

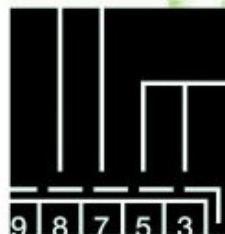
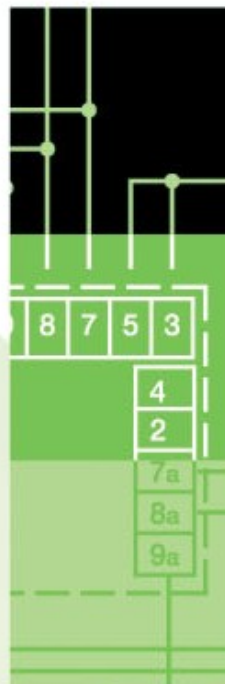
# ALTERNATE CURRENT CALL SYSTEMS



**ACI FARFISA**  
INTERCOMS

TECHNICAL  
MANUAL  
2004

STUDIO  
PROJECT



## INTRODUCTION

This edition contains helpful information on the operation and installation of Farfisa video intercoms systems.

In order to make the systems work properly it is necessary to install only Farfisa equipment, keeping strictly to the items referred to in each diagram.

Read all the notes carefully, (even the small ones) in each installation scheme and the working instructions of the system given in the following pages.

For the sake of clarity, please notice that the sequence of the terminals of each article has not been followed. Only the terminal code (letter and/or number) is valid not the graphic sequence.

The items may have more terminals than the ones in the installation diagrams. The excess terminals must not be used.

## Notice to the installer and user

Check the integrity of the product after removing it from the packing.

Packing materials (such as plastic bags, cardboard, polystyrene foam, etc.) must be kept out of the reach of children.

The manufacturer cannot be held responsible for possible damages caused by improper, erroneous and unreasonable use.

The cable runs of any intercom and video-intercom system must be kept separate from the mains or any other electrical installation as required by **International Safety Standards**.

## WARNINGS

**An all-pole mains switch with a contact separation of at least 3mm in each pole shall be incorporated in the electrical installation of the building.**

**Before connecting the unit, make sure its data correspond to those of the mains.**

**The apparatus shall not be exposed to dripping or splashing.**

**For correct operation make sure that ventilation or heat dissipation openings are not obstructed.**

**Do not open or tamper with power supply or video intercom apparatus when they are ON. There is high voltage inside.**

**Avoid bumping and hitting the video intercom apparatus, it could break of the CRT with consequent projections of fragmented glass.**

**For installation or maintenance refer only to qualified personnel.**



European Mark of conformity to the EEC Directives.

## CEMARK

The CE mark ensures that the product complies with the requirements of the European Community Directives in force; in particular, Electrical Safety LVD73/23, Electromagnetic Compatibility EMC89/336 and Telecommunication Terminals R&TTE99/5 Directives.

As set forth by the Directives, the technical documentation and Conformity Declarations are available in the Company's offices for verifications and controls by competent Authorities.



Mark of VDE a German Testing and Certification Institute.



Quality assured firm.



Italian Association of Electrotechnical and Electronic Industries

# 12 TECHNICAL MANUAL

2004 edition

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# INSTALLATION INSTRUCTIONS

The Farfisa alternate call system allows for the realisation of intercom, video intercom, digital and intercom-telephone systems.

The modularity of Farfisa indoor and outdoor devices allows for system extension to satisfy the most diverse user's requirements, from individual houses to apartment buildings, from simple intercoms to complete video intercom-telephone sets.

## Selecting the system

The Farfisa alternate call system allows for the realisation of different types of installation.

- Intercom systems
- Video intercom systems
- Intercom-telephone systems
- Video intercom systems
- Mixed systems (intercom/video intercom/telephone)

## Intercom systems

It is the simplest of the installations. It provides bidirectional audio communication between intercoms and external door stations with door-opening function. The following variants of the basic installation are possible:

- **intercommunicating service.** It allows for communication between different intercoms of the same apartment or between different apartments with private conversation to other users and to external stations.
- **private conversation.** By adding a board to each intercom you can restrict the communication between internal and external user to the called user. The other users do not hear the conversation in progress when they lift the handset.

For the realisation of a basic intercom system you need 4 common wires + 1 single for each user.

## Video intercom systems

Apart from audio communication and door-opening function, video intercom systems provide visual control of the entrance. The typical characteristics of video intercom systems are:

- **Timed operation.** The video intercom of the called user is enabled for about 40 seconds. The time doubles if the handset is lifted. The system returns to the stand-by state when the handset is replaced.
- **Private conversation.** Video intercom systems allow for audio communication only for the called user. The other users do not hear the conversation in progress when they lift the handset.
- **Intercommunicating service.** This service allows for audio communication between different intercoms or video intercoms of the same apartment or between different apartments with private conversation to other users or external stations.
- **Control switching ON.** The user can enable the system, switch ON his/her own video intercom and monitor the area framed by the camera. Additional wires and activation buttons are needed in case of multiple entrances.

For the realisation of basic video intercom systems you need 7 common wires + 1 single for each user + common coaxial cable.

## Intercom-telephone and video intercom-telephone systems

It is a variant of traditional intercom and video intercom systems in which internal stations use telephones (with monitors for video intercom-telephone functions) instead of intercoms or video intercoms. In this case intercom connections are established over an interface board that provides telephone and intercom communication. The interface can be a stand alone product (art. FT11D) or an interface board to be installed inside the FT105P or FT208P electronic PABX (art. ES60 or ES65).

Internal stations can use:

- a standard telephone in which intercom functions are obtained by dialling specific codes on the keypad
  - an intercom-telephone set (art. ST740) or video intercom-telephone set (art. ST740 + ST7100) with telephone functions and specific buttons for the main intercom services.
- In intercom-telephone systems the intercommunicating service can be realized by means of a PABX that allows also for private conversation.

Intercom-telephone systems need 4 common wires + 1 single for each user (+ 3 common wires + common coaxial cable or twisted pair in case of video intercom-telephone systems) for connections to the riser. Telephone connections are made with a telephone pair.

## Mixed systems (intercom/intercom-telephone/video intercom-telephone)

All intercom, intercom-telephone and video intercom-telephone systems can be combined according to the user's requirements.

## Choosing the correct article

When choosing the article and type of installation, you should consider:

- user's requirements
- number of users
- installation possibilities
- possible location of articles.

The following options are possible for **external door stations**:








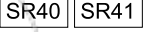






- **Mody** series push-button panels for intercom, telephone and video intercom systems
- **Matrix** series stainless steel push-button panels for intercom, telephone and video intercom systems
- **Prestige** series brass push-button panels for intercom, telephone and video intercom systems
- **ErreP/R** series push-button panels for intercom and telephone systems
- **TM** series push-button panels for intercom and telephone systems
- **UP** series push-button panels for analogue intercom and telephone systems with maximum 2 calls

The following options are possible for **internal stations**:

- **Studio** modular line for intercom-telephone and video intercom-telephone systems
- **Project** line for intercom and video intercom systems
- **PuntoVirgola** for intercom and video intercom systems
- **Slim (900)** line for intercom systems

## Graphic symbols

The following symbols are used in the installation diagrams:

-  Speaker
-  Microphone
-  Button
-  Resistance
-  Lamp
-  Electric door lock
-  Diode
-  SR40 SR41 Electronic ringer or buzzer
-  Mechanical buzzer
-  Optional wire (usually control switching ON, door release button or intercommunicating calls)
-  Dashed line (for schematic purposes the first and last monitors are shown in the multi-family systems. Required additional monitors can be inserted in such dashed line to complete the installation).
-  Coaxial cable
-   $x_n$   
 $x_2$  Call wires (second and last)
-  Telephone pair



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- **Si 11MO/2** Intercoms with private conversation connected to 1 external door station
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- **Si 16MO/1** Intercom system with secondary door stations and 1 main common station (multiple entrance)
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- **Si 115L/5S** 5 intercommunicating intercoms connected to 1 external door station with single calls. Electronic bell for internal calls.
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- **Si 125L/5S** 5 intercommunicating intercoms connected to 2 external door stations with single calls. Electronic bell for internal calls.
- **Si 121L/5M** 5 intercommunicating intercoms connected to 2 external door stations with common call. Electronic bell for internal calls.
- **Si 135L/5S** 5 intercommunicating intercoms connected to 3 external door stations with single calls. Electronic bell for internal calls.
- **Si 131L/5M** 5 intercommunicating intercoms connected to 3 external door stations with common call. Electronic bell for internal calls.
- **Si 161L/1S** One-way intercommunicating system with secondary door stations and 1 main common station (multiple entrance)
- **Si 11MO/3** Multi-way intercom system connected to 1 external door station. With intercommunication service in 1 or more apartments and private conversation feature with the external door station and the other apartments.

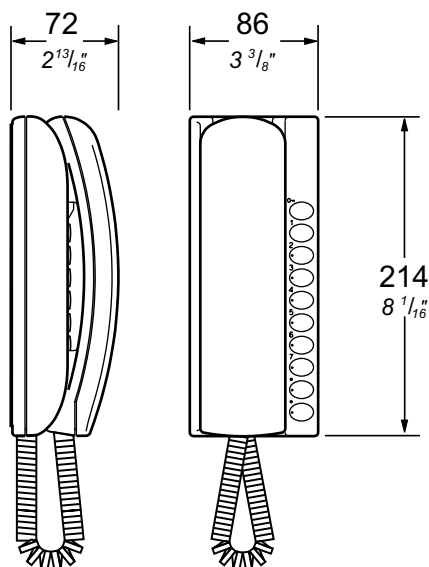
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# INTERNAL STATIONS

## INTERCOMS PROJECT series

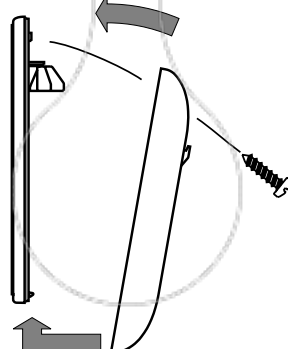
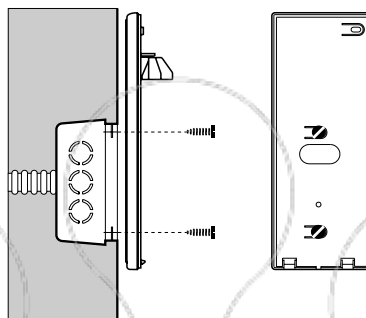
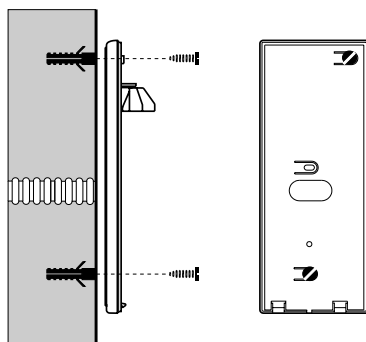
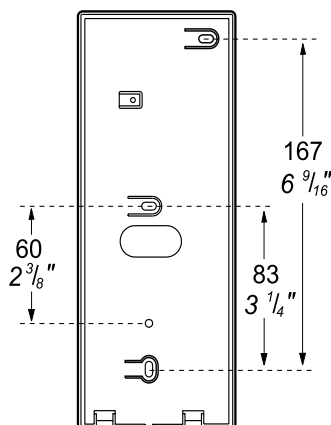
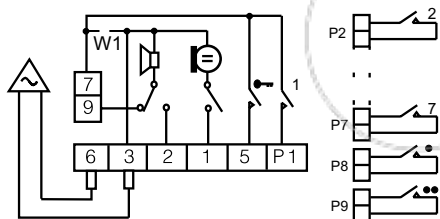


**PT520.** Two-colour intercom for 4+1 systems connected to one or more door stations. Complete with buzzer, spiral cord, electronic microphone and two push-buttons that can be increased to 10 by adding the individual push-button unit, art. **PT501**. It can be installed on the wall with screws or on a back box.

**PT520W.** Colour: white.

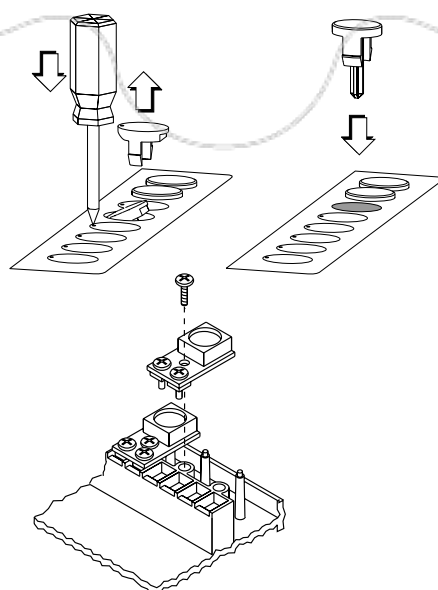
### Terminals

- 1 microphone
- 2 loudspeaker
- 3 ground
- 5 door release push-button (max 1A)
- 6 buzzer (0.2A)
- 7 common push-buttons (● and 1)
- 9 electronic bell input
- P1 service push-button (max 1A)
- P2 ÷ P9 service push-buttons (max 0.5A)

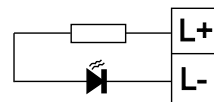


### Fittings for PT520 and PT520W intercoms

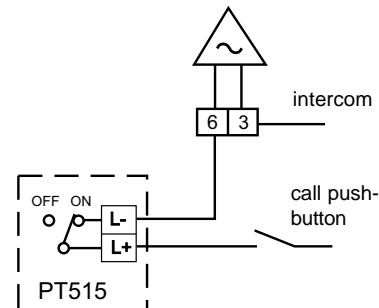
#### PT501. Individual push-button unit.



#### PT502. Led module.

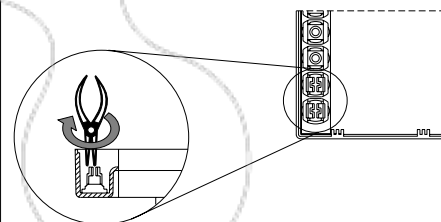


#### PT515. Bell silencer module (privacy).



### Note

We recommend to insert the LED module **PT502** and bell silencer module **PT515** in the bottom 2 slots marked by ● and ●●. To insert them properly it's necessary to remove the guide of the button sliding from the internal side of the base cover (see figure).



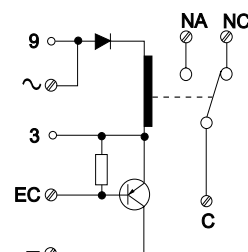
**RL 36. Relay module.** When installed inside intercoms it allows to activate additional bells (see page 27). Maximum switching current is 1A (24V).

### Terminals

- C common terminal of relay
- NA normally open contact of relay
- NC normally closed contact of relay
- ground
- ~ 13Vac/dc voltage input
- EC relay activation input (ground command)

### Wires

- 9 electronic call input without resistive load
- 3 ground

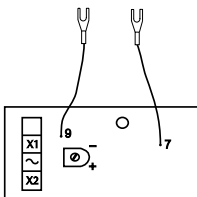


## INTERCOMS PROJECT series

**SR40. Electronic bell module** (see intercommunication diagrams).

### Terminals

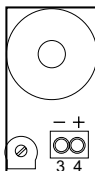
- ~ power supply call input (12Vac-0.5A)
- X1** power supply input (12Vac-0.3A)
- X2** call input (ground control)



**SR41. Electronic buzzer module.** It can be used to differentiate calls from external door stations or external door station and intercommunicating stations (in this case it can replace electronic bell module SR40).

### Terminals

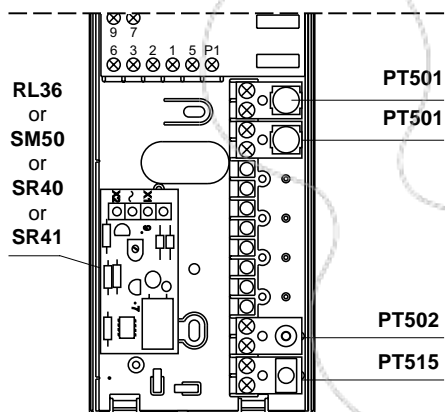
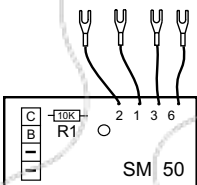
- 4** power supply input (13Vac-70mA; 9÷20Vdc-15mA)
- 3** ground



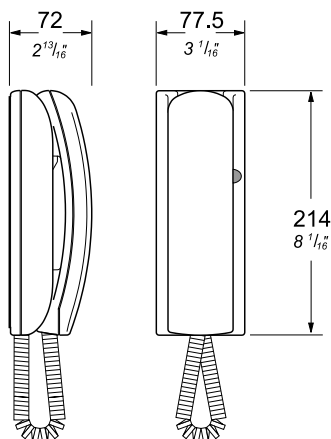
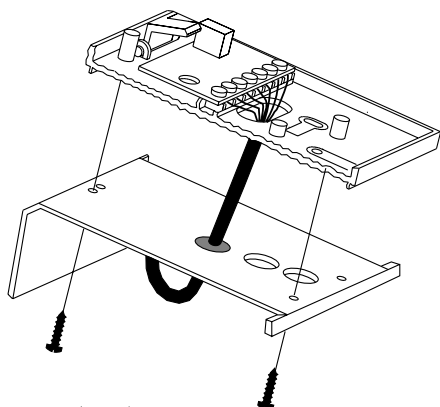
**SM50. Private conversation module** (see pages 32 and 100).

### Terminals

- C** audio line receiver
- B** audio line transmitter
- ground



**PT538. Table adapter for Project series intercoms**, with weighted base, junction box and 2.4m connection cable with 13 wires.



**PT510.** Two-colour intercom for 4+1 systems connected to one or more door stations. Complete with push-button, spiral cord, buzzer, electronic microphone. Wall-mounted with screws or fixed to back box.

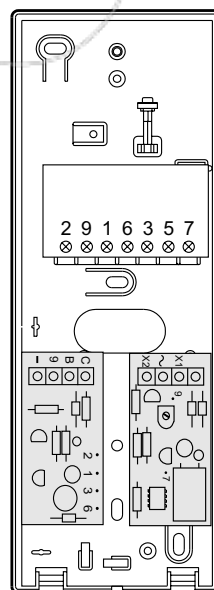
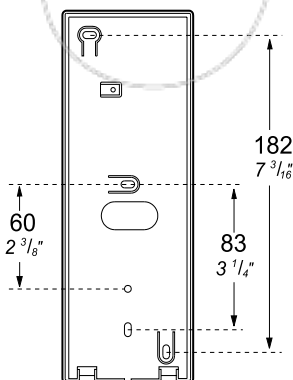
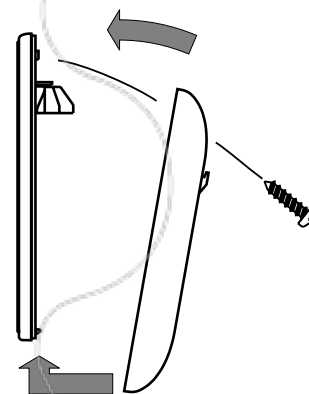
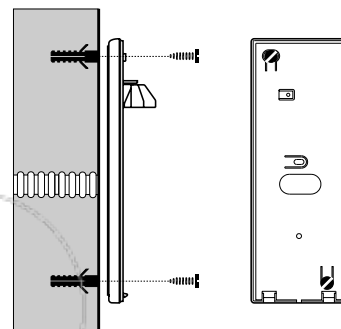
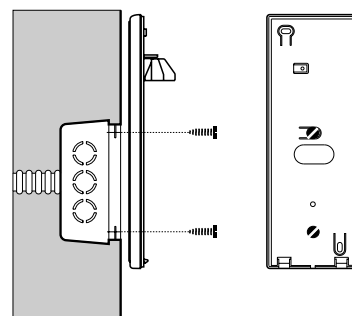
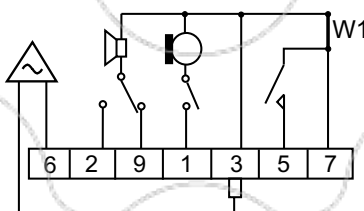
**PT510N.** Colour: beige.

**PT510W.** Colour: white.

**PT524W.** White colour finish with carbon microphone.

### Terminals

- 1** microphone
- 2** loudspeaker
- 3** ground
- 5** door release push-button (max 1A)
- 6** buzzer (0.2A)
- 9** electronic bell input



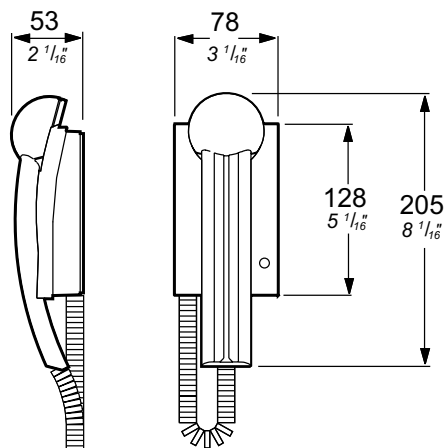
Two of the following modules can be simultaneously applied inside the intercoms:

- **RL36** relay module;
- **SM50** private conversation module;
- **SR40** electronic bell module;
- **SR41** electronic buzzer module.



## INTERNAL STATIONS

### INTERCOMS PuntoVirgola series

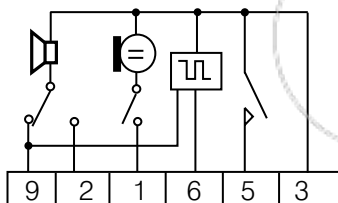


**PV100.** Two-colour intercom for 4+1 systems connected to one or more door stations. Complete with a push-button, spiral cord, built-in electronic bell, electronic microphone. Wall-mounted with screws or fixed to back box.

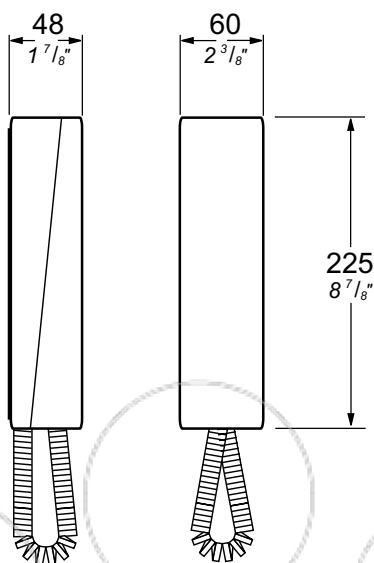
**PV100W.** Colour: white.

#### Terminals

- 1 Microphone
- 2 Loudspeaker
- 3 Ground
- 5 Door release push-button (1A max)
- 6 Buzzer (0.35A)
- 9 Electronic bell input



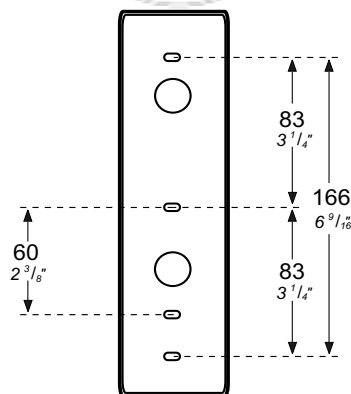
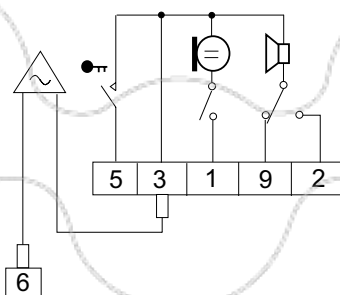
### INTERCOMS 900 series (Slim)



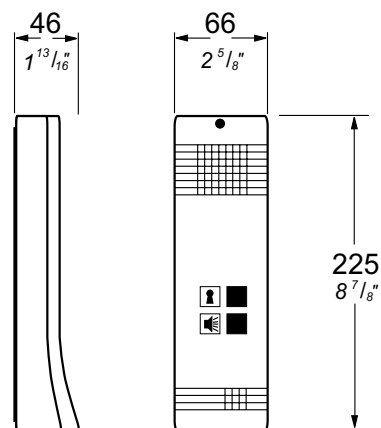
**924W.** Beige intercom for 4+1 systems connected to 1 or more door stations. Complete with a push-button, spiral cord, electronic microphone, buzzer. It can be installed on the wall with screws.

#### Terminals

- 1 Microphone
- 2 Loudspeaker
- 3 Ground
- 5 Door release push-button (1A max)
- 6 Buzzer (0.2A)
- 9 Electronic bell input (from PRS240 or digital systems)



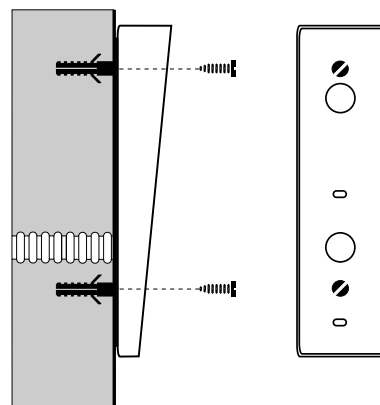
### OPEN VOICE 900 series



**910W.** Open-voice, white, two-way model for 4+1 systems connected to one or more door stations, with internal amplification and modulated electronic bell and knob for adjusting the volume (receiving channel). This model is provided with two push-buttons (one for connecting the audio line and the other one for the electric door lock). To optimise speech quality the use of 337C electric speaker is recommended. It can be installed on the wall with screws or on a wall box.

#### Terminals

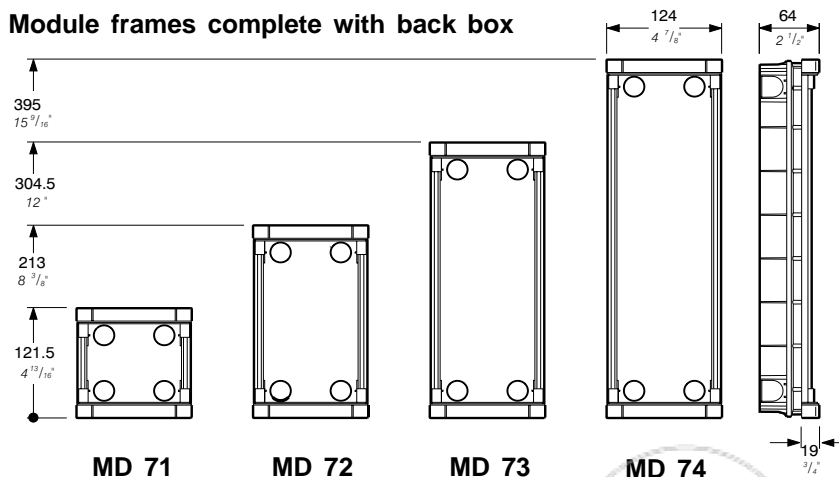
The same of 924 series.



## EXTERNAL DOOR STATIONS

### PUSH-BUTTONS MODY series

#### Module frames complete with back box



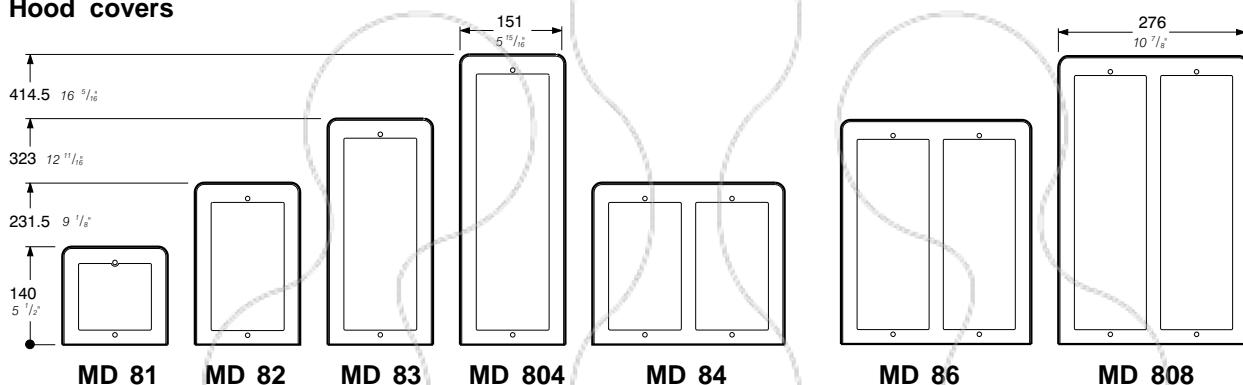
Push-button panels in extruded aluminium made up of modular elements. Suitable for the most diverse installation requirements.

**MD71.72.73.74.** Plastic back boxes complete with module frames.

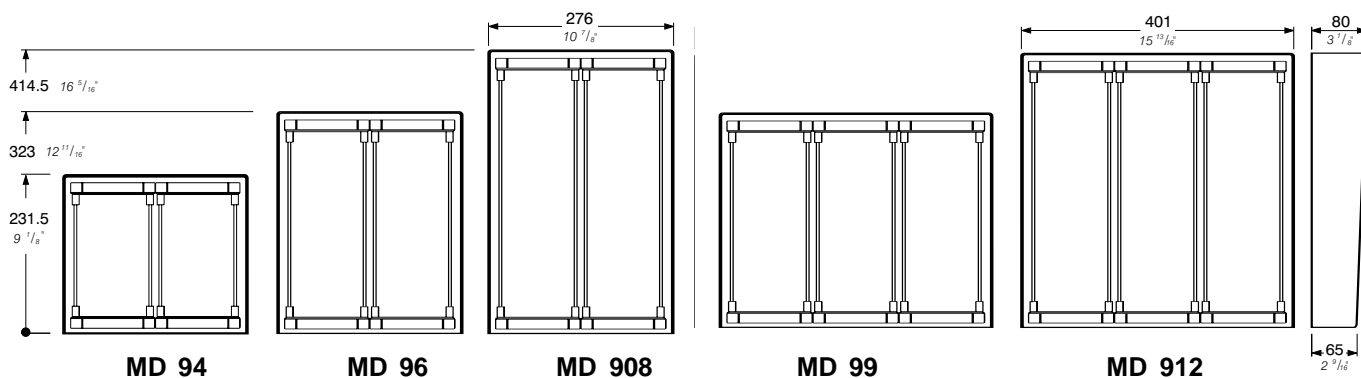
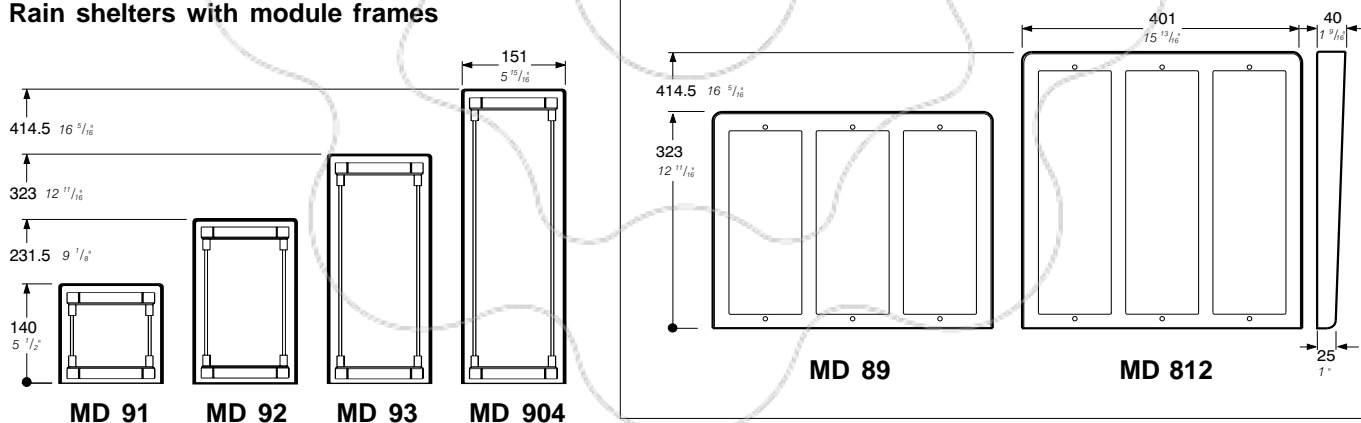
**MD81.82.83.804.84.86.808.89.912.** Aluminium hood covers. To be added to MD71.72.73.74 back boxes.

**MD91.92.93.904.94.96.908.99.912.** Anodized aluminium rain shelters with module frames. Used for wall mounting.

#### Hood covers



#### Rain shelters with module frames

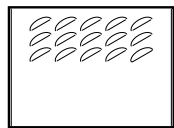


## EXTERNAL DOOR STATIONS

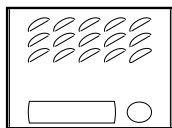
### PUSH-BUTTONS MODY series

#### 1 row push-button modules

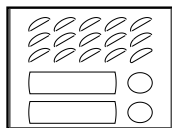
##### Modules for electric door speaker (amplifier)



**MD 10**  
without call buttons

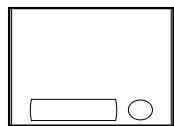


**MD 11**  
1 call button

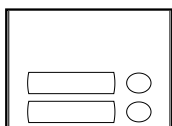


**MD 12**  
2 call buttons

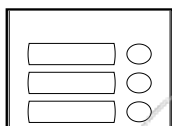
##### Button modules



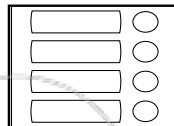
**MD 21**  
1 call button



**MD 22**  
2 call buttons



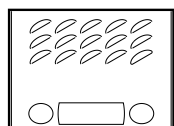
**MD 23**  
3 call buttons



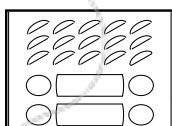
**MD 24**  
4 call buttons

#### 2 row push-button modules

##### Modules for electric door speaker (amplifier)

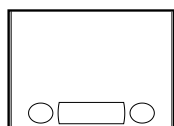


**MD 122**  
2 call buttons

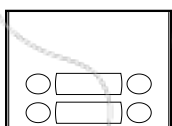


**MD 124**  
4 call buttons

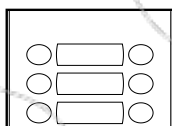
##### Button modules



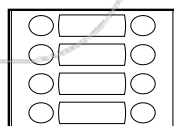
**MD 222**  
2 call buttons



**MD 224**  
4 call buttons



**MD 226**  
6 call buttons

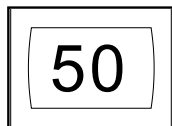


**MD 228**  
8 call buttons

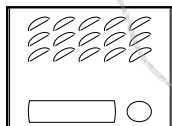
##### Modules: blank, number, access control and cameras



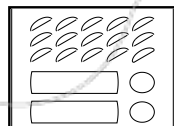
**MD20**  
blank module



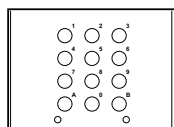
**MD50**  
number module



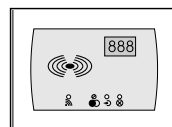
**MD 100**  
Amplified door station with 1 push-button (see page 9)



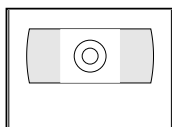
**MD 200**  
Amplified door station with 2 push-buttons (see page 9)



**FC52P.** Keypad module for access control (see page 9).

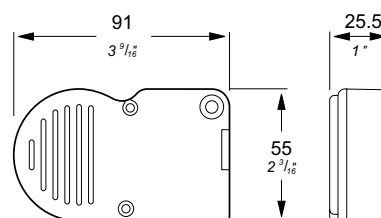


**FP52.** Proximity reader for access control (see page 9).



**MD41, MD41D.** Black and white cameras.  
**MD41C.** Colour cameras (see characteristics on page 81).

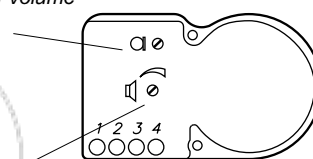
### ELECTRIC DOOR SPEAKER



#### MD 30.

It consists of a double amplifier (receiver and transmitter) with adjustable volume of 2 channels. Also fittable to **Prestige** and **ErreP/R** series push-button panels (for **ErreP/R** door stations by means of **299/1** adapter).

Transmitting volume adjustment

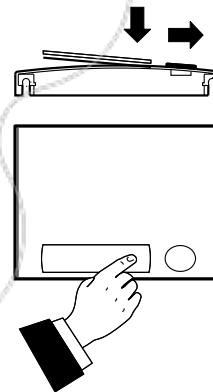


Receiving volume adjustment

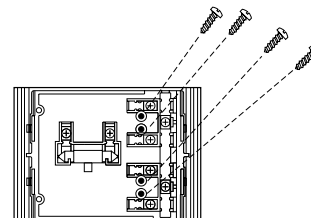
#### Terminals

- 1 audio receiver
- 2 audio transmitter
- 3 positive power supply 6 ÷ 8Vdc - 60mA
- 4 ground

#### Dismounting and protection of name labels



Dismounting of name holder to insert name label.

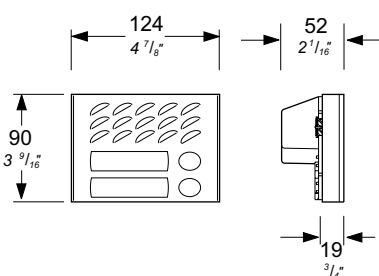


In any button module, in order to avoid the dismounting of name holder, insert a 3Mx12 screw in the holes shown in the picture for each name plate to be blocked. Screws are not supplied by the manufacturer.



## PUSH-BUTTONS MODY series

### AMPLIFIED DOOR STATIONS



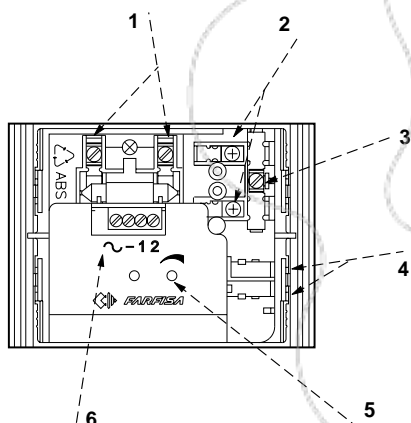
#### MD 100. 1 button module.

Fittable in all intercom, telephone, intercommunicating and video intercom systems. Complete with electric door speaker amplified in the two channels, receiving adjustable volume, call button and anodized aluminium front plate. It can replace the **MD11** and **MD30** module and use all the other accessories of the **Mody** series.

#### MD 200. 2 buttons module.

##### Terminals

- ground
- ~ supply 13Vac - 0.13A
- 1 audio receiver
- 2 audio transmitter
- C call push-buttons common
- call push-buttons
- ⊗ name-plate lamp (24V-70mA)

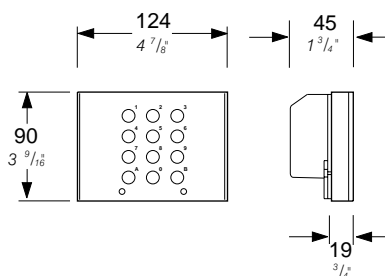


- 1 Lamp terminals
- 2 Push-button terminal board
- 3 Common contact of call push-buttons
- 4 Terminals on stair light push-button
- 5 External volume adjustment
- 6 Terminal board for connection to the system

#### Installation diagrams

For the installation of the **MD100** and **MD200** modules see the installation diagrams for systems with one entrance in the "intercom" and "video intercom" section (for example pages 30, 32, 46, 48, 98, 102, 120, 178 and 180).

### ACCESS CONTROL KEYPAD



#### FC52P.

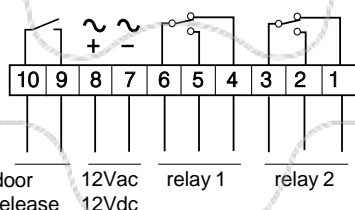
Access control keypad with 12 keys and 2 relays for lock release. 4 programmable access codes for each relay. Programmable door opening time from 1 up 99 sec. for each relay (or bistable operation of relay 1). Acoustic and visual confirmation for entered keys, accepted programming and for wrong codes.

##### Technical data

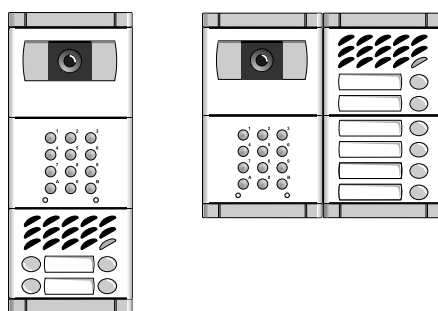
Power supply: 12Vac/dc ±10%  
 Stand-by current: 0.015A  
 Maximum current consumption: 0.1A  
 Contact ratings: 12Vac-5A  
 Numbers of codes for relays 1: 4  
 Numbers of codes for relays 2: 4 or direct activation  
 Activation time for each relay: from 1 to 99sec. (or bistable relay 1)  
 Operating temperature: 0° ÷ +40°C  
 Maximum permissible humidity: 85% RH

##### Terminals

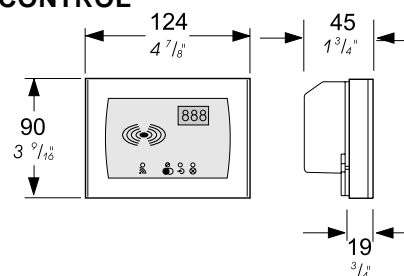
- 1 normally closed contact of relays 2
- 2 normally open contact of relays 2
- 3 common contact of relays 2
- 4 normally closed contact of relays 1
- 5 normally open contact of relays 1
- 6 common contact of relays 1
- 7 ground or alternate voltage input
- 8 positive or alternate voltage input
- 9-10 connection to optional door lock release



#### Example of composition



### PROXIMITY READER FOR ACCESS CONTROL



#### FP52.

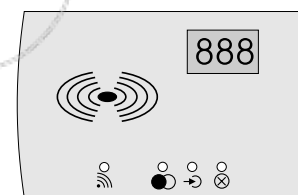
This article allows for the activation of 2 relays by means of keytags or electronic ISO cards based on transponder technology. Programmable activation time from 1 to 63 seconds for every relay. 4 user cards and 1 master card supplied with the product. Acoustic and visual control signals and 3-digit display to view numbers and codes during set-up and operation.

##### Technical data

Power supply 12Vac/dc ±10%  
 Stand-by current 0.1A  
 Maximum current consumption 0.25A  
 Contact ratings 24Vac - 2A  
 Max. number of cards 490  
 Max. number of Master cards 10  
 Number of relays 2  
 Relay time 1 to 63 sec.  
 Minimum recognition distance 3 cm  
 Maximum recognition time 1 sec.  
 Operating temperature 0° ÷ +40°C  
 Maximum permitted humidity 85% RH

##### Terminals

- +A positive or alternate current input
- A ground or alternate current input
- PB door open button
- NC2 normally closed contact of relay 2
- NA2 normally open contact of relay 2
- C2 common terminal of relay 2
- NC1 normally closed contact of relay 1
- NA1 normally open contact of relay 1
- C1 common terminal of relay 1

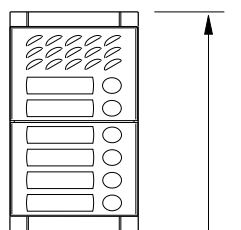


- Card recognition LED. It turns ON during card recognition.
- Relay activation LED. It indicates relay deactivation (red) or activation (green).
- Program LED. It turns ON during system programming.
- Card cancellation and system setup LED. It turns ON during Master or user card cancellation and system setup.

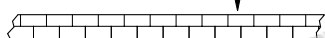


# EXTERNAL DOOR STATIONS

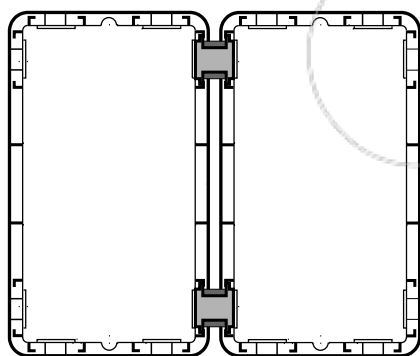
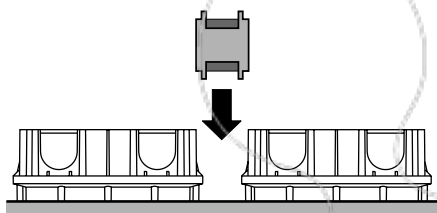
## PUSH-BUTTONS MODY series



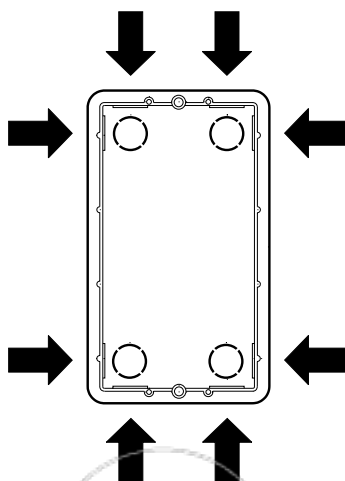
1.65m  
5' 5"



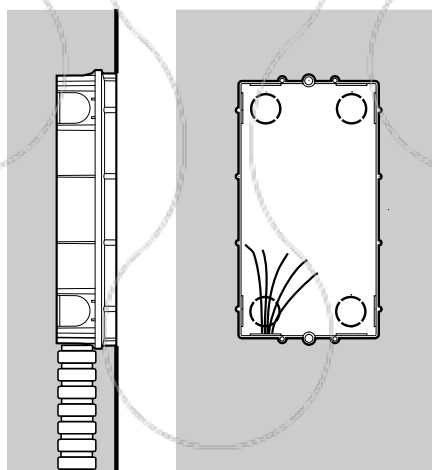
Place the box of the push button panel at a height of about 1.65m (5' 5") from the floor keeping the front edges flush-mounted and vertical to the finished plaster.



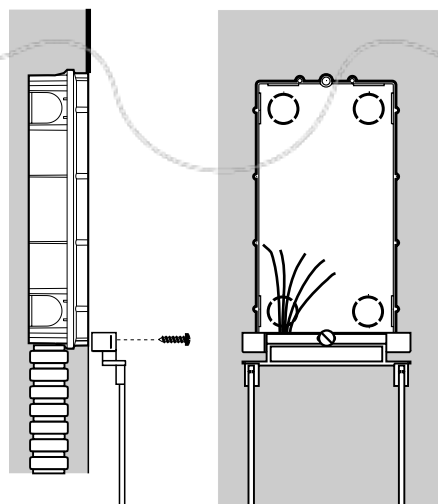
Insertion of cable bush between back boxes. The cable bushes must be inserted before brickwork.



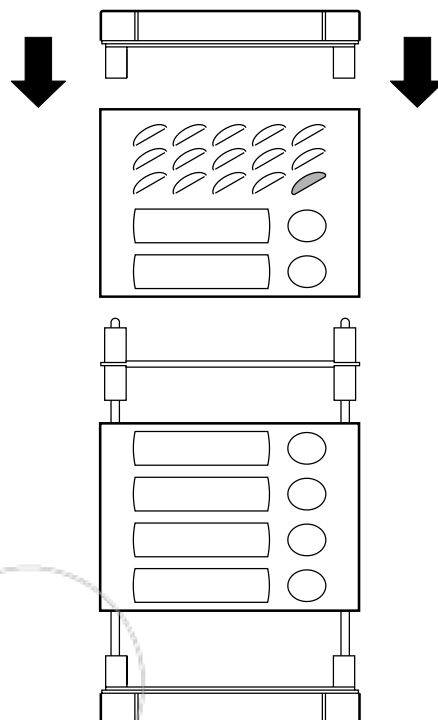
Openings for cables.



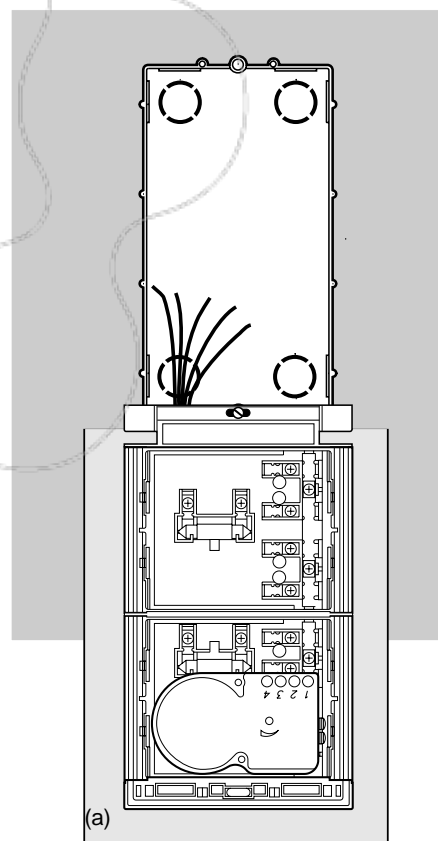
Flush mounting and cables placing.



Lower fixing of the module frame.



Mounting of button module.

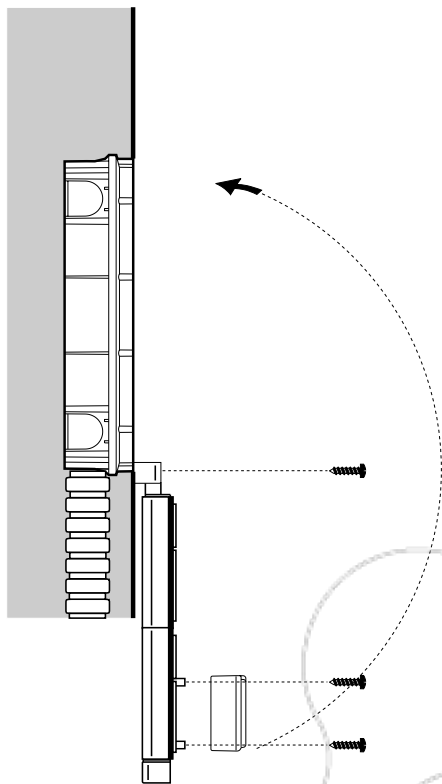


Lower fixing of the module frame on back box. It is advised to insert a protection (a) between panel and wall while fixing.

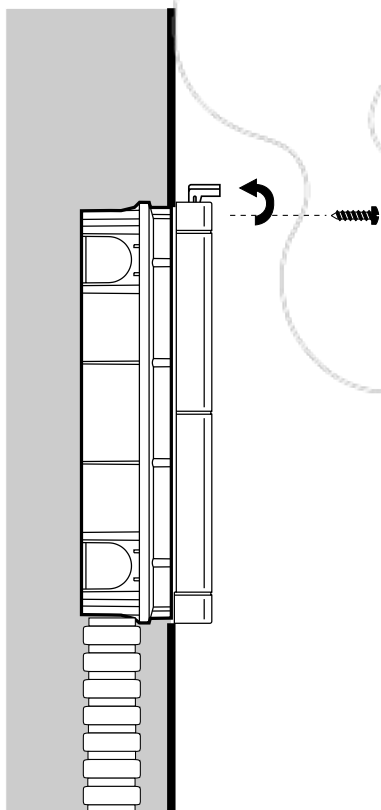


# EXTERNAL DOOR STATIONS

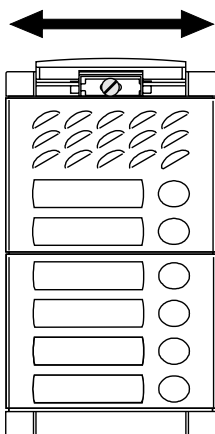
## PUSH-BUTTONS MODY series



Mounting of frame bottom and door speaker (amplifier).

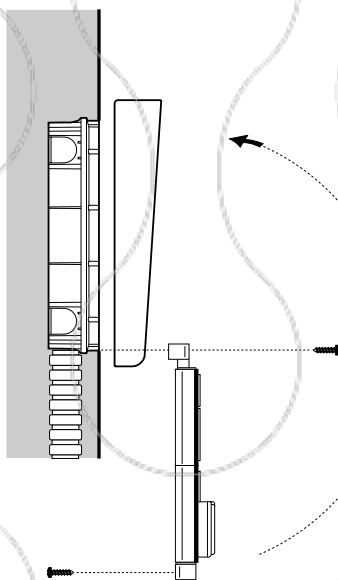


Top fixing of the panel.



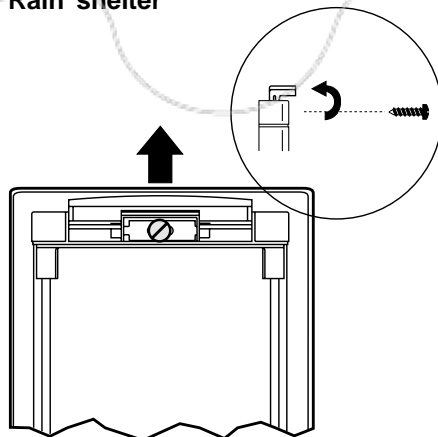
Alignment of the panel.

### Hood covers

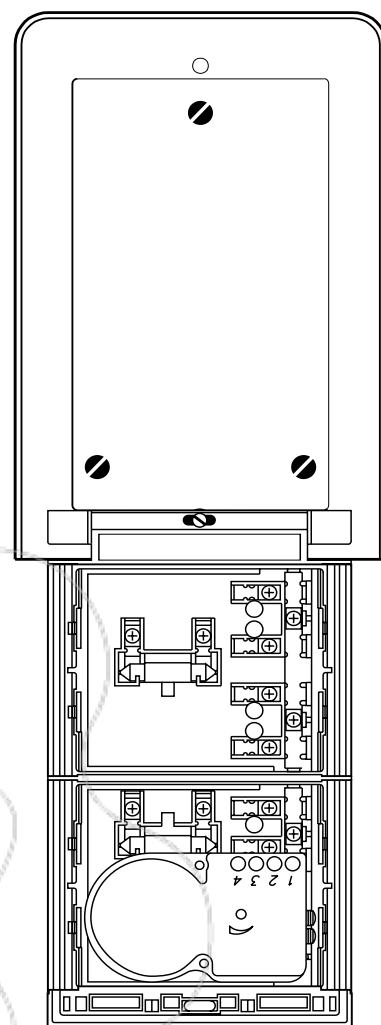


Fixing of the hood cover between the back box and the module frame.

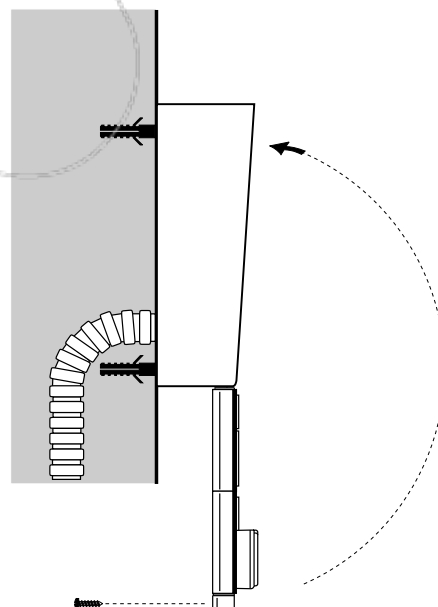
### Rain shelter



Dismounting of the frame top side from the rain shelter.



Modules insertion and wall fixing of rain shelter.



Mounting of the frame top to the rain shelter.

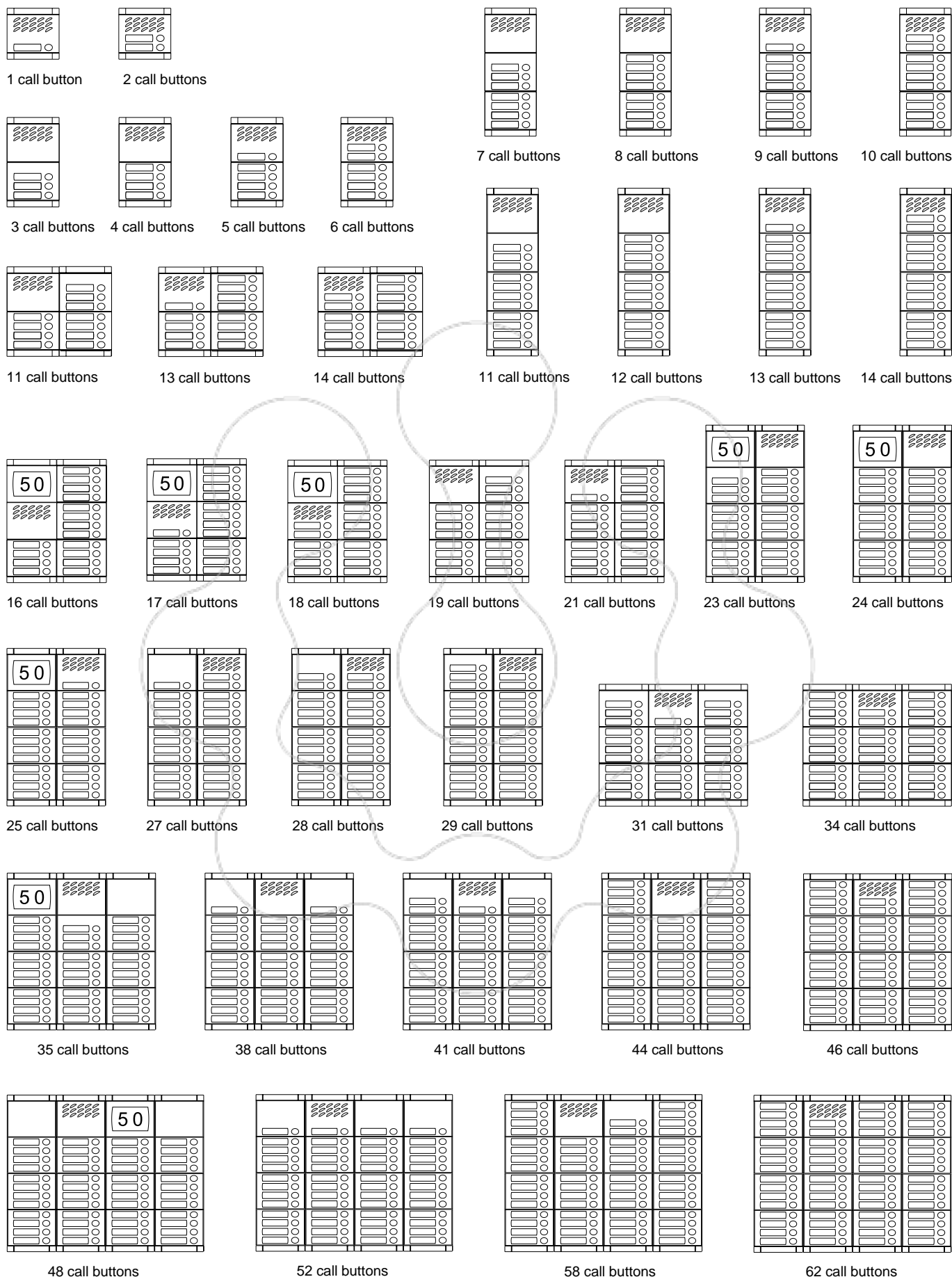


# EXTERNAL DOOR STATIONS

1 row push-button



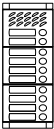
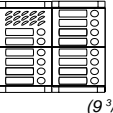
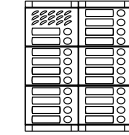
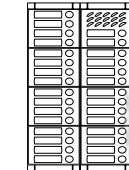
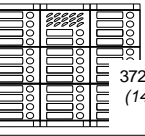
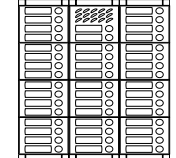
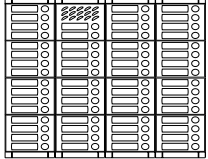
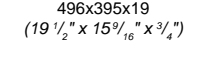
## PUSH-BUTTONS MODY series

Example of Mody push-button panel installations.



## PUSH-BUTTONS MODY series

## Composition board of Mody push-button panels.

N° calls	Compositions and dimensions	Doorspeaker (amplifier)	Module for speaker	Button modules and number or blank module			Back box and module frame	Hood covers	Rain shelter
1	 124x121.5x19 (4 7/8" x 4 13/16" x 3/4")	1 MD30	1 MD11	-	-	-	1 MD71	1 MD81	1 MD91
2		1 MD30	1 MD12	-	-	-	1 MD71	1 MD81	1 MD91
3	 124x213x19 (4 7/8" x 8 3/8" x 3/4")	1 MD30	1 MD10	1 MD23	-	-	1 MD72	1 MD82	1 MD92
4		1 MD30	1 MD10	1 MD24	-	-	1 MD72	1 MD82	1 MD92
5		1 MD30	1 MD11	1 MD24	-	-	1 MD72	1 MD82	1 MD92
6	 124x304.5x19 (4 7/8" x 12" x 3/4")	1 MD30	1 MD12	1 MD24	-	-	1 MD72	1 MD82	1 MD92
7		1 MD30	1 MD10	1 MD24	1 MD23	-	1 MD73	1 MD83	1 MD93
8		1 MD30	1 MD10	2 MD24	-	-	1 MD73	1 MD83	1 MD93
9		1 MD30	1 MD11	2 MD24	-	-	1 MD73	1 MD83	1 MD93
10	 248x213x19 (9 3/4" x 8 3/8" x 3/4")	1 MD30	1 MD12	2 MD24	-	-	1 MD73	1 MD83	1 MD93
11		1 MD30	1 MD10	2 MD24	1 MD23	-	2 MD72 ■	1 MD84 ■	1 MD94 ■
12		1 MD30	1 MD10	3 MD24	-	-	2 MD72 ■	1 MD84 ■	1 MD94 ■
13		1 MD30	1 MD11	3 MD24	-	-	2 MD72 ■	1 MD84 ■	1 MD94 ■
14	 248x304.5x19 (9 3/4" x 12" x 3/4")	1 MD30	1 MD12	3 MD24	-	-	2 MD72 ■	1 MD84 ■	1 MD94 ■
15		1 MD30	1 MD10	3 MD24	1 MD23	1 *	2 MD73	1 MD86	1 MD96
16		1 MD30	1 MD10	4 MD24	-	1 *	2 MD73	1 MD86	1 MD96
17		1 MD30	1 MD11	4 MD24	-	1 *	2 MD73	1 MD86	1 MD96
18		1 MD30	1 MD12	4 MD24	-	1 *	2 MD73	1 MD86	1 MD96
19		1 MD30	1 MD10	4 MD24	1 MD23	-	2 MD73	1 MD86	1 MD96
20		1 MD30	1 MD11	5 MD24	-	-	2 MD73	1 MD86	1 MD96
21	 248x395x19 (9 3/4" x 15 9/16" x 3/4")	1 MD30	1 MD12	5 MD24	-	-	2 MD73	1 MD86	1 MD96
22		1 MD30	1 MD10	5 MD24	1 MD23	1 *	2 MD74	1 MD808	1 MD908
23		1 MD30	1 MD10	6 MD24	-	1 *	2 MD74	1 MD808	1 MD908
24		1 MD30	1 MD11	6 MD24	-	1 *	2 MD74	1 MD808	1 MD908
25		1 MD30	1 MD12	6 MD24	-	1 *	2 MD74	1 MD808	1 MD908
26		1 MD30	1 MD10	6 MD24	1 MD21	-	2 MD74	1 MD808	1 MD908
27		1 MD30	1 MD12	6 MD24	1 MD22	-	2 MD74	1 MD808	1 MD908
28		1 MD30	1 MD12	6 MD24	1 MD23	-	2 MD74	1 MD808	1 MD908
29	 372x304.5x19 (14 5/8" x 12" x 3/4")	1 MD30	1 MD12	7 MD24	-	-	2 MD74	1 MD808	1 MD908
30		1 MD30	1 MD11	6 MD24	2 MD23	-	3 MD73	1 MD89	1 MD99
31		1 MD30	1 MD10	8 MD24	-	-	3 MD73	1 MD89	1 MD99
32		1 MD30	1 MD11	8 MD24	-	-	3 MD73	1 MD89	1 MD99
33		1 MD30	1 MD12	8 MD24	-	-	3 MD73	1 MD89	1 MD99
34		1 MD30	1 MD10	8 MD24	1 MD23	2 *	3 MD74	1 MD812	1 MD912
35		1 MD30	1 MD12	8 MD24	2 MD21	1 *	3 MD74	1 MD812	1 MD912
36	 372x395x19 (14 5/8" x 15 9/16" x 3/4")	1 MD30	1 MD11	9 MD24	-	2 *	3 MD74	1 MD812	1 MD912
37		1 MD30	1 MD10	9 MD24	2 MD21	-	3 MD74	1 MD812	1 MD912
38		1 MD30	1 MD11	9 MD24	2 MD21	-	3 MD74	1 MD812	1 MD912
39		1 MD30	1 MD10	9 MD24	2 MD21	-	3 MD74	1 MD812	1 MD912
40		1 MD30	1 MD12	9 MD24	2 MD21	-	3 MD74	1 MD812	1 MD912
41		1 MD30	1 MD11	9 MD24	2 MD22	-	3 MD74	1 MD812	1 MD912
43		1 MD30	1 MD12	10 MD24	1 MD21	-	3 MD74	1 MD812	1 MD912
45	 496x395x19 (19 1/2" x 15 9/16" x 3/4")	1 MD30	1 MD12	10 MD24	1 MD23	-	3 MD74	1 MD812	1 MD912
46		1 MD30	1 MD12	11 MD24	-	-	3 MD74	1 MD812	1 MD912
48		1 MD30	1 MD10	12 MD24	-	3 *	4 MD74	-	-
50		1 MD30	1 MD10	12 MD24	2 MD21	1 *	4 MD74	-	-
52		1 MD30	1 MD11	12 MD24	3 MD21	-	4 MD74	-	-
53		1 MD30	1 MD12	12 MD24	3 MD21	-	4 MD74	-	-
55		1 MD30	1 MD11	13 MD24	2 MD21	-	4 MD74	-	-
58	 496x395x19 (19 1/2" x 15 9/16" x 3/4")	1 MD30	1 MD10	14 MD24	1 MD22	-	4 MD74	-	-
62		1 MD30	1 MD12	15 MD24	-	-	4 MD74	-	-

■ or MD74 or MD804 or MD904

\* or MD20 or MD50 or FC52P or FP52

Optional

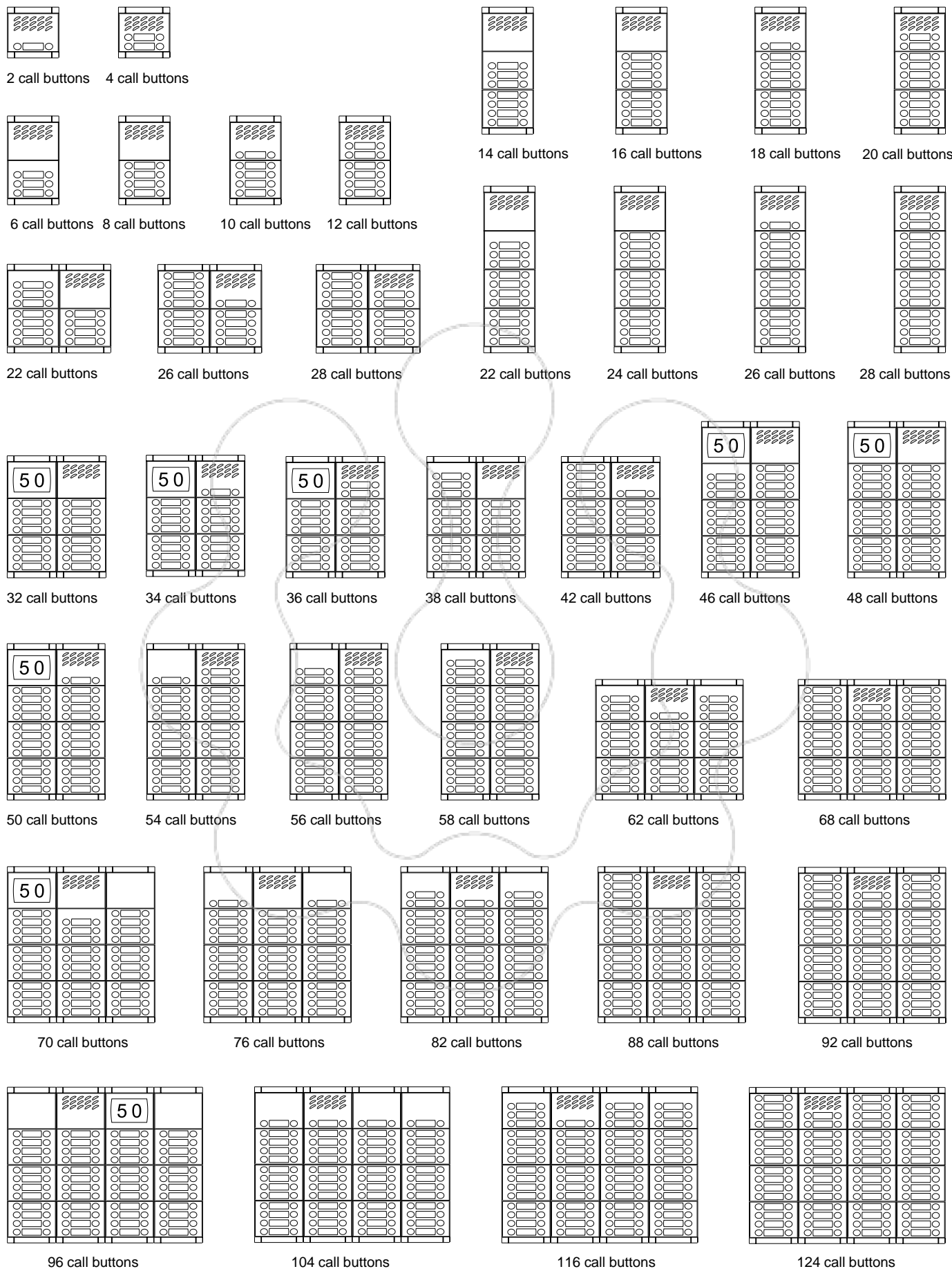
It replaces  
MD71, 72, 73, 74

# EXTERNAL DOOR STATIONS

2 row push-button













## PUSH-BUTTONS MODY series

Example of Mody push-button panel installations.



## PUSH-BUTTONS MODY series

## Composition board of Mody push-button panels.

N° calls	Compositions and dimensions	Doorspeaker (amplifier)	Module for speaker	Button modules and number or blank module			Back box and module frame	Hood covers	Rain shelter
2	 124x121.5x19 (4 7/8" x 4 13/16" x 3/4")	1 MD30	1 MD122	-	-	-	1 MD71	1 MD81	1 MD91
4		1 MD30	1 MD124	-	-	-	1 MD71	1 MD81	1 MD91
6	 124x213x19 (4 7/8" x 8 3/8" x 3/4")	1 MD30	1 MD10	1 MD226	-	-	1 MD72	1 MD82	1 MD92
8		1 MD30	1 MD10	1 MD228	-	-	1 MD72	1 MD82	1 MD92
10		1 MD30	1 MD122	1 MD228	-	-	1 MD72	1 MD82	1 MD92
12	 124x304.5x19 (4 7/8" x 12" x 3/4")	1 MD30	1 MD124	1 MD228	-	-	1 MD72	1 MD82	1 MD92
14		1 MD30	1 MD10	1 MD228	1 MD226	-	1 MD73	1 MD83	1 MD93
16		1 MD30	1 MD10	2 MD228	-	-	1 MD73	1 MD83	1 MD93
18		1 MD30	1 MD122	2 MD228	-	-	1 MD73	1 MD83	1 MD93
20	 248x213x19 (9 3/4" x 8 3/8" x 3/4")	1 MD30	1 MD124	2 MD228	-	-	1 MD73	1 MD83	1 MD93
22		1 MD30	1 MD10	2 MD228	1 MD226	-	2 MD72 ■	1 MD84 ■	1 MD94 ■
24		1 MD30	1 MD10	3 MD228	-	-	2 MD72 ■	1 MD84 ■	1 MD94 ■
26		1 MD30	1 MD122	3 MD228	-	-	2 MD72 ■	1 MD84 ■	1 MD94 ■
28		1 MD30	1 MD124	3 MD228	-	-	2 MD72 ■	1 MD84 ■	1 MD94 ■
30	 248x304.5x19 (9 3/4" x 12" x 3/4")	1 MD30	1 MD10	3 MD228	1 MD226	1 *	2 MD73	1 MD86	1 MD96
32		1 MD30	1 MD10	4 MD228	-	1 *	2 MD73	1 MD86	1 MD96
34		1 MD30	1 MD122	4 MD228	-	1 *	2 MD73	1 MD86	1 MD96
36		1 MD30	1 MD124	4 MD228	-	1 *	2 MD73	1 MD86	1 MD96
38		1 MD30	1 MD10	4 MD228	1 MD226	-	2 MD73	1 MD86	1 MD96
40		1 MD30	1 MD10	5 MD228	-	-	2 MD73	1 MD86	1 MD96
42	 248x395x19 (9 3/4" x 15 5/16" x 3/4")	1 MD30	1 MD122	5 MD228	-	-	2 MD73	1 MD86	1 MD96
44		1 MD30	1 MD124	5 MD228	-	-	2 MD73	1 MD86	1 MD96
46		1 MD30	1 MD10	5 MD228	1 MD226	1 *	2 MD74	1 MD808	1 MD908
48		1 MD30	1 MD10	6 MD228	-	1 *	2 MD74	1 MD808	1 MD908
50		1 MD30	1 MD122	6 MD228	-	1 *	2 MD74	1 MD808	1 MD908
52		1 MD30	1 MD124	6 MD228	-	1 *	2 MD74	1 MD808	1 MD908
54		1 MD30	1 MD124	6 MD228	1 MD222	-	2 MD74	1 MD808	1 MD908
56	 372x304.5x19 (14 5/8" x 12" x 3/4")	1 MD30	1 MD124	6 MD228	1 MD224	-	2 MD74	1 MD808	1 MD908
58		1 MD30	1 MD124	6 MD228	1 MD226	-	2 MD74	1 MD808	1 MD908
60		1 MD30	1 MD124	7 MD228	-	-	2 MD74	1 MD808	1 MD908
62		1 MD30	1 MD122	6 MD228	2 MD226	-	3 MD73	1 MD89	1 MD99
64	 372x395x19 (14 5/8" x 15 5/16" x 3/4")	1 MD30	1 MD10	8 MD228	-	-	3 MD73	1 MD89	1 MD99
66		1 MD30	1 MD122	8 MD228	-	-	3 MD73	1 MD89	1 MD99
68		1 MD30	1 MD124	8 MD228	-	-	3 MD73	1 MD89	1 MD99
70		1 MD30	1 MD10	8 MD228	1 MD226	2 *	3 MD74	1 MD812	1 MD912
72	 496x395x19 (19 1/2" x 15 5/16" x 3/4")	1 MD30	1 MD124	8 MD228	2 MD222	1 *	3 MD74	1 MD812	1 MD912
74		1 MD30	1 MD122	9 MD228	-	2 *	3 MD74	1 MD812	1 MD912
76		1 MD30	1 MD10	9 MD228	2 MD222	-	3 MD74	1 MD812	1 MD912
78		1 MD30	1 MD122	9 MD228	2 MD222	-	3 MD74	1 MD812	1 MD912
80		1 MD30	1 MD124	9 MD228	2 MD222	-	3 MD74	1 MD812	1 MD912
82		1 MD30	1 MD122	9 MD228	2 MD224	-	3 MD74	1 MD812	1 MD912
86	 496x395x19 (19 1/2" x 15 5/16" x 3/4")	1 MD30	1 MD124	10 MD228	1 MD222	-	3 MD74	1 MD812	1 MD912
90		1 MD30	1 MD124	10 MD228	1 MD226	-	3 MD74	1 MD812	1 MD912
92		1 MD30	1 MD124	11 MD228	-	-	3 MD74	1 MD812	1 MD912
96		1 MD30	1 MD10	12 MD228	-	3 *	4 MD74	-	-
100	 496x395x19 (19 1/2" x 15 5/16" x 3/4")	1 MD30	1 MD10	12 MD228	2 MD222	1 *	4 MD74	-	-
104		1 MD30	1 MD122	12 MD228	3 MD222	-	4 MD74	-	-
106		1 MD30	1 MD124	12 MD228	3 MD222	-	4 MD74	-	-
110		1 MD30	1 MD122	12 MD228	3 MD224	-	4 MD74	-	-
116	 496x395x19 (19 1/2" x 15 5/16" x 3/4")	1 MD30	1 MD122	12 MD228	3 MD226	-	4 MD74	-	-
124		1 MD30	1 MD124	15 MD228	-	-	4 MD74	-	-

■ or MD74 or MD804 or MD904

\* or MD20 or MD50 or FC52P or FP52

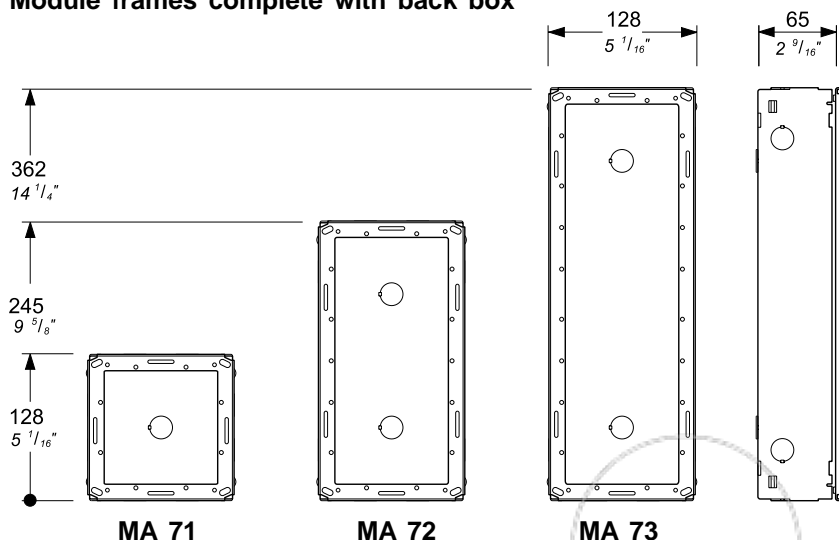
Optional

It replaces  
MD71, 72, 73, 74

## EXTERNAL DOOR STATIONS

### PUSH-BUTTONS Matrix series

#### Module frames complete with back box

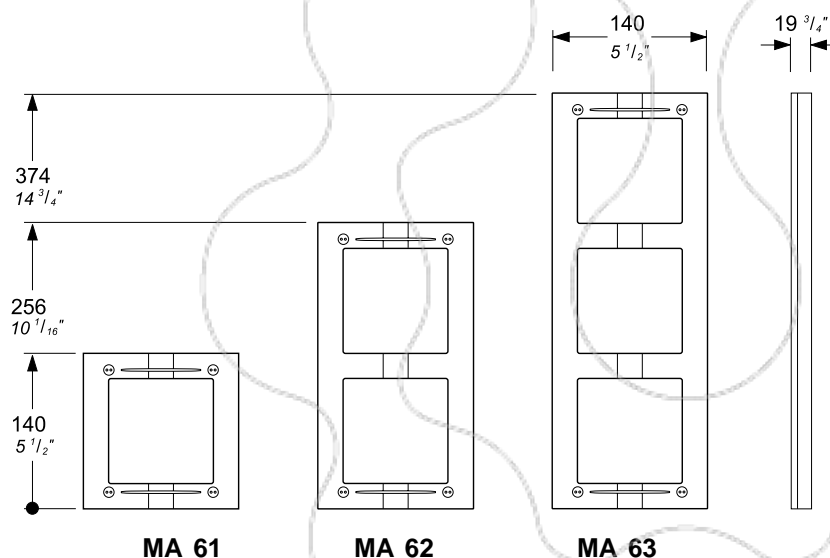


Stainless steel anti-vandalism push-button panels especially studied to withstand burglary, penetration of solids and water jets (IP 45 protection degree against the penetration of external solids and water; IK09 against shocks). The Matrix push-button panels include back boxes, module frames, die-cast aluminium decorative frames, button modules, and modules with built-in speaker unit (with or without camera).

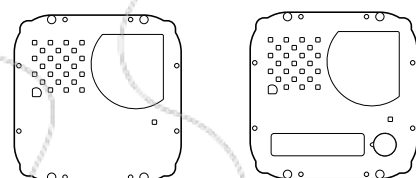
The careful selection of modules allows for multiple application opportunities; from one-way installations to blocks of flats; from intercom to video intercom installations.

The push-button elements have been developed to allow both for horizontal and vertical configuration.

#### Front frames



#### Video modules with door speaker integrated



**MA 42**  
without call buttons  
and with B/W camera

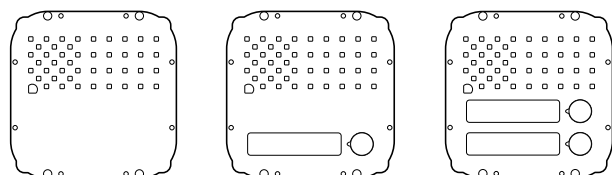
**MA 43**  
with 1 call button and  
B/W camera

**MA 42C**  
without call buttons  
and with colour camera

**MA 43C**  
with 1 call button and  
colour camera

For specifications see page 86.

#### Modules with door speaker integrated

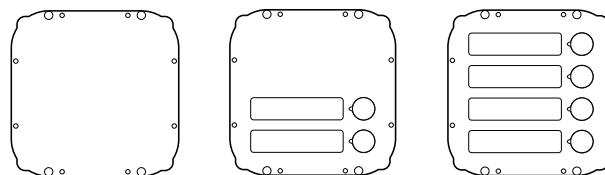


**MA 10P**  
without call buttons

**MA 11P**  
1 call button

**MA 12P**  
2 call buttons

#### Push-button modules



**MA 20**  
blank module

**MA 22**  
2 call buttons

**MA 24**  
4 call buttons



## EXTERNAL DOOR STATIONS

### PUSH-BUTTONS Matrix series

#### Modules with door speaker integrated

##### MA 10P.

- amplified speaker unit with volume adjustment of 2 channels (reception and transmission)
- steel front plate
- red operation LED.

##### MA 11P.

Same as MA 10P, with call button and name plate panel with breakproof transparent screen and green LED backlight.

##### MA 12P.

With 2 call buttons.

#### Push-button modules

##### MA 20.

Blank module in stainless steel.

##### MA 22.

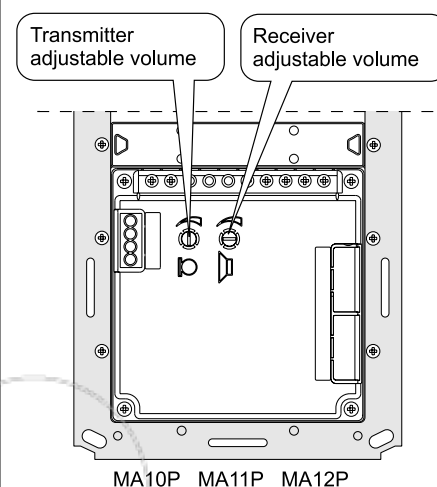
Module with 2 call buttons and name plate panel with breakproof transparent screen and green LED backlight.

##### MA 24.

With 4 call buttons.

#### Audio adjustments

If necessary, it is possible to adjust the volume of the 2 channels audio opportunely varying the external knobs.



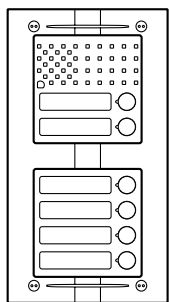
#### Technical characteristics of MATRIX modules terminal boards

MA10P	MA11P	MA12P	MA20	MA22	MA24	MA42 MA42C	MA43 MA43C	
1	1	1				1	1	Reception audio line
2	2	2				2	2	Transmission audio line
3	3	3				3	3	Power supply input for electric door speaker (6÷12Vdc)
4	4	4				4	4	Audio ground
-	-	-	-	-	-	-	-	Alternated power supply input or ground for name-plate Led
A	A	A	A	A	A	A	A	AC or DC power supply input for name-plate Led (12Vac-dc)
	C	C		C	C		C	Call push-buttons common
	P1	P1		P1	P1		P1	Call push-button
		P2		P2	P2			Call push-button
					P3			Call push-button
					P4			Call push-button
						V	V	Video signal output (coaxial cable)
						M	M	Video ground (coaxial shield)
						H	H	Positive voltage input for camera (18÷24Vdc)
L-	L-	L-				L-	L-	Alternated power supply input or ground for service Led
L+	L+	L+				L+	L+	AC or DC power supply input for service Led (12Vac-dc)



# EXTERNAL DOOR STATIONS

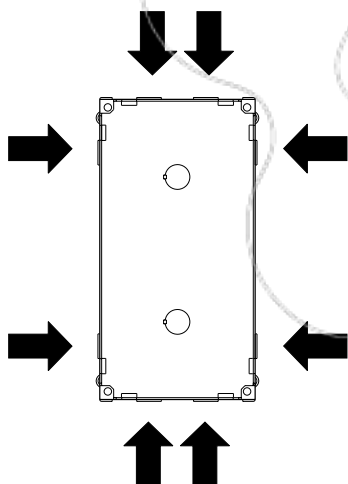
## PUSH-BUTTONS Matrix series



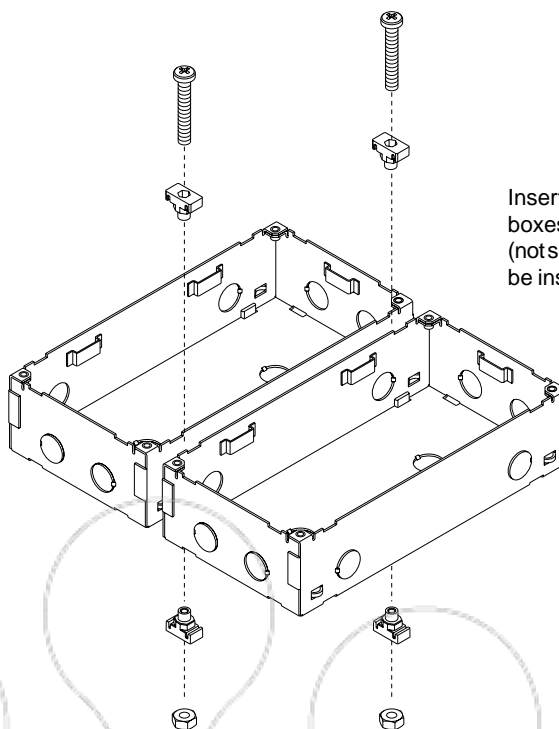
1.65m  
5' 5"



Place the box of the push button panel at a height of about 1.65m (5' 5") from the floor keeping the front edges flush-mounted and vertical to the finished plaster.

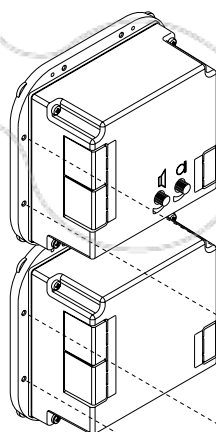
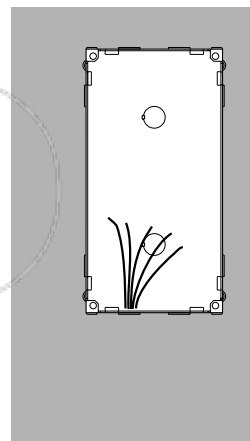
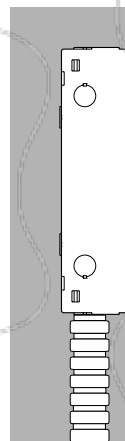


Openings for cables.

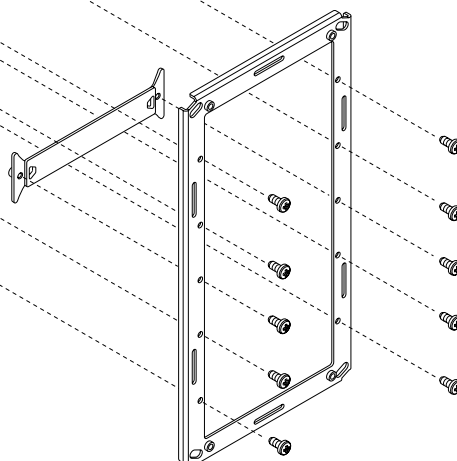


Insertion of spacers between back boxes. Spacers and cable bushing (not supplied with the products) must be inserted before brick work.

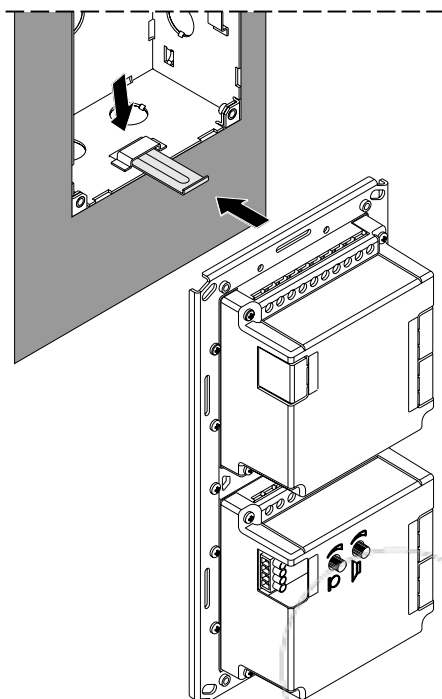
Flush mounting and cables placing.



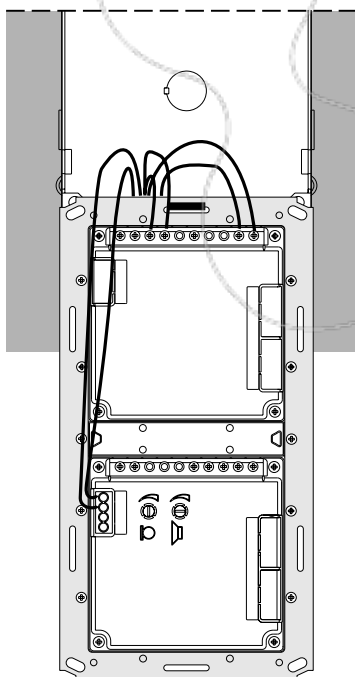
Mounting modules.



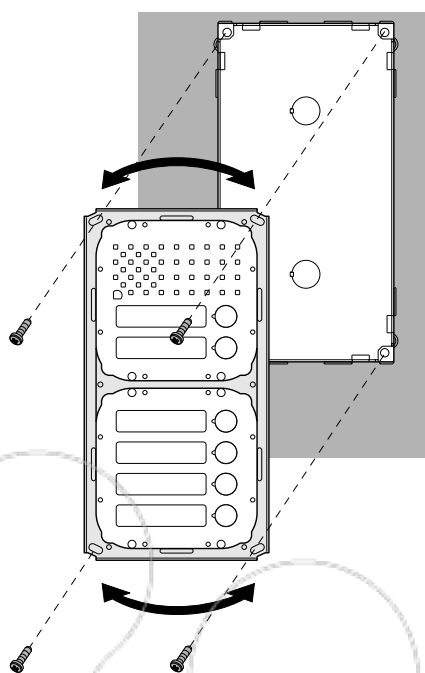
## PUSH-BUTTONS Matrix series



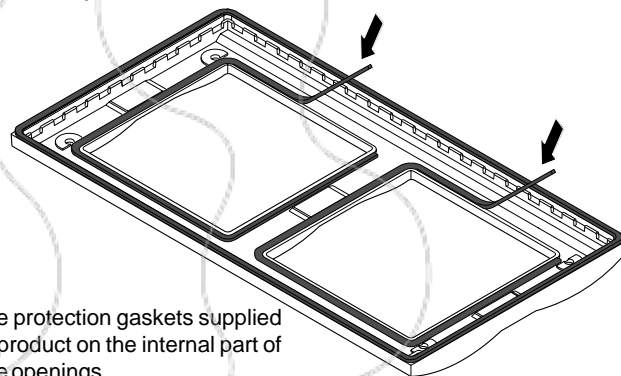
For easier connection to the electrical system, it is recommended to insert the metal plate supplied with the product in the back box opening, as shown in the figure. The plate is used to hook the frame with pre-assembled modules. Leave the plate in the box to reuse it for maintenance operations.



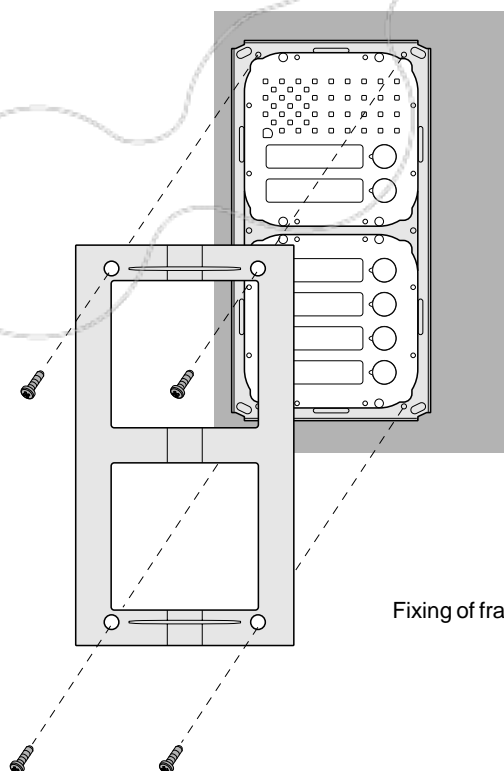
Connection of wires to module terminal boxes.



Fixing of frame to back box. Align the frame before tightening the screws.



Apply the protection gaskets supplied with the product on the internal part of the frame openings.



Fixing of frame to module frame.



# EXTERNAL DOOR STATIONS

## PUSH-BUTTONS Matrix series










## Example of Matrix push-button panel installations.



# EXTERNAL DOOR STATIONS

## PUSH-BUTTONS Matrix series

## Composition board of Matrix push-button panels.

N° calls	Compositions and dimensions	Door speaker module (amplifier)	Button modules and number or blank module			Front frames	Back box and module frame
1	 140x140x19 (5 1/2" x 5 1/2" x 3/4")	1 MA11P	-	-	-	1 MA61	1 MA71
2		1 MA12P	-	-	-	1 MA61	1 MA71
3	 140x256x19 (5 1/2" x 10 1/16" x 3/4")	1 MA11P	1 MA22	-	-	1 MA62	1 MA72
4		1 MA10P	1 MA24	-	-	1 MA62	1 MA72
5		1 MA11P	1 MA24	-	-	1 MA62	1 MA72
6		1 MA12P	1 MA24	-	-	1 MA62	1 MA72
7	 140x374x19 (5 1/2" x 14 3/4" x 3/4")	1 MA11P	1 MA24	1 MA22	-	1 MA63	1 MA73
8		1 MA10P	2 MA24	-	-	1 MA63	1 MA73
9		1 MA11P	2 MA24	-	-	1 MA63	1 MA73
10		1 MA12P	2 MA24	-	-	1 MA63	1 MA73
11	 280x256x19 (11" x 10 1/16" x 3/4")	1 MA11P	2 MA24	1 MA22	-	2 MA62	2 MA72
12		1 MA12P	2 MA24	1 MA22	-	2 MA62	2 MA72
13		1 MA11P	3 MA24	-	-	2 MA62	2 MA72
14		1 MA12P	3 MA24	-	-	2 MA62	2 MA72
15	 280x374x19 (11" x 14 3/4" x 3/4")	1 MA11P	3 MA24	1 MA22	1 MA20	2 MA63	2 MA73
16		1 MA10P	4 MA24	-	1 MA20	2 MA63	2 MA73
17		1 MA11P	4 MA24	-	1 MA20	2 MA63	2 MA73
18		1 MA10P	4 MA24	1 MA22	-	2 MA63	2 MA73
19		1 MA11P	4 MA24	1 MA22	-	2 MA63	2 MA73
20		1 MA12P	4 MA24	1 MA22	-	2 MA63	2 MA73
21		1 MA11P	5 MA24	-	-	2 MA63	2 MA73
22		1 MA12P	5 MA24	-	-	2 MA63	2 MA73
23	 560x256x19 (22 1/16" x 10 1/16" x 3/4")	1 MA11P	5 MA24	1 MA22	1 MA20	4 MA62	4 MA72
24		1 MA10P	6 MA24	-	1 MA20	4 MA62	4 MA72
25		1 MA11P	6 MA24	-	1 MA20	4 MA62	4 MA72
26		1 MA12P	6 MA24	-	1 MA20	4 MA62	4 MA72
27		1 MA11P	6 MA24	1 MA22	-	4 MA62	4 MA72
28		1 MA12P	6 MA24	1 MA22	-	4 MA62	4 MA72
29		1 MA11P	7 MA24	-	-	4 MA62	4 MA72
30		1 MA12P	7 MA24	-	-	4 MA62	4 MA72
31	 420x374x19 (16 9/16" x 14 3/4" x 3/4")	1 MA11P	7 MA24	1 MA22	-	3 MA63	3 MA73
32		1 MA12P	7 MA24	1 MA22	-	3 MA63	3 MA73
33		1 MA11P	8 MA24	-	-	3 MA63	3 MA73
34		1 MA12P	8 MA24	-	-	3 MA63	3 MA73
35	 560x374x19 (22 1/16" x 14 3/4" x 3/4")	1 MA11P	8 MA24	1 MA22	2 MA20	4 MA63	4 MA73
36		1 MA10P	9 MA24	-	2 MA20	4 MA63	4 MA73
37		1 MA11P	9 MA24	-	2 MA20	4 MA63	4 MA73
38		1 MA12P	9 MA24	-	2 MA20	4 MA63	4 MA73
39		1 MA11P	9 MA24	1 MA22	1 MA20	4 MA63	4 MA73
40		1 MA12P	9 MA24	1 MA22	1 MA20	4 MA63	4 MA73
41		1 MA11P	10 MA24	-	1 MA20	4 MA63	4 MA73
42		1 MA12P	10 MA24	-	1 MA20	4 MA63	4 MA73
43	 560x374x19 (22 1/16" x 14 3/4" x 3/4")	1 MA11P	10 MA24	1 MA22	-	4 MA63	4 MA73
44		1 MA12P	10 MA24	1 MA22	-	4 MA63	4 MA73
45		1 MA11P	11 MA24	-	-	4 MA63	4 MA73
46		1 MA12P	11 MA24	-	-	4 MA63	4 MA73

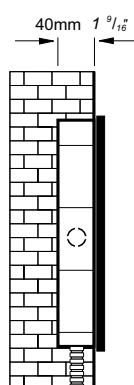
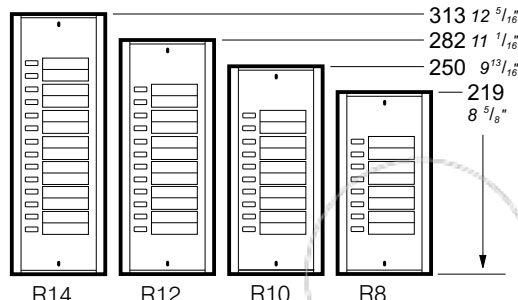
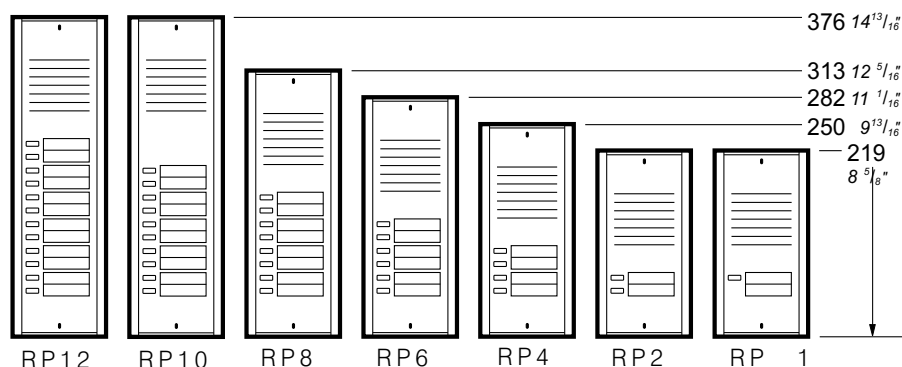
INTERCOMS \* VIDEOINTERCOMS \* TELECOMMUNICATION

MATRIX



## EXTERNAL DOOR STATIONS

## PUSH-BUTTONS ErreP/R series



**R. Push-button panels** provided only with buttons. An electric door speaker cannot be fitted inside. When such panels are installed together with the previous ones, a system with over 12 calls is obtained (see table).

**RP. Push-button panels** with anodized aluminium front panel and buttons, complete with name plate lights and height adjustable contacts to compensate imperfections of the wall. The electric door speaker can be fitted inside the push-button panel.

**The unit should be flush-mounted and the microphone should be firmly attached to the front panel to avoid feedback and to obtain the highest audio quality.**

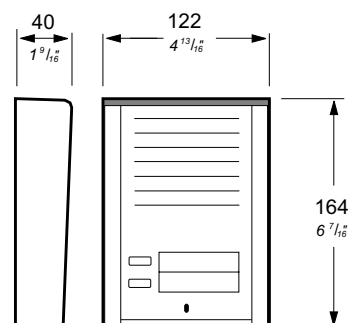
## ELECTRIC DOOR SPEAKER (amplifier)

**337C.** It features a double amplifier (receiver and transmitter); receiver has volume control. It is applicable inside the **RP** or **TM** push-button panels (or in other push-button panels by means of the adaptor art.299). Provided with an electret microphone and tropicalized speaker.

## Terminals

- 1 audio receiver
- 2 audio transmitter
- 3 positive power supply 6÷8Vdc -60mA
- 4 ground

## AMPLIFIED DOOR STATIONS

**RP100. 1-button amplified door station.**

It is complete with an amplifier, in both channels, electric door speaker, volume control of the receiving channel, front panel in anodized aluminium, call button, rain shelter and name plate light.

It can be installed on the wall with expansion plugs or on a wall box.

**RP200. 2-button amplified door station.**

## Technical data

Power supply: 13Vac  
Operating current: 130mA

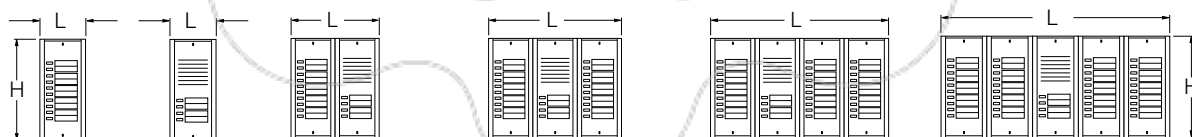
## Terminals

- 2 audio receiver
- 1 audio transmitter
- C common contact of call push-buttons
- P1 call push-button
- P2 call push-button
- ground
- ~ alternate voltage input 13Vac

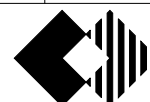
## Instructions of the various ErreP/R push-button panel series and their dimensions en mm (and inches)

L and H = Dimensions of the panel

l and h = Dimensions of the back-box

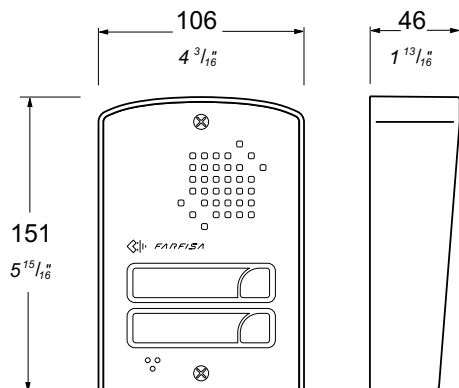


Series	R	RP	R+RP	R+RP+R	R+RP+R+R	R+RP+R+R+R	L	h
H	L	112 (4 7/16")	224 (8 13/16")	336 (13 1/4")	448 (17 5/8")	560 (22 1/16")	L	h
218.5 (8 5/8")	R8	RP1	R8+RP1=9	2R8+RP1=17	3R8+RP1=25	4R8+RP1=33	206.5 (8 1/8")	
	R8	RP2	R8+RP2=10	2R8+RP2=18	3R8+RP2=26	4R8+RP2=34		
250 (9 13/16")	R10	RP4	R10+RP4=14	2R10+RP4=24	3R10+RP4=34	4R10+RP4=44	238 (9 3/8")	
281.5 (11 1/16")	R12	RP6	R12+RP6=18	2R12+RP6=30	3R12+RP6=42	4R12+RP6=54	269.5 (10 5/8")	
313 (12 5/16")	R14	RP8	R14+RP8=22	2R14+RP8=36	3R14+RP8=50	4R14+RP8=64	301 (11 7/8")	
H	l	103 (4 1/16")	215 (8 7/16")	327 (12 7/8")	439 (17 5/16")	551 (21 1/16")	l	h



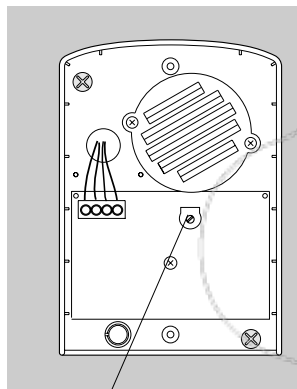
## PUSH-BUTTONS UP series

### Surface mounted version

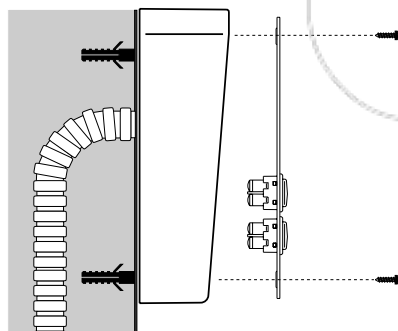


**UP 100. Amplified push-button panel with 1 call button.**  
Fittable in all 4+1 intercom and intercommunicating systems. Complete with electric door speaker amplified in the two channels, volume control of the receiving channel, front panel in anodized aluminium with call button. Wall-mountable with expansion plugs.

**UP 200. Amplified push-button panel with 2 call buttons.**



External volume adjustment



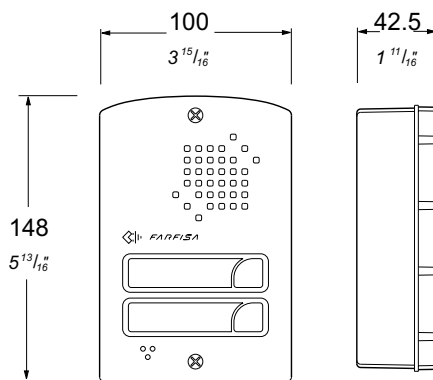
#### Terminals

- ground
- ~ 13Vac-70mA voltage input
- 1 audio receiver
- 2 audio transmitter

#### Wires

- C yellow wire connected to call button common.

### Flush mounted version

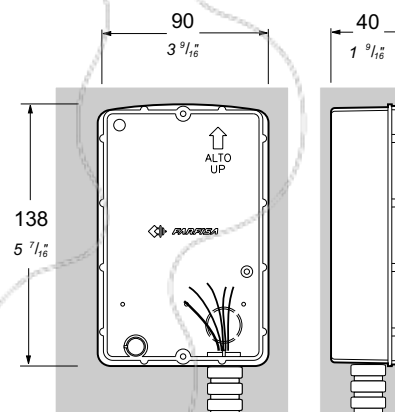


**UP 11. Amplified push-button panel with 1 call button.**  
Fittable in all 4+1 intercom and intercommunicating systems. Complete with electric door speaker amplified in the two channels, volume control of the receiving channel, front panel in anodized aluminium with call button.

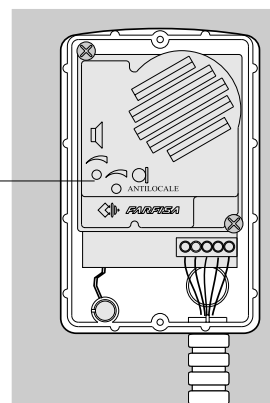
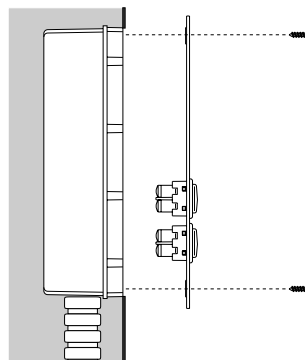
To install it you must:

- fix the back box to the wall;
- install the speaker unit;
- make the connections;
- screw the front panel onto the back box.

**UP 12. Amplified push-button panel with 2 call buttons.**



External volume adjustment



## POWER SUPPLIES

The power supply is not provided with fuses, but it is protected against overloading or short-circuiting by a heat sensor (thermoprotector), to restore power, it is necessary to cut off the mains voltage for about one minute. Reconnect power after having repaired the fault.

Do not obstruct the openings or the ventilation or heat ejection slots to allow the equipment to operate correctly. The power supply can be installed on DIN rail or screwed to the wall.

All the power supplies described in this manual replace the corresponding ones with similar initials. E.g.: **PRS220** replaces **PRS220D**, **PRS220K**, etc. **PRS226** replaces **PRS226D** and **PRS226K**.

All power supplies can provide power for a maximum of **6 24V-3W lamps** for illuminating push-button panel name plates. For more than 6 lamps, **PRS210** transformer should be installed.

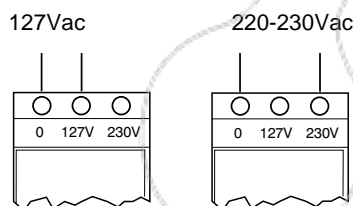
### General technical data

Input voltage: 127Vac or 220-230Vac  
Working temperature: 0°±+50°C  
Maximum of humidity: 90%RH

### Warning

All power supplies in this manual can work either 127Vac or 220-230Vac.

**Check carefully the right connection.**

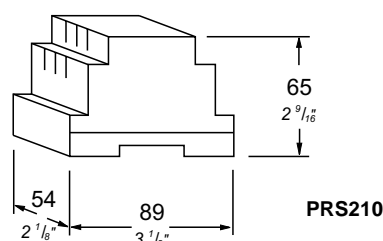


### PRS 210. TRANSFORMER.

Used to power 13Vac devices; **MD100, MD200, RP100, RP200, UP** series amplified external door stations, accessories, additional door locks, name plate light, etc.

### Technical data

Power: 15VA  
Output voltage: 13Vac  
Maximum load: 0.7A  
Maximum of intermittent load: 1A  
Housing: DIN 3 modules A  
Weight: 0.42 Kg. (0.93lb)  
Approved by: VDE according to the Safety Standard EN60065



### PRS 220. STABILIZED POWER SUPPLY.

It is provided to supply 4+1 intercom systems (electric door lock, name plate lamps, electric door-speakers, amplifier, etc.)

### Technical data

Power: 15VA  
Housing: DIN 4 modules A  
Weight: 0.45 Kg. (0.99lb)  
Approved by: VDE (according to the Safety Standard EN60065)

### Output terminals

- Ground
- + Audio line power supply 6Vdc-0.1A
- ~ Power supply 13Vac for:
  - name plate lamps, exchangers (continuous load 0.6A)
  - electric door lock and bells (intermittent load 1A)

### PRS226. STABILIZED POWER SUPPLY/ SWITCHER.

It is able to supply intercommunicating intercom systems and to switch over automatically audio connection of the door station and of the intercommunicating service to the intercoms.

### Technical data

Power: 18VA  
Housing: DIN 6 modules A  
Weight: 0.5 Kg. (1.1lb)  
Approved by: VDE (according to the Safety Standard EN60065)

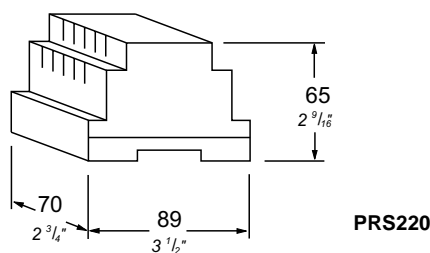
### Output terminals

- Ground
- + Audio line power supply 8Vdc-0.1A
- X Power supply for auxiliary services 12Vdc-0.2A
- ~ Power supply 13Vac for:
  - name plate lamps, exchangers (continuous load 0.6A)
  - electric door lock and bells (intermittent load 1A)
- 7 Power supply 13Vac for electric door lock and bells (intermittent load 1A)
- A Output for call from push-button panel 13Vac-0.15A
- G Audio line receiver from intercoms
- 2 Audio line transmitter to intercoms
- D Audio line transmitter to electric door speaker
- C+ Audio line receiver from electric door speaker

### PRS226E. STABILIZED POWER SUPPLY/ SWITCHER.

As above, with the following additional terminals and the modification of terminal 7.

- 7 Electronic bell output for intercommunications
- Y Electronic bell output for push-button panel



- 9 Electronic call input for switching over multi-way installations
- 4 Relay switching common terminal controlled from entrance 9
- 4a NC relay switching controlled from entrance 9
- 4b NA relay switching controlled from entrance 9

### PRS 240. STABILIZED POWER SUPPLY WITH ELECTRONIC RINGING GENERATOR.

Power supply with modulated electronic ringing generator for calls. It supplies the voltages needed for the correct operation of intercom systems.

### Technical data

Power: 18VA  
Ringing frequency: 450Hz modulated  
Housing: DIN 6 modules A  
Weight: 0.5 Kg. (1.1lb)  
Approved by: VDE according to the Safety Standard EN60065

### Output terminals

- Ground
- + Audio line power supply 7.2Vdc-0.1A
- X Power supply for aux. services 12Vdc-0.2A
- ~ Power supply 13Vac for:
  - name plate lamps (continuous load 0.6A)
  - electric door lock and bells (intermittent load 1A)
- C+ Modulated electronic call output 12Vpp-0.25A
- 7 Continuous electronic call output 12Vpp-0.25A

### PRS 235. POWER SUPPLY FOR SYSTEMS WITH PRIVATE CONVERSATION MODULE.

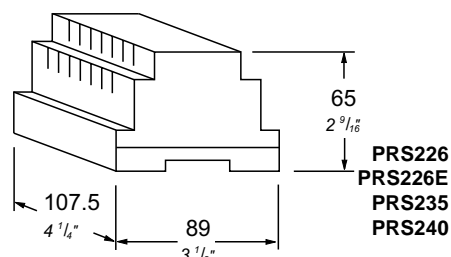
It may be installed with **Project** series intercoms for supplying power to 4+1 systems with private conversation module. Only the intercom which has been called can speak to the door station. All the other users are isolated.

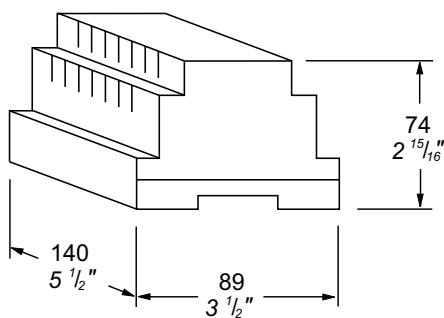
### Technical data

Power: 18VA  
Housing: DIN 6 modules A  
Weight: 0.5 Kg. (1.1lb)  
Approved by: VDE according to the Safety Standard EN60065

### Output terminals

- Ground
- + Audio line power supply 7.2Vdc-0.1A
- X Power supply for auxiliary services 12Vdc-0.2A
- ~ Power supply 13Vac for:
  - name plate lamps (continuous load 0.6A)
  - electric door lock and bells (intermittent load 1A)
- C+ Power supply for bells 13Vac- 0.15A





## 1473. 4-CONTACT ANALOG EXCHANGER.

It is installed in intercom systems with two or more entrances for switching the audio lines and door lock of the calling entrance. It can be installed on DIN bar or with two screws. In housing DIN bar 8 modules A.

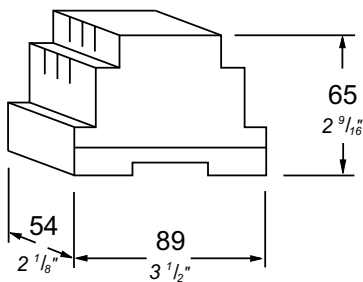
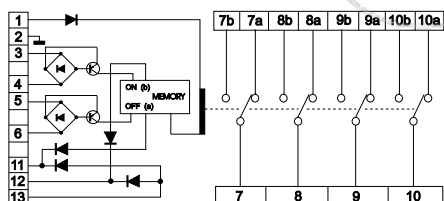
Art. 1473 completely replaces the functions of models 473 and 273.

### Technical data

Power supply: 13Vac; 15÷21Vdc  
Current consumption: 0.1A  
Number of exchanges: 4  
Max. switching current: 5A (50V)  
Housing: DIN 8 modules A  
Operating temperature: 0° ÷ 50°C  
Maximum permissible humidity: 90% RH

### Terminals

- 1 Power supply 13Vac-0.1A
- 2 Ground
- 3 and 4 Driver to switch the relay to "b" position - ON position
- 5 and 6 Driver to switch the relay to "a" position - OFF position
- 7, 8, 9 and 10 Common contact of relays
- 7a, 8a, 9a and 10a OFF position of the relay contacts
- 7b, 8b, 9b and 10b ON position of the relay contacts
- 11 Ground command to switch the relay to "a" position - OFF position
- 12 Ground command to switch the relay to "b" position - ON position
- 13 Electronic call input from PRS240



## 1471. RELAY UNIT

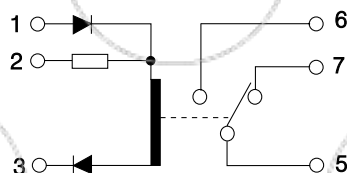
A low voltage, low current (DC/AC) unit, it can switch voltages up to 50V and 5A max. Used for auxiliary services (e.g. stair lights, call for 4 or more bells, door release etc). It can be installed on DIN bar or with two screws. In housing DIN bar 3 modules A.

### Technical data

Power supply: 13Vac; 12÷24Vdc  
Current consumption: 0.05A  
Number of exchanges: 1  
Switching current: 5A (50V)  
Housing: DIN 3 modules A  
Operating temperature: 0° ÷ 50°C  
Maximum permissible humidity: 90% RH

### Terminals

- 1 Alternate current input 13Vac-dc
- 2 Continuous current input 21Vdc
- 3 Negative half-wave input or ground
- 5 Common contact of relay
- 6 Normally open contact of relay
- 7 Normally closed contact of relay

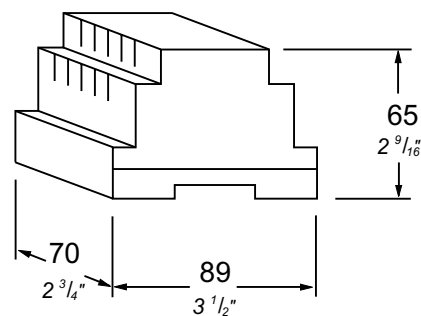
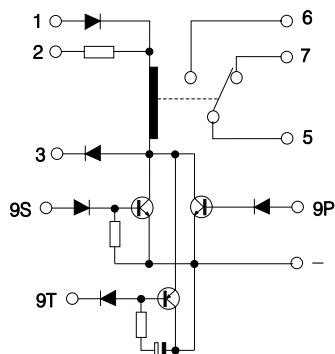


## 1471E. RELAY UNIT

Same as 1471, but with 9S, 9T and 9P input terminals. In housing DIN bar 4 modules A.

### Terminals

- In addition to terminals of art. 1471 you find:
- 9P Electronic call input without resistive load
  - 9S Electronic call input with resistive load
  - 9T Electronic call input timed operation (1 sec.)
  - Ground



## 1472. 2-CONTACT RELAY UNIT

Same as 1471, but with 2 relays and 9S input terminal.

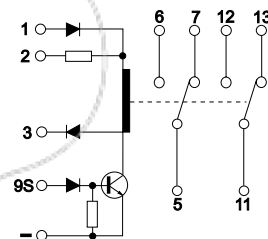
### Technical data

Power supply: 13Vac; 12÷24Vdc  
Current consumption: 0.05A  
Number of exchanges: 2  
Switching current: 1A (24V)  
Housing: DIN 4 modules A  
Operating temperature: 0° ÷ 50°C  
Maximum permissible humidity: 90% RH

### Terminals

In addition to terminals of art. 1471 you find:

- 11 Common contact of relay 2
- 12 Normally open contact of relay 2
- 13 Normally closed contact of relay 2
- 9S Electronic call input with resistive load
- Ground



### General characteristics

- **The cable runs** of intercom and video intercom installations must be kept separate from the mains or any other electrical installation as required by the **International Safety Standards** and the entire installation must be realized in compliance with the safety rules in force in any specific Country.
- It is necessary to provide a disconnecting and safety switch before the power supply. Use a single general switch in case of several power supplies (also in multiple entrance).
- Before connecting the power supply make sure that its rating data corresponds to this of the mains.
- For electromagnetic reasons, all service modules must be installed near their power supply.

## Wires




- 1) For the correct operation of the intercom system you must choose the correct type of cable.
- 2) Wires must be dimensioned according to the distance of the different devices and their current consumption.
- 3) Do not connect wires in parallel to reach the required cross-section (for example multi-pair telephone cables). Only use a single wire with suitable cross-section. When using multi-core cables you must select them with low parasite parameters (low capacitance per metre, low inductance over Ohm).
- 4) If the installation includes additional power supplies you must place them near the device to be powered.

## Background noise

To avoid possible background noise over the speech line, it is advisable:

- 5) not to lay intercom or telephone cables in the same runaway as the wires used to power alternate current loads;
- 6) to avoid using the same multi-core cable to transmit audio signals and alternate current power supplies (lamps, amplified external door stations, electrical door locks). Always use separate wires for alternate current power supplies;
- 7) not to connect name-plate lamps (or other devices powered with alternate current) to terminal **4** (-) of the speaker unit; 2 wires must originate from terminal - (minus sign) of the power supply, one for terminal **4** of the speaker unit and one for the lamps (or other devices powered with alternate current);
- 8) for name-plate lamps, to use an additional 12Vac transformer (PRS210 type) with suitable power (consumption is 75mA for each lamp) with 2 power supply wires separate from audio wires;
- 9) in case of long distances between the external door station and the last intercom, to place the power supply near the external door station and use a relay for the electric door lock in order to avoid alternate current induction along the riser (see diagrams of lateral column).

### WIRE CROSS-SECTION

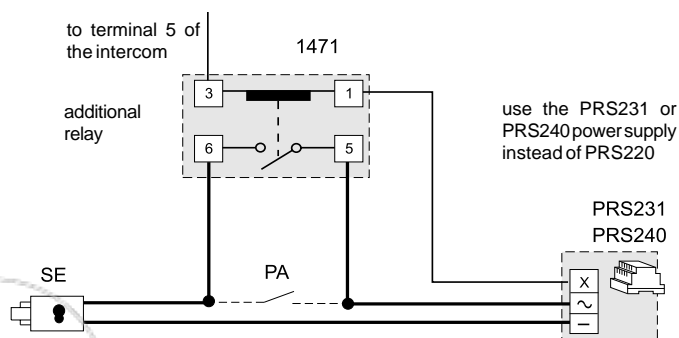
Distance	Audio and calls			Door lock and ground (*)		
						
m.	mm <sup>2</sup> S	mm Ø	AWG	mm <sup>2</sup> S	mm Ø	AWG
50	0.35	0.7	21	0.75	1	18
100	0.35	0.7	21	1	1.2	16
200	0.5	0.8	20	2	1.4	14
300	0.75	1	18	2.5	1.6	13
400	1	1.2	16	-	-	-

(\*) Wires in **bold face type**.

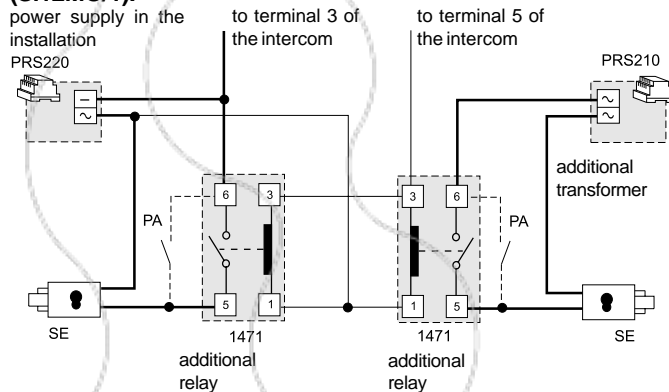
## ELECTRIC DOOR LOCK ACTIVATION

In case of long distances or if you want to control several door locks at the same time, install a relay as shown in the following installation diagrams.

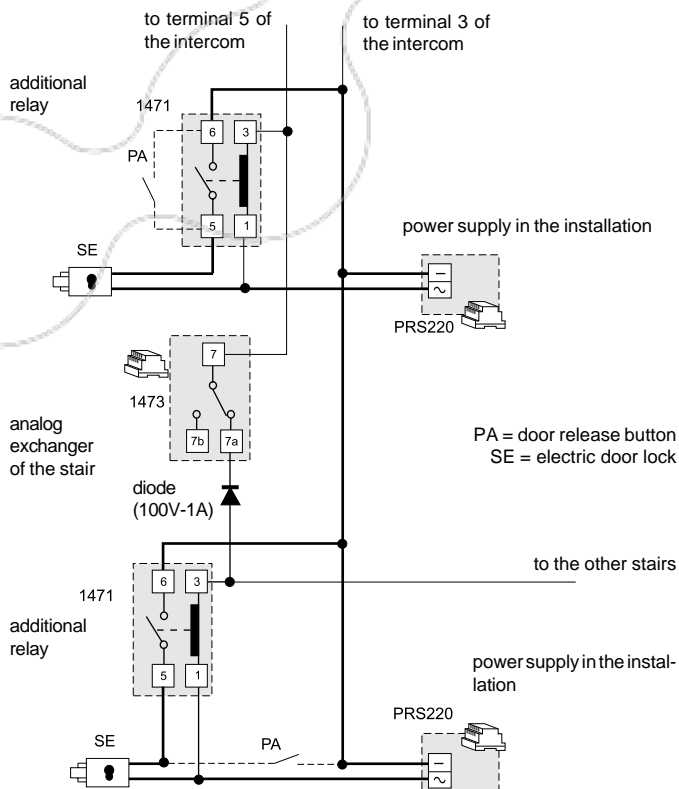
### Electric door lock activation by means of an additional relay



**Connection of 2 door locks with simultaneous opening (Si12MO/1).**



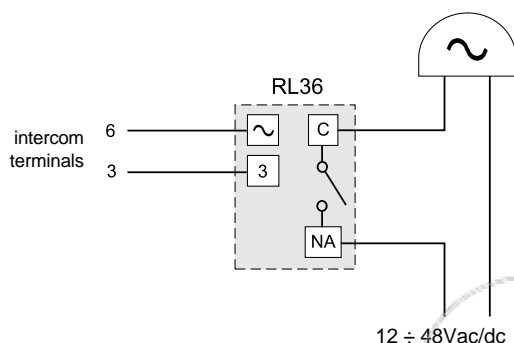
**Connection of 2 door locks, one of which always activable, in a system with multiple entrance (Si16MO/1; Si 16MO/2).**



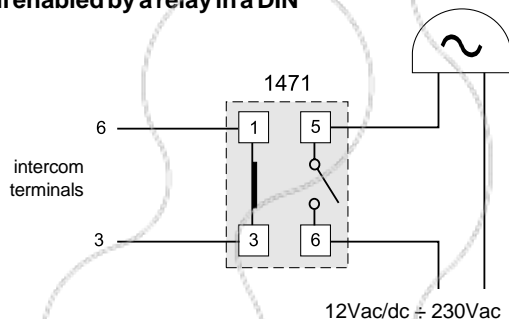
## ADDITIONAL BELL

If the ringing volume is not sufficient or if you need to chime the call in a different place, you can add an additional bell enabled by a relay.

### Additional bell enabled by a relay to be installed inside the intercom

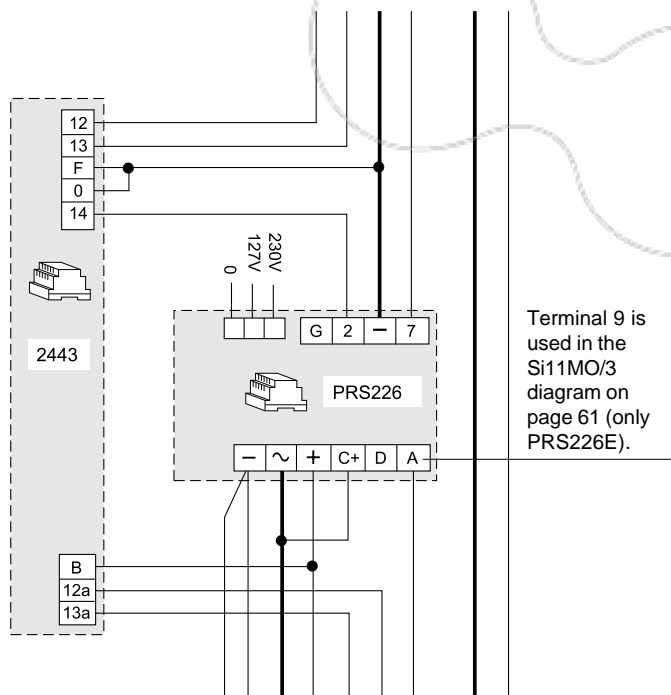


### Additional bell enabled by a relay in a DIN housing



## ADDITIONAL AUDIO AMPLIFIER

In intercommunicating systems with long distances between intercoms and power supply, to increase the intercommunication audio level, it is advisable to install an amplifier art. **2443** (see page 90 for characteristics). The following diagram can be applied to all intercommunicating systems (from page 47 to page 61).



## Basic systems

For all the intercom systems, simply lift the handset to speak to the door station. The call is indicated by an audio signal (a buzzer or an electronic bell).

To activate the door release, press the push-button with the key symbol. In systems with two or more entrances the communication and door release are switched automatically on the entrance from which the call is made while the other entrances are isolated.

## Systems with private conversation module

In all standard intercom systems (not intercommunicating) a private audio system can be provided (only the intercom which has been called can speak to the door station) by installing the "private conversation module" art. **SM50** in every intercom.

Since the buzzer rings, the user has about 30 seconds to lift handset and answer. There is no time limit for the private conversation. When the handset is replaced the system returns to the rest condition. If a user does not replace the handset properly, the next call from another intercom, automatically cuts him out of the audio connection with the door station.

## Intercommunicating systems

Intercommunicating systems allow users to speak to one another by simply lifting the handset; any user can join in to a conversation already in progress. To avoid interferences it is necessary to observe the following instructions.

Lift the handset, make sure that there is not a conversation already in progress, then press the call push-button corresponding to the desired user.

## Intercommunicating systems connected to door station

Such systems allow conversation between two or more inside users with the exclusion of the door station, or between one inside user and the door station.

When there is a call from an external push-button panel the audio line of the electric door speaker is activated automatically; when one calls from one of the intercoms, the internal intercommunicating audio line is automatically activated.

The user called has simply to lift the handset.

Any user can join in to a conversation already in progress.

To avoid interferences it is necessary to observe the following instructions:

- lift the handset, make sure that there is not a conversation already in progress, then press the call push-button corresponding to the desired user.

As it is shown in the connection diagram, internal calls have a sound (electronic) distinct from external calls (buzzer).

To activate the electric lock it is necessary to push the push-button with a key symbol on. By performing this operation the system returns to the intercommunicating service with the audio exclusion of the door station.



## TROUBLESHOOTING

### PRELIMINARY CHECKS

- Check for the presence of the mains voltage in the terminals 230Vac (or 127Vac) of the power supply.  
- The power supply is not provided with fuses, but it is protected against overloading or short-circuiting by a heat sensor (thermoprotector),

to restore power, it is necessary to cut off the mains voltage for about one minute. Reconnect power after having repaired the fault.  
- Check the voltage output of the power supply (see in detail the values indicated in the power supply chapter).

- Check that the cross section of the cables corresponds to what is indicated on page 26 and in the descriptions of each individual diagram.

### FAULT AND PROBABLE DAMAGE

#### Nothing at all is working

Absence of main voltage. Short-circuit or overload of the terminals of the power supply output. Faulty power supply.

#### The lock does not work

Faulty lock. The cross section of the cables indicated in bold type is insufficient. A connecting cable to the lock has been interrupted. Faulty power supply.

#### Calls from the door station do not activate

The common connection of the push-buttons on the push-button panel has been interrupted.

#### A call to an individual intercom does not activate

The connecting wire from the door station to the intercom has been interrupted. The intercom buzzer is faulty or badly set. In intercoms with electronic call check that the handset is hung up correctly.

#### No sound from either channel

Absence of power between **3** (+) and **4** (-) of the electric door-speaker (6-8Vdc). Short-circuit between + and - of the power supply. Faulty power supply.

#### No sound from the intercoms to door station

Connection **1** from the intercoms to the electric door-speaker has been interrupted or short-circuited. There is no ground connection to terminal **4** of the electric door-speaker (amplifier). Faulty electric door-speaker (amplifier).

#### No sound from the door station to the intercoms

Connection **2** from the intercoms to the electric door-speaker (amplifier) has been interrupted or short-circuited. Faulty electric door-speaker (amplifier).

#### Audio with humming in the background (50/60Hz)

The wires have been canalized together with the cables that power AC loads. Wrong connections or under dimensioned cross-section of wires (see recommendation and table on page 26). Faulty power supply.

#### At the door station a whistle is heard (Larsen effect)

The electric door-speaker (amplifier) is badly housed in the push-button panel; the microphone has to be stuck to plate. Lower the volume.

#### Radio reception on the door station

The defect can occur when there is a transmitter working in the proximity. Apply a condenser from 0.1  $\mu$ F between terminals **1** and **3** of the electric door speaker (amplifier).

### INTERCOMMUNICATING SYSTEMS

#### No sound in either channel. Intercommunicating phone not working

Short-circuit between + and - of the power supply. Faulty power supply.

#### Calls from the door station activate. No sounds in either channel. Intercommunicating phone is working

No power supply between **3** (+) and **4** (-) of the electric door-speaker (8Vdc). Faulty power supply.

#### No sounds from the intercoms to the door station

The connection between **1** of the intercoms and **G** of the power supply has been interrupted. The connection between **D** of the power supply and **1** of the electric door-speaker (amplifier) has been interrupted. Faulty electric door-speaker (amplifier). Faulty power supply.

#### No sounds from the door station to the intercoms

The connection between **2** of the intercoms and **2** of the power supply has been interrupted. The connection between **C+** of the power supply and **2** of the electric door-speaker (amplifier) has been interrupted. Faulty electric door-speaker (amplifier). Faulty power supply.

#### The intercommunicating calls activate, but the door station is still on

Check that cable **7** is connected to **7** of the power supply and not to terminal  $\sim$ . Faulty power supply.

#### The intercommunicating calls do not activate

Check that cable **7** is connected to **7** of the power supply. Faulty power supply.

#### No sound in the intercommunicating service

Faulty power supply.

### SYSTEM WITH MORE ENTRANCES

#### Entrance A is never activated

Short-circuit between **5** and **6** of the exchanger. Faulty exchanger.

#### Entrance B is never activated

Short-circuit between **3** and **4** of the exchanger. Faulty exchanger. No power supply to **1** and **2** of the exchanger (13Vac).



## INSTALLATION DIAGRAMS

The following pages show the installation diagrams that are most commonly used in intercom systems. Upon request ACI Farfisa can supply installation diagrams for configurations that are not included in this manual.

- **Systems with 1 or more main entrances**
- **Systems with 1 or more main entrances and secondary door stations**
- **Systems with private conversation**
- **Intercommunicating systems without external door station**
- **Intercommunicating systems with 1 or more main entrances**
- **Intercommunicating systems with 1 or more main entrances and secondary door stations**
- **Systems with floor-call**
- **Systems with intercommunicating service between intercoms in individual flats**

For a clearer understanding of the diagrams, **the sequence of terminals in each individual article has not been followed**. Only the terminal code (letter and/or number) is valid, not the graphic sequence.  
Terminals with the same letter or number have the same functions.

The items may have more terminals than the ones shown in the installation diagrams. **The excess terminals must not be connected.**

- **The intercommunicating installation diagrams** connected to 1 or more door stations allow for the use of 5 intercommunicating intercoms (see diagrams from page 47 to 61). If a different number is required, the installation diagrams on pages 62÷70 should be looked at, paying attention to the type of installation (single or common call from door station). The installation diagram to use (2, 3, 4, 6 or 7 intercoms) should be also copied and placed over the 5-intercom basic diagram.

**Example:** copying the installation diagram of 4 intercommunicating intercoms on page 66 and placing it to the installation diagram on page 53 (Si 121L/5M), aligning the 6 cables at the riser, will produce a system of 4 intercommunicating intercoms connected to 2 external door stations with common call and electronic ringing for internal calls.

- **The “telecommunication” section** contains only some intercom-telephone (pages 173÷175); many of the installation diagrams contained in the intercom sections can be however used, following the indications on page 170.



## INTERCOMS CONNECTED TO 1 EXTERNAL DOOR STATION.

Q.ty	Article	Description
...	<b>PT 510 *</b>	Project series intercom with 1 call button
1	<b>PRS220</b>	Power supply
1	<b>PA **</b>	Door release push-button ( <i>optional</i> )
1	<b>SE **</b>	Electric door lock (12VAC-1A)

**Door station series Mody** (for items selection refer to pages 12÷15)

	1 row	2 row	
...	<b>MD71÷74</b>	<b>MD71÷74</b>	Module frames with back box
1	<b>MD10-11-12</b>	<b>MD10-122-124</b>	Modules for electric door speaker
...	<b>MD21 ÷ 24</b>	<b>MD222 ÷ 228</b>	Button modules
...	<b>MD20 - 50</b>	<b>MD20 - 50</b>	Blank and info modules
1	<b>MD82 ÷ 812</b>	<b>MD82 ÷ 812</b>	Hood covers
1	<b>MD92 ÷ 912 <sup>(2)</sup></b>	<b>MD92 ÷ 912 <sup>(2)</sup></b>	Rain shelters with module frames
1	<b>MD30</b>	<b>MD30</b>	Electric door speaker (amplifier)

**Door station series Matrix** (for items selection refer to pages 20 and 21)

...	<b>MA71÷73</b>	Module frames with back box
1	<b>MA10P-11P-12P</b>	Modules with integrated audio amplifier
...	<b>MA20-22-24</b>	Blank and button modules
...	<b>MA61÷63</b>	Front frames

... Refers to number of users.

\* Besides the mentioned model all the intercoms from the **Project, PuntoVirgola, 900** and **700** can be installed.

\*\* Articles not supplied by ACI Farfisa.

<sup>(2)</sup> Rain shelters are used instead of back boxes and hood covers.

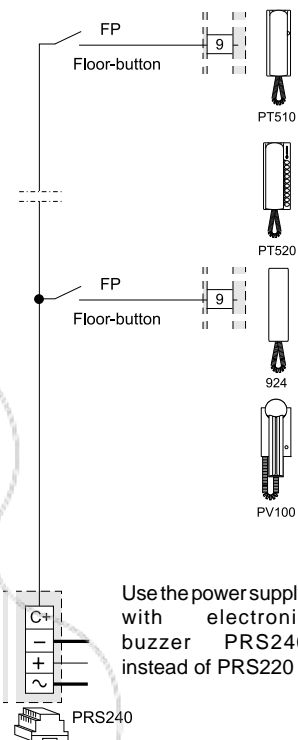
**Working instructions.** See page 27.

### Notes

- For the connection of name-plate lamps, read notes 6, 7 and 8 of the installation instructions on page 26.
- For wires dimensioning refer to the installation recommendations and table on page 26.
- Telephones can be used instead of intercoms (see "telecommunication" section).
- For other types of push-button panels see pages 22 and 23 or the general catalogue.

### Floor call

This work diagram allows for differentiating the floor-call from the call from the push-button panel.



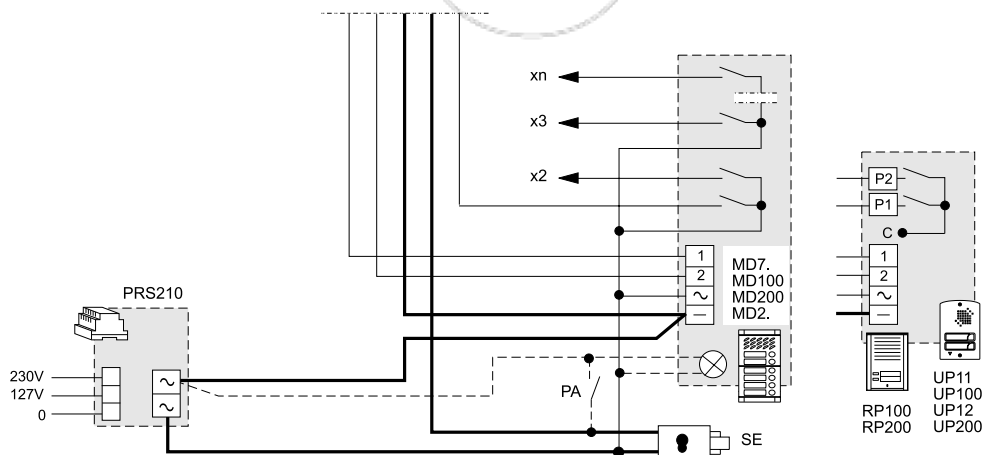
### Application diagram

When using **MD100, MD200, RP100, RP200** and **UP** amplified external door stations, place this diagram on the diagram on page 31 and line it up with the riser.

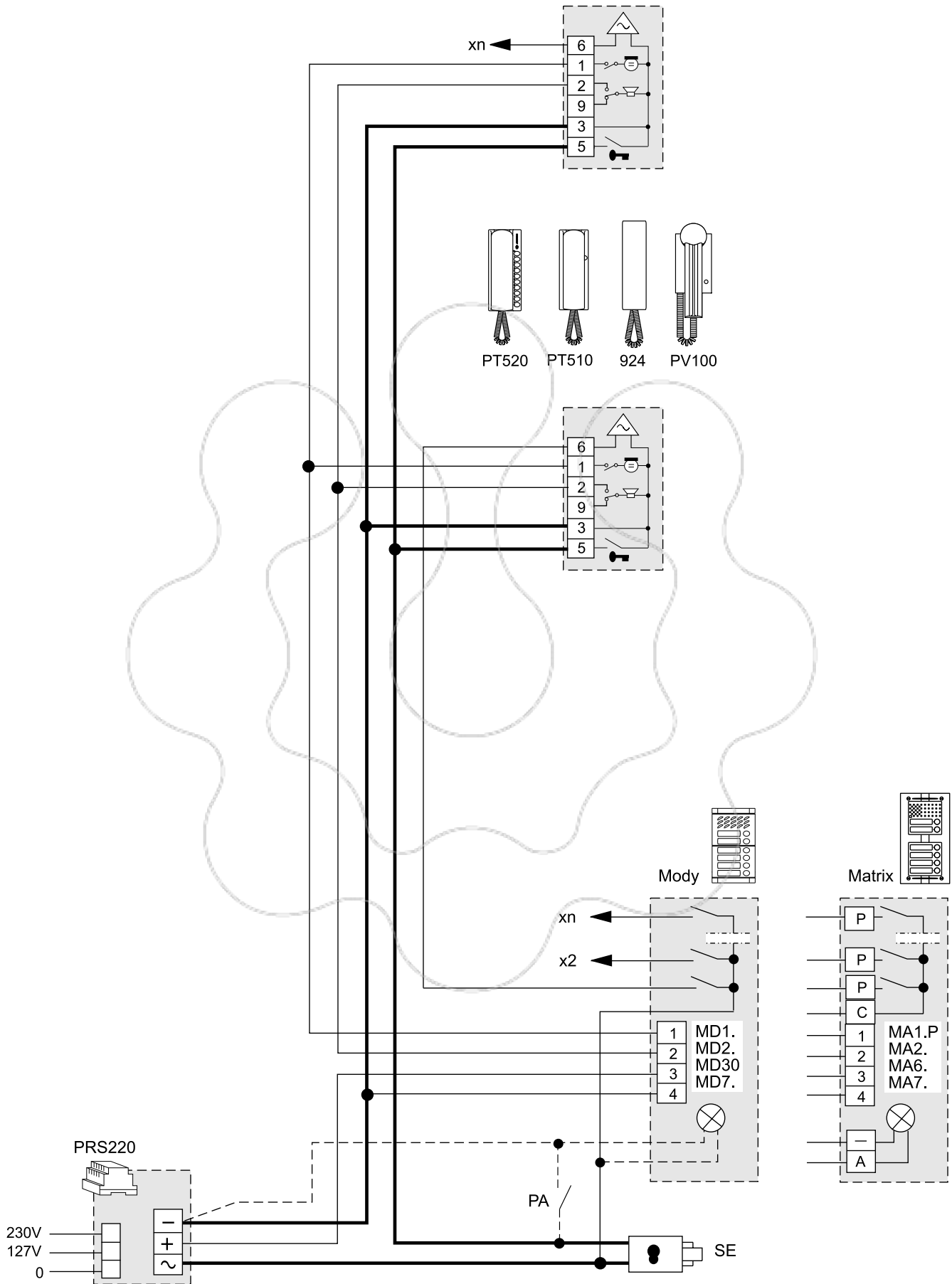
One or two-way systems can be realized with **RP** and **UP** series. As regards the **Mody** series, multi-family systems can be realized by adding the required quantity of button modules.

### Warning.

- For alternate current wires refer to note 6 of the installation instructions on page 26.



## INTERCOMS CONNECTED TO 1 EXTERNAL DOOR STATION



# INTERCOMS WITH PRIVATE CONVERSATION CONNECTED TO 1 EXTERNAL DOOR STATION.

Q.ty	Article	Description
...	<b>PT 510 *</b>	Project series intercom with 1 call button
...	<b>SM 50</b>	Private conversation module
1	<b>PRS235</b>	Power supply
1	<b>PA **</b>	Door release push-button (optional)
1	<b>SE **</b>	Electric door lock (12VAC-1A)

**Door station series Mody** (for items selection refer to pages 12÷15)

	1 row	2 row	
...	<b>MD71÷74</b>	<b>MD71÷74</b>	Module frames with back box
1	<b>MD10-11-12</b>	<b>MD10-122-124</b>	Modules for electric door speaker
...	<b>MD21 ÷ 24</b>	<b>MD222 ÷ 228</b>	Button modules
...	<b>MD20 - 50</b>	<b>MD20 - 50</b>	Blank and info modules
1	<b>MD82 ÷ 812</b>	<b>MD82 ÷ 812</b>	Hood covers
1	<b>MD92 ÷ 912 (2)</b>	<b>MD92 ÷ 912 (2)</b>	Rain shelters with module frames
1	<b>MD30</b>	<b>MD30</b>	Electric door speaker (amplifier)

**Door station series Matrix** (for items selection refer to pages 20 and 21)

...	<b>MA71÷73</b>	Module frames with back box
1	<b>MA10P-11P-12P</b>	Modules with integrated audio amplifier
...	<b>MA20-22-24</b>	Blank and button modules
...	<b>MA61÷63</b>	Front frames

... Refers to number of users.

\* Besides the mentioned model all the intercoms from the **Project, PuntoVirgola, 900 and 700** can be installed.

\*\* Articles not supplied by ACI Farfisa.

(2) Rain shelters are used instead of back boxes and hood covers.

**Working instructions.** See page 27.

## Notes

- For the connection of name-plate lamps, read notes 6, 7 and 8 of the installation instructions on page 26.
- For wires dimensioning refer to the installation recommendations and table on page 26.
- Telephones can be used instead of intercoms (see "telecommunication" section).
- For other types of push-button panels see pages 22 and 23 or the general catalogue.

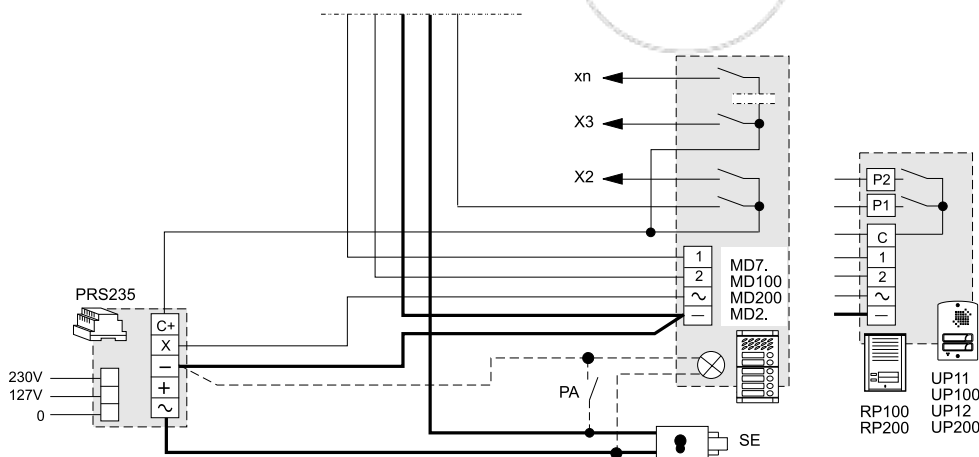
## Application diagram

When using **MD100, MD200, RP100, RP200** and **UP** amplified external door stations, place this diagram on the diagram on page 33 and line it up with the riser.

One or two-way systems can be realized with **RP** and **UP** series. As regards the **Mody** series, multi-family systems can be realized by adding the required quantity of button modules.

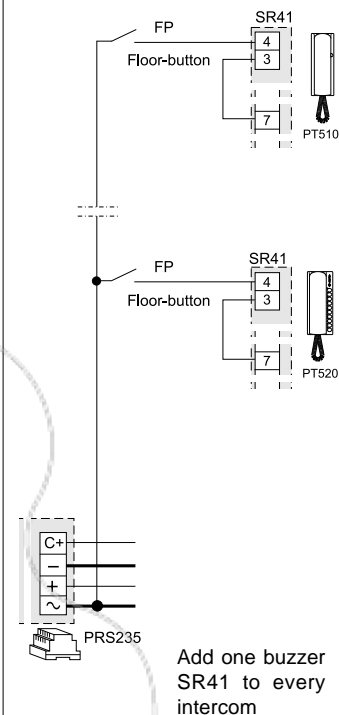
## Warning.

- For alternate current wires refer to note 6 of the installation instructions on page 26.

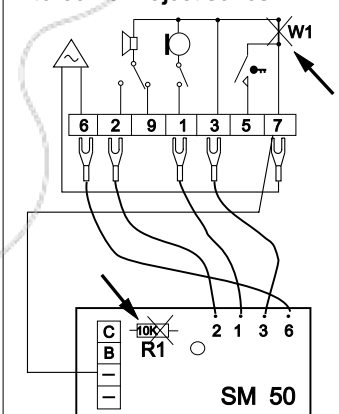


## Floor call

This work diagram allows for differentiating the floor-call from the call from the push-button panel.



## Intercoms Project series



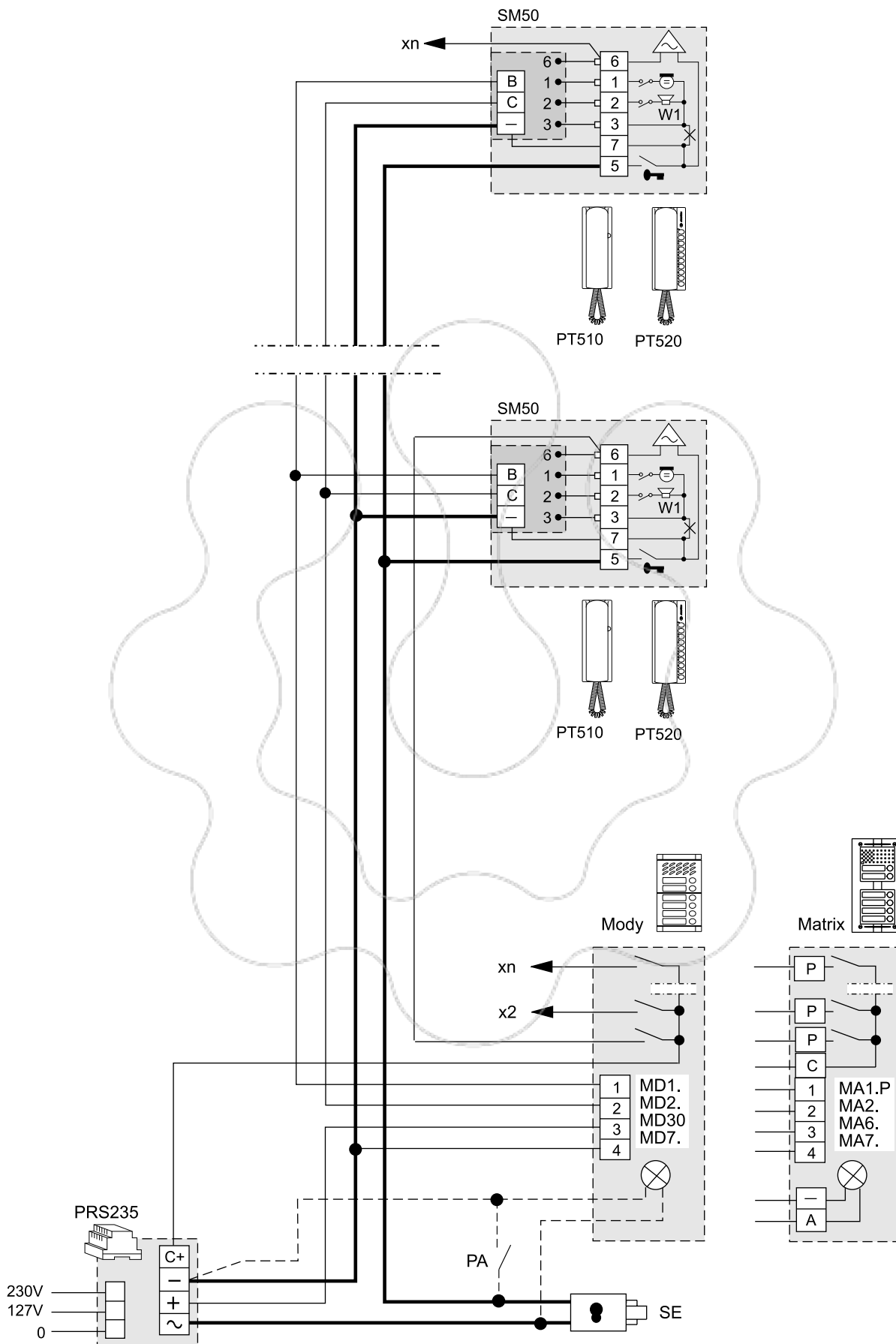
In each intercom it is necessary:

- to cut the jumper (W1) that links the terminals 3 and 7;
- to move the connection of the buzzer from terminal 3 to 7;
- to activate the connection between terminal 7 of the intercom and the - (minus) of the private conversation module.

In all private conversation modules cut the resistance R1.



## INTERCOMS WITH PRIVATE CONVERSATION CONNECTED TO 1 EXTERNAL DOOR STATION



## INTERCOMS CONNECTED TO 2 AUTOMATICALLY SWITCHED EXTERNAL DOOR STATIONS.

Q.ty	Article	Description
...	<b>PT 510 *</b>	Project series intercom with 1 call button
1	<b>PRS220</b>	Power supply
1	<b>1473</b>	Exchanger
2	<b>PA **</b>	Door release push-button ( <i>optional</i> )
2	<b>SE **</b>	Electric door lock (12VAC-1A)

**Door station series Mody** (for items selection refer to pages 12÷15)

	1 row	2 row	
...	<b>MD71÷74</b>	<b>MD71÷74</b>	Module frames with back box
2	<b>MD10-11-12</b>	<b>MD10-122-124</b>	Modules for electric door speaker
...	<b>MD21 ÷ 24</b>	<b>MD222 ÷ 228</b>	Button modules
...	<b>MD20 - 50</b>	<b>MD20 - 50</b>	Blank and info modules
2	<b>MD82 ÷ 812</b>	<b>MD82 ÷ 812</b>	Hood covers
2	<b>MD92 ÷ 912 <sup>(2)</sup></b>	<b>MD92 ÷ 912 <sup>(2)</sup></b>	Rain shelters with module frames
2	<b>MD30</b>	<b>MD30</b>	Electric door speaker (amplifier)

**Door station series Matrix** (for items selection refer to pages 20 and 21)

...	<b>MA71÷73</b>	Module frames with back box
2	<b>MA10P-11P-12P</b>	Modules with integrated audio amplifier
...	<b>MA20-22-24</b>	Blank and button modules
...	<b>MA61÷63</b>	Front frames

... Refers to number of users.

\* Besides the mentioned model all the intercoms from the **Project, PuntoVirgola, 900** and **700** can be installed.

\*\* Articles not supplied by ACI Farfisa.

<sup>(2)</sup> Rain shelters are used instead of back boxes and hood covers.**Working instructions.**

As the basic system described on page 27, with the following variations:

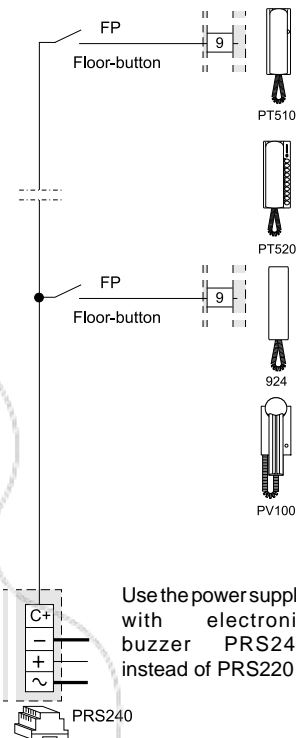
- The audio functions and door lock opening are automatically switched to the door station which has made the call and remain in this state until a call from another entrance is received.

**Notes**

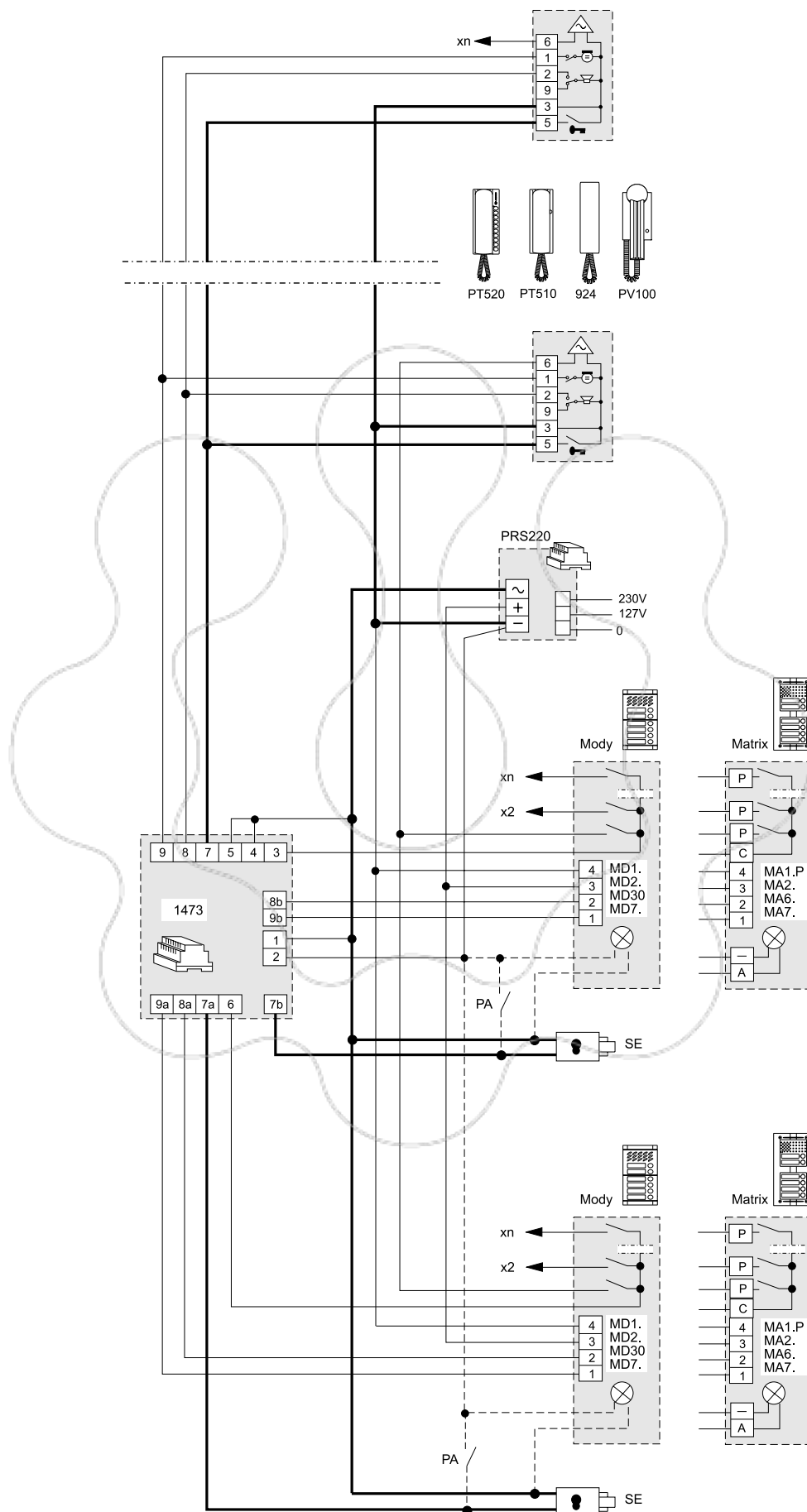
- For the connection of name-plate lamps, read notes 6, 7 and 8 of the installation instructions on page 26.
- For wires dimensioning refer to the installation recommendations and table on page 26.
- Telephones can be used instead of intercoms (see "telecommunication" section).
- For other types of push-button panels see pages 22 and 23 or the general catalogue.

**Floor call**

This work diagram allows for differentiating the floor-call from the call from the push-button panel.



## INTERCOMS CONNECTED TO 2 AUTOMATICALLY SWITCHED EXTERNAL DOOR STATIONS



## INTERCOMS CONNECTED TO 3 AUTOMATICALLY SWITCHED EXTERNAL DOOR STATIONS.

Q.ty	Article	Description
...	<b>PT 510 *</b>	Project series intercom with 1 call button
1	<b>PRS220</b>	Power supply
2	<b>1473</b>	Exchanger
3	<b>PA **</b>	Door release push-button ( <i>optional</i> )
3	<b>SE **</b>	Electric door lock (12VAC-1A)

**Door station series Mody** (for items selection refer to pages 12÷15)

	1 row	2 row	
...	<b>MD71÷74</b>	<b>MD71÷74</b>	Module frames with back box
3	<b>MD10-11-12</b>	<b>MD10-122-124</b>	Modules for electric door speaker
...	<b>MD21 ÷ 24</b>	<b>MD222 ÷ 228</b>	Button modules
...	<b>MD20 - 50</b>	<b>MD20 - 50</b>	Blank and info modules
3	<b>MD82 ÷ 812</b>	<b>MD82 ÷ 812</b>	Hood covers
3	<b>MD92 ÷ 912 <sup>(2)</sup></b>	<b>MD92 ÷ 912 <sup>(2)</sup></b>	Rain shelters with module frames
3	<b>MD30</b>	<b>MD30</b>	Electric door speaker (amplifier)

**Door station series Matrix** (for items selection refer to pages 20 and 21)

...	<b>MA71÷73</b>	Module frames with back box
3	<b>MA10P-11P-12P</b>	Modules with integrated audio amplifier
...	<b>MA20-22-24</b>	Blank and button modules
...	<b>MA61÷63</b>	Front frames

... Refers to number of users.

\* Besides the mentioned model all the intercoms from the **Project, PuntoVirgola, 900** and **700** can be installed.

\*\* Articles not supplied by ACI Farfisa.

<sup>(2)</sup> Rain shelters are used instead of back boxes and hood covers.**Working instructions.**

As the basic system described on page 27, with the following variations:

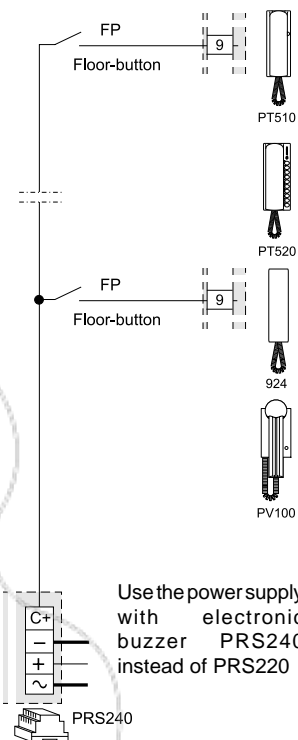
- The audio functions and door lock opening are automatically switched to the door station which has made the call and remain in this state until a call from another entrance is received.

**Notes**

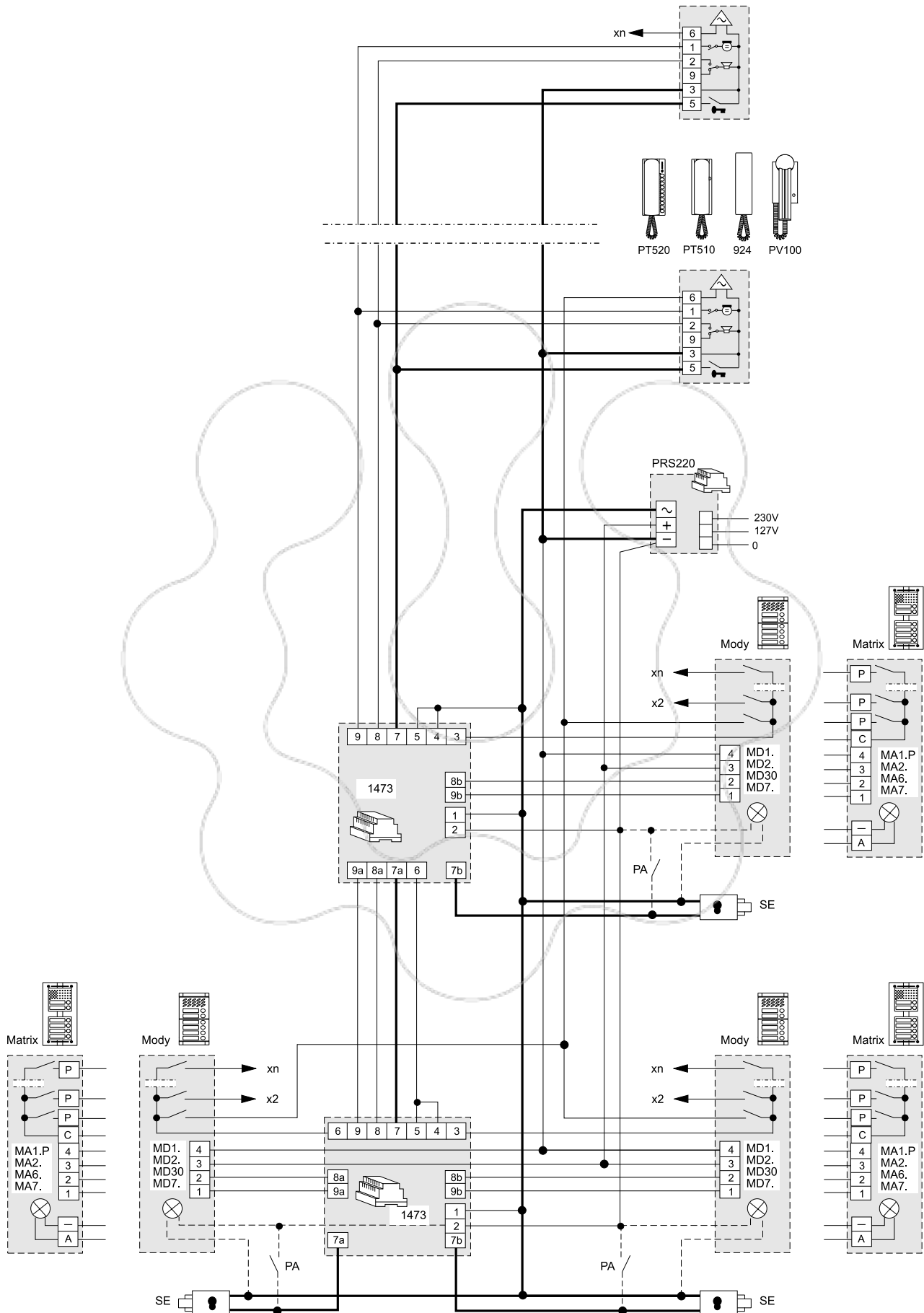
- For the connection of name-plate lamps, read notes 6, 7 and 8 of the installation instructions on page 26.
- For wires dimensioning refer to the installation recommendations and table on page 26.
- Telephones can be used instead of intercoms (see "telecommunication" section).
- For other types of push-button panels see pages 22 and 23 or the general catalogue.

**Floor call**

This work diagram allows for differentiating the floor-call from the call from the push-button panel.



## INTERCOMS CONNECTED TO 3 AUTOMATICALLY SWITCHED EXTERNAL DOOR STATIONS



## INTERCOM SYSTEM WITH SECONDARY DOOR STATIONS AND 1 MAIN COMMON STATION (multiple entrance)

Q.ty	Article	Description
...	<b>PT 510 *</b>	Project series intercom with 1 call button
1+X	<b>PRS220</b>	Power supply
X	<b>1473</b>	Exchanger
1+X	<b>PA **</b>	Door release push-button (optional)
1+X	<b>SE **</b>	Electric door lock (12VAC-1A)

**Door station series Mody** (for items selection refer to pages 12÷15)

	1 row	2 row	
...	<b>MD71÷74</b>	<b>MD71÷74</b>	Module frames with back box
1+X	<b>MD10-11-12</b>	<b>MD10-122-124</b>	Modules for electric door speaker
...	<b>MD21 ÷ 24</b>	<b>MD222 ÷ 228</b>	Button modules
...	<b>MD20 - 50</b>	<b>MD20 - 50</b>	Blank and info modules
1+X	<b>MD82 ÷ 812</b>	<b>MD82 ÷ 812</b>	Hood covers
1+X	<b>MD92 ÷ 912 <sup>(2)</sup></b>	<b>MD92 ÷ 912 <sup>(2)</sup></b>	Rain shelters with module frames
1+X	<b>MD30</b>	<b>MD30</b>	Electric door speaker (amplifier)

**Door station series Matrix** (for items selection refer to pages 20 and 21)

...	<b>MA71÷73</b>	Module frames with back box
1+X	<b>MA10P-11P-12P</b>	Modules with integrated audio amplifier
...	<b>MA20-22-24</b>	Blank and button modules
...	<b>MA61÷63</b>	Front frames

... Refers to number of users.

X Refers to number of secondary door stations.

\* Besides the mentioned model all the intercoms from the **Project, PuntoVirgola, 900** and **700** can be installed.

\*\* Articles not supplied by ACI Farfisa.

<sup>(2)</sup> Rain shelters are used instead of back boxes and hood covers.**Working instructions.**

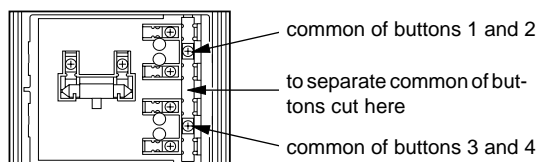
As the basic system described on page 27, with the following variations:

- The audio functions and door lock opening are automatically switched to the door station which has made the call and remain in this state until a call from another entrance is received.
- Services to secondary door stations are independent and can be operated at the same time.

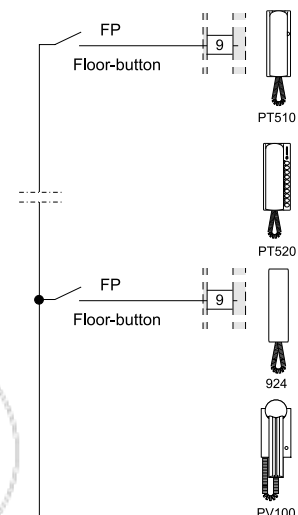
**Notes**

- You can also use **Prestige** and **TM** push-button panels. For the latter series you must request the version with separate common terminals.
- For the connection of name-plate lamps, read notes 6, 7 and 8 of the installation instructions on page 26.
- For wires dimensioning refer to the installation recommendations and table on page 26.
- Telephones can be used instead of intercoms (see "telecommunication" section).
- For other types of push-button panels see pages 22 and 23 or the general catalogue.

**The main entrance push-button panel must have separate common terminals.** One common terminal for each secondary door station. Buttons of the Mody series can be divided into 2-button groups.

**Floor call**

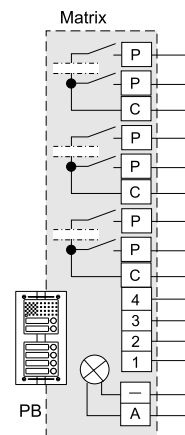
This work diagram allows for differentiating the floor-call from the call from the push-button panel.



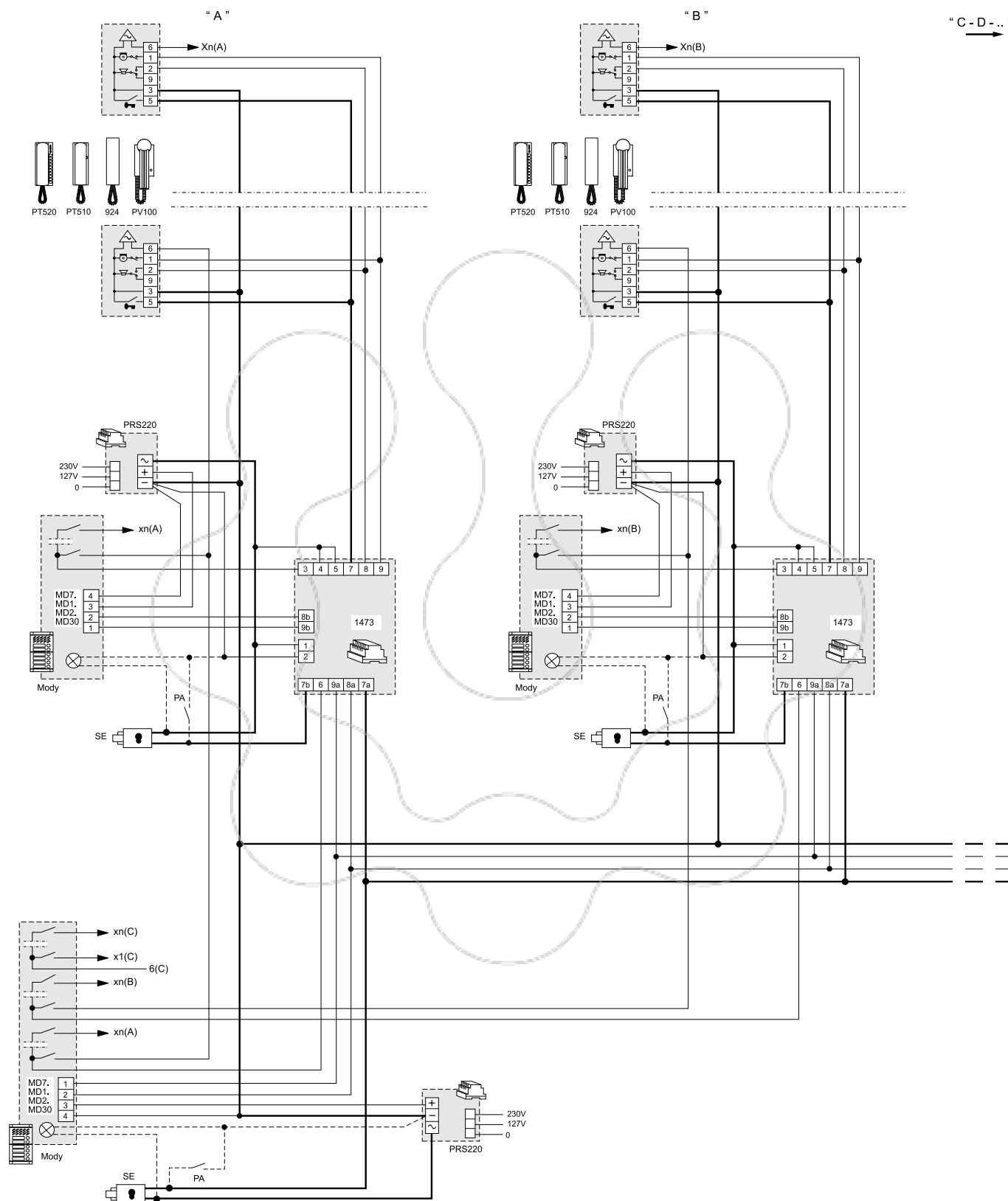
Use the power supply with electronic buzzer PRS240 instead of PRS220

**Application of Matrix push-button panel**

The button common terminal of every module CANNOT be separated. For the composition of the push-button panel at the main entrance, carefully select the button modules in order to obtain the necessary number of buttons for every common terminal.



## INTERCOM SYSTEM WITH SECONDARY DOOR STATIONS AND 1 MAIN COMMON STATION (multiple entrance)



**ONE-WAY INTERCOM SYSTEM WITH SECONDARY DOOR STATIONS AND 1 MAIN COMMON STATION (multiple entrance)**

Q.ty	Article	Description
...	<b>PT 510 *</b>	Project series intercom with 1 call button
1+X	<b>PRS220</b>	Power supply
X	<b>1473</b>	Exchanger
1+X	<b>PA **</b>	Door release push-button ( <i>optional</i> )
1+X	<b>SE **</b>	Electric door lock (12VAC-1A)

**Door station series Modby** (for items selection refer to pages 12÷15)

**Secondary door stations**

X	<b>MD71</b>	Module frames with back box
X	<b>MD11</b>	Module for electric door speaker
X	<b>MD81</b>	Hood cover
X	<b>MD91 <sup>(2)</sup></b>	Rain shelter with module frames
X	<b>MD30</b>	Electric door speaker (amplifier)

**Main entrance**

	1 row	2 row	
...	<b>MD71÷74</b>	<b>MD71÷74</b>	Module frames with back box
1	<b>MD10-11-12</b>	<b>MD10-122-124</b>	Modules for electric door speaker
...	<b>MD21 ÷ 24</b>	<b>MD222 ÷ 228</b>	Button modules
...	<b>MD20 - 50</b>	<b>MD20 - 50</b>	Blank and info modules
1	<b>MD82 ÷ 812</b>	<b>MD82 ÷ 812</b>	Hood covers
1	<b>MD92 ÷ 912 <sup>(2)</sup></b>	<b>MD92 ÷ 912 <sup>(2)</sup></b>	Rain shelters with module frames
1	<b>MD30</b>	<b>MD30</b>	Electric door speaker (amplifier)

**Door station series Matrix** (for items selection refer to pages 20 and 21)

**Secondary door stations**

X	<b>MA71</b>	Module frames with back box
X	<b>MA11P</b>	Module with integrated audio amplifier
X	<b>MA61</b>	Front frame

**Main entrance**

...	<b>MA71÷73</b>	Module frames with back box
1	<b>MA10P-11P-12P</b>	Modules with integrated audio amplifier
...	<b>MA20-22-24</b>	Blank and button modules
1	<b>MA61 ÷ 63</b>	Front frames

... Refers to number of users.

X Refers to the number of stairways.

\* Besides the mentioned model all the intercoms from the **Project**, **PuntoVirgola**, **900** and **700** can be installed.

\*\* Articles not supplied by ACI Farfisa.

<sup>(2)</sup> Rain shelters are used instead of back boxes and hood covers.

**Working instructions.**

As the basic system described on page 27, with the following variations:

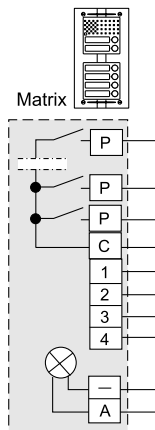
- The audio functions and door lock opening are automatically switched to the door station which has made the call and remain in this state until a call from another entrance is received.
- Services to secondary door stations are independent and can be operated at the same time.

**Notes**

- For the connection of name-plate lamps, read notes 6, 7 and 8 of the installation instructions on page 26.
- For wires dimensioning refer to the installation recommendations and table on page 26.
- Telephones can be used instead of intercoms (see "telecommunication" section).
- For other types of push-button panels see pages 22 and 23 or the general catalogue.

**Application of Matrix push-button panel**

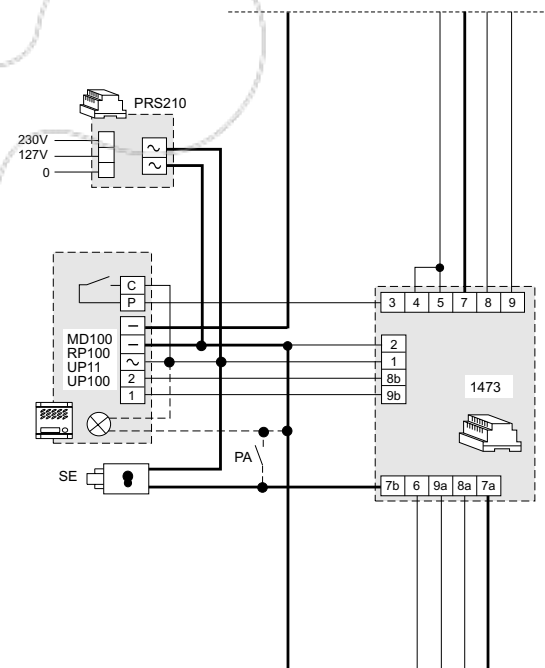
The button common terminal of every module CANNOT be separated. For the composition of the push-button panel at the main entrance, carefully select the button modules in order to obtain the necessary number of buttons for every common terminal.

**Application diagram**

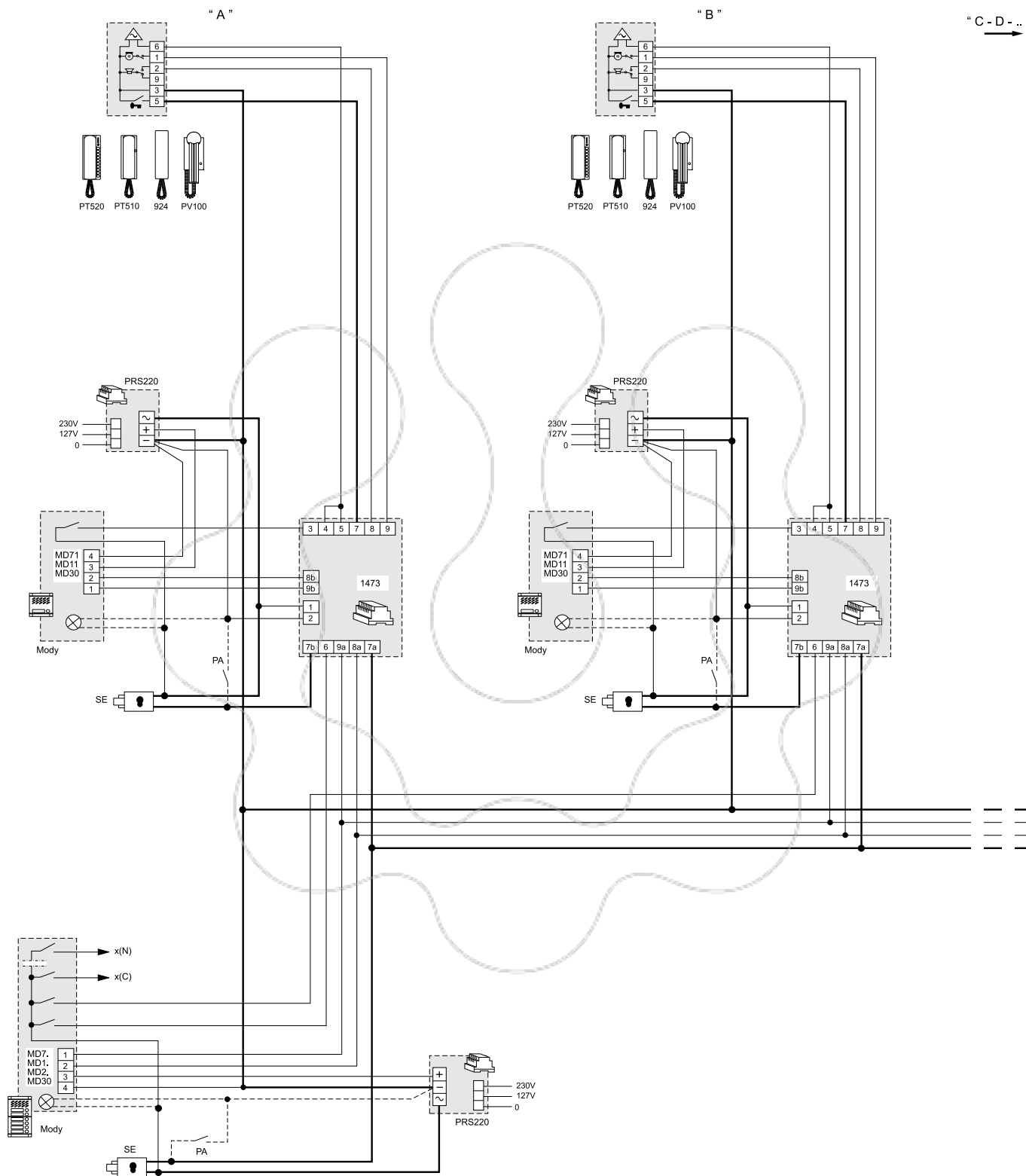
When using **MD100**, **RP100**, **UP11** and **UP100** amplified external door stations as one-way secondary door stations, place this diagram on the diagram on page 41 and line it up with the riser.

**Warning.**

- Bridging of C and ~ terminals is not necessary in **RP100** amplified external door stations.
- For alternate current wires refer to note 6 of the installation instructions on page 26.



## ONE-WAY INTERCOM SYSTEM WITH SECONDARY DOOR STATIONS AND 1 MAIN COMMON STATION (multiple entrance)



## INTERCOM SYSTEM WITH SECONDARY DOOR STATIONS AND 2 MAIN COMMON STATIONS (multiple entrance)

Q.ty	Article	Description
...	<b>PT 510 *</b>	Project series intercom with 1 call button
2+X	<b>PRS220</b>	Power supply
2xX	<b>1473</b>	Exchanger
2+X	<b>PA **</b>	Door release push-button (optional)
2+X	<b>SE **</b>	Electric door lock (12VAC-1A)

**Door station series Mody** (for items selection refer to pages 12÷15)

	1 row	2 row	
...	<b>MD71÷74</b>	<b>MD71÷74</b>	Module frames with back box
2+X	<b>MD10-11-12</b>	<b>MD10-122-124</b>	Modules for electric door speaker
...	<b>MD21 ÷ 24</b>	<b>MD222 ÷ 228</b>	Button modules
...	<b>MD20 - 50</b>	<b>MD20 - 50</b>	Blank and info modules
2+X	<b>MD82 ÷ 812</b>	<b>MD82 ÷ 812</b>	Hood covers
2+X	<b>MD92 ÷ 912 <sup>(2)</sup></b>	<b>MD92 ÷ 912 <sup>(2)</sup></b>	Rain shelters with module frames
2+X	<b>MD30</b>	<b>MD30</b>	Electric door speaker (amplifier)

**Door station series Matrix** (for items selection refer to pages 20 and 21)

...	<b>MA71÷73</b>	Module frames with back box
2+X	<b>MA10P-11P-12P</b>	Modules with integrated audio amplifier
...	<b>MA20-22-24</b>	Blank and button modules
...	<b>MA61÷63</b>	Front frames

... Refers to number of users.

X Refers to the number of stairways.

\* Besides the mentioned model all the intercoms from the **Project, PuntoVirgola, 900** and **700** can be installed.

\*\* Articles not supplied by ACI Farfisa.

<sup>(2)</sup> Rain shelters are used instead of back boxes and hood covers.**Working instructions.**

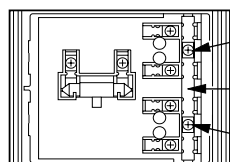
As the basic system described on page 27, with the following variations:

- The audio functions and door lock opening are automatically switched to the door station which has made the call and remain in this state until a call from another entrance is received.
- Services to secondary door stations are independent and can be operated at the same time.

**Notes**

- You can also use **Prestige** and **TM** push-button panels. For the latter series you must request the version with separate common terminals.
- For the connection of name-plate lamps, read notes 6, 7 and 8 of the installation instructions on page 26.
- For wires dimensioning refer to the installation recommendations and table on page 26.
- Telephones can be used instead of intercoms (see "telecommunication" section).
- For other types of push-button panels see pages 22 and 23 or the general catalogue.

**The main entrance push-button panel must have separate common terminals.** One common terminal for each secondary door station. Buttons of the Mody series can be divided into 2-button groups.



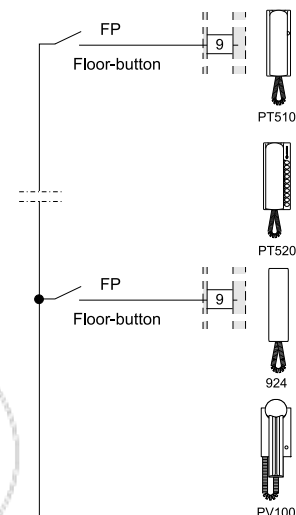
common of buttons 1 and 2

to separate common of buttons cut here

common of buttons 3 and 4

**Floor call**

This work diagram allows for differentiating the floor-call from the call from the push-button panel.

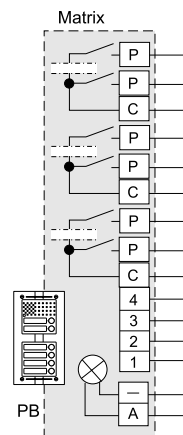


Use the power supply with electronic buzzer PRS240 instead of PRS220

PRS240

**Application of Matrix push-button panel**

The button common terminal of every module CANNOT be separated. For the composition of the push-button panel at the main entrance, carefully select the button modules in order to obtain the necessary number of buttons for every common terminal.

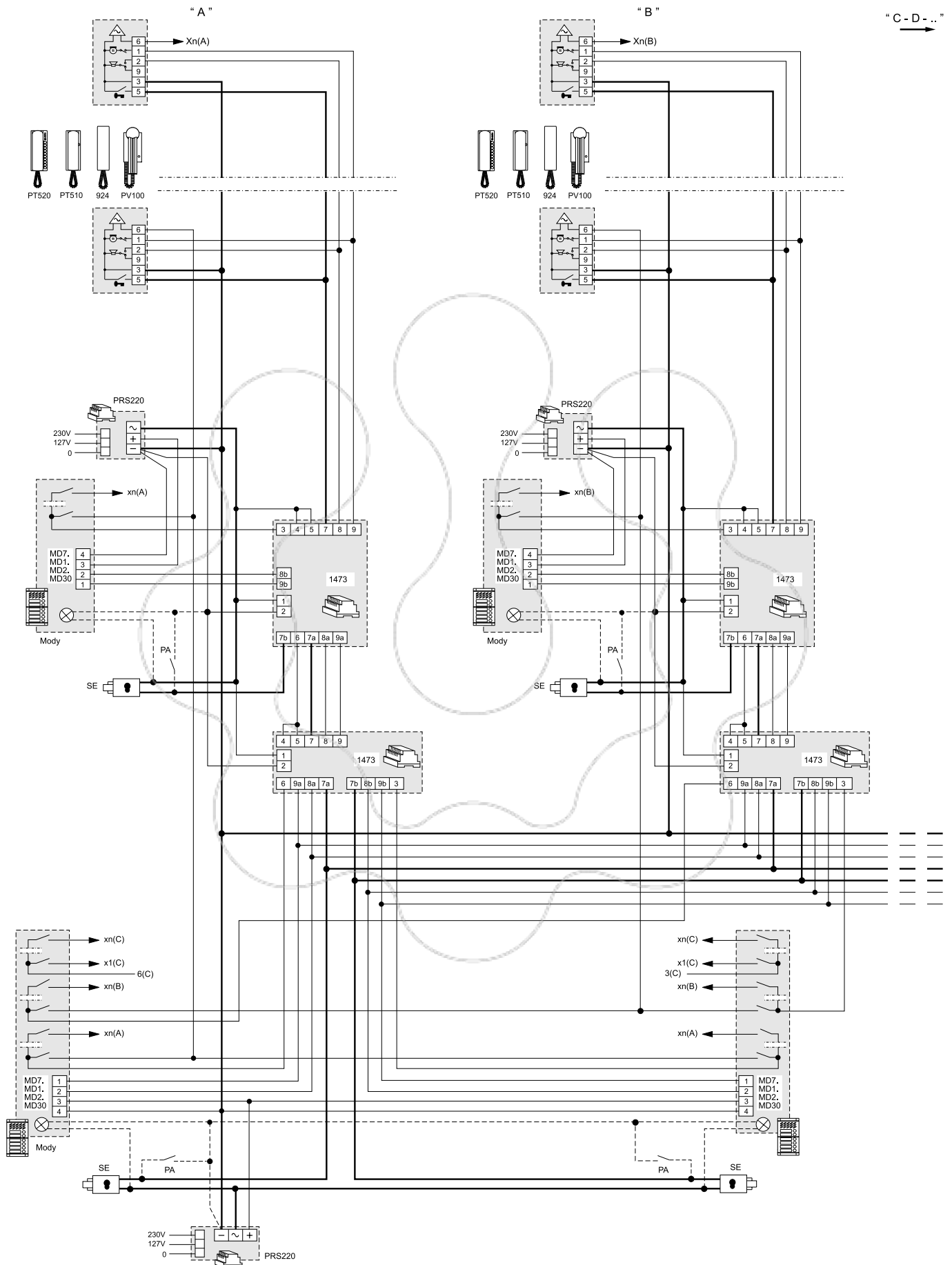


Matrix

PB



## INTERCOM SYSTEM WITH SECONDARY DOOR STATIONS AND 2 MAIN COMMON STATIONS (multiple entrance)



## Si 100L/2

### 2 INTERCOMMUNICATING INTERCOMS

Q.ty	Article	Description
2	<b>PT524 *</b>	Project series intercom with 1 call button
1	<b>PRS220</b>	Power supply

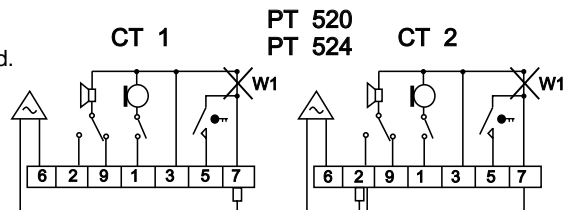
\* Besides the mentioned model the intercom **PT520** and **PT520W** can be installed.

#### Working instructions.

See page 27.

#### Notes

- In each intercom **to cut the jumper (W1)** that links terminals 3 and 7.
- In intercoms **CT1** move the **buzzer mobile connection** from terminal 3 to 7.
- In intercoms **CT2** move the **buzzer mobile connection** from terminal 3 to 2 and **connect** terminals 2 and 7 **together**.
- For wires dimensioning refer to the installation recommendations and table on page 26.



## Si 100L/11

### INTERCOMMUNICATING INTERCOMS (2 to 11 users)

Q.ty	Article	Description
...	<b>PT520W</b>	Project series modular intercom
...	<b>PT501</b>	Single button unit
1	<b>PRS231</b>	Power supply

... Refers to number of users (see table).

#### Working instructions.

See page 27.

#### Notes

- In each intercom **to cut the jumper (W1)** that links terminals 3 and 7.
- In each intercom **to move the connection** of the buzzer from terminal 3 to 2.
- In all intercoms connect one of the two terminals of the single button unit to terminal 7.
- For wires dimensioning refer to the installation recommendations and table on page 26.

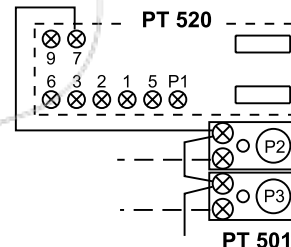
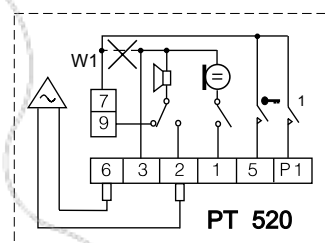
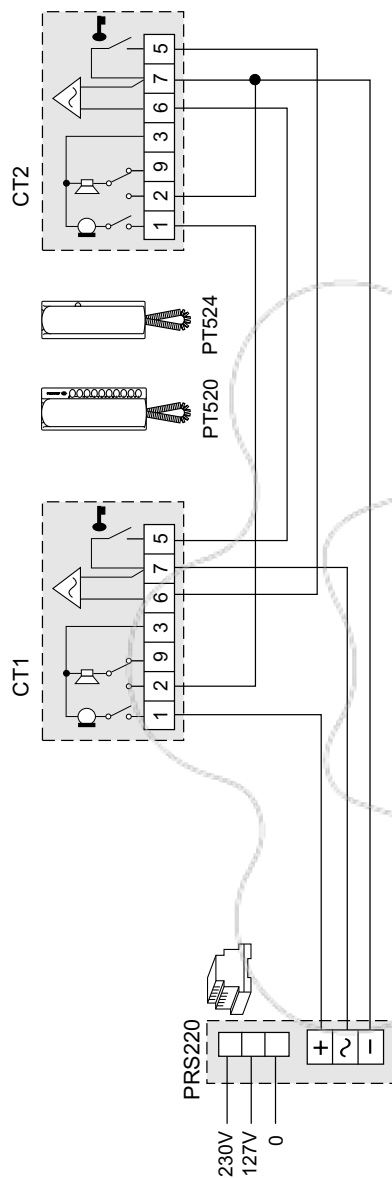


Table for choosing intercoms and accessories for the required type of installation

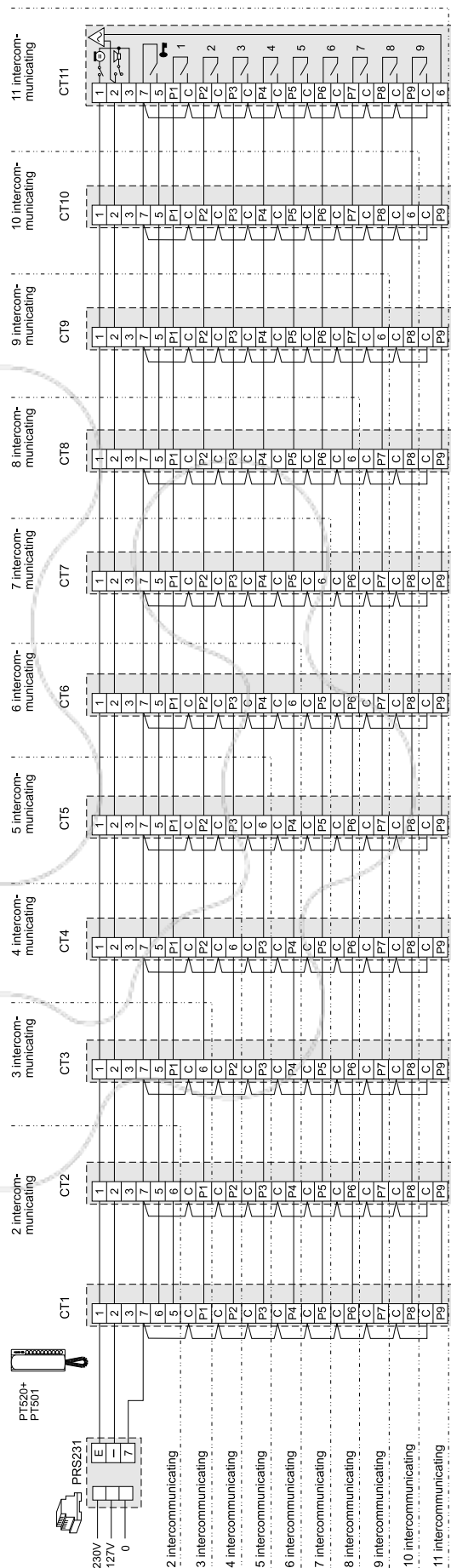
Number of intercommunicating	Project		
	PT520	PT501	PT524
2	2	0	2
3	3	0	
4	4	4	
5	5	10	
6	6	18	
7	7	28	
8	8	40	
9	9	54	
10	10	70	
11	11	88	



## 2 INTERCOMMUNICATING INTERCOMS



## INTERCOMMUNICATING INTERCOMS (2 to 11 users)



**5 INTERCOMMUNICATING INTERCOMS CONNECTED TO 1 EXTERNAL DOOR STATION WITH SINGLE CALLS. ELECTRONIC BELL FOR INTERNAL CALLS.**

Q.ty	Article	Description
...	<b>PT520</b>	Project series modular intercom
...	<b>PT501</b>	Single button unit
...	<b>SR40</b>	Electronic bell module
1	<b>PRS226</b>	Power supply-switcher
1	<b>PA **</b>	Door release push-button ( <i>optional</i> )
1	<b>SE **</b>	Electric door lock (12VAC-1A)

**Door station series Mody** (for right item set see on pages 12÷15)

1 row	2 row	
...	<b>MD71÷73</b>	Module frames with back box
1	<b>MD10-11-12</b>	Modules for electric door speaker
...	<b>MD21 ÷ 24</b>	Button modules
...	<b>MD20 - 50</b>	Blank and info modules
1	<b>MD81 ÷ 83</b>	Hood covers
1	<b>MD91 ÷ 93*</b>	Rain shelters with module frames
1	<b>MD30</b>	Electric door speaker (amplifier)

**Door station series Matrix** (for right item set see on pages 20 and 21)

...	<b>MA71÷73</b>	Module frames with back box
1	<b>MA10P-11P-12P</b>	Modules with integrated audio amplifier
...	<b>MA20-22-24</b>	Blank and button modules
...	<b>MA61÷63</b>	Front frames

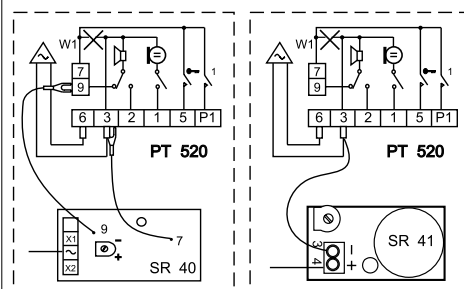
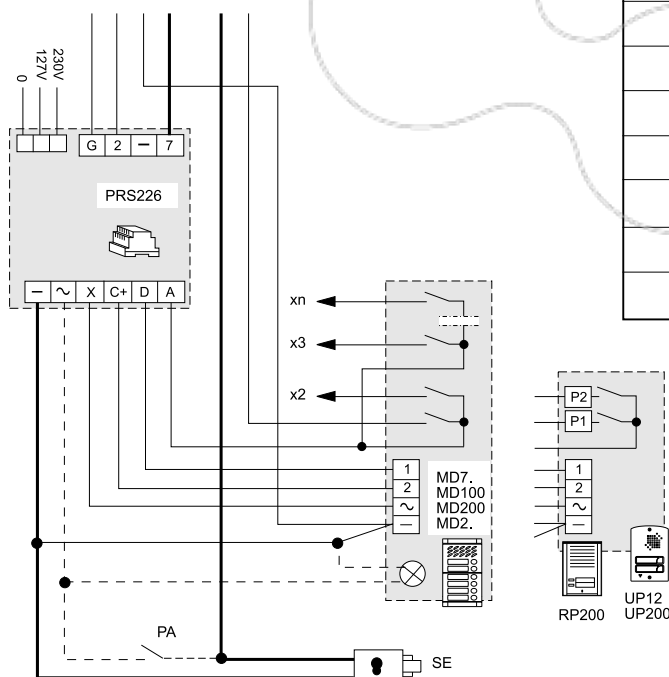
... Refers to number of users (see table).

\* Rain shelters are used instead of back boxes and hood covers.

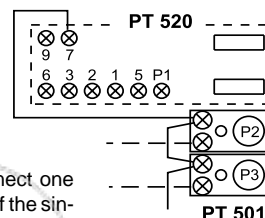
\*\* Articles not supplied by ACI Farfisa.

**Working instructions.** See page 27.**Notes**

- For the connection of name-plate lamps, read notes 6 and 7 of the installation instructions on page 26.
- For wires dimensioning refer to the installation recommendations and table on page 26.
- For other types of push-button panels see pages 22 and 23 or the general catalogue.

In intercoms **cut the jumper W1** that connects terminals 3 and 7 and apply:

- the electronic buzzer SR40 by connecting wires 7 and 9 to the intercom terminals 3 and 9,
- or use the buzzer SR41 by connecting terminals 3 of buzzer and intercom together and by connecting the call wires to terminal 4 (instead of terminal ~ as shown in the diagrams).



In all intercoms connect one of the two terminals of the single button unit to terminal 7.

**Table for choosing intercoms and accessories for the required type of installation**

Number of inter-communicating	Project			Application diagram on page:	
	PT520	PT501	SR40/SR41		
2	2	0	2	62	64
3	3	3	3	62	64
4	4	8	4	62	64
5	5	15	5	63	47
6	6	24	6	63	65
7	7	35	7	*	65
8	8	48	8	*	
9	9	63	9	*	
10	10	80	10	*	

\* upon request

**Application diagram**

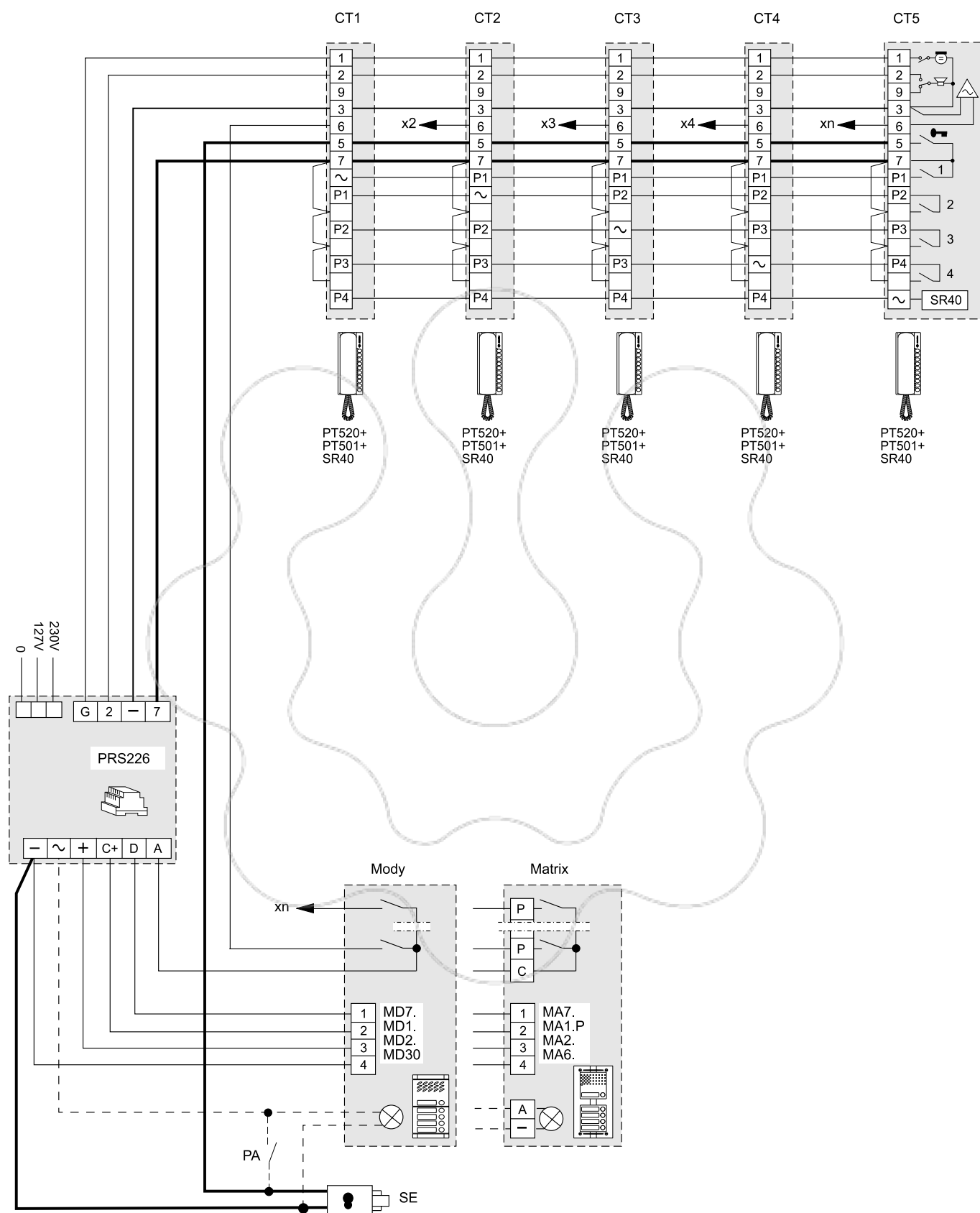
When using **MD100**, **MD200**, **RP200**, **UP12** and **UP200** amplified external door stations (RP and UP series for two-way systems only) place this diagram on the diagram on page 47 and line it up with the riser.

**Warning.**

- In the external door stations **RP200** cut the jumper **W1**.
- In the external door stations **UP** do not connect the yellow wire and insulate it.
- For alternate current wires refer to note 6 of the installation instructions on page 26.



# 5 INTERCOMMUNICATING INTERCOMS CONNECTED TO 1 EXTERNAL DOOR STATION WITH SINGLE CALLS. ELECTRONIC BELL FOR INTERNAL CALLS



# 5 INTERCOMMUNICATING INTERCOMS CONNECTED TO 1 EXTERNAL DOOR STATION WITH COMMON CALL. ELECTRONIC BELL FOR INTERNAL CALLS.

Q.ty	Article	Description
...	<b>PT520</b>	Project series modular intercom
...	<b>PT501</b>	Single button unit
...	<b>SR40</b>	Electronic bell module
1	<b>PRS226</b>	Power supply-switcher
1	<b>PA **</b>	Door release push-button (optional)
1	<b>SE **</b>	Electric door lock (12VAC-1A)

## Door station series Mody

1	<b>MD71</b>	Module frames with back box
1	<b>MD11</b>	Module for electric door speaker
1	<b>MD81</b>	Hood cover
1	<b>MD91*</b>	Rain shelter with module frames
1	<b>MD30</b>	Electric door speaker (amplifier)

## Door station series Matrix

1	<b>MA71</b>	Module frames with back box
1	<b>MA11P</b>	Module with integrated audio amplifier
1	<b>MA61</b>	Front frame

... Refers to number of users (see table).

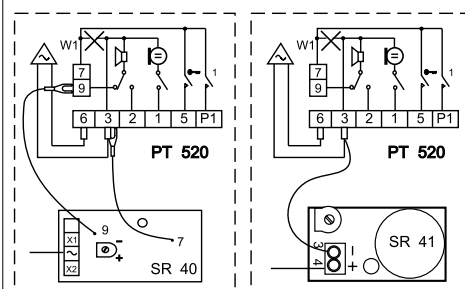
\* Rain shelters are used instead of back boxes and hood covers.

\*\* Articles not supplied by ACI Farfisa.

**Working instructions.** See page 27.

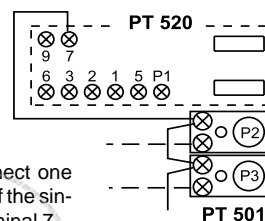
## Notes

- For the connection of name-plate lamps, read notes 6 and 7 of the installation instructions on page 26.
- For wires dimensioning refer to the installation recommendations and table on page 26.
- For other types of push-button panels see pages 22 and 23 or the general catalogue.



In intercoms **cut the jumper W1** that connects terminals 3 and 7 and apply:

- the electronic buzzer SR40 by connecting wires 7 and 9 to the intercom terminals 3 and 9,
- or use the buzzer SR41 by connecting terminals 3 of buzzer and intercom together and by connecting the call wires to terminal 4 (instead of terminal ~ as shown in the diagrams).

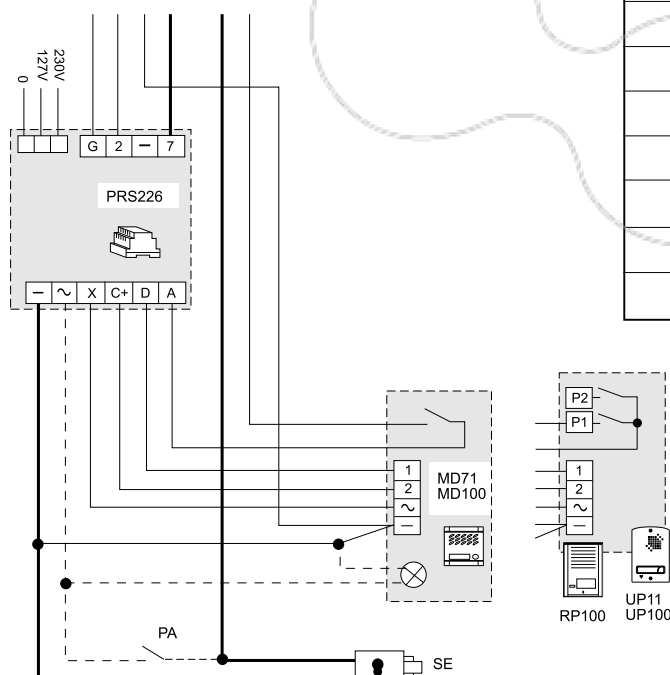


In all intercoms connect one of the two terminals of the single button unit to terminal 7.

**Table for choosing intercoms and accessories for the required type of installation**

Number of inter-communicating	Project			Application diagram on page:
	PT520	PT501	SR40/SR41	
2	2	0	2	66
3	3	3	3	66
4	4	8	4	66
5	5	15	5	49
6	6	24	6	67
7	7	35	7	67
8	8	48	8	*
9	9	63	9	*
10	10	80	10	*

\* upon request



## Application diagram

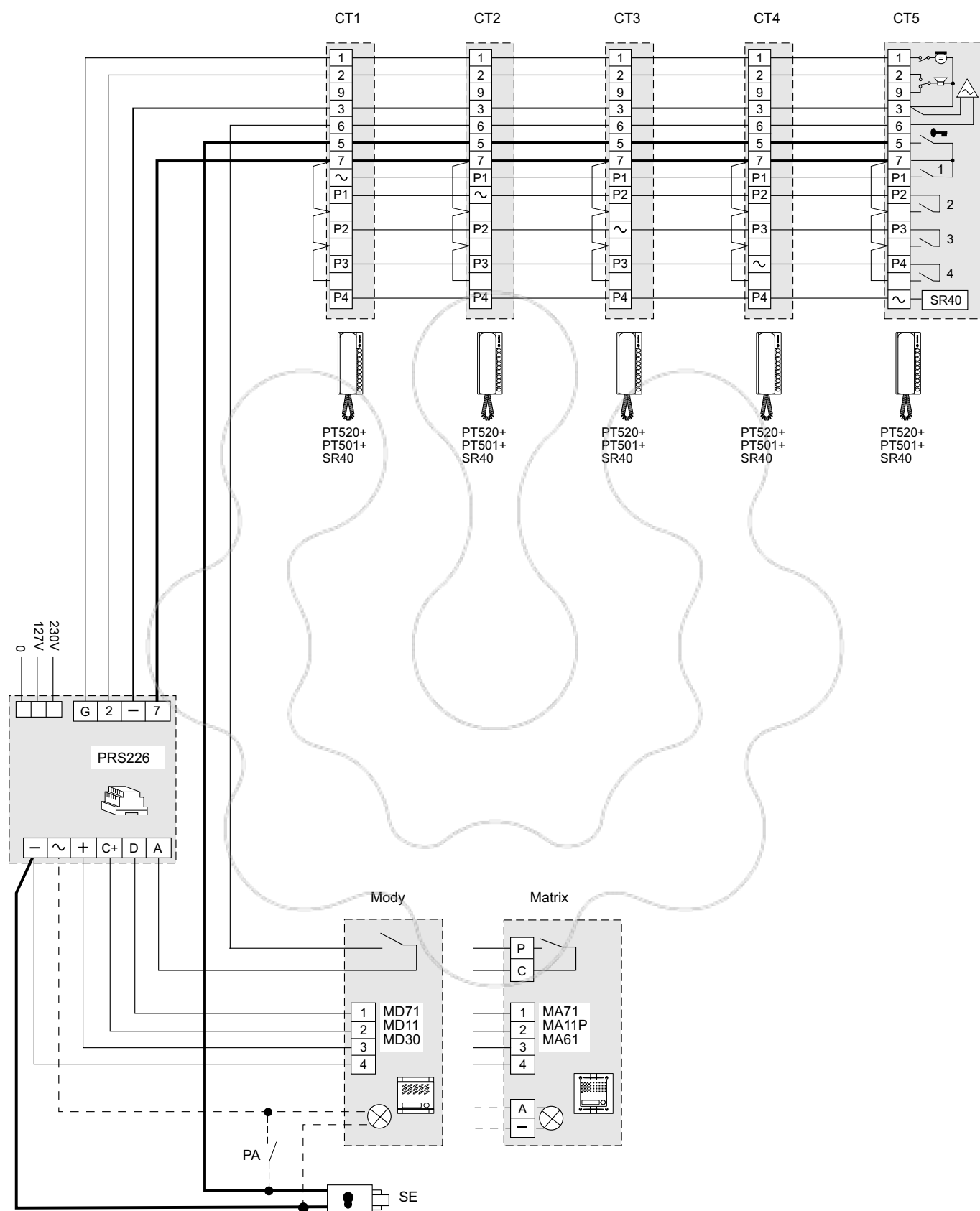
When using **MD100**, **MD200**, **RP200**, **UP12** and **UP200** amplified external door stations (RP and UP series for two-way systems only) place this diagram on the diagram on page 49 and line it up with the riser.

## Warning.

- In the external door stations **RP200** cut the jumper **W1**.
- In the external door stations **UP** do not connect the yellow wire and insulate it.
- For alternate current wires refer to note 6 of the installation instructions on page 26.



# 5 INTERCOMMUNICATING INTERCOMS CONNECTED TO 1 EXTERNAL DOOR STATION WITH COMMON CALL. ELECTRONIC BELL FOR INTERNAL CALLS



**5 INTERCOMMUNICATING INTERCOMS CONNECTED TO 2 EXTERNAL DOOR STATIONS WITH SINGLE CALLS. ELECTRONIC BELL FOR INTERNAL CALLS.**

Q.ty	Article	Description
...	<b>PT520</b>	Project series modular intercom
...	<b>PT501</b>	Single button unit
...	<b>SR40</b>	Electronic bell module
1	<b>PRS226</b>	Power supply-switcher
1	<b>1473</b>	Exchanger
2	<b>PA **</b>	Door release push-button ( <i>optional</i> )
2	<b>SE **</b>	Electric door lock (12VAC-1A)

**Door station series Mody** (for right item set see on pages 12÷15)

1 row	2 row	
...	<b>MD71÷73</b>	Module frames with back box
2	<b>MD10-11-12</b>	Modules for electric door speaker
...	<b>MD21 ÷ 24</b>	Button modules
...	<b>MD20 - 50</b>	Blank and info modules
2	<b>MD81 ÷ 83</b>	Hood covers
2	<b>MD91 ÷ 93*</b>	Rain shelters with module frames
2	<b>MD30</b>	Electric door speaker (amplifier)

**Door station series Matrix** (for right item set see on pages 20 and 21)

...	<b>MA71÷73</b>	Module frames with back box
2	<b>MA10P-11P-12P</b>	Modules with integrated audio amplifier
...	<b>MA20-22-24</b>	Blank and button modules
...	<b>MA61÷63</b>	Front frames

... Refers to number of users (see table).

\* Rain shelters are used instead of back boxes and hood covers.

\*\* Articles not supplied by ACI Farfisa.

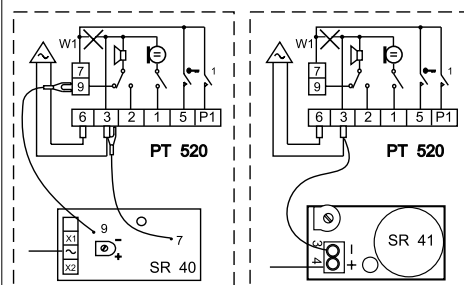
**Working instructions**

As the basic system described on page 27, with the following variations:

- The audio functions and door lock opening are automatically switched to the door station which has made the call and remain in this state until a call from another entrance is received.

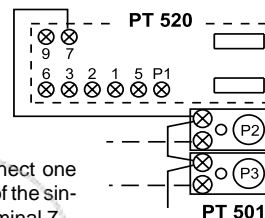
**Notes**

- For the connection of name-plate lamps, read notes 6 and 7 of the installation instructions on page 26.
- For wires dimensioning refer to the installation recommendations and table on page 26.
- For other types of push-button panels see pages 22 and 23 or the general catalogue.



In intercoms **cut the jumper W1** that connects terminals 3 and 7 and apply:

- the electronic buzzer SR40 by connecting wires 7 and 9 to the intercom terminals 3 and 9,
- or use the buzzer SR41 by connecting terminals 3 of buzzer and intercom together and by connecting the call wires to terminal 4 (instead of terminal ~ as shown in the diagrams).



In all intercoms connect one of the two terminals of the single button unit to terminal 7.

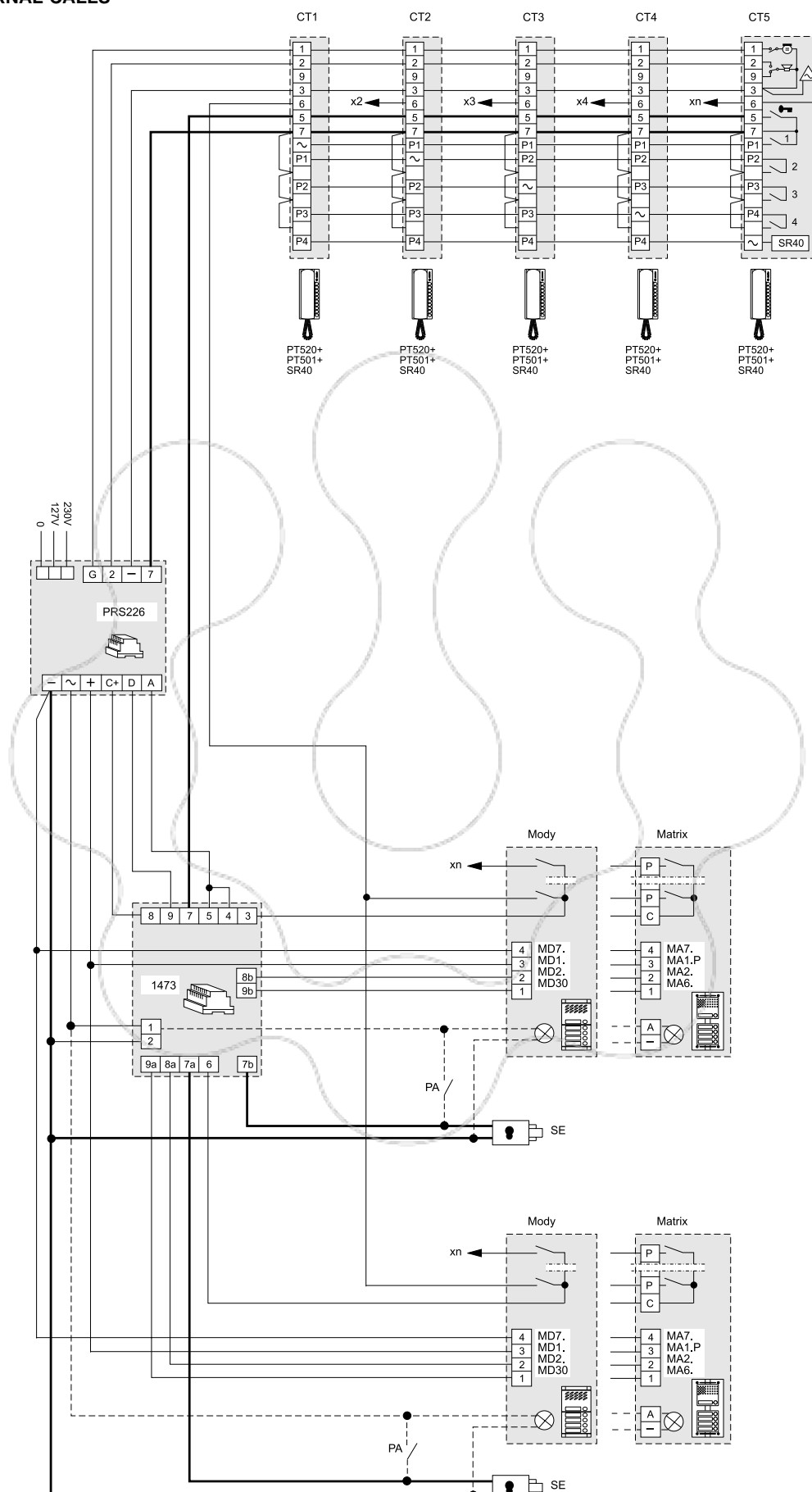
**Table for choosing intercoms and accessories for the required type of installation**

Number of inter-communicating	Project			Application diagram on page:	
	PT520	PT501	SR40/SR41		
2	2	0	2	62	64
3	3	3	3	62	64
4	4	8	4	62	64
5	5	15	5	63	51
6	6	24	6	63	65
7	7	35	7	*	65
8	8	48	8	*	
9	9	63	9	*	
10	10	80	10	*	

\* upon request



# 5 INTERCOMMUNICATING INTERCOMS CONNECTED TO 2 EXTERNAL DOOR STATIONS WITH SINGLE CALLS. ELECTRONIC BELL FOR INTERNAL CALLS



# 5 INTERCOMMUNICATING INTERCOMS CONNECTED TO 2 EXTERNAL DOOR STATIONS WITH COMMON CALL. ELECTRONIC BELL FOR INTERNAL CALLS.

Q.ty	Article	Description
...	<b>PT520</b>	Project series modular intercom
...	<b>PT501</b>	Single button unit
...	<b>SR40</b>	Electronic bell module
1	<b>PRS226</b>	Power supply-switcher
1	<b>1473</b>	Exchanger
2	<b>PA **</b>	Door release push-button (optional)
2	<b>SE **</b>	Electric door lock (12VAC-1A)

## Door station series Mody

2	<b>MD71</b>	Module frames with back box
2	<b>MD11</b>	Module for electric door speaker
2	<b>MD81</b>	Hood cover
2	<b>MD91*</b>	Rain shelter with module frames
2	<b>MD30</b>	Electric door speaker (amplifier)

## Door station series Matrix

2	<b>MA71</b>	Module frames with back box
2	<b>MA11P</b>	Module with integrated audio amplifier
2	<b>MA61</b>	Front frame

... Refers to number of users (see table).

\* Rain shelters are used instead of back boxes and hood covers.

\*\* Articles not supplied by ACI Farfisa.

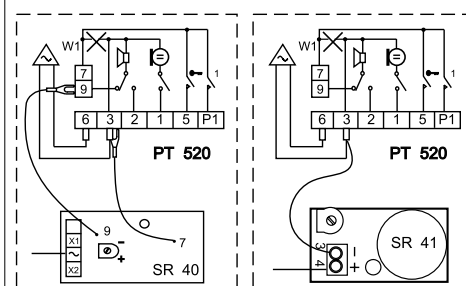
## Working instructions

As the basic system described on page 27, with the following variations:

- The audio functions and door lock opening are automatically switched to the door station which has made the call and remain in this state until a call from another entrance is received.

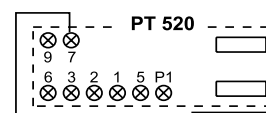
## Notes

- For the connection of name-plate lamps, read notes 6 and 7 of the installation instructions on page 26.
- For wires dimensioning refer to the installation recommendations and table on page 26.
- For other types of push-button panels see pages 22 and 23 or the general catalogue.



In intercoms **cut the jumper W1** that connects terminals 3 and 7 and apply:

- the electronic buzzer SR40 by connecting wires 7 and 9 to the intercom terminals 3 and 9,
- or use the buzzer SR41 by connecting terminals 3 of buzzer and intercom together and by connecting the call wires to terminal 4 (instead of terminal ~ as shown in the diagrams).



In all intercoms connect one of the two terminals of the single button unit to terminal 7.

PT 501

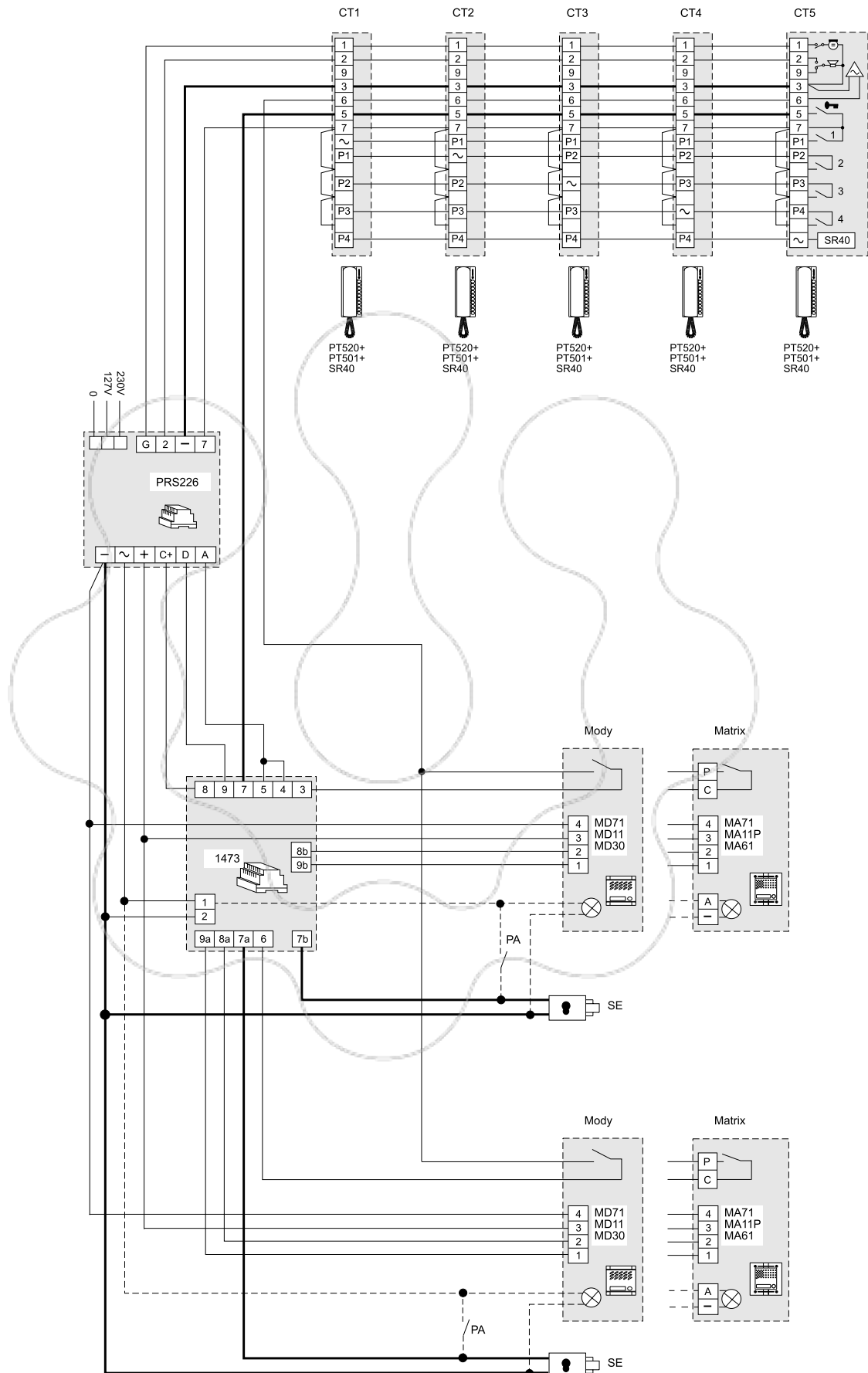
Table for choosing intercoms and accessories for the required type of installation

Number of inter-communicating	Project			Application diagram on page:
	PT520	PT501	SR40/SR41	
2	2	0	2	66
3	3	3	3	66
4	4	8	4	66
5	5	15	5	53
6	6	24	6	67
7	7	35	7	67
8	8	48	8	*
9	9	63	9	*
10	10	80	10	*

\* upon request



# 5 INTERCOMMUNICATING INTERCOMS CONNECTED TO 2 EXTERNAL DOOR STATIONS WITH COMMON CALL. ELECTRONIC BELL FOR INTERNAL CALLS



**5 INTERCOMMUNICATING INTERCOMS CONNECTED TO 3 EXTERNAL DOOR STATIONS WITH SINGLE CALLS. ELECTRONIC BELL FOR INTERNAL CALLS.**

Q.ty	Article	Description
...	<b>PT520</b>	Project series modular intercom
...	<b>PT501</b>	Single button unit
...	<b>SR40</b>	Electronic bell module
1	<b>PRS226</b>	Power supply-switcher
2	<b>1473</b>	Exchanger
3	<b>PA **</b>	Door release push-button ( <i>optional</i> )
3	<b>SE **</b>	Electric door lock (12VAC-1A)

**Door station series Mody** (for right item set see on pages 12÷15)

1 row	2 row	
...	<b>MD71÷73</b>	Module frames with back box
3	<b>MD10-11-12</b>	Modules for electric door speaker
...	<b>MD21 ÷ 24</b>	Button modules
...	<b>MD20 - 50</b>	Blank and info modules
3	<b>MD81 ÷ 83</b>	Hood covers
3	<b>MD91 ÷ 93*</b>	Rain shelters with module frames
3	<b>MD30</b>	Electric door speaker (amplifier)

**Door station series Matrix** (for right item set see on pages 20 and 21)

...	<b>MA71÷73</b>	Module frames with back box
3	<b>MA10P-11P-12P</b>	Modules with integrated audio amplifier
...	<b>MA20-22-24</b>	Blank and button modules
...	<b>MA61÷63</b>	Front frames

... Refers to number of users (see table).

\* Rain shelters are used instead of back boxes and hood covers.

\*\* Articles not supplied by ACI Farfisa.

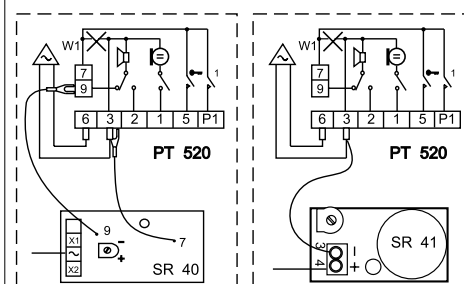
**Working instructions**

As the basic system described on page 27, with the following variations:

- The audio functions and door lock opening are automatically switched to the door station which has made the call and remain in this state until a call from another entrance is received.

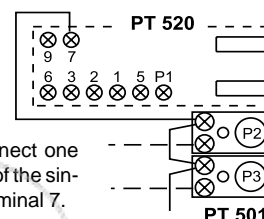
**Notes**

- For the connection of name-plate lamps, read notes 6 and 7 of the installation instructions on page 26.
- For wires dimensioning refer to the installation recommendations and table on page 26.
- For other types of push-button panels see pages 22 and 23 or the general catalogue.



In intercoms **cut the jumper W1** that connects terminals 3 and 7 and apply:

- the electronic buzzer SR40 by connecting wires 7 and 9 to the intercom terminals 3 and 9,
- or use the buzzer SR41 by connecting terminals 3 of buzzer and intercom together and by connecting the call wires to terminal 4 (instead of terminal ~ as shown in the diagrams).



In all intercoms connect one of the two terminals of the single button unit to terminal 7.

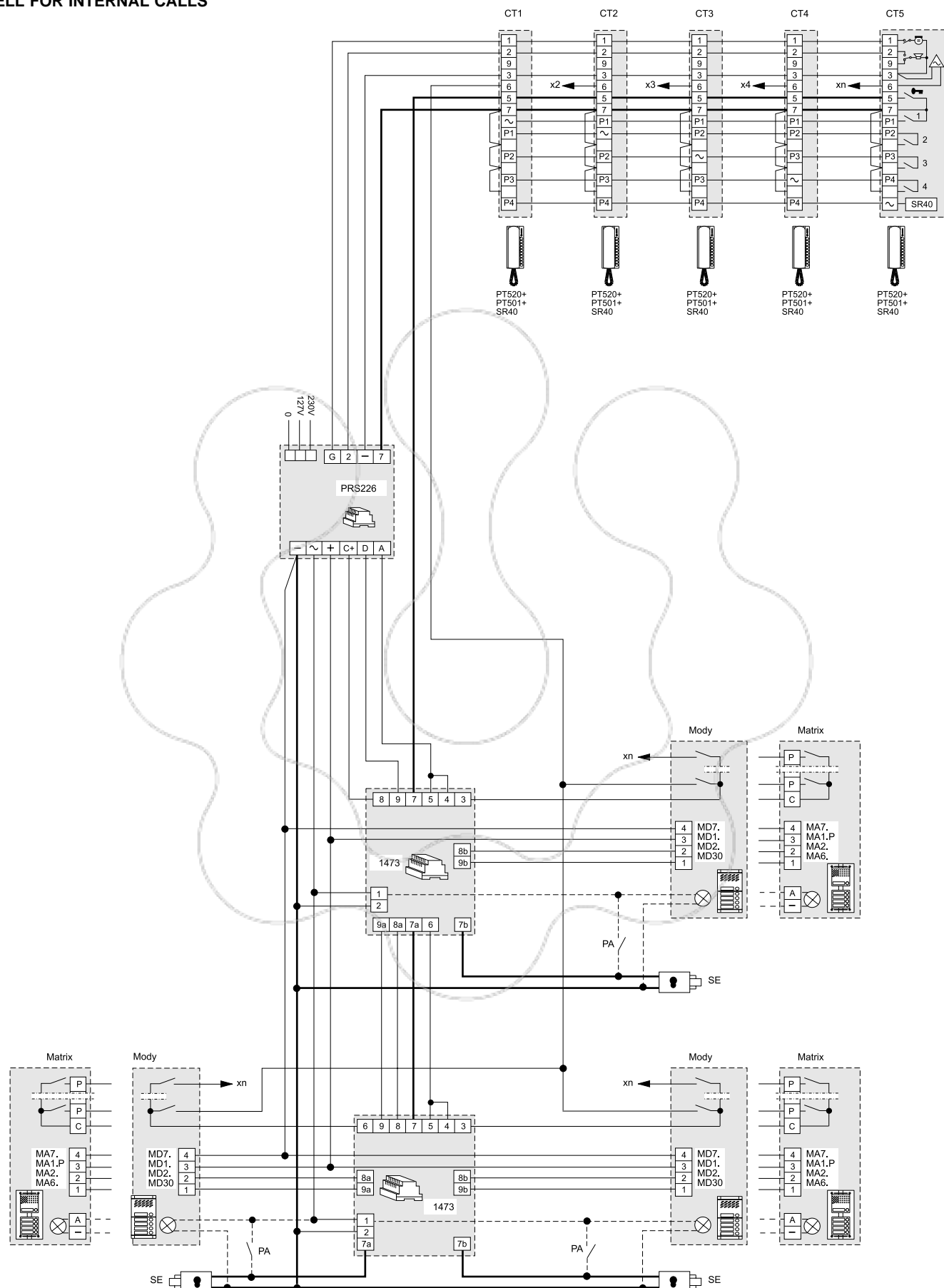
**Table for choosing intercoms and accessories for the required type of installation**

Number of inter-communicating	Project			Application diagram on page:	
	PT520	PT501	SR40/SR41		
2	2	0	2	62	64
3	3	3	3	62	64
4	4	8	4	62	64
5	5	15	5	63	55
6	6	24	6	63	65
7	7	35	7	*	65
8	8	48	8	*	
9	9	63	9	*	
10	10	80	10	*	

\* upon request



# 5 INTERCOMMUNICATING INTERCOMS CONNECTED TO 3 EXTERNAL DOOR STATIONS WITH SINGLE CALLS. ELECTRONIC BELL FOR INTERNAL CALLS



**5 INTERCOMMUNICATING INTERCOMS CONNECTED TO 3 EXTERNAL DOOR STATIONS WITH COMMON CALL. ELECTRONIC BELL FOR INTERNAL CALLS.**

Q.ty	Article	Description
...	<b>PT520</b>	Project series modular intercom
...	<b>PT501</b>	Single button unit
...	<b>SR40</b>	Electronic bell module
1	<b>PRS226</b>	Power supply-switcher
2	<b>1473</b>	Exchanger
3	<b>PA **</b>	Door release push-button (optional)
3	<b>SE **</b>	Electric door lock (12VAC-1A)

**Door station series Mody**

3	<b>MD71</b>	Module frames with back box
3	<b>MD11</b>	Module for electric door speaker
3	<b>MD81</b>	Hood cover
3	<b>MD91*</b>	Rain shelter with module frames
3	<b>MD30</b>	Electric door speaker (amplifier)

**Door station series Matrix**

3	<b>MA71</b>	Module frames with back box
3	<b>MA11P</b>	Module with integrated audio amplifier
3	<b>MA61</b>	Front frame

... Refers to number of users (see table).

\* Rain shelters are used instead of back boxes and hood covers.

\*\* Articles not supplied by ACI Farfisa.

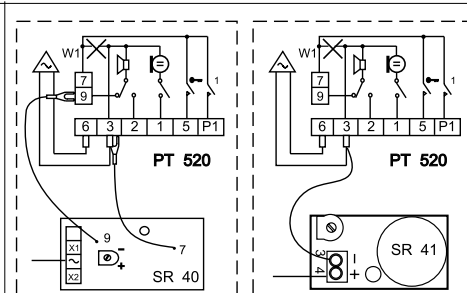
**Working instructions**

As the basic system described on page 27, with the following variations:

- The audio functions and door lock opening are automatically switched to the door station which has made the call and remain in this state until a call from another entrance is received.

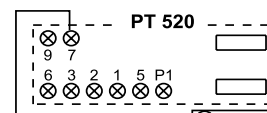
**Notes**

- For the connection of name-plate lamps, read notes 6 and 7 of the installation instructions on page 26.
- For wires dimensioning refer to the installation recommendations and table on page 26.
- For other types of push-button panels see pages 22 and 23 or the general catalogue.

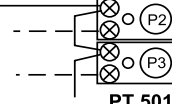


In intercoms **cut the jumper W1** that connects terminals 3 and 7 and apply:

- the electronic buzzer SR40 by connecting wires 7 and 9 to the intercom terminals 3 and 9,
- or use the buzzer SR41 by connecting terminals 3 of buzzer and intercom together and by connecting the call wires to terminal 4 (instead of terminal ~ as shown in the diagrams).



In all intercoms connect one of the two terminals of the single button unit to terminal 7.



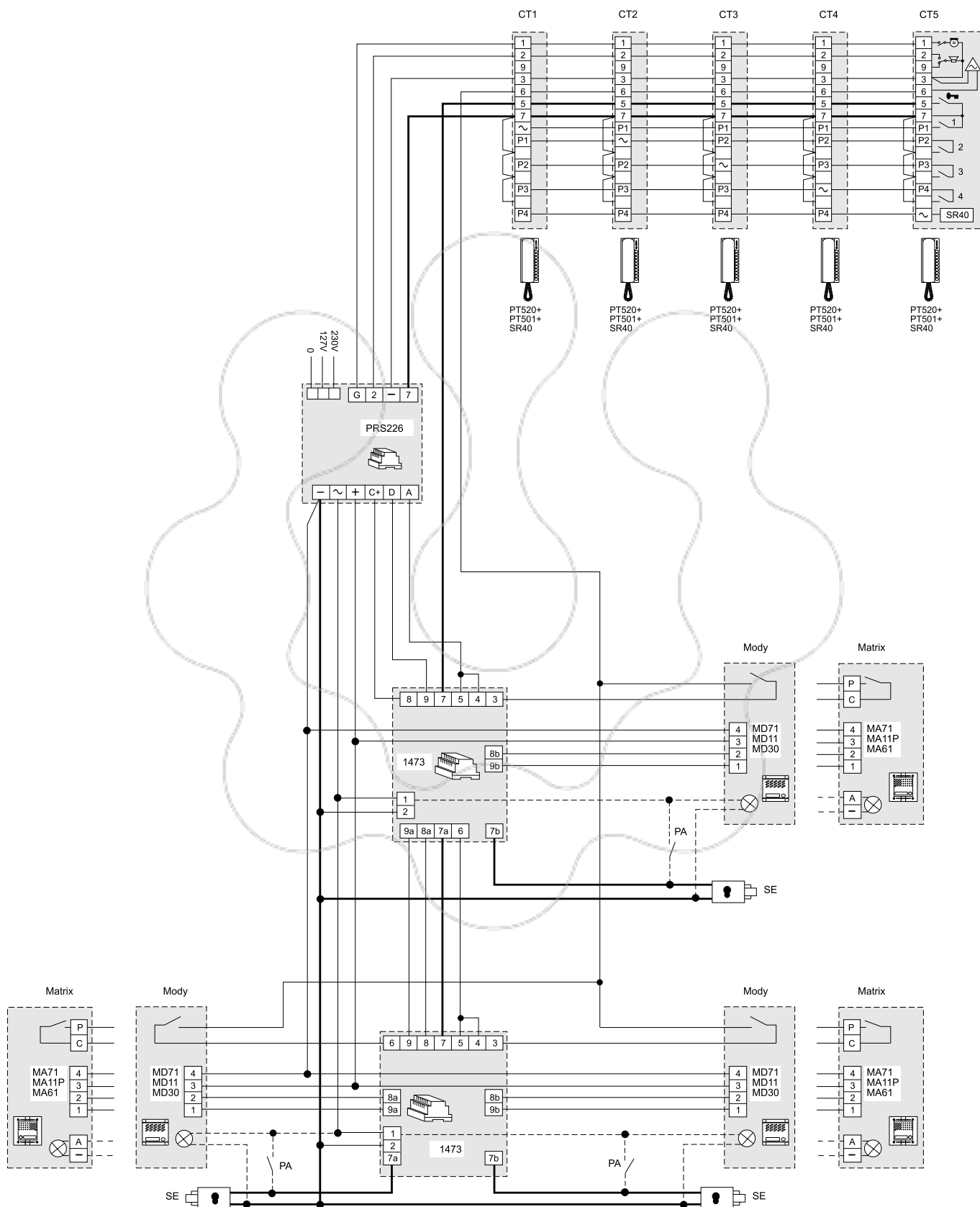
**Table for choosing intercoms and accessories for the required type of installation**

Number of inter-communicating	Project			Application diagram on page:
	PT520	PT501	SR40/SR41	
2	2	0	2	66
3	3	3	3	66
4	4	8	4	66
5	5	15	5	57
6	6	24	6	67
7	7	35	7	67
8	8	48	8	*
9	9	63	9	*
10	10	80	10	*

\* upon request



# 5 INTERCOMMUNICATING INTERCOMS CONNECTED TO 3 EXTERNAL DOOR STATIONS WITH COMMON CALL. ELECTRONIC BELL FOR INTERNAL CALLS



**ONE-WAY INTERCOMMUNICATING SYSTEM WITH SECONDARY DOOR STATIONS AND 1 MAIN COMMON STATION (multiple entrance).**

Q.ty	Article	Description
...	<b>PT520</b>	Project series modular intercom
...	<b>PT501</b>	Single button unit
1	<b>PRS220</b>	Power supply
X	<b>PRS226E</b>	Power supply-switcher
X	<b>1473</b>	Exchanger
1+X	<b>PA **</b>	Door release push-button ( <i>optional</i> )
1+X	<b>SE **</b>	Electric door lock (12VAC-1A)

**Door station series Mody** (for right item set see on pages 12÷15)

**Secondary door stations**

X	<b>MD71</b>	Module frames with back box
X	<b>MD11</b>	Module for electric door speaker
X	<b>MD81</b>	Hood cover
X	<b>MD91*</b>	Rain shelter with module frames
X	<b>MD30</b>	Electric door speaker (amplifier)

**Main entrance**

1 row	2 row	
...	<b>MD71÷74</b>	Module frames with back box
1	<b>MD10-11-12</b>	MD10-122-124 Modules for electric door speaker
...	<b>MD21 ÷ 24</b>	MD222 ÷ 228 Button modules
...	<b>MD20 - 50</b>	MD20 - 50 Blank and info modules
1	<b>MD82 ÷ 812</b>	MD82 ÷ 812 Hood covers
1	<b>MD92 ÷ 912*</b>	MD92 ÷ 912* Rain shelters with module frames
1	<b>MD30</b>	MD30 Electric door speaker (amplifier)

**Door station series Matrix** (for right item set see on pages 20 and 21)

**Secondary door stations**

X	<b>MA71</b>	Module frames with back box
X	<b>MA11P</b>	Module with integrated audio amplifier
X	<b>MA61</b>	Front frame

**Main entrance**

...	<b>MA71÷73</b>	Module frames with back box
1	<b>MA10P-11P-12P</b>	Modules with integrated audio amplifier
...	<b>MA20-22-24</b>	Blank and button modules
...	<b>MA61÷63</b>	Front frames

... Refers to number of users.

X Refers to the number of stairways.

\* Rain shelters are used instead of back boxes and hood covers.

\*\* Articles not supplied by ACI Farfisa.

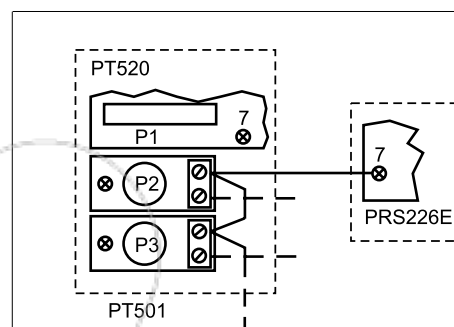
**Working instructions.**

As the basic system described on page 27, with the following variations:

- The audio functions and door lock opening are automatically switched to the door station which has made the call and remain in this state until a call from another entrance is received.
- Services to secondary door stations are independent and can be operated at the same time.

**Notes**

- For the connection of name-plate lamps, read notes 6 and 7 of the installation instructions on page 26.
- For wires dimensioning refer to the installation recommendations and table on page 26.
- For other types of push-button panels see pages 22 and 23 or the general catalogue.



- In every **intercommunicating** intercom apply the single button group by connecting one of the two button terminals to **terminal 7 of the power supply PRS226E**.

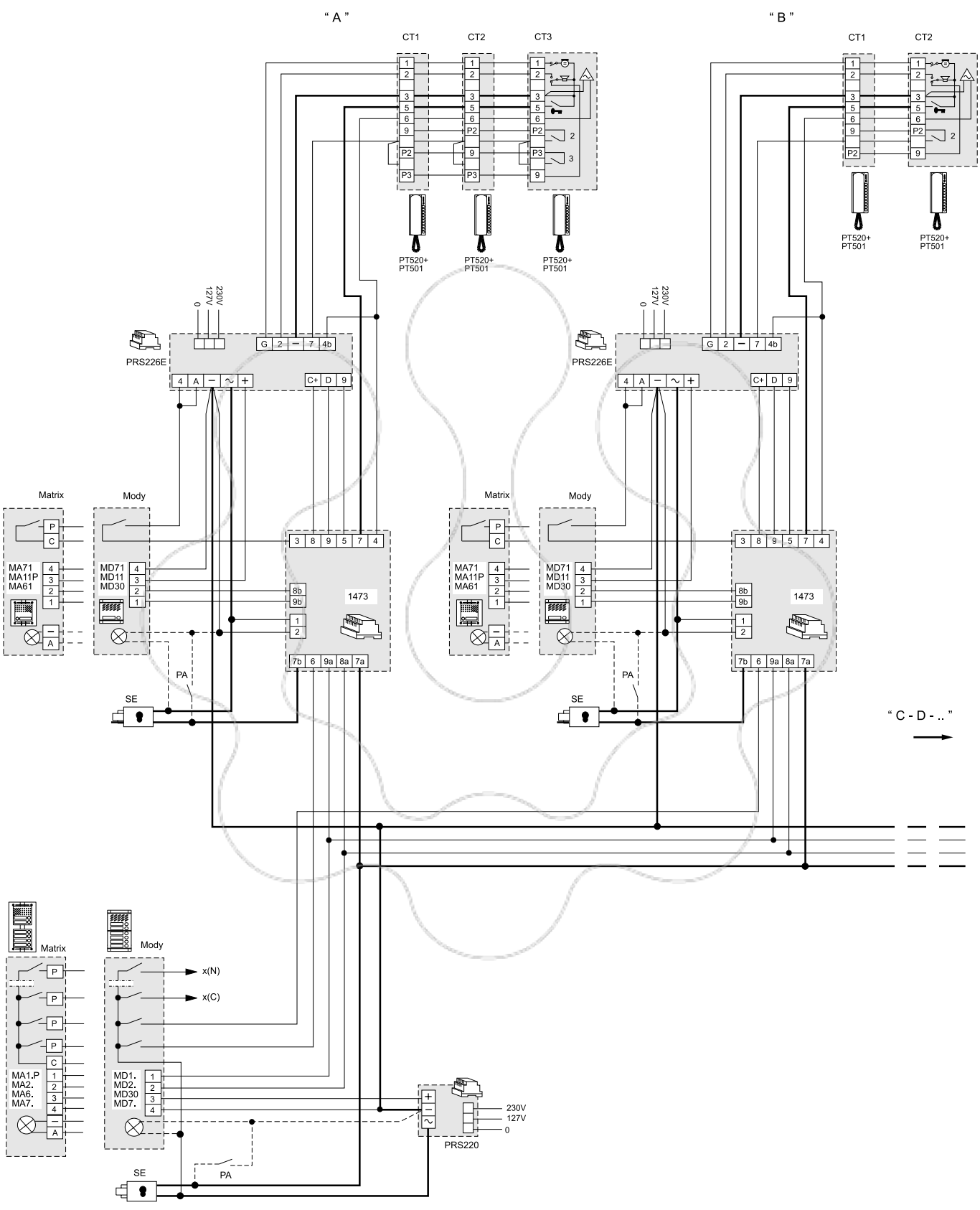
- **Do not use button no. 1** for intercommunicating calls.

**Table for choosing intercoms and accessories for the required type of installation**

Number of inter-communicating	Project	
	PT520	PT501
2	2	0
3	3	3
4	4	8
5	5	15
6	6	24
7	7	35
8	8	48
9	9	63
10	10	80



ONE-WAY INTERCOMMUNICATING SYSTEM WITH SECONDARY DOOR STATIONS AND 1 MAIN COMMON STATION (multiple entrance)



**MULTI-WAY INTERCOM SYSTEM CONNECTED TO 1 EXTERNAL DOOR STATION.** With intercommunication service in 1 or more apartments and private conversation feature with the external door station and the other apartments.

Q.ty	Article	Description
...	<b>PT 510 *</b>	Project series intercom with 1 call button
1	<b>PRS220</b>	Power supply
1	<b>PA **</b>	Door release push-button ( <i>optional</i> )
1	<b>SE **</b>	Electric door lock (12VAC-1A)

**Door station series Mody** (for right item set see on pages 12÷15)

	1 row	2 row	
...	<b>MD71÷74</b>	<b>MD71÷74</b>	Module frames with back box
1	<b>MD10-11-12</b>	<b>MD10-122-124</b>	Modules for electric door speaker
...	<b>MD21 ÷ 24</b>	<b>MD222 ÷ 228</b>	Button modules
...	<b>MD20 - 50</b>	<b>MD20 - 50</b>	Blank and info modules
1	<b>MD82 ÷ 812</b>	<b>MD82 ÷ 812</b>	Hood covers
1	<b>MD92 ÷ 912 <sup>(2)</sup></b>	<b>MD92 ÷ 912 <sup>(2)</sup></b>	Rain shelters with module frames
1	<b>MD30</b>	<b>MD30</b>	Electric door speaker (amplifier)

**Door station series Matrix** (for right item set see on pages 20 and 21)

...	<b>MA71÷73</b>	Module frames with back box
1	<b>MA10P-11P-12P</b>	Modules with integrated audio amplifier
...	<b>MA20-22-24</b>	Blank and button modules
...	<b>MA61÷63</b>	Front frames

**Articles required for every intercommunicating flat**

...	<b>PT520</b>	Intercom with 2 call buttons
...	<b>PT501</b>	Single button unit
1	<b>PRS226E</b>	Power supply-switcher

... Refers to number of users.

\* Besides the mentioned model all the intercoms from the **Project, PuntoVirgola, 900 and 700** can be installed.

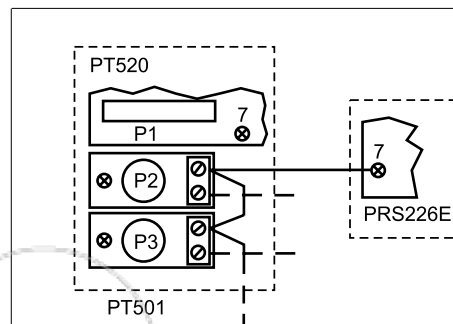
\*\* Articles not supplied by ACI Farfisa.

<sup>(2)</sup> Rain shelters are used instead of back boxes and hood covers.

**Working instructions.** See page 27.

#### Notes

- To use **MD100** and **MD200 amplified external door stations**, combine the diagram on page 61 to the diagram on page 30 by aligning it to the riser.
- For the connection of name-plate lamps, read notes 6, 7 and 8 of the installation instructions on page 26.
- For wires dimensioning refer to the installation recommendations and table on page 26.
- Telephones can be used instead of intercoms (see "telecommunication" section).
- For other types of push-button panels see pages 22 and 23 or the general catalogue.



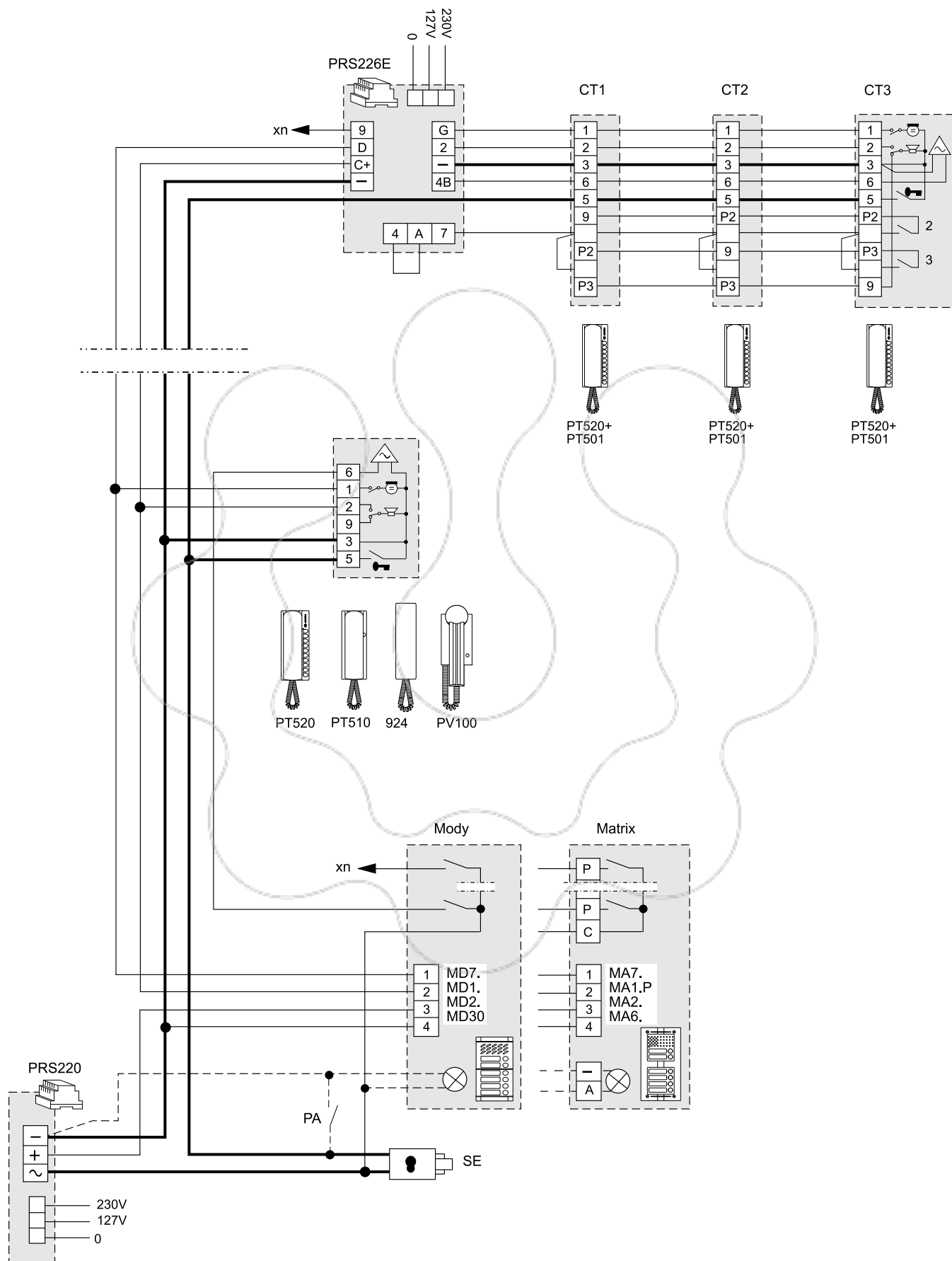
- In every **intercommunicating** intercom apply the single button group by connecting one of the two button terminals to **terminal 7 of the power supply PRS226E**.
- **Do not use button no. 1** for intercommunicating calls.

**Table for choosing intercoms and accessories for the required type of installation**

Number of inter-communicating	Project		Application diagram on page:
	PT520	PT501	
2	2	0	68
3	3	3	68
4	4	8	69
5	5	15	69
6	6	24	70
7	7	35	70
8	8	48	upon request
9	9	63	upon request
10	10	80	upon request



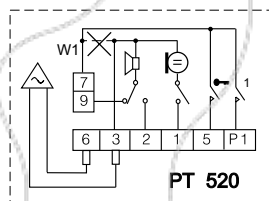
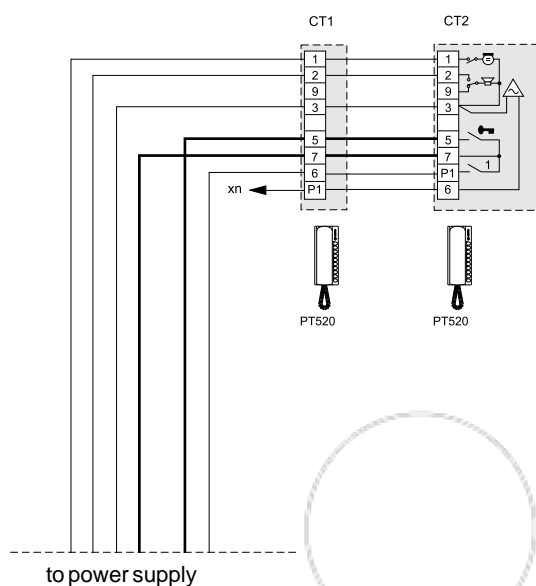
**MULTI-WAY INTERCOM SYSTEM CONNECTED TO 1 EXTERNAL DOOR STATION.** With intercommunication service in 1 or more apartments and private conversation feature with the external door station and the other apartments.



ADDITIONAL DIAGRAMS FOR INTERCOMMUNICATING SYSTEMS WITH SINGLE EXTERNAL CALL. BOTH CALLS ACTIVATE THE BUZZER.

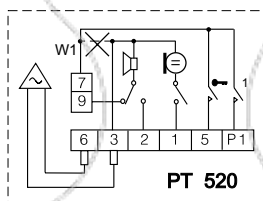
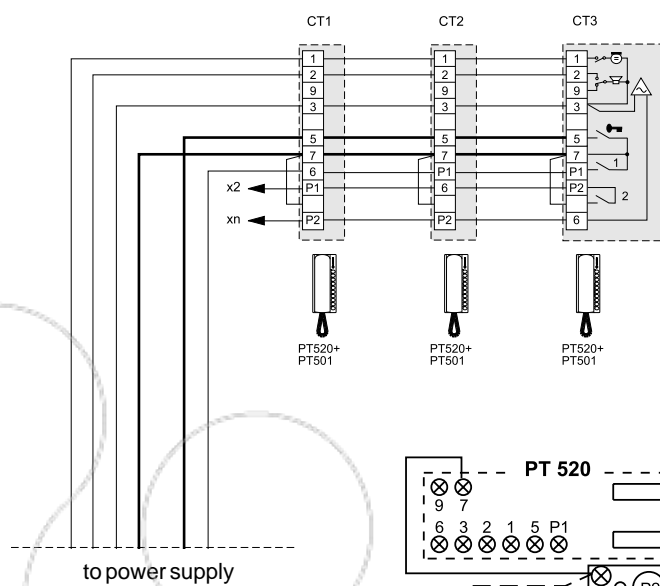
- To match with diagrams: Si 115L/5S; Si 125L/5S; Si 135L/5S

## 2 INTERCOMMUNICATING INTERCOMS

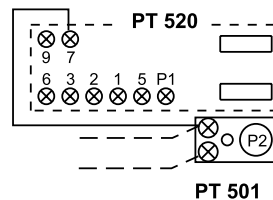


In each intercom to cut the jumper (W1) that links terminals 3 and 7.

## 3 INTERCOMMUNICATING INTERCOMS



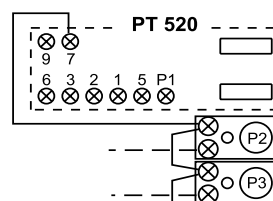
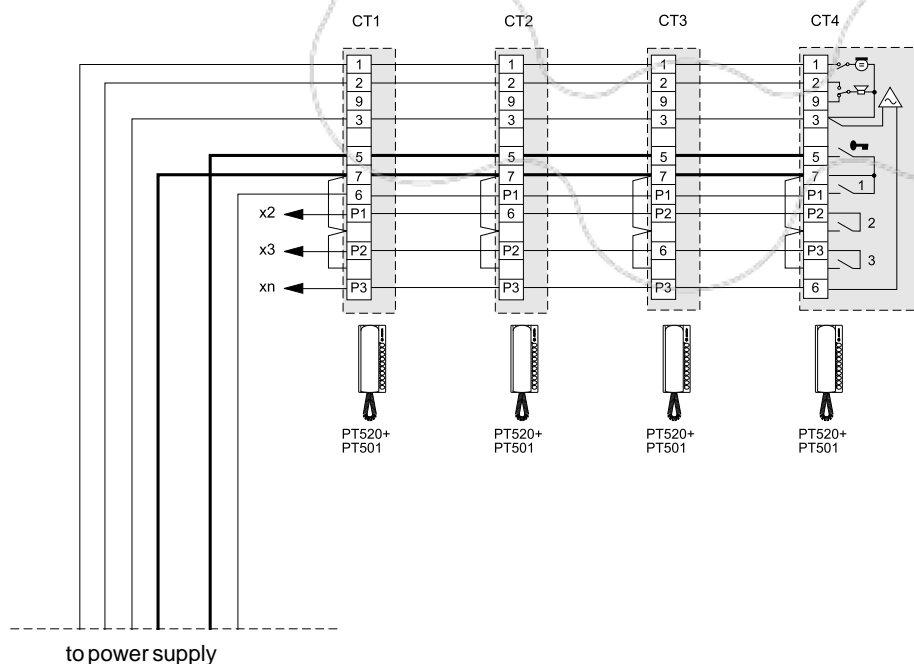
In each intercom to cut the jumper (W1) that links terminals 3 and 7



PT 501

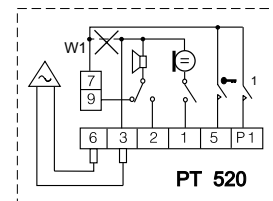
In all intercoms connect one of the two terminals of the single button unit to terminal 7.

## 4 INTERCOMMUNICATING INTERCOMS



PT 501

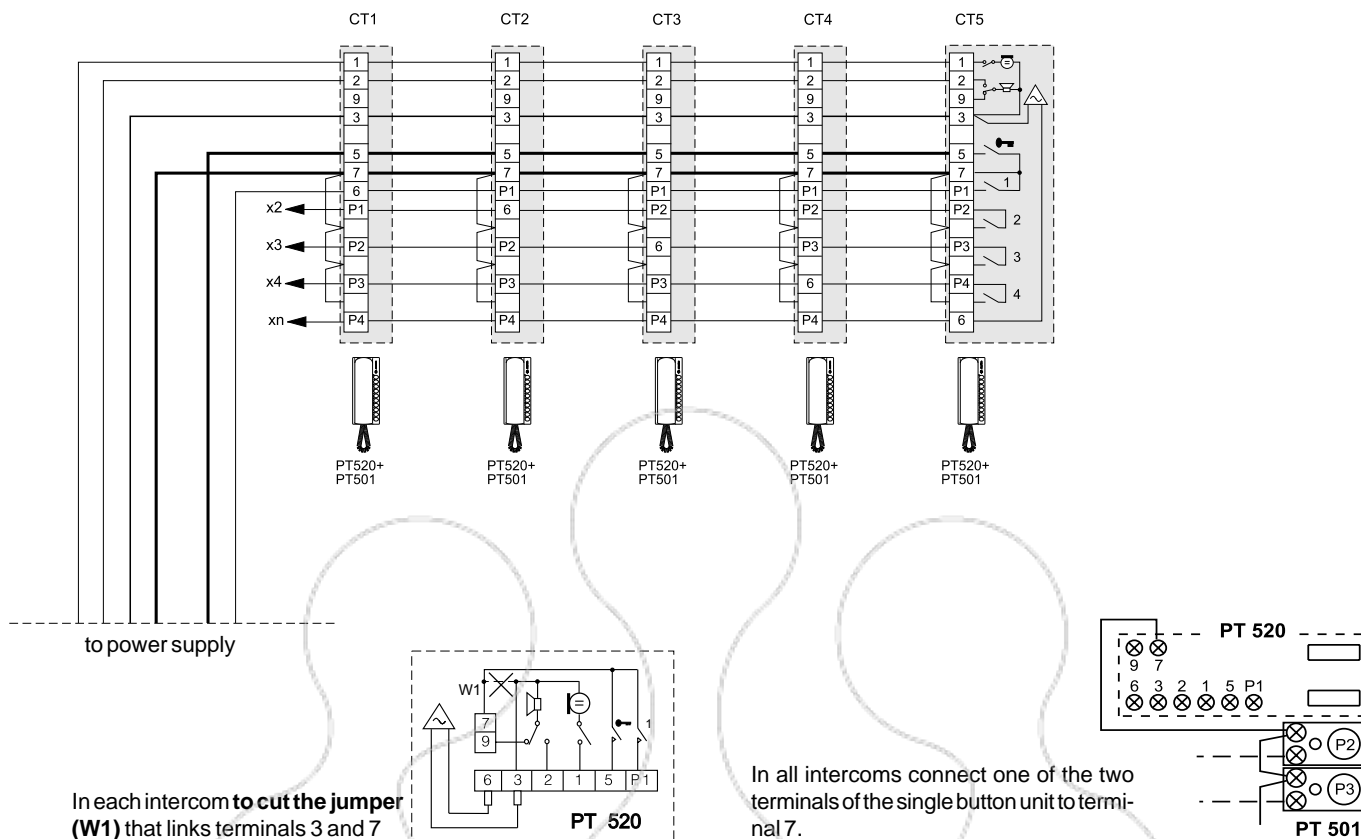
In all intercoms connect one of the two terminals of the single button unit to terminal 7.



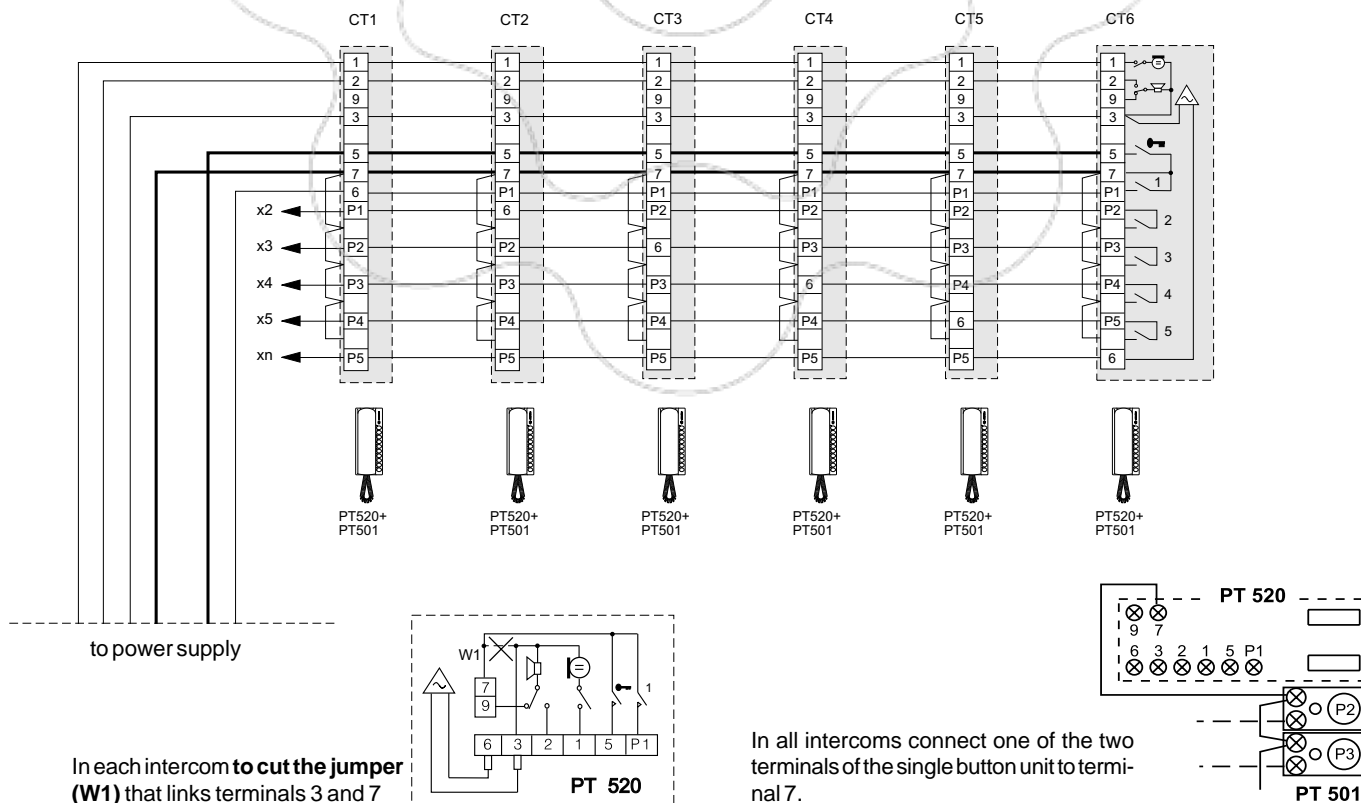
In each intercom to cut the jumper (W1) that links terminals 3 and 7



## 5 INTERCOMMUNICATING INTERCOMS



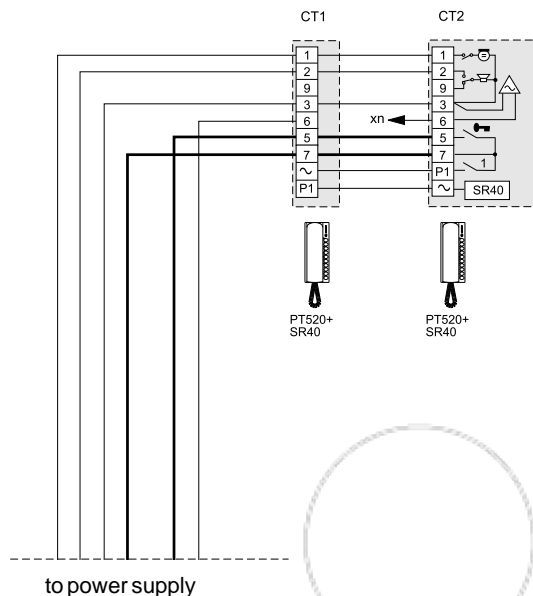
## 6 INTERCOMMUNICATING INTERCOMS



## APPLICATION DIAGRAMS FOR INTERCOMMUNICATING SYSTEMS WITH SINGLE ALTERNATE CURRENT CALL FROM EXTERNAL STATION AND ELECTRONIC CALL FOR EXTENSIONS

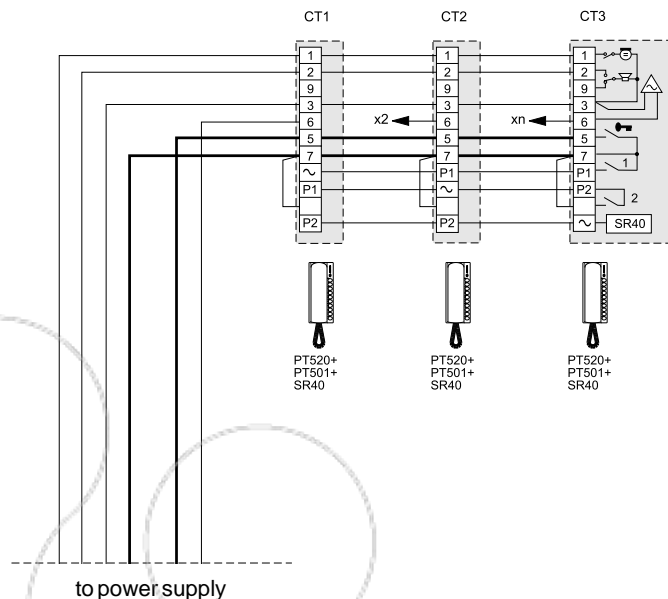
- To match with diagrams: Si 115L/5S; Si 125L/5S; Si 135L/5S

## 2 INTERCOMMUNICATING INTERCOMS



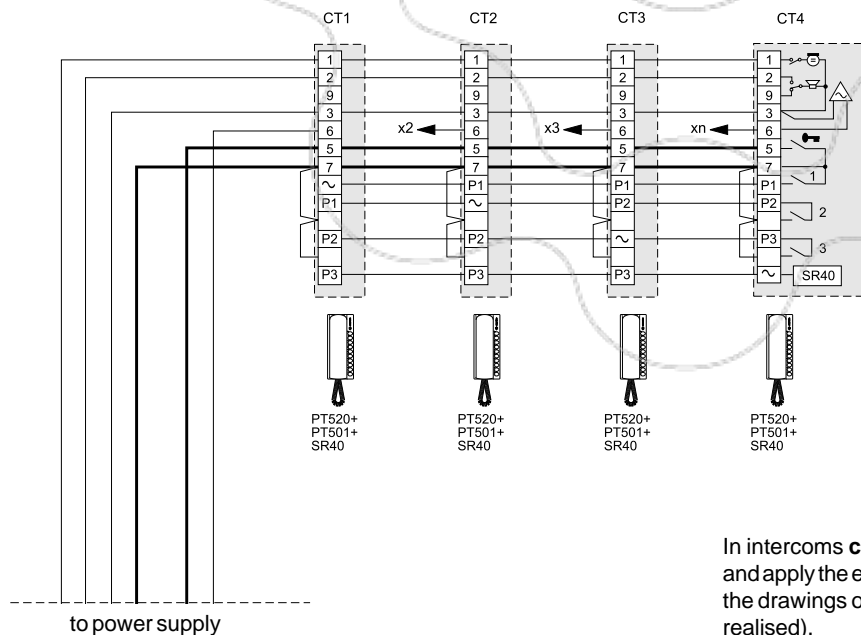
In intercoms **cut the jumper W1** which connects terminals 3 and 7 and apply the electronic buzzer SR40 or SR41 (for the application see the drawings on the page that illustrates the electrical diagram to be realised).

## 3 INTERCOMMUNICATING INTERCOMS



In intercoms **cut the jumper W1** which connects terminals 3 and 7 and apply the electronic buzzer SR40 or SR41 (for the application see the drawings on the page that illustrates the electrical diagram to be realised).

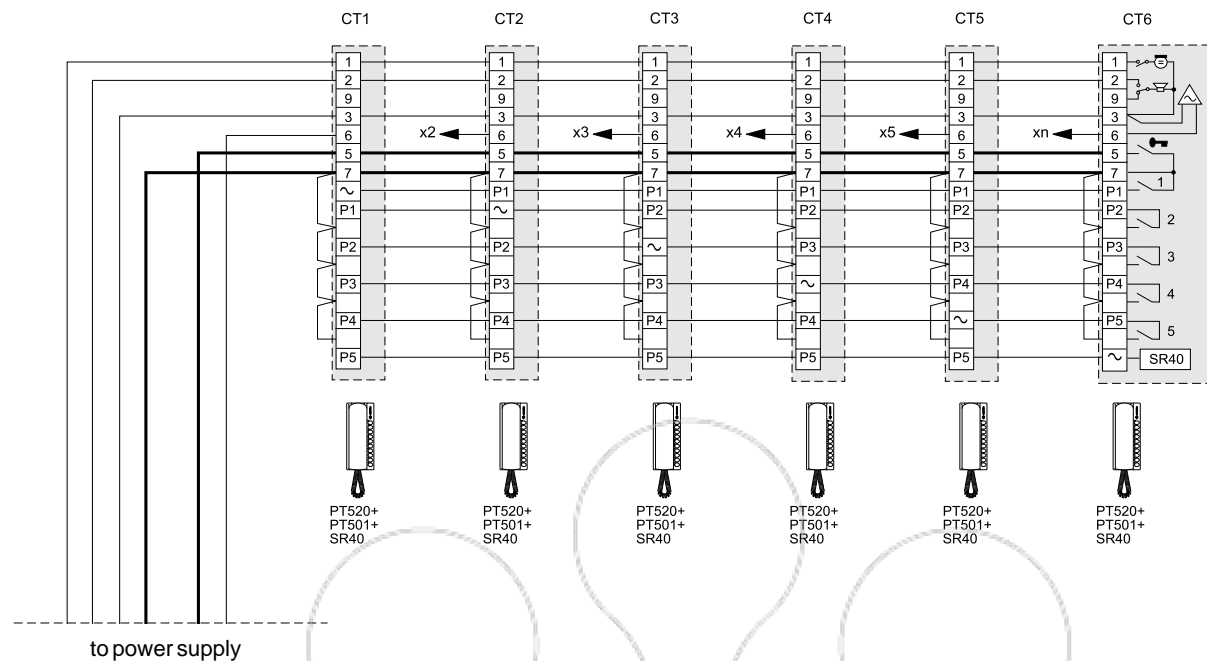
## 4 INTERCOMMUNICATING INTERCOMS



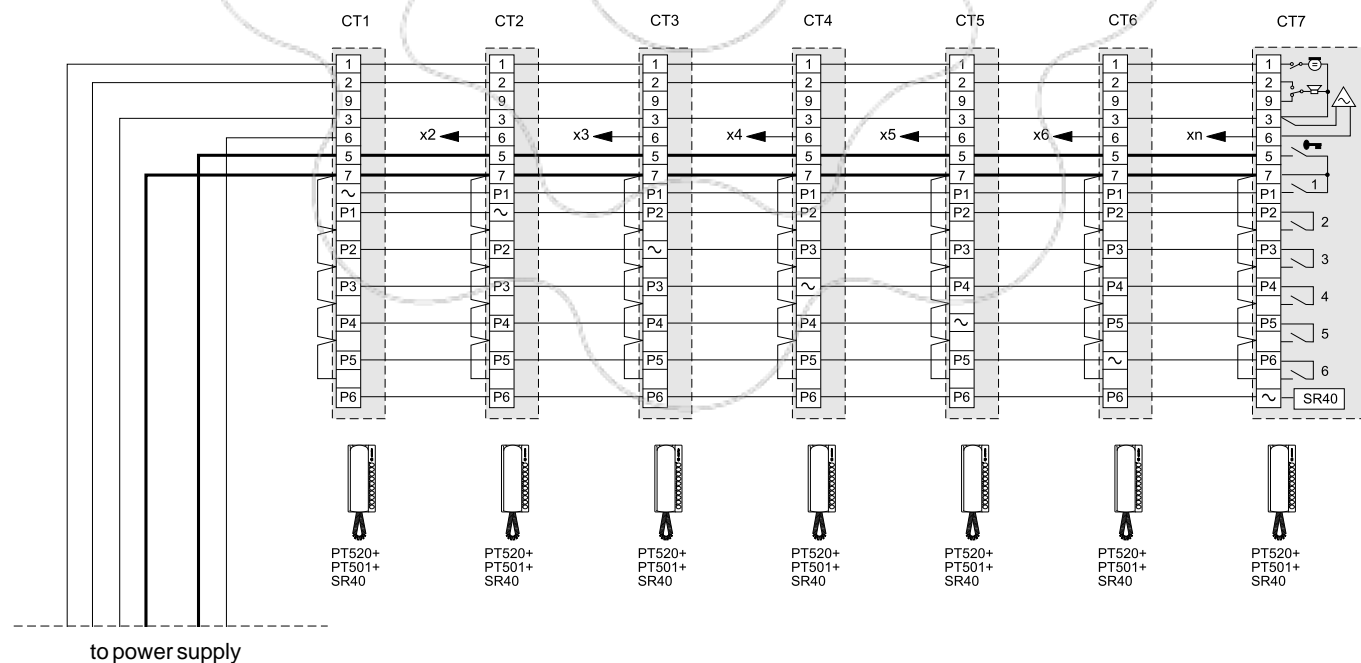
In intercoms **cut the jumper W1** which connects terminals 3 and 7 and apply the electronic buzzer SR40 or SR41 (for the application see the drawings on the page that illustrates the electrical diagram to be realised).



## 6 INTERCOMMUNICATING INTERCOMS



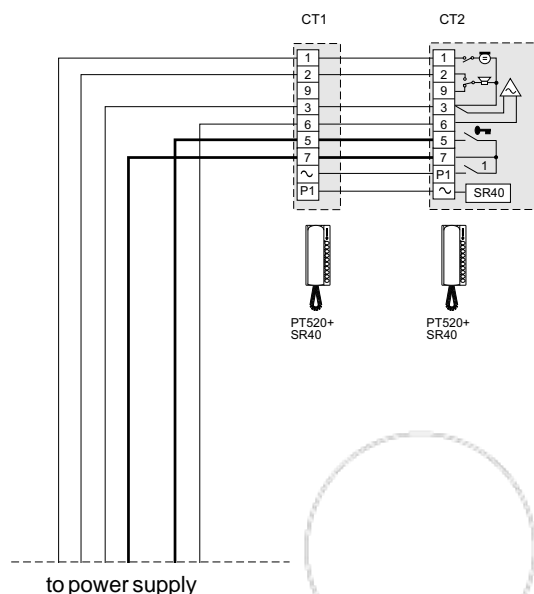
## 7 INTERCOMMUNICATING INTERCOMS



## APPLICATION DIAGRAMS FOR INTERCOMMUNICATING SYSTEMS WITH COMMON ALTERNATE CURRENT CALL FROM EXTERNAL STATION AND ELECTRONIC CALL FOR EXTENSIONS

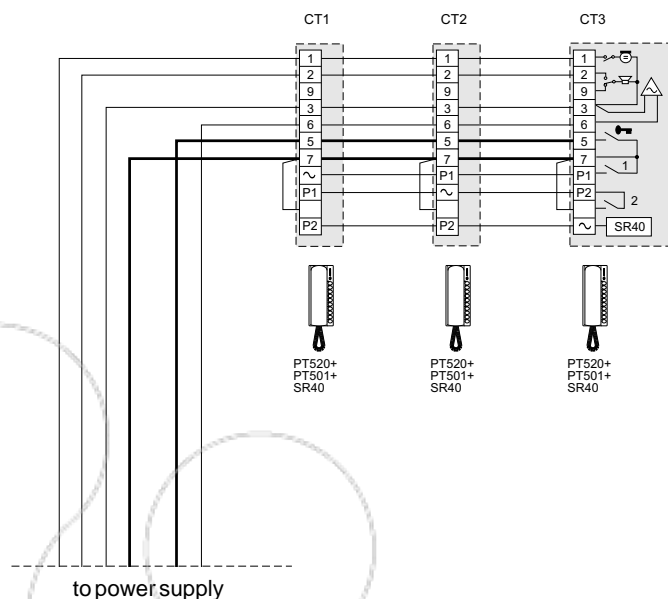
- To match with diagrams: Si 111L/5M; Si 121L/5M; Si 131L/5M

### 2 INTERCOMMUNICATING INTERCOMS



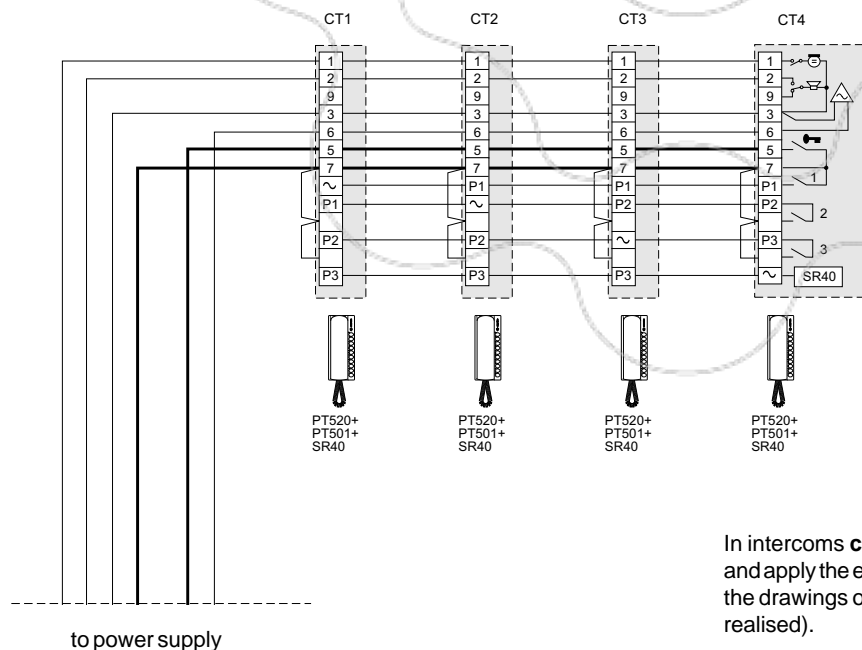
In intercoms **cut the jumper W1** which connects terminals 3 and 7 and apply the electronic buzzer SR40 or SR41 (for the application see the drawings on the page that illustrates the electrical diagram to be realised).

### 3 INTERCOMMUNICATING INTERCOMS



In intercoms **cut the jumper W1** which connects terminals 3 and 7 and apply the electronic buzzer SR40 or SR41 (for the application see the drawings on the page that illustrates the electrical diagram to be realised).

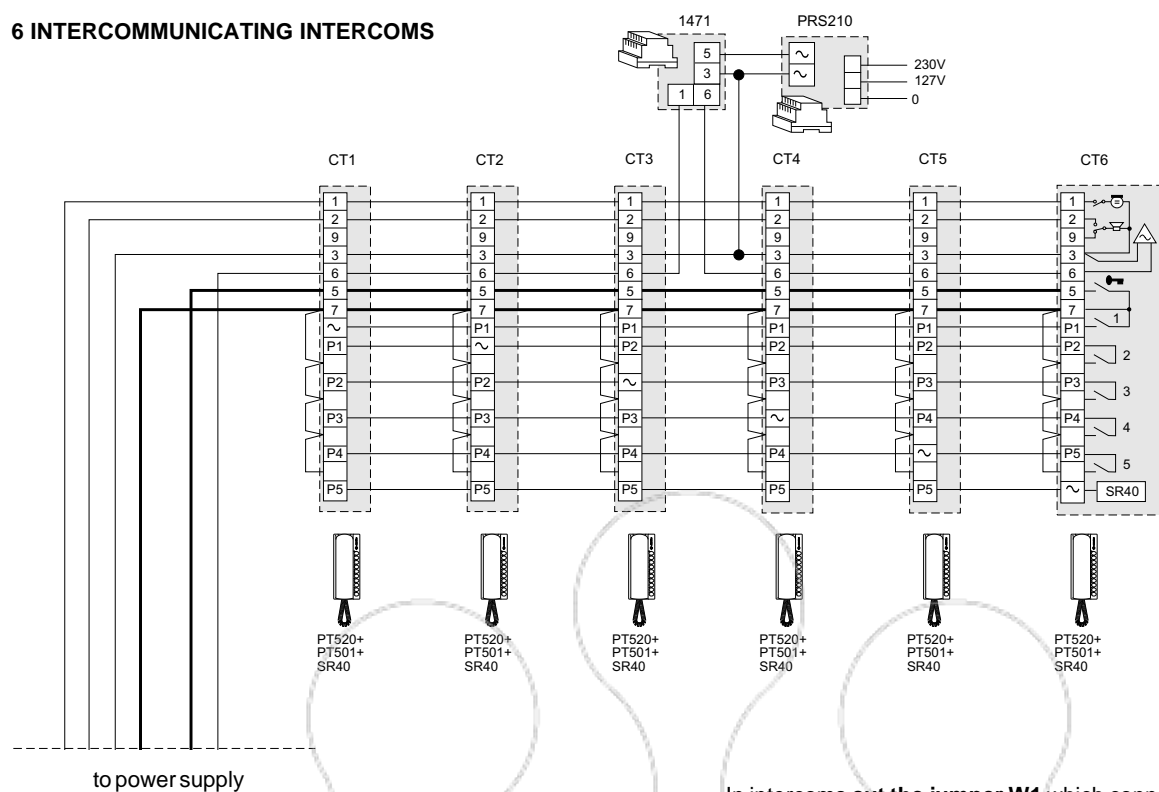
### 4 INTERCOMMUNICATING INTERCOMS



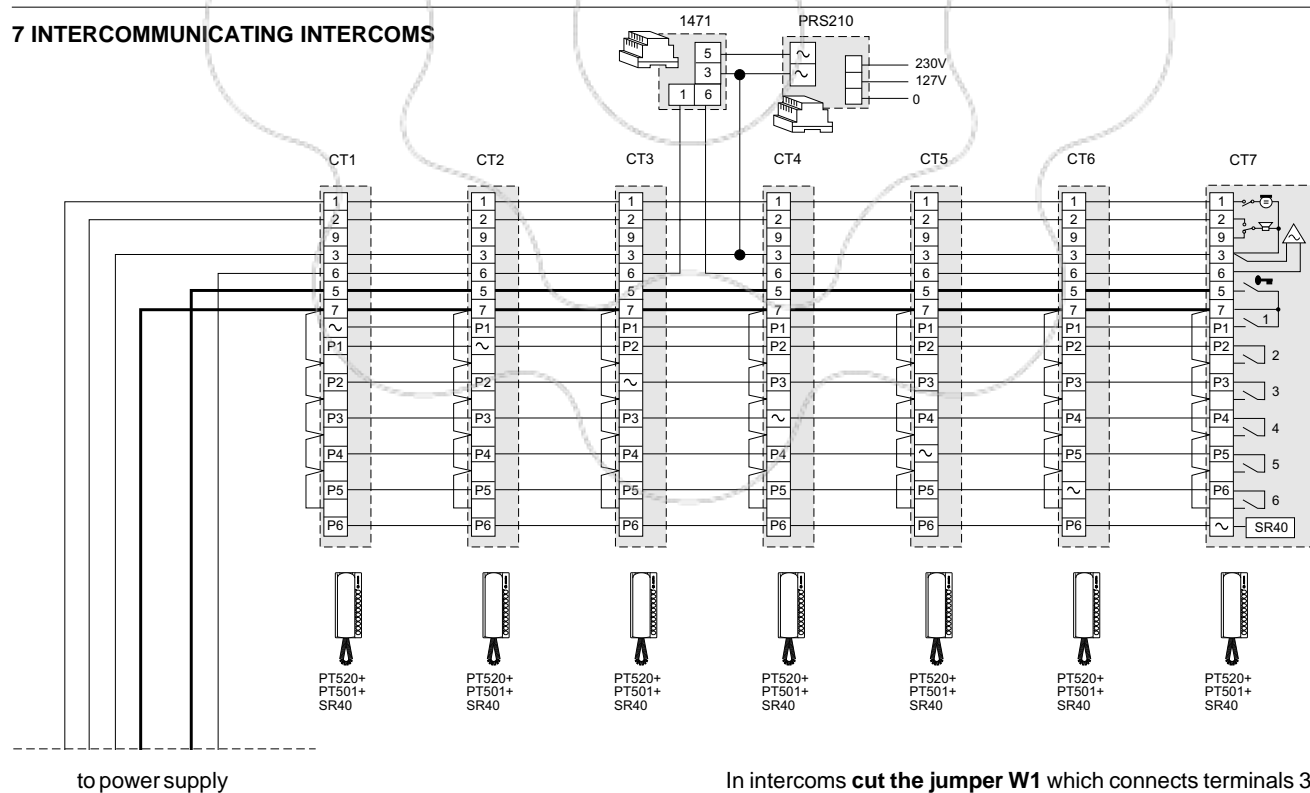
In intercoms **cut the jumper W1** which connects terminals 3 and 7 and apply the electronic buzzer SR40 or SR41 (for the application see the drawings on the page that illustrates the electrical diagram to be realised).



## 6 INTERCOMMUNICATING INTERCOMS



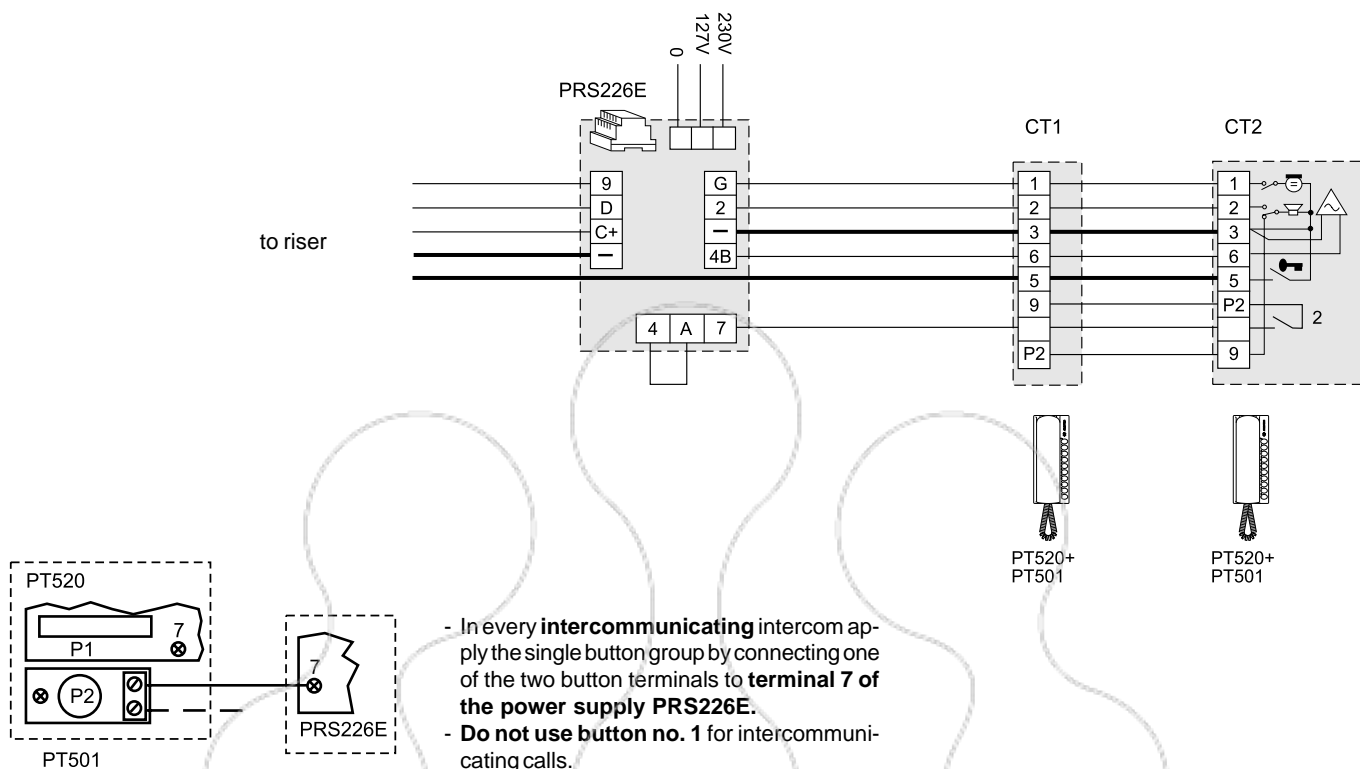
## 7 INTERCOMMUNICATING INTERCOMS



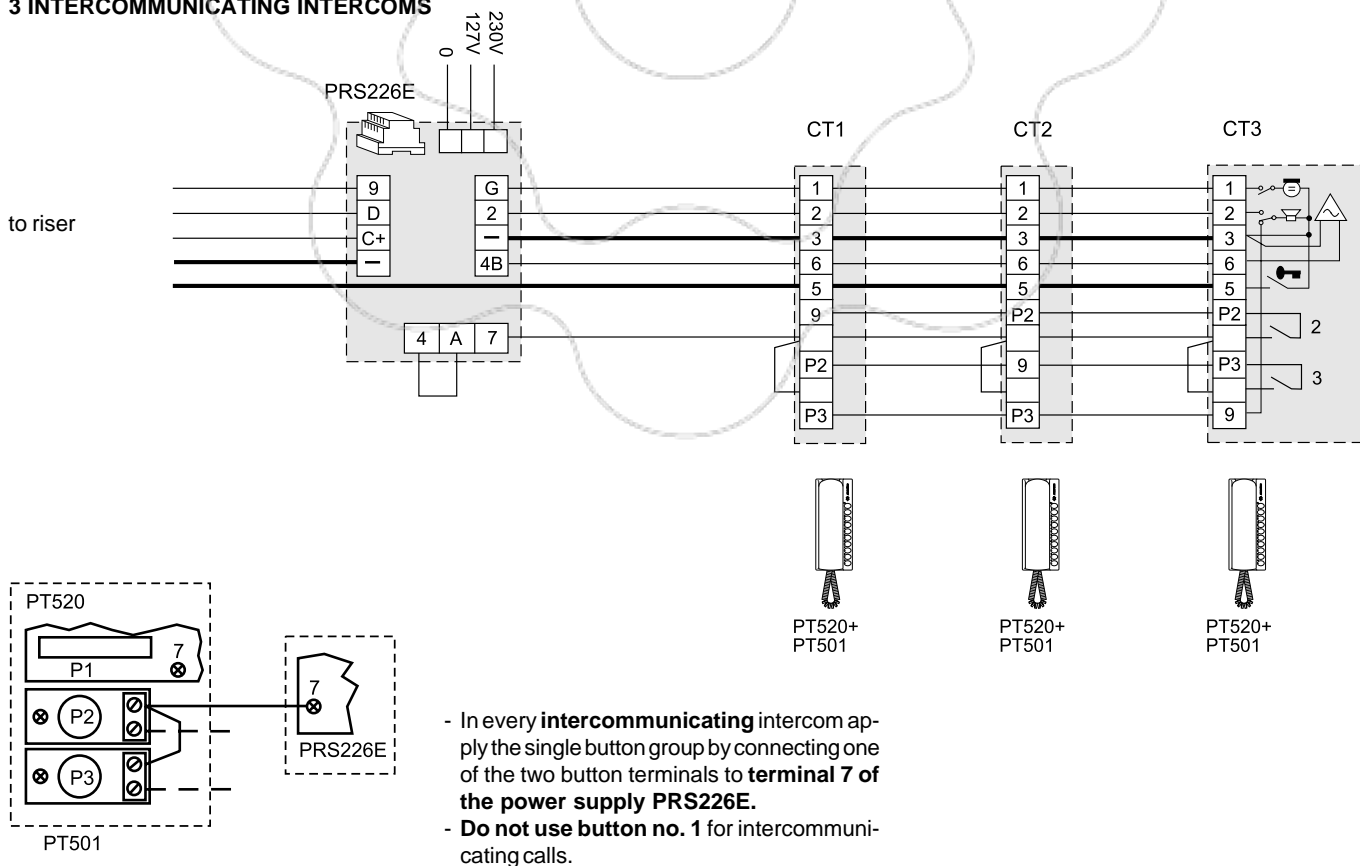
### APPLICATION DIAGRAMS FOR ONE-WAY INTERCOMMUNICATING SERVICES IN APARTMENT BUILDING SYSTEMS. ALTERNATE CURRENT CALL FROM THE DOOR STATION AND ELECTRONIC FOR EXTENSIONS

- To match with diagrams: Si11MO/1; Si11MO/2; Si12MO/1; Si13MO/1; Si16MO/1; Si17MO/1 (example of application on page 61 - Si11MO/3).

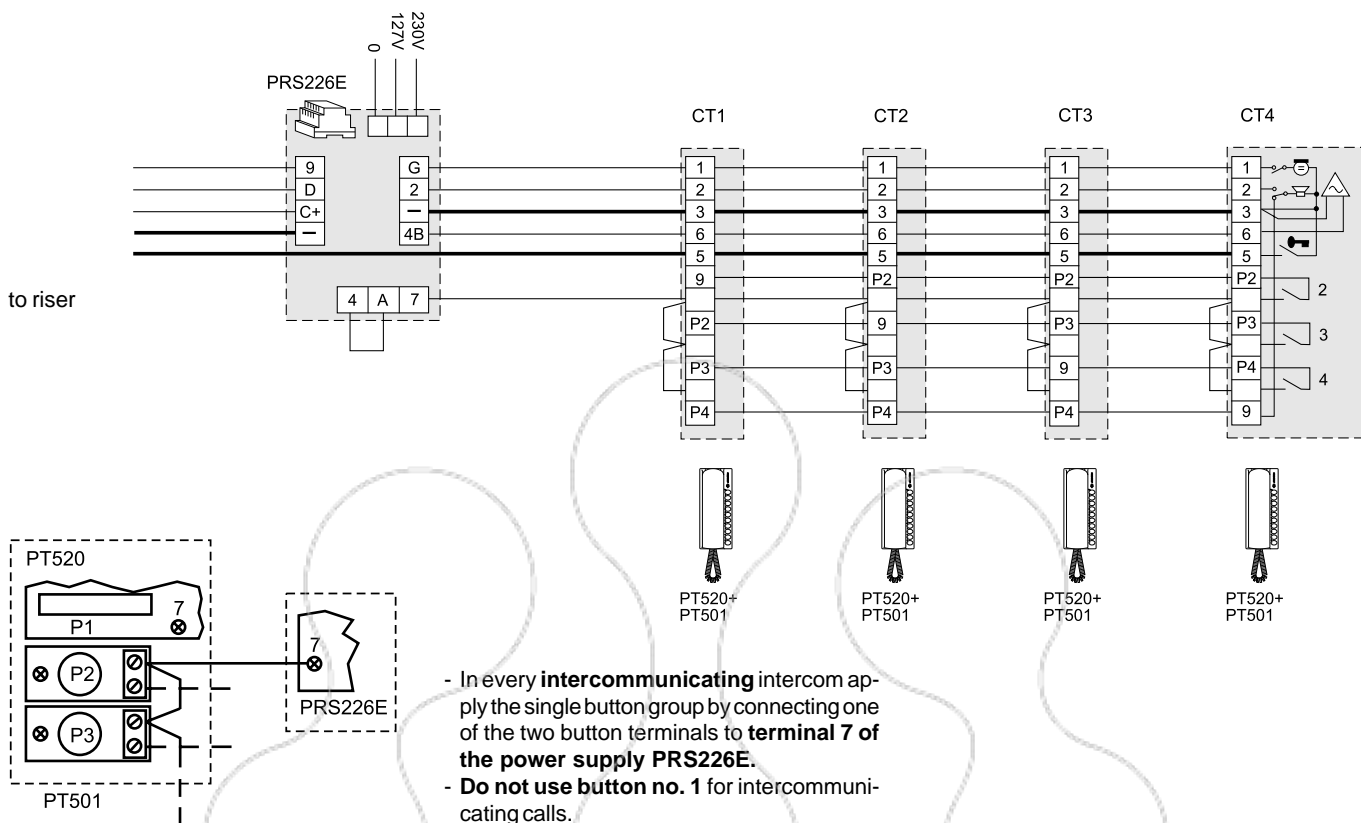
#### 2 INTERCOMMUNICATING INTERCOMS



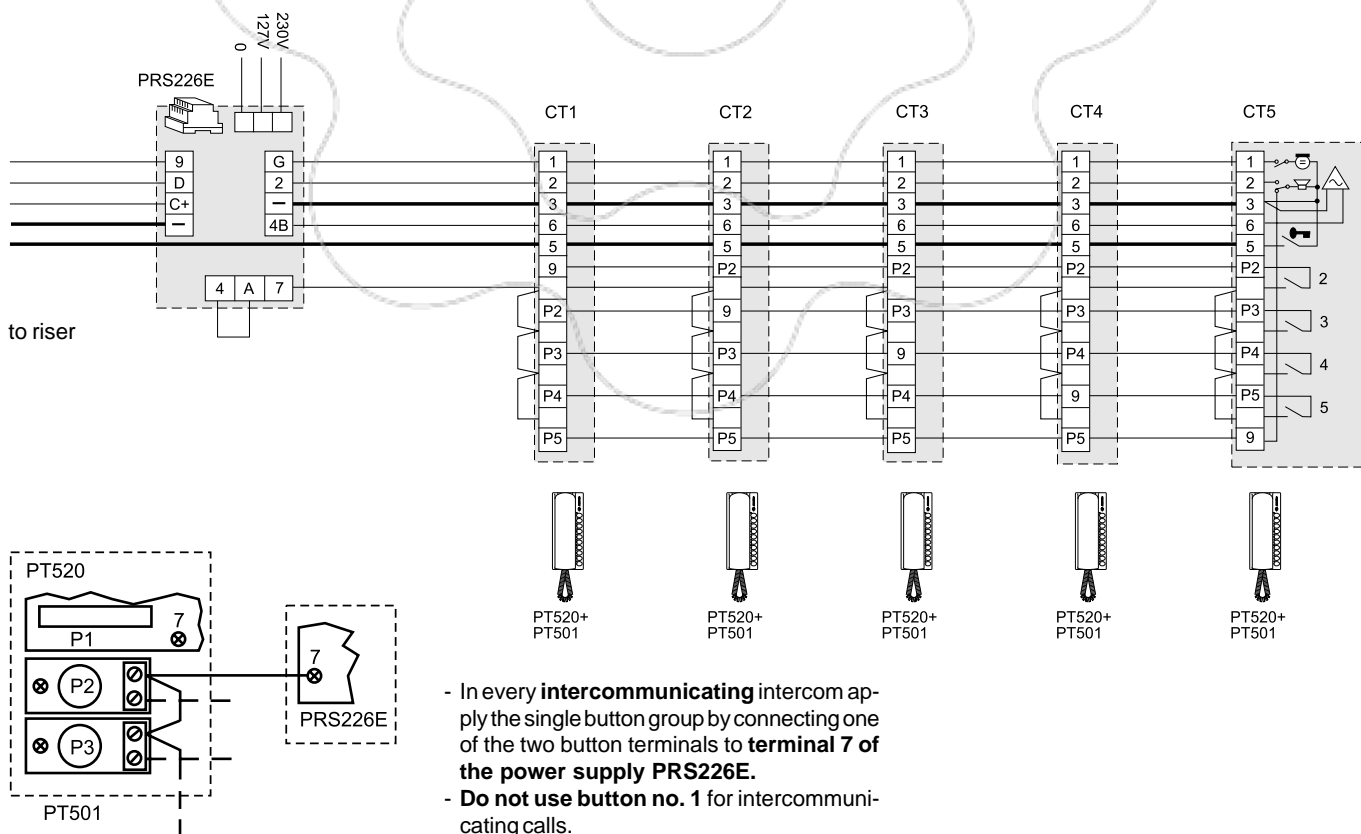
#### 3 INTERCOMMUNICATING INTERCOMS



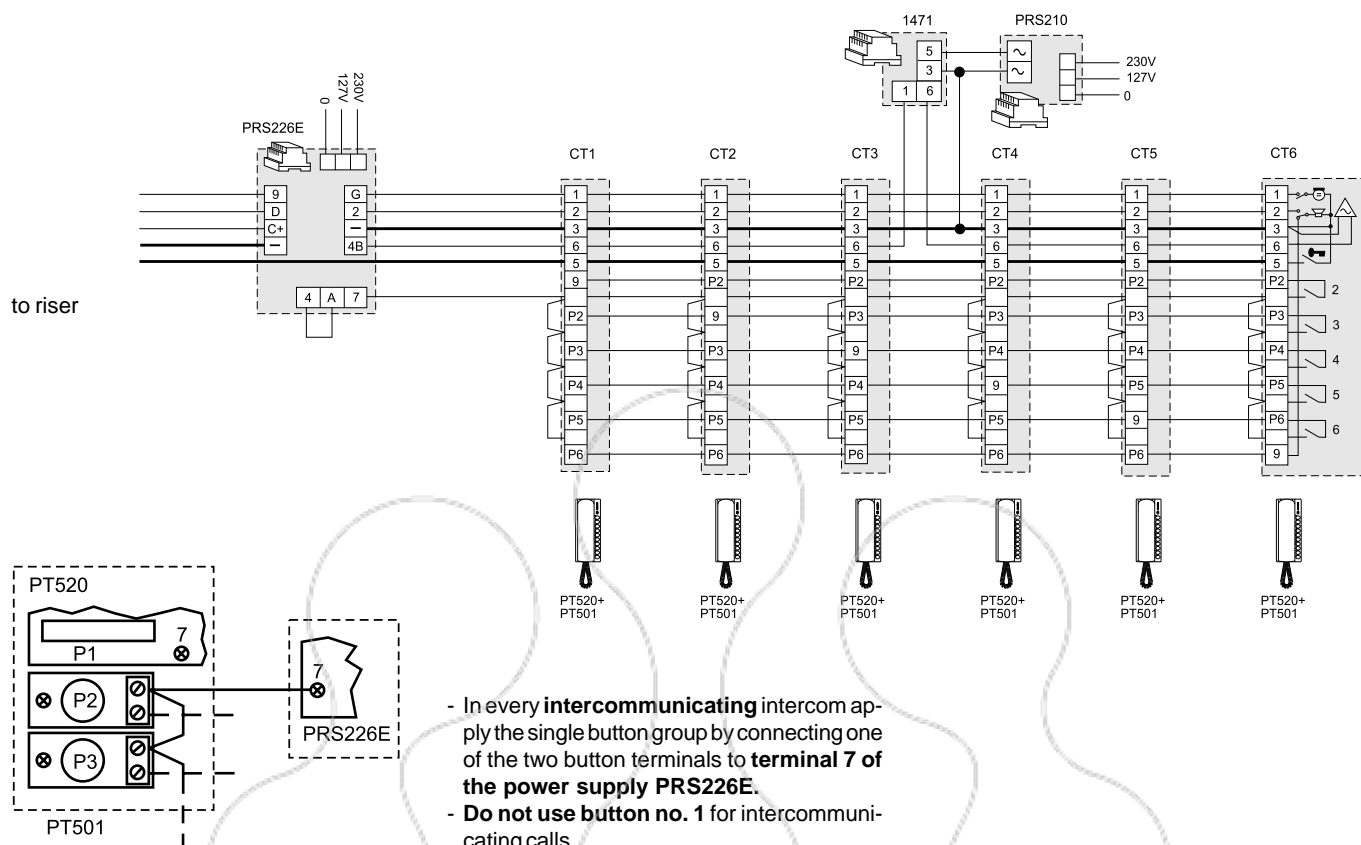
## 4 INTERCOMMUNICATING INTERCOMS



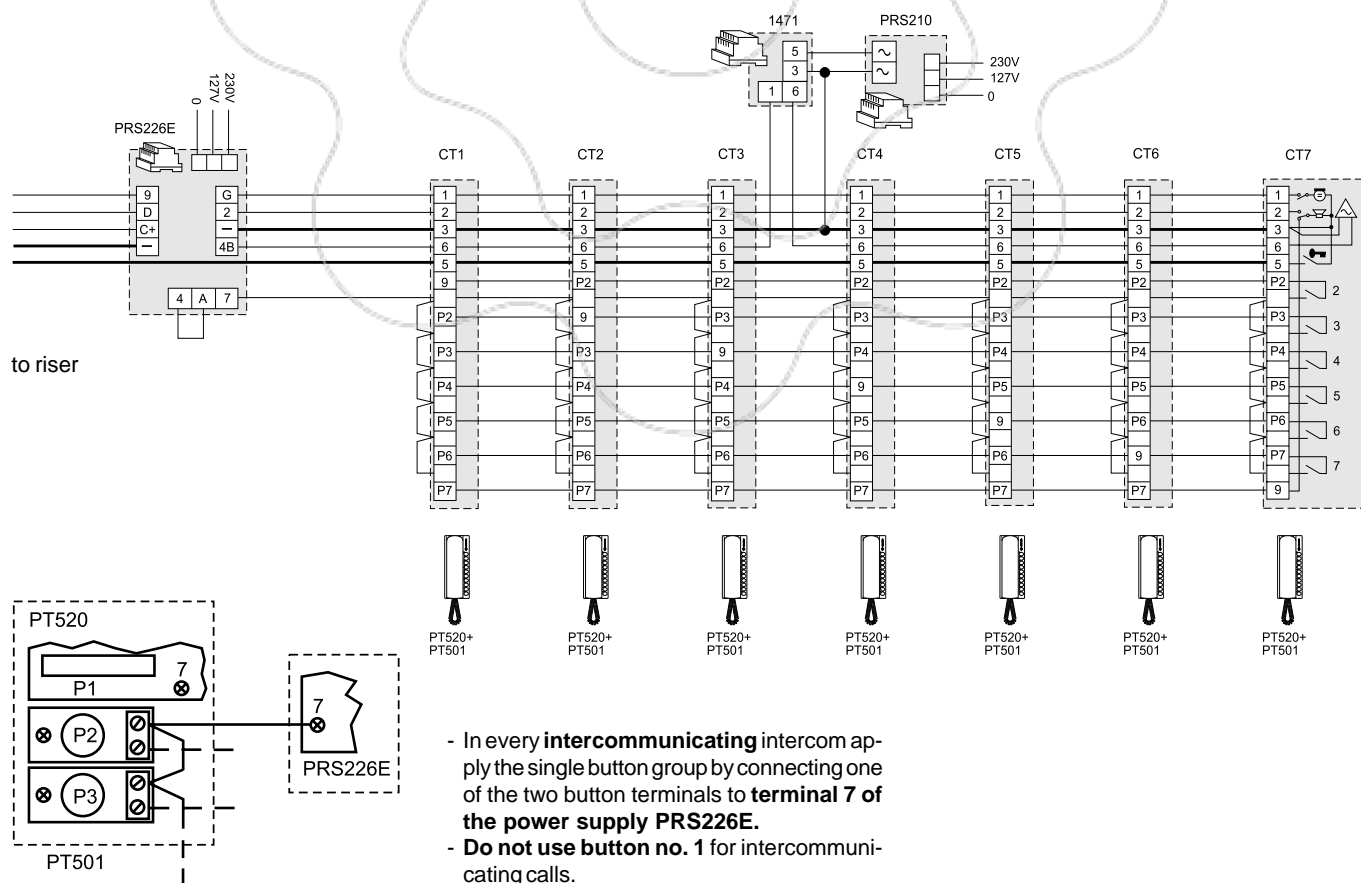
## 5 INTERCOMMUNICATING INTERCOMS



## 6 INTERCOMMUNICATING INTERCOMS



## 7 INTERCOMMUNICATING INTERCOMS

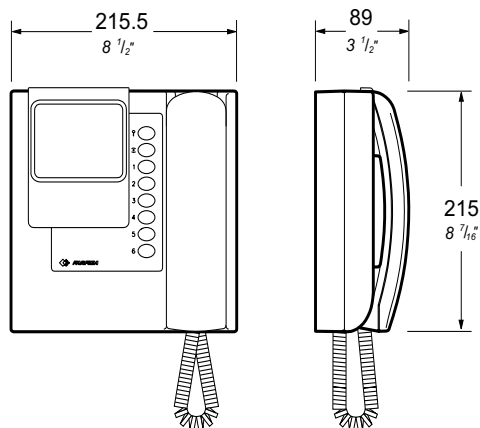


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## INTERNAL STATIONS

## Videointercoms Project series



**PT5160.** Two-colour flat tube videointercom with audio-video privacy, electronic microphone, differentiated double electronic ringing sounds (modulated and continuous note) and terminal board for the connection to the wall-bracket. With two buttons, one for control switch ON and one for door lock release, and 6 supplementary buttons, that can be added for additional services such as: control switch ON, intercommunicating calls, stair lights, door lock release, etc. The buttons are included in the kit of the videointercom. The maximum acceptable current to the button terminals is 60mA. For higher currents use relay unit art. 1471. It can be installed on the wall (with no built-in) by using the wall-bracket **WB5100** or **WB5160**. For particular needs it is possible to separate the common of the buttons labelled **P4**, **P5** and **P6** by cutting the **W1** jumper on the wall-bracket. The buttons have the **2C** terminal in common. In this case the maximum acceptable current to the three buttons is 0.5A.

**PT5160W.** This model has the same features as the previous one, but with a white finish.

## Technical data

Power Supply	18÷24Vdc
Operating current	0.35A
Video tube	4" FLAT CRT
Television standard	625 lines
Horizontal frequency	15625Hz
Vertical frequency	50Hz
Bandwidth	>5MHz
Video signal on 75Ω	0.8÷1.5Vpp
Starting up time	2÷4 sec.
Operating temperature	0°÷+50°C
Max. permissible humidity	90%RH

**PT5160W-LCD.** Version with colour LCD screen videointercom **PT5160W**.

**Note:** This version is applied to all video installation diagrams with coaxial cable.

## Technical data

Power Supply	18÷24Vdc
Operating current	0.4A
Screen	4" LCD
Television standard	PAL
Horizontal frequency	15625Hz
Vertical frequency	50Hz
Bandwidth	>5MHz
Video signal on 75Ω	0.8÷1.5Vpp
Starting up time	1 sec.
Operating temperature	0°÷+50°C
Max. permissible humidity	90%RH

Wall-brackets for the **PT5160**, **PT5160W** and **PT5160W-LCD** videointercoms.

**WB5100.** The wall bracket includes a terminal board for connection to the system, it is to be used when installing 2 - button videointercoms (control switch-ON and door lock release), with a one call.

## Terminals

- 1 Video signal input 0.8÷1.5Vpp
- 2 General ground
- 3 Video ground
- 4 Control switch ON - button
- 8 Positive power supply output for video floor distributors 12Vdc
- 9 Door lock release - button
- 10 Call from the door station (180mA)
- 11 Audio ground
- 12 Microphone output
- 13 Speaker and automatic cancel
- 14 Positive power supply input 18÷24Vdc
- V Not connected

**WB5160.** The wall bracket includes 2 terminal boards for connection to the system, it is to be used when installing videointercoms with extra buttons and/or 2 differentiated bells.

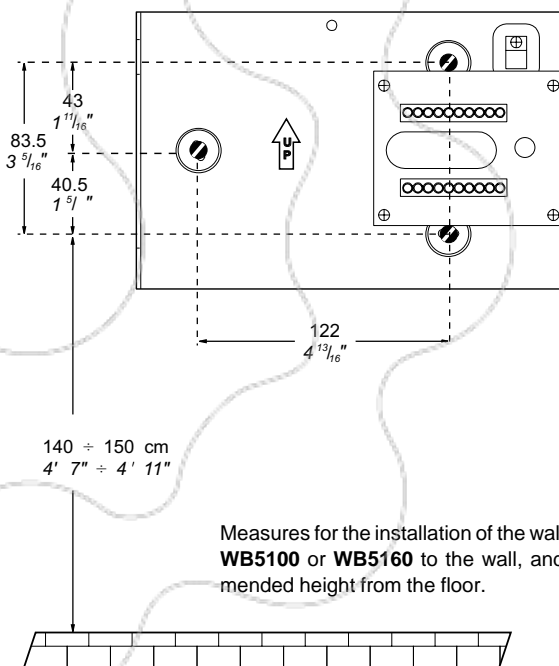
Located on the wall-bracket terminal board is a **J1** jumper positioned for the intercommunicating service (**position A**).

By using the **PT5160**, **PT5160W** and **PT5160W-LCD** videointercoms with multi-way systems without the intercommunicating service, the audio privacy can be restored by positioning the jumper **J1** in **B**.

## Terminals

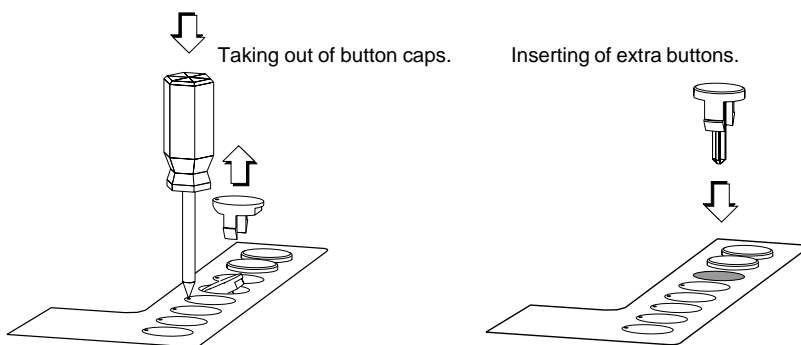
The terminals from 1 to 14 have the same functions and characteristics as the previous model.

- V Activation input for digital systems
- X1 AC power supply input 13Vac-0.35A
- X2 Intercommunicating call input (ground command)
- 1C Common for P1, P2 and P3 buttons
- 2C Common for P4, P5 and P6 buttons
- P1÷P6 Service buttons - max 60mA

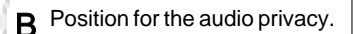
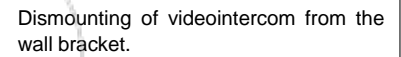


Measures for the installation of the wall bracket **WB5100** or **WB5160** to the wall, and recommended height from the floor.

## Supplementary push-buttons installation

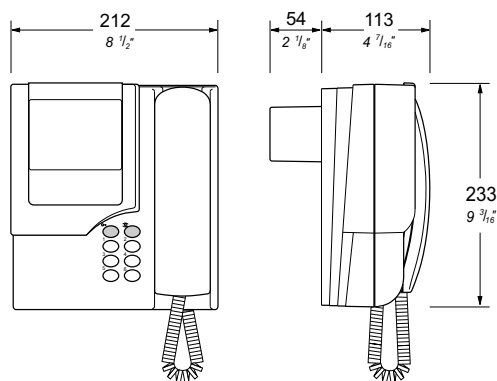


# PROJECT



## INTERNAL STATIONS

### Videointercoms Project series



**PT5660W.** White colour videointercom with traditional cathode tube with audio-video privacy, electronic microphone, differentiated double electronic ringing sounds (modulated and continuous note) and terminal board for the connection to the wall-bracket. With two buttons, one for control switch ON and one for door lock release, and 6 supplementary buttons, that can be added for additional services such as: control switch ON, intercommunicating calls, stair lights, door lock release, etc. The buttons are included in the kit of the videointercom. The maximum acceptable current to the button terminals is 60mA. For higher currents use relay unit art. 1471.

It can be installed on the wall by using the wall-bracket art. **WB5600** or **WB5660** and the back-box art. **1283**. For particular needs it is possible to separate the common of the buttons labelled **P4**, **P5** and **P6** by cutting the **W1** jumper on the wall-bracket. The buttons have the **2C** terminal in common. In this case the maximum acceptable current to the three buttons is 0.5A.

#### Technical data

Power Supply	18÷24Vdc
Operating current	0.6A
Video tube	4.5" - 90°
Television standard	625 lines
Horizontal frequency	15625Hz
Vertical frequency	50Hz
Bandwidth	>5MHz
Video signal on 75Ω	0.8÷1.5Vpp
Starting up time	5÷7 sec.
Operating temperature	0°÷+50°C
Max. permissible humidity	90%RH

### Wall-brackets for the PT5660W videointercoms.

**WB5600.** The wall bracket includes a terminal board for connection to the system, it is to be used when installing 2-button videointercoms (control switch-ON and door lock release), with a one call.

#### Terminals

- 1 Video signal input 0.8÷1.5Vpp
- 2 General ground
- 3 Video ground
- 4 Control switch ON - button
- 8 Positive power supply output for video floor distributors 12Vdc
- 9 Door lock release - button
- 10 Call from the door station (180mA)
- 11 Audio ground
- 12 Microphone output
- 13 Speaker and automatic cancel
- 14 Positive power supply input 18÷24Vdc
- V Not connected

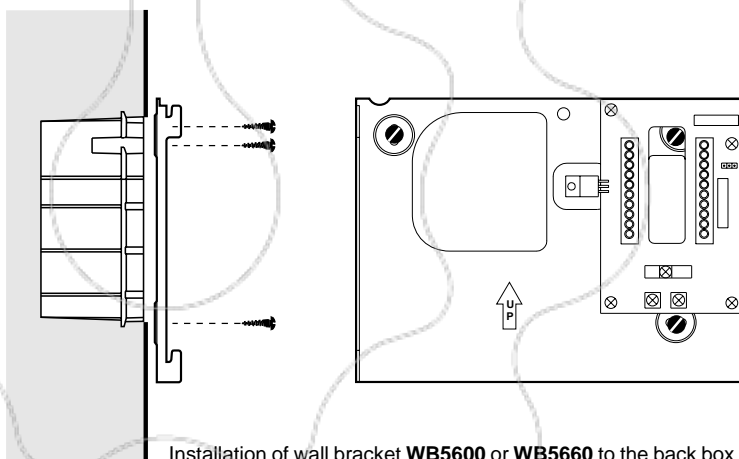
**WB5660.** The wall bracket includes 2 terminal boards for connection to the system, it is to be used when installing videointercoms with extra buttons and/or 2 differentiated bells. Located on the wall-bracket terminal board is a **J1** jumper positioned for the intercommunicating service (**position A**).

By using the **PT5660W** videointercoms with multi-way systems without the intercommunicating service, the audio privacy can be restored by positioning the jumper **J1** in **B**.

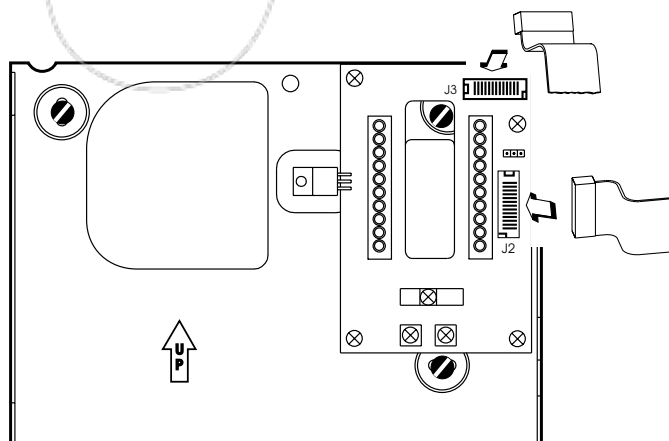
#### Terminals

The terminals from 1 to 14 have the same functions and characteristics as the previous model.

- V Activation input for digital systems
- X1 AC power supply input 13Vac-0.35A
- X2 Intercommunicating call input (ground command)
- 1C Common for P1, P2 and P3 buttons
- 2C Common for P4, P5 and P6 buttons
- P1÷P6 Service buttons - max 60mA



Installation of wall bracket **WB5600** or **WB5660** to the back box **1283**.

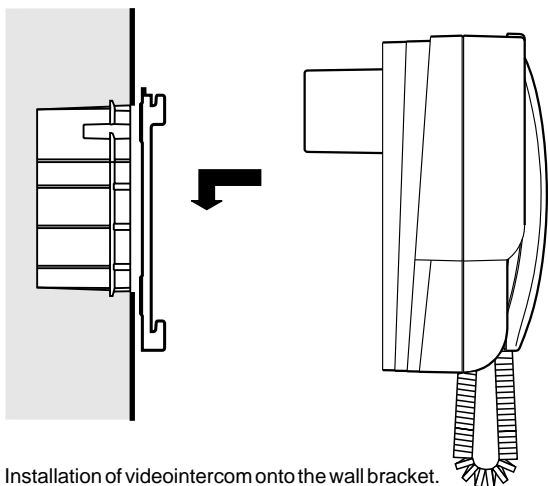


Plugging in of videointercom connectors to the terminal boards of wall bracket.



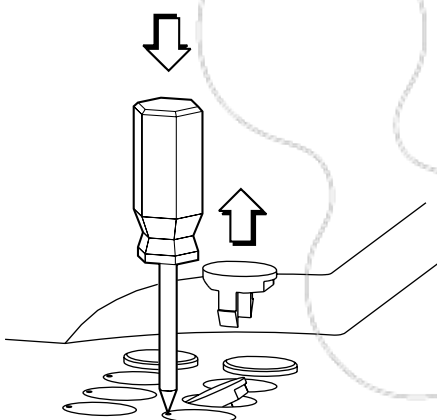
## INTERNAL STATIONS

### Videointercoms Project series

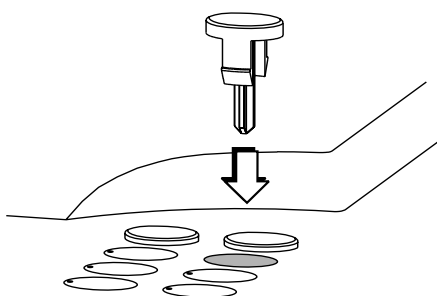


Installation of videointercom onto the wall bracket.

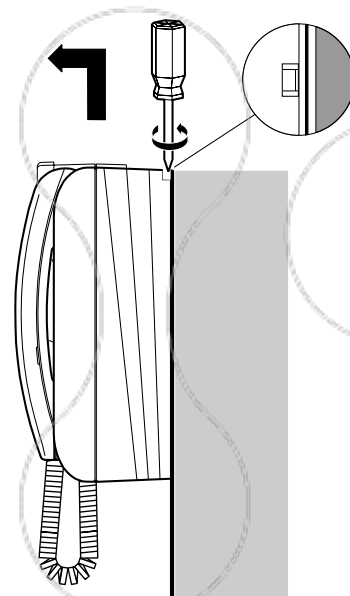
### Supplementary push-buttons installation



Taking out of button caps.



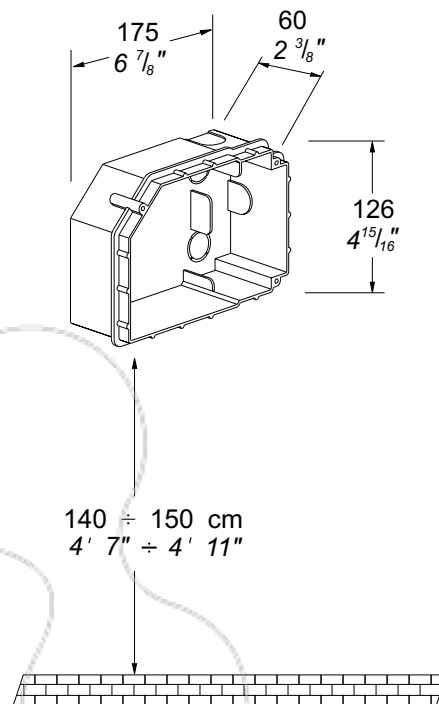
Inserting of extra buttons.



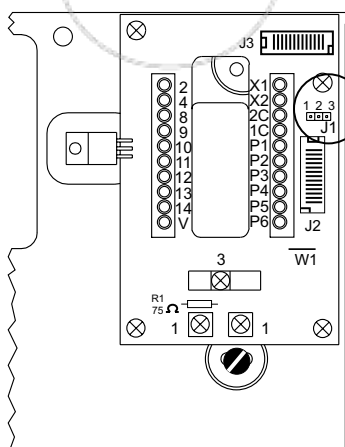
Dismounting of videointercom from the wall bracket.

### 1283. Back-box for videointercoms PT5660W and PV1260.

Place the box on the wall at a height of about 1.5m (4' 11") from the floor keeping the front edges flush-mounted and vertical to the finished plaster.



### Audio privacy or intercommunicating service



WB 5660

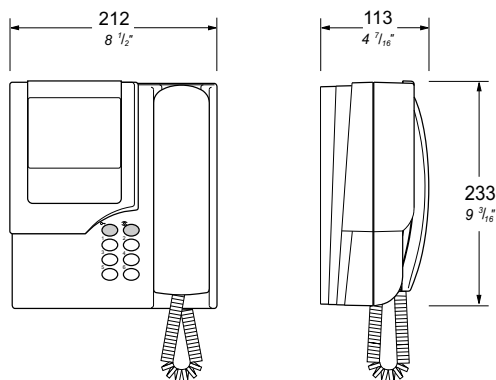
A Position for the intercommunicating service.

B Position for the audio privacy.



## INTERNAL STATIONS

### Videointercoms Project series



**PT5860.** Two-colour reflex videointercom with audio-video privacy, electronic microphone, differentiated double electronic ringing sounds (modulated and continuous note) and terminal board for the connection to the wall-bracket. With two buttons, one for control switch ON and one for door lock release, and 6 supplementary buttons, that can be added for additional services such as: control switch ON, intercommunicating calls, stair lights, door lock release, etc. The buttons are included in the kit of the videointercom. The maximum acceptable current to the button terminals is 60mA. For higher currents use relay unit art. 1471.

It can be installed on the wall by using the wall-bracket art. **WB5600** or **WB5660**. For particular needs it is possible to separate the common of the buttons labeled **P4**, **P5** and **P6** by cutting the **W1** jumper on the wall-bracket. The buttons have the **2C** terminal in common. In this case the maximum acceptable current to the three buttons is 0.5A.

**PT5860W.** This model has the same features as the previous one, but with a white finish.

#### Technical data

Power Supply	18÷24Vdc
Operating current	0.6A
Video tube	4.5" - 90°
Television standard	625 lines
Horizontal frequency	15625Hz
Vertical frequency	50Hz
Bandwidth	>5MHz
Video signal on 75Ω	0.8÷1.5Vpp
Starting up time	5÷7 sec.
Operating temperature	0°÷+50°C
Max. permissible humidity	90%RH

### Wall-brackets for the PT5860 and PT5860W videointercoms.

**WB5600.** The wall bracket includes a terminal board for connection to the system, it is to be used when installing 2-button videointercoms (control switch-ON and door lock release), with a one call.

#### Terminals

- 1 Video signal input 0.8÷1.5Vpp
- 2 General ground
- 3 Video ground
- 4 Control switch ON - button
- 8 Positive power supply output for video floor distributors 12Vdc
- 9 Door lock release - button
- 10 Call from the door station (180mA)
- 11 Audio ground
- 12 Microphone output
- 13 Speaker and automatic cancel
- 14 Positive power supply input 18÷24Vdc
- V Not connected

**WB5660.** The wall bracket includes 2 terminal boards for connection to the system, it is to be used when installing videointercoms with extra buttons and/or 2 differentiated bells.

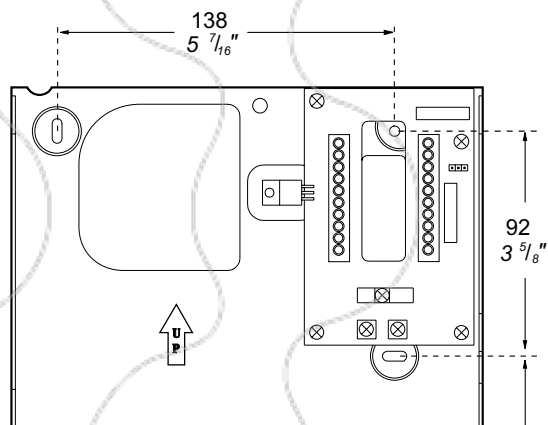
Located on the wall-bracket terminal board is a **J1** jumper positioned for the intercommunicating service (**position A**).

By using the **PT5860** and **PT5860W** videointercoms with multi-way systems without the intercommunicating service, the audio privacy can be restored by positioning the jumper **J1** in **B**.

#### Terminals

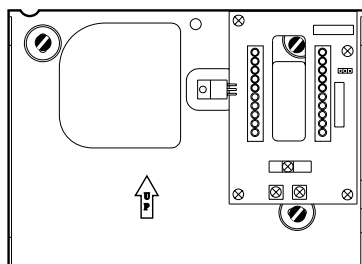
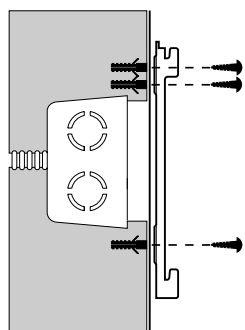
The terminals from 1 to 14 have the same functions and characteristics as the previous model.

- V Activation input for digital systems
- X1 AC power supply input 13Vac-0.35A
- X2 Intercommunicating call input (ground command)
- 1C Common for P1, P2 and P3 buttons
- 2C Common for P4, P5 and P6 buttons
- P1÷P6 Service buttons - max 60mA

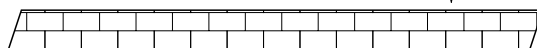


Measures for the installation of the wall bracket **WB5600** or **WB5660** to the wall, and recommended height from the floor.

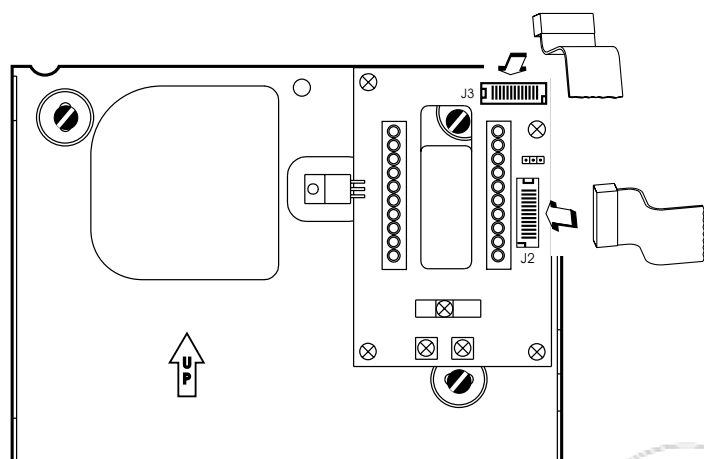
140 ÷ 150 cm  
4' 7" ÷ 4' 11"



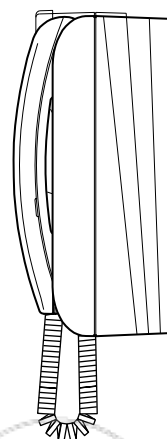
Installation of the wall bracket **WB5600** or **WB5660** to the wall, by means of expansion plugs.



## Videointercoms Project series

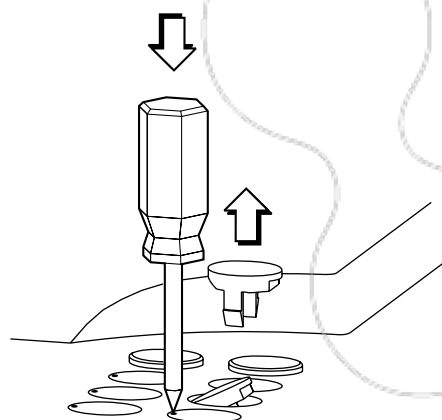


Plugging in of videointercom connectors to the terminal boards of wall bracket.

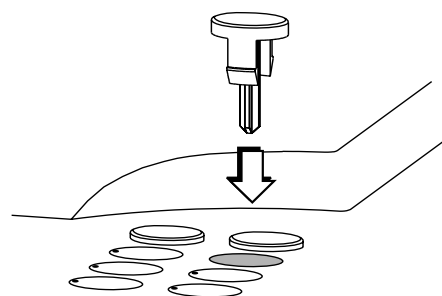


Installation of videointercom onto the wall bracket.

### Supplementary push-buttons installation

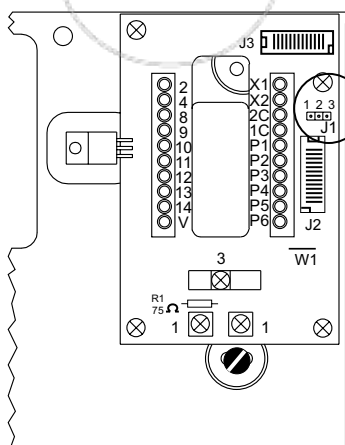


Taking out of button caps.



Inserting of extra buttons.

### Audio privacy or intercommunicating service



WB 5660

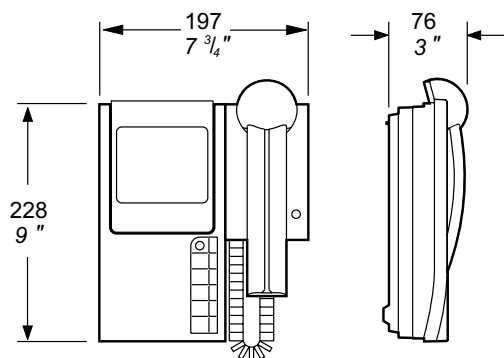
A Position for the intercommunicating service.

B Position for the audio privacy.



## INTERNAL STATIONS

### Videointercoms PuntoVirgola series



**PV2160.** Two-colour flat tube videointercom with audio-video privacy, electronic microphone, differentiated double electronic ringing sounds (modulated and continuous note) and terminal board for the connection to the wall-bracket. With two buttons, one for control switch ON and one for door lock release, and 5 supplementary buttons, that can be added for additional services such as: control switch ON, intercommunicating calls, stair lights, door lock release, etc. The buttons are included in the kit of the videointercom. The maximum acceptable current to the button terminals is 60mA. For higher currents use relay unit art.1471. It can be installed on the wall (with no built-in) by using the wall-bracket **WB2100** or **WB2160**. For particular needs it is possible to separate the common of the buttons labeled **T4** and **T5** by cutting the **W1** jumper on the wall-bracket. The buttons have the **2C** terminal in common. In this case the maximum acceptable current to the three buttons is 0.5A.

**PV2160W.** This model has the same features as the previous one, but with a white finish.

#### Technical data

Power Supply	18÷24Vdc
Operating current	0.35A
Video tube	4" FLAT CRT
Television standard	625 lines
Horizontal frequency	15625Hz
Vertical frequency	50Hz
Bandwidth	>5MHz
Video signal on 75Ω	0.8÷1.5Vpp
Starting up time	2÷4 sec.
Operating temperature	0°÷+50°C
Max. permissible humidity	90%RH

### Wall-brackets for the PV2160 and PV2160W videointercoms.

**WB2100.** The wall bracket includes a terminal board for connection to the system, it is to be used when installing 2-button videointercoms (control switch-ON and door lock release), with a one call.

#### Terminals

- 1 Video signal input 0.8÷1.5Vpp
- 2 General ground
- 3 Video ground
- 4 Control switch ON - button
- 8 Positive power supply output for video floor distributors 12Vdc
- 9 Door lock release - button
- 10 Call from the door station (180mA)
- 11 Audio ground
- 12 Microphone output
- 13 Speaker and automatic cancel
- 14 Positive power supply input 18÷24Vdc
- V Not connected

**WB2160.** The wall bracket includes 2 terminal boards for connection to the system, it is to be used when installing videointercoms with extra buttons and/or 2 differentiated bells.

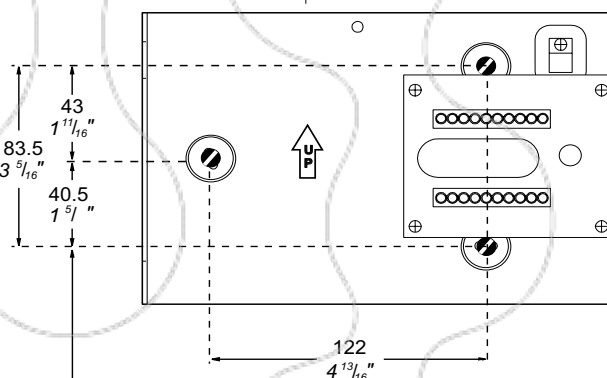
Located on the wall-bracket terminal board is a **J1** jumper positioned for the intercommunicating service (**position A**).

By using the **PV2160** and **PV2160W** videointercoms with multi-way systems without the intercommunicating service, the audio privacy can be restored by positioning the jumper **J1** in **B**.

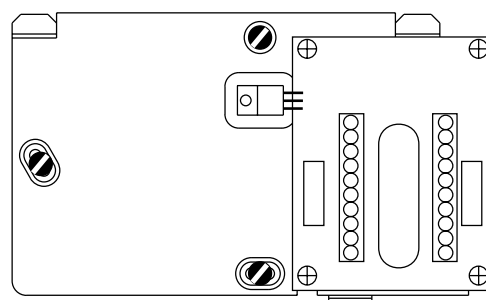
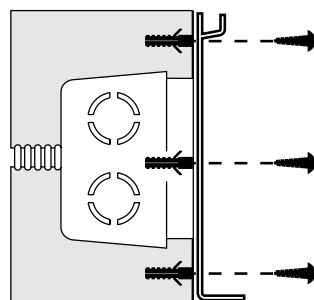
#### Terminals

The terminals from 1 to 14 have the same functions and characteristics as the previous model.

- V Activation input for digital systems
- X1 AC power supply input 13Vac-0.35A
- X2 Intercommunicating call input (ground command)
- 1C Common for T1, T2 and T3 buttons
- 2C Common for T4 and T5 buttons
- T1÷T5 Service buttons - max 60mA
- P1 Not connected



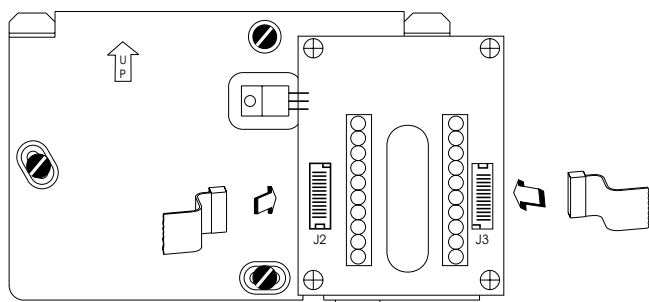
Measures for the installation of the wall bracket **WB2100** or **WB2160** to the wall, and recommended height from the floor.



Installation of the wall bracket **WB2100** or **WB2160** to the wall, by means of expansion plugs.



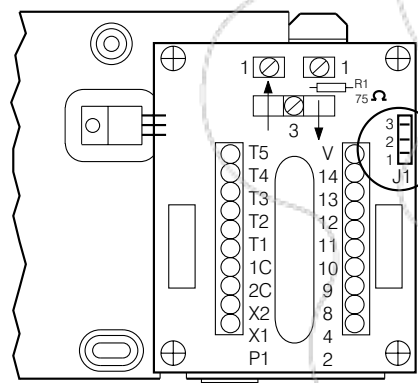
## Videointercoms PuntoVirgola series



Plugging in of videointercom connectors to the terminal boards of wall bracket.

Installation of videointercom onto the wall bracket.

## Audio privacy or intercommunicating service

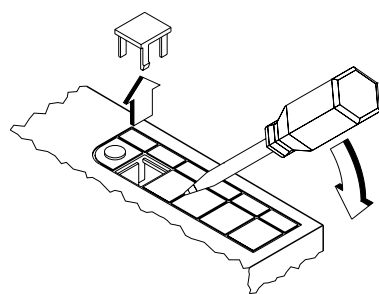


WB2160

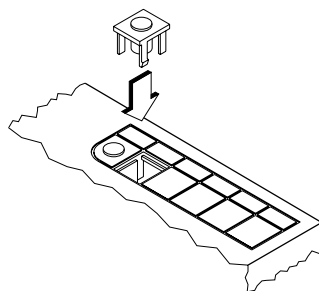
Position for the intercommunicating service.

Position for the audio privacy.

## Supplementary push-buttons installation

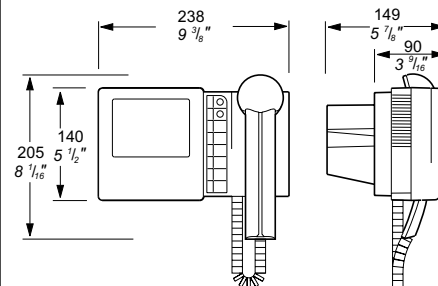


Taking out of button caps.



Inserting of extra buttons.

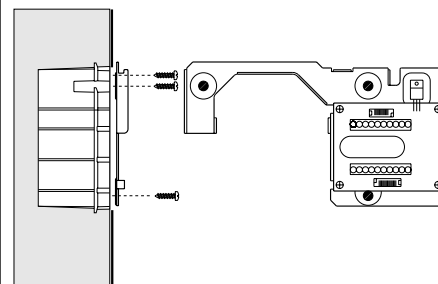
## Videointercoms PuntoVirgola series



**PV1260.** Two-colour videointercom with traditional cathode tube with audio-video privacy, electronic microphone, differentiated double electronic ringing sounds (modulated and a continuous note) and terminal board for the connection to the wall-bracket. With 2 buttons, one for control switch ON and the other for door lock release and 6 supplementary service buttons that can be added for additional services such as: control switch ON, intercommunicating calls, stair lights, door lock release, etc. The buttons are included in the kit of the videointercom. The maximum acceptable current to the buttons is 60mA. For higher currents use the art. 1471 relay unit. It can be installed on the wall using the wall-bracket **WB1200** or **WB1260** and the back-box art. 1283. For particular needs it is possible to separate the common of the buttons labelled **P4**, **P5** and **P6** by cutting the **W1** jumper located on the connecting terminal board. These buttons have in common the **C2** terminal. In this case the maximum acceptable current to the buttons is 0.5A.

### Technical data

Power Supply	18÷24Vdc
Operating current	0.6A
Video tube	4.5"-90°
Television standard	625 lines
Horizontal frequency	15625Hz
Vertical frequency	50Hz
Band width	>5MHz
Video signal on 75Ω	0.8÷1.5Vpp
Starting up time	5÷7 sec.
Operating temperature	0°÷+50°C
Max. permissible humidity	90%RH

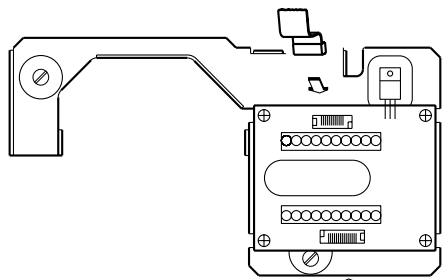


Installation of wall bracket **WB1200** or **WB1260** to the back box 1283.

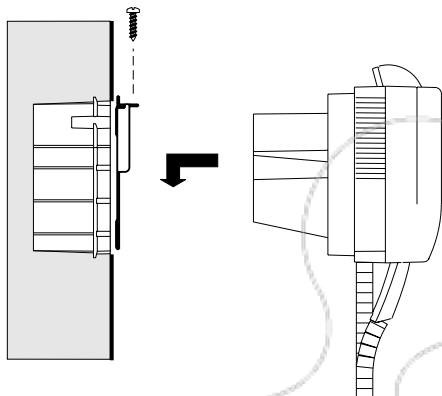


## INTERNAL STATIONS

### Videointercoms PuntoVirgola



Plugging in of videointercom connectors to the terminal boards of wall bracket.



Installation of videointercom onto the wall bracket.

### Wall-brackets for the PV1260 video-intercom.

**WB1200.** The wall bracket includes a terminal board for connection to the system, it is to be used when installing 2 - button videointercoms (control switch-ON and door lock release), with a one call.

#### Terminals

- 1 Video signal input 0.8÷1.5Vpp
- 2 General ground
- 3 Videoground
- 4 Control switch ON - button
- 8 Positive power supply output for video floor distributors 12Vdc
- 9 Door lock release - button
- 10 Call from the door station (180mA)
- 11 Audio ground
- 12 Microphone output
- 13 Speaker and automatic cancel
- 14 Positive power supply input 18÷24Vdc-0.6A
- V Not connected

**WB1260.** The wall bracket includes 2 terminal boards for connection to the system, it is to be used when installing videointercoms with extra buttons and/or 2 differentiated bells. Located on the wall-bracket terminal board is a **J1** jumper positioned for the intercommunicating service (**position A**).

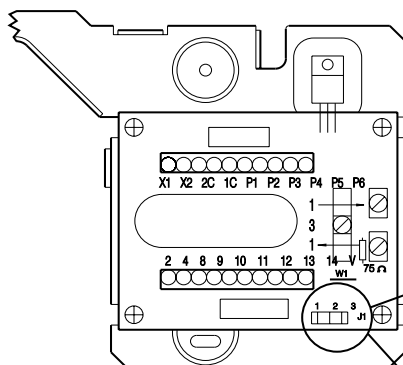
By using the **PV1260** videointercom with multi-way systems without the intercommunicating service, the audio privacy can be restored by positioning the jumper **J1** in **B**.

#### Terminals

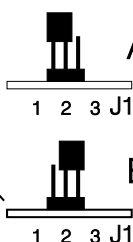
The terminals from 1 to 14 have the same functions and characteristics as the previous model.

- V Activation input for digital systems
- X1 AC power supply input 13Vac-0.35A
- X2 Intercommunicating call input (ground command)
- 1C Common for P1, P2 and P3 buttons
- 2C Common for P4, P5 and P6 buttons
- P1÷P6 Service buttons - max 60mA

### Audio privacy or intercommunicating service



WB1260

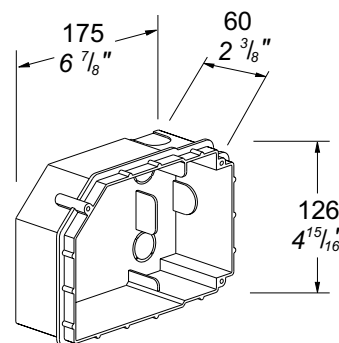


**A** Position for the intercommunicating service.

**B** Position for the audio privacy.

### 1283. Back-box for PV1260 and PT5660W videointercoms.

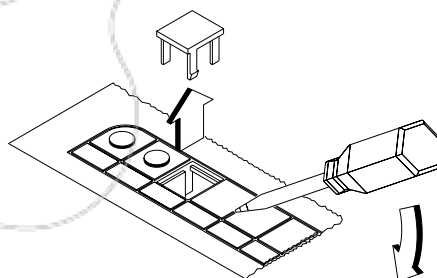
Place the box on the wall at a height of about 1.5m (4' 11") from the floor keeping the front edges flush-mounted and vertical to the finished plaster.



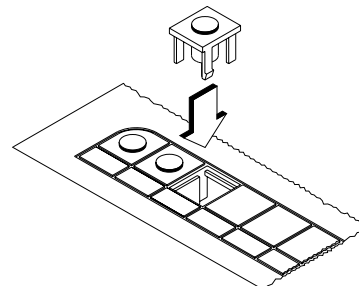
140 ÷ 150 cm  
4' 7" ÷ 4' 11"



### Supplementary push-buttons installation



Taking out of button caps.



Inserting of extra buttons.

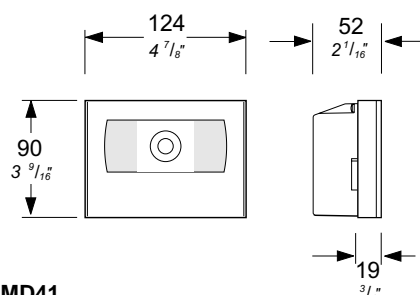


## PUSH-BUTTON PANELS

For information on characteristics and assembly of push-button panels, electric door speakers, back boxes, rain shelters, hood covers and modules see section "intercoms" on page 7 to

page 11.

## CAMERAS



### MD41.

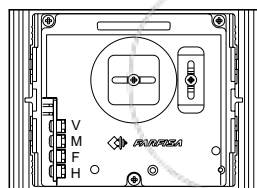
B/W adjustable camera complete with:

- solid-state sensor (CCD), electronic autoiris, 3.6mm fixed optics and 6 infrared LEDs;
- front plate of anodized aluminium with break-proof transparent screen;
- horizontal and vertical adjustment.

### MD41C Color.

Colour adjustable camera complete with:

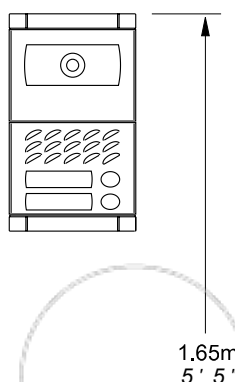
- solid-state sensor (CCD), autoiris and 4mm fixed optics;
- front plate of anodized aluminium with break-proof transparent screen;
- horizontal and vertical adjustment.



### Terminals

- V** Video signal output
- M** Ground
- F** Not connected
- H** Power supply input

## Installation



Place the push-button panel back box at a height of about 1.65m (5' 5") from the floor keeping the front edges flush-mounted and vertical to the finished plaster.

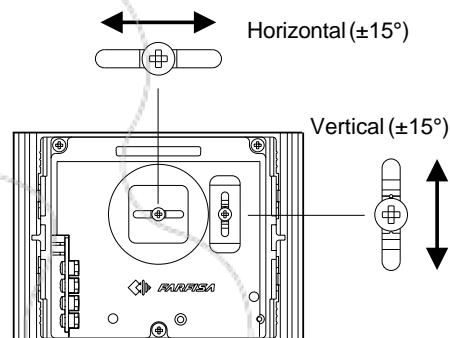
**Position the camera in such a way that sunlight or other direct or reflected light sources with high intensity do not hit the camera lens.**

## Adjustments

If necessary, you can manually modify the camera position by means of the horizontal and vertical adjustments located on the back of the camera.

To do this, you must:

- remove the upper screw of the push-button panel to access the back of the camera;
- loosen the screw of the horizontal or vertical adjustment (or both screws, if you want to adjust the image in all the directions);
- move the camera in the desired direction;
- tighten the screw to block the camera in the desired position;
- fix the push-button panel.



## Technical data

	MD41	MD41C
Power supply	21±3Vdc	21±3Vdc
Operating current	0.2A	0.4A
Video signal output	1Vpp on 75Ω	1Vpp on 75Ω
Video signal standard	CCIR	PAL
Minimum illumination	2 Lux	2.5 Lux
White balance	-	auto
Sensor	CCD 1/4" B/W	CCD 1/3" colour
Number of pixels	291,000	291,000
Horizontal frequency	15,625Hz	15,625Hz
Vertical frequency	50Hz	50Hz
Lens	3.6mm; F5	4mm; F4
Focus	0.1m ÷ ∞	0.6m ÷ ∞
Autoiris	electronic	electronic
Horizontal adjustment	± 15°	± 15°
Vertical adjustment	± 15°	± 15°
Operating temperature	-10°÷+40°C	-10°÷+40°C
Max. permissible humidity	80%RH	80%RH

### Note

**MD40** and **MD40C** cameras have the same specifications as models MD41 and MD41C, except that they have not horizontal and vertical adjustments.

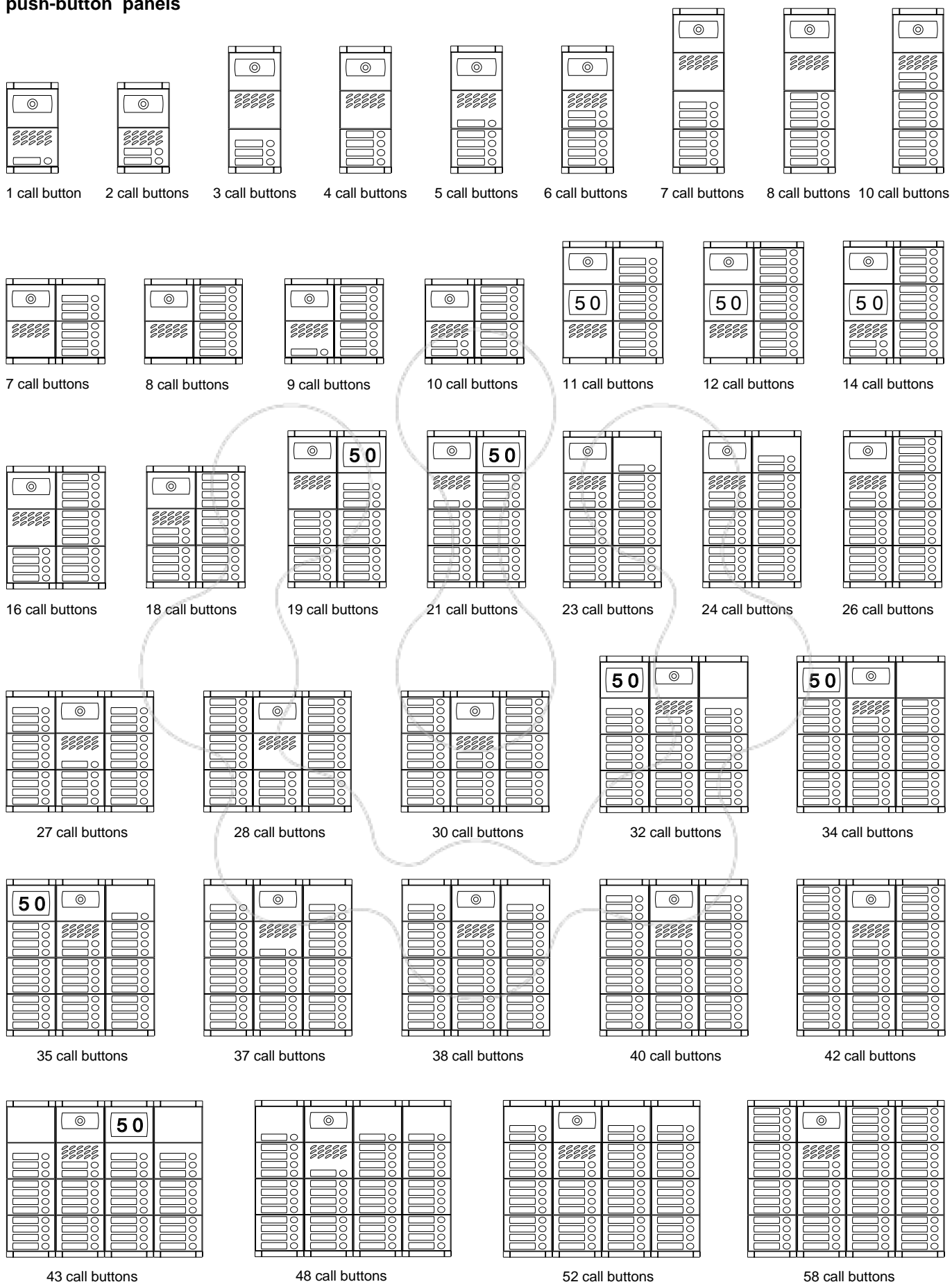


# EXTERNAL DOOR STATIONS

1 row push-button


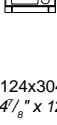

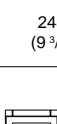
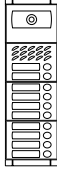
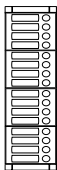
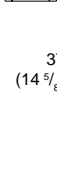


## MODY series push-button panels

### Examples of compositions of Mody push-button panels in video intercom systems



## MODY series push-button panels

## Composition board of Mody push-button panels.

N° calls	Compositions and dimensions	Camera module	Doorspeaker (amplifier)	Module for speaker	Button and info or blank modules			Backbox and module frame	Hood covers	Rain shelter
1	 124x213x19 (4 <sup>7</sup> / <sub>8</sub> " x 8 <sup>3</sup> / <sub>8</sub> " x 3 <sup>3</sup> / <sub>4</sub> " )	1 MD41	1 MD30	1 MD11	-	-	-	1 MD72	1 MD82	1 MD92
2		1 MD41	1 MD30	1 MD12	-	-	-	1 MD72	1 MD82	1 MD92
3		1 MD41	1 MD30	1 MD10	1 MD23	-	-	1 MD73	1 MD83	1 MD93
4		1 MD41	1 MD30	1 MD10	1 MD24	-	-	1 MD73	1 MD83	1 MD93
5		1 MD41	1 MD30	1 MD11	1 MD24	-	-	1 MD73	1 MD83	1 MD93
6		1 MD41	1 MD30	1 MD12	1 MD24	-	-	1 MD73	1 MD83	1 MD93
7	 124x304.5x19 (4 <sup>7</sup> / <sub>8</sub> " x 12" x 3 <sup>3</sup> / <sub>4</sub> " )	1 MD41	1 MD30	1 MD10	1 MD24	1 MD23	-	2 MD72 ■	1 MD84 ■	1 MD94 ■
8		1 MD41	1 MD30	1 MD10	2 MD24	-	-	2 MD72 ■	1 MD84 ■	1 MD94 ■
9		1 MD41	1 MD30	1 MD11	2 MD24	-	-	2 MD72 ■	1 MD84 ■	1 MD94 ■
10		1 MD41	1 MD30	1 MD12	2 MD24	-	-	2 MD72 ■	1 MD84 ■	1 MD94 ■
11		1 MD41	1 MD30	1 MD10	2 MD24	1 MD23	1 *	2 MD73	1 MD86	1 MD96
12		1 MD41	1 MD30	1 MD10	3 MD24	-	1 *	2 MD73	1 MD86	1 MD96
13	 248x213x19 (9 <sup>3</sup> / <sub>4</sub> " x 8 <sup>3</sup> / <sub>8</sub> " x 3 <sup>3</sup> / <sub>4</sub> " )	1 MD41	1 MD30	1 MD11	3 MD24	-	1 *	2 MD73	1 MD86	1 MD96
14		1 MD41	1 MD30	1 MD12	3 MD24	-	1 *	2 MD73	1 MD86	1 MD96
15		1 MD41	1 MD30	1 MD10	3 MD24	1 MD23	-	2 MD73	1 MD86	1 MD96
16		1 MD41	1 MD30	1 MD10	4 MD24	-	-	2 MD73	1 MD86	1 MD96
17		1 MD41	1 MD30	1 MD11	4 MD24	-	-	2 MD73	1 MD86	1 MD96
18		1 MD41	1 MD30	1 MD12	4 MD24	-	-	2 MD73	1 MD86	1 MD96
19	 248x304.5x19 (9 <sup>3</sup> / <sub>4</sub> " x 12" x 3 <sup>3</sup> / <sub>4</sub> " )	1 MD41	1 MD30	1 MD10	4 MD24	1 MD23	1 *	2 MD74	1 MD808	1 MD908
20		1 MD41	1 MD30	1 MD10	5 MD24	-	1 *	2 MD74	1 MD808	1 MD908
21		1 MD41	1 MD30	1 MD11	5 MD24	-	1 *	2 MD74	1 MD808	1 MD908
22		1 MD41	1 MD30	1 MD12	5 MD24	-	1 *	2 MD74	1 MD808	1 MD908
23		1 MD41	1 MD30	1 MD12	5 MD24	1 MD21	-	2 MD74	1 MD808	1 MD908
24		1 MD41	1 MD30	1 MD12	5 MD24	1 MD22	-	2 MD74	1 MD808	1 MD908
25	 248x395x19 (9 <sup>3</sup> / <sub>4</sub> " x 15 <sup>9</sup> / <sub>16</sub> " x 3 <sup>3</sup> / <sub>4</sub> " )	1 MD41	1 MD30	1 MD12	5 MD24	1 MD23	-	2 MD74	1 MD808	1 MD908
26		1 MD41	1 MD30	1 MD12	6 MD24	-	-	2 MD74	1 MD808	1 MD908
27		1 MD41	1 MD30	1 MD11	5 MD24	2 MD23	-	3 MD73	1 MD89	1 MD99
28		1 MD41	1 MD30	1 MD10	7 MD24	-	-	3 MD73	1 MD89	1 MD99
29		1 MD41	1 MD30	1 MD11	7 MD24	-	-	3 MD73	1 MD89	1 MD99
30		1 MD41	1 MD30	1 MD12	7 MD24	-	-	3 MD73	1 MD89	1 MD99
31	 372x304.5x19 (14 <sup>3</sup> / <sub>8</sub> " x 12" x 3 <sup>3</sup> / <sub>4</sub> " )	1 MD41	1 MD30	1 MD11	6 MD24	2 MD23	2 *	3 MD74	1 MD812	1 MD912
32		1 MD41	1 MD30	1 MD12	6 MD24	2 MD23	2 *	3 MD74	1 MD812	1 MD912
33		1 MD41	1 MD30	1 MD11	8 MD24	-	2 *	3 MD74	1 MD812	1 MD912
34		1 MD41	1 MD30	1 MD12	8 MD24	-	2 *	3 MD74	1 MD812	1 MD912
35		1 MD41	1 MD30	1 MD12	8 MD24	1 MD21	1 *	3 MD74	1 MD812	1 MD912
36		1 MD41	1 MD30	1 MD12	8 MD24	2 MD21	-	3 MD74	1 MD812	1 MD912
37	 372x395x19 (14 <sup>3</sup> / <sub>8</sub> " x 15 <sup>9</sup> / <sub>16</sub> " x 3 <sup>3</sup> / <sub>4</sub> " )	1 MD41	1 MD30	1 MD11	8 MD24	2 MD22	-	3 MD74	1 MD812	1 MD912
38		1 MD41	1 MD30	1 MD12	8 MD24	2 MD22	-	3 MD74	1 MD812	1 MD912
39		1 MD41	1 MD30	1 MD11	8 MD24	2 MD23	-	3 MD74	1 MD812	1 MD912
40		1 MD41	1 MD30	1 MD12	8 MD24	2 MD23	-	3 MD74	1 MD812	1 MD912
41		1 MD41	1 MD30	1 MD12	9 MD24	1 MD23	-	3 MD74	1 MD812	1 MD912
42		1 MD41	1 MD30	1 MD12	10 MD24	-	-	3 MD74	1 MD812	1 MD912
43	 496x395x19 (19 <sup>1</sup> / <sub>2</sub> " x 15 <sup>9</sup> / <sub>16</sub> " x 3 <sup>3</sup> / <sub>4</sub> " )	1 MD41	1 MD30	1 MD12	8 MD24	3 MD23	3 *	4 MD74	-	-
45		1 MD41	1 MD30	1 MD11	11 MD24	-	3 *	4 MD74	-	-
47		1 MD41	1 MD30	1 MD10	11 MD24	3 MD21	-	4 MD74	-	-
48		1 MD41	1 MD30	1 MD11	11 MD24	3 MD21	-	4 MD74	-	-
50		1 MD41	1 MD30	1 MD10	11 MD24	3 MD22	-	4 MD74	-	-
52		1 MD41	1 MD30	1 MD12	11 MD24	3 MD22	-	4 MD74	-	-
53	 496x395x19 (19 <sup>1</sup> / <sub>2</sub> " x 15 <sup>9</sup> / <sub>16</sub> " x 3 <sup>3</sup> / <sub>4</sub> " )	1 MD41	1 MD30	1 MD10	11 MD24	3 MD23	-	4 MD74	-	-
55		1 MD41	1 MD30	1 MD12	11 MD24	3 MD23	-	4 MD74	-	-
58		1 MD41	1 MD30	1 MD12	14 MD24	-	-	4 MD74	-	-

■ or MD74 or MD804 or MD904

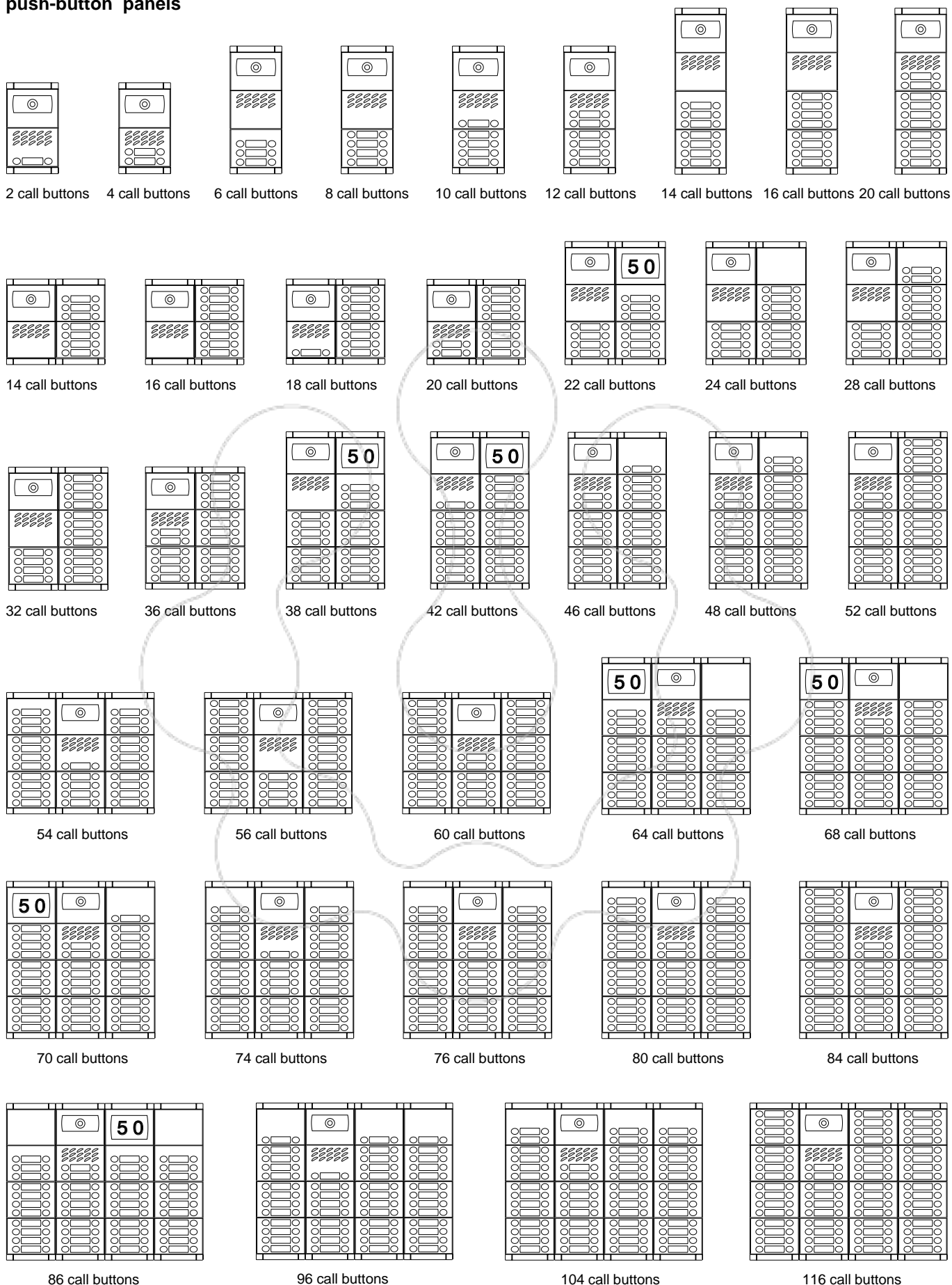
\* or MD20 or MD50 or FC52P or FP52

Optional

It replaces  
MD72, 73, 74














### MODY series push-button panels

### Examples of compositions of Mody push-button panels in video intercom systems



## MODY series push-button panels

## Composition board of Mody push-button panels.

N° calls	Compositions and dimensions	Camera module	Doorspeaker (amplifier)	Module for speaker	Button and info or blank modules	Backbox and module frame	Hood covers	Rain shelter
2	 124x213x19 $(4\frac{1}{8}" \times 8\frac{3}{8}" \times \frac{3}{4}" )$	1 MD41	1 MD30	1 MD122	- - -	1 MD72	1 MD82	1 MD92
4		1 MD41	1 MD30	1 MD124	- - -	1 MD72	1 MD82	1 MD92
6		1 MD41	1 MD30	1 MD10	1 MD226 - -	1 MD73	1 MD83	1 MD93
8		1 MD41	1 MD30	1 MD10	1 MD228 - -	1 MD73	1 MD83	1 MD93
10	 124x304.5x19 $(4\frac{1}{8}" \times 12" \times \frac{3}{4}" )$	1 MD41	1 MD30	1 MD122	1 MD228 - -	1 MD73	1 MD83	1 MD93
12		1 MD41	1 MD30	1 MD124	1 MD228 - -	1 MD73	1 MD83	1 MD93
14	 248x213x19 $(9\frac{3}{4}" \times 8\frac{3}{8}" \times \frac{3}{4}" )$	1 MD41	1 MD30	1 MD10	1 MD228 1 MD226 -	2 MD72 ■	1 MD84 ■	1 MD94 ■
16		1 MD41	1 MD30	1 MD10	2 MD228 - -	2 MD72 ■	1 MD84 ■	1 MD94 ■
18		1 MD41	1 MD30	1 MD122	2 MD228 - -	2 MD72 ■	1 MD84 ■	1 MD94 ■
20		1 MD41	1 MD30	1 MD124	2 MD228 - -	2 MD72 ■	1 MD84 ■	1 MD94 ■
22	 248x304.5x19 $(9\frac{3}{4}" \times 12" \times \frac{3}{4}" )$	1 MD41	1 MD30	1 MD10	2 MD228 1 MD226 1 *	2 MD73	1 MD86	1 MD96
24		1 MD41	1 MD30	1 MD10	3 MD228 - 1 *	2 MD73	1 MD86	1 MD96
26		1 MD41	1 MD30	1 MD122	3 MD228 - 1 *	2 MD73	1 MD86	1 MD96
28		1 MD41	1 MD30	1 MD124	3 MD228 - 1 *	2 MD73	1 MD86	1 MD96
30	 248x395x19 $(9\frac{3}{4}" \times 15\frac{9}{16}" \times \frac{3}{4}" )$	1 MD41	1 MD30	1 MD10	3 MD228 1 MD226 -	2 MD73	1 MD86	1 MD96
32		1 MD41	1 MD30	1 MD10	4 MD228 - -	2 MD73	1 MD86	1 MD96
34		1 MD41	1 MD30	1 MD122	4 MD228 - -	2 MD73	1 MD86	1 MD96
36		1 MD41	1 MD30	1 MD124	4 MD228 - -	2 MD73	1 MD86	1 MD96
38	 372x304.5x19 $(14\frac{5}{8}" \times 12" \times \frac{3}{4}" )$	1 MD41	1 MD30	1 MD10	4 MD228 1 MD226 1 *	2 MD74	1 MD808	1 MD908
40		1 MD41	1 MD30	1 MD10	5 MD228 - 1 *	2 MD74	1 MD808	1 MD908
42		1 MD41	1 MD30	1 MD122	5 MD228 - 1 *	2 MD74	1 MD808	1 MD908
44		1 MD41	1 MD30	1 MD124	5 MD228 - 1 *	2 MD74	1 MD808	1 MD908
46	 372x395x19 $(14\frac{5}{8}" \times 15\frac{9}{16}" \times \frac{3}{4}" )$	1 MD41	1 MD30	1 MD124	5 MD228 1 MD222 -	2 MD74	1 MD808	1 MD908
48		1 MD41	1 MD30	1 MD124	5 MD228 1 MD224 -	2 MD74	1 MD808	1 MD908
50		1 MD41	1 MD30	1 MD124	5 MD228 1 MD226 -	2 MD74	1 MD808	1 MD908
52		1 MD41	1 MD30	1 MD124	6 MD228 - -	2 MD74	1 MD808	1 MD908
54	 496x395x19 $(19\frac{1}{2}" \times 15\frac{9}{16}" \times \frac{3}{4}" )$	1 MD41	1 MD30	1 MD122	5 MD228 2 MD226 -	3 MD73	1 MD89	1 MD99
56		1 MD41	1 MD30	1 MD124	7 MD228 - -	3 MD73	1 MD89	1 MD99
58		1 MD41	1 MD30	1 MD122	7 MD228 - -	3 MD73	1 MD89	1 MD99
60		1 MD41	1 MD30	1 MD124	7 MD228 - -	3 MD73	1 MD89	1 MD99
62	 496x395x19 $(19\frac{1}{2}" \times 15\frac{9}{16}" \times \frac{3}{4}" )$	1 MD41	1 MD30	1 MD122	6 MD228 2 MD226 2 *	3 MD74	1 MD812	1 MD912
64		1 MD41	1 MD30	1 MD124	6 MD228 2 MD226 2 *	3 MD74	1 MD812	1 MD912
66		1 MD41	1 MD30	1 MD122	8 MD228 - 2 *	3 MD74	1 MD812	1 MD912
68		1 MD41	1 MD30	1 MD124	8 MD228 - 2 *	3 MD74	1 MD812	1 MD912
70	 496x395x19 $(19\frac{1}{2}" \times 15\frac{9}{16}" \times \frac{3}{4}" )$	1 MD41	1 MD30	1 MD124	8 MD228 1 MD222 1 *	3 MD74	1 MD812	1 MD912
72		1 MD41	1 MD30	1 MD124	8 MD228 2 MD222 -	3 MD74	1 MD812	1 MD912
74		1 MD41	1 MD30	1 MD122	8 MD228 2 MD224 -	3 MD74	1 MD812	1 MD912
76		1 MD41	1 MD30	1 MD124	8 MD228 2 MD224 -	3 MD74	1 MD812	1 MD912
78	 496x395x19 $(19\frac{1}{2}" \times 15\frac{9}{16}" \times \frac{3}{4}" )$	1 MD41	1 MD30	1 MD122	8 MD228 2 MD226 -	3 MD74	1 MD812	1 MD912
80		1 MD41	1 MD30	1 MD124	8 MD228 2 MD226 -	3 MD74	1 MD812	1 MD912
82		1 MD41	1 MD30	1 MD124	9 MD228 1 MD226 -	3 MD74	1 MD812	1 MD912
84		1 MD41	1 MD30	1 MD124	10 MD228 - -	3 MD74	1 MD812	1 MD912
86	 496x395x19 $(19\frac{1}{2}" \times 15\frac{9}{16}" \times \frac{3}{4}" )$	1 MD41	1 MD30	1 MD124	8 MD228 3 MD226 3 *	4 MD74	-	-
90		1 MD41	1 MD30	1 MD122	11 MD228 - 3 *	4 MD74	-	-
94		1 MD41	1 MD30	1 MD10	11 MD228 3 MD222 -	4 MD74	-	-
96		1 MD41	1 MD30	1 MD122	11 MD228 3 MD222 -	4 MD74	-	-
100	 496x395x19 $(19\frac{1}{2}" \times 15\frac{9}{16}" \times \frac{3}{4}" )$	1 MD41	1 MD30	1 MD10	11 MD228 3 MD224 -	4 MD74	-	-
104		1 MD41	1 MD30	1 MD124	11 MD228 3 MD224 -	4 MD74	-	-
106		1 MD41	1 MD30	1 MD10	11 MD228 3 MD226 -	4 MD74	-	-
110		1 MD41	1 MD30	1 MD124	11 MD228 3 MD226 -	4 MD74	-	-
116		1 MD41	1 MD30	1 MD124	14 MD228 - -	4 MD74	-	-

■ or MD74 or MD804 or MD904

\* or MD20 or MD50 or FC52P or FP52

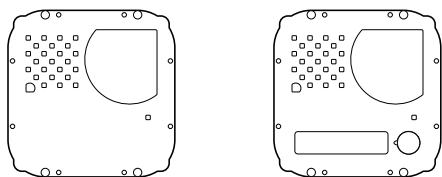
Optional

It replaces  
MD72, 73, 74

## EXTERNAL DOOR STATIONS

### MATRIX series push-button panels

#### Video modules with integrated audio amplifier



##### MA 42.

Modules complete with:

- CCD camera with autoiris, fixed 3.6mm lens and 6 infrared LED's.
- amplified speaker unit with volume adjustment of 2 channels (reception and transmission)
- steel front plate with breakproof transparent screen
- red operation LED
- horizontal and vertical adjustments

##### MA 42C.

Colour version of model MA 42.

##### MA 43.

Same as MA 42, with call button and name plate panel with breakproof transparent screen and green LED backlighting.

##### MA 43C.

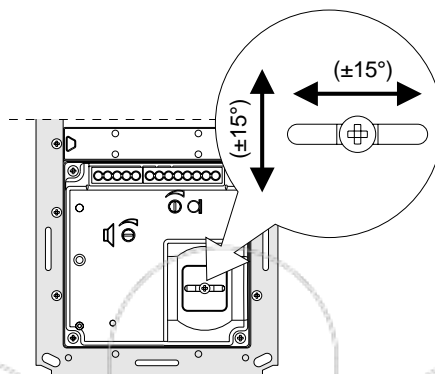
Colour version of model MA 43.

#### Terminals

- 1 Reception audio line
- 2 Transmission audio line
- 3 Power supply input for electric door speaker (6÷12Vdc)
- 4 Audioground
- Alternated power supply input or ground for name-plate Led
- A AC or DC power supply input for name-plate Led (12Vac-dc)
- C Call push-buttons common
- P1 Call push-button
- V Video signal output (coaxial cable)
- M Video ground (coaxial shield)
- H Positive voltage input for camera (18÷24Vdc)
- L- Alternated power supply input or ground for service Led
- L+ AC or DC power supply input for service Led (12Vac-dc)

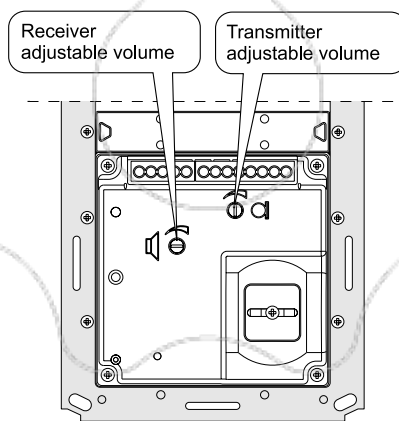
#### Adjustments

You can manually change the camera framing by unloosening and adjusting the horizontal and vertical screws in the desired direction.



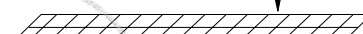
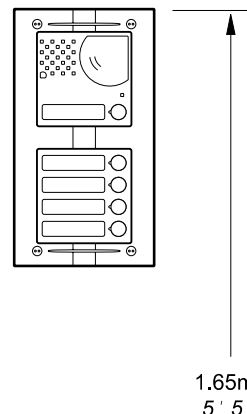
#### Audio adjustments

If necessary, it is possible to adjust the volume of the 2 audio channels opportunely varying the external knobs.



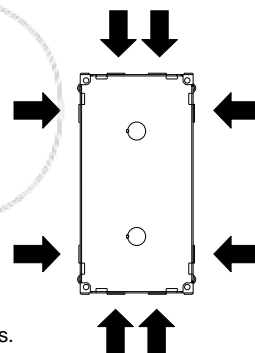
MA42 MA42C MA43 MA43C

#### Installation

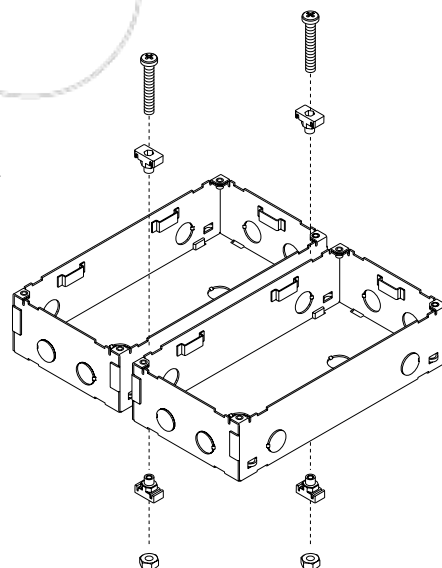


Place the push-button panel back box at a height of about 1.65m (5' 5") from the floor keeping the front edges flush-mounted and vertical to the finished plaster.

**Position the camera in such a way that sunlight or other direct or reflected light sources with high intensity do not hit the camera lens.**



Openings for cables.



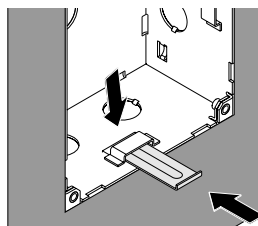
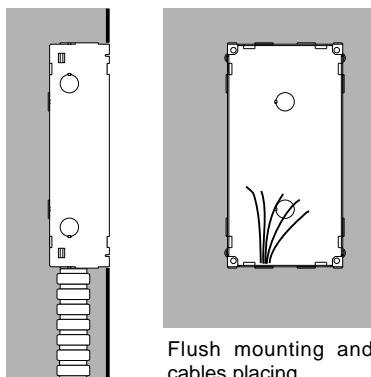
Insertion of spacers between back boxes. Spacers and cable bushing (not supplied with the products) must be inserted before brick work.

Technical data	MA42-MA43	MA42C-MA43C
Power supply	21±3Vdc	21±3Vdc
Operating current	0.2A	0.4A
Video signal output	1Vpp on 75Ω	1Vpp on 75Ω
Video signal standard	CCIR	PAL
Minimum illumination	2 Lux	2.5 Lux
White balance	-	auto
Sensor	CCD 1/4" B/W	CCD 1/3" colour
Number of pixels	291,000	291,000
Horizontal frequency	15,625Hz	15,625Hz
Vertical frequency	50Hz	50Hz
Lens	3.6mm; F5	4mm; F4
Focus	0.1m ÷ ∞	0.6m ÷ ∞
Autoiris	electronic	electronic
Horizontal adjustment	± 15°	± 15°
Vertical adjustment	± 15°	± 15°
Operating temperature	-10°÷+40°C	-10°÷+40°C
Max. permissible humidity	80%RH	80%RH

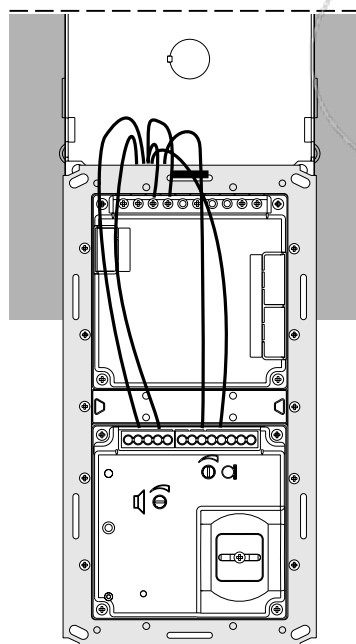
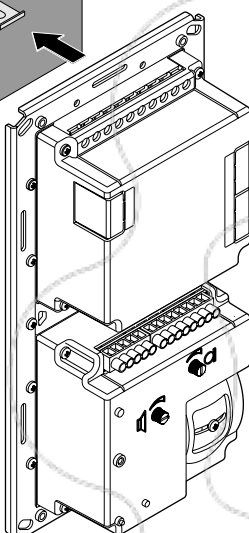


# EXTERNAL DOOR STATIONS

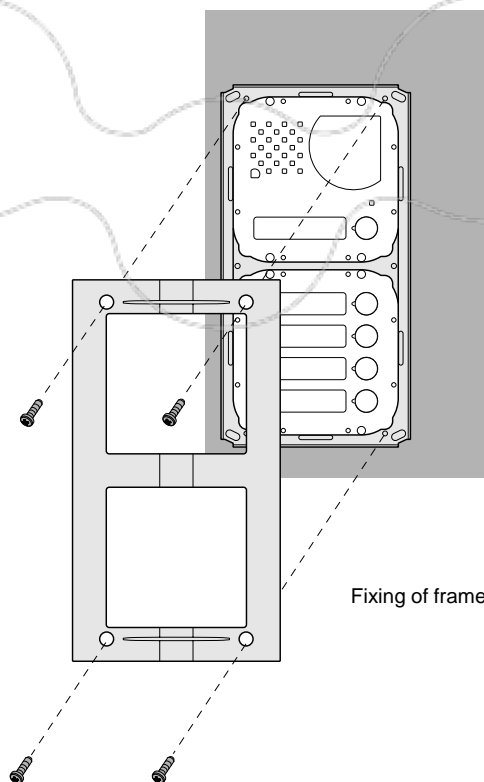
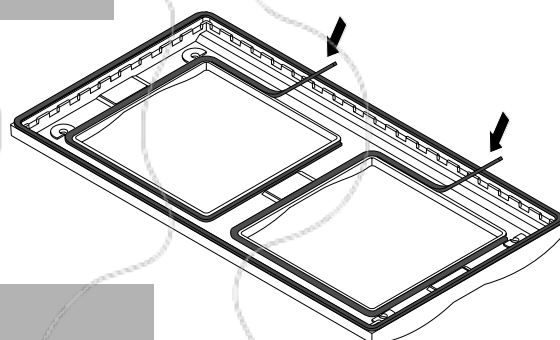
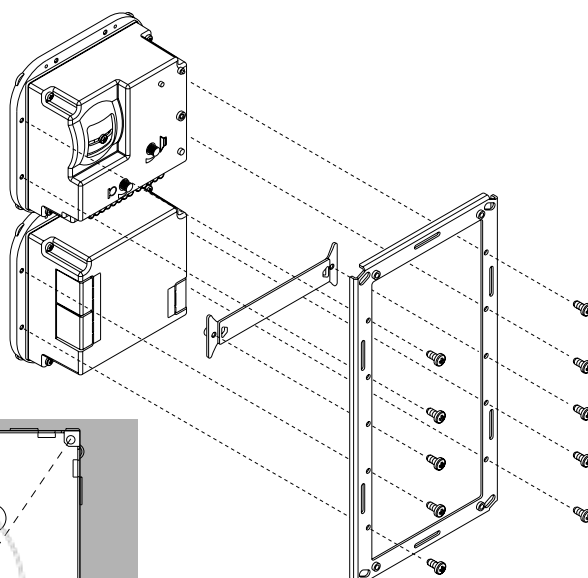
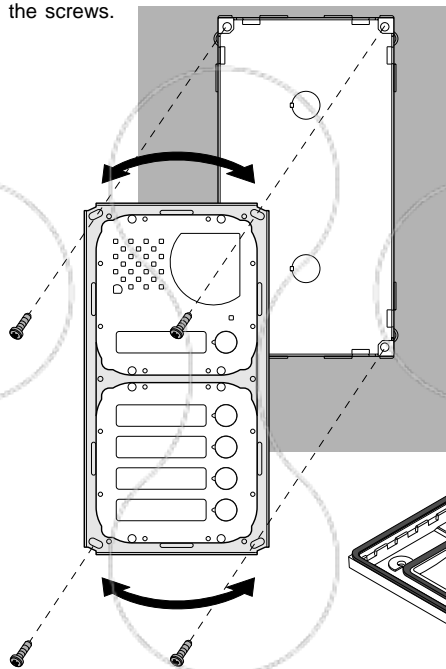
## MATRIX series push-button panels



For easier connection to the electrical system, it is recommended to insert the metal plate supplied with the product in the back box opening, as shown in the figure. The plate is used to hook the frame with pre-assembled modules. Leave the plate in the box to reuse it for maintenance operations.



Fixing of frame to back box. Align the frame before tightening the screws.

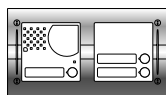


# EXTERNAL DOOR STATIONS

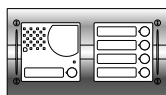
## MATRIX series push-button panels



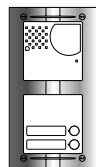
1 call button



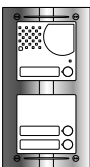
3 call buttons



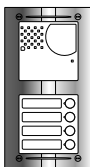
5 call buttons



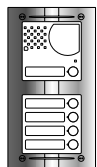
2 call buttons



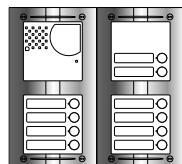
3 call buttons



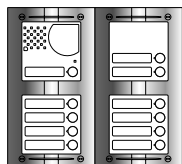
4 call buttons



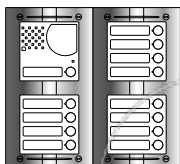
5 call buttons



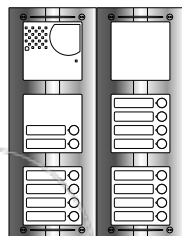
10 call buttons



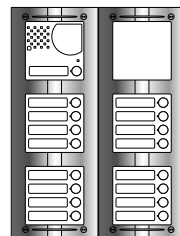
11 call buttons



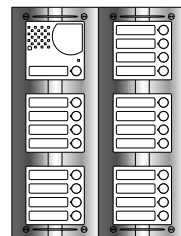
13 call buttons



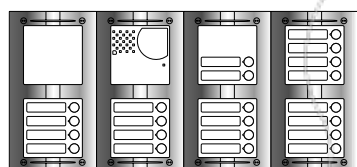
14 call buttons



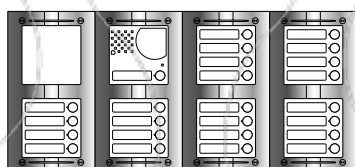
17 call buttons



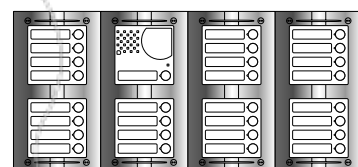
21 call buttons



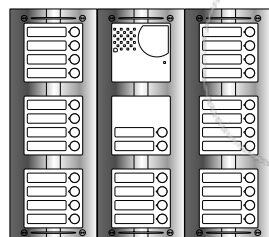
22 call buttons



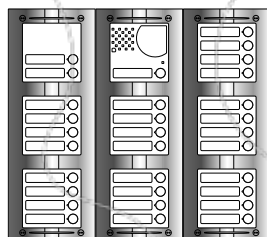
25 call buttons



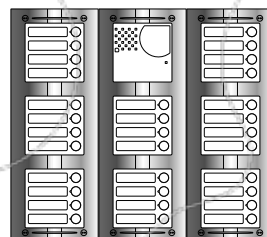
29 call buttons



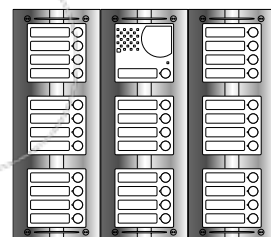
30 call buttons



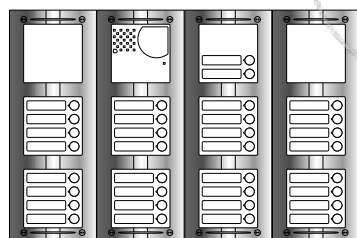
31 call buttons



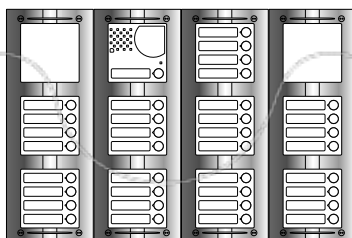
32 call buttons



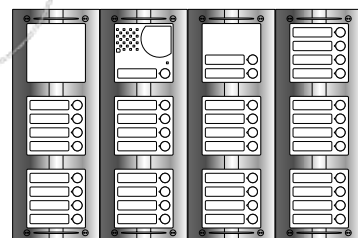
33 call buttons



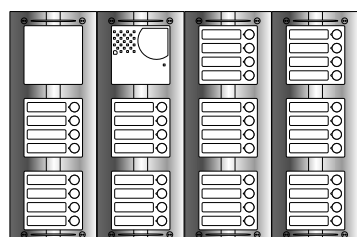
34 call buttons



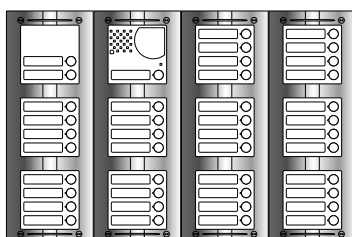
37 call buttons



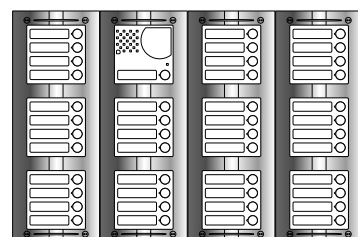
39 call buttons



40 call buttons

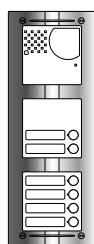


43 call buttons

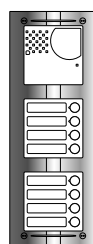


45 call buttons

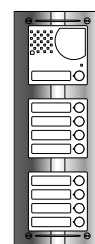
## Examples of compositions in video intercom systems



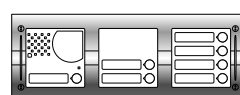
6 call buttons



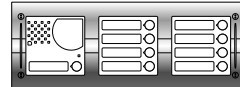
8 call buttons



9 call buttons



7 call buttons





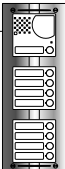
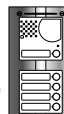
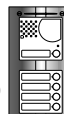
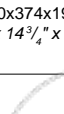
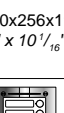


9 call buttons



# EXTERNAL DOOR STATIONS

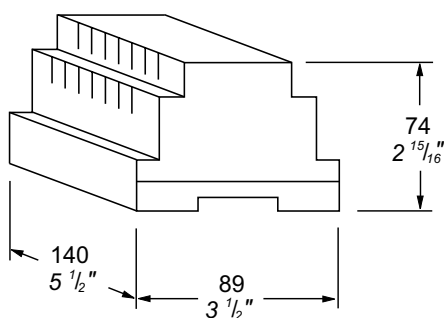
## MATRIX series push-button panels

## Composition board of Matrix push-button panels.

N° calls	Compositions and dimensions	Camera module and door speaker	Button and info or blank modules			Front frame	Back box and module frame
1	 140x140x19 (5 1/2" x 5 1/2" x 3/4")	1 MA43	-	-	-	1 MA61	1 MA71
2		1 MA42	1 MA22	-	-	1 MA62	1 MA72
3	 140x256x19 (5 1/2" x 10 1/16" x 3/4")	1 MA43	1 MA22	-	-	1 MA62	1 MA72
4		1 MA42	1 MA24	-	-	1 MA62	1 MA72
5	 140x374x19 (5 1/2" x 14 3/4" x 3/4")	1 MA43	1 MA24	-	-	1 MA62	1 MA72
6		1 MA42	1 MA24	1 MA22	-	1 MA63	1 MA73
7		1 MA43	1 MA24	1 MA22	-	1 MA63	1 MA73
8		1 MA42	2 MA24	-	-	1 MA63	1 MA73
9	 280x374x19 (11" x 14 3/4" x 3/4")	1 MA43	2 MA24	-	-	1 MA63	1 MA73
10		1 MA42	2 MA24	1 MA22	-	2 MA62	2 MA72
11		1 MA43	2 MA24	1 MA22	-	2 MA62	2 MA72
12		1 MA42	3 MA24	-	-	2 MA62	2 MA72
13	 280x256x19 (11" x 10 1/16" x 3/4")	1 MA43	3 MA24	-	-	2 MA62	2 MA72
14		1 MA42	3 MA24	1 MA22	1 MA20	2 MA63	2 MA73
15		1 MA43	3 MA24	1 MA22	1 MA20	2 MA63	2 MA73
16		1 MA42	4 MA24	-	1 MA20	2 MA63	2 MA73
17		1 MA43	4 MA24	-	1 MA20	2 MA63	2 MA73
18		1 MA42	4 MA24	1 MA22	-	2 MA63	2 MA73
19		1 MA43	4 MA24	1 MA22	-	2 MA63	2 MA73
20		1 MA42	5 MA24	-	-	2 MA63	2 MA73
21	 280x374x19 (11" x 14 3/4" x 3/4")	1 MA43	5 MA24	-	-	2 MA63	2 MA73
22		1 MA42	5 MA24	1 MA22	1 MA20	4 MA62	4 MA72
23		1 MA43	5 MA24	1 MA22	1 MA20	4 MA62	4 MA72
24		1 MA42	6 MA24	-	1 MA20	4 MA62	4 MA72
25		1 MA43	6 MA24	-	1 MA20	4 MA62	4 MA72
26		1 MA42	6 MA24	1 MA22	-	4 MA62	4 MA72
27		1 MA43	6 MA24	1 MA22	-	4 MA62	4 MA72
28		1 MA42	7 MA24	-	-	4 MA62	4 MA72
29	 560x256x19 (22 1/16" x 10 1/16" x 3/4")	1 MA43	7 MA24	-	-	4 MA62	4 MA72
30		1 MA42	7 MA24	1 MA22	-	3 MA63	3 MA73
31		1 MA43	7 MA24	1 MA22	-	3 MA63	3 MA73
32		1 MA42	8 MA24	-	-	3 MA63	3 MA73
33	 420x374x19 (16 9/16" x 14 3/4" x 3/4")	1 MA43	8 MA24	-	-	3 MA63	3 MA73
34		1 MA42	8 MA24	1 MA22	2 MA20	4 MA63	4 MA73
35		1 MA43	8 MA24	1 MA22	2 MA20	4 MA63	4 MA73
36		1 MA42	9 MA24	-	2 MA20	4 MA63	4 MA73
37		1 MA43	9 MA24	-	2 MA20	4 MA63	4 MA73
38		1 MA42	9 MA24	1 MA22	1 MA20	4 MA63	4 MA73
39		1 MA43	9 MA24	1 MA22	1 MA20	4 MA63	4 MA73
40		1 MA42	10 MA24	-	1 MA20	4 MA63	4 MA73
41	 560x374x19 (22 1/16" x 14 3/4" x 3/4")	1 MA43	10 MA24	-	1 MA20	4 MA63	4 MA73
42		1 MA42	10 MA24	1 MA22	-	4 MA63	4 MA73
43		1 MA43	10 MA24	1 MA22	-	4 MA63	4 MA73
44		1 MA42	11 MA24	-	-	4 MA63	4 MA73
45		1 MA43	11 MA24	-	-	4 MA63	4 MA73



## POWER SUPPLY AND CONTROL UNIT



### 1281. STABILIZED POWER SUPPLY WITH SWITCHING REGULATOR.

Connected to the timer art.1382, allows to drive at low voltage a videointercom (or 2 in parallel in FLAT type), a camera unit with a solid state sensor (CCD), electric door lock, name plate lights, etc.

#### Technical data

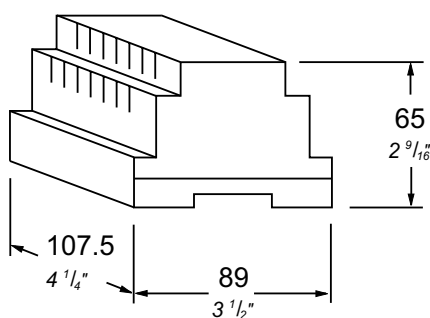
Input voltage	127 or 220-230Vac
Frequency	50/60Hz
Power	48VA
Operating temperature	0°÷+40°C
Maximum permissible humidity	90%RH
Housing	DIN 8 modules A
Weight	0.95Kg.
Approved by	VDE according to safety standard EN60065

#### Terminals

- A** Output voltage 13Vac for:  
 -name plate light, exchangers and climatized camera (continuous service 0.6A)  
 -electric door lock and bells (intermittent service 1A)  
 - Ground  
**+** Continuous output 21Vdc-1A (timed operation)  
**I** Logic command input from timing  
 0 = activated  
 +5Vdc = non activated

#### Note

- The power supply is not provided with fuses, but all of its outputs are protected against overloading and short circuiting by temperature sensors. To reset the power supply, power must be cut off for about one minute and can be restored after having eliminated the defect.
- The power supply must be installed in a dry place and can be fixed on DIN bar or on a wall by using the expansion plugs.
- The connection between power supply 1281 and timer 1382 is not to be longer than 25cm.



### 1382. AUDIO-VIDEO TIMER.

Connected to the stabilized power supply art.1281, it allows a videointercom system to be timed (50 seconds).

It also allows time to be increased during a conversation (3 minutes), automatic power OFF at the end of the conversation; switching ON of one videointercom at a time. By adding the intercommunicating module art.1443E on the proper connector, an intercommunicating operation with privacy towards the external speaker is obtained.

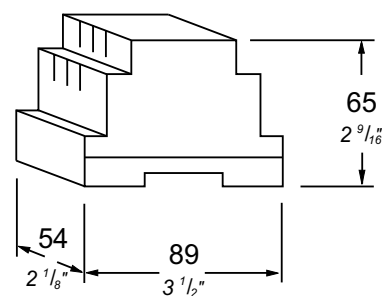
#### Technical data

Turn ON time:	-50 sec. with handset replaced -3 min. with handset lifted
Operating temperature	0°÷+50°C
Maximum permissible humidity	90%RH
Housing	DIN 6 modules A

#### Terminals

- I** Logic command output of timing 0/5Vdc  
**+** Positive voltage input 18÷28Vdc-2A  
**-** Ground  
**A** Alternating voltage input-output 13Vac-1.6A  
**D** Alternating voltage output for the common of push-button 13Vac-0.5A (intermittent service)  
**H** Timed positive voltage output for the camera unit 18÷28Vdc-0.5A max.  
**F** Ground  
**1** Transmitter audio channel input 4.5Vdc-10mA  
**2** Receiver audio channel input 2Vdc-16mA  
**3** Positive voltage output 8Vdc-0.1A  
**S** Electronic door lock release 1A  
**4** Control switching ON input from the video-intercoms 5.5Vdc-90mA  
**9** Door lock release command 50mA  
**11** Audio ground  
**12** Transmitter audio channel output 4.5Vdc-10mA  
**13** Receiver audio channel output 2Vdc-16mA  
**14** Timed positive voltage output for the video-intercoms 18÷28Vdc-1.5A max.

## SERVICE MODULES



### 2443. AMPLIFIER-SWITCHER FOR INTER-COMMUNICATING SYSTEMS.

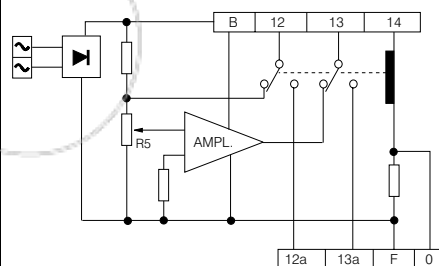
It is suitable for video intercom systems where it is necessary to have the intercommunicating service in different flats with privacy towards both outside and other users. Use one art.2443 in every intercommunicating flat. Can be fixed on DIN bar or with two expansion plugs. In housing DIN 4 modules A.

#### Terminals

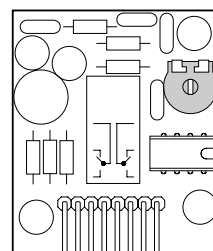
- F** General ground  
**B** Power supply 8Vdc-60mA  
 $\sim$  Power supply 13Vac-70mA  
**12** Connection toward the microphone of the videointercoms  
**12a** Audio output from door station (transmitter channel)  
**13** Connection towards the loudspeaker of the videointercoms  
**13a** Audio input from the door station (receiver channel)  
**14** Timed power supply for audio connection toward the door station 12÷24Vdc-60mA  
**0** To connect to terminal F when the terminal 14 is powered to 12Vdc (terminal 8 of the videointercom)

#### Note

If it is necessary to adjust the volume of the intercommunicating audio turn trimmer R5.



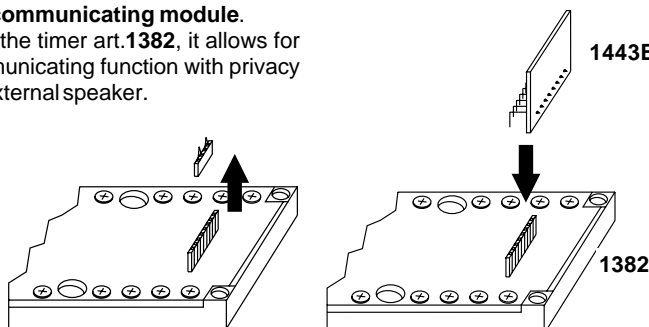
Use the trimmer to adjust the intercommunicating volume.

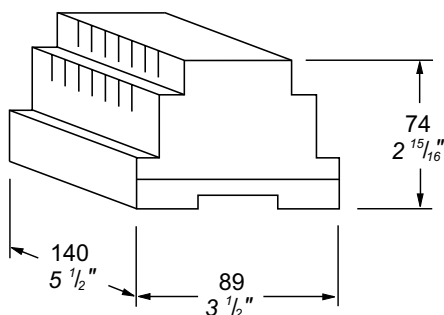


art.1443E

### 1443E. Intercommunicating module.

Added inside the timer art.1382, it allows for the intercommunicating function with privacy towards the external speaker.



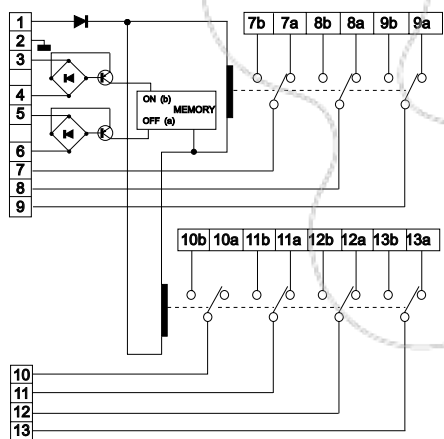


## 1273TV. 7-CONTACT ANALOG EXCHANGER.

It is used in systems with 2 or more video entrances for switching automatically the video signals, the audio lines and door lock on the calling entrance.  
Can be fixed on DIN bar or with two expansion plugs. In housing DIN 8 modules A.  
For the switching of video signals it is advisable to use terminals 8-8a-8b and 9-9a-9b, being that they are physically closer.

### Terminals

- 1 Power supply 13Vac-0.1A (15÷21Vdc)
- 2 Ground
- 3 and 4 Driver to switch the relay in "b" position - ON position
- 5 and 6 Driver to switch the relay in "a" position - OFF position
- 7,8,9,10,11,12,13 Common contact of relay
- 7a,8a,9a,10a,11a,12a, 13a OFF position of relay contacts
- 7b,8b,9b,10b,11b,12b, 13b ON position of relay contacts

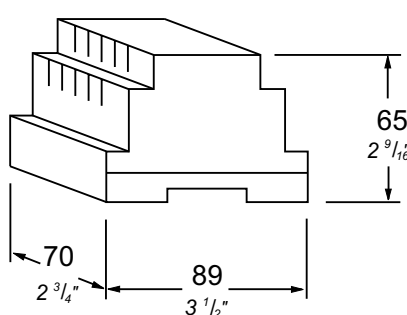


**1473. EXCHANGER.** See page 25.

**1471. RELAY MODULE.** See page 25.

**1471E. RELAY MODULE.** See page 25.

**1472. 2-CONTACT RELAY UNIT.** See page 25.



## RL37. RELAY MODULE.

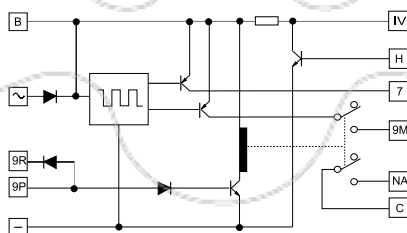
Relay module used to regenerate the electronic call for additional 3 intercoms or video intercoms. It permits to activate/deactivate max. 3 additional video power supplies. Complete with electronic ringing generator for intercommunication.  
Can be fixed on DIN bar or screwed to the wall with 2 expansion plugs.

### Technical data

- Power supply: 13Vac
- Current consumption: 0.04A
- Current consumption with ringing ON: 0.6A
- Number of exchanges: 1
- Max. switching current: 1A (24V)
- Housing: DIN 4 modules A
- Operating temperature: 0° ÷ 50°C
- Maximum permissible humidity: 90% RH

### Terminals

- ~ Alternate current input
- Ground
- H Timed continuous current input 21Vdc
- IV Additional power supply activation
- C Common contact of relay
- NA Normally open contact of relay
- 9P Electronic call input
- 9M Regenerated electronic call output activated by terminal 9P
- 9R Direct electronic call output from terminal 9P
- B 8Vdc voltage output



## General characteristics

- The cable runs of intercom and video intercom installations must be kept separate from the mains or any other electrical installation as required by the **International Safety Standards** and the entire installation must be realized in compliance with the safety rules in force in any specific Country.
- It is necessary to provide an all contact switch before the power supply. Use a single general switch in case of several power supplies (also in multiple entrance).
- Before connecting the power supply make sure that its rating data corresponds to this of the mains.
- For electromagnetic reasons, all service modules must be installed near their power supply.

## Wires

- 1) For the correct operation of the video intercom system you must choose the correct type of cable.
- 2) Wires must be dimensioned according to the distance of the different devices and their current consumption.
- 3) Do not connect wires in parallel to reach the required cross-section (for example multi-pair telephone cables). Only use a single wire with suitable cross-section. When using multi-core cables you must select them with low parasite parameters (low capacitance per metre, low inductance over Ohm).
- 4) If the installation includes additional power supplies you must place them near the device to be powered.

## Background noise

To avoid possible background noise over the speech line, it is advisable:

- 5) not to lay intercom or telephone cables in the same runaway as the wires used to power alternate current loads;
- 6) to avoid using the same multi-core cable to transmit audio signals and alternate current power supplies (lamps, amplified external door stations, electrical door locks). Always use separate wires for alternate current power supplies;
- 7) do not connect the name plate lamps (or other AC powered devices) to terminal 4 (-) of the speaker unit; two wires must start from terminal F of the timer, one for terminal 4 of the speaker unit and one for the connection of the lamps (or other AC powered devices);
- 8) for name-plate lamps, to use an additional 12Vac transformer (PRS210 type) with suitable power (consumption is 75mA for each lamp) with 2 power supply wires separate from audio wires;
- 9) for systems with long distance between the external door station and the last video intercom, it is advisable to position the power supply near the external door station (see diagram on page 97).



# INSTALLATION INSTRUCTIONS

## WIRE CROSS-SECTION

Distance		Terminals			Terminals		
		4 . 9 . 11 . 12 . 13 . H 1 . 2 . 3 . D . 10 (call)			F . 14 . A . S (wires in <b>bold face type</b> )		
m.	feet	mm <sup>2</sup> S	mm Ø	AWG	mm <sup>2</sup> S	mm Ø	AWG
50	165	0,5	0,8	20	0,75	1	18
100	330	0,75	1	18	1	1,2	16
200	660	1	1,2	16	1,5	1,4	15
300	990	1,5	1,4	15	2,5	1,8	12

For the video signal use a TV 75Ω low loss coaxial cable or a twisted pair (see next pages).

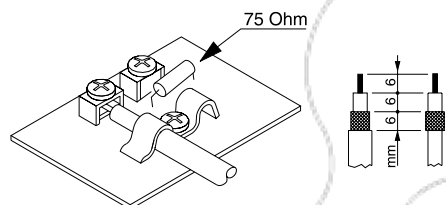
### 1304. MULTI-CORE CABLE

Video intercom cable with 10 wires of different cross-sections and 75Ω coaxial cable. It can be used in systems with a maximum distance of 100 meters (50m between timer and camera unit and 50m between timer and video intercom).

## VIDEO SIGNAL DISTRIBUTION WITH COAXIAL CABLE

### Videointercoms terminal board

The resistance for terminate the video signal (75Ω) is located on the terminal board of the videointercom wall bracket.

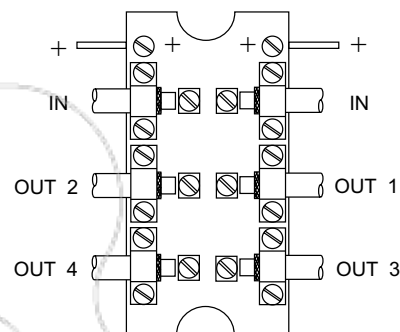


### DV2-DV4. VIDEO SIGNAL DISTRIBUTORS.

They allow the distribution of the video signal on 2 or 4 outputs. It can be installed on the wall, on a wall box, with expansion plugs or it can be placed in the junction box.

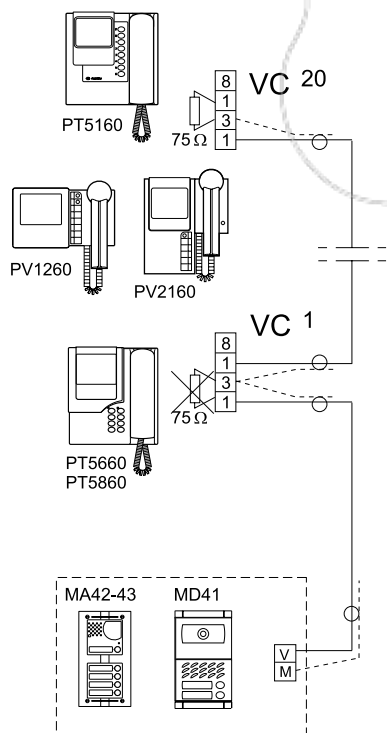
#### Technical data

Power supply	12Vdc±2
Operating current	DV2 50mA
	DV4 100mA
Insertion loss	0.8dB
Max. input video signal	2Vpp
Bandwidth	>5MHz



### Serial connection of the coaxial cable (input and output from videointercom)

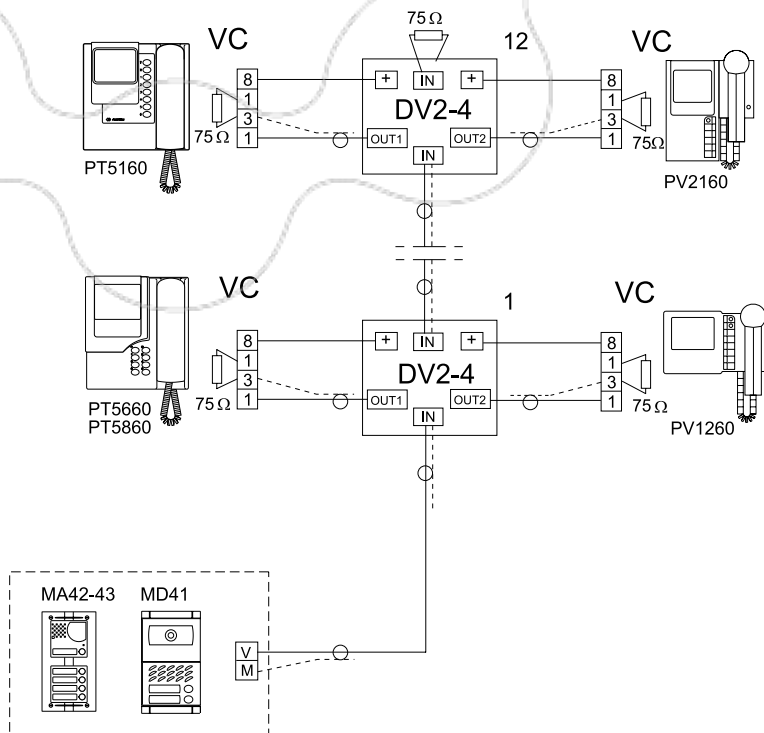
To carry out the video connection in a serial mode it is necessary to cut the resistance of 75Ω located on the wall-bracket terminal board. Leave it only on the last videointercom. The videointercoms serially connectable are max. 20.



### Connection of the coaxial cable with video distributors

For multi-way video systems it is advisable to use video distributor that, being powered by the videointercoms connected to it (terminal 8), do not create overloads on the video power

supply. The outputs that are not used must be closed with resistances of 75Ω that are provided in kit. Maximum 12 video distributors can be connected together.




# INSTALLATION INSTRUCTIONS

## 476. VIDEO DISTRIBUTOR-AMPLIFIER.

It allows for the distribution of the video signal coming from the cameras on 5 independent lines. It is not necessary to terminate on 75Ω the unused outputs.

### Terminals

<b>F</b>	General ground
<b>14</b>	Positive power supply
<b>IN</b>	Video signal input
<b>1-2-3-4-5</b>	Video signal outputs
	Video ground (shield of the coaxial cable)

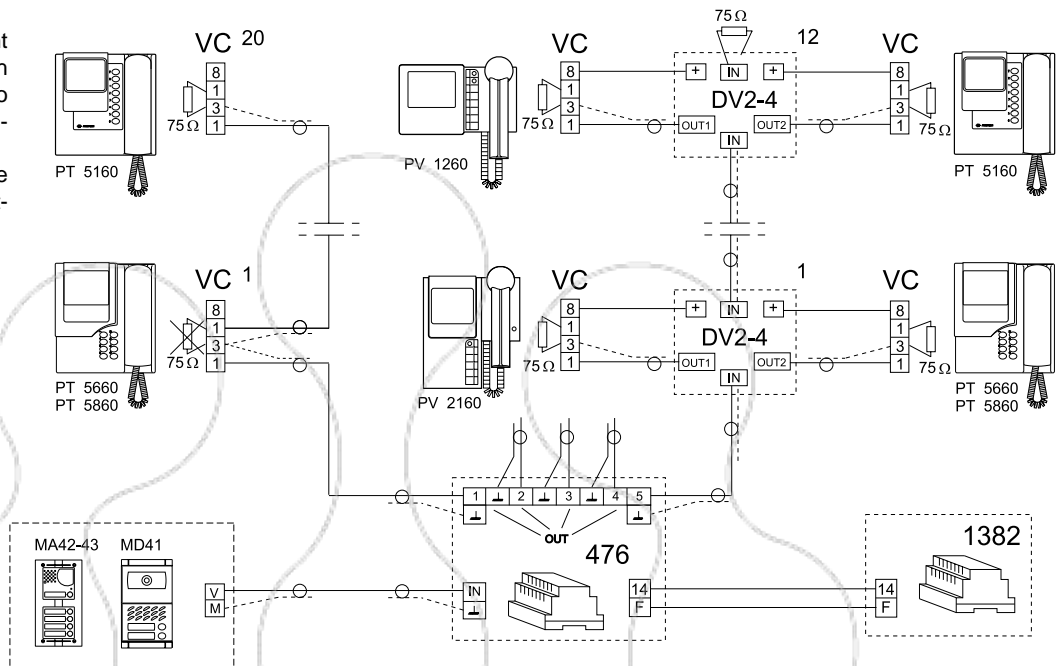
### Technical data

Power supply	21 ± 3Vdc
Operating current at max. load	250mA
Gain at max. load	from 0 to 3.5dB (adjustable)
Gain with one output terminated to 75Ω	from 0 to 9dB (adjustable)
Bandwidth	>5MHz
Operating temperature	0°±+50°C
Maximum permissible humidity	90% RH
Housing	DIN 8 modules A

## Connection of the coaxial cable with distribution on maximum 5 column rising (serial and/or with video distributors)

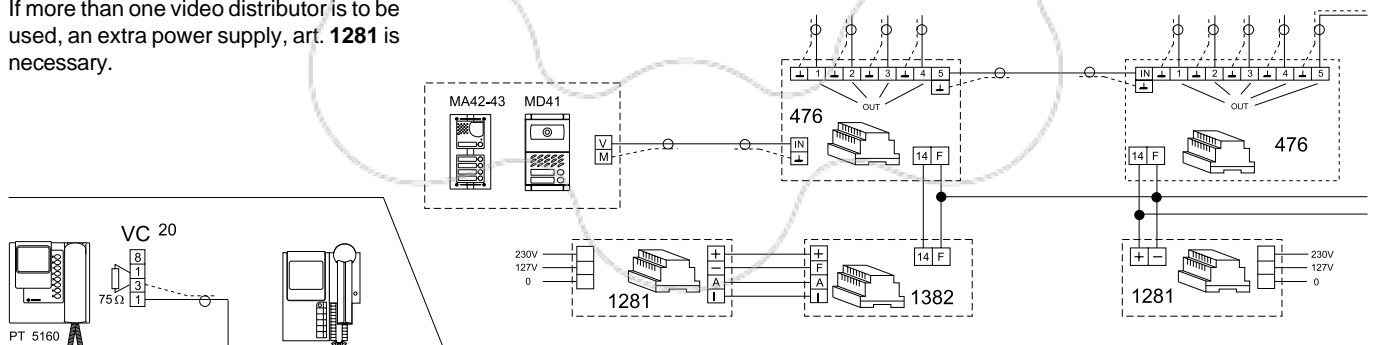
In video systems with different columns rising or with a high number of users, it is necessary to use the video distributor-amplifier art.476.

It is not necessary to terminate the unused outputs on the 75Ω resistance.



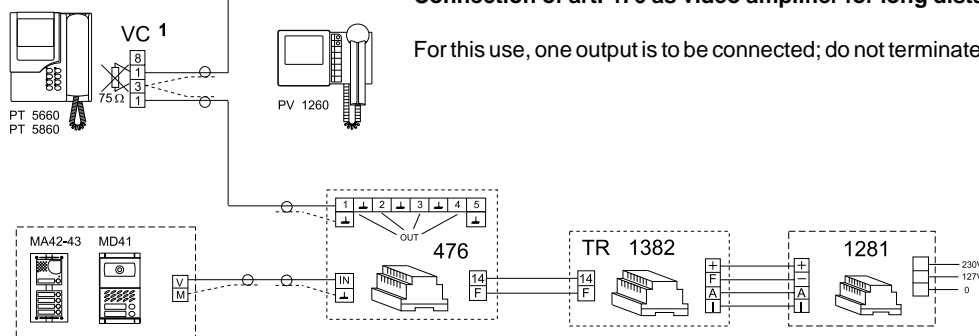
## Connection of the coaxial cable with video signal distribution on more than 5 risers

If more than one video distributor is to be used, an extra power supply, art. 1281 is necessary.



## Connection of art. 476 as video amplifier for long distance systems

For this use, one output is to be connected; do not terminate the other outputs on the 75Ω resistance.



Check that the connections of the system are carried out correctly.


Put the system in use by connecting the power supply to the mains.

By pushing a call button from the external push-button panel, the call is sent to the corresponding video intercom, the system is activated for about 50 seconds and the image appears on the videointercom a few seconds after the call.

By lifting the handset, the called user can speak with the external station and increases at the same time the activation time of the system (about 3 minutes).

If a call to another internal station occurs in the meantime, the videointercom switches OFF and the last videointercom called is activated. By replacing the handset the system switches OFF automatically.

By making a call to a video intercom with off-hook handset, the videointercoms is activated without hearing the ringing call.

If more calls occur simultaneously, a protection circuit against overloading and short circuiting is provided to disable the timer and switch OFF the system. If provided for in the system, from any videointercom it is possible to control the entrance by pressing the  button (control switch ON). Such a control is not possible when a conversation is taking place.

To operate the electric door lock release press the  button.

In systems with 2 or more entrances, audio, video and door lock release switching between two entrances is automatic upon the call or control switching ON.

In systems with 2 or more entrances, the control switch ON from the videointercoms interrupt the communication in progress, consequently in multi-way systems it is advisable to interrupt during a communication the switch ON function by means of a relay art. 1471 or 1472, giving the priority to the communication to the external door stations (see installation diagrams of video intercom systems with several entrances). In systems with intercommunicating service, the communication between videointercoms and/or intercoms is possible only when the system is in stand-by.

### Adjustments

Being subject to the environmental lighting conditions, contrast and brightness can be adjusted by means of external knobs.

All the other adjustments can be carried out inside the videointercom. For any necessary maintenance intervention of a specialized technician is mandatory.

The probability of breakdown in the video-intercom systems is obviously greater than in the intercom system. Consequently this brief troubleshooting takes into consideration the most common defects. When a defect is limited to only one videointercom it is evident that the trouble is a short circuit to the videointercom itself, to the connecting terminal board or to the wires that go to the riser. The simplest way to test the efficiency of a videointercom is to connect it in another flat where everything functions correctly.

### Preliminary checks

- Check for the presence of the mains voltage between terminals **230** (or **127**) and **0** of the power supply.
- The power supply is not provided with fuses, but all of its outputs are protected against overloading and short circuiting by temperature sensors. To reset the power supply, power must be cut OFF for about one minute and can be restored after having eliminated the problem.
- Check the voltage output of the power supply (see in detail the values indicated in the power supply and control chapter-page 90).
- Check that the cross section of the wire corresponds to what is indicated on page 92 and on the descriptions of each diagram.
- Check that the connection of the wire corresponds to the installation diagram.

### Problem, reason and solutions

#### Videointercoms shut OFF. Ringing tone not present. Control switching ON not functioning.

Absence of main voltage. Short circuits or overloading of the output terminals of the power supply and/or timer. Faulty power supply. Faulty timer.

#### Videointercoms shut OFF. Ringing tone not present. Control switch ON functioning.

The **D** wire is interrupted. Faulty timer.

#### Videointercoms turn ON. Absence of image.

The wire **H** that powers the camera is interrupted. The coaxial cable is interrupted or has a short circuit. The shield of the coaxial cable is interrupted. The video distributors (if present) are not being powered. Faulty camera unit.

#### Control switch ON by videointercoms does not function.

Wire **4** is interrupted. Faulty timer. The system is working.

#### The system does not shut OFF by replacing the handset.

Such a defect can be due to the non-working audio section from the door station to the videointercoms (see related section). Faulty timer. Faulty electric door speaker.

#### Unfocused image.

Dirty optics or lens. Faulty camera.

#### Image only slightly contrasted and/or out of synchronism.

Bad quality of coaxial cable or coaxial cable in dispersion.

Nominal impedance of coaxial cable not of 75Ω.

High distance system (use video amplifier art. 476).

Check the correct connection of the coaxial cable (see pages 92 and 93).

#### The electric door lock does not function.

Faulty lock. The cross section of the wires indicated in bold type is insufficient. A connecting wire to the lock has been interrupted. The **9** wire is interrupted. Faulty timer.

### Audio section

#### No audio from both channels.

Absence of power supply voltage between **3** and **4** of the electric door speaker (6÷8Vdc). Short circuit between **3** and **F** of the timer. The **11** wire is interrupted. Faulty timer.

#### No audio from the videointercoms to the door station.

The **12** or **1** wire (from the timer to the door station) is interrupted or has a short circuit. Absence of the ground connection to terminal **4** of the electric door speaker (amplifier). Faulty electric door speaker.

#### No audio from the door station to the videointercoms.

The **13** or **2** wire (from the timer to the door station) is interrupted or has a short circuit. Defective electric door speaker (amplifier).

#### Audio with humming in the background (50/60Hz).

The wires have been canalized together with the cables that power AC loads. Separate the ground connection of the electric door speaker (amplifier) and of the name plate lights, or power them with an additional transformer (see recommendations on page 91). Faulty power supply.

#### A whistle is heard at the external door station (Larsen effect).

The microphone hole of the external door station might be clogged. Lower the volume.

#### Radio reception on the door station.

The defect can occur when there is a transmitter working in the proximity. Apply a capacitor from 0.1μF between terminals **1** and **3** of the electric door speaker (amplifier).

### Intercommunicating systems

#### During the intercommunication the door speaker is still connected.

The video system is ON (privacy towards the outside only when the video system is in standby). The module for intercommunicating has not been plugged in the timer art. 1443E. Faulty timer.

#### No audio in the intercommunicating service.

The wall-brackets of the videointercoms have the **J1** jumper in position of audio privacy (see pages 73, 75, 77, 79 and 80). Defective module for intercommunicating. Faulty timer.

#### The intercommunicating calls does not work.

Faulty timer. Check that the **X1** and **X2** wires are connected correctly. Check the button connections inside the intercoms.

### System with more entrances

#### Entrance A is never activated.

Short circuit between **5** and **6** of the exchanger. Faulty exchanger.

#### Entrance B is never activated.

Short circuit between **3** and **4** of the exchanger. Faulty exchanger. No power supply to **1** and **2** of the exchanger (12Vac; 17÷21Vdc).



# INSTALLATION DIAGRAMS

The following pages show the installation diagrams that are most commonly used in videointercom systems. Upon request ACI Farfisa can supply installation diagrams for configurations that are not included in this manual.

- **Systems with 1 or more main entrances**
- **Systems with 1 or more main entrances and secondary door stations**
- **Systems with private conversation**
- **Intercommunicating systems without external door station**
- **Intercommunicating systems with 1 or more main entrances**
- **Intercommunicating systems with 1 or more main entrances and secondary door stations**
- **Systems with floor-call**
- **Systems with intercommunicating service between intercoms-video intercoms in individual flats**

For a clearer understanding of the diagrams, **the sequence of terminals in each individual article has not been followed**. Only the terminal code (letter and/or number) is valid, not the graphic sequence.  
Terminals with the same letter or number have the same functions.

The items may have more terminals than the ones shown in the installation diagrams. **The excess terminals must not be connected.**

The **installation diagrams** with 1 or more external door stations contained in this technical manual are shown with only one video intercom for every user. Installation can be customised by combining the applications on pages 126 to 148 with the basic diagrams on pages 99 to 123. For more information see page 124 and 125.

The **installation diagrams** shown from page 99 to 119 and on page 123 can also be used for **one-way installations** by connecting only one video intercom, using only one call wire and not using the floor video distributor (the coaxial cable is directly connected to the video intercom bracket).

The **“Telephony” chapter** contains only some video intercom telephone installation diagrams (page 176 to 187) with application diagrams (see pages 188 to 191); many of diagrams contained in the “Video Intercom” chapter can be used following the instructions on page 170. **Mixed video intercom/video intercom telephone systems with video signal connection by means of twisted pair are not possible.**



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## ONE-WAY VIDEO INTERCOM SYSTEM CONNECTED TO ONE EXTERNAL DOOR STATION.

Q.ty	Article	Description
1	<b>PT 5160 + WB 5100</b>	Videointercom FLAT + wall bracket
	<b>PT 5660 + WB 5600 + 1283</b>	Videointercom + wall bracket + back box
	<b>PT 5860 + WB 5600</b>	Videointercom reflex + wall bracket
	<b>PV 1260 + WB1200 + 1283</b>	Videointercom + wall bracket + back box
	<b>PV 2160 + WB 2100</b>	Videointercom FLAT + wall bracket
1	<b>1281</b>	Power supply
1	<b>1382</b>	Timer
1	<b>PA **</b>	Door release button (optional)
1	<b>SE **</b>	Electric door lock (12Vac-1A)

**Mody series external door station**

1	<b>MD72</b>	Back box and module frames
1	<b>MD11</b>	Module for electric door speaker
1	<b>MD82</b>	Hood cover
1	<b>MD92*</b>	Rain shelter
1	<b>MD30</b>	Electric door speaker (amplifier)
1	<b>MD41</b>	Camera

**Matrix series external door station**

1	<b>MA71</b>	Back box and module frames
1	<b>MA61</b>	Front frame
1	<b>MA43</b>	Camera module with integrated audio and call button

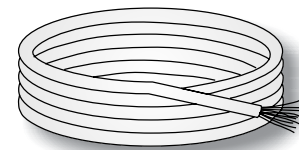
\* The rain shelter is used in the place of the back box and hood cover.

\*\* Articles not supplied by ACI Farfisa.

**Working instructions.** See page 94.

**Notes**

- If the control switching ON is necessary, connect terminal 4 of the timer (dashed wire).
- For the connection of name plate lamps read notes 6 and 7 of the installation instructions on page 91.
- For wires dimensioning refer to the installation instructions and table on page 92.

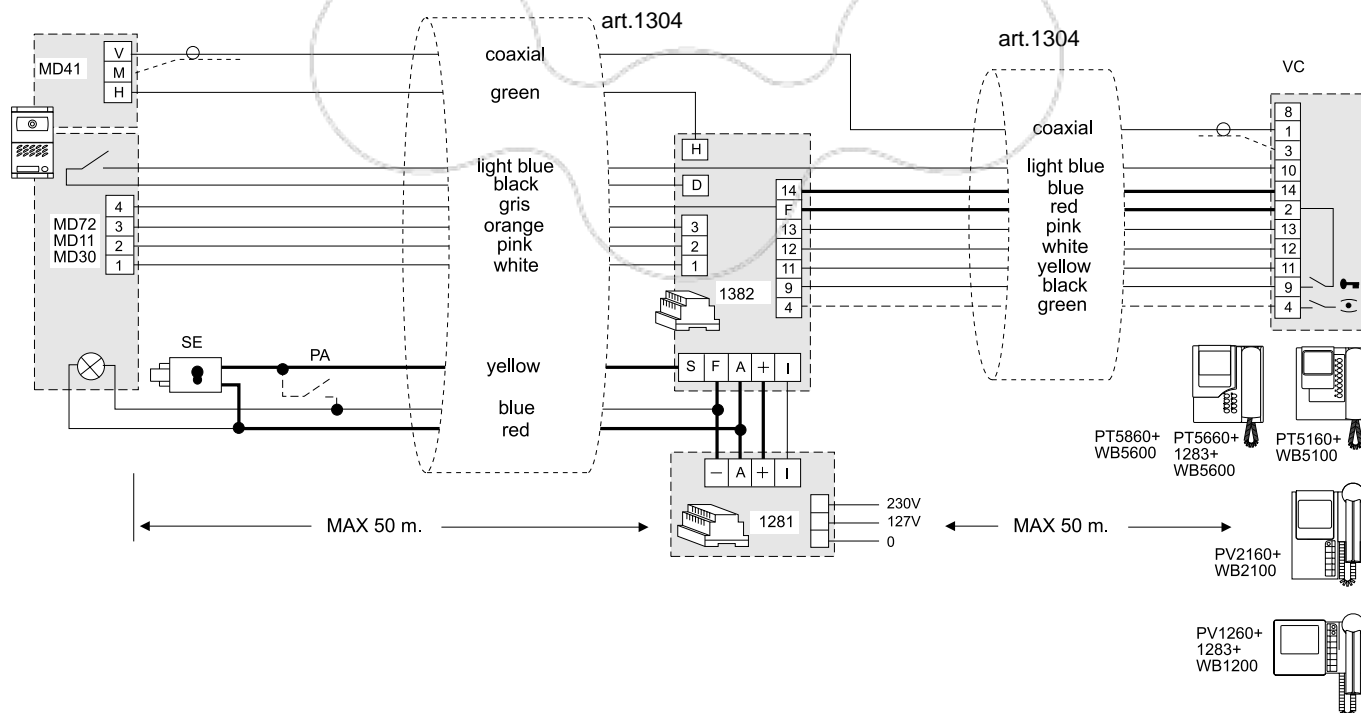
**1304. MULTI-CORE CABLE**

Video intercom cable with 10 wires of different cross-sections and 75Ω coaxial cable. It can be used in systems with a maximum distance of 100 meters (50m between timer and camera unit and 50m between timer and video intercom).

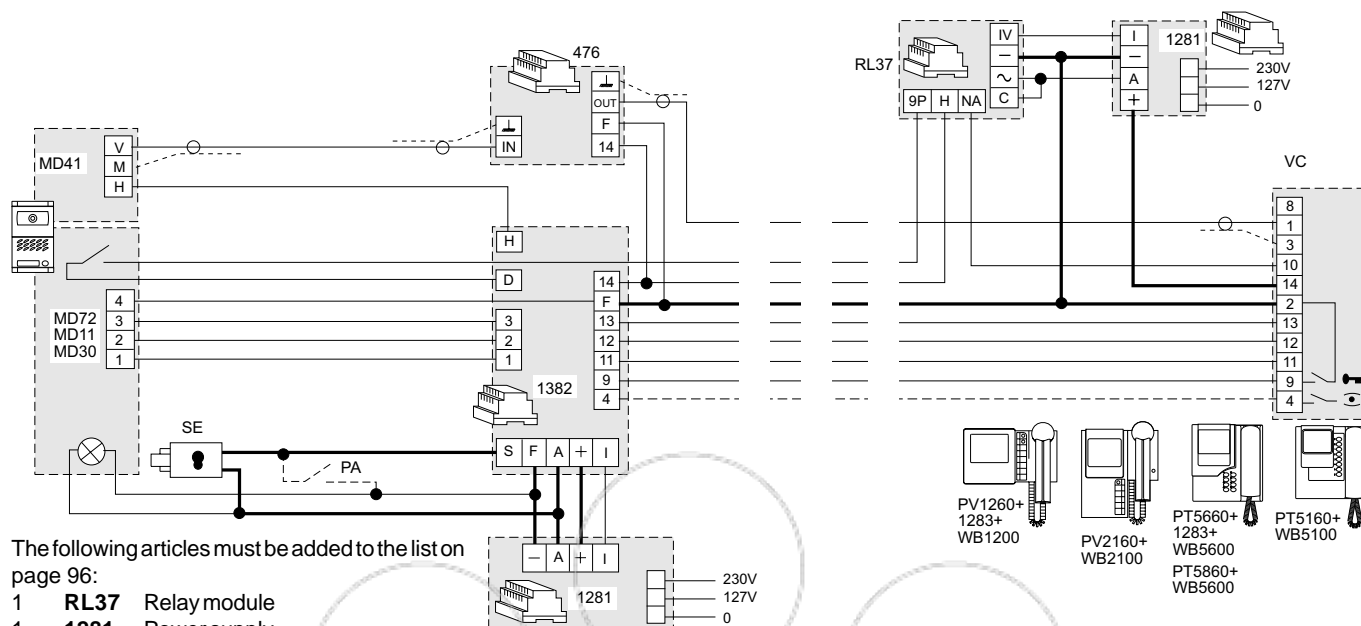
**Wire characteristics**

Colour	Cross-section (mm <sup>2</sup> )
<b>Red</b>	1
<b>Yellow</b>	0.5
<b>Blue</b>	0.5
<b>Black</b>	0.35
<b>Green</b>	0.35
<b>Orange</b>	0.35
<b>White</b>	0.25
<b>Pink</b>	0.25
<b>Light blue</b>	0.25
<b>Grey</b>	0.25

75Ω low loss **coaxial cable**.

**ONE-WAY VIDEO INTERCOM CONNECTION WITH MULTI-CORE CABLE art. 1304**

# One-way video intercom system with long distance between video intercom and main power supply



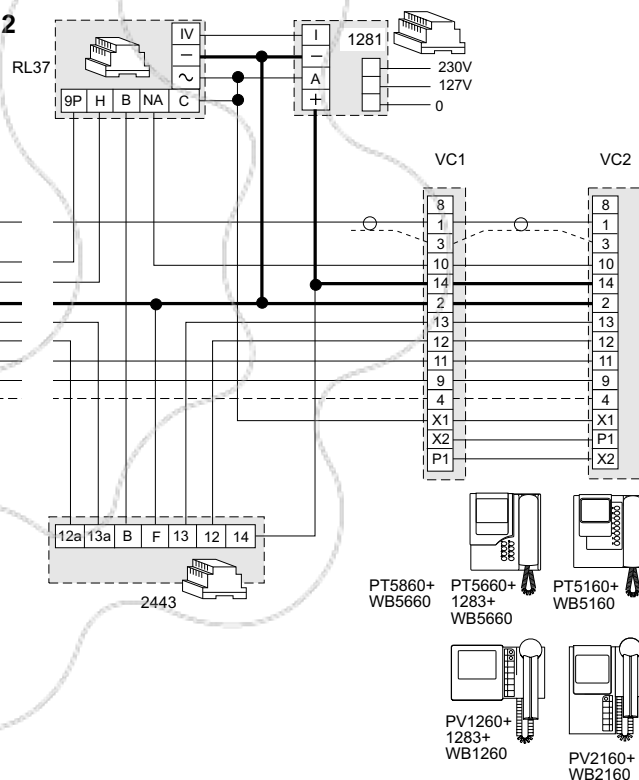
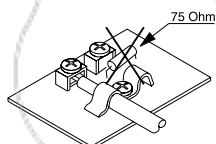
# One-way video intercom system with long distance and 2 intercommunicating intercoms

The following articles must be added to the list on page 96:

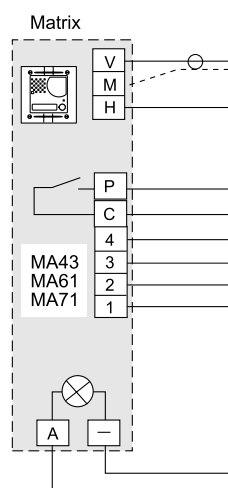
- 1 **RL37** Relay module
- 1 **1281** Power supply
- 1 **476** Video amplifier
- 1 **2443** Amplifier-switcher for intercommunicating

## Notes

- To have the intercommunication system you must:
  - use brackets **WB5160** or **WB5660**;
  - check that the **mobile jumper J1** is in position 1-2.
- On the wall bracket of the first video intercom you must cut the 75Ω resistance.



# Connection with MATRIX series push-button panel



Application of MATRIX push-button panel in one-way installations (pages 96 and 97).



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## VIDEO INTERCOM SYSTEM CONNECTED TO ONE EXTERNAL DOOR STATION

Diagram ref.	Q.ty	Article	Description
VC	...	<b>PT 5160 + WB 5100</b>	Videointercom FLAT + wall bracket
		<b>PT 5660 + WB 5600 + 1283</b>	Videointercom + wall bracket + back box
		<b>PT 5860 + WB 5600</b>	Videointercom reflex + wall bracket
		<b>PV 1260 + WB1200 + 1283</b>	Videointercom + wall bracket + back box
		<b>PV 2160 + WB 2100</b>	Videointercom FLAT + wall bracket
DV	...	<b>DV2-4</b>	Video distributor
AL	1	<b>1281</b>	Power supply
TR	1	<b>1382</b>	Timer
PA	1	<b>**</b>	Door release button (optional)
SE	1	<b>**</b>	Electric door lock (12Vac-1A)

## External door station

**Mody series** (for the composition see pages 82÷85)

		1 row	2 row	
UR	1	<b>MD41</b>	<b>MD41</b>	Camera module
PB	...	<b>MD72-73-74</b>	<b>MD72-73-74</b>	Back boxes and module frames
	1	<b>MD10-11-12</b>	<b>MD10-122-124</b>	Modules for electric door speaker
	...	<b>MD21 ÷ 24</b>	<b>MD222 ÷ 228</b>	Button modules
	...	<b>MD20 - 50</b>	<b>MD20 - 50</b>	Blank and info modules
	1	<b>MD82 ÷ 812</b>	<b>MD82 ÷ 812</b>	Hood covers
	1	<b>MD92 ÷ 912*</b>	<b>MD92 ÷ 912*</b>	Rain shelters
PE	1	<b>MD30</b>	<b>MD30</b>	Electric door speaker (amplifier)

**Matrix series** (for the composition see pages 88÷89)

UR	1	<b>MA42-43</b>	Camera modules with integrated audio amplifier
PB	...	<b>MA20-22-24</b>	Blank and button modules
	...	<b>MA61-62-63</b>	Front frames
	...	<b>MA71-72-73</b>	Back boxes and module frames

... Refers to number of users.

\* The rain shelter is used in the place of the back box and hood cover.

\*\* Articles not supplied by ACI Farfisa.

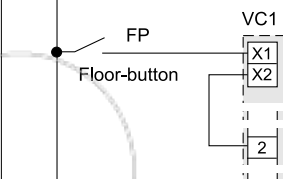
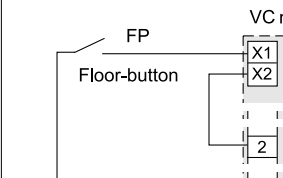
**Working instructions.** See page 94.**Notes**

- If the control switching ON is necessary, connect terminal 4 of the timer (dashed wire).
- For the connection of name plate lamps read notes 6, 7 and 8 of the installation instructions on page 91.
- For wires dimensioning and video connection refer to the installation instructions and table on pages 91÷93.

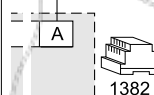
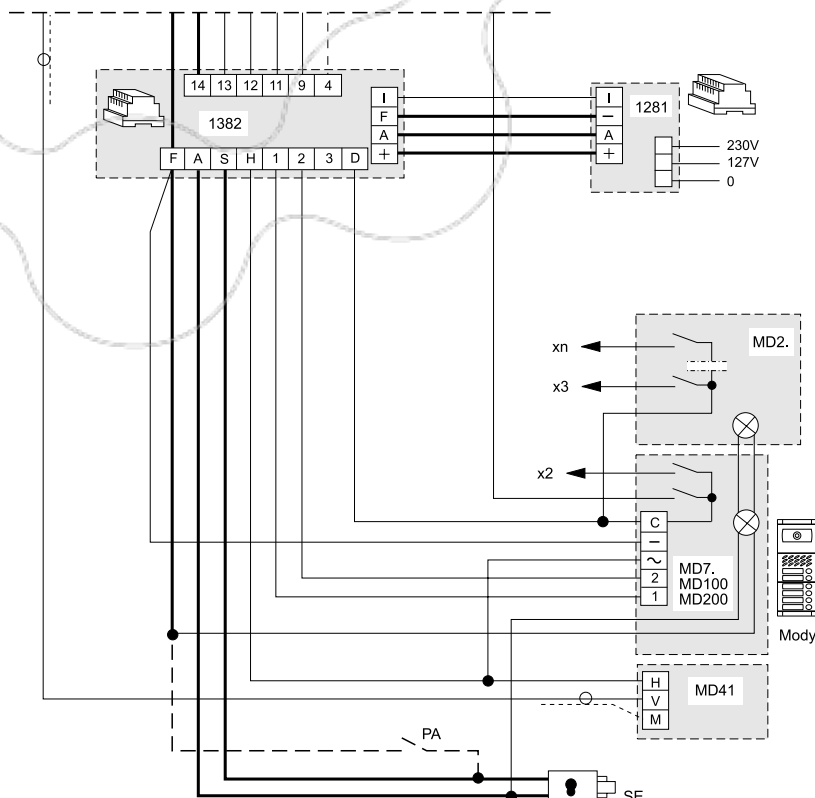
When using **MD100** and **MD200** amplified external door stations, it is advisable to place this diagram on the diagram of page 99 and line it up with the riser. For AC powered wires refer to the indications on page 91.

**Floor-call**

This working diagram allows for differentiating the floor-call from the call from the push-button panel.



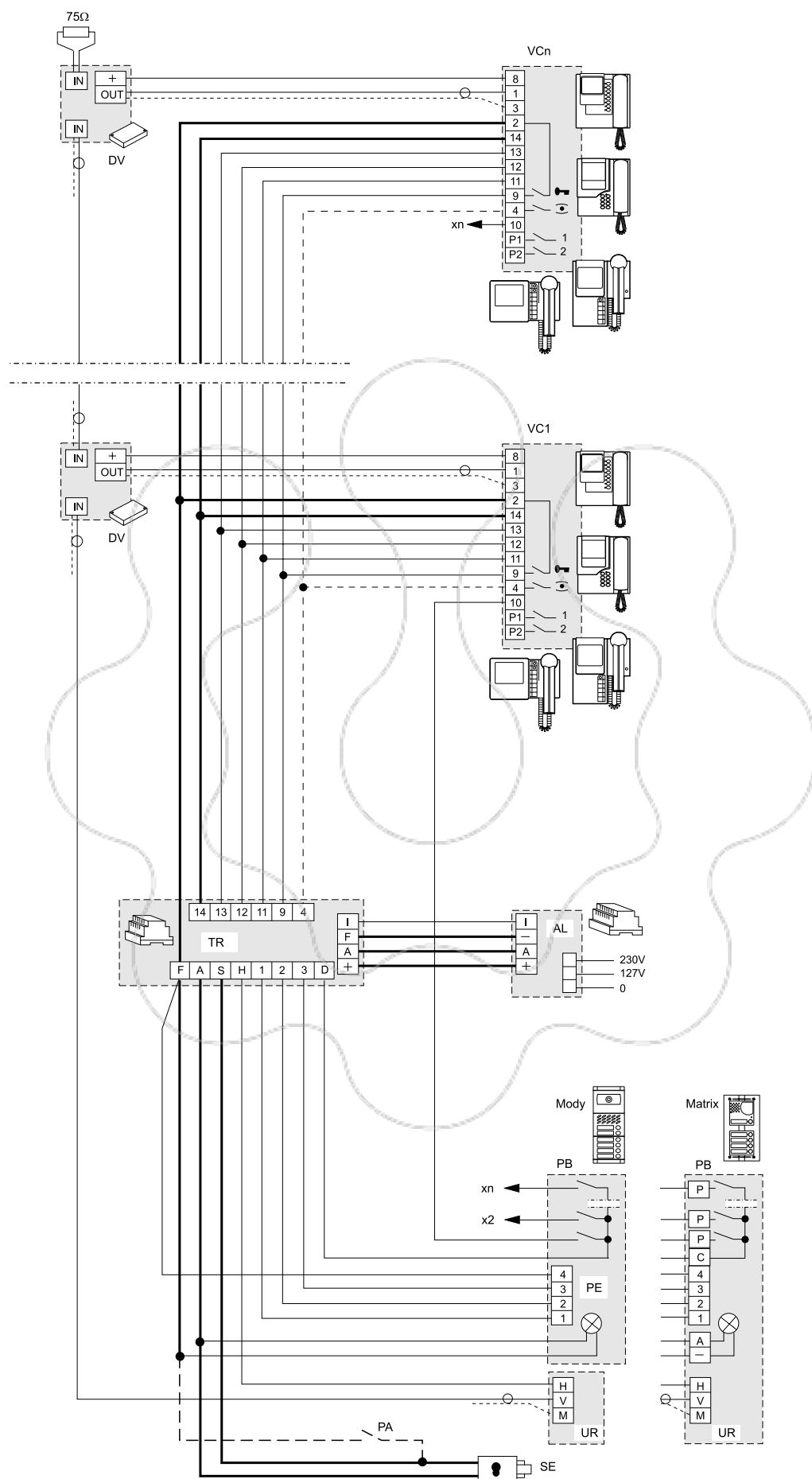
Use expandable fixing brackets WB5160, WB5660, WB1260, WB2160.

**Application of MD100 and MD200 modules in one and multiway systems**

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## VIDEO INTERCOM SYSTEM CONNECTED TO ONE EXTERNAL DOOR STATION



## MIXED INTERCOM AND VIDEO INTERCOM SYSTEM CONNECTED TO ONE EXTERNAL DOOR STATION

Diagram ref.	Q.ty	Article	Description
VC	...	<b>PT 5160 + WB 5100</b>	Videointercom FLAT + wall bracket
		<b>PT 5660 + WB 5600 + 1283</b>	Videointercom + wall bracket + back box
		<b>PT 5860 + WB 5600</b>	Videointercom reflex + wall bracket
		<b>PV 1260 + WB1200 + 1283</b>	Videointercom + wall bracket + back box
		<b>PV 2160 + WB 2100</b>	Videointercom FLAT + wall bracket
CT	...	<b>PT510</b>	Intercom
		<b>PT520</b>	Intercom
SM	...	<b>SM50</b>	Private conversation module
DV	...	<b>DV2-4</b>	Video distributor
AL	1	<b>1281</b>	Power supply
TR	1	<b>1382</b>	Timer
PA	1	<b>**</b>	Door release button (optional)
SE	1	<b>**</b>	Electric door lock (12Vac-1A)

## External door station

**Mody series** (for the composition see pages 82÷85)

		1 row	2 row	
UR	1	<b>MD41</b>	<b>MD41</b>	Camera module
PB	...	<b>MD72-73-74</b>	<b>MD72-73-74</b>	Back boxes and module frames
	1	<b>MD10-11-12</b>	<b>MD10-122-124</b>	Modules for electric door speaker
	...	<b>MD21 ÷ 24</b>	<b>MD222 ÷ 228</b>	Button modules
	...	<b>MD20 - 50</b>	<b>MD20 - 50</b>	Blank and info modules
	1	<b>MD82 ÷ 812</b>	<b>MD82 ÷ 812</b>	Hood covers
	1	<b>MD92 ÷ 912*</b>	<b>MD92 ÷ 912*</b>	Rain shelters
PE	1	<b>MD30</b>	<b>MD30</b>	Electric door speaker (amplifier)

**Matrix series** (for the composition see pages 88÷89)

UR	1	<b>MA42-43</b>	Camera modules with integrated audio amplifier
PB	...	<b>MA20-22-24</b>	Blank and button modules
	...	<b>MA61-62-63</b>	Frontframes
	...	<b>MA71-72-73</b>	Back boxes and module frames

... Refers to number of users.

\* The rain shelter is used in the place of the back box and hood cover.

\*\* Articles not supplied by ACI Farfisa.

## Working instructions

It is similar to the basic system described on page 94, but with the following variations:

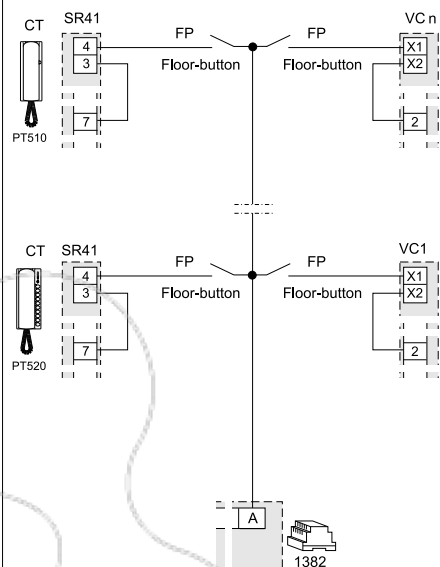
- from the intercom the user has about 40 seconds to answer by lifting the handset and therefore can speak for an unlimited time with video privacy towards the other users. By replacing the handset the system shuts itself OFF.

## Notes

- If the control switching ON is necessary, connect terminal 4 of the timer (dashed wire).
- If no private conversation feature is required, all intercoms in the "Intercom" chapter can be used.
- For the connection of name plate lamps read notes 6, 7 and 8 of the installation instructions on page 91.
- For wires dimensioning and video connection refer to the installation instructions and table on pages 91÷93.

## Floor-call for mixed intercom and video-intercom systems

This working diagram allows for differentiating the floor-call from the call from the push-button panel.



Use expandable fixing brackets WB5160, WB5660, WB1260, WB2160. Insert buzzer SR41 in intercoms with or without private conversation feature.

## Application of MD100 and MD200 modules

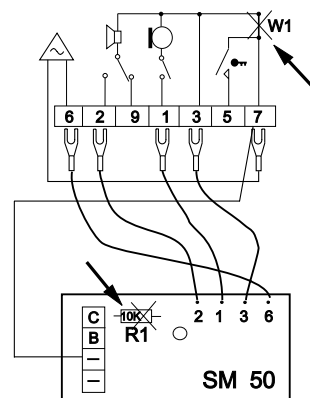
When using **MD100** and **MD200** amplified external door stations, it is recommended to combine the diagram on page 98 with diagram on page 101 by aligning it to the riser. For wires with alternate power supply refer to directions on page 91.

## Private conversation

In video intercoms the private conversation feature is permitted by the **jumper J1 (position 2-3)** located on the fixing bracket. In intercoms you must:

- insert the private conversation module art. **SM50**;
- **to cut the jumper W1** that links the terminals 3 and 7.
- **move the connection** of the buzzer from terminal 3 to 7.
- make the connection between terminal 7 of the intercom and the - (minus) of the privacy module.

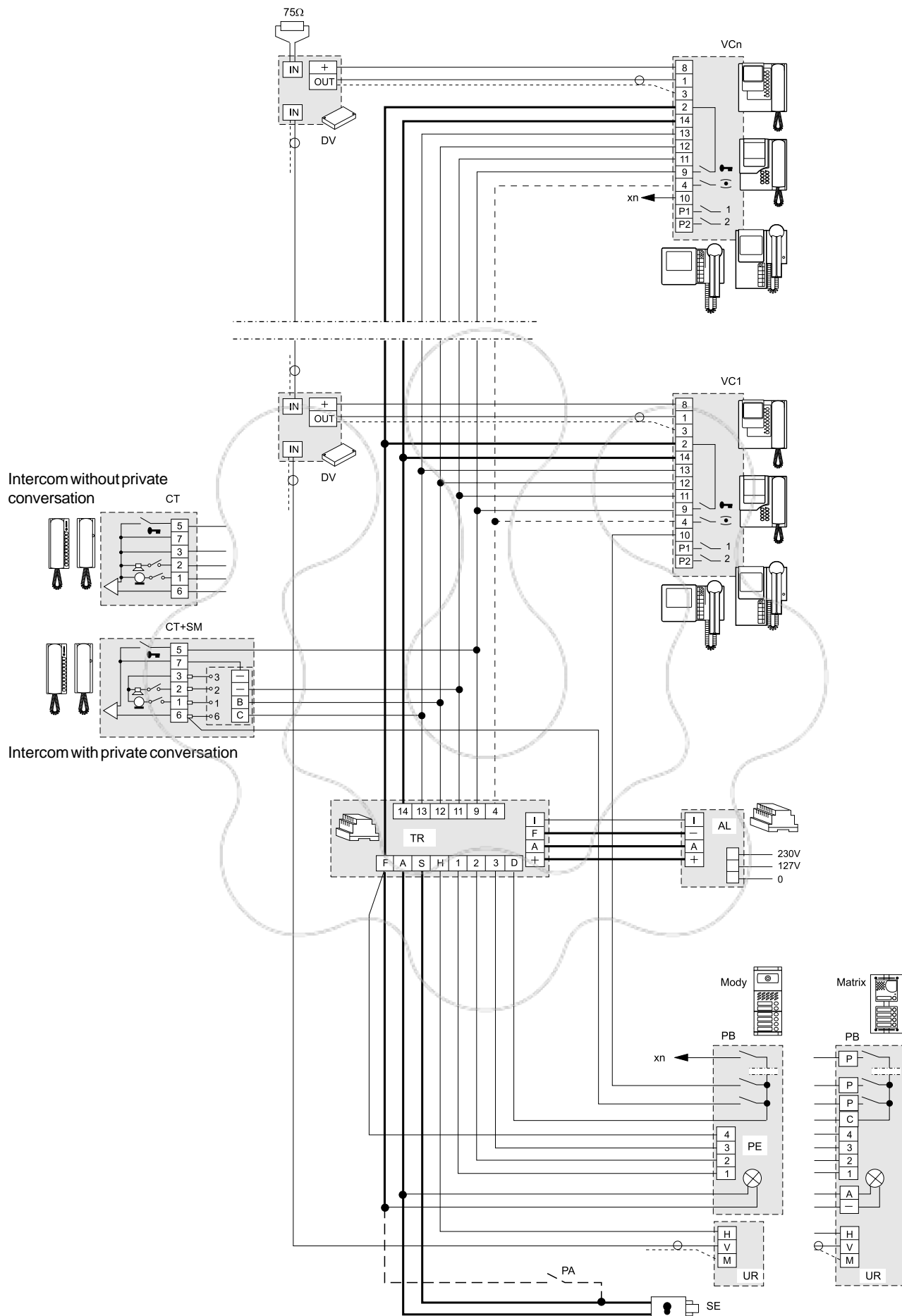
**Cut the resistance R1** in all of the privacy modules.



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## MIXED INTERCOM AND VIDEO INTERCOM SYSTEM CONNECTED TO ONE EXTERNAL DOOR STATION



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## VIDEO INTERCOM SYSTEM CONNECTED TO ONE EXTERNAL DOOR STATION WITH SURVEILLANCE CAMERA

Diagram ref.	Q.ty	Article	Description
VC	...	<b>PT 5160 + WB 5100</b>	Videointercom FLAT + wall bracket
		<b>PT 5660 + WB 5600 + 1283</b>	Videointercom + wall bracket + back box
		<b>PT 5860 + WB 5600</b>	Videointercom reflex + wall bracket
		<b>PV 1260 + WB1200 + 1283</b>	Videointercom + wall bracket + back box
		<b>PV 2160 + WB 2100</b>	Videointercom FLAT + wall bracket
DV	...	<b>DV2-4</b>	Video distributor
AL	1	<b>1281</b>	Power supply
TR	1	<b>1382</b>	Timer
IN	1	<b>1471</b>	Relay unit (optional)
TVT	1	<b>TVT...</b>	CCTV camera
H	1	<b>H...</b>	Lens with or without autoiris
CU	1	<b>CU...</b>	Outdoor heated housing
AST	1	<b>AST...</b>	Bracket for camera or housing
APS	1	<b>APS...</b>	Power supply for camera
LL	1	<b>**</b>	Lamp with maximum power 800W (optional)
PA	1	<b>**</b>	Door release button (optional)
SE	1	<b>**</b>	Electric door lock (12Vac-1A)

## External door station

**Mody series** (for the composition see pages 82÷85)

		1 row	2 row	
PB	...	<b>MD72-73-74</b>	<b>MD72-73-74</b>	Back boxes and module frames
	1	<b>MD10-11-12</b>	<b>MD10-122-124</b>	Modules for electric door speaker
	...	<b>MD21 ÷ 24</b>	<b>MD222 ÷ 228</b>	Button modules
	...	<b>MD20 - 50</b>	<b>MD20 - 50</b>	Blank and info modules
	1	<b>MD82 ÷ 812</b>	<b>MD82 ÷ 812</b>	Hood covers
PE	1	<b>MD92 ÷ 912*</b>	<b>MD92 ÷ 912*</b>	Rain shelters
	1	<b>MD30</b>	<b>MD30</b>	Electric door speaker (amplifier)

**Matrix series** (for the composition see pages 88÷89)

PB	...	<b>MA20-22-24</b>	Blank and button modules
	...	<b>MA61-62-63</b>	Front frames
	...	<b>MA71-72-73</b>	Back boxes and module frames
PE	1	<b>MA10P ÷ 12P</b>	Modules with integrated audio amplifier

... Refers to number of users.

\* The rain shelter is used in the place of the back box and hood cover.

\*\* Articles not supplied by ACI Farfisa.

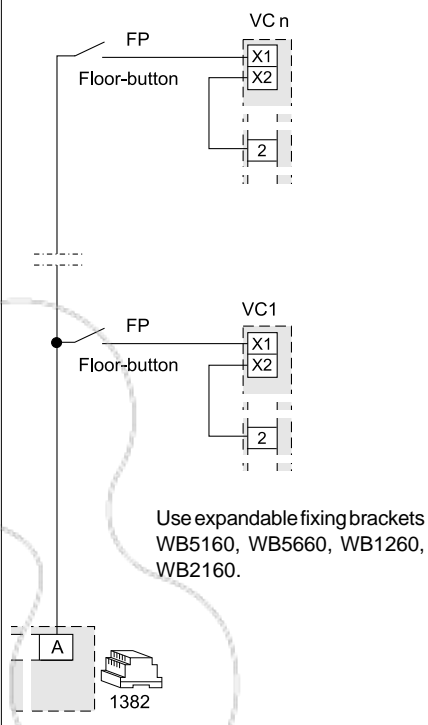
**Working instructions.** See page 94.

## Notes

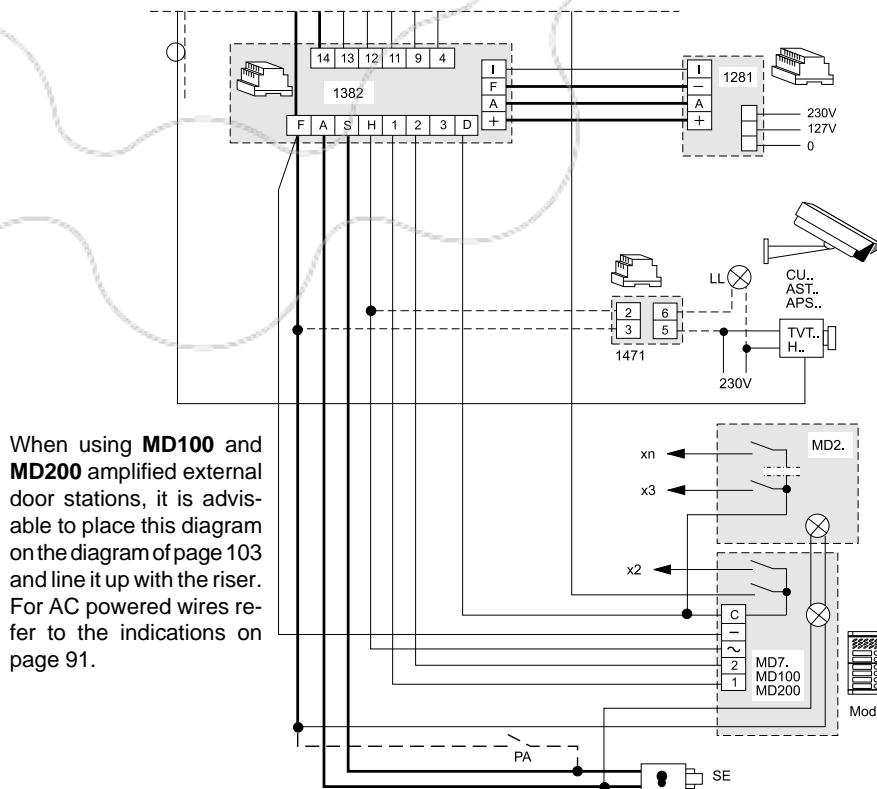
- If the control switching ON is necessary, connect terminal 4 of the timer (dashed wire).
- For the connection of name plate lamps read notes 6, 7 and 8 of the installation instructions on page 91.
- For wires dimensioning and video connection refer to the installation instructions and table on pages 91÷93.
- For **one-way systems** connect the coaxial cable to the monitor bracket directly, without using the DV video distributor.
- For the selection of CCTV equipment see the general catalogue.

## Floor-call

This working diagram allows for differentiating the floor-call from the call from the push-button panel.



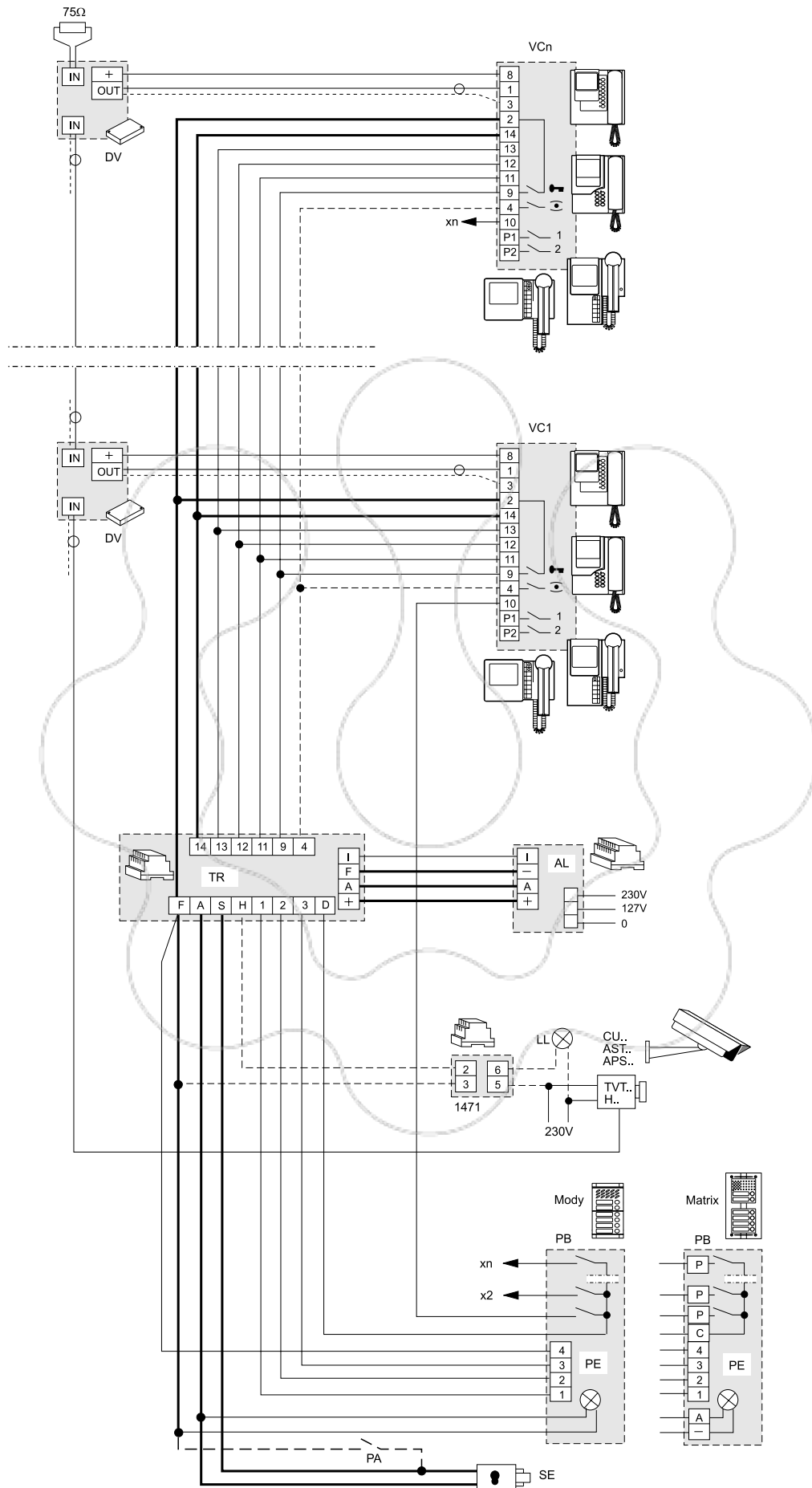
## Application of MD100 and MD200 modules in one and multiway systems



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## VIDEO INTERCOM SYSTEM CONNECTED TO ONE EXTERNAL DOOR STATION WITH SURVEILLANCE CAMERA



INTERCOMS

\* VIDEOINTERCOMS

\* TELECOMMUNICATION



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## VIDEO INTERCOM SYSTEM CONNECTED TO TWO EXTERNAL DOOR STATIONS

Diagram ref.	Q.ty	Article	Description
VC	...	<b>PT 5160 + WB 5100</b>	Videointercom FLAT + wall bracket
		<b>PT 5660 + WB 5600 + 1283</b>	Videointercom + wall bracket + back box
		<b>PT 5860 + WB 5600</b>	Videointercom reflex + wall bracket
		<b>PV 1260 + WB1200 + 1283</b>	Videointercom + wall bracket + back box
		<b>PV 2160 + WB 2100</b>	Videointercom FLAT + wall bracket
DV	...	<b>DV2-4</b>	Video distributor
AL	1	<b>1281</b>	Power supply
TR	1	<b>1382</b>	Timer
DS	1	<b>1273TV</b>	Exchanger
PA	2	<b>**</b>	Door release button (optional)
SE	2	<b>**</b>	Electric door lock (12Vac-1A)

## External door station

**Mody series** (for the composition see pages 82÷85)

		1 row	2 row	
UR	2	<b>MD41</b>	<b>MD41</b>	Camera module
PB	...	<b>MD72-73-74</b>	<b>MD72-73-74</b>	Back boxes and module frames
	2	<b>MD10-11-12</b>	<b>MD10-12-124</b>	Modules for electric door speaker
	...	<b>MD21 ÷ 24</b>	<b>MD222 ÷ 228</b>	Button modules
	...	<b>MD20 - 50</b>	<b>MD20 - 50</b>	Blank and info modules
	2	<b>MD82 ÷ 812</b>	<b>MD82 ÷ 812</b>	Hood covers
	2	<b>MD92 ÷ 912*</b>	<b>MD92 ÷ 912*</b>	Rain shelters
PE	2	<b>MD30</b>	<b>MD30</b>	Electric door speaker

**Matrix series** (for the composition see pages 88÷89)

UR	2	<b>MA42-43</b>	Camera modules with integrated audio amplifier
PB	...	<b>MA20-22-24</b>	Blank and button modules
	...	<b>MA61-62-63</b>	Front frames
	...	<b>MA71-72-73</b>	Back boxes and module frames

... Refers to number of users.

\* The rain shelter is used in the place of the back box and hood cover.

\*\* Articles not supplied by ACI Farfisa.

## Notes

- To have the control switch ON for the 2 video entrances it is necessary to make the dashed line connections and use **WB5160, WB5660, WB2160, WB1260** wall brackets. The wall brackets are configured to work without the audio privacy, to restore it the **jumper J1** must be moved (see pages 73, 75, 77, 79 and 80).
- For the connection of name plate lamps read notes 6, 7 and 8 of the installation instructions on page 91.
- For wires dimensioning and video connection refer to the installation instructions and table on pages 91÷93.
- For **one-way systems** connect the coaxial cable to the monitor bracket directly, without using the **DV** video distributor.

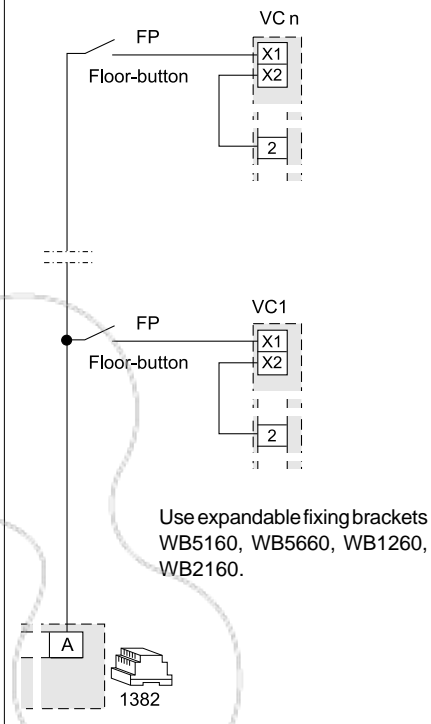
## Working instructions

It is similar to the basic system described on page 94, but with the following variations:

- The audio-video operations and the door lock release are automatically switched at the time of the call or with the control switch ON.

## Floor-call

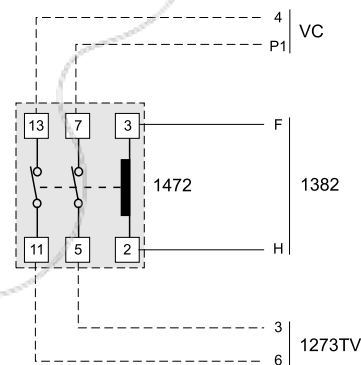
This working diagram allows for differentiating the floor-call from the call from the push-button panel.



## Control switching ON deactivation

To activate the control switching ON from the videointercoms only when the system is in standby, it is necessary to install a 2-exchange relay (type **1472**) and connect it as shown on the diagram.

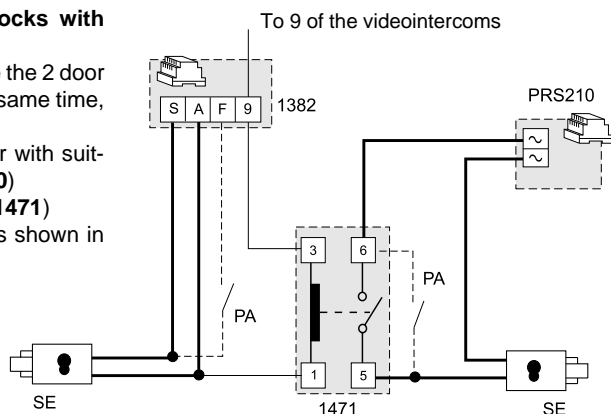
VC is a reference on the diagrams



## Connection of 2 door locks with simultaneous opening

If it is necessary to operate the 2 door locks of the system at the same time, you must:

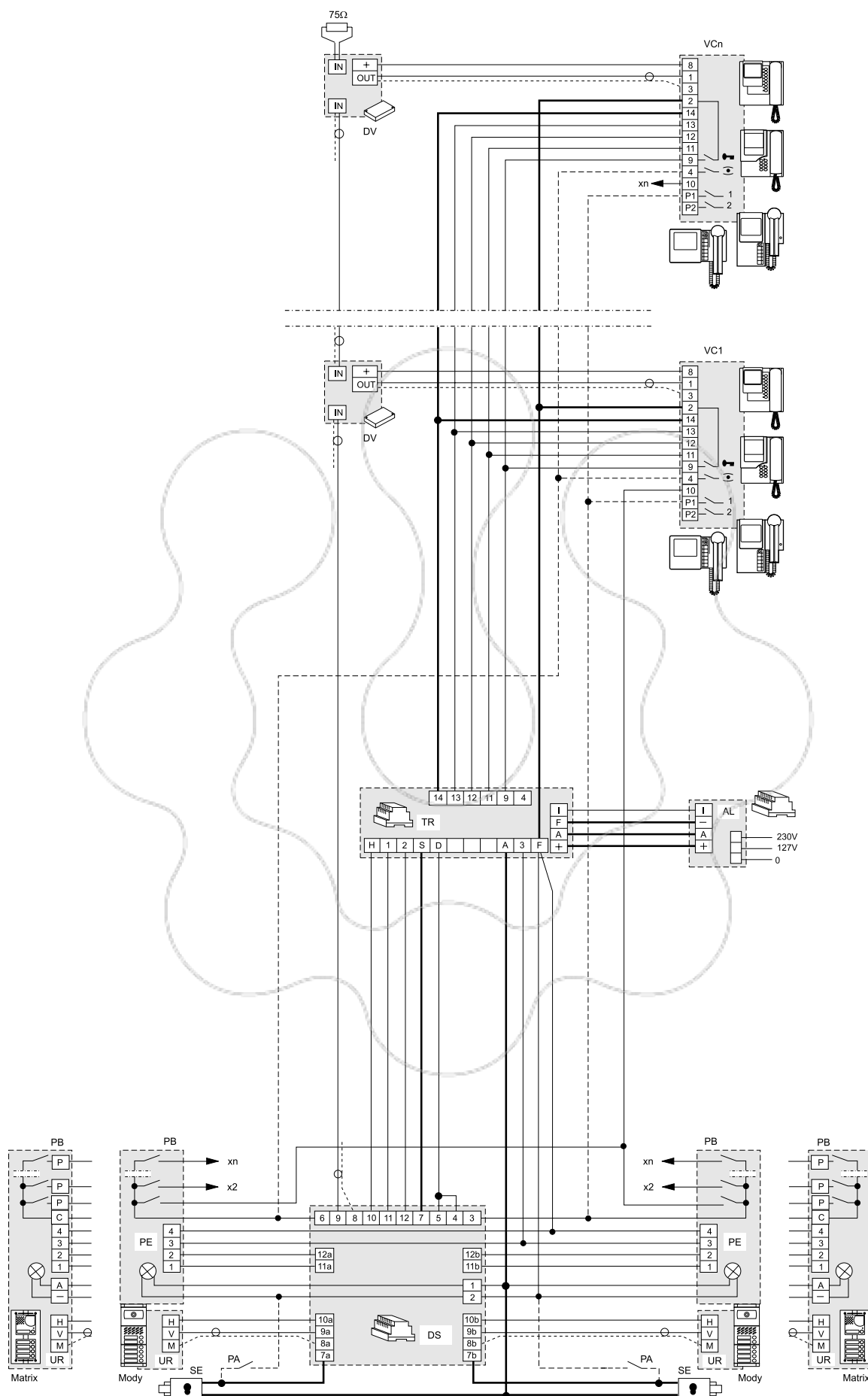
- add a 12Vac transformer with suitable power (type **PRS210**)
- add a 12Vac relay (type **1471**)
- make the connections as shown in the diagram below.



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## VIDEO INTERCOM SYSTEM CONNECTED TO TWO EXTERNAL DOOR STATIONS



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## VIDEO INTERCOM SYSTEM CONNECTED TO TWO EXTERNAL DOOR STATIONS, ONE OF WHICH ONLY AUDIO

Diagram ref. Q.ty Article

Description

VC	...	<b>PT 5160 + WB 5100</b>	Videointercom FLAT + wall bracket
		<b>PT 5660 + WB 5600 + 1283</b>	Videointercom + wall bracket + back box
		<b>PT 5860 + WB 5600</b>	Videointercom reflex + wall bracket
		<b>PV 1260 + WB1200 + 1283</b>	Videointercom + wall bracket + back box
		<b>PV 2160 + WB 2100</b>	Videointercom FLAT + wall bracket
DV	...	<b>DV2-4</b>	Video distributor
AL	1	<b>1281</b>	Power supply
TR	1	<b>1382</b>	Timer
DS	1	<b>1473</b>	Exchanger
PA	2	<b>**</b>	Door release button (optional)
SE	2	<b>**</b>	Electric door lock (12Vac-1A)

## External door station

**Mody series** (for the composition see pages 82÷85)

		1 row	2 row	
UR	1	<b>MD41</b>	<b>MD41</b>	Camera module
PB	...	<b>MD72-73-74</b>	<b>MD72-73-74</b>	Back boxes and module frames
	2	<b>MD10-11-12</b>	<b>MD10-12-124</b>	Modules for electric door speaker
	...	<b>MD21 ÷ 24</b>	<b>MD222 ÷ 228</b>	Button modules
	...	<b>MD20 - 50</b>	<b>MD20 - 50</b>	Blank and info modules
	2	<b>MD82 ÷ 812</b>	<b>MD82 ÷ 812</b>	Hood covers
	2	<b>MD92 ÷ 912*</b>	<b>MD92 ÷ 912*</b>	Rain shelters
PE	2	<b>MD30</b>	<b>MD30</b>	Electric door speaker (amplifier)

**Matrix series** (for the composition see pages 88÷89)

UR	1	<b>MA42-43</b>	Camera modules with integrated audio amplifier
PE	1	<b>MA10P÷MA12P</b>	Modules with integrated audio
PB	...	<b>MA20-22-24</b>	Blank and button modules
	...	<b>MA61-62-63</b>	Front frames
	...	<b>MA71-72-73</b>	Back boxes and module frames

... Refers to number of users.

\* The rain shelter is used in the place of the back box and hood cover.

\*\* Articles not supplied by ACI Farfisa.

## Notes

- If the control switching ON is necessary, connect terminal 4 of the timer (dashed wire).
- For the connection of name plate lamps read notes 6, 7 and 8 of the installation instructions on page 91.
- For wires dimensioning and video connection refer to the installation instructions and table on pages 91÷93.
- For **one-way systems** connect the coaxial cable to the monitor bracket directly, without using the DV video distributor.

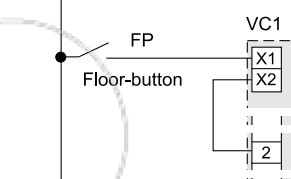
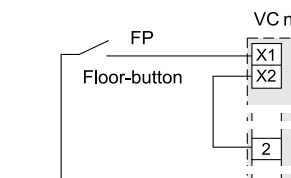
## Working instructions

It is similar to the basic system described on page 94, but with the following variations:

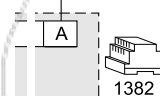
- Carrying out a call from the entrance only audio, the corresponding monitor turns itself ON without images.
- The audio-video operations and the door lock release are automatically switched at the time of the call or with the control switch ON.

## Floor-call

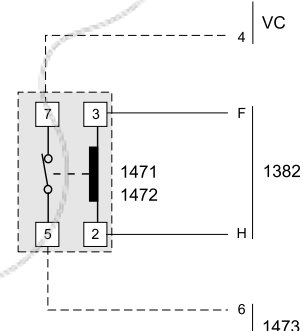
This working diagram allows for differentiating the floor-call from the call from the push-button panel.



Use expandable fixing brackets WB5160, WB5660, WB1260, WB2160.



## Control switching ON deactivation

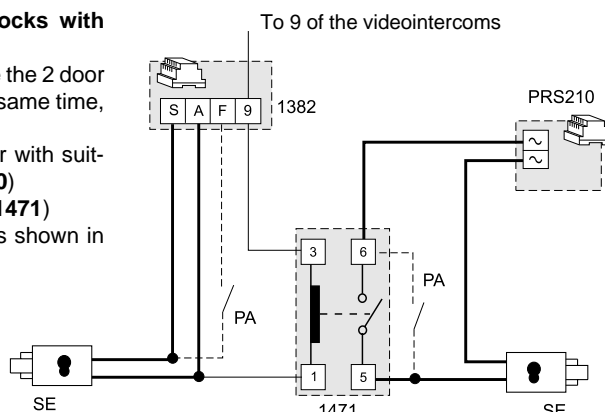
To activate the control switching ON from the videointercoms only when the system is in standby, it is necessary to install a relay (type **1471** or **1472**) and connect it as shown on the diagram.

VC is a reference on the diagrams

## Connection of 2 door locks with simultaneous opening

If it is necessary to operate the 2 door locks of the system at the same time, you must:

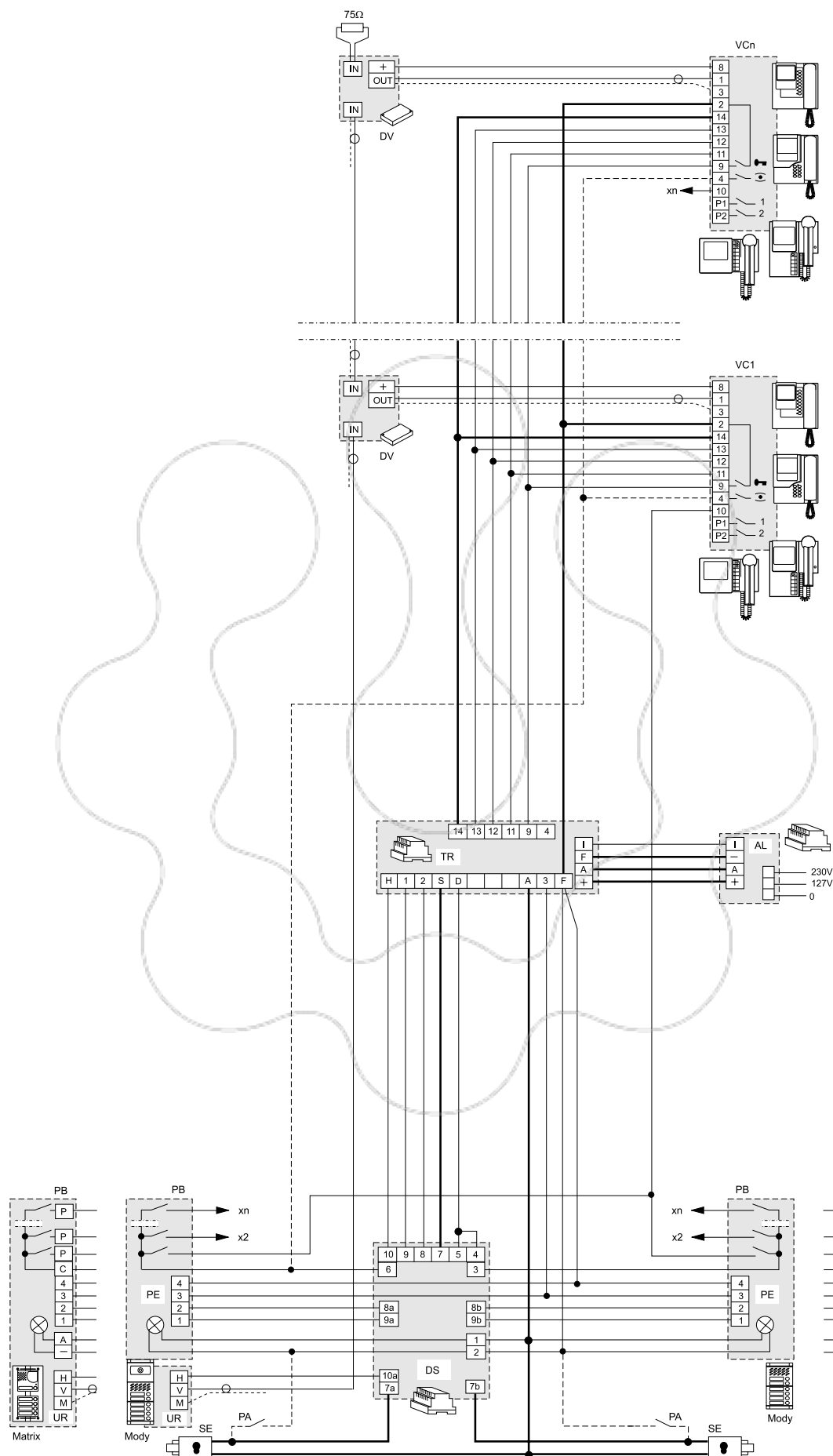
- add a 12Vac transformer with suitable power (type **PRS210**)
- add a 12Vac relay (type **1471**)
- make the connections as shown in the diagram below.



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## VIDEO INTERCOM SYSTEM CONNECTED TO TWO EXTERNAL DOOR STATIONS, ONE OF WHICH ONLY AUDIO



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\* VIDEOINTERCOMS

\* TELECOMMUNICATION



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# VIDEO INTERCOM SYSTEM CONNECTED TO THREE EXTERNAL DOOR STATIONS

Diagram ref.	Q.ty	Article	Description
VC	...	<b>PT 5160 + WB 5100</b>	Videointercom FLAT + wall bracket
		<b>PT 5660 + WB 5600 + 1283</b>	Videointercom + wall bracket + back box
		<b>PT 5860 + WB 5600</b>	Videointercom reflex + wall bracket
		<b>PV 1260 + WB1200 + 1283</b>	Videointercom + wall bracket + back box
		<b>PV 2160 + WB 2100</b>	Videointercom FLAT + wall bracket
DV	...	<b>DV2-4</b>	Video distributor
AL	1	<b>1281</b>	Power supply
TR	1	<b>1382</b>	Timer
DS	2	<b>1273TV</b>	Exchanger
PA	3	<b>**</b>	Door release button (optional)
SE	3	<b>**</b>	Electric door lock (12Vac-1A)

## External door station

**Mody series** (for the composition see pages 82÷85)

		1 row	2 row	
UR	3	<b>MD41</b>	<b>MD41</b>	Camera module
PB	...	<b>MD72-73-74</b>	<b>MD72-73-74</b>	Back boxes and module frames
	3	<b>MD10-11-12</b>	<b>MD10-122-124</b>	Modules for electric door speaker
	...	<b>MD21 ÷ 24</b>	<b>MD222 ÷ 228</b>	Button modules
	...	<b>MD20 - 50</b>	<b>MD20 - 50</b>	Blank and info modules
	3	<b>MD82 ÷ 812</b>	<b>MD82 ÷ 812</b>	Hood covers
	3	<b>MD92 ÷ 912*</b>	<b>MD92 ÷ 912*</b>	Rain shelters
PE	3	<b>MD30</b>	<b>MD30</b>	Electric door speaker (amplifier)

**Matrix series** (for the composition see pages 88÷89)

UR	3	<b>MA42-43</b>	Camera modules with integrated audio amplifier
PB	...	<b>MA20-22-24</b>	Blank and button modules
	...	<b>MA61-62-63</b>	Front frames
	...	<b>MA71-72-73</b>	Back boxes and module frames

... Refers to number of users.

\* The rain shelter is used in the place of the back box and hood cover.

\*\* Articles not supplied by ACI Farfisa.

## Notes

- To have the control switch ON for the 3 video entrances it is necessary to make the dashed line connections and use **WB5160, WB5660, WB2160, WB1260** wall brackets. The wall brackets are configured to work without the audio privacy, to restore it the **jumper J1** must be moved (see pages 73, 75, 77, 79 and 80).
- For the connection of name plate lamps read notes 6, 7 and 8 of the installation instructions on page 91.
- For wires dimensioning and video connection refer to the installation instructions and table on pages 91÷93.
- For **one-way systems** connect the coaxial cable to the monitor bracket directly, without using the **DV** video distributor.

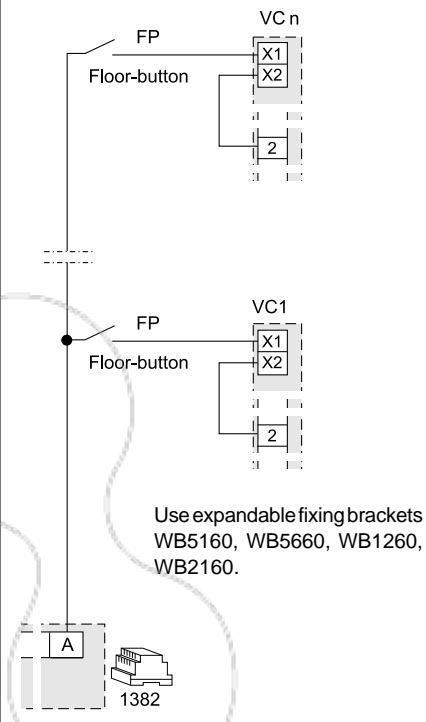
## Working instructions

It is similar to the basic system described on page 94, but with the following variations:

- The audio-video operations and the door lock release are automatically switched at the time of the call or with the control switch ON.

## Floor-call

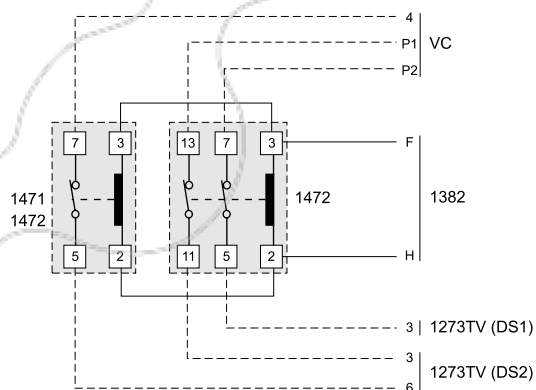
This working diagram allows for differentiating the floor-call from the call from the push-button panel.



## Control switching ON deactivation

To activate the control switching ON from the videointercoms only when the system is in standby, it is necessary to install a 2-exchange relay (type **1472**) and connect it as shown on the diagram.

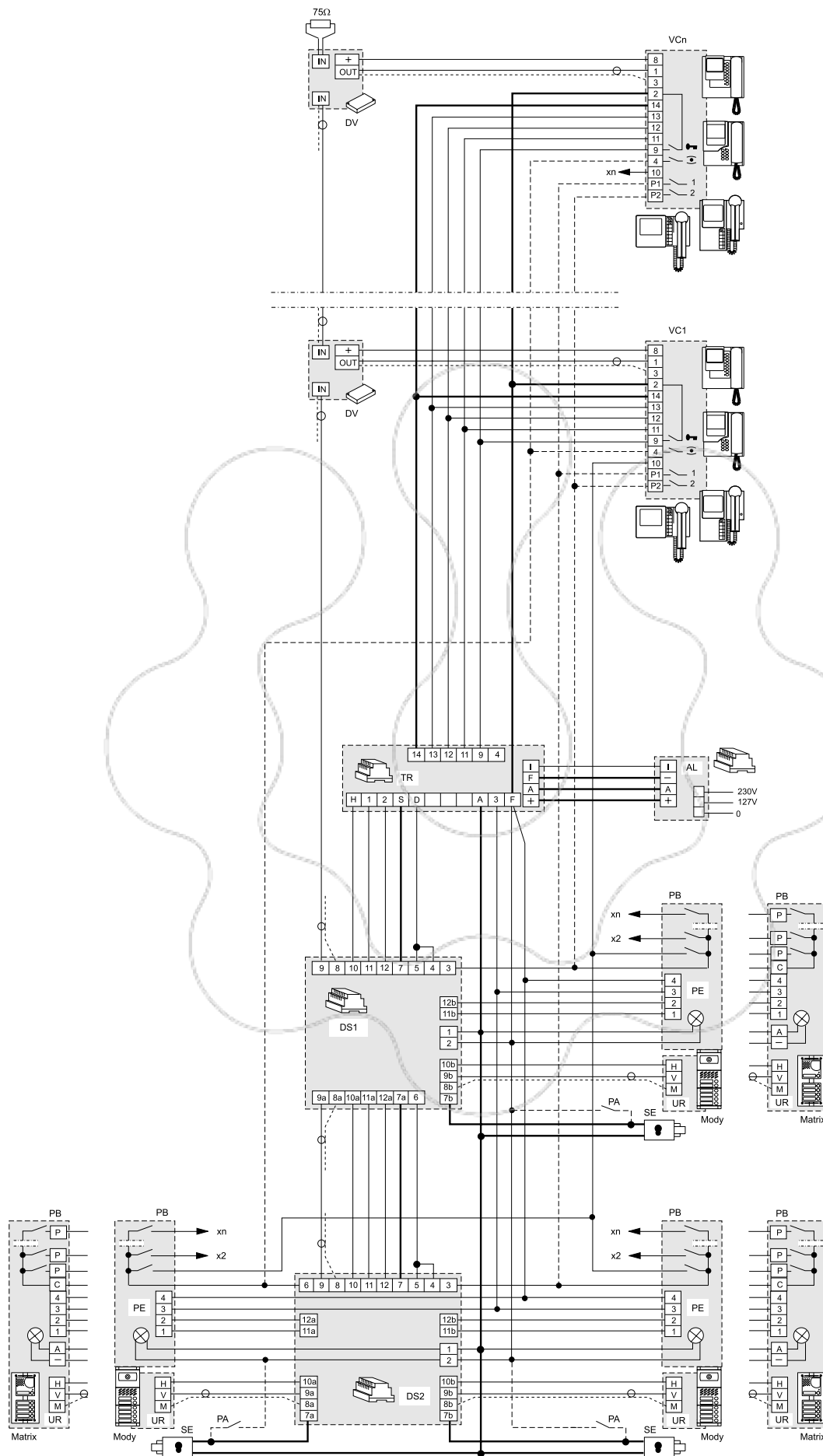
VC, DS1 and DS2 are a reference on the diagrams



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## VIDEO INTERCOM SYSTEM CONNECTED TO THREE EXTERNAL DOOR STATIONS



## VIDEO INTERCOM SYSTEM CONNECTED TO THREE EXTERNAL DOOR STATIONS, ONE OF WHICH ONLY AUDIO

Diagram ref.	Q.ty	Article	Description
VC	...	<b>PT 5160 + WB 5100</b>	Videointercom FLAT + wall bracket
		<b>PT 5660 + WB 5600 + 1283</b>	Videointercom + wall bracket + back box
		<b>PT 5860 + WB 5600</b>	Videointercom reflex + wall bracket
		<b>PV 1260 + WB1200 + 1283</b>	Videointercom + wall bracket + back box
		<b>PV 2160 + WB 2100</b>	Videointercom FLAT + wall bracket
DV	...	<b>DV2-4</b>	Video distributor
AL	1	<b>1281</b>	Power supply
TR	1	<b>1382</b>	Timer
DS1	1	<b>1473</b>	Exchanger
DS2	1	<b>1273TV</b>	Exchanger
PA	3	**	Door release button (optional)
SE	3	**	Electric door lock (12Vac-1A)

## External door station

**Mody series** (for the composition see pages 82÷85)

		1 row	2 row	
UR	2	<b>MD41</b>	<b>MD41</b>	Camera module
PB	...	<b>MD72-73-74</b>	<b>MD72-73-74</b>	Back boxes and module frames
	3	<b>MD10-11-12</b>	<b>MD10-122-124</b>	Modules for electric door speaker
	...	<b>MD21 ÷ 24</b>	<b>MD222 ÷ 228</b>	Button modules
	...	<b>MD20 - 50</b>	<b>MD20 - 50</b>	Blank and info modules
	3	<b>MD82 ÷ 812</b>	<b>MD82 ÷ 812</b>	Hood covers
	3	<b>MD92 ÷ 912*</b>	<b>MD92 ÷ 912*</b>	Rain shelters
PE	3	<b>MD30</b>	<b>MD30</b>	Electric door speaker (amplifier)

**Matrix series** (for the composition see pages 88÷89)

UR	2	<b>MA42-43</b>	Camera modules with integrated audio amplifier
PE	1	<b>MA10P÷12P</b>	Modules with integrated audio
PB	...	<b>MA20-22-24</b>	Blank and button modules
	...	<b>MA61-62-63</b>	Front frames
	...	<b>MA71-72-73</b>	Back boxes and module frames

... Refers to number of users.

\* The rain shelter is used in the place of the back box and hood cover.

\*\* Articles not supplied by ACI Farfisa.

## Notes

- To have the control switch ON for the 2 video entrances it is necessary to make the dashed line connections and use **WB5160**, **WB5660**, **WB2160**, **WB1260** wall brackets. The wall brackets are configured to work without the audio privacy, to restore it the **jumper J1** must be moved (see pages 73, 75, 77, 79 and 80).
- For the connection of name plate lamps read notes 6, 7 and 8 of the installation instructions on page 91.
- For wires dimensioning and video connection refer to the installation instructions and table on pages 91÷93.
- For **one-way systems** connect the coaxial cable to the monitor bracket directly, without using the **DV** video distributor.

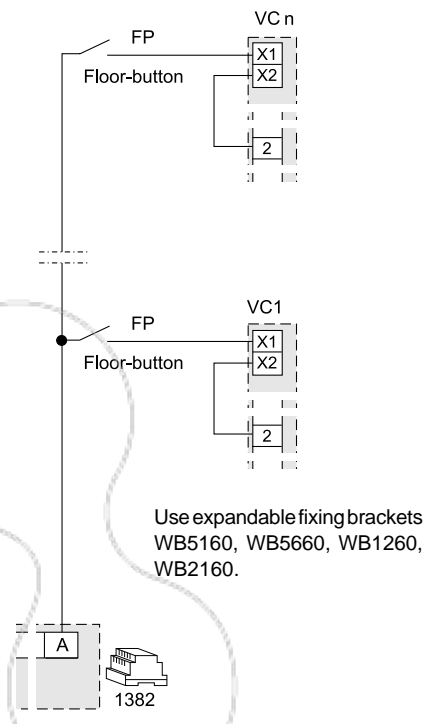
## Working instructions

It is similar to the basic system described on page 94, but with the following variations:

- Carrying out a call from the entrance only audio, the corresponding monitor turns itself ON without images.
- The audio-video operations and the door lock release are automatically switched at the time of the call or with the control switch ON.

## Floor-call

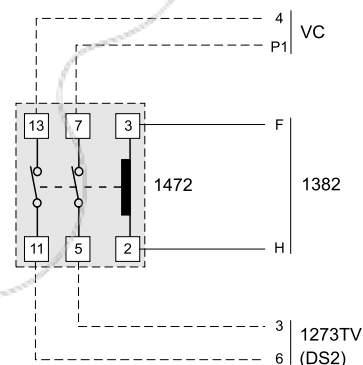
This working diagram allows for differentiating the floor-call from the call from the push-button panel.



## Control switching ON deactivation

To activate the control switching ON from the videointercoms only when the system is in standby, it is necessary to install a 2-exchange relay (type **1472**) and connect it as shown on the diagram.

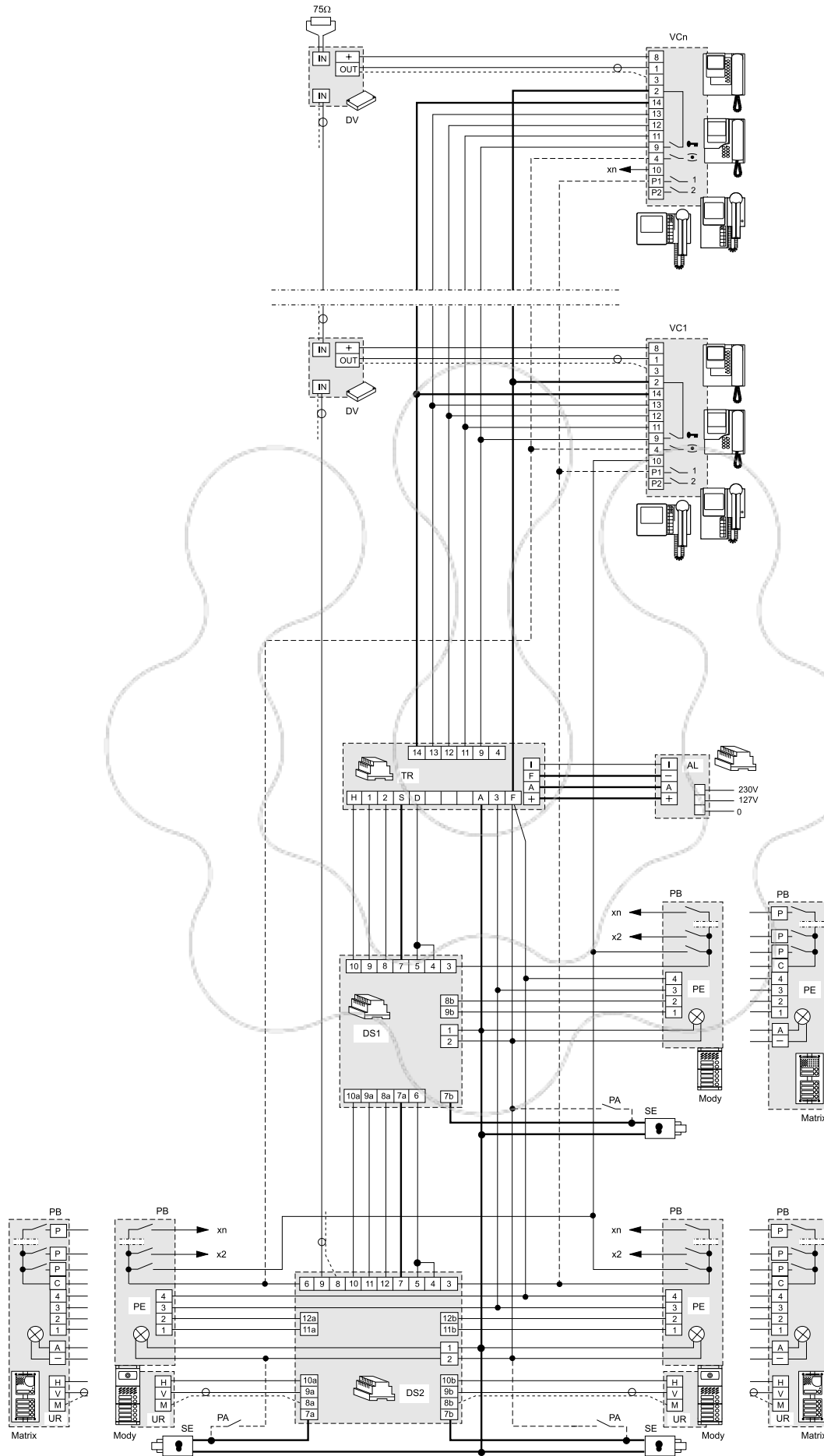
VC and DS2 are a reference on the diagrams



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## VIDEO INTERCOM SYSTEM CONNECTED TO THREE EXTERNAL DOOR STATIONS, ONE OF WHICH ONLY AUDIO



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## VIDEO INTERCOM SYSTEM CONNECTED TO THREE EXTERNAL DOOR STATIONS, TWO OF WHICH ONLY AUDIO

Diagram ref.	Q.ty	Article	Description
VC	...	<b>PT 5160 + WB 5100</b>	Videointercom FLAT + wall bracket
		<b>PT 5660 + WB 5600 + 1283</b>	Videointercom + wall bracket + back box
		<b>PT 5860 + WB 5600</b>	Videointercom reflex + wall bracket
		<b>PV 1260 + WB1200 + 1283</b>	Videointercom + wall bracket + back box
		<b>PV 2160 + WB 2100</b>	Videointercom FLAT + wall bracket
DV	...	<b>DV2-4</b>	Video distributor
AL	1	<b>1281</b>	Power supply
TR	1	<b>1382</b>	Timer
DS	2	<b>1473</b>	Exchanger
PA	3	<b>**</b>	Door release button (optional)
SE	3	<b>**</b>	Electric door lock (12Vac-1A)

## External door station

**Mody series** (for the composition see pages 82÷85)

		1 row	2 row	
UR	1	<b>MD41</b>	<b>MD41</b>	Camera module
PB	...	<b>MD72-73-74</b>	<b>MD72-73-74</b>	Back boxes and module frames
	3	<b>MD10-11-12</b>	<b>MD10-122-124</b>	Modules for electric door speaker
	...	<b>MD21 ÷ 24</b>	<b>MD222 ÷ 228</b>	Button modules
	...	<b>MD20 - 50</b>	<b>MD20 - 50</b>	Blank and info modules
	3	<b>MD82 ÷ 812</b>	<b>MD82 ÷ 812</b>	Hood covers
	3	<b>MD92 ÷ 912*</b>	<b>MD92 ÷ 912*</b>	Rain shelters
PE	3	<b>MD30</b>	<b>MD30</b>	Electric door speaker (amplifier)

**Matrix series** (for the composition see pages 88÷89)

UR	1	<b>MA42-43</b>	Camera modules with integrated audio amplifier
PE	2	<b>MA10P÷12P</b>	Modules with integrated audio
PB	...	<b>MA20-22-24</b>	Blank and button modules
	...	<b>MA61-62-63</b>	Front frames
	...	<b>MA71-72-73</b>	Back boxes and module frames

... Refers to number of users.

\* The rain shelter is used in the place of the back box and hood cover.

\*\* Articles not supplied by ACI Farfisa.

## Notes

- If the control switching ON is necessary, connect terminal 4 of the timer (dashed wire).
- For the connection of name plate lamps read notes 6, 7 and 8 of the installation instructions on page 91.
- For wires dimensioning and video connection refer to the installation instructions and table on pages 91÷93.
- For **one-way systems** connect the coaxial cable to the monitor bracket directly, without using the **DV** video distributor.

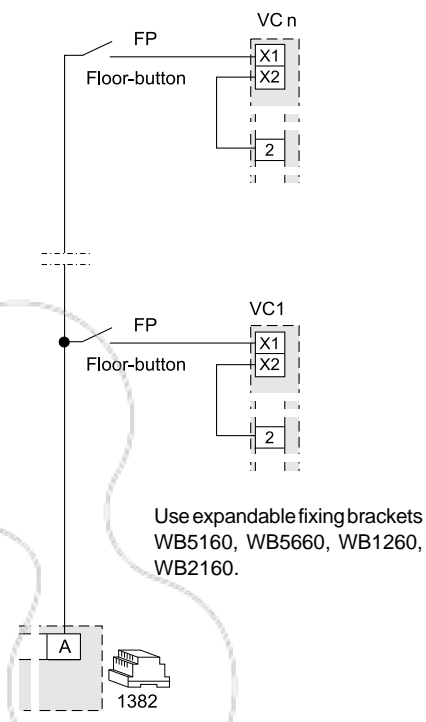
## Working instructions

It is similar to the basic system described on page 94, but with the following variations:

- Carrying out a call from the entrance only audio, the corresponding monitor turns itself ON without images.
- The audio-video operations and the door lock release are automatically switched at the time of the call or with the control switch ON.

## Floor-call

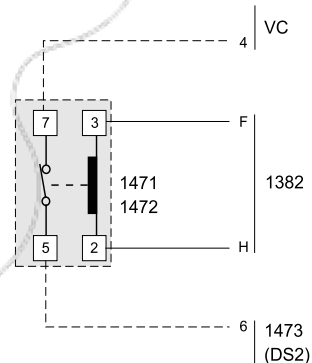
This working diagram allows for differentiating the floor-call from the call from the push-button panel.



## Control switching ON deactivation

To activate the control switching ON from the videointercoms only when the system is in standby, it is necessary to install a relay (type **1471** or **1472**) and connect it as shown on the diagram.

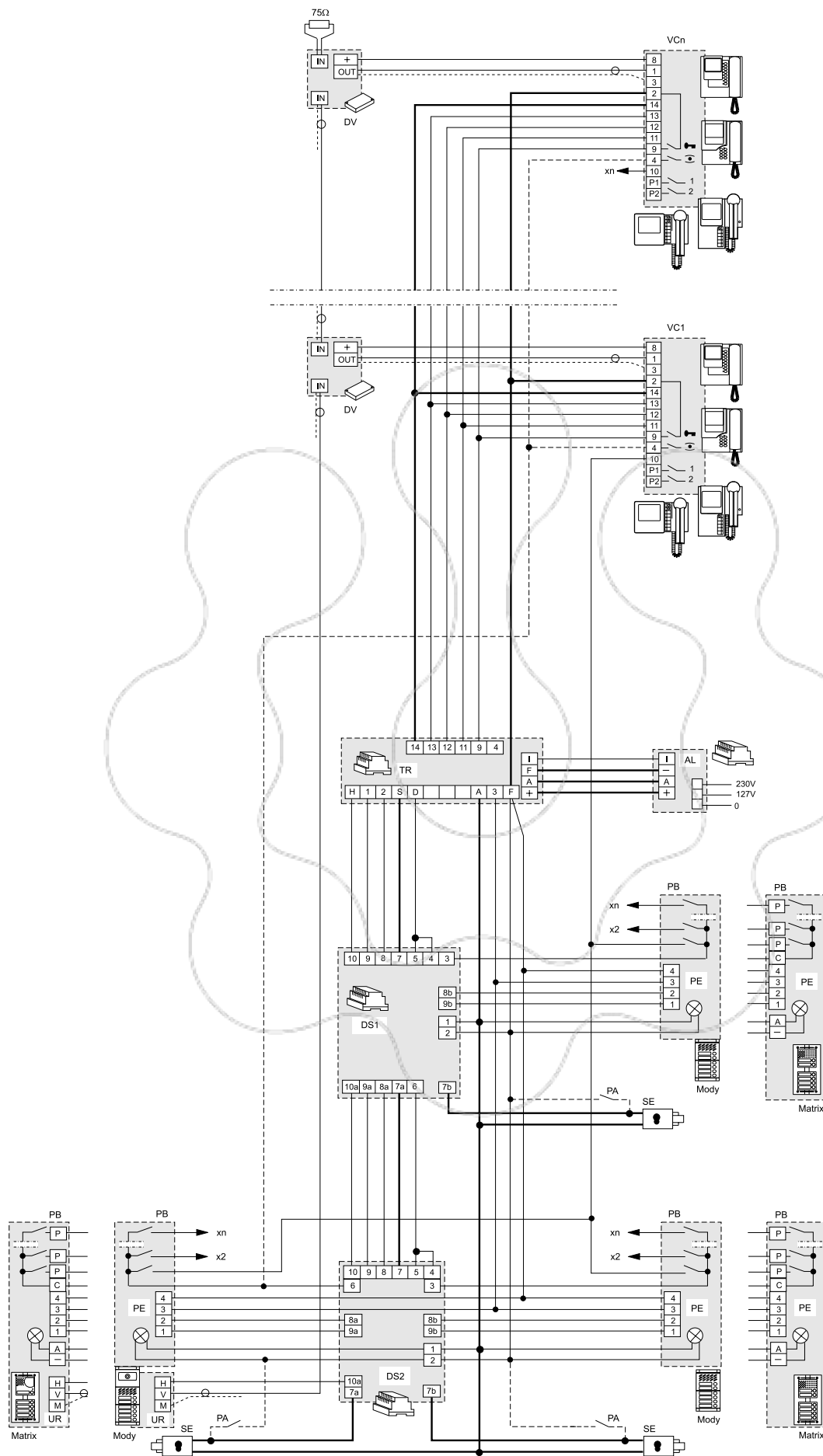
VC and DS2 are a reference on the diagrams



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## VIDEO INTERCOM SYSTEM CONNECTED TO THREE EXTERNAL DOOR STATIONS, TWO OF WHICH ONLY AUDIO



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## VIDEO INTERCOM SYSTEM WITH SECONDARY VIDEO STATIONS AND 1 MAIN COMMON VIDEO STATION (multiple entrance)

Diagram ref.	Q.ty	Article	Description
VC	...	<b>PT 5160 + WB 5100</b>	Videointercom FLAT + wall bracket
		<b>PT 5660 + WB 5600 + 1283</b>	Videointercom + wall bracket + back box
		<b>PT 5860 + WB 5600</b>	Videointercom reflex + wall bracket
		<b>PV 1260 + WB1200 + 1283</b>	Videointercom + wall bracket + back box
		<b>PV 2160 + WB 2100</b>	Videointercom FLAT + wall bracket
DV	...	<b>DV2-4</b>	Video distributor
AV	1	<b>476</b>	Video distributor
AL	1+X	<b>1281</b>	Power supply
TR	1+X	<b>1382</b>	Timer
DS	X	<b>1273TV</b>	Exchanger
PA	1+X	<b>**</b>	Door release button (optional)
SE	1+X	<b>**</b>	Electric door lock (12Vac-1A)

## External door station

**Mody series** (for the composition see pages 82÷85)

		1 row	2 row	
UR	1+X	<b>MD41</b>	<b>MD41</b>	Camera module
PB	...	<b>MD72-73-74</b>	<b>MD72-73-74</b>	Back boxes and module frames
	1+X	<b>MD10-11-12</b>	<b>MD10-122-124</b>	Modules for electric door speaker
	...	<b>MD21 ÷ 24</b>	<b>MD222 ÷ 228</b>	Button modules
	...	<b>MD20 - 50</b>	<b>MD20 - 50</b>	Blank and info modules
	1+X	<b>MD82 ÷ 812</b>	<b>MD82 ÷ 812</b>	Hood covers
	1+X	<b>MD92 ÷ 912*</b>	<b>MD92 ÷ 912*</b>	Rain shelters
PE	1+X	<b>MD30</b>	<b>MD30</b>	Electric door speaker (amplifier)

**Matrix series** (for the composition see pages 88÷89)

UR	1+X	<b>MA42-43</b>	Camera modules with integrated audio amplifier
PB	...	<b>MA20-22-24</b>	Blank and button modules
	...	<b>MA61-62-63</b>	Front frames
	...	<b>MA71-72-73</b>	Back boxes and module frames

... Refers to number of users.

X Refers to number of secondary door stations.

\* The rain shelter is used in the place of the back box and hood cover.

\*\* Articles not supplied by ACI Farfisa.

## Notes

- Connect the video intercom terminal 4 (wire shown with dotted line) if the control switch on from the secondary door station is required.
- For the connection of name plate lamps read notes 6, 7 and 8 of the installation instructions on page 91.
- For wires dimensioning and video connection refer to the installation instructions and table on pages 91÷93.

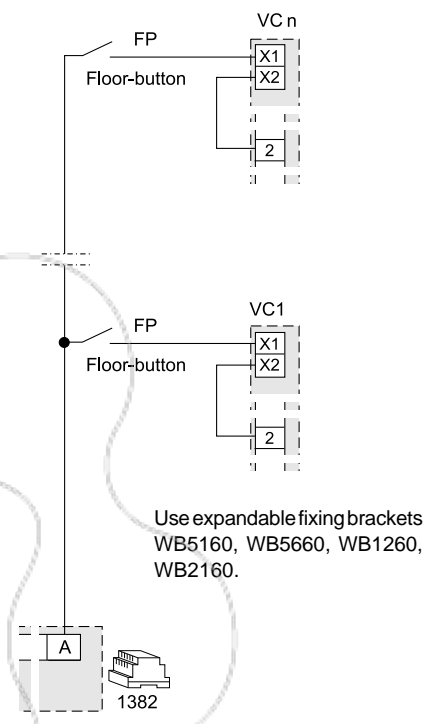
## Working instructions

It is similar to the basic system described on page 94, but with the following variations:

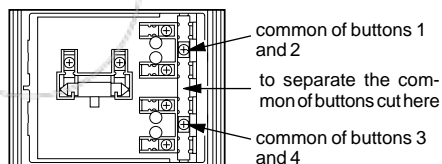
- The audio-video operations and the door lock release are automatically switched at the time of the call or with the control switch ON.
- The services towards the secondary video entrances are independent among themselves and therefore they can function at the same time.

## Floor-call

This working diagram allows for differentiating the floor-call from the call from the push-button panel.

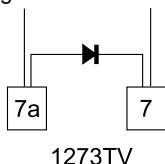


**The main entrance push-button panel must have separate common terminals.** One common terminal for each secondary door station. Buttons of the Mody series can be divided into 2-button groups.



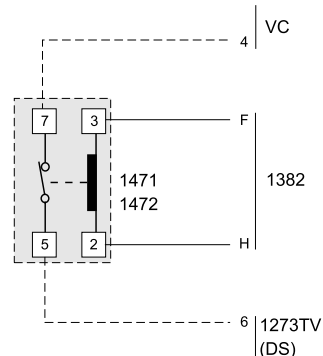
### Connection of two door locks, of which the secondary is always activable, in a system with multiple entrance

For this option it is necessary to install a diode (100V-1A; type 1N4007) between terminals 7 (cathode) and 7a (anode) of every secondary exchanger.



## Control switching ON deactivation

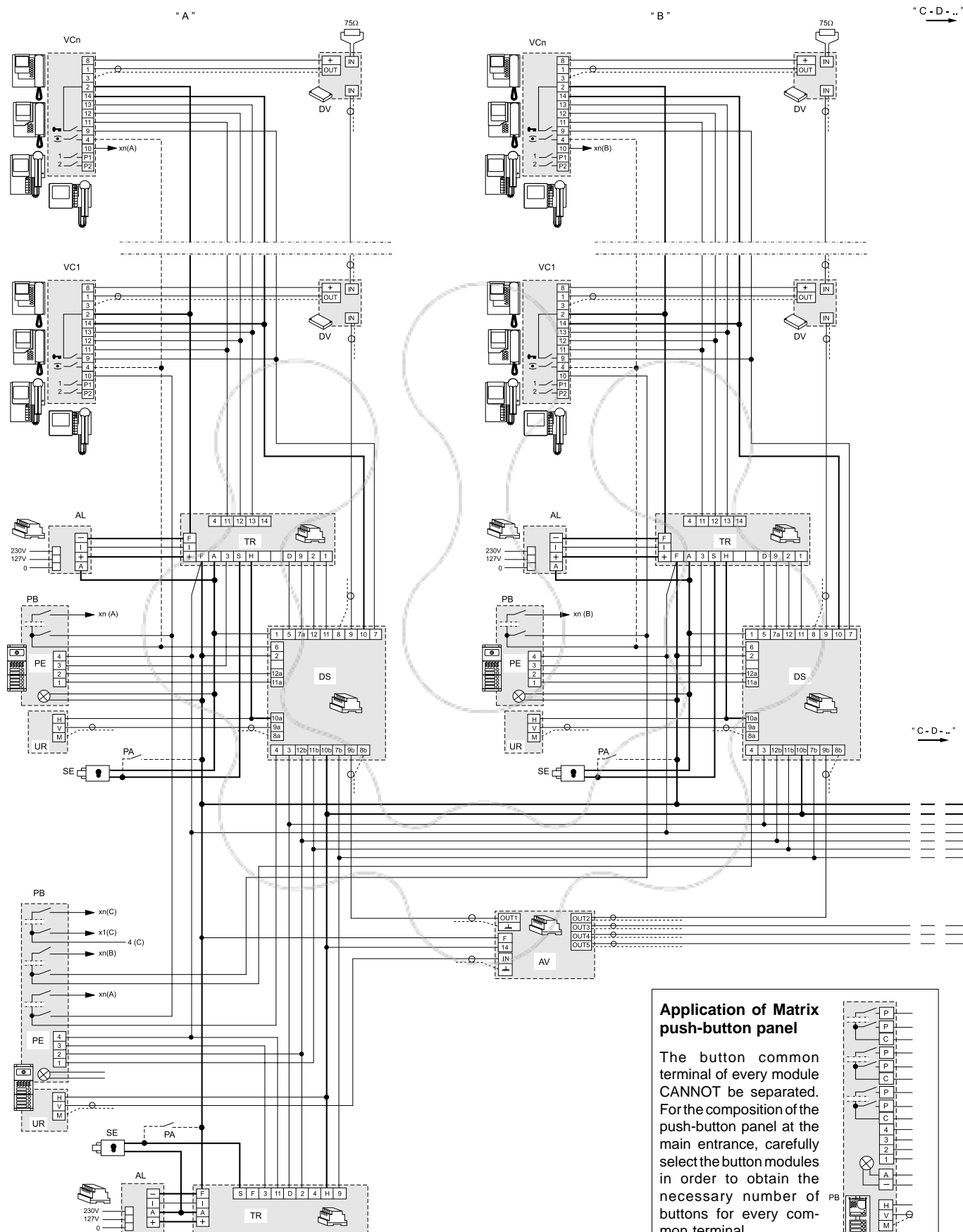
To activate the control switching ON from the videointercoms only when the system is in standby, it is necessary to install a relay (type 1471 or 1472) and connect it as shown on the diagram.



VC and DS are a reference on the diagrams



## VIDEO INTERCOM SYSTEM WITH SECONDARY VIDEO STATIONS AND 1 MAIN COMMON VIDEO STATION (multiple entrance)



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\* VIDEOINTERCOMS

\* TELECOMMUNICATION

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**VIDEO INTERCOM SYSTEM WITH SECONDARY DOOR STATIONS ONLY AUDIO AND 1 MAIN COMMON VIDEO STATION (multiple entrance)**

Diagram ref.	Q.ty	Article	Description
VC	...	<b>PT 5160 + WB 5100</b>	Videointercom FLAT + wall bracket
		<b>PT 5660 + WB 5600 + 1283</b>	Videointercom + wall bracket + back box
		<b>PT 5860 + WB 5600</b>	Videointercom reflex + wall bracket
		<b>PV 1260 + WB1200 + 1283</b>	Videointercom + wall bracket + back box
		<b>PV 2160 + WB 2100</b>	Videointercom FLAT + wall bracket
DV	...	<b>DV2-4</b>	Video distributor
AV	1	<b>476</b>	Video distributor
AL	1+X	<b>1281</b>	Power supply
TR	1+X	<b>1382</b>	Timer
DS	X	<b>1273TV</b>	Exchanger
PA	1+X	<b>**</b>	Door release button (optional)
SE	1+X	<b>**</b>	Electric door lock (12Vac-1A)

**External door station****Mody series** (for the composition see pages 82÷85)

		1 row	2 row	
UR	1	<b>MD41</b>	<b>MD41</b>	Camera module
PB	...	<b>MD72-73-74</b>	<b>MD72-73-74</b>	Back boxes and module frames
	1+X	<b>MD10-11-12</b>	<b>MD10-122-124</b>	Modules for electric door speaker
	...	<b>MD21 ÷ 24</b>	<b>MD222 ÷ 228</b>	Button modules
	...	<b>MD20 - 50</b>	<b>MD20 - 50</b>	Blank and info modules
	1+X	<b>MD82 ÷ 812</b>	<b>MD82 ÷ 812</b>	Hood covers
	1+X	<b>MD92 ÷ 912*</b>	<b>MD92 ÷ 912*</b>	Rain shelters
PE	1+X	<b>MD30</b>	<b>MD30</b>	Electric door speaker (amplifier)

**Matrix series** (for the composition see pages 88÷89)

UR	1	<b>MA42-43</b>	Camera modules with integrated audio amplifier
PE	X	<b>MA10P÷MA12P</b>	Blank and button modules
PB	...	<b>MA20-22-24</b>	Blank and button modules
	...	<b>MA61-62-63</b>	Front frames
	...	<b>MA71-72-73</b>	Back boxes and module frames

... Refers to number of users.

X Refers to number of secondary door stations.

\* The rain shelter is used in the place of the back box and hood cover.

\*\* Articles not supplied by ACI Farfisa.

**Notes**

- For the connection of name plate lamps read notes 6, 7 and 8 of the installation instructions on page 91.
- For wires dimensioning and video connection refer to the installation instructions and table on pages 91÷93.

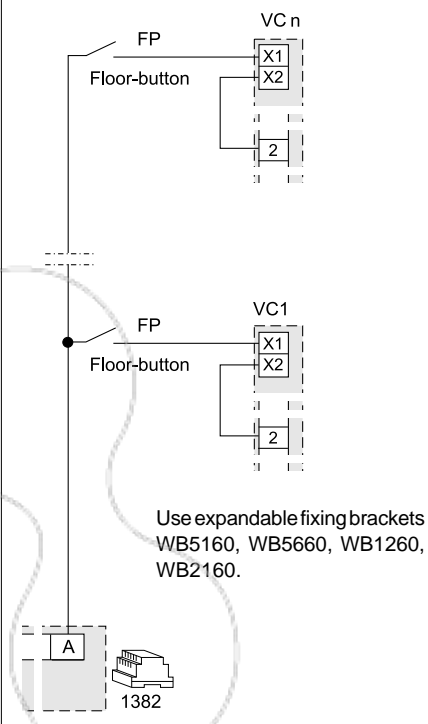
**Working instructions**

It is similar to the basic system described on page 94, but with the following variations:

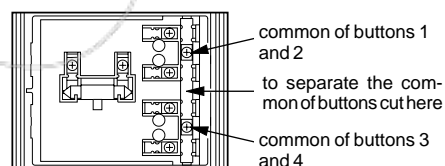
- Carrying out a call from the entrance only audio, the corresponding monitor turns itself ON without images.
- The audio-video operations and the door lock release are automatically switched at the time of the call or with the control switch ON.
- The services towards the secondary video entrances are independent among themselves and therefore they can function at the same time.

**Floor-call**

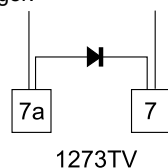
This working diagram allows for differentiating the floor-call from the call from the push-button panel.



**The main entrance push-button panel must have separate common terminals.** One common terminal for each secondary door station. Buttons of the Mody series can be divided into 2-button groups.

**Connection of two door locks, of which the secondary is always activable, in a system with multiple entrance**

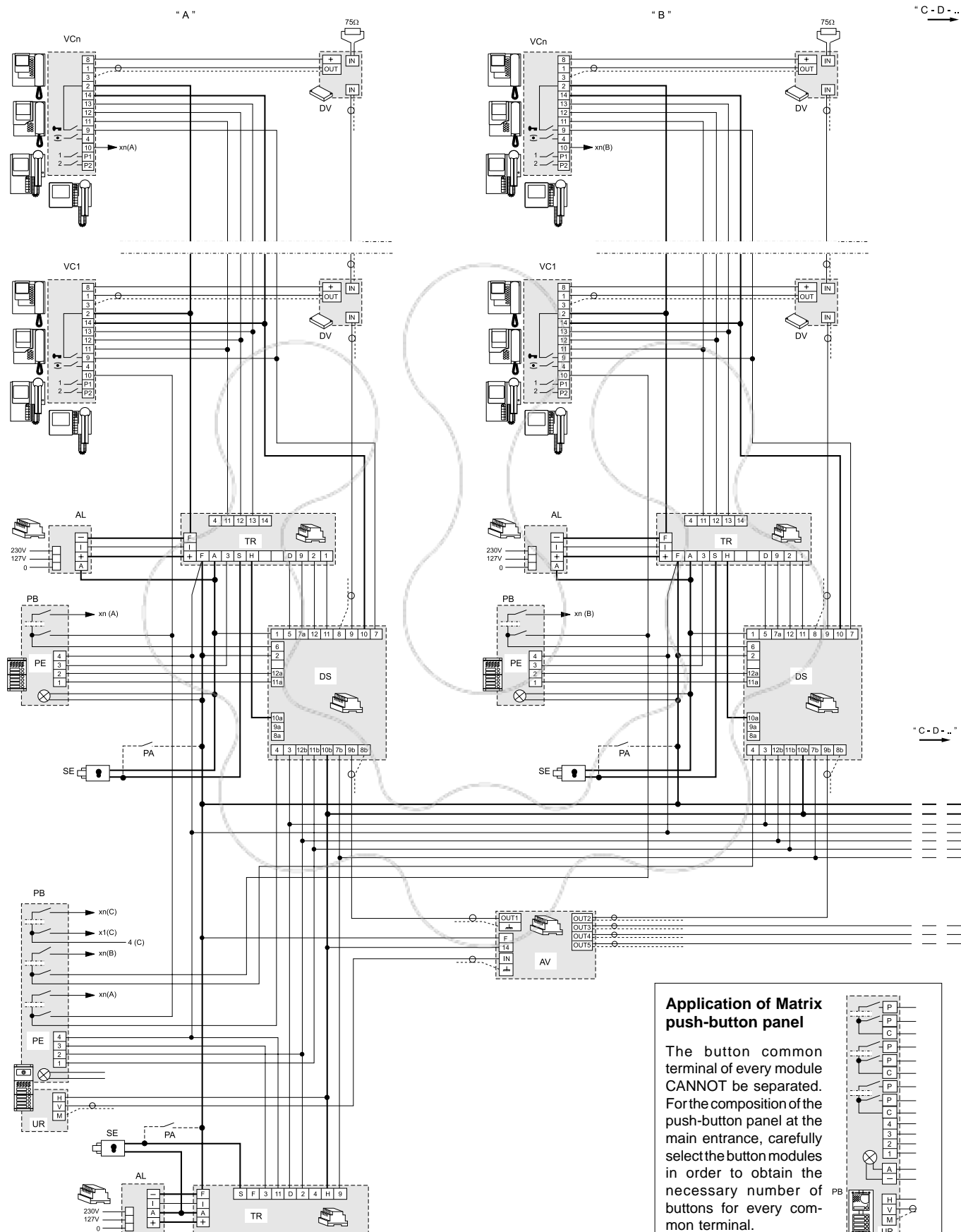
For this option it is necessary to install a diode (100V-1A; type 1N4007) between terminals 7 (cathode) and 7a (anode) of every secondary exchanger.



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# VIDEO INTERCOM SYSTEM WITH SECONDARY DOOR STATIONS ONLY AUDIO AND 1 MAIN COMMON VIDEO STATION (multiple entrance)



## VIDEO INTERCOM SYSTEM WITH SECONDARY VIDEO STATIONS AND 1 MAIN COMMON STATION ONLY AUDIO (multiple entrance)

Diagram ref.	Q.ty	Article	Description
VC	...	<b>PT 5160 + WB 5100</b>	Videointercom FLAT + wall bracket
		<b>PT 5660 + WB 5600 + 1283</b>	Videointercom + wall bracket + back box
		<b>PT 5860 + WB 5600</b>	Videointercom reflex + wall bracket
		<b>PV 1260 + WB1200 + 1283</b>	Videointercom + wall bracket + back box
		<b>PV 2160 + WB 2100</b>	Videointercom FLAT + wall bracket
DV	...	<b>DV2-4</b>	Video distributor
AL	1+X	<b>1281</b>	Power supply
TR	1+X	<b>1382</b>	Timer
DS	X	<b>1273TV</b>	Exchanger
PA	1+X	**	Door release button (optional)
SE	1+X	**	Electric door lock (12Vac-1A)

## External door station

**Mody series** (for the composition see pages 82÷85)

		1 row	2 row	
UR	X	<b>MD41</b>	<b>MD41</b>	Camera module
PB	...	<b>MD72-73-74</b>	<b>MD72-73-74</b>	Back boxes and module frames
	1+X	<b>MD10-11-12</b>	<b>MD10-122-124</b>	Modules for electric door speaker
	...	<b>MD21 ÷ 24</b>	<b>MD222 ÷ 228</b>	Button modules
	...	<b>MD20 - 50</b>	<b>MD20 - 50</b>	Blank and info modules
	1+X	<b>MD82 ÷ 812</b>	<b>MD82 ÷ 812</b>	Hood covers
	1+X	<b>MD92 ÷ 912*</b>	<b>MD92 ÷ 912*</b>	Rain shelters
PE	1+X	<b>MD30</b>	<b>MD30</b>	Electric door speaker (amplifier)

**Matrix series** (for the composition see pages 88÷89)

UR	X	<b>MA42-43</b>	Camera modules with integrated audio amplifier
PE	1	<b>MA10P÷MA12P</b>	Modules with integrated audio amplifier
PB	...	<b>MA20-22-24</b>	Blank and button modules
	...	<b>MA61-62-63</b>	Front frames
	...	<b>MA71-72-73</b>	Back boxes and module frames

... Refers to number of users.

X Refers to number of secondary door stations.

\* The rain shelter is used in the place of the back box and hood cover.

\*\* Articles not supplied by ACI Farfisa.

## Notes

- Connect the video intercom terminal 4 (wire shown with dotted line) if the control switch on from the secondary door station is required.
- For the connection of name plate lamps read notes 6, 7 and 8 of the installation instructions on page 91.
- For wires dimensioning and video connection refer to the installation instructions and table on pages 91÷93.

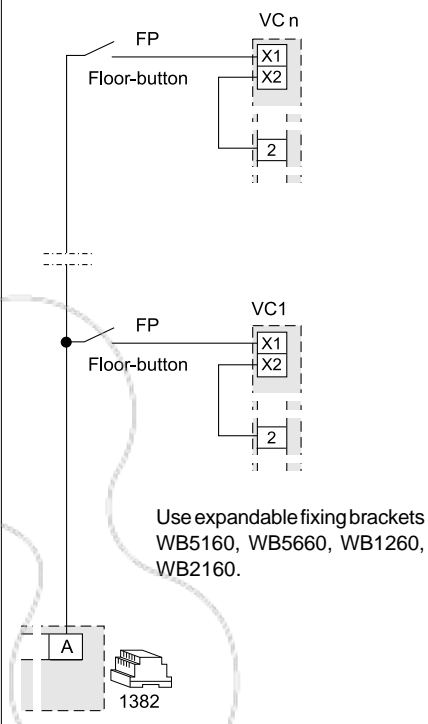
## Working instructions

It is similar to the basic system described on page 94, but with the following variations:

- Carrying out a call from the entrance only audio, the corresponding monitor turns itself ON without images.
- The audio-video operations and the door lock release are automatically switched at the time of the call or with the control switch ON.
- The services towards the secondary video entrances are independent among themselves and therefore they can function at the same time.

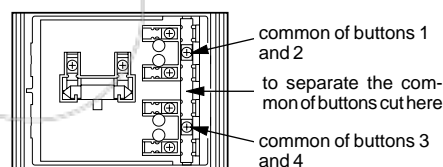
## Floor-call

This working diagram allows for differentiating the floor-call from the call from the push-button panel.



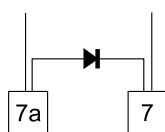
## The main entrance push-button panel must have separate common terminals.

One common terminal for each secondary door station. Buttons of the Mody series can be divided into 2-button groups.



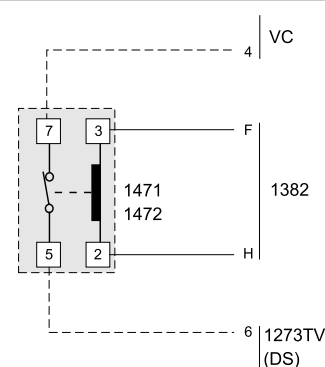
## Connection of two door locks, of which the secondary is always activable, in a system with multiple entrance

For this option it is necessary to install a diode (100V-1A; type 1N4007) between terminals 7 (cathode) and 7a (anode) of every secondary exchanger.



## Control switching ON deactivation

To activate the control switching ON from the videointercoms only when the system is in standby, it is necessary to install a relay (type 1471 or 1472) and connect it as shown on the diagram.



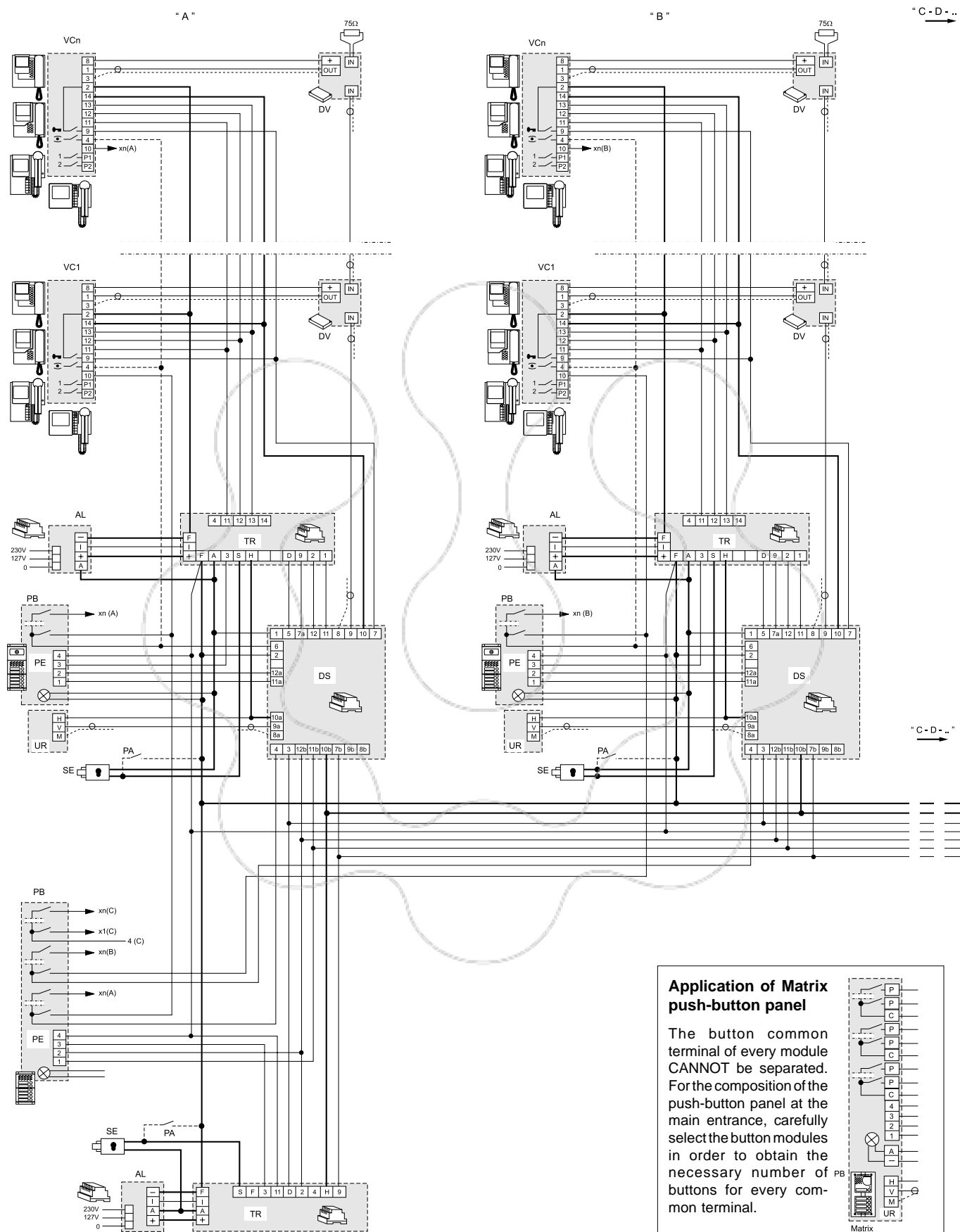
VC and DS are a reference on the diagrams



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## VIDEO INTERCOM SYSTEM WITH SECONDARY VIDEO STATIONS AND 1 MAIN COMMON STATION ONLY AUDIO (multiple entrance)



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## Si 36MO/5

## VIDEO INTERCOM SYSTEM WITH ONE-WAY SECONDARY DOOR STATIONS ONLY AUDIO AND 1 MAIN COMMON VIDEO STATION (multiple entrance)

Diagram ref.	Q.ty	Article	Description
VC	...	<b>PT 5160 + WB 5160</b>	Videointercom FLAT + wall bracket
		<b>PT 5660 + WB 5660 + 1283</b>	Videointercom + wall bracket + back box
		<b>PT 5860 + WB 5660</b>	Videointercom reflex + wall bracket
		<b>PV 1260 + WB 1260 + 1283</b>	Videointercom + wall bracket + back box
		<b>PV 2160 + WB 2160</b>	Videointercom FLAT + wall bracket
AV	1	<b>476</b>	Video distributor
ALp	1	<b>1281</b>	Power supply
AL	X	<b>PRS220</b>	Intercom power supply
TR	1	<b>1382</b>	Timer
IN	X	<b>1471</b>	Relay unit
DS	X	<b>1473</b>	Exchanger
PA	1+X	**	Door release button (optional)
SE	1+X	**	Electric door lock (12Vac-1A)

## External door station

**Modu series** (for the composition see pages 82÷85)

		1 row	2 row	
UR	1	<b>MD41</b>	<b>MD41</b>	Camera module
PB	...	<b>MD71÷74</b>	<b>MD72÷74</b>	Back boxes and module frames
	1+X	<b>MD10-11-12</b>	<b>MD10-122-124</b>	Modules for electric door speaker
	...	<b>MD21 ÷ 24</b>	<b>MD222 ÷ 228</b>	Button modules
	...	<b>MD20 - 50</b>	<b>MD20 - 50</b>	Blank and info modules
	1+X	<b>MD82 ÷ 812</b>	<b>MD82 ÷ 812</b>	Hood covers
	1+X	<b>MD92 ÷ 912*</b>	<b>MD92 ÷ 912*</b>	Rain shelters
PE	1+X	<b>MD30</b>	<b>MD30</b>	Electric door speaker (amplifier)

**Matrix series** (for the composition see pages 88÷89)

UR	1	<b>MA42-43</b>	Camera modules with integrated audio amplifier
PE	X	<b>MA11P</b>	Module with integrated audio amplifier
PB	...	<b>MA20-22-24</b>	Blank and button modules
	...	<b>MA61-62-63</b>	Front frames
	...	<b>MA71-72-73</b>	Back boxes and module frames

... Refers to number of users.

X Refers to number of secondary door stations.

\* The rain shelter is used in the place of the back box and hood cover.

\*\* Articles not supplied by ACI Farfisa.

## Working instructions

It is similar to the basic system described on page 94, but with the following variations:

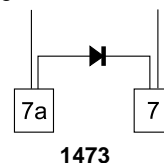
- Carrying out a call from the entrance only audio, the corresponding monitor turns itself ON without images.
- The audio-video operations and the door lock release are automatically switched at the time of the call or with the control switch ON.
- The services towards the secondary video entrances are independent among themselves and therefore they can function at the same time.

## Notes

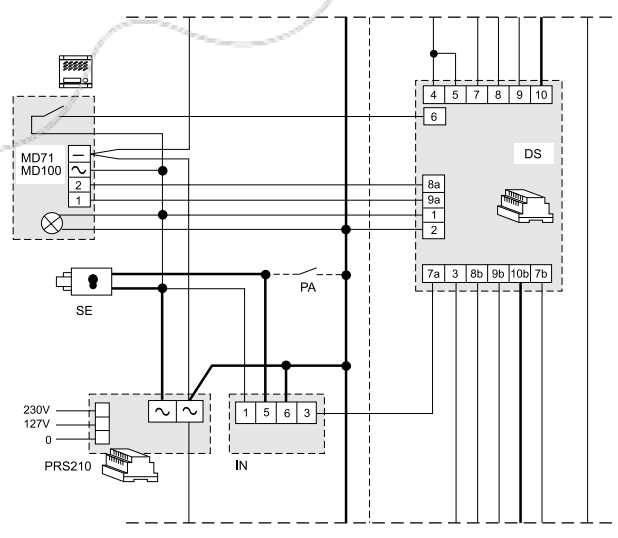
- Connect the video intercom terminal 4 (wire shown with dotted line) and apply 2 diodes (1N4007 type; 100V-1A) for every secondary door station, if the control switch on is required.
- For the connection of name plate lamps read notes 6, 7 and 8 of the installation instructions on page 91.
- For wires dimensioning and video connection refer to the installation instructions and table on pages 91÷93.
- DV.. distributors can be used instead of the video distributors **476** by adding a power supply wire (from + to terminal 8 of every video intercom).
- On bracket of the videointercoms you must move jumper **J1** from position **2-3** to **1-2**. If the private conversation is necessary, use the Si36MO/3 diagram.

Connection of two door locks, of which the secondary is always activable, in a system with multiple entrance

For this option it is necessary to install a diode (100V-1A; type 1N4007) between terminals 7 (cathode) and 7a (anode) of every secondary exchanger.



Connection of the MD100 amplified external door station to the secondary door station instead of electric door speaker MD30 and module MD11.



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## VIDEO INTERCOM SYSTEM WITH SECONDARY VIDEO STATIONS AND 2 MAIN COMMON VIDEO STATIONS (multiple entrance)

Diagram ref.	Q.ty	Article	Description
VC	...	<b>PT 5160 + WB 5100</b>	Videointercom FLAT + wall bracket
		<b>PT 5660 + WB 5600 + 1283</b>	Videointercom + wall bracket + back box
		<b>PT 5860 + WB 5600</b>	Videointercom reflex + wall bracket
		<b>PV 1260 + WB1200 + 1283</b>	Videointercom + wall bracket + back box
		<b>PV 2160 + WB 2100</b>	Videointercom FLAT + wall bracket
DV	...	<b>DV2-4</b>	Video distributor
AV	2+..	<b>476</b>	Video distributor
AL	2+X	<b>1281</b>	Power supply
TR	1+X	<b>1382</b>	Timer
DS	2xX	<b>1273TV</b>	Exchanger
IN	1	<b>1471</b>	Relay unit
D	2	**	Min. 100V-1A diodes (1N4007 type)
PA	2+X	**	Door release button (optional)
SE	2+X	**	Electric door lock (12Vac-1A)

## External door station

**Mody series** (for the composition see pages 82÷85)

		1 row	2 row	
UR	2+X	<b>MD41</b>	<b>MD41</b>	Camera module
PB	...	<b>MD72-73-74</b>	<b>MD72-73-74</b>	Back boxes and module frames
	2+X	<b>MD10-11-12</b>	<b>MD10-122-124</b>	Modules for electric door speaker
	...	<b>MD21 ÷ 24</b>	<b>MD222 ÷ 228</b>	Button modules
	...	<b>MD20 - 50</b>	<b>MD20 - 50</b>	Blank and info modules
	2+X	<b>MD82 ÷ 812</b>	<b>MD82 ÷ 812</b>	Hood covers
	2+X	<b>MD92 ÷ 912*</b>	<b>MD92 ÷ 912*</b>	Rain shelters
PE	2+X	<b>MD30</b>	<b>MD30</b>	Electric door speaker (amplifier)

**Matrix series** (for the composition see pages 88÷89)

UR	2+X	<b>MA42-43</b>	Camera modules with integrated audio amplifier
PB	...	<b>MA20-22-24</b>	Blank and button modules
	...	<b>MA61-62-63</b>	Front frames
	...	<b>MA71-72-73</b>	Back boxes and module frames

... Refers to number of users.

X Refers to number of secondary door stations.

\* The rain shelter is used in the place of the back box and hood cover.

\*\* Articles not supplied by ACI Farfisa.

## Notes

- Connect the video intercom terminal 4 (wire shown with dotted line) if the control switch on from the secondary door station is required.
- For the connection of name plate lamps read notes 6, 7 and 8 of the installation instructions on page 91.
- For wires dimensioning and video connection refer to the installation instructions and

table on pages 91÷93.

- To use the **Matrix** series push-button panels, see the application diagram and notes on page 115, 117 or 119.

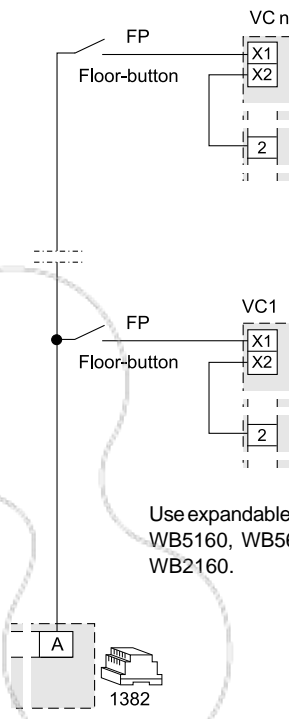
## Working instructions

It is similar to the basic system described on page 94, but with the following variations:

- The audio-video operations and the door lock release are automatically switched at the time of the call or with the control switch ON.
- The services towards the secondary video entrances are independent among themselves and therefore they can function at the same time.

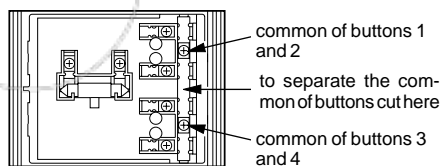
## Floor-call

This working diagram allows for differentiating the floor-call from the call from the push-button panel.



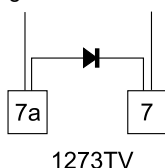
## The main entrance push-button panel must have separate common terminals.

One common terminal for each secondary door station. Buttons of the Mody series can be divided into 2-button groups.



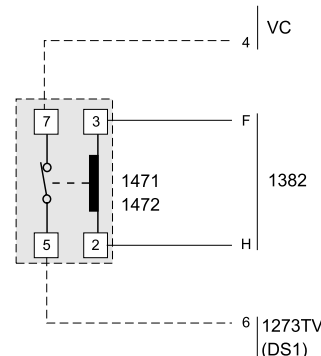
## Connection of two door locks, of which the secondary is always activable, in a system with multiple entrance

For this option it is necessary to install a diode (100V-1A; type 1N4007) between terminals 7a (cathode) and 7a (anode) of every secondary exchanger.



## Control switching ON deactivation

To activate the control switching ON from the videointercoms only when the system is in standby, it is necessary to install a relay (type 1471 or 1472) and connect it as shown on the diagram.



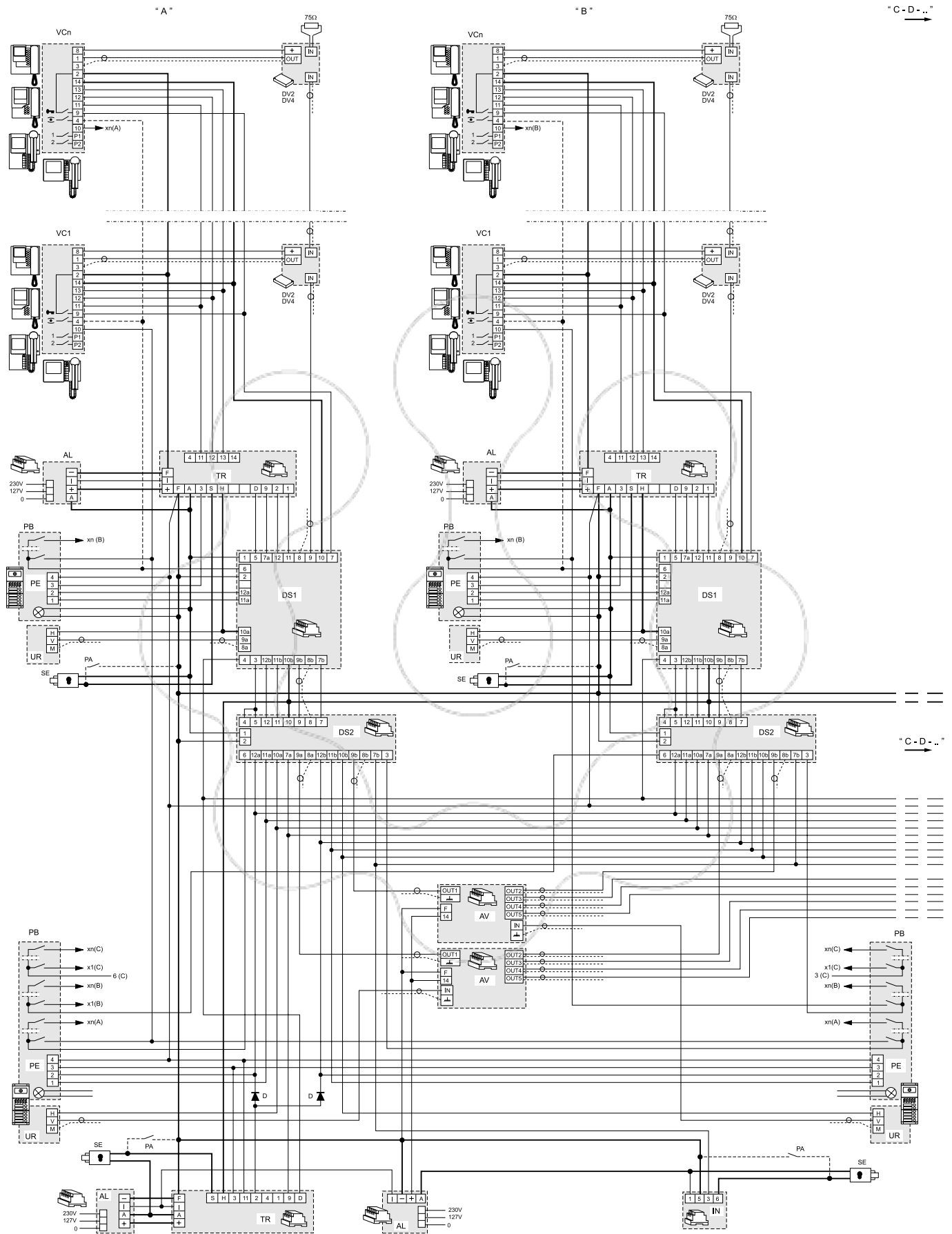
VC and DS1 are a reference on the diagrams



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## VIDEO INTERCOM SYSTEM WITH SECONDARY VIDEO STATIONS AND 2 MAIN COMMON VIDEO STATIONS (multiple entrance)



INTERCOMS

\* VIDEOINTERCOMS

\* TELECOMMUNICATION

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# Additional diagrams

## EXTENSION OF VIDEO INTERCOM SYSTEMS

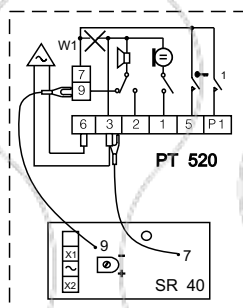
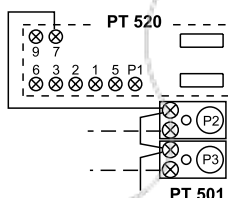
**All installation diagrams** in this technical manual are drawn with only one video intercom for each user. It is possible to "personalise" the installation by properly matching the applications on the following pages (page 126 to 148) to the basic diagrams (page 99 to page 123). Such examples refer to applications with one video intercom entrance. To realise systems with 2 or more audio/video entrances were more than one control switch ON is needed, use for this function the first buttons of the video intercom (P, P1, P2, etc.) and the lower ones (P3, P4, etc.) for the intercommunicating calls.

In the basic diagrams the dashed lines identify the wires for control switch ON, whereas in the additional diagrams the dashed lines also refer to the wires for intercommunicating service.

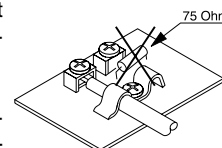
When the simultaneous switch ON of several video intercoms is needed and extra power supplies are to be added, do not forget that terminal I of timer **1382** can be connected to a **maximum of 3** power supplies **1281**.

### NOTES

- 1) To have the intercommunication system you must:
  - a) - make the connections shown with dotted lines,
  - b) - apply the module **1443E** inside the timer **1382** (see page 90),
  - c) - use expandable brackets **WB5160**, **WB5660**, **WB1260**, **WB2160**, verifying that the **mobile jumper J1** located on the video intercom brackets is in intercommunicating position **1-2** (see page 73, 75, 77, 79 and 80).
- 2) In intercommunicating intercoms you must:
  - cut the jumper **W1**,
  - add the electronic buzzer **SR40**,
  - add the necessary number of **PT501** button groups and connect one of the two terminals to terminal 7 of the intercom.

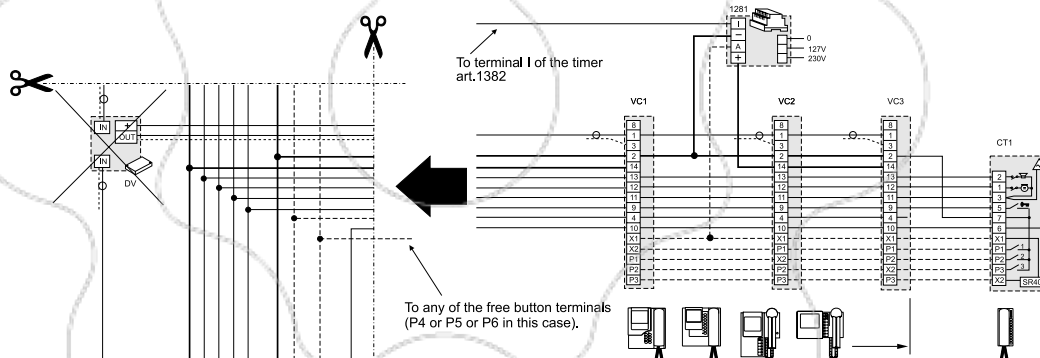


- 3) If the video system is realized with coaxial cable connected in serial mode (input and output from the video intercom), you must **cut** the 75Ω resistance of the bracket and leave it only on the last video intercom.

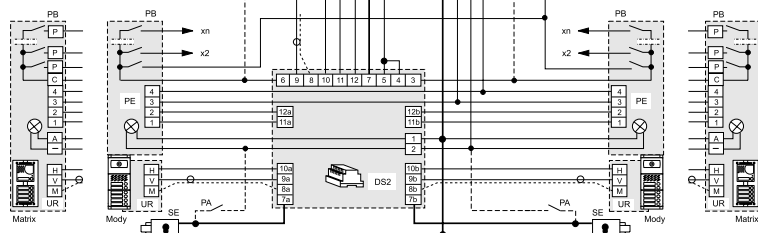


- 4) When using the video intercom **PV2160** the additional buttons P1, P2, P3, P4 and P5 change into T1, T2, T3, T4 and T5, respectively (T6 does not exist because the maximum number of additional buttons is 5).

- 5) The diode shown in this installation diagram must be connected to power video distributors **DV2** and **DV4**. The diode is not necessary if no video distributors are used.



*Example of combination of an additional diagram with a basic diagram for the realisation of a one-way system with intercoms and video intercoms in parallel with or without intercommunicating service (description on page 125).*



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### EXTENSION OF VIDEO INTERCOM SYSTEMS

#### Extension of ONE-WAY system

To realise a one-way system with several monitors and/or intercoms in parallel, **with or without intercommunicating service**, you must proceed as follows:

- make a photocopy of the additional diagram desired, selecting it among those of pages 126 to 136;
- place the diagram on the basic diagram so as to cover the existing video intercom and line up the wires of the two diagrams;
- if specified in the additional diagram, connect the wires **I** and **X1** to terminals **I** and **A** of art. **1382**;
- to have the intercommunication system you must:
  - make the connections shown with dotted lines,
  - apply the module **1443E** inside the timer **1382**,
  - use expandable brackets **WB5160**, **WB5660**, **WB1260**, **WB2160**, verifying that the **mobile jumper J1** located on the video intercom brackets is in intercommunicating position **1-2** (see page 73, 75, 77, 79 and 80).
- add the electronic buzzer **SR40** and the necessary number of buttons **PT501** in the intercoms, if any.

**Example** (see page 124): by making a photocopy of the additional diagram of page 127 (3 video intercoms and 1 intercom in parallel with or without intercommunicating service), placing it on the installation diagram of page 105 (Si 32MO/1), lining it up to the wires of the first video intercom and eliminating the second video intercom and the video distributor, it is possible to obtain a one-way system with 3 video intercoms and 1 intercom in parallel connected to 2 external video stations.

*Example of combination of an additional diagram with a basic diagram for the realisation of a multi-way system with extension in one apartment only.*

#### Extension in one apartment of a MULTI-WAY system

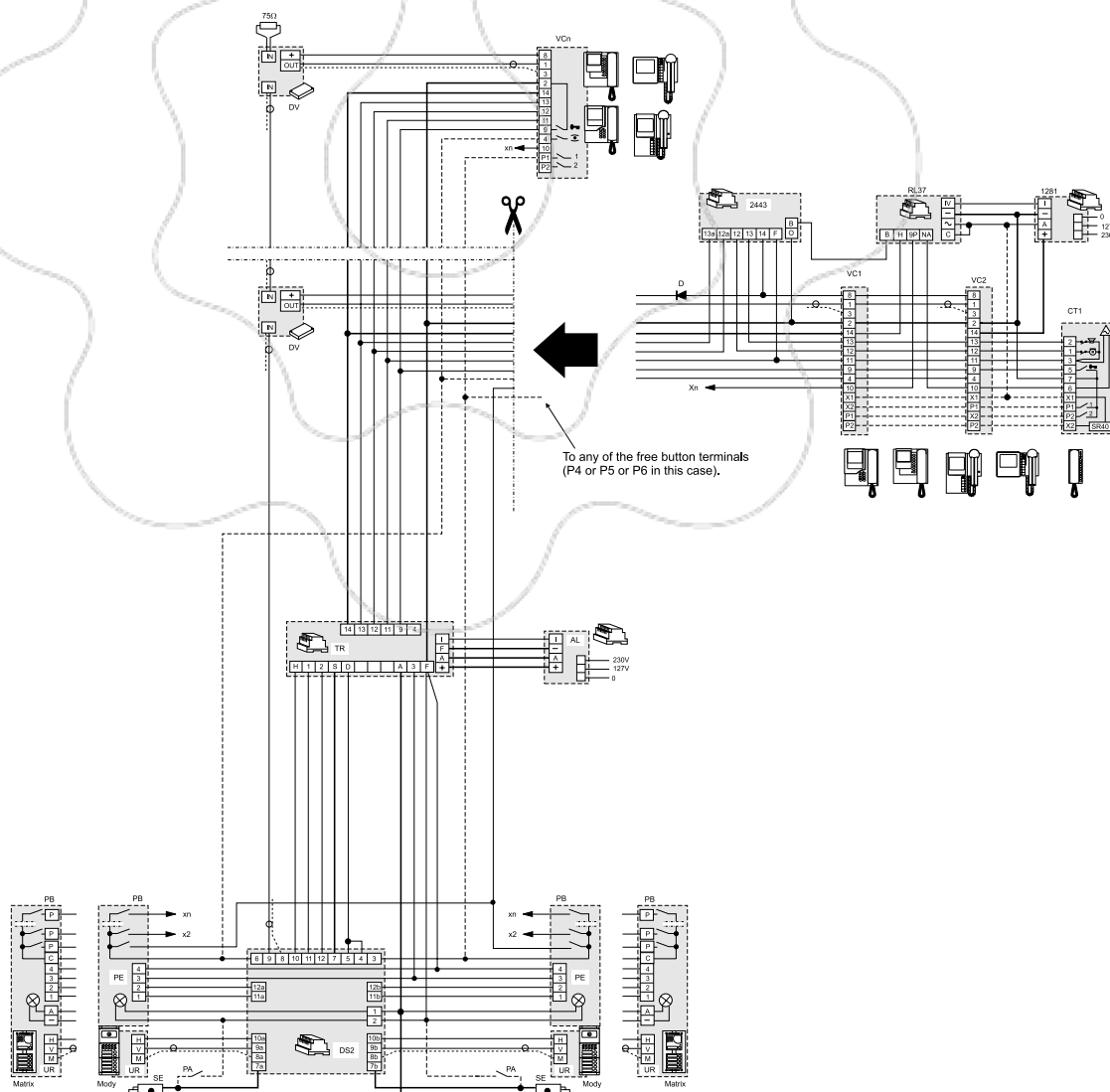
To realise a **multi-way** system with several video intercoms and/or intercoms in parallel in one apartment **with or without intercommunicating service**, you must proceed as follows:

- make a photocopy of the additional diagram desired, selecting it among those of pages 137 to 148;
- place the diagram on the basic diagram so as to cover the existing video intercom and line up the wires of the two diagrams;
- to have the intercommunication system you must:
  - make the connections shown with dotted lines,
  - use expandable brackets **WB5160**, **WB5660**, **WB1260**, **WB2160**, verifying that the **mobile jumper J1** located on the video intercom brackets is in intercommunicating position **1-2** (see page 73, 75, 77, 79 and 80).
- add the electronic buzzer **SR40** and the necessary number of buttons **PT501** in the intercoms, if any.

**Example:** by making a photocopy of the additional diagram of page 137 (2 videointercoms and 1 intercom in parallel with or without intercommunicating service), placing it on the installation diagram of page 105 (Si 32MO/1), lining it up to the wires of the first video intercom, it is possible to obtain a multi-way system with 2 video intercoms and 1 intercom in parallel in one apartment and intercommunicating connected to 2 external video stations.

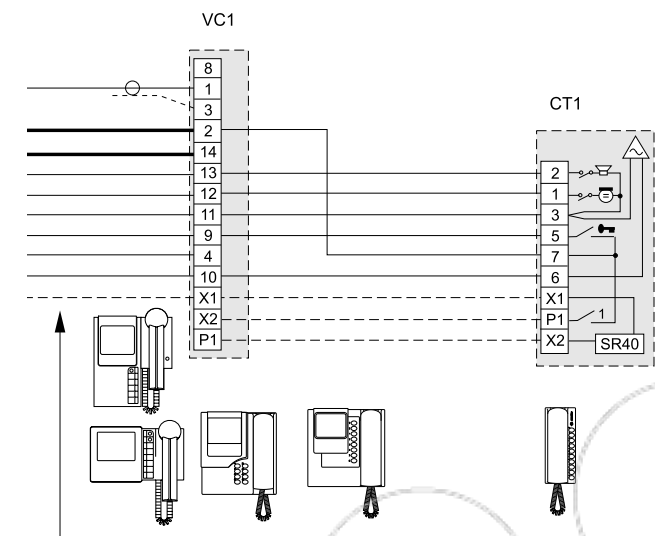
#### Extension of a MULTI-WAY system in several apartments

To realise a **multi-way** system with several video intercoms and/or intercoms in parallel in 2 or more apartments **with or without intercommunicating service**, you must repeat the operations described in the preceding section several times.



# ONE-WAY additional diagrams

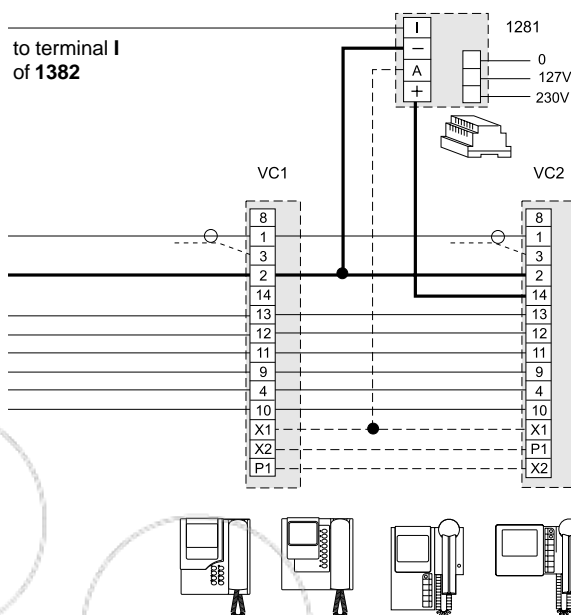
## 1 VIDEO INTERCOM AND 1 INTERCOM WITH INTERCOMMUNICATING SERVICE



X1 to be connected to terminal A of art.1382

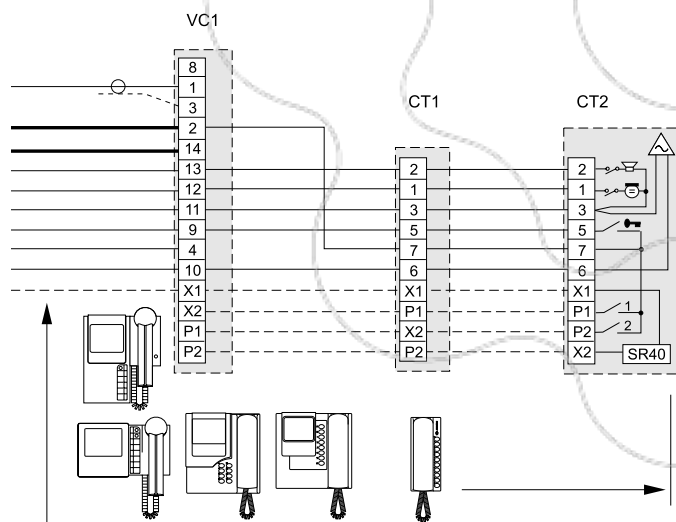
Read notes 1abc, 2 and 4 of page 124.

## 2 INTERCOMMUNICATING VIDEO INTERCOMS



Read notes 1abc, 3 and 4 of page 124.

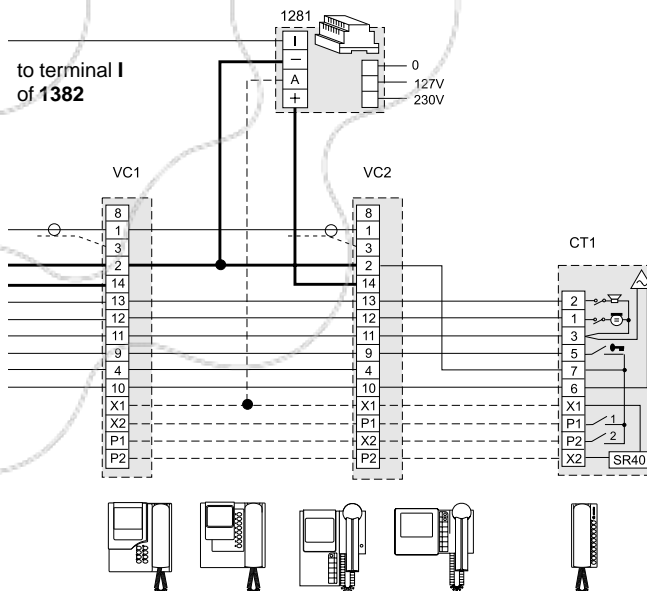
## 1 VIDEO INTERCOM AND 2 INTERCOMS WITH INTERCOMMUNICATING SERVICE



X1 to be connected to terminal A of art.1382

Read notes 1abc, 2 and 4 of page 124.

## 2 VIDEO INTERCOMS AND 1 INTERCOM WITH INTERCOMMUNICATING SERVICE



Read notes 1abc, 2, 3 and 4 of page 124.

VC =  
PT5160 + WB5100  
PT5660 + WB5600 + 1283  
PT5860 + WB5600  
PV2160 + WB2100  
PV1260 + WB1200 + 1283

or, if intercommunicating  
PT5160 + WB5160  
PT5660 + WB5660 + 1283  
PT5860 + WB5660  
PV2160 + WB2160  
PV1260 + WB1260 + 1283

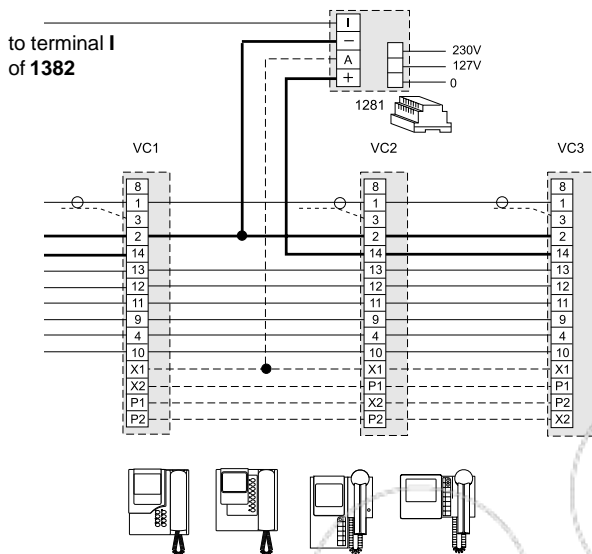
CT =  
PT510  
PV100  
924  
or, if intercommunicating  
PT520 + SR40 + PT501



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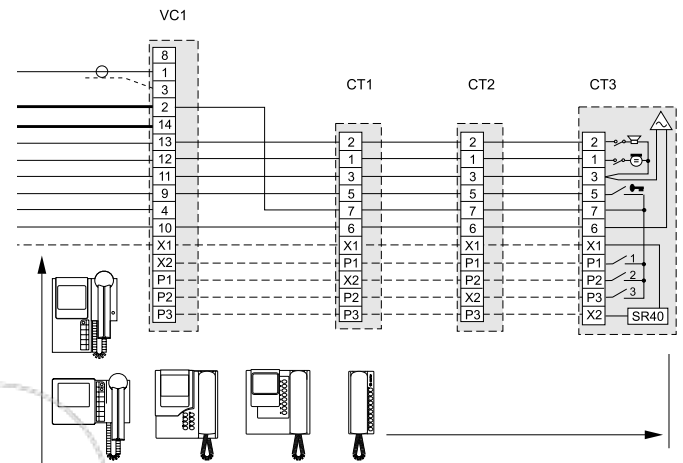


## 3 INTERCOMMUNICATING VIDEO INTERCOMS



Read notes 1abc, 2, 3 and 4 of page 124.

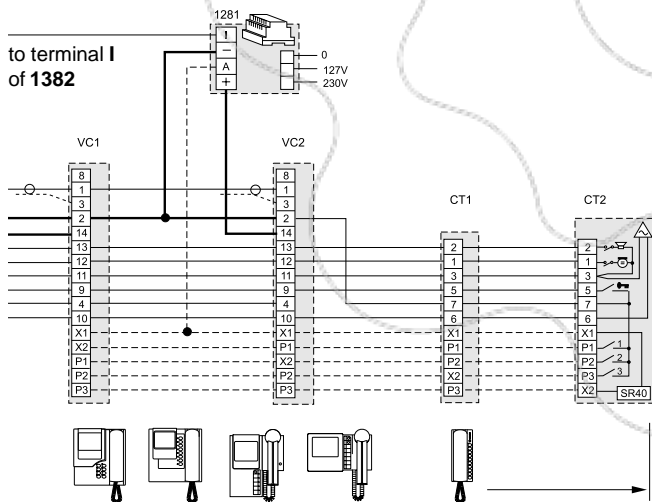
## 1 VIDEO INTERCOM AND 3 INTERCOMS WITH INTERCOMMUNICATING SERVICE



X1 to be connected to terminal A of art.1382

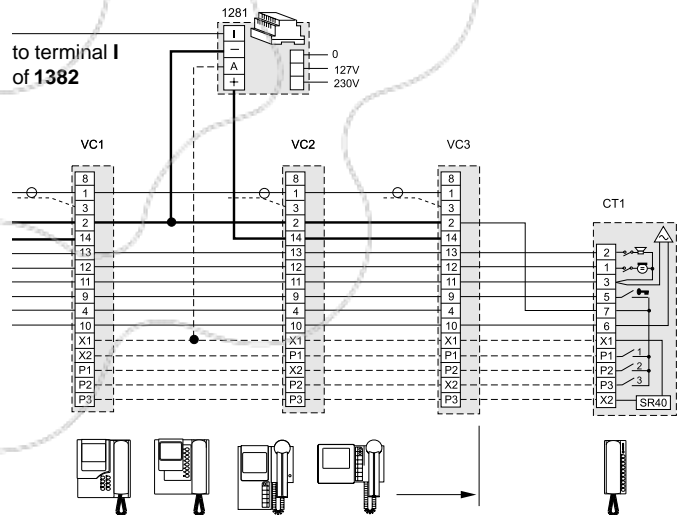
Read notes 1abc, 2 and 4 of page 124.

## 2 VIDEO INTERCOMS AND 2 INTERCOMS WITH INTERCOMMUNICATING SERVICE



Read notes 1abc, 2, 3 and 4 of page 124.

## 3 VIDEO INTERCOMS AND 1 INTERCOM WITH INTERCOMMUNICATING SERVICE



Read notes 1abc, 2, 3 and 4 of page 124.

VC =  
PT5160 + WB5100  
PT5660 + WB5600 + 1283  
PT5860 + WB5600  
PV2160 + WB2100  
PV1260 + WB1200 + 1283

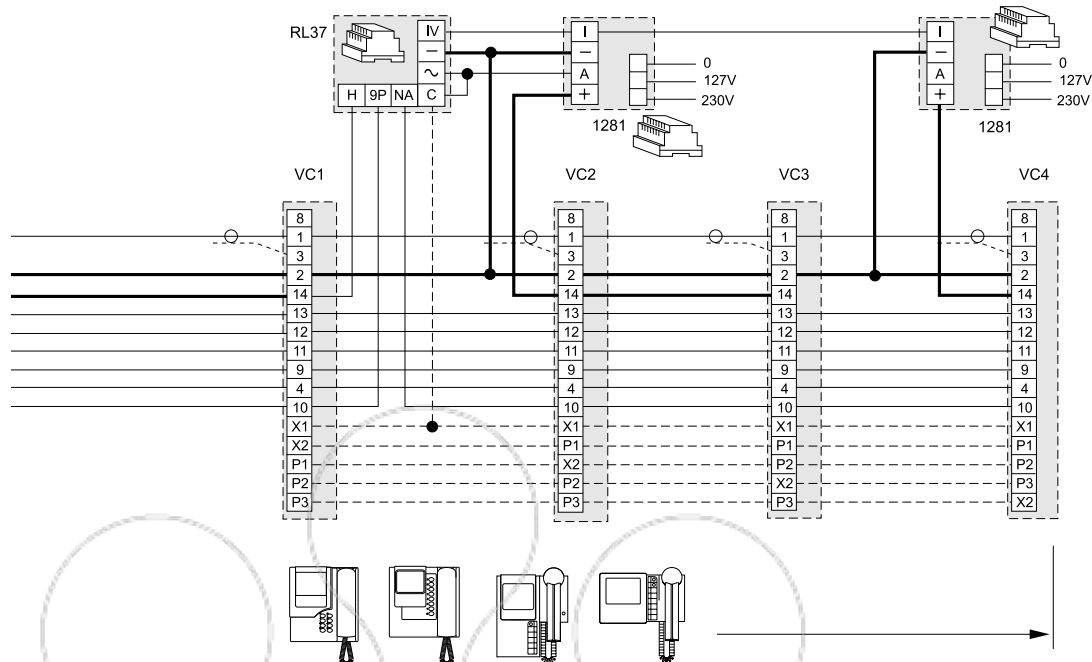
or, if intercommunicating  
PT5160 + WB5160  
PT5660 + WB5660 + 1283  
PT5860 + WB5660  
PV2160 + WB2160  
PV1260 + WB1260 + 1283

CT =  
PT510  
PV100  
924  
or, if intercommunicating  
PT520 + SR40 + PT501



# ONE-WAY additional diagrams

## 4 INTERCOMMUNICATING VIDEO INTERCOMS

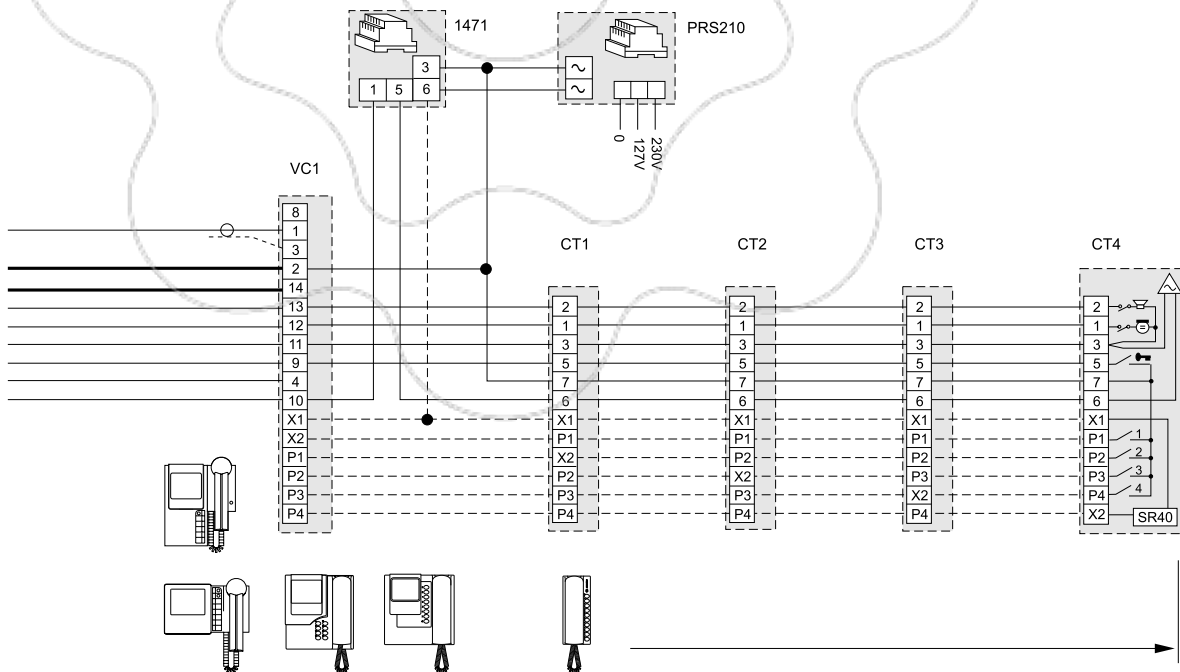


Read notes 1abc, 3 and 4 of page 124.

**VC =**  
**PT5160 + WB5100**  
**PT5660 + WB5600 + 1283**  
**PT5860 + WB5600**  
**PV2160 + WB2100**  
**PV1260 + WB1200 + 1283**

or, if intercommunicating  
**PT5160 + WB5160**  
**PT5660 + WB5660 + 1283**  
**PT5860 + WB5660**  
**PV2160 + WB2160**  
**PV1260 + WB1260 + 1283**

## 1 VIDEO INTERCOM AND 4 INTERCOMS WITH INTERCOMMUNICATING SERVICE



Read notes 1abc, 2, 3 and 4 of page 124.

**VC =**  
**PT5160 + WB5100**  
**PT5660 + WB5600 + 1283**  
**PT5860 + WB5600**  
**PV2160 + WB2100**  
**PV1260 + WB1200 + 1283**

or, if intercommunicating  
**PT5160 + WB5160**  
**PT5660 + WB5660 + 1283**  
**PT5860 + WB5660**  
**PV2160 + WB2160**  
**PV1260 + WB1260 + 1283**

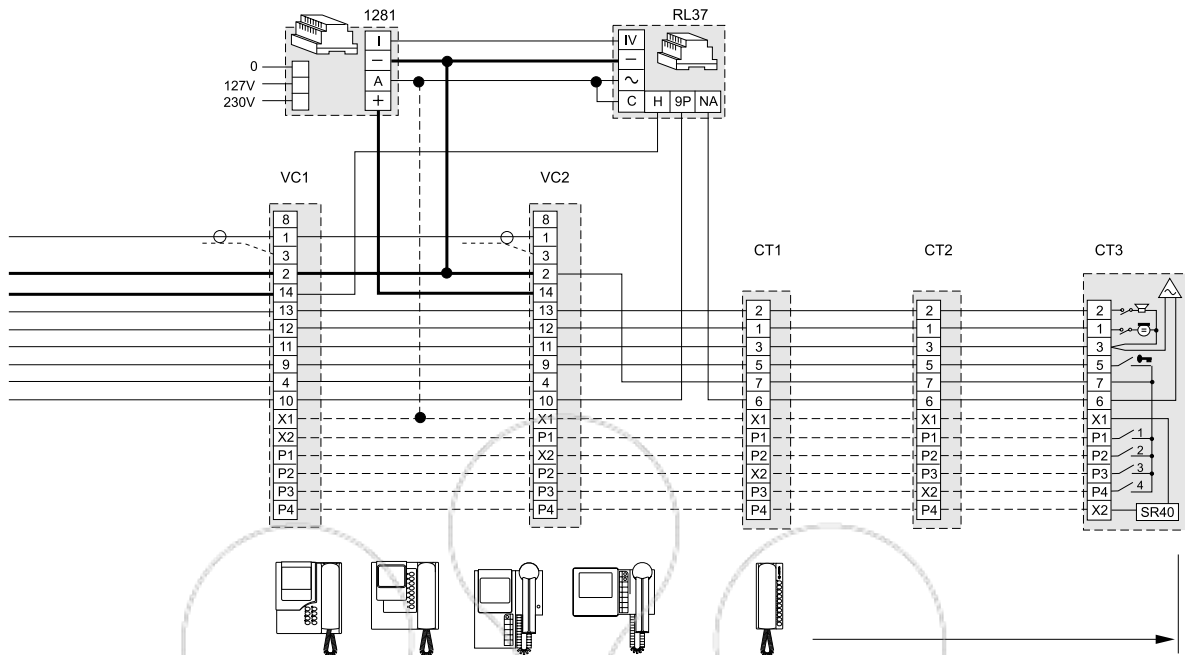
**CT =**  
**PT510**  
**PV100**  
**924**  
 or, if intercommunicating  
**PT520 + SR40 + PT501**



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## 2 VIDEO INTERCOMS AND 3 INTERCOMS WITH INTERCOMMUNICATING SERVICE



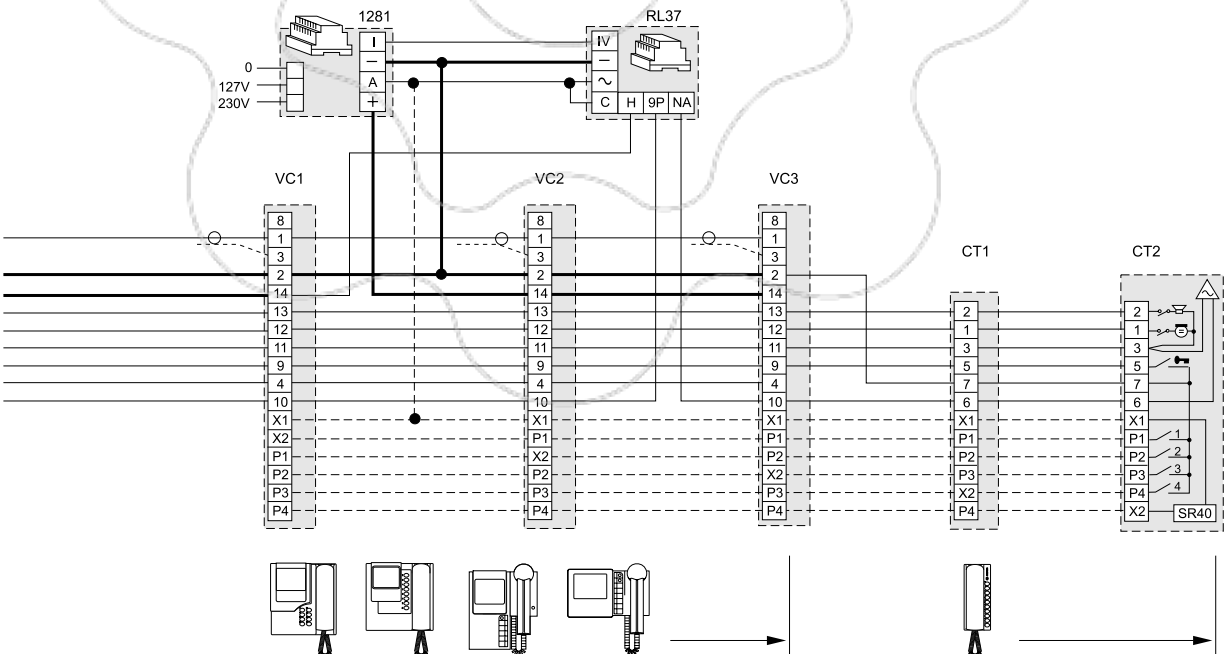
Read notes 1abc, 2, 3 and 4 of page 124.

**VC =**  
**PT5160 + WB5100**  
**PT5660 + WB5600 + 1283**  
**PT5860 + WB5600**  
**PV2160 + WB2100**  
**PV1260 + WB1200 + 1283**

or, if intercommunicating  
**PT5160 + WB5160**  
**PT5660 + WB5660 + 1283**  
**PT5860 + WB5660**  
**PV2160 + WB2160**  
**PV1260 + WB1260 + 1283**

**CT =**  
**PT510**  
**PV100**  
**924**  
 or, if intercommunicating  
**PT520 + SR40 + PT501**

## 3 VIDEO INTERCOMS AND 2 INTERCOMS WITH INTERCOMMUNICATING SERVICE



Read notes 1abc, 2, 3 and 4 of page 124.

**VC =**  
**PT5160 + WB5100**  
**PT5660 + WB5600 + 1283**  
**PT5860 + WB5600**  
**PV2160 + WB2100**  
**PV1260 + WB1200 + 1283**

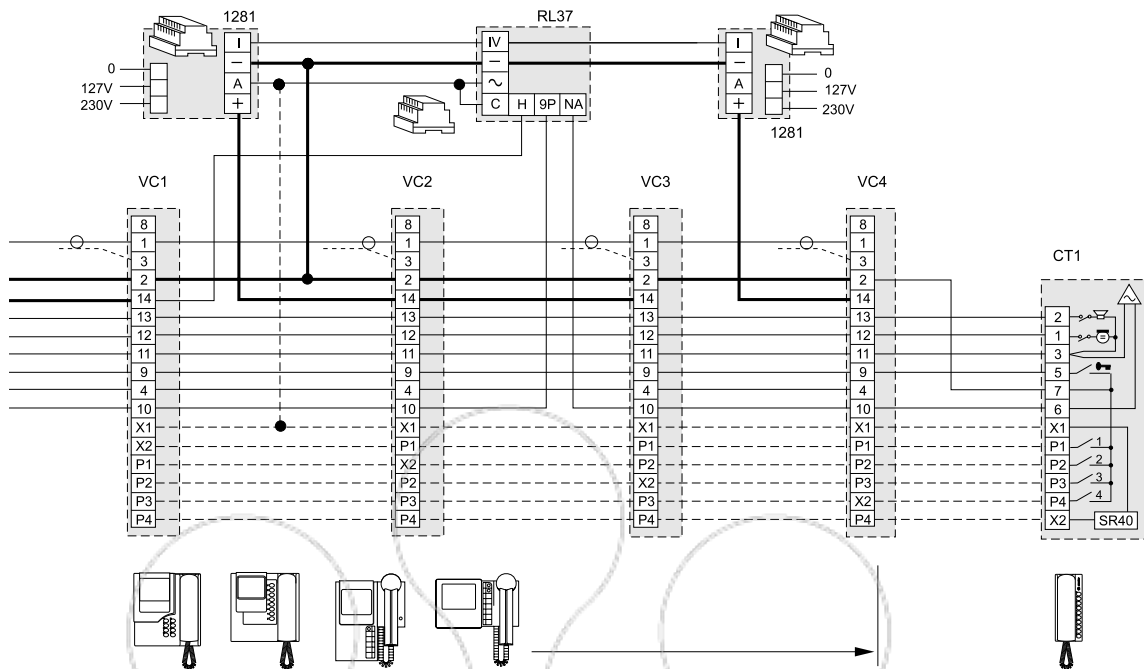
or, if intercommunicating  
**PT5160 + WB5160**  
**PT5660 + WB5660 + 1283**  
**PT5860 + WB5660**  
**PV2160 + WB2160**  
**PV1260 + WB1260 + 1283**

**CT =**  
**PT510**  
**PV100**  
**924**  
 or, if intercommunicating  
**PT520 + SR40 + PT501**



# ONE-WAY additional diagrams

## 4 VIDEO INTERCOMS AND 1 INTERCOM WITH INTERCOMMUNICATING SERVICE



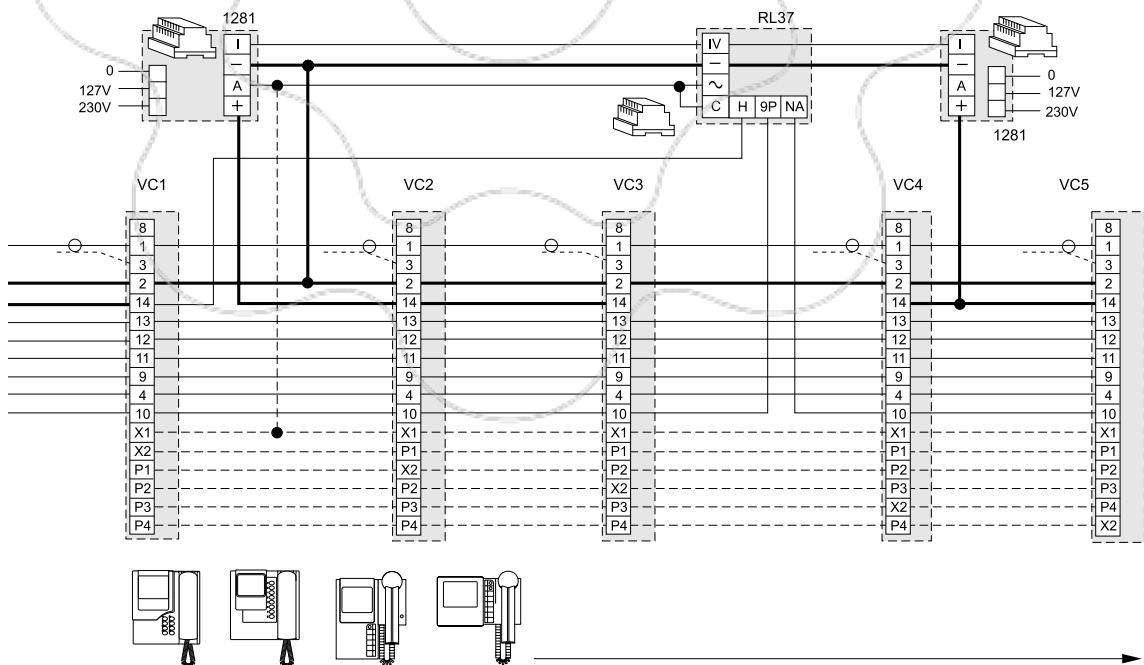
Read notes 1abc, 2, 3 and 4 of page 124.

**VC =**  
 PT5160 + WB5100  
 PT5660 + WB5600 + 1283  
 PT5860 + WB5600  
 PV2160 + WB2100  
 PV1260 + WB1200 + 1283

or, if intercommunicating  
 PT5160 + WB5160  
 PT5660 + WB5660 + 1283  
 PT5860 + WB5660  
 PV2160 + WB2160  
 PV1260 + WB1260 + 1283

**CT =**  
 PT510  
 PV100  
 924  
 or, if intercommunicating  
 PT520 + SR40 + PT501

## 5 INTERCOMMUNICATING VIDEO INTERCOMS



Read notes 1abc, 3 and 4 of page 124.

**VC =**  
 PT5160 + WB5100  
 PT5660 + WB5600 + 1283  
 PT5860 + WB5600  
 PV2160 + WB2100  
 PV1260 + WB1200 + 1283

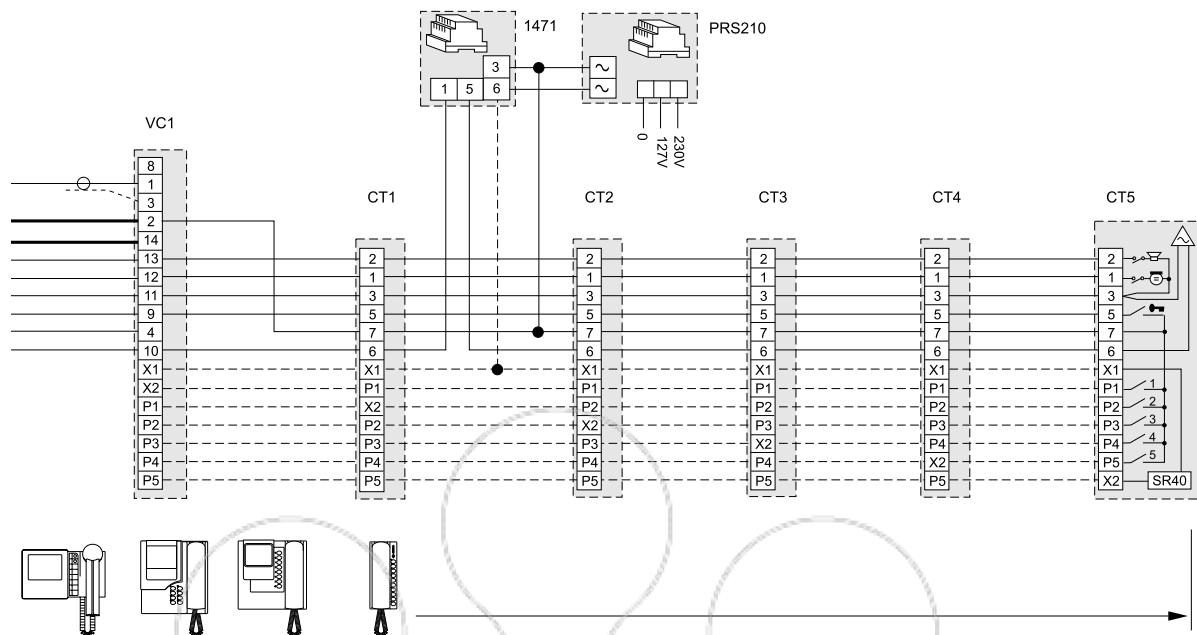
or, if intercommunicating  
 PT5160 + WB5160  
 PT5660 + WB5660 + 1283  
 PT5860 + WB5660  
 PV2160 + WB2160  
 PV1260 + WB1260 + 1283



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## 1 VIDEO INTERCOM AND 5 INTERCOMS WITH INTERCOMMUNICATING SERVICE



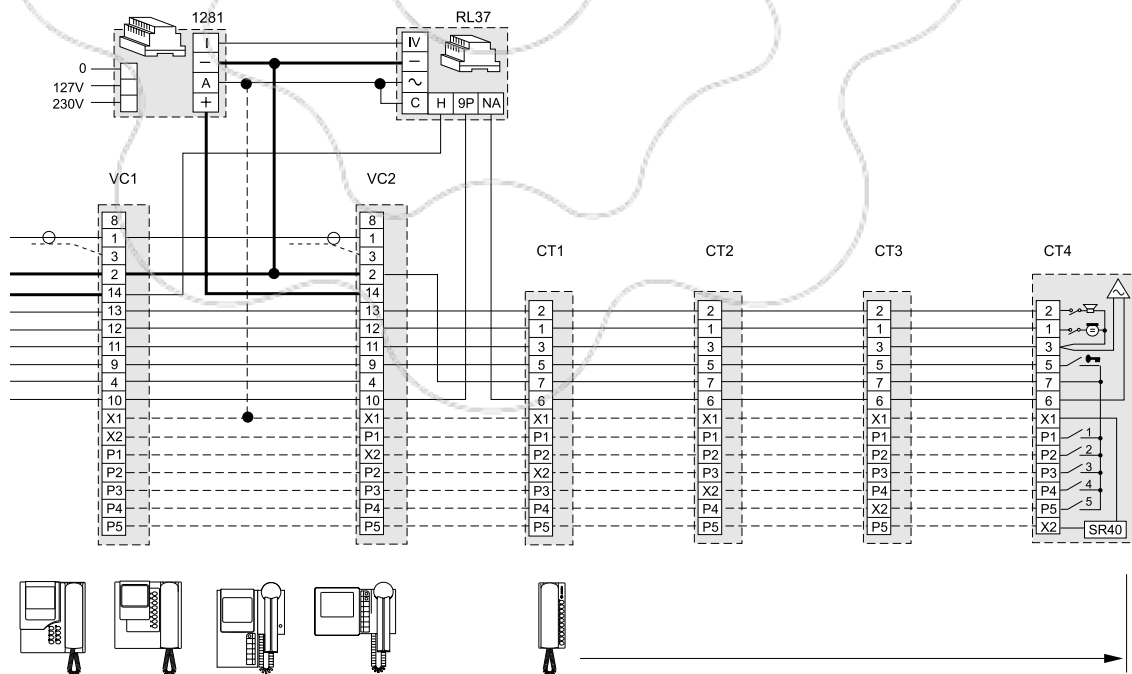
Read notes 1abc, 2 and 4 of page 124.

**VC =**  
 PT5160 + WB5100  
 PT5660 + WB5600 + 1283  
 PT5860 + WB5600  
 PV2160 + WB2100  
 PV1260 + WB1200 + 1283

or, if intercommunicating  
 PT5160 + WB5160  
 PT5660 + WB5660 + 1283  
 PT5860 + WB5660  
 PV2160 + WB2160  
 PV1260 + WB1260 + 1283

**CT =**  
 PT510  
 PV100  
 924  
 or, if intercommunicating  
 PT520 + SR40 + PT501

## 2 VIDEO INTERCOMS AND 4 INTERCOMS WITH INTERCOMMUNICATING SERVICE



Read notes 1abc, 2, 3 and 4 of page 124.

**VC =**  
 PT5160 + WB5100  
 PT5660 + WB5600 + 1283  
 PT5860 + WB5600  
 PV2160 + WB2100  
 PV1260 + WB1200 + 1283

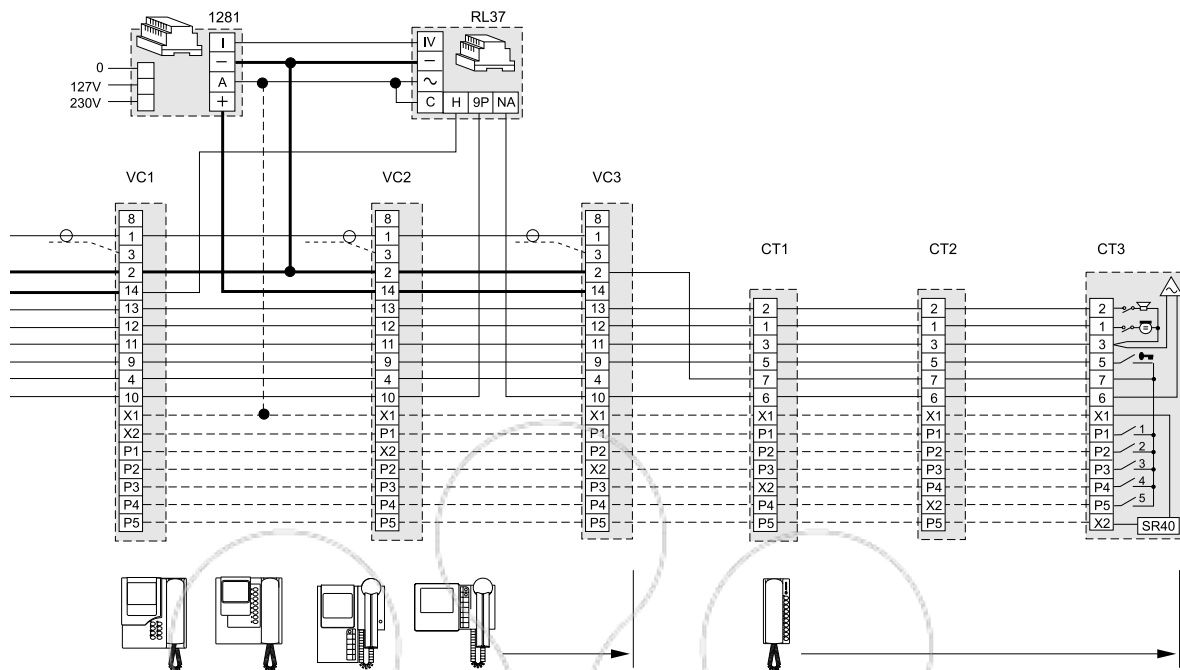
or, if intercommunicating  
 PT5160 + WB5160  
 PT5660 + WB5660 + 1283  
 PT5860 + WB5660  
 PV2160 + WB2160  
 PV1260 + WB1260 + 1283

**CT =**  
 PT510  
 PV100  
 924  
 or, if intercommunicating  
 PT520 + SR40 + PT501



# ONE-WAY additional diagrams

## 3 VIDEO INTERCOMS AND 3 INTERCOMS WITH INTERCOMMUNICATING SERVICE



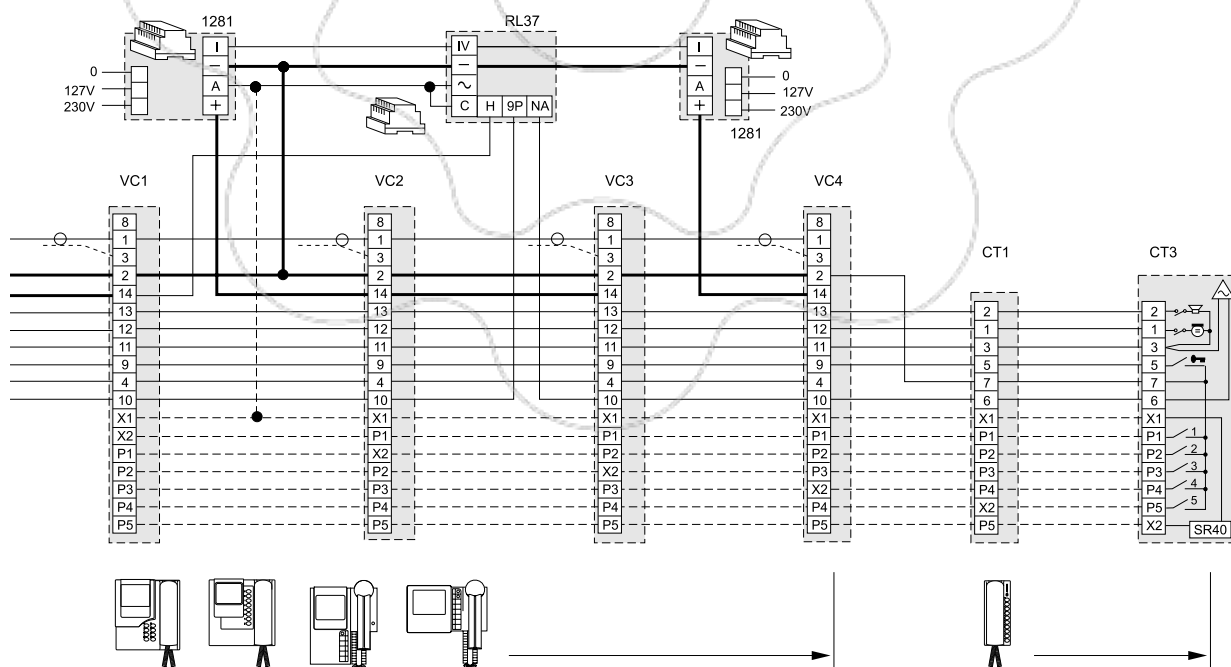
**VC =**  
**PT5160 + WB5100**  
**PT5660 + WB5600 + 1283**  
**PT5860 + WB5600**  
**PV2160 + WB2100**  
**PV1260 + WB1200 + 1283**

or, if intercommunicating  
**PT5160 + WB5160**  
**PT5660 + WB5660 + 1283**  
**PT5860 + WB5660**  
**PV2160 + WB2160**  
**PV1260 + WB1260 + 1283**

**CT =**  
**PT510**  
**PV100**  
**924**  
 or, if intercommunicating  
**PT520 + SR40 + PT501**

Read notes 1 abc, 2, 3 and 4 of page 124.

## 4 VIDEO INTERCOMS AND 2 INTERCOMS WITH INTERCOMMUNICATING SERVICE



**VC =**  
**PT5160 + WB5100**  
**PT5660 + WB5600 + 1283**  
**PT5860 + WB5600**  
**PV2160 + WB2100**  
**PV1260 + WB1200 + 1283**

or, if intercommunicating  
**PT5160 + WB5160**  
**PT5660 + WB5660 + 1283**  
**PT5860 + WB5660**  
**PV2160 + WB2160**  
**PV1260 + WB1260 + 1283**

**CT =**  
**PT510**  
**PV100**  
**924**  
 or, if intercommunicating  
**PT520 + SR40 + PT501**

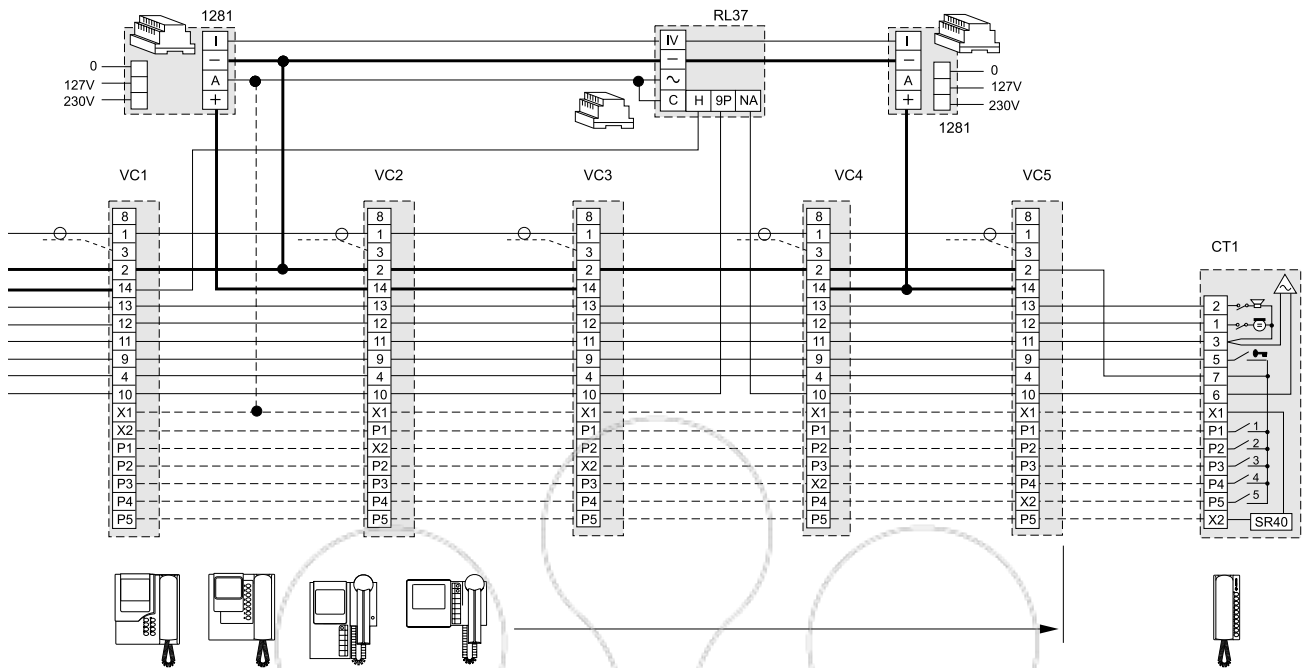
Read notes 1 abc, 2, 3 and 4 of page 124.



coax



## 5 VIDEO INTERCOMS AND 1 INTERCOM WITH INTERCOMMUNICATING SERVICE



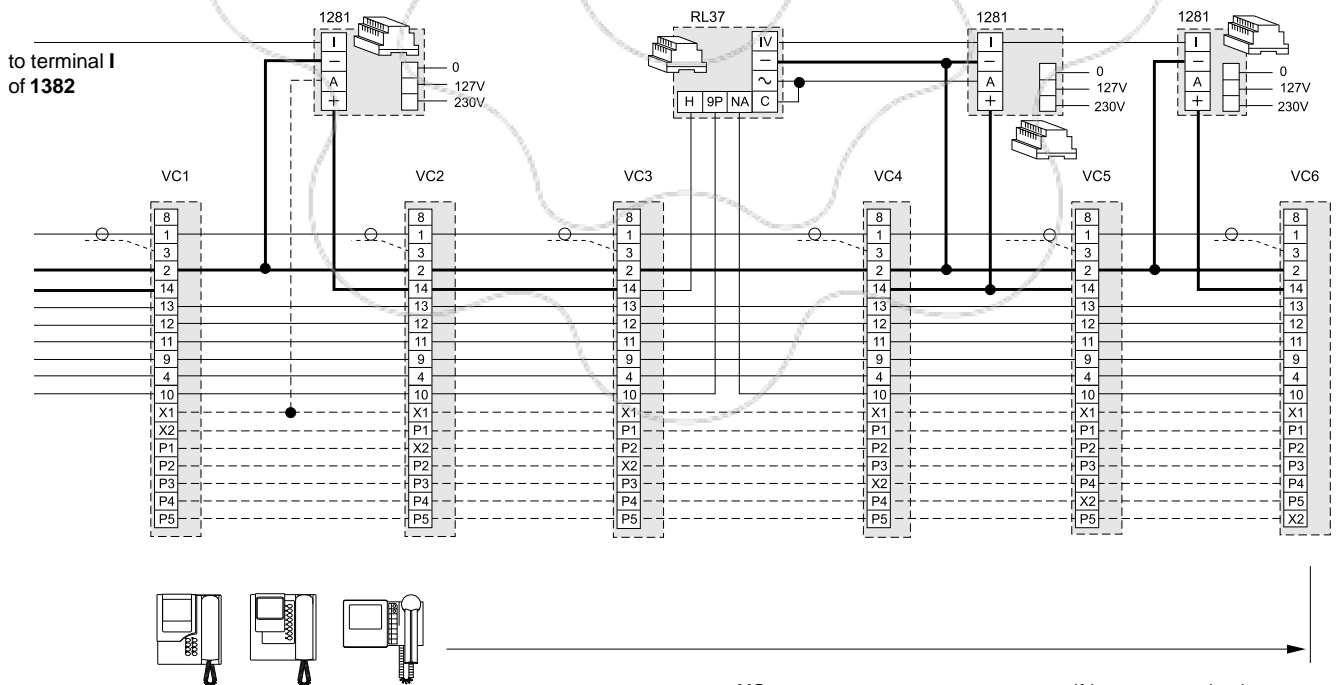
Read notes 1abc, 2, 3 and 4 of page 124.

VC =  
 PT5160 + WB5100  
 PT5660 + WB5600 + 1283  
 PT5860 + WB5600  
 PV2160 + WB2100  
 PV1260 + WB1200 + 1283

or, if intercommunicating  
 PT5160 + WB5160  
 PT5660 + WB5660 + 1283  
 PT5860 + WB5660  
 PV2160 + WB2160  
 PV1260 + WB1260 + 1283

CT =  
 PT510  
 PV100  
 924  
 or, if intercommunicating  
 PT520 + SR40 + PT501

## 6 INTERCOMMUNICATING VIDEO INTERCOMS



to terminal I  
 of 1382

Read notes 1abc, 3 and 4 of page 124.

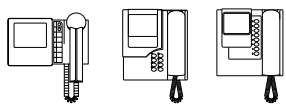
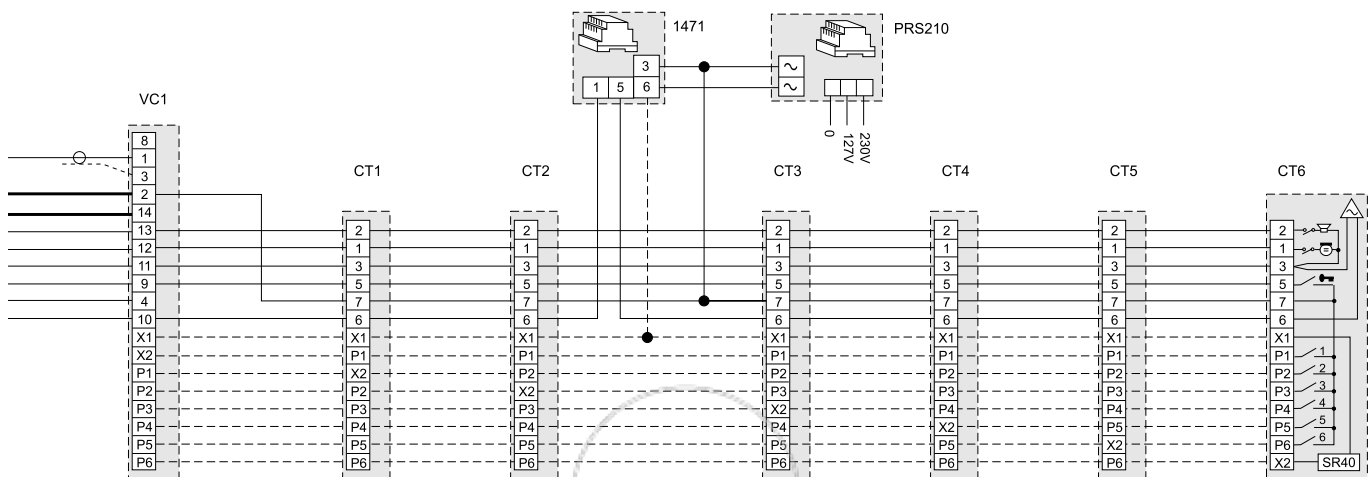
VC =  
 PT5160 + WB5100  
 PT5660 + WB5600 + 1283  
 PT5860 + WB5600  
 PV2160 + WB2100  
 PV1260 + WB1200 + 1283

or, if intercommunicating  
 PT5160 + WB5160  
 PT5660 + WB5660 + 1283  
 PT5860 + WB5660  
 PV2160 + WB2160  
 PV1260 + WB1260 + 1283



# ONE-WAY additional diagrams

## 1 VIDEO INTERCOM AND 6 INTERCOMS WITH INTERCOMMUNICATING SERVICE



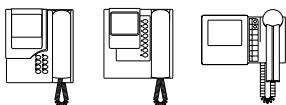
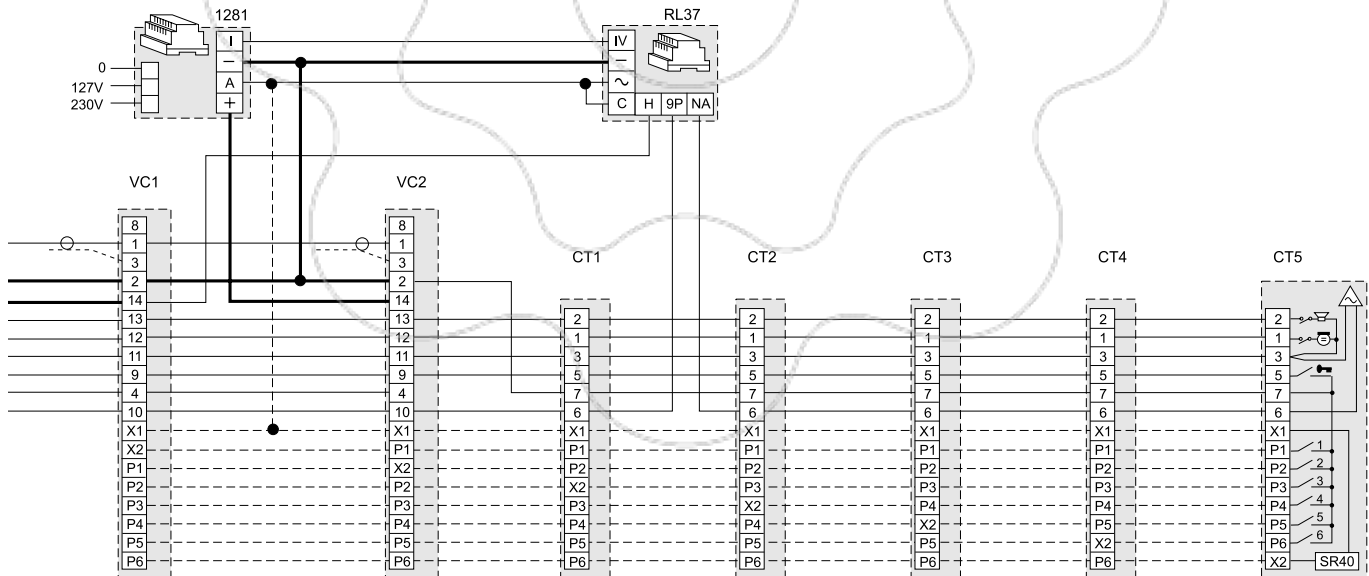
Read notes 1abc and 2 of page 124.

**VC =**  
 PT5160 + WB5100  
 PT5660 + WB5600 + 1283  
 PT5860 + WB5600  
 PV2160 + WB2100  
 PV1260 + WB1200 + 1283

or, if intercommunicating  
 PT5160 + WB5160  
 PT5660 + WB5660 + 1283  
 PT5860 + WB5660  
 PV2160 + WB2160  
 PV1260 + WB1260 + 1283

**CT =**  
 PT510  
 PV100  
 924  
 or, if intercommunicating  
 PT520 + SR40 + PT501

## 2 VIDEO INTERCOMS AND 5 INTERCOMS WITH INTERCOMMUNICATING SERVICE



Read notes 1abc, 2 and 3 of page 124.

**VC =**  
 PT5160 + WB5100  
 PT5660 + WB5600 + 1283  
 PT5860 + WB5600  
 PV2160 + WB2100  
 PV1260 + WB1200 + 1283

or, if intercommunicating  
 PT5160 + WB5160  
 PT5660 + WB5660 + 1283  
 PT5860 + WB5660  
 PV2160 + WB2160  
 PV1260 + WB1260 + 1283

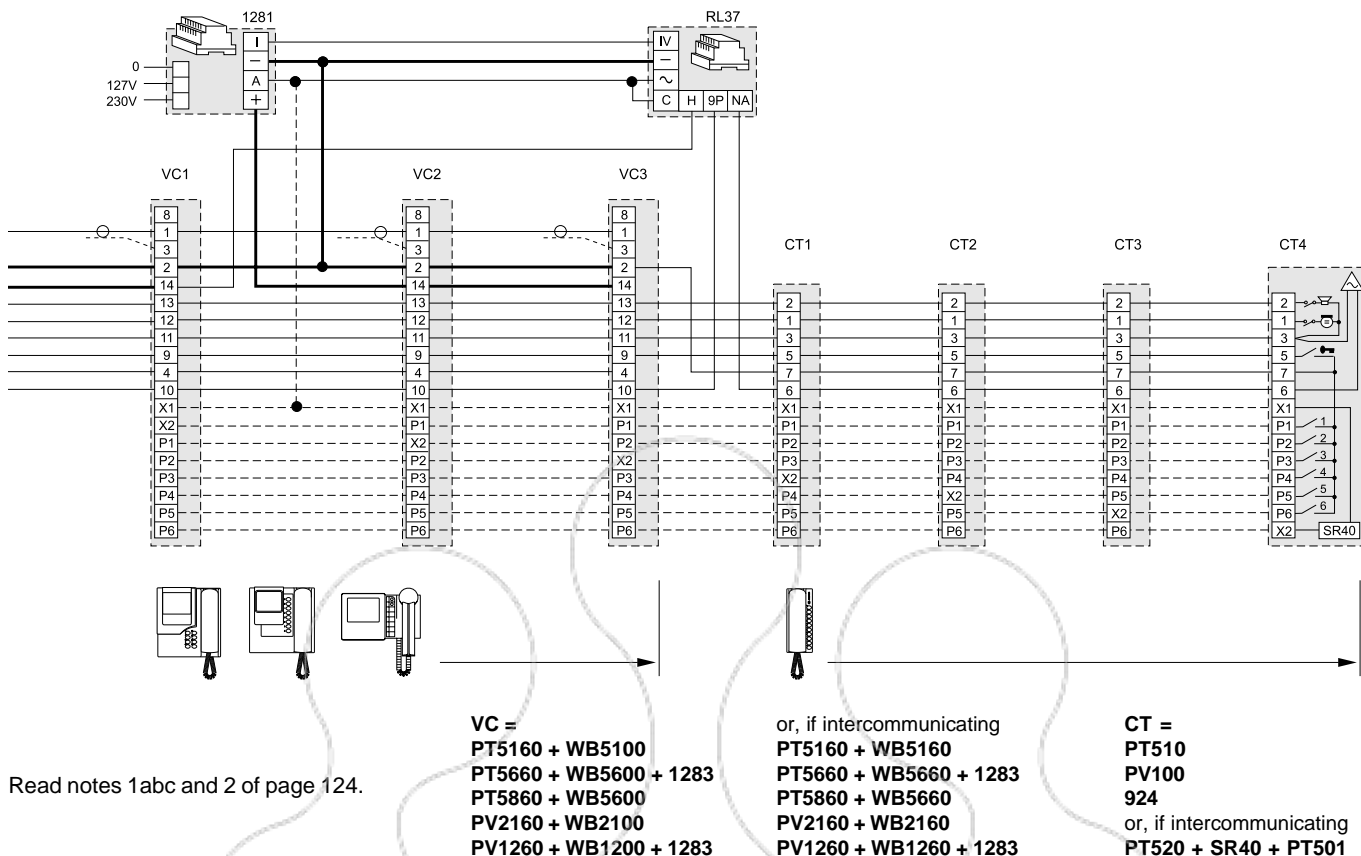
**CT =**  
 PT510  
 PV100  
 924  
 or, if intercommunicating  
 PT520 + SR40 + PT501



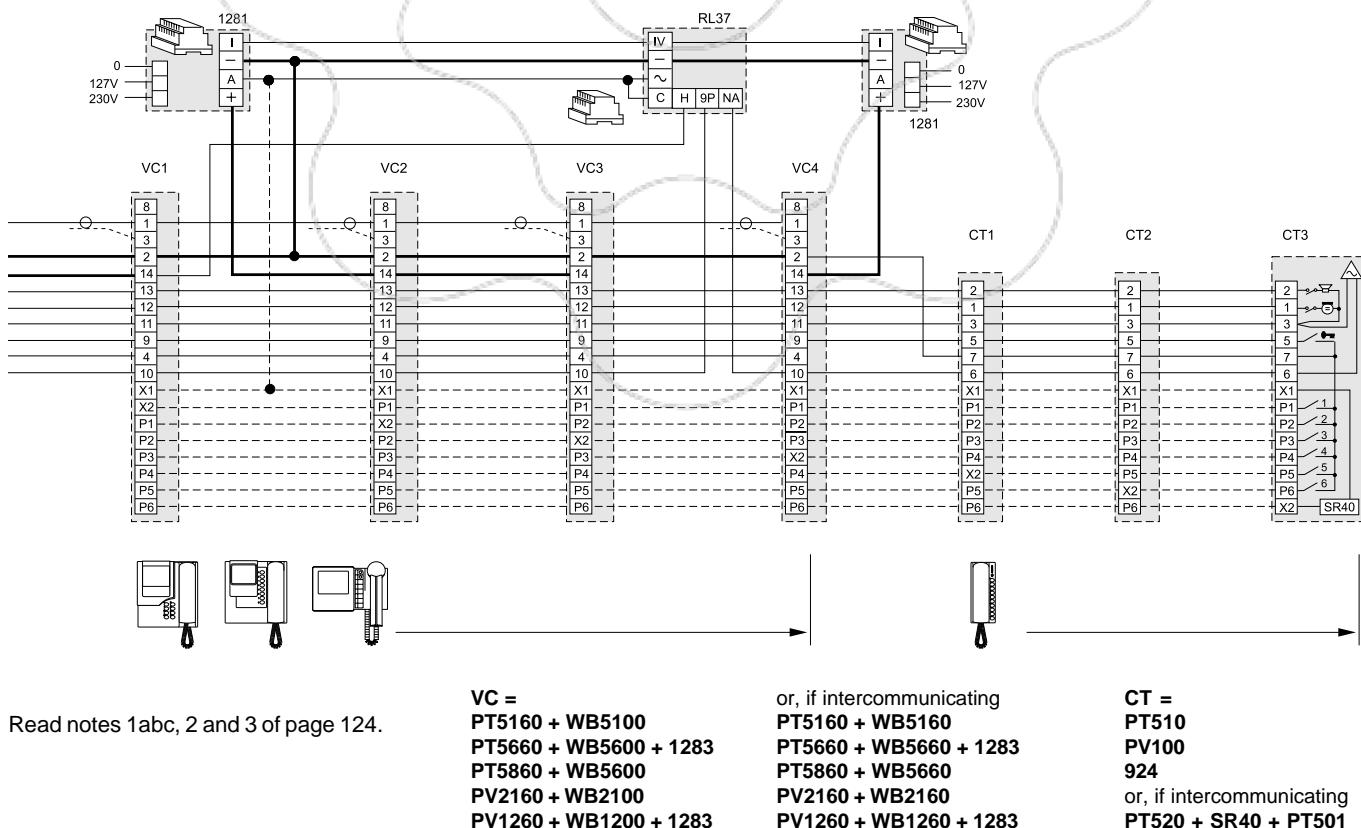
coax



## 3 VIDEO INTERCOMS AND 4 INTERCOMS WITH INTERCOMMUNICATING SERVICE

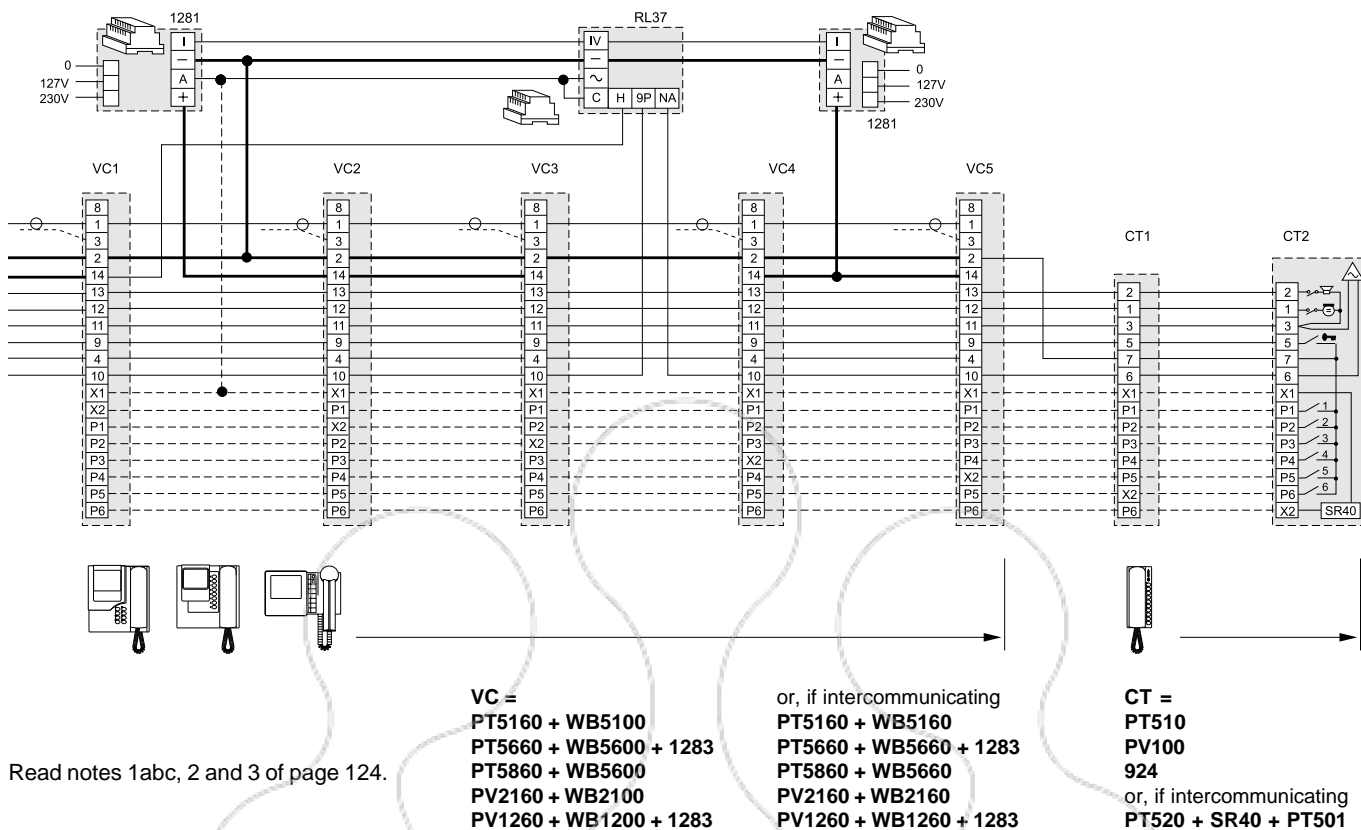


## 4 VIDEO INTERCOMS AND 3 INTERCOMS WITH INTERCOMMUNICATING SERVICE

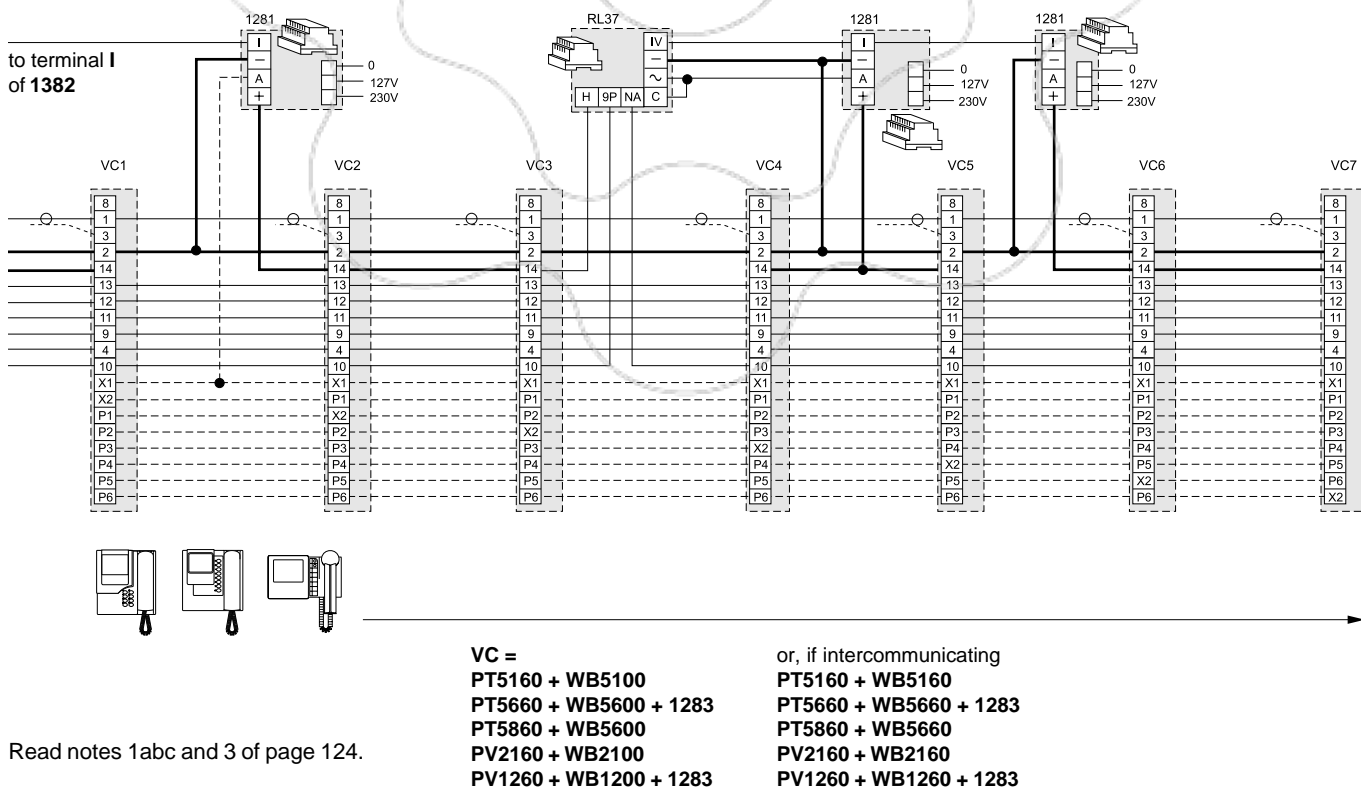


# ONE-WAY additional diagrams

## 5 VIDEO INTERCOMS AND 2 INTERCOMS WITH INTERCOMMUNICATING SERVICE



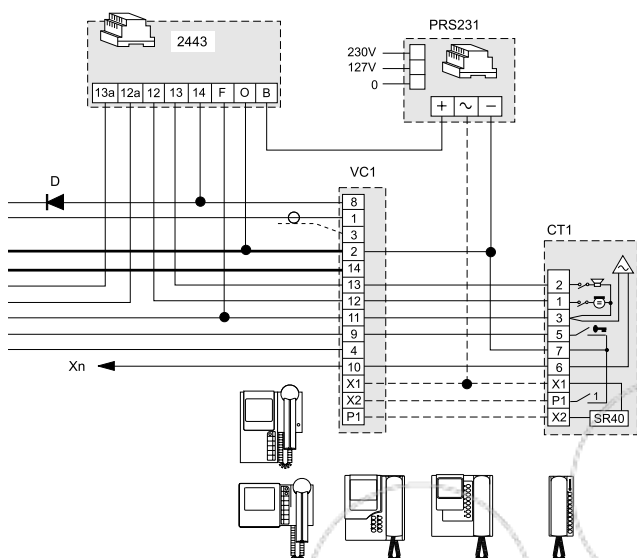
## 7 INTERCOMMUNICATING VIDEO INTERCOMS



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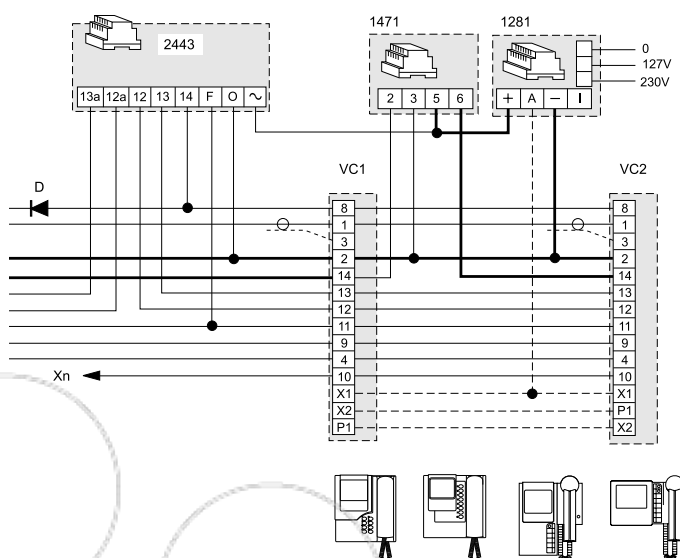
## 1 VIDEO INTERCOM AND 1 INTERCOM WITH INTERCOMMUNICATING SERVICE



D = 100V-1A diode (type 1N4007)

Read notes 1ac, 2, 4 and 5 of page 124.

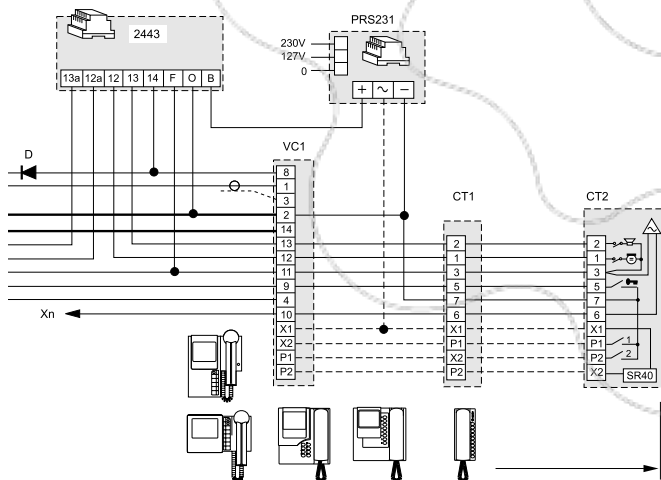
## 2 INTERCOMMUNICATING VIDEO INTERCOMS



D = 100V-1A diode (type 1N4007)

Read notes 1ac, 3, 4 and 5 of page 124.

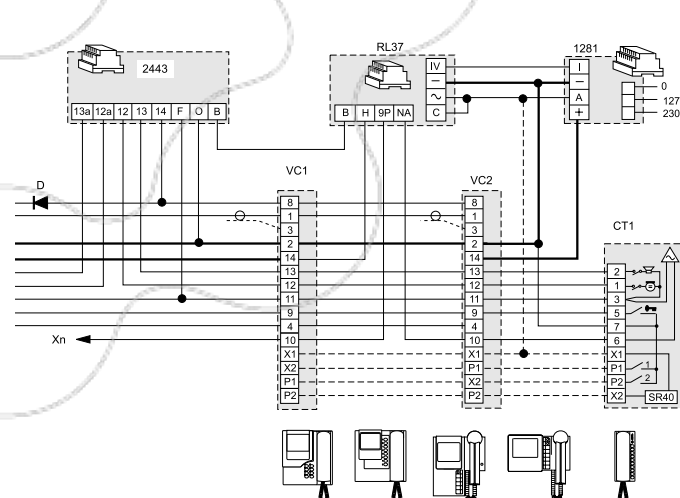
## 1 VIDEO INTERCOM AND 2 INTERCOMS WITH INTERCOMMUNICATING SERVICE



D = 100V-1A diode (type 1N4007)

Read notes 1ac, 2, 4 and 5 of page 124.

## 2 VIDEO INTERCOMS AND 1 INTERCOM WITH INTERCOMMUNICATING SERVICE



D = 100V-1A diode (type 1N4007)

Read notes 1ac, 2, 3, 4 and 5 of page 124.

VC =  
PT5160 + WB5100  
PT5660 + WB5600 + 1283  
PT5860 + WB5600  
PV2160 + WB2100  
PV1260 + WB1200 + 1283

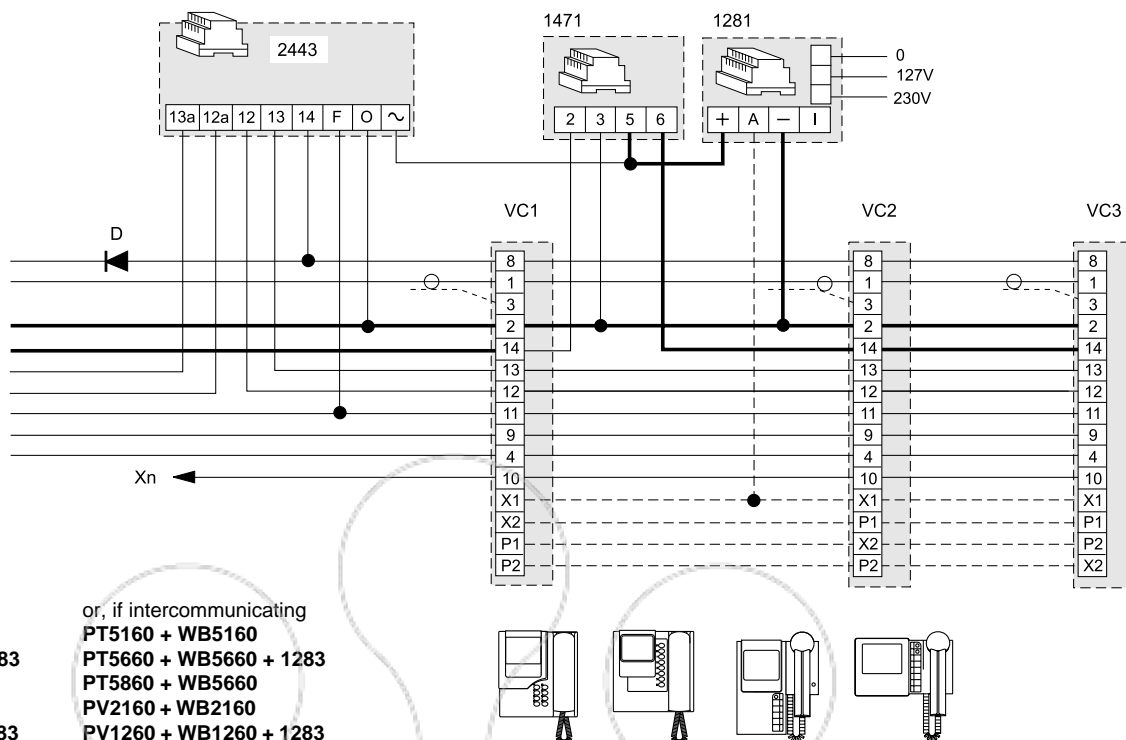
or, if intercommunicating  
PT5160 + WB5160  
PT5660 + WB5660 + 1283  
PT5860 + WB5660  
PV2160 + WB2160  
PV1260 + WB1260 + 1283

CT =  
PT510  
PV100  
924  
or, if intercommunicating  
PT520 + SR40 + PT501



# MULTI-WAY additional diagrams

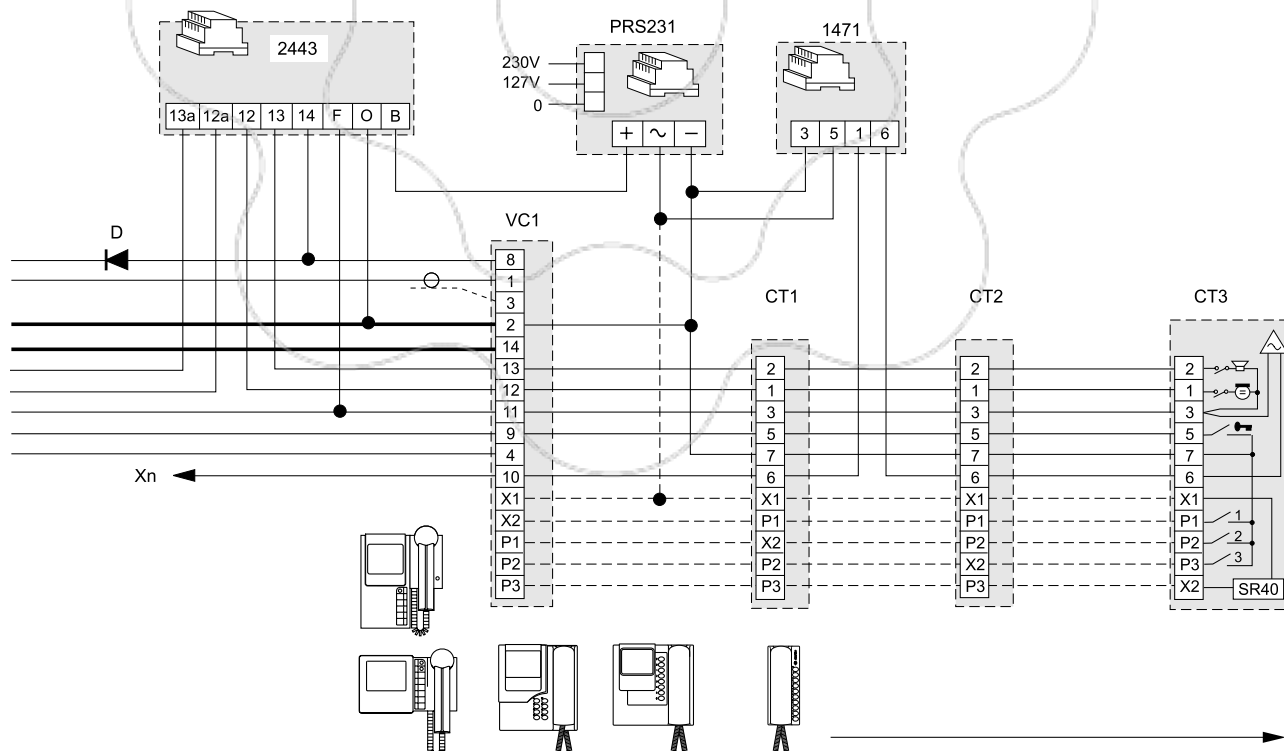
## 3 INTERCOMMUNICATING VIDEO INTERCOMS



D = 100V-1A diode (type 1N4007)

Read notes 1ac, 3, 4 and 5 of page 124.

## 1 VIDEO INTERCOM AND 3 INTERCOMS WITH INTERCOMMUNICATING SERVICE



D = 100V-1A diode (type 1N4007)

Read notes 1ac, 2, 4 and 5 of page 124.

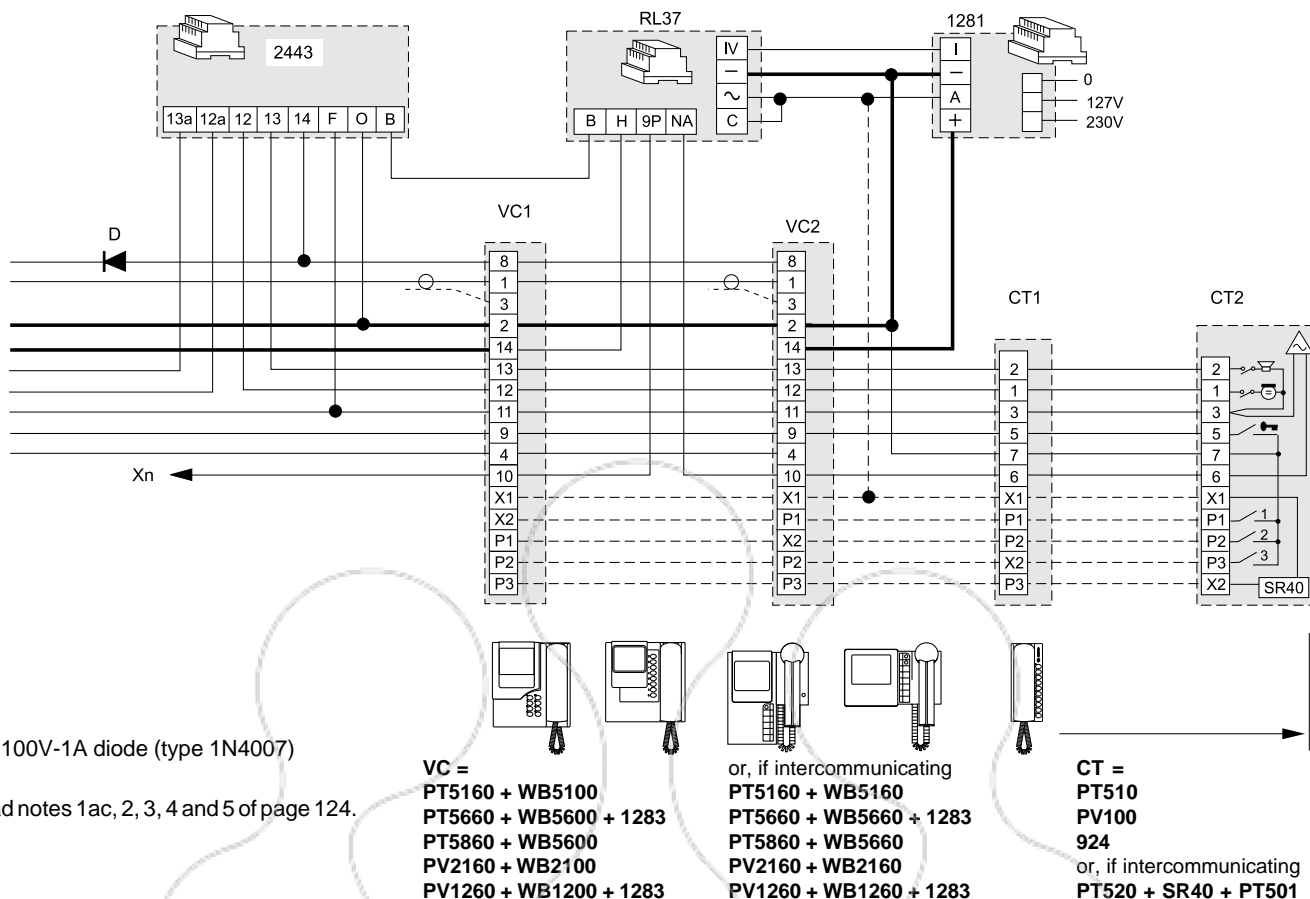


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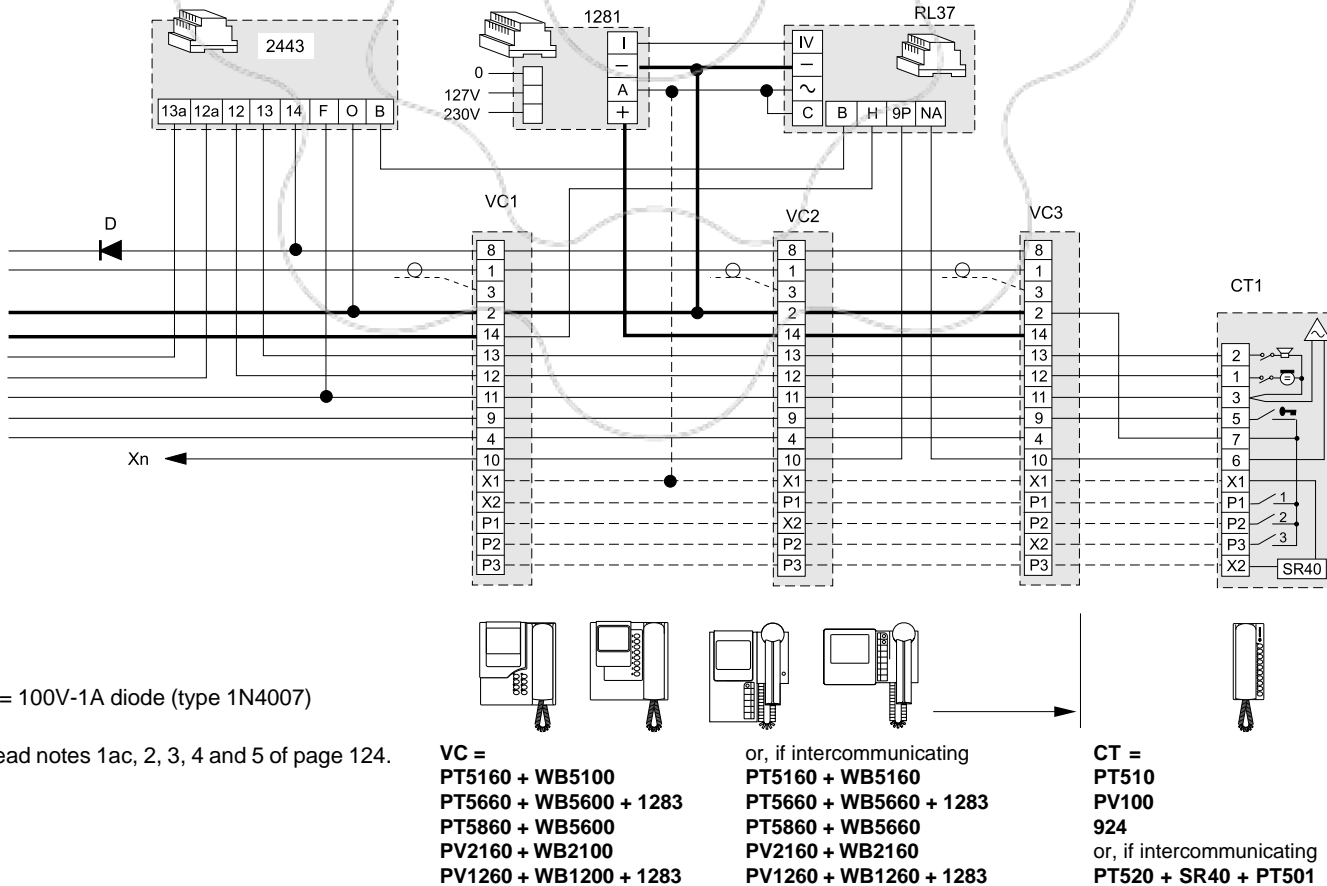


## MULTI-WAY additional diagrams

### 2 VIDEO INTERCOMS AND 2 INTERCOMS WITH INTERCOMMUNICATING SERVICE

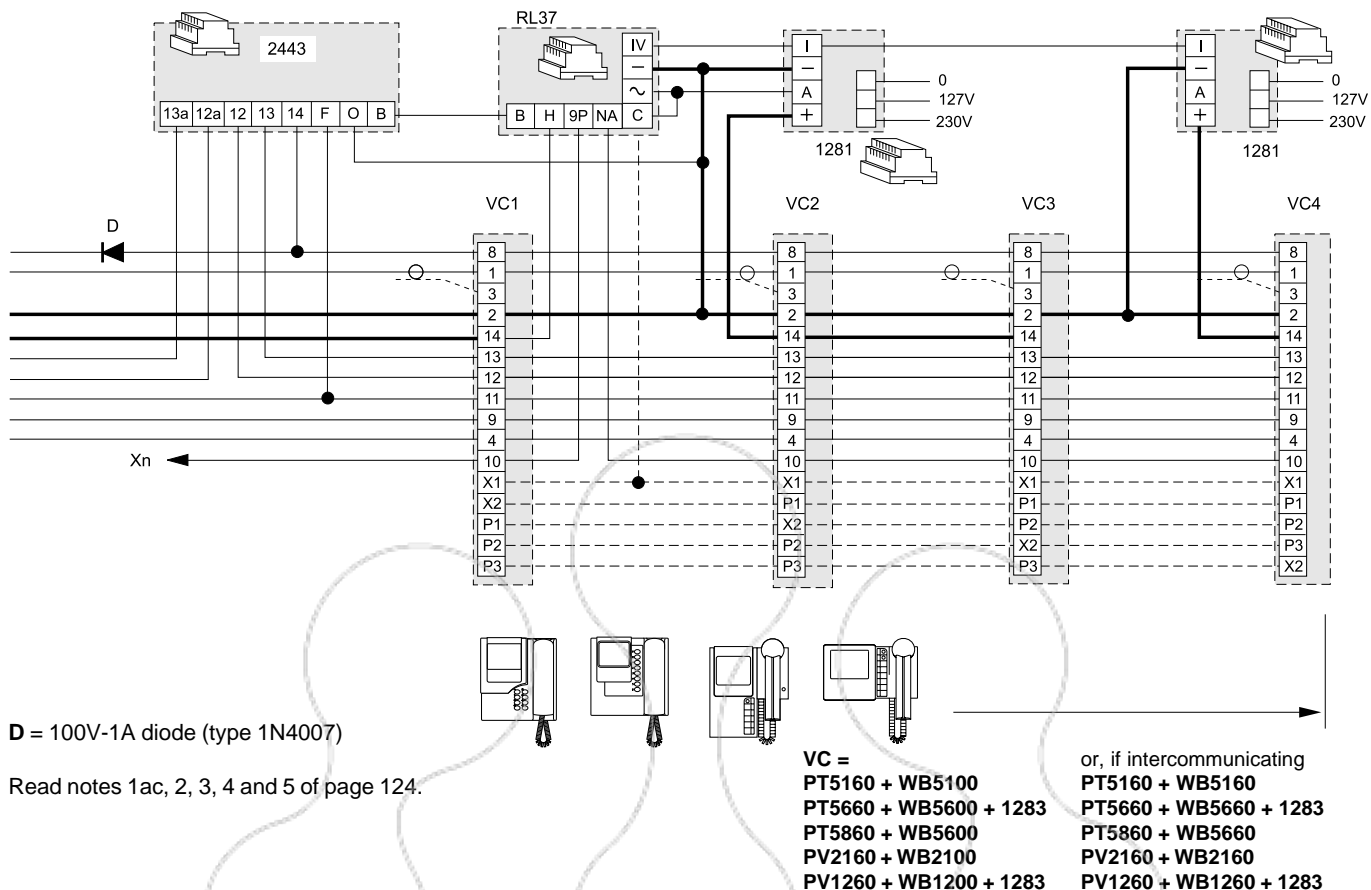


### 3 VIDEO INTERCOMS AND 1 INTERCOM WITH INTERCOMMUNICATING SERVICE

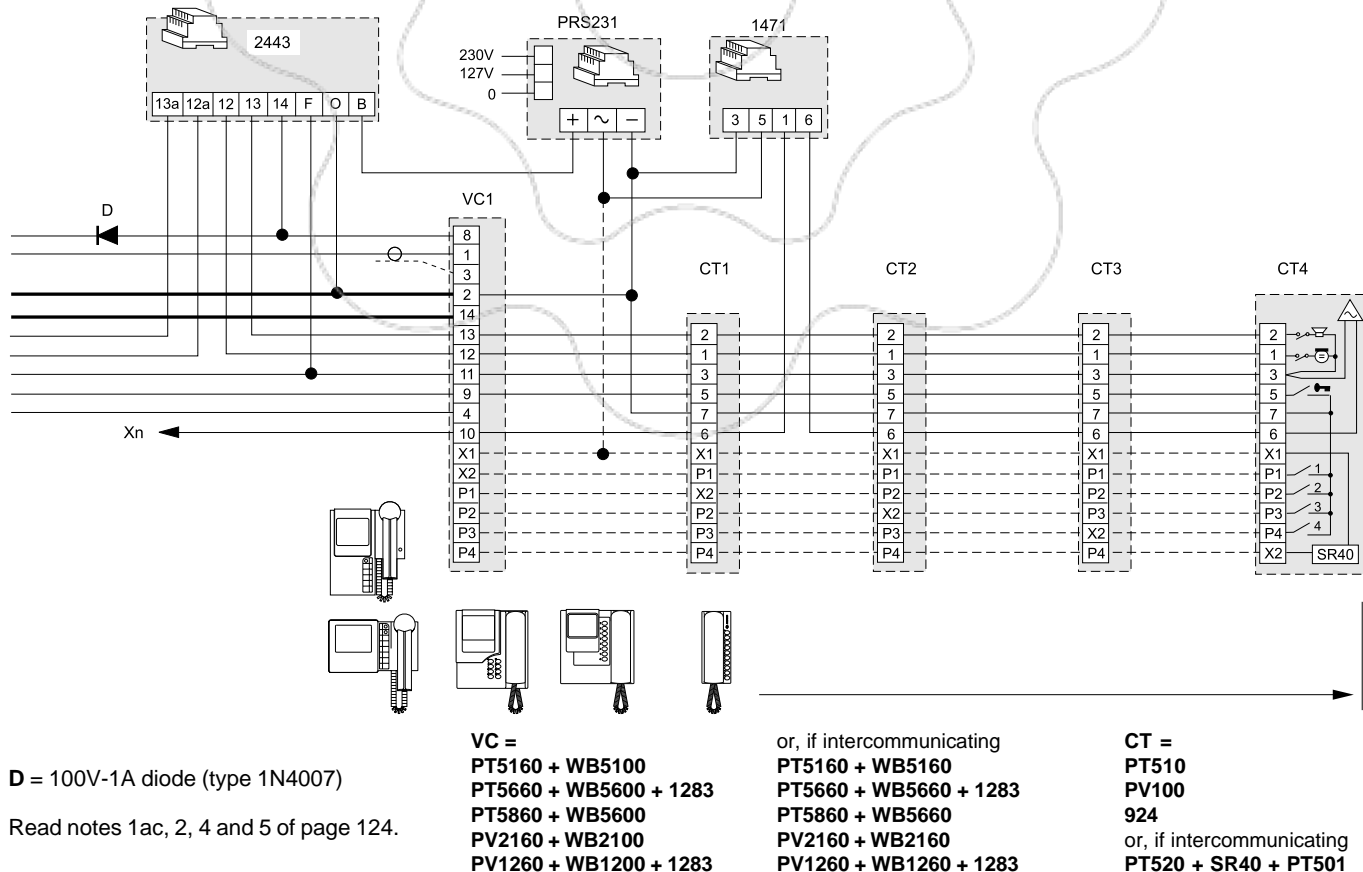


# MULTI-WAY additional diagrams

## 4 INTERCOMMUNICATING VIDEO INTERCOMS



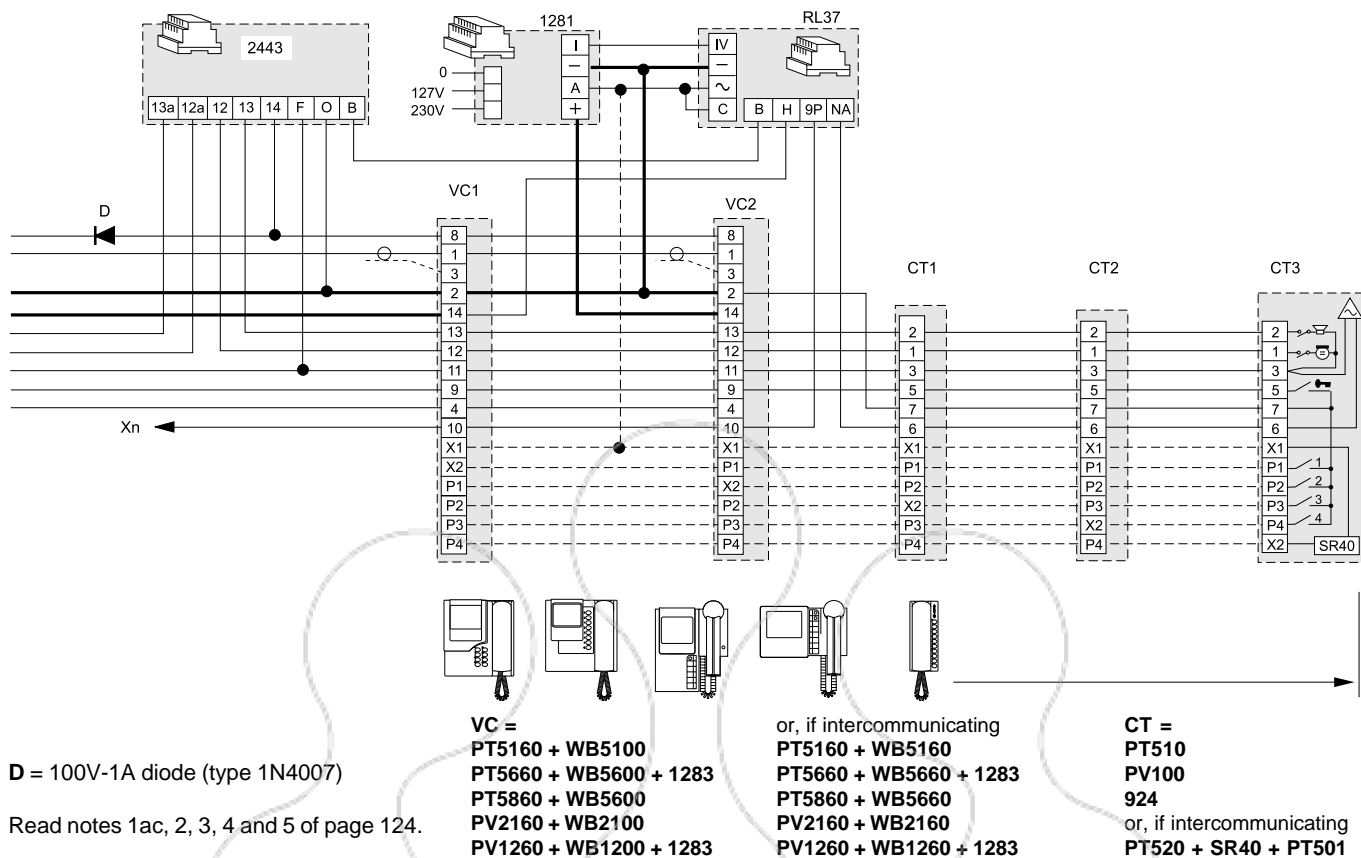
## 1 VIDEO INTERCOM AND 4 INTERCOMS WITH INTERCOMMUNICATING SERVICE



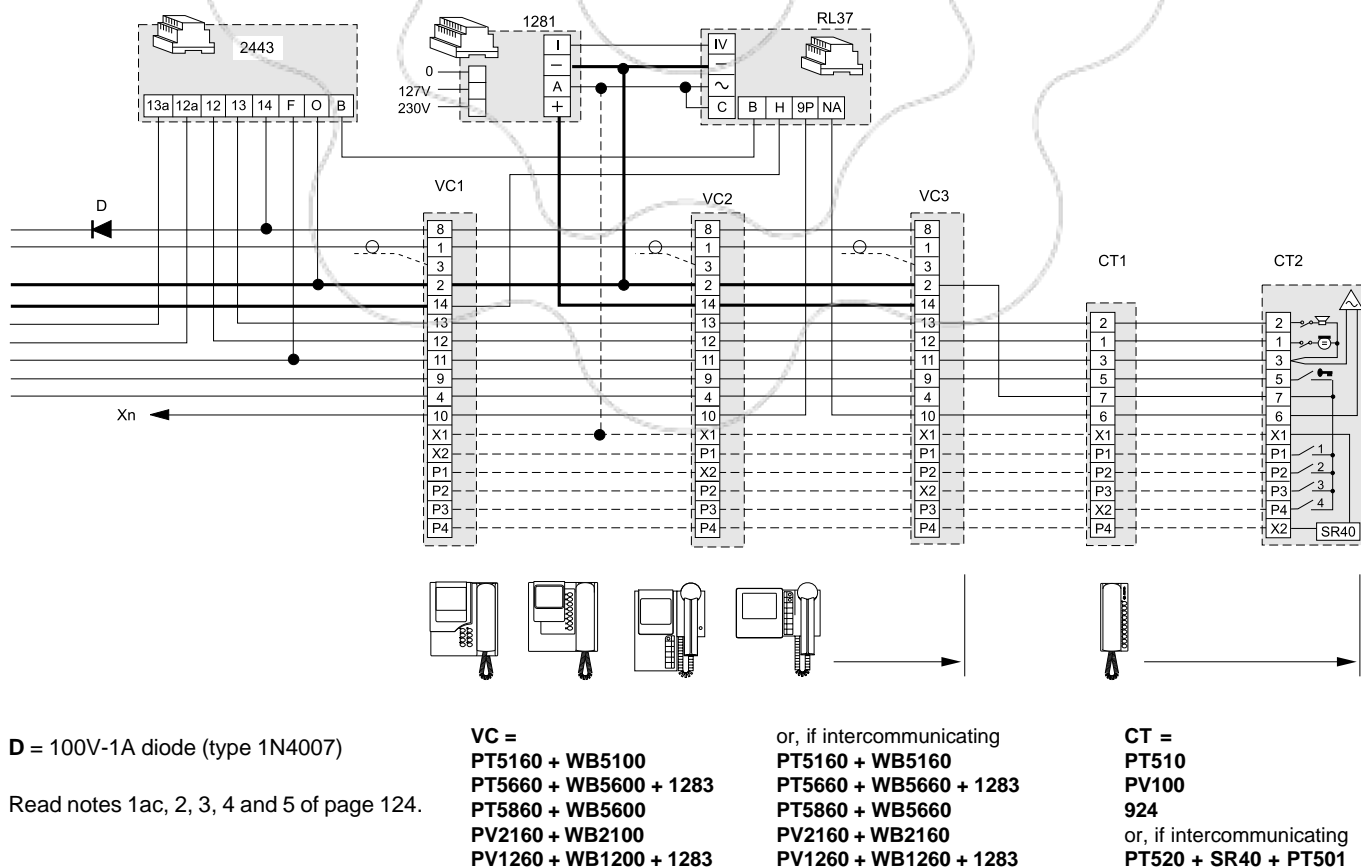
coax



## 2 VIDEO INTERCOMS AND 3 INTERCOMS WITH INTERCOMMUNICATING SERVICE

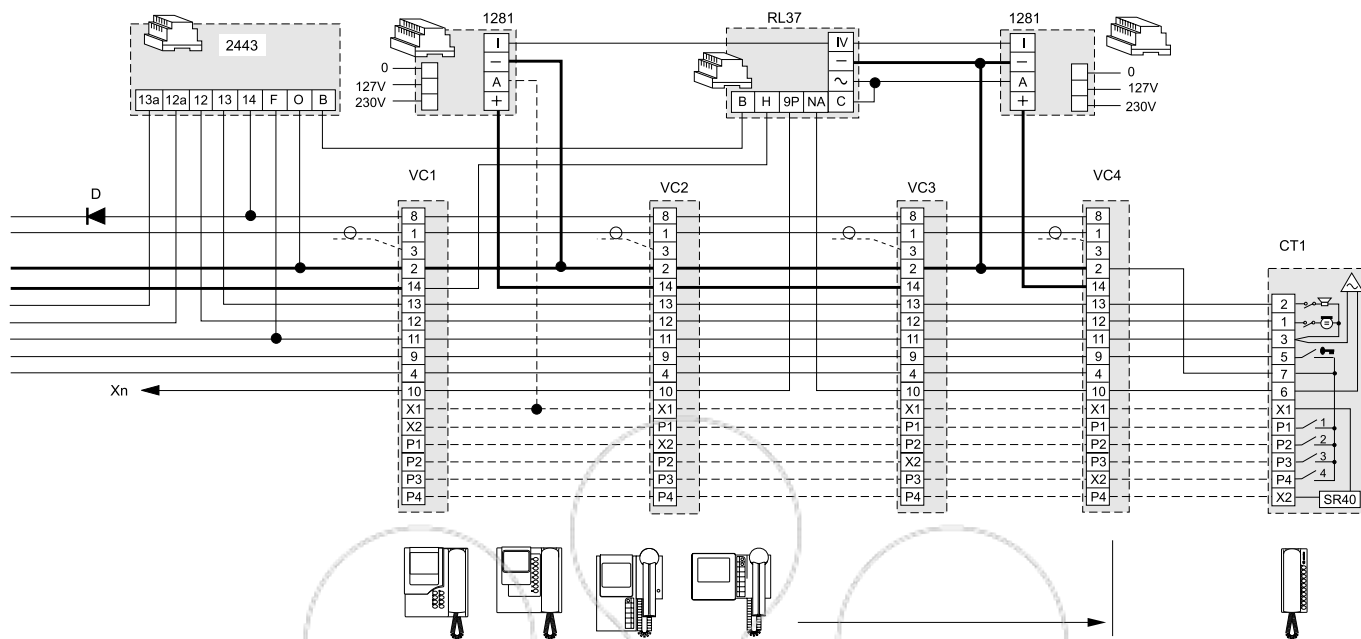


## 3 VIDEO INTERCOMS AND 2 INTERCOMS WITH INTERCOMMUNICATING SERVICE



# MULTI-WAY additional diagrams

## 4 VIDEO INTERCOMS AND 1 INTERCOM WITH INTERCOMMUNICATING SERVICE



D = 100V-1A diode (type 1N4007)

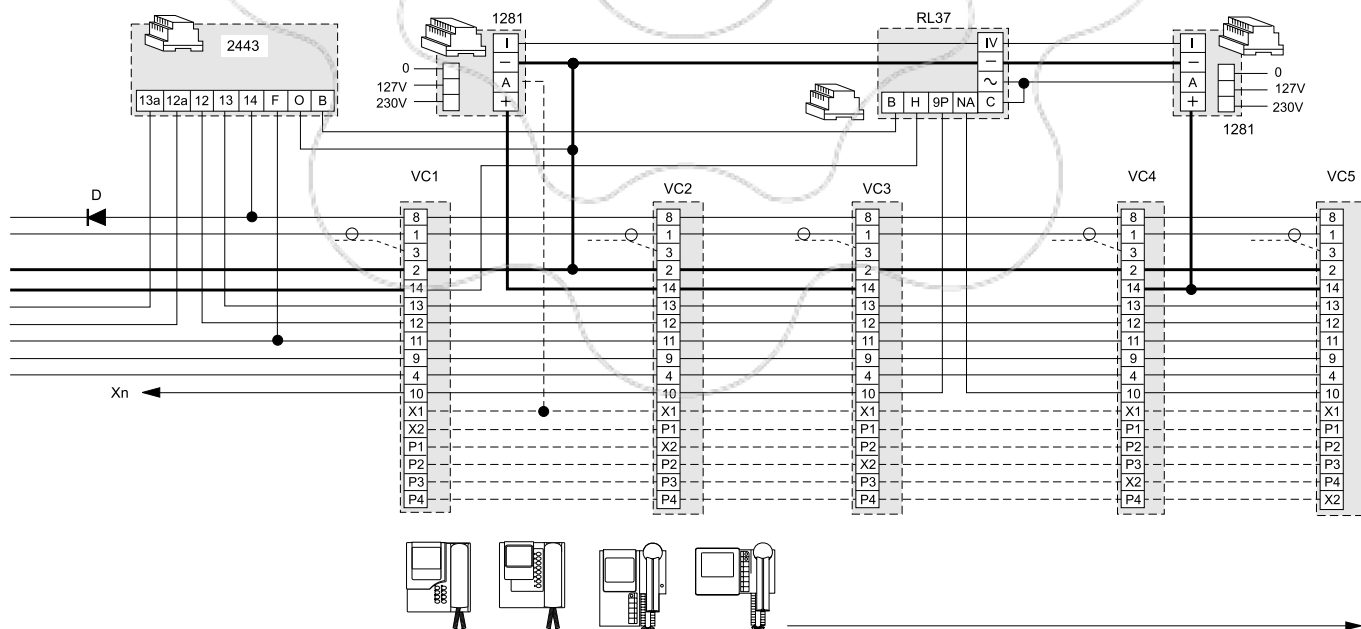
Read notes 1ac, 2, 3, 4 and 5 of page 124.

VC =  
PT5160 + WB5100  
PT5660 + WB5600 + 1283  
PT5860 + WB5600  
PV2160 + WB2100  
PV1260 + WB1200 + 1283

or, if intercommunicating  
PT5160 + WB5160  
PT5660 + WB5660 + 1283  
PT5860 + WB5660  
PV2160 + WB2160  
PV1260 + WB1260 + 1283

CT =  
PT510  
PV100  
924  
or, if intercommunicating  
PT520 + SR40 + PT501

## 5 INTERCOMMUNICATING VIDEO INTERCOMS



D = 100V-1A diode (type 1N4007)

Read notes 1ac, 3, 4 and 5 of page 124.

VC =  
PT5160 + WB5100  
PT5660 + WB5600 + 1283  
PT5860 + WB5600  
PV2160 + WB2100  
PV1260 + WB1200 + 1283

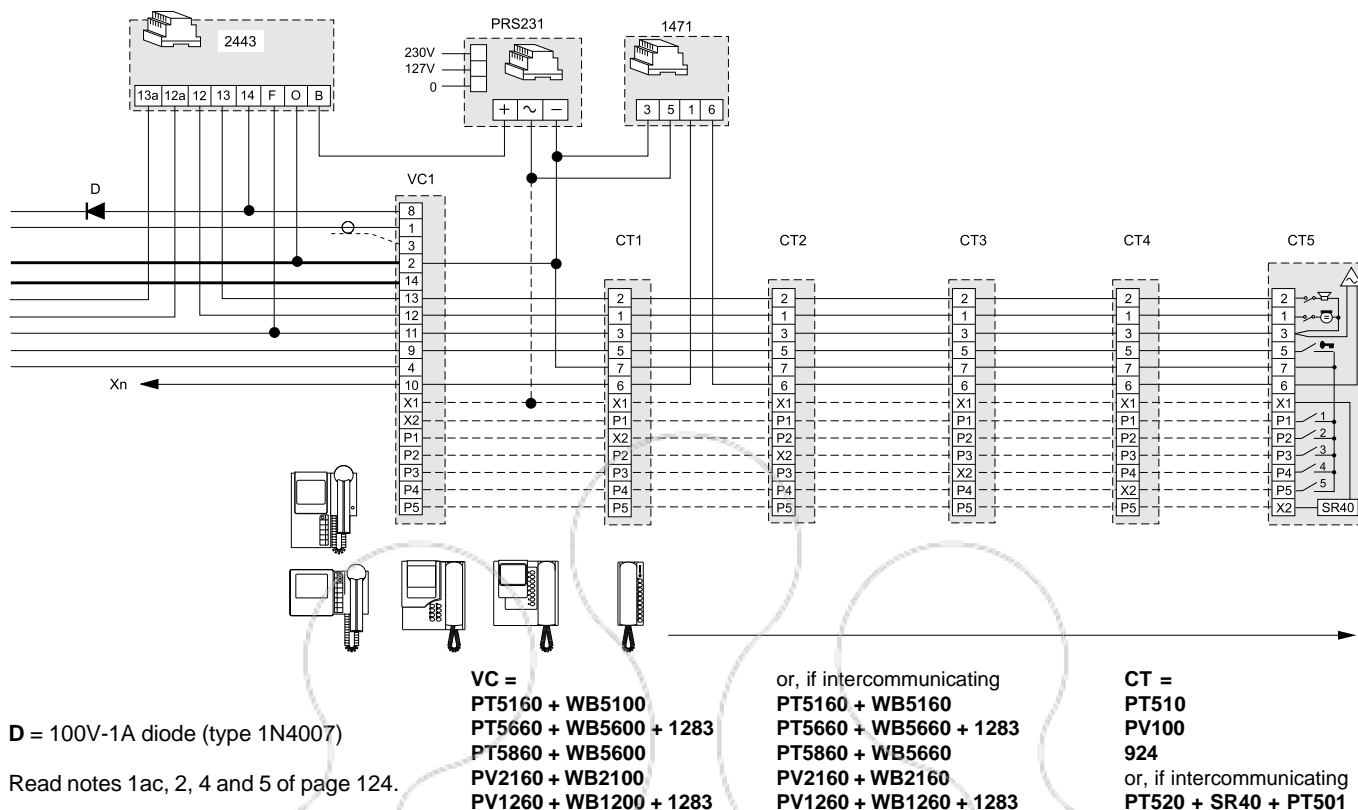
or, if intercommunicating  
PT5160 + WB5160  
PT5660 + WB5660 + 1283  
PT5860 + WB5660  
PV2160 + WB2160  
PV1260 + WB1260 + 1283



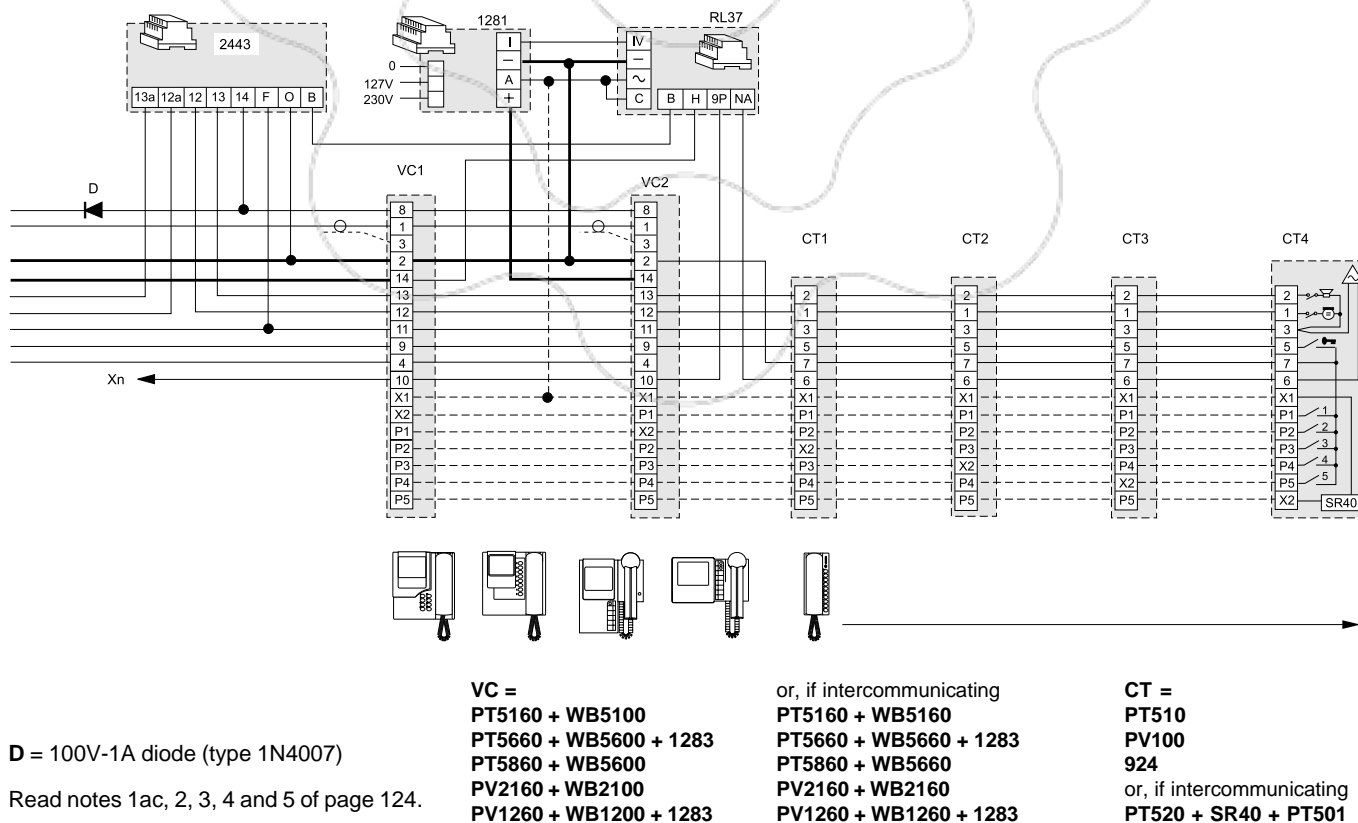
coax



## 1 VIDEO INTERCOM AND 5 INTERCOMS WITH INTERCOMMUNICATING SERVICE

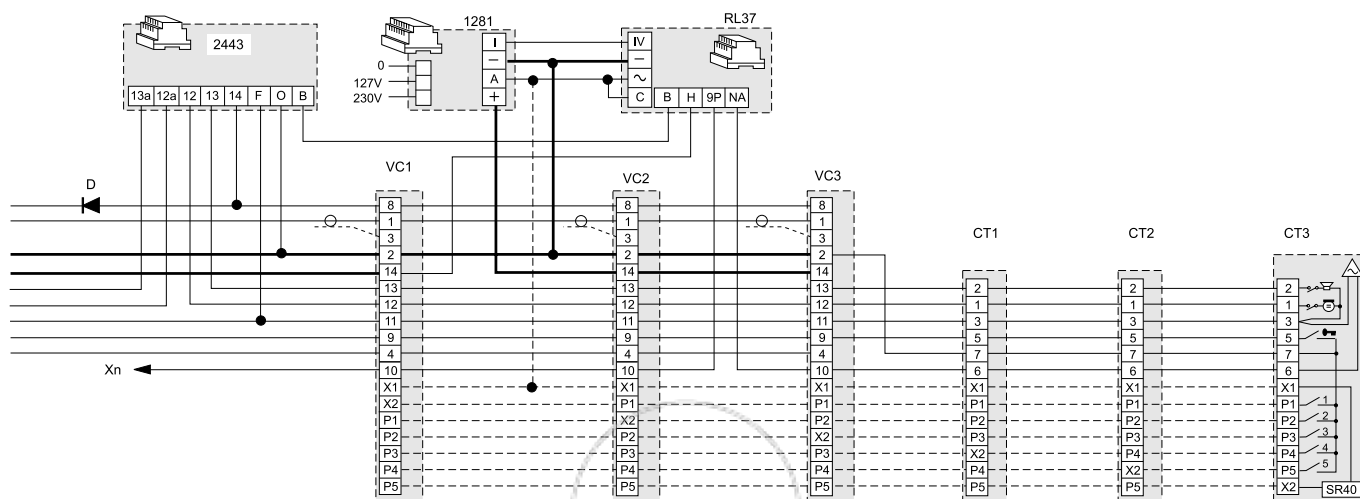


## 2 VIDEO INTERCOMS AND 4 INTERCOMS WITH INTERCOMMUNICATING SERVICE



# MULTI-WAY additional diagrams

## 3 VIDEO INTERCOMS AND 3 INTERCOMS WITH INTERCOMMUNICATING SERVICE



D = 100V-1A diode (type 1N4007)

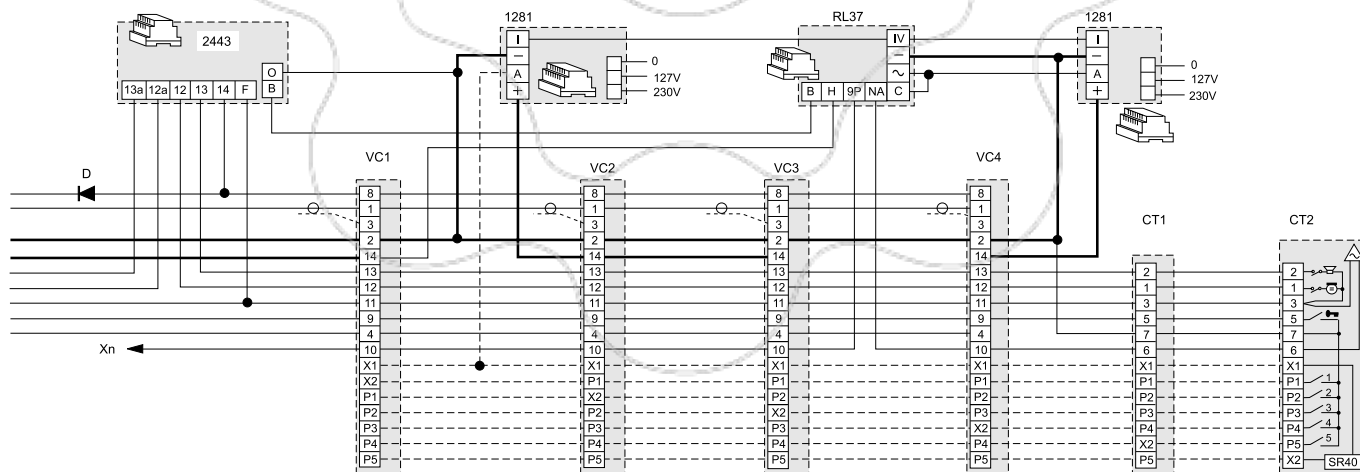
Read notes 1 ac, 2, 3, 4 and 5 of page 124.

VC =  
PT5160 + WB5100  
PT5660 + WB5600 + 1283  
PT5860 + WB5600  
PV2160 + WB2100  
PV1260 + WB1200 + 1283

or, if intercommunicating  
PT5160 + WB5160  
PT5660 + WB5660 + 1283  
PT5860 + WB5660  
PV2160 + WB2160  
PV1260 + WB1260 + 1283

CT =  
PT510  
PV100  
924  
or, if intercommunicating  
PT520 + SR40 + PT501

## 4 VIDEO INTERCOMS AND 2 INTERCOMS WITH INTERCOMMUNICATING SERVICE



D = 100V-1A diode (type 1N4007)

Read notes 1 ac, 2, 3, 4 and 5 of page 124.

VC =  
PT5160 + WB5100  
PT5660 + WB5600 + 1283  
PT5860 + WB5600  
PV2160 + WB2100  
PV1260 + WB1200 + 1283

or, if intercommunicating  
PT5160 + WB5160  
PT5660 + WB5660 + 1283  
PT5860 + WB5660  
PV2160 + WB2160  
PV1260 + WB1260 + 1283

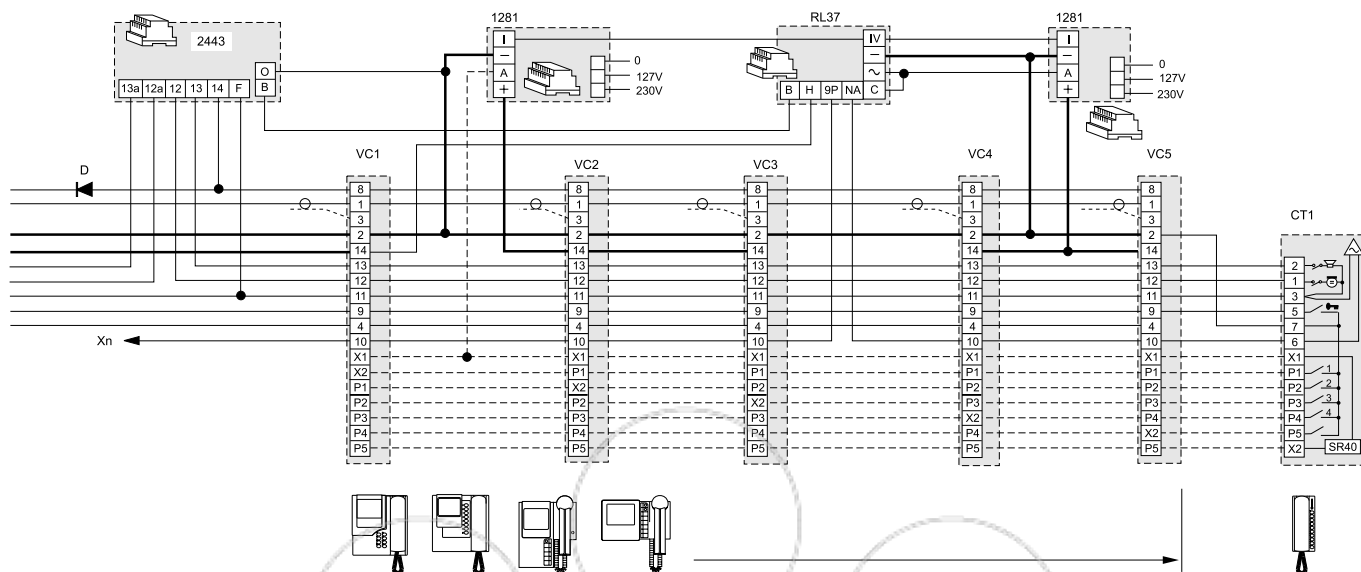
CT =  
PT510  
PV100  
924  
or, if intercommunicating  
PT520 + SR40 + PT501



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## 5 VIDEO INTERCOMS AND 1 INTERCOM WITH INTERCOMMUNICATING SERVICE



D = 100V-1A diode (type 1N4007)

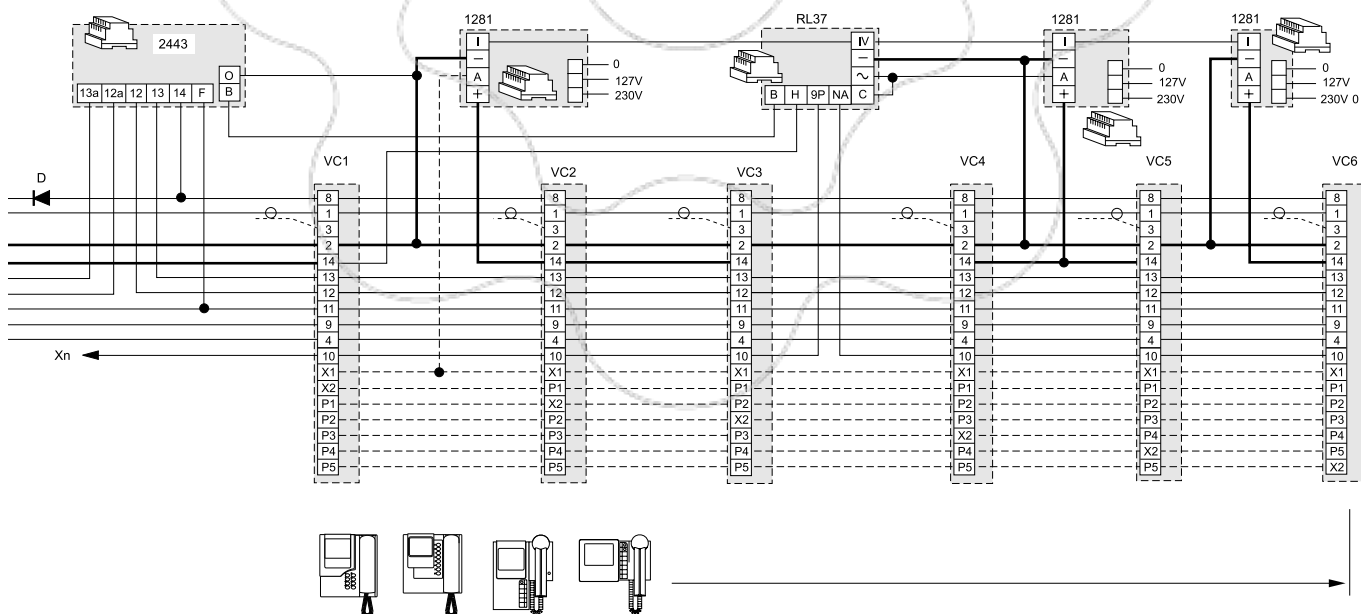
Read notes 1ac, 2, 3, 4 and 5 of page 124.

VC =  
PT5160 + WB5100  
PT5660 + WB5600 + 1283  
PT5860 + WB5600  
PV2160 + WB2100  
PV1260 + WB1200 + 1283

or, if intercommunicating  
PT5160 + WB5160  
PT5660 + WB5660 + 1283  
PT5860 + WB5660  
PV2160 + WB2160  
PV1260 + WB1260 + 1283

CT =  
PT510  
PV100  
924  
or, if intercommunicating  
PT520 + SR40 + PT501

## 6 INTERCOMMUNICATING VIDEO INTERCOMS



D = 100V-1A diode (type 1N4007)

Read notes 1ac, 2, 3, 4 and 5 of page 124.

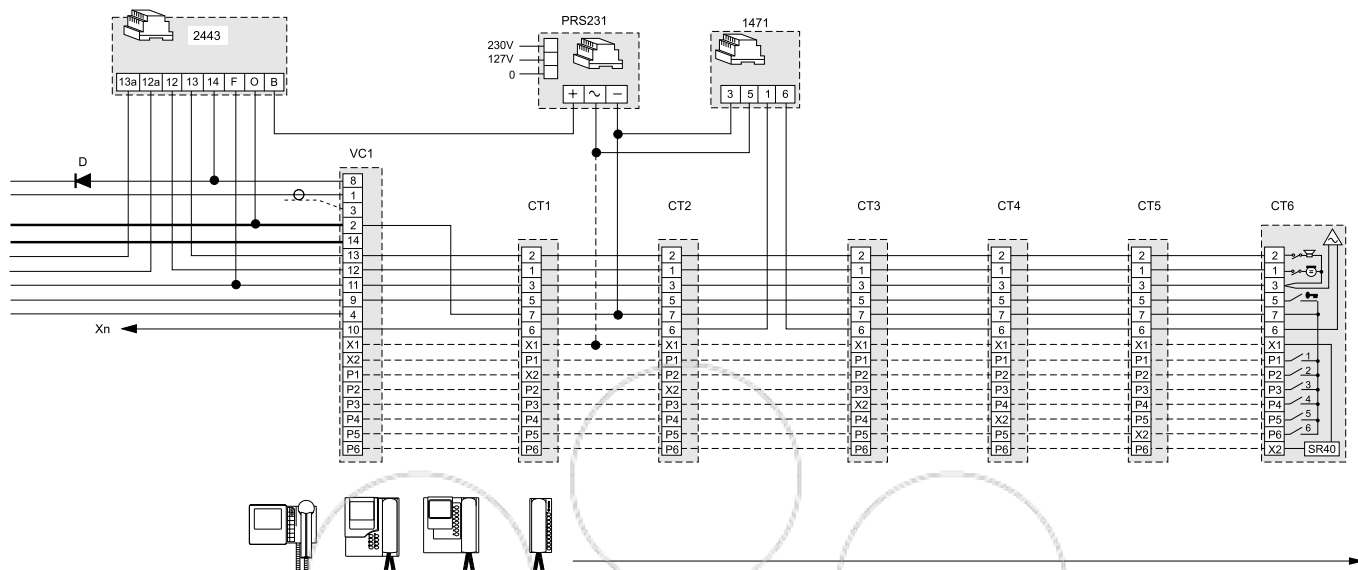
VC =  
PT5160 + WB5100  
PT5660 + WB5600 + 1283  
PT5860 + WB5600  
PV2160 + WB2100  
PV1260 + WB1200 + 1283

or, if intercommunicating  
PT5160 + WB5160  
PT5660 + WB5660 + 1283  
PT5860 + WB5660  
PV2160 + WB2160  
PV1260 + WB1260 + 1283



# MULTI-WAY additional diagrams

## 1 VIDEO INTERCOM AND 6 INTERCOMS WITH INTERCOMMUNICATING SERVICE



D = 100V-1A diode (type 1N4007)

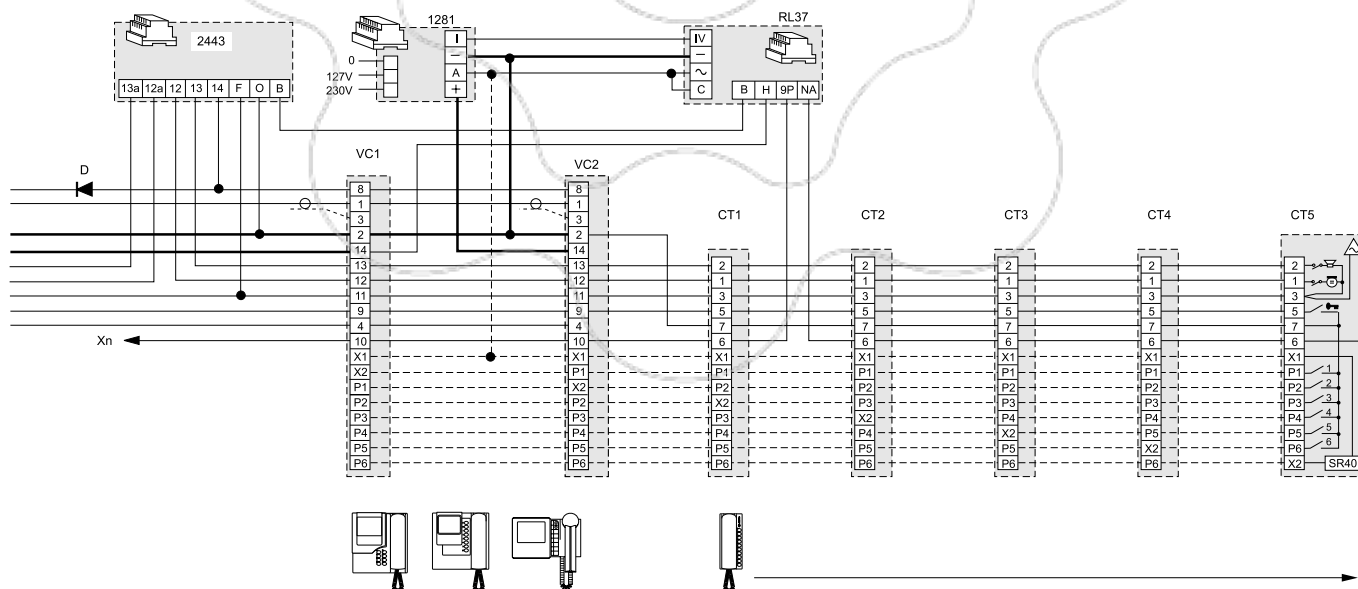
Read notes 1ac, 2 and 5 of page 124.

VC =  
PT5160 + WB5100  
PT5660 + WB5600 + 1283  
PT5860 + WB5600  
PV2160 + WB2100  
PV1260 + WB1200 + 1283

or, if intercommunicating  
PT5160 + WB5160  
PT5660 + WB5660 + 1283  
PT5860 + WB5660  
PV2160 + WB2160  
PV1260 + WB1260 + 1283

CT =  
PT510  
PV100  
924  
or, if intercommunicating  
PT520 + SR40 + PT501

## 2 VIDEO INTERCOMS AND 5 INTERCOMS WITH INTERCOMMUNICATING SERVICE



D = 100V-1A diode (type 1N4007)

Read notes 1ac, 2, 3 and 5 of page 124.

VC =  
PT5160 + WB5100  
PT5660 + WB5600 + 1283  
PT5860 + WB5600  
PV2160 + WB2100  
PV1260 + WB1200 + 1283

or, if intercommunicating  
PT5160 + WB5160  
PT5660 + WB5660 + 1283  
PT5860 + WB5660  
PV2160 + WB2160  
PV1260 + WB1260 + 1283

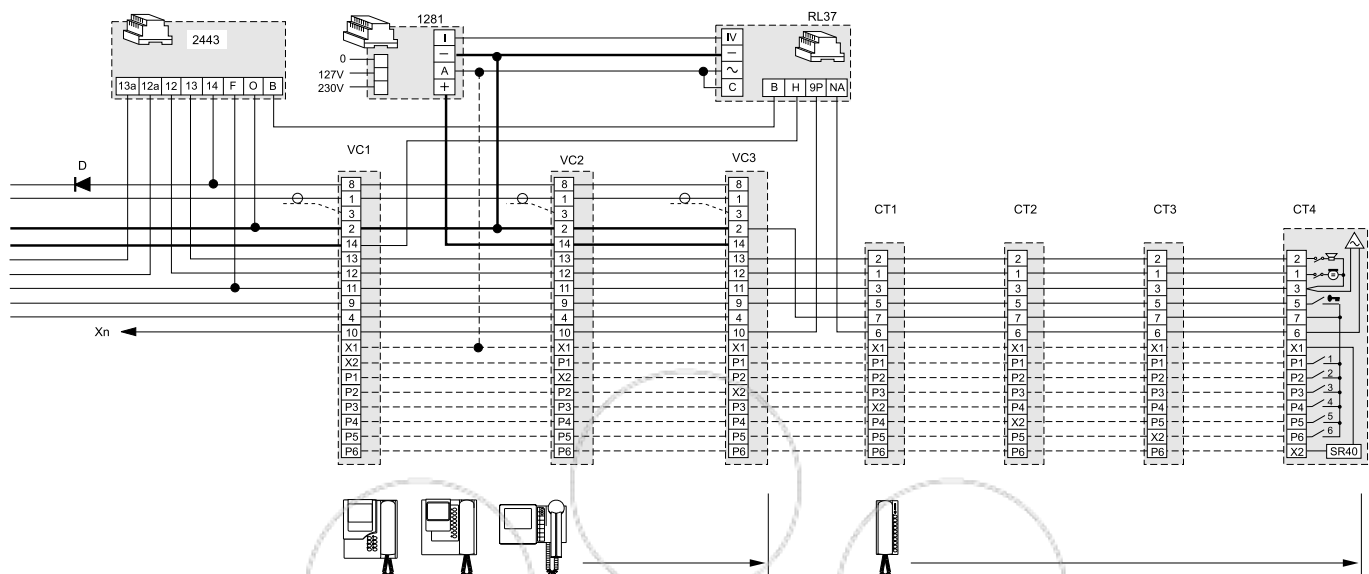
CT =  
PT510  
PV100  
924  
or, if intercommunicating  
PT520 + SR40 + PT501



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## 3 VIDEO INTERCOMS AND 4 INTERCOMS WITH INTERCOMMUNICATING SERVICE



D = 100V-1A diode (type 1N4007)

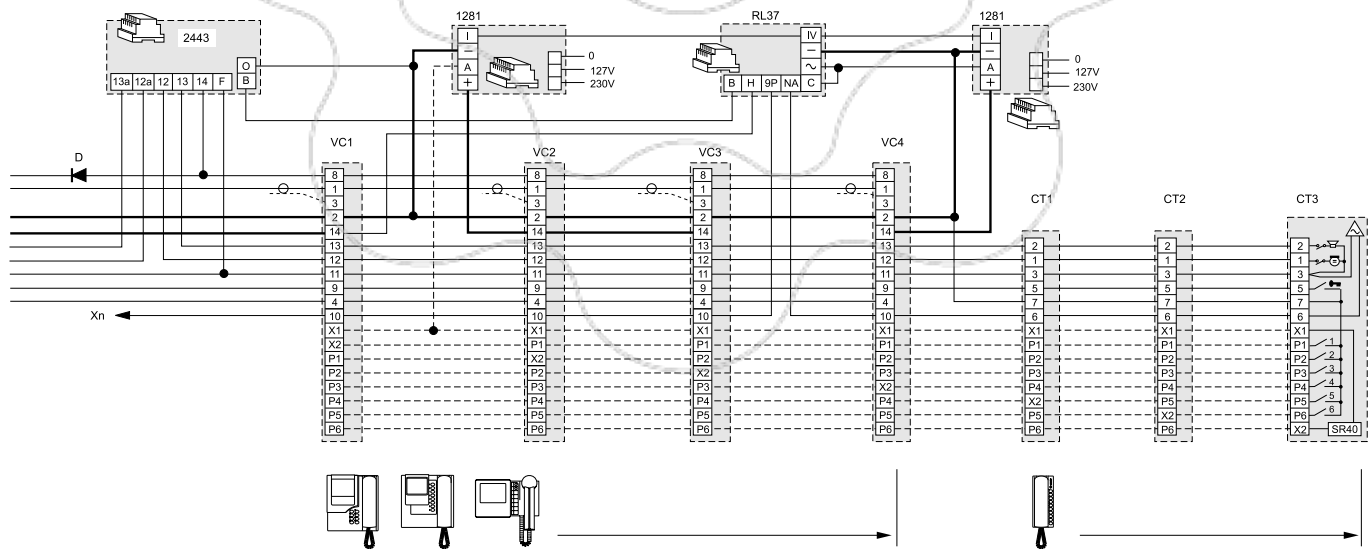
Read notes 1ac, 2, 3 and 5 of page 124.

VC =  
PT5160 + WB5100  
PT5660 + WB5600 + 1283  
PT5860 + WB5600  
PV2160 + WB2100  
PV1260 + WB1200 + 1283

or, if intercommunicating  
PT5160 + WB5160  
PT5660 + WB5660 + 1283  
PT5860 + WB5660  
PV2160 + WB2160  
PV1260 + WB1260 + 1283

CT =  
PT510  
PV100  
924  
or, if intercommunicating  
PT520 + SR40 + PT501

## 4 VIDEO INTERCOMS AND 3 INTERCOMS WITH INTERCOMMUNICATING SERVICE



D = 100V-1A diode (type 1N4007)

Read notes 1ac, 2, 3 and 5 of page 124.

VC =  
PT5160 + WB5100  
PT5660 + WB5600 + 1283  
PT5860 + WB5600  
PV2160 + WB2100  
PV1260 + WB1200 + 1283

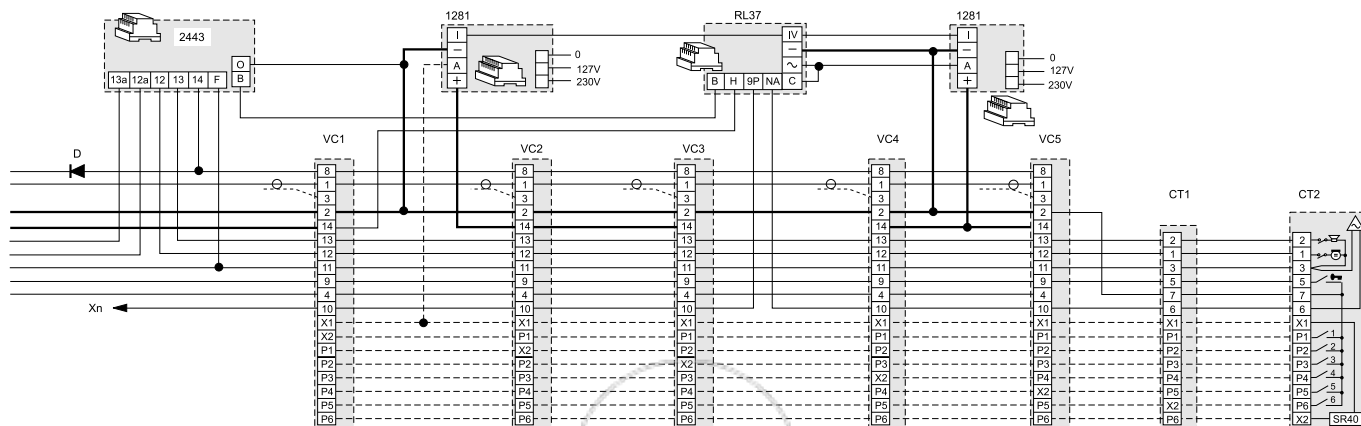
or, if intercommunicating  
PT5160 + WB5160  
PT5660 + WB5660 + 1283  
PT5860 + WB5660  
PV2160 + WB2160  
PV1260 + WB1260 + 1283

CT =  
PT510  
PV100  
924  
or, if intercommunicating  
PT520 + SR40 + PT501



# MULTI-WAY additional diagrams

## 5 VIDEO INTERCOMS AND 2 INTERCOMS WITH INTERCOMMUNICATING SERVICE



D = 100V-1A diode (type 1N4007)

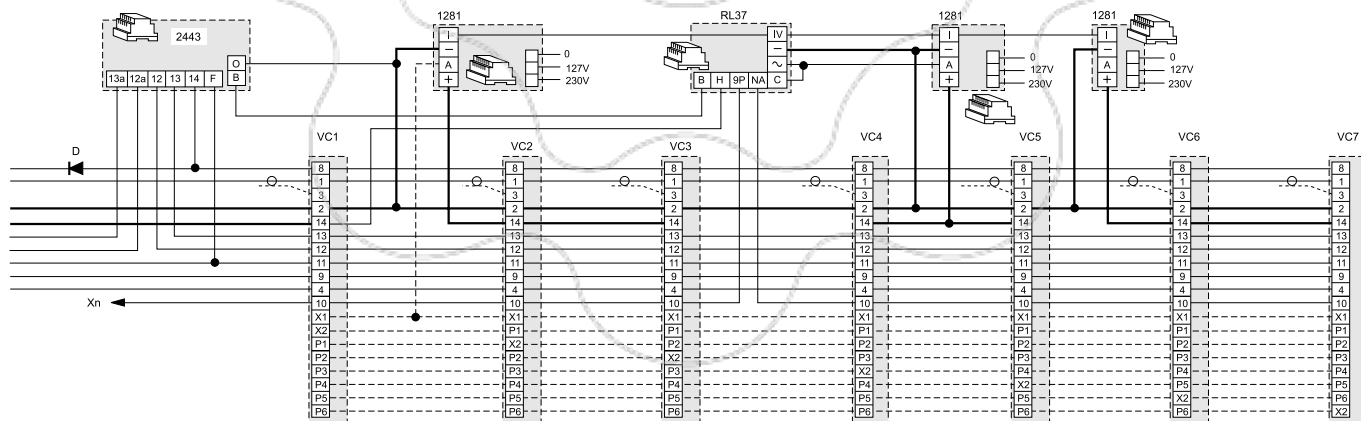
Read notes 1 ac, 2, 3 and 5 of page 124.

VC =  
PT5160 + WB5100  
PT5660 + WB5600 + 1283  
PT5860 + WB5600  
PV2160 + WB2100  
PV1260 + WB1200 + 1283

or, if intercommunicating  
PT5160 + WB5160  
PT5660 + WB5660 + 1283  
PT5860 + WB5660  
PV2160 + WB2160  
PV1260 + WB1260 + 1283

CT =  
PT510  
PV100  
924  
or, if intercommunicating  
PT520 + SR40 + PT501

## 7 INTERCOMMUNICATING VIDEO INTERCOMS



D = 100V-1A diode (type 1N4007)

Read notes 1 ac, 3 and 5 of page 124.

VC =  
PT5160 + WB5100  
PT5660 + WB5600 + 1283  
PT5860 + WB5600  
PV2160 + WB2100  
PV1260 + WB1200 + 1283

or, if intercommunicating  
PT5160 + WB5160  
PT5660 + WB5660 + 1283  
PT5860 + WB5660  
PV2160 + WB2160  
PV1260 + WB1260 + 1283



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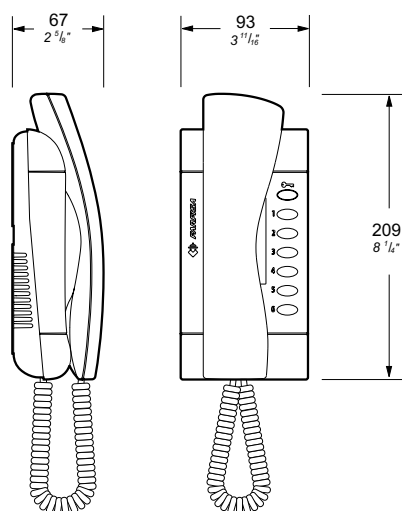
The main intercom and video intercom functions can also be provided with an ordinary telephone set by installing a suitable interface in the intercom system.

For better intercom/telephone integration it is advisable to use the dedicated Farfisa telephone art. **ST740W**. In addition to the normal telephone functions, this telephone has extra buttons for intuitive and easy use of intercom functions.



# INTERNAL STATIONS

## TELEPHONE

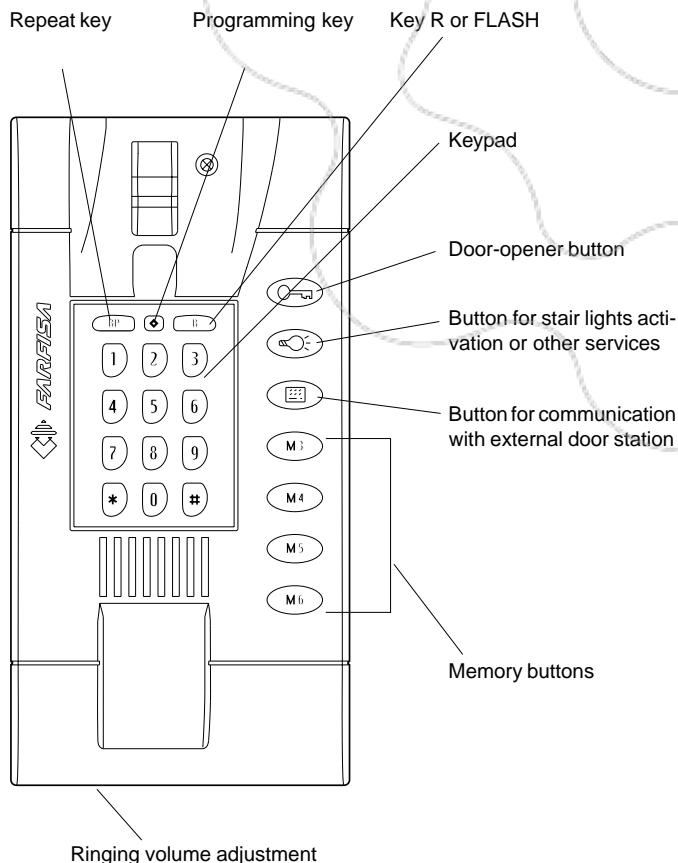


**ST740W.** White telephone for intercom or video intercom-telephone systems. Complete with spiral cord, electronic microphone, 15 buttons for telephone functions, 7 buttons for intercom functions and direct memories. The buttons dedicated to intercom functions can operate only by means of a suitable telephone interface (FT11D) or PABX (FT105P or FT208P).

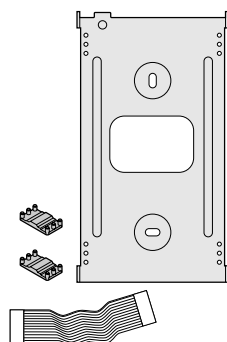
The telephone permits DTMF dialling only.

Wall mounting with bracket **WB700** or table version with adapter **TA700** and bracket **WB700**.

## Description



## FIXING ELEMENTS



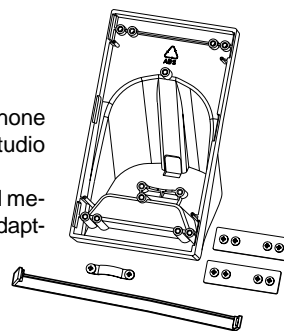
**WB700.** Bracket for fixing on wall or to table adapter (with art. **TA700**) the **ST740** telephone and/or accessories of the Studio series. Complete with plastic templates for the correct alignment with bracket **WB7100** and/or other brackets **WB700**.

### Note

The flat cable supplied with the bracket cannot be used in telephone systems.

**TA700W.** White table adapter for telephone **ST740W** and/or accessories of the Studio series.

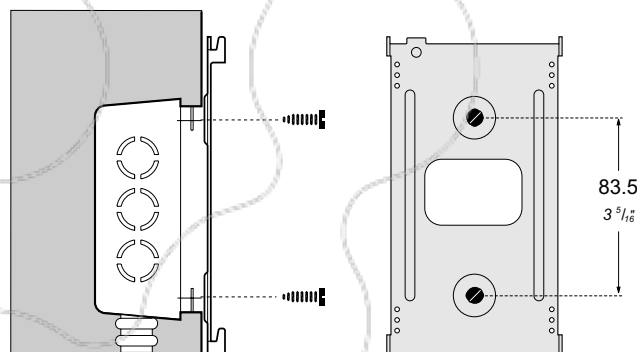
Complete with cable clamp, plastic and metallic frames for the correct alignment to adapters **TA7100** and/or additional **TA700**.



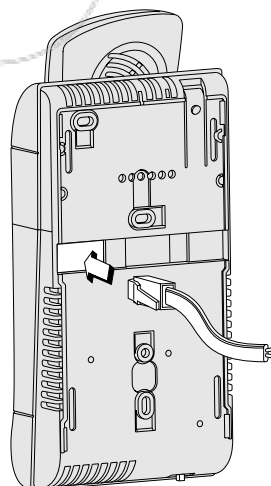
## INSTALLATION

The telephone can be installed on the wall or on the table with dedicated accessories.

### Wall version



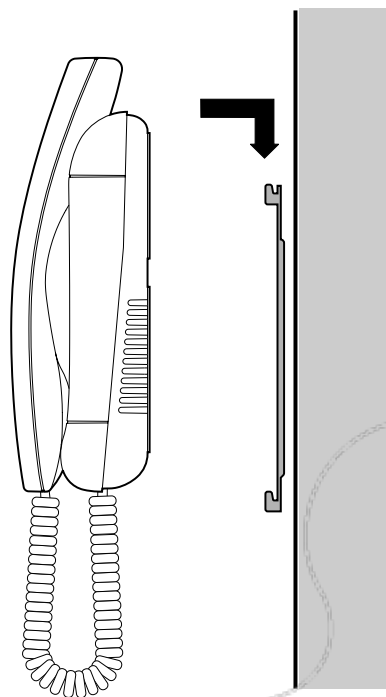
Fix the bracket **WB700** to a back box or to the wall with 2 expansion plugs.



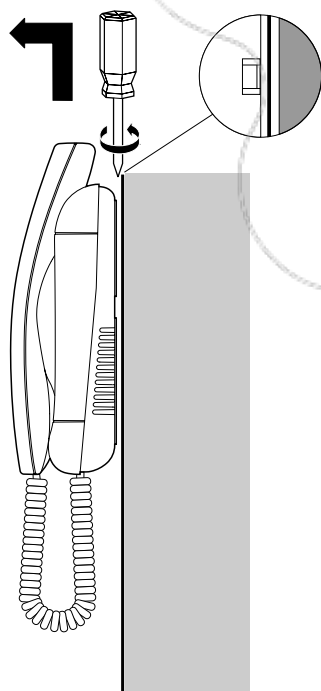
Connect the telephone cable supplied with the product to the plug on the back of the telephone.



Connect the 2 wires of the cable to terminals DER41÷45/48 of the **PABX (FT105P or FT208P)** or L+ and L- of the telephone interface **FT11D**.

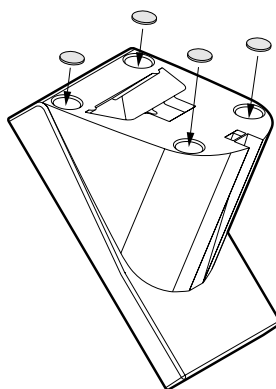


Hook the telephone to the bracket.

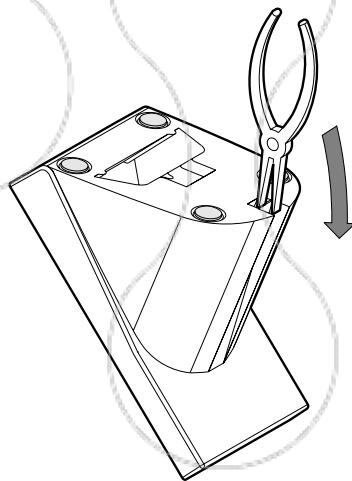


Unhook the telephone from the bracket.

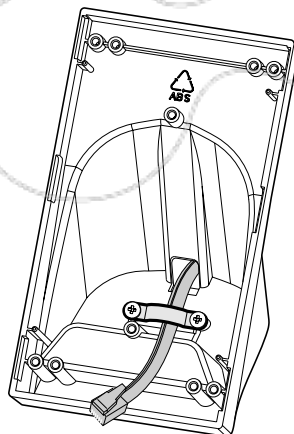
## Table version



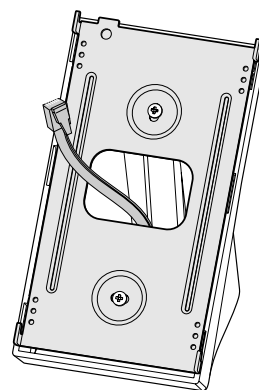
Apply the 4 anti-slip rubber pads in their housings under the table adapter base.



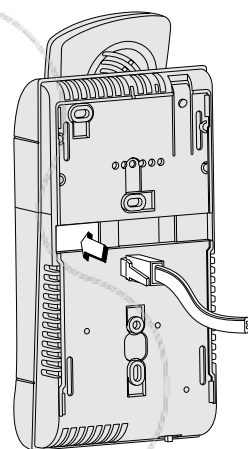
Make the hole for the telephone cable.



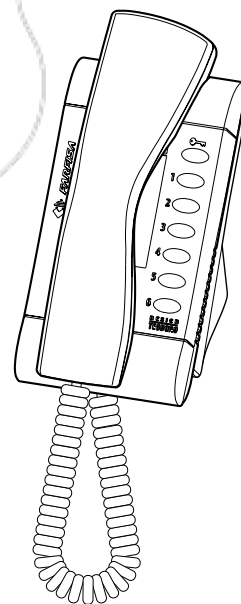
Block the telephone cable to the table adapter with the cable clamp.



Fix the **WB700** bracket to the table adapter with the 2 screws supplied.



Connect the telephone cable to the plug on the back of the telephone.



Hook the telephone to the adapter.






# INTERNAL STATIONS

## PROGRAMMING

The **ST740W** has been developed for exclusive use with **Farfisa** PABX's or telephone interface. It is programmed for use with **FT105P** and **FT208P** PABX by default. The default setting can be modified as described below in this manual.



### Default setting

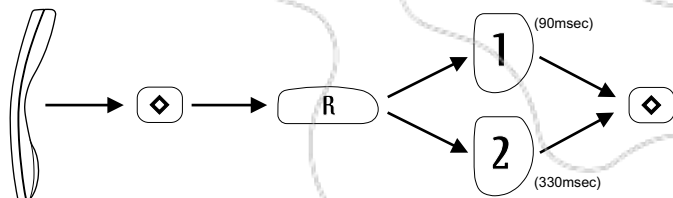
Button	Code	Function
	<b>6R1</b>	<b>activation of relay 1 of FT105P and FT208P PABX</b>
	<b>6R2</b>	<b>activation of relay 2 of FT105P and FT208P PABX</b>
	<b>6</b>	<b>audio connection with external door station connected to FT105P and FT208P PABX</b>
<b>R</b>	<b>1</b>	<b>timing of R key equal to 90 msec</b>

The ringing volume is set at the maximum value.

### How to program the timing of R (FLASH) key

To change programming:

- pick-up the handset
- press ; no tone is heard on the loudspeaker
- press **R**
- press **1** or **2** (90 or 330msec, respectively)
- press ; if programming is correct, you hear the actual tone of the PABX. If not, you hear a continuous sharp tone to indicate incorrect programming.








**Note:** in case of error replace the handset and repeat the programming procedure.

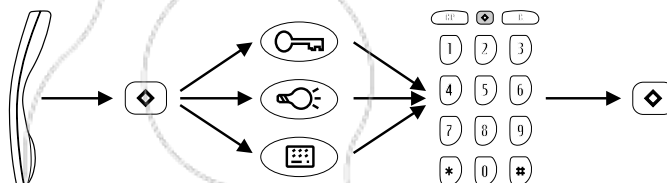
### How to program the buttons

The buttons can change their function by changing programming as desired. They can be used to:

- enable PABX short numbers
- enable audio and door opening in installations with FT11D interface
- change operation mode of relay (i.e. for two-way installations with differentiated door locks, activation of relays 3 and 4, etc.). See the PABX instructions on pages 168 and 169.

To change programming:

- pick-up the handset
- press ; no tone is heard on the loudspeaker
- press the button **you want to program** (,  or )
- dial the **new code** on the keypad (see table)
- press ; if programming is correct, you hear the actual tone of PABX. If not, you hear a continuous sharp tone to indicate incorrect programming.



**Note:** in case of error replace the handset and repeat the programming procedure.

### Table of programmable functions for the buttons

Code	Function
<b>6R1</b>	activation of <b>relay 1</b> of <b>ES60</b> or <b>ES65</b> intercom interface with <b>FT105P</b> and <b>FT208P</b> PABX's
<b>6R2</b>	activation of <b>relay 2</b> of <b>ES60</b> or <b>ES65</b> intercom interface with <b>FT105P</b> and <b>FT208P</b> PABX's
<b>6R3</b>	simultaneous activation of <b>relays 1 and 2</b> of <b>ES60</b> or <b>ES65</b> intercom interface with <b>FT105P</b> and <b>FT208P</b> PABX's
<b>7832</b>	activation of <b>relay 3</b> of <b>ES65</b> intercom interface with <b>FT105P</b> and <b>FT208P</b> PABX's
<b>7842</b>	activation of <b>relay 4</b> of <b>ES65</b> intercom interface with <b>FT105P</b> and <b>FT208P</b> PABX's
<b>6</b>	audio connection with external door station with <b>ES60</b> or <b>ES65</b> intercom interface and <b>FT105P</b> or <b>FT208P</b> PABX's
<b>RRRR</b>	door opening with <b>FT11D</b> telephone interface
<b>RR</b>	audio connection with external door station with <b>FT11D</b> telephone interface

Apart from the codes in the table, you can program numbers or functions (\*, #, R, RP) for a **max. of 6 digits** (short numbers, emergency numbers, numbers of special services offered by the telephone provider, etc.). The **RP** key inserts a 3-sec. pause in the numerical sequence to be programmed.



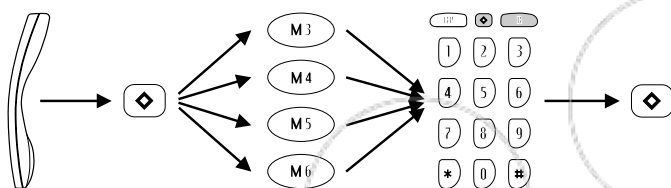
## PROGRAMMING

### How to program the M3, M4, M5 and M6 memory buttons

You can use these buttons to program frequently used numbers.

To program the buttons:

- pick-up the handset
- press **◆**; no tone is heard on the loudspeaker
- press the button **you want to program (M3, M4, M5 or M6)**
- dial the **number** on the keypad (**max. 24 digits**)
- press **◆**; if programming is correct, you hear the actual tone of PABX. If not, you hear a continuous sharp tone to indicate incorrect programming.



**Note:** in case of error replace the handset and repeat the programming procedure.

#### Important:

- if the telephone is connected to the **FT105P** or **FT208P** PABX's, you must dial **0, 81** or **82** before telephone number of the user to access the external line (i.e. **810548975615**); in case of international calls, it is recommended to insert a **pause** (by pressing **RP**) between the international code and the user number (i.e. **81001RP67859063**).
- if the telephone is connected to the **FT11D** interface you can program the telephone number directly; in case of international numbers it is recommended to insert a pause (i.e. **001RP678599063**).

## OPERATION

### Answer a call

- Pick-up the handset.
- Replace the handset after conversation.

### Make a call

- Pick-up the handset.
- Dial the number.
- Replace the handset after conversation.

**Note.** If the telephone is connected to a Farfisa PABX's, you must dial **0, 81** or **82** to access the external line.

### Redial of the last call number dialled

- Pick-up the handset.
- Press **RP**.
- Replace the handset after conversation.

**Note.** The key **RP** redials the last call number dialled only if it is the first button you press after picking-up the handset. If not, this key inserts a 3-sec. pause during dialling.

### Intercom function buttons

These functions can be used only if an intercom installation is connected to the PABX or telephone interface.

- Pick-up the handset.
- Press:

- to operate the electric door lock
- to activate stair light or other service
- to enable intercom conversation

- Replace the handset.

**Note.** When using the **FT11D** telephone interface you must program properly the buttons and for correct operations wait for the public exchanger tone before using them.

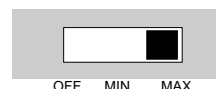
### Memory buttons

These buttons need to be programmed.

- Pick-up the handset.
- Press the button associated to the telephone number you want to dial (**M3, M4, M5 or M6**).
- Replace the handset after conversation.

### Ringing volume adjustment

Move the switch located on the bottom of the telephone on the desired position (OFF, min. and max.).

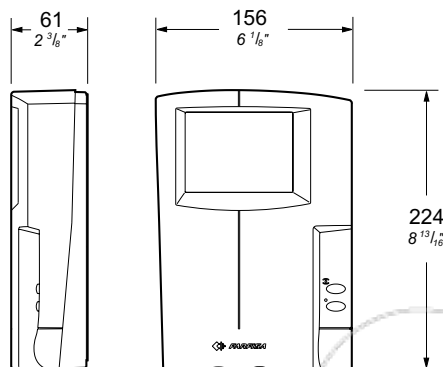


# INTERNAL STATIONS

## VIDEO INTERCOM-TELEPHONE SET

To realise a video intercom-telephone system you must combine the **ST740** telephone with bracket **WB700** to a monitor **ST7100** (or **ST7100C**) and bracket **WB7100**.

### MONITORS



**ST 7100W.** White monitor with flat CRT and 2 buttons. One button for control switch ON and one button for supplementary services. Maximum acceptable current of buttons is 0.3A. For higher currents use relay art. **1471** or **1472**. The monitor can be surface mounted on the wall with bracket art. **WB7100**.

#### Technical data

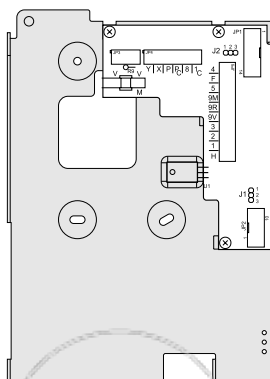
Power supply	18÷24Vdc
Operating current	0.35A
Monitor	4" FLAT CRT
TV standard	CCIR-625 lines
Horizontal frequency	15625Hz
Vertical frequency	50Hz
Bandwidth	>5MHz
Video signal on 75Ω	0.8÷1.5Vpp
Starting up time	2÷4 sec.
Operating temperature	0°÷+50°C
Max. permissible humidity	90%RH

**ST 7100CW.** Version with colour LCD of monitor **ST7100W**.

#### Technical data

Power supply	18÷24Vdc
Operating current	0.4A
Monitor	4" LCD
TV standard	PAL
Horizontal frequency	15625Hz
Vertical frequency	50Hz
Bandwidth	>5MHz
Video signal on 75Ω	0.8÷1.5Vpp
Starting up time	1 sec.
Operating temperature	0°÷+50°C
Max. permissible humidity	90%RH

### FIXING ELEMENTS for Studio series.



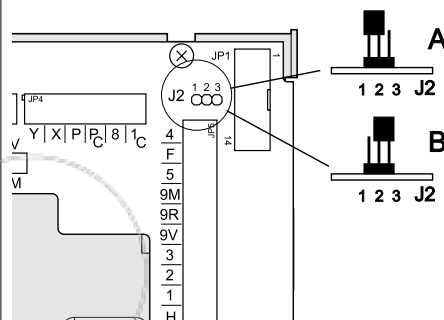
**WB 7100.** The bracket allows for wall-fixing of monitor **ST7100**. Complete with terminal board for connection to the system and connectors for connection to the monitor. One or more brackets **WB 700** can be used to expand the system.

#### Terminals

- V** Video signal input 0.8÷1.5Vpp
- M** Video ground
- F** General ground
- H** Positive power supply input 18÷24Vdc
- X** Negative balanced video signal input
- Y** Positive balanced video signal input
- 1, 2, 3, 5** Not used.
- 4** Control switching ON – button
- 8** Positive power supply output for video distributors 12Vdc
- 9M** Call input from external door station (250mA)
- 9R** Intercommunicating or floor-call input
- 9V** Activation input for FN4000 digital systems (ground command)
- 1C** Common of button for control switching ON
- PC** Common of service button
- P** Service button (symbol ●)

### Choosing the video connection with coaxial cable or twisted pair

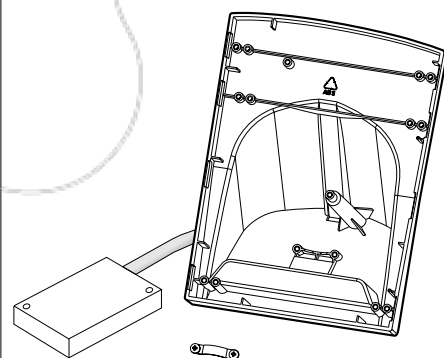
With monitor **ST7100** the video connection can be made either with 75 Ohm coaxial cable or twisted pair. The choice between the two systems depends on the correct selection of video distributor and camera. The number of wires and possible installations does not change. **Do not forget to position jumper J2 correctly and use the proper input terminals of bracket WB7100.**



- A** = Video connection with coaxial cable at terminals **V** and **M**
- B** = Video connection with twisted pair at terminals **X** and **Y**

#### Note

The bracket is also equipped with connector **J1**. This connector shall not be used in video intercom-telephone systems.



**TA7100W.** White Table adapter for **ST7100W** and **ST7100CW** monitors. Complete with cable clamp, junction box and 2.4m connection cable with 20 wires.

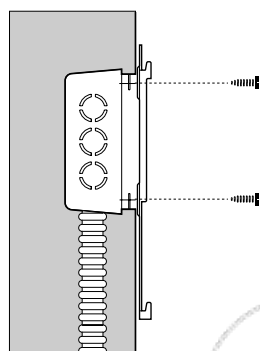


The video intercom-telephone system can be also realized by separating the intercom/telephone function from the video function. For example: install the monitor on the wall and use a standard or cordless telephone to answer to intercom/telephone calls.

## MONITOR ONLY

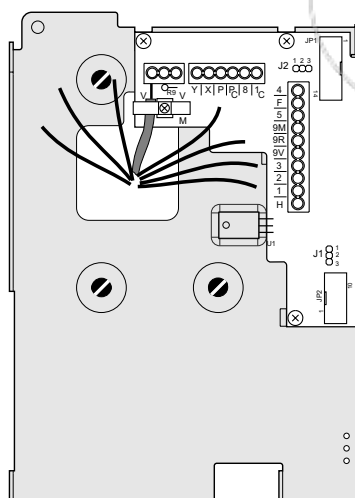
Installation steps for monitor **ST7100** or **ST 7100C** in wall or table version.

### Wall version

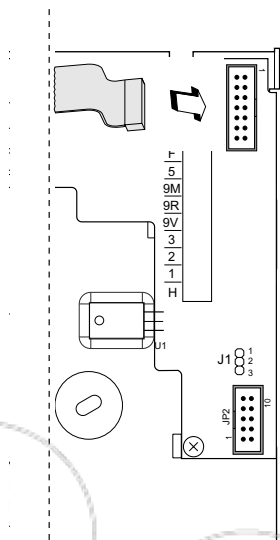


- 1) Fix the bracket **WB7100** to the wall with the 3 fixing points at approximately 1.55 m (4' 13") distance from the floor to the upper part of the bracket.

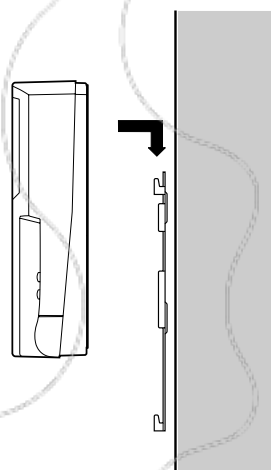
1.55m  
4' 13"



- 2) Make the connections on the bracket terminal board.



- 3) Connect the monitor cable to the bracket.

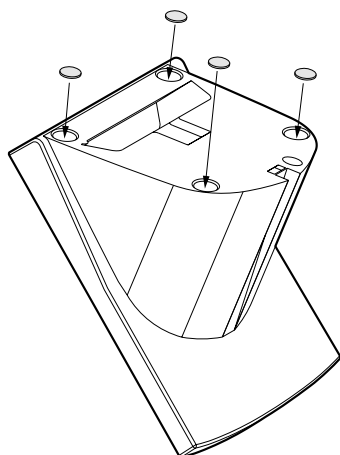


- 4) Hook the monitor to the bracket.



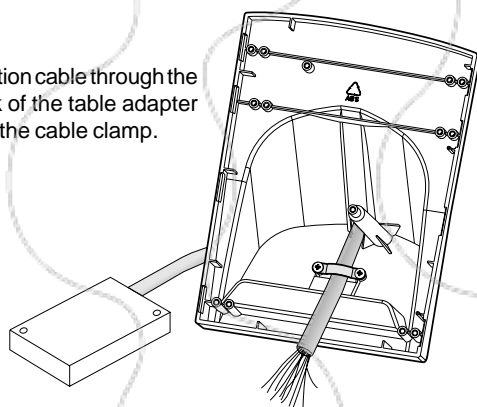
# INTERNAL STATIONS

## Table version

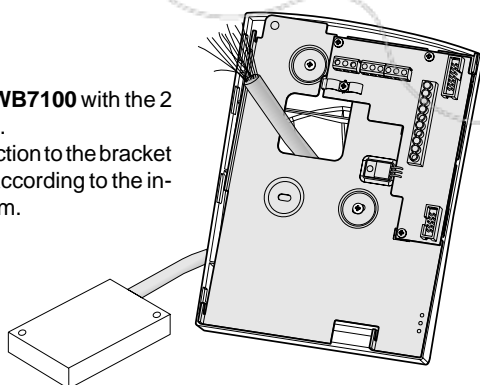


- 1) Apply the 4 anti-slip rubber pads in their housing under the table adapter base.

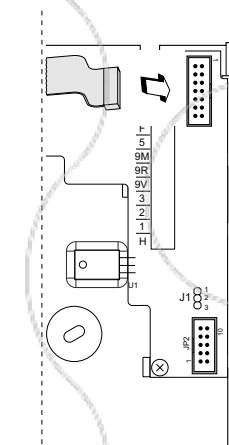
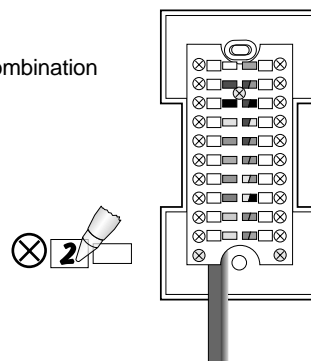
- 2) Pass the connection cable through the hole on the back of the table adapter and block it with the cable clamp.



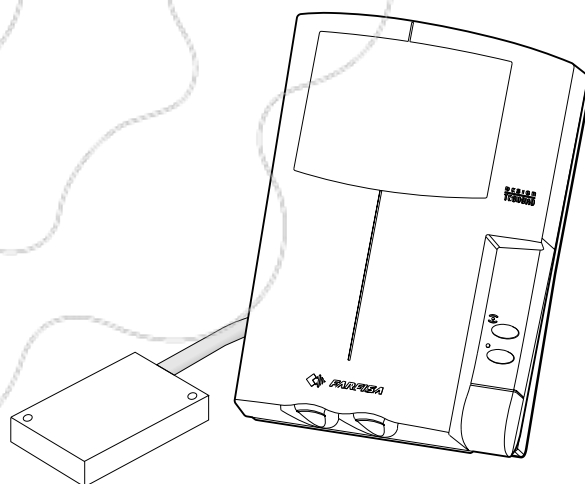
- 3) Fix the bracket **WB7100** with the 2 screws supplied.
- 4) Make the connection to the bracket terminal board according to the installation diagram.



- 5) Mark the colour/terminal combination on the junction box.



- 6) Connect the monitor cable to the bracket.



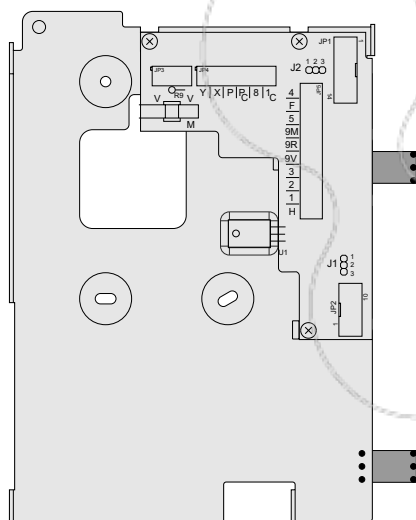
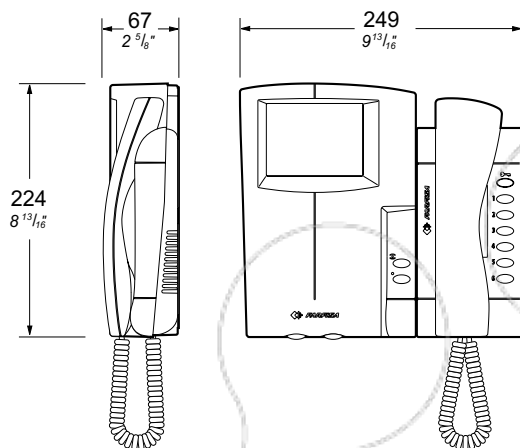
- 7) Hook the monitor to the bracket.



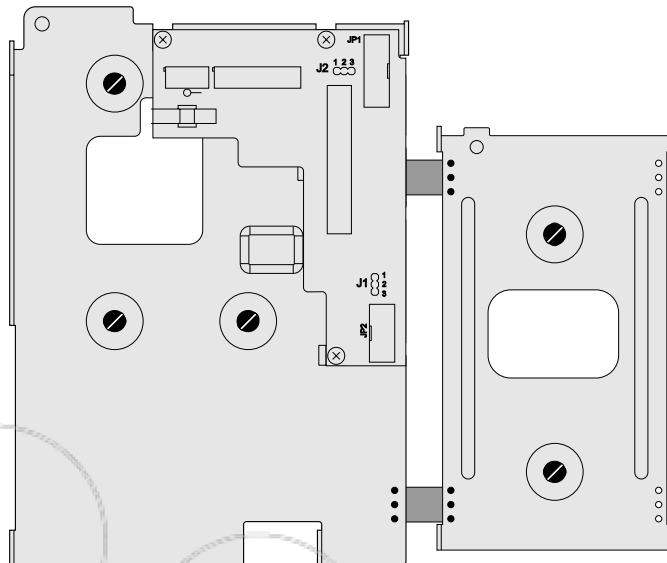
## VIDEO INTERCOM-TELEPHONE SET

Installation steps for monitor **ST7100W** (or **ST7100CW**), telephone **ST740W**, brackets **WB7100** and **WB700** and table adapters (if necessary) to obtain an internal station with video intercom-telephone functions.

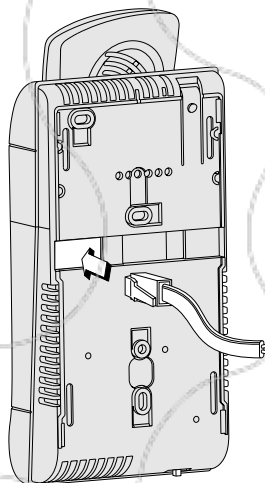
### Wall version



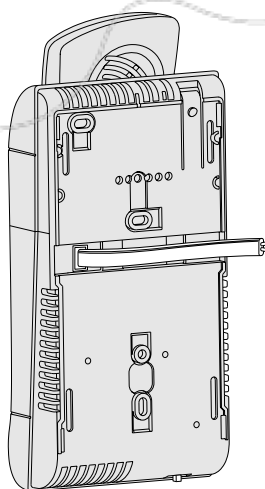
- 1) Before fixing the bracket **WB700**, position the 2 plastic templates on the holes of bracket **WB7100**.



- 2) Fix the 2 brackets to the wall according to the instructions of figure 1 on page 155.



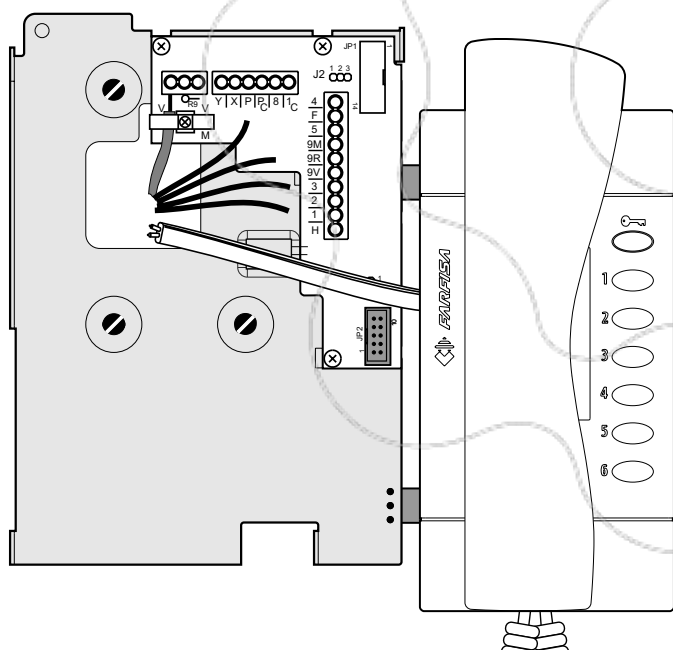
- 3) Connect the telephone cable supplied with the product to the plug on the back of the telephone.



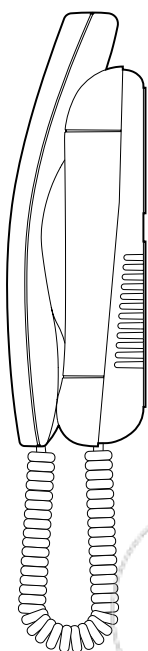
- 4) Pass the telephone cable through the space between the telephone and the bracket. Pull the cable in such a way that the extra part of the cable faces the monitor bracket.

**Note.**  
If necessary, to make it easier to pass the cable between the telephone and monitor, you can use the breaking points on the base of telephone and monitor (only the sides that are interested by the passage of the cable).

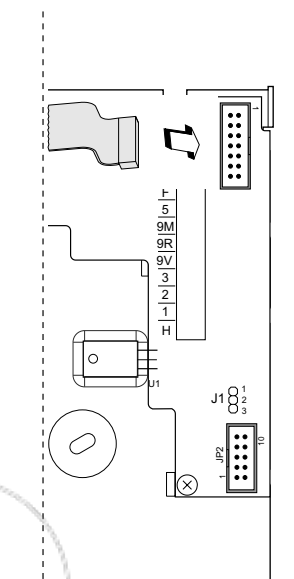




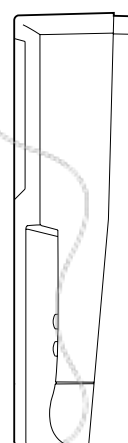
6) Make the connections on the terminal board of bracket **WB7100** according to the installation diagram.



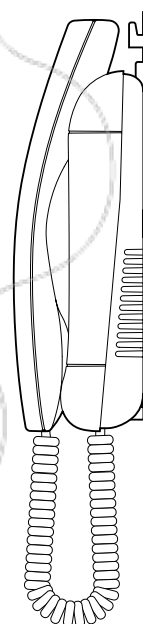
5) Hook the telephone to the bracket **WB700**.



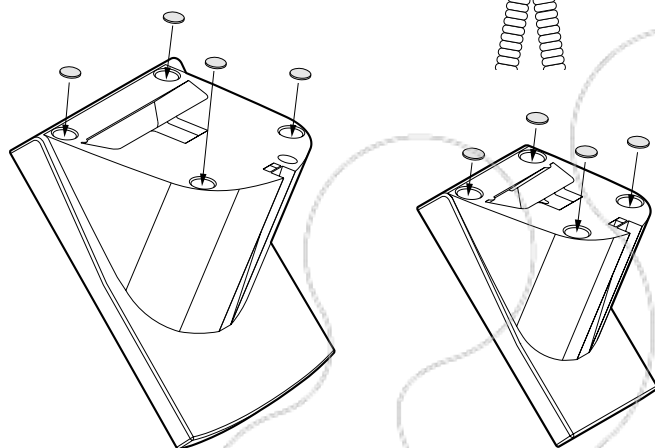
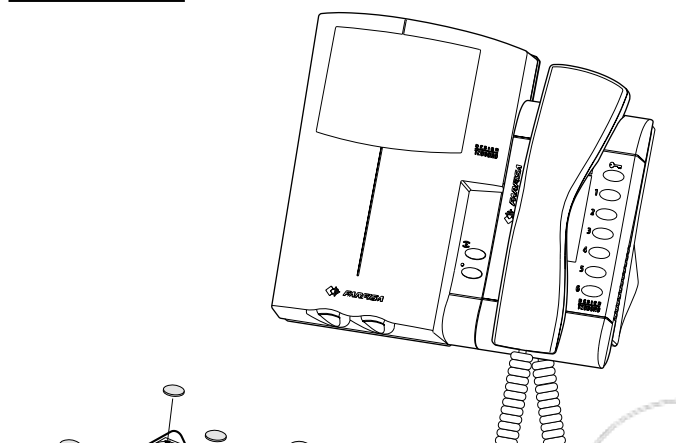
7) Connect the monitor cable to the bracket.



8) Hook the monitor to the bracket.

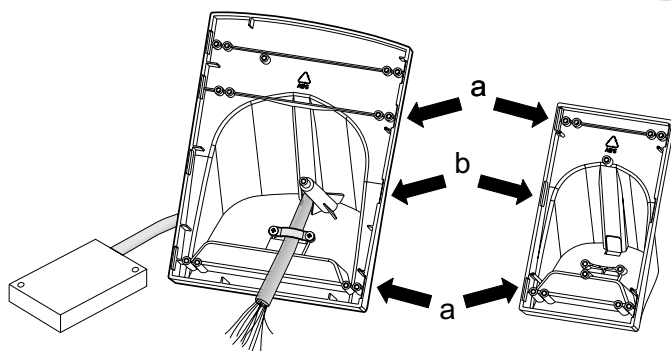
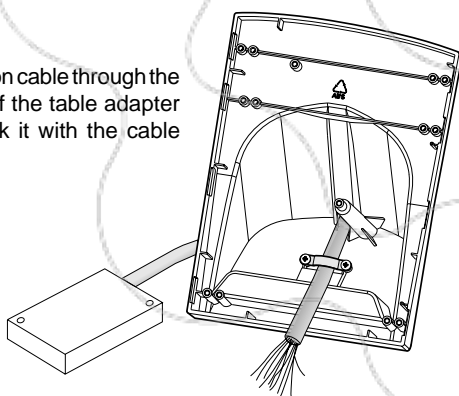


## Table version

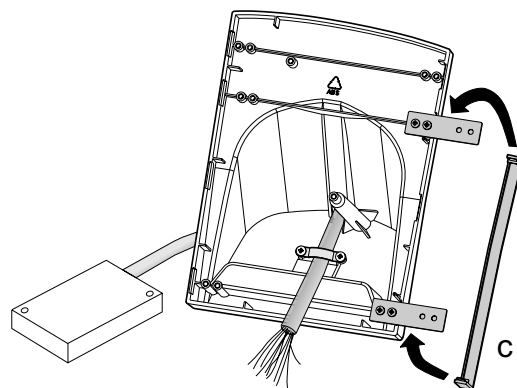


1) Apply the 8 anti-slip rubber pads in their housings under the base of the table adapters **TA7100** and **TA700**.

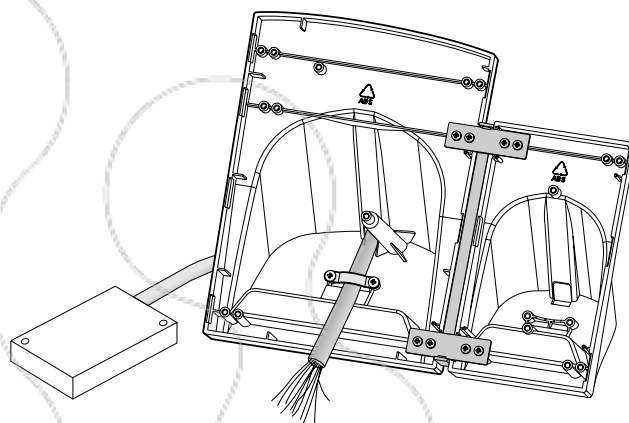
2) Pass the connection cable through the hole in the back of the table adapter **TA7100** and block it with the cable clamp.



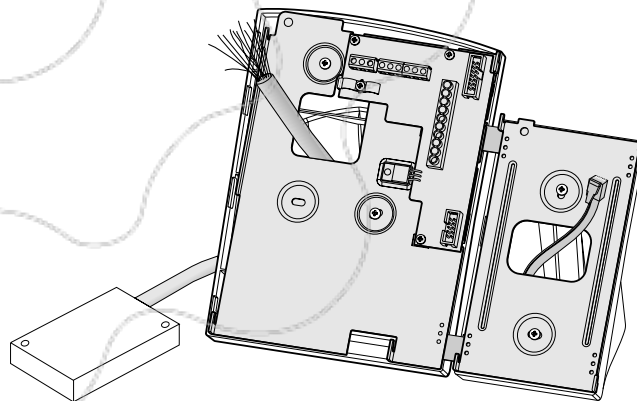
3) The arrow indicate the breaking points for the application of the metallic frames (a) and the passage of the telephone cable (b).



4) Screw the 2 metallic frames to the table adapter **TA7100** and hook the plastic frame to them (c).

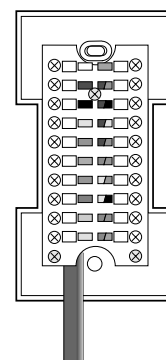


5) Screw the table adapter **TA700** to the 2 metallic frames.



6) Screw brackets **WB7100** and **WB700** to the table adapters.

7) Apply the monitor and telephone according to the instructions on pages 157 and 158 (from point 3 to 8). When connecting the wires to the terminal boards of bracket **WB7100** (point 6) you must mark the colour/terminal combination on the junction box.



## INTERNAL STATIONS

### VIDEO INTERCOM-TELEPHONE WITH VIDEO MEMORY

#### ST7M32W. Video memory.

For information on connections and specifications see the instructions manual supplied with the product. The only difference between video intercom and video intercom-telephone connections is represented by the fact that in video intercom-telephone systems the 4 main functions of the video memory can not be remotely actuated with the telephone because it is not provided with buttons for these functions.

#### Installation

Installation steps for the realisation of one video intercom-telephone internal station with video memory in wall or table version.

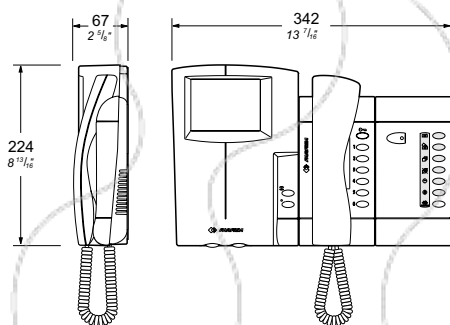
For this composition you need:

- 1 **ST7100** or **ST7100C** (monitor)
- 1 **ST740** (telephone)
- 1 **ST7M32** (video memory)
- 1 **WB7100** (bracket for monitor)
- 2 **WB700** (brackets for telephone and video memory)

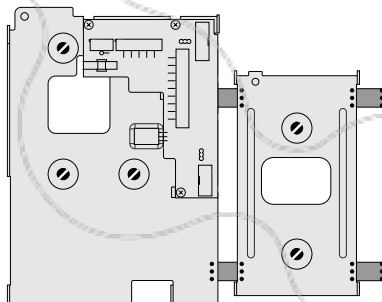
For the table version you must add:

- 1 **TA7100** (table adapter for monitor)
- 2 **TA700** (table adapter for telephone and video memory)

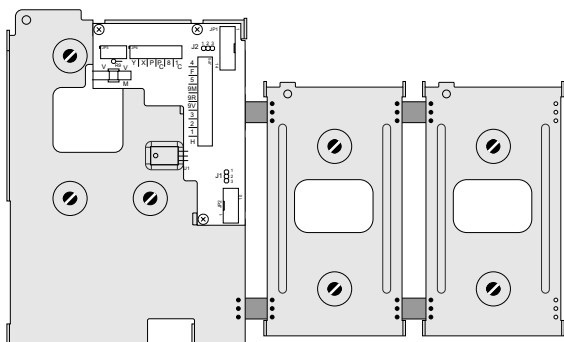
#### Wall version



To install a video memory module next to the monitor and telephone, you must insert the 2 plastic templates contained in the packing on the proper holes of the bracket **WB700** before fixing it.



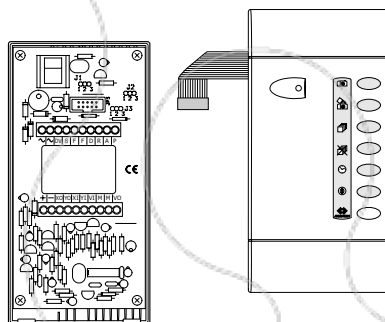
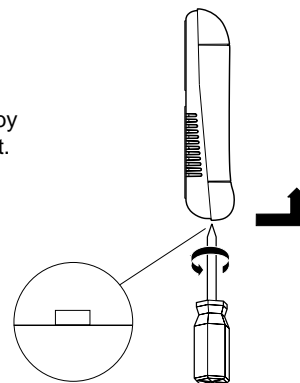
- 1) Before fixing the second bracket **WB700**, position the 2 plastic templates on the bracket holes.



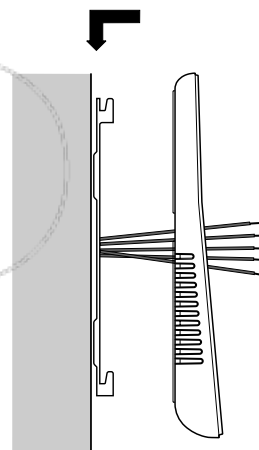
- 2) Fix the third bracket to the wall.

- 3) Hook the monitor and telephone according to the instructions on pages 157 and 158 from point 3 to 8.

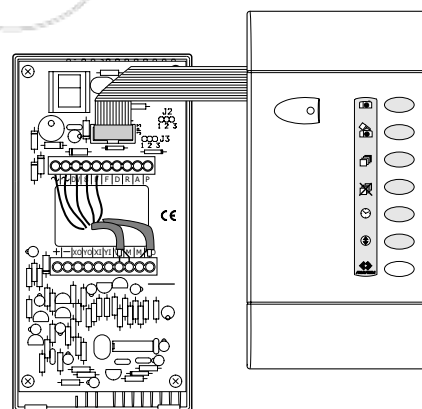
- 4) Remove the video memory cover by disengaging it from the bottom part.



- 5) Remove the flat cable that connects the 2 boards.



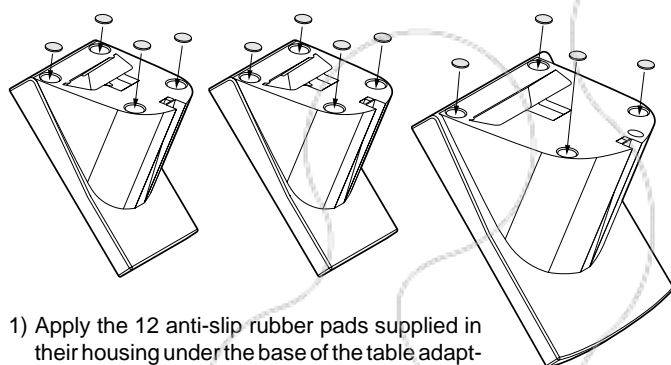
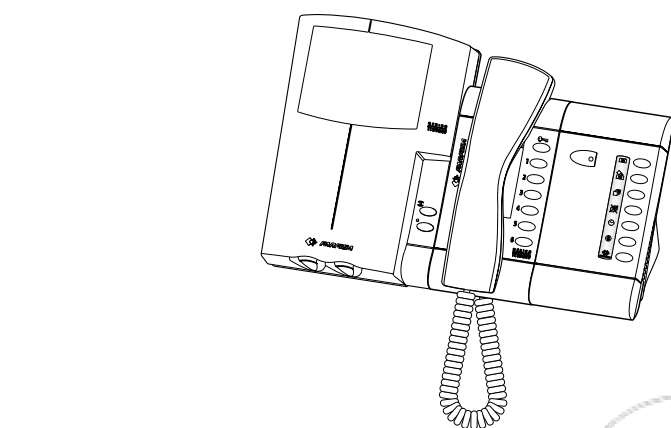
- 6) Pass the connection wires through the hole on the base and hook the base to the bracket.



- 7) Make the connection as shown in the installation diagram, reconnect the internal flat cable and replace the cover at the base of the video memory.

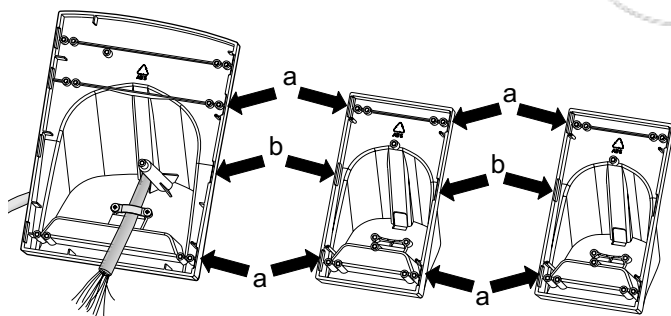
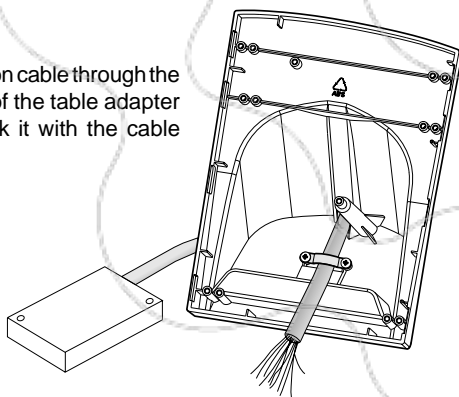


## Table version

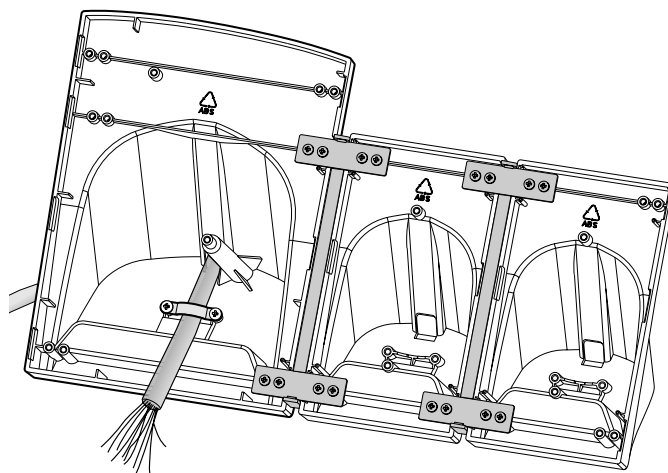


1) Apply the 12 anti-slip rubber pads supplied in their housing under the base of the table adapters **TA7100** e **TA700**.

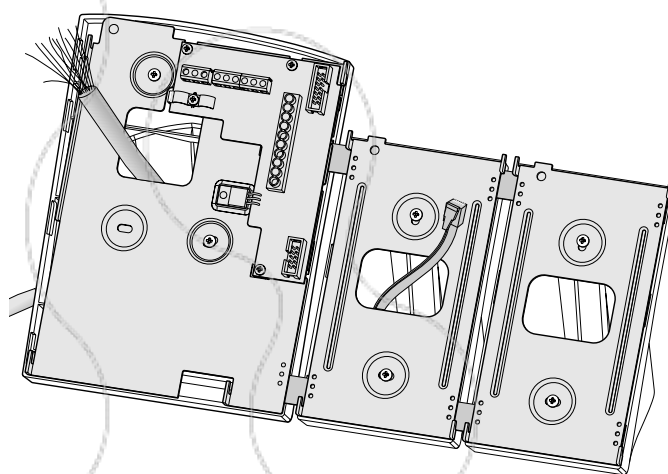
2) Pass the connection cable through the hole on the back of the table adapter **TA7100** and block it with the cable clamp supplied.



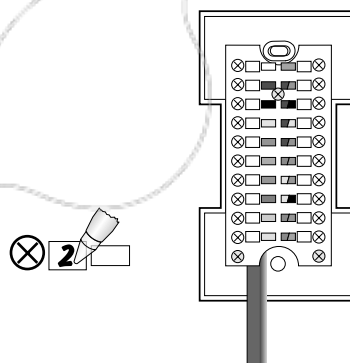
3) The arrows indicate the breaking points for the application of the metallic frames (a) and for the video memory wires (b).



4) Screw the 4 metallic frames on the table adapters and hook the 2 plastic frames to them (see drawing 4 on page 159).



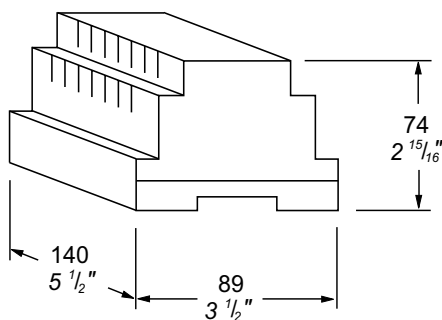
5) Screw the brackets **WB7100** and **WB700** on the table adapters.



6) Hook the monitor and intercom according to the instructions on pages 157 and 158 (point 3 to 8) and the video memory according to the instructions on page 160 (point 4 to 7).  
When connecting the wires on the terminal boards of bracket **WB7100** (point 6), mark the colour/terminal combination on the junction box.



# INTERCOM-TELEPHONE INTERFACE



## FT11D. Intercom-telephone interface.

It allows the connection of the trunk line and the intercom system to home telephone.

### Technical data

Power supply	127/230Vac
Maximum power consumption	7VA
Flashing time (button "R")	80 ÷ 330msec
Ringing Voltage	48Vac - 15mA
Operating temperature	0° ÷ +40°C
Maximum humidity	85% RH
Housing	DIN 8 modules A

### Note

The model is not provided with fuses, but it is protected against overloading or short-circuiting by temperature sensors (thermoprotector). In order to reset them, it is necessary to cut off the mains voltage for about one minute. Reconnect power after correcting the fault.

### Terminals

**Tip/ Ring** trunk line connection

**L-/ L+** telephone connection

**0/ 127** input voltage 127Vac

**0/ 230** input voltage 230Vac

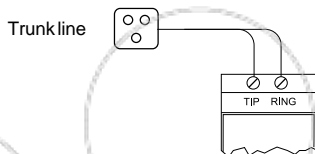
- 1 audio transmission
- 2 audio receiver
- 3 ground
- 4 terminal connected to ground. It can be isolated by cutting **W5** jumper. The normally open contact of relay, is connected between terminals 4 and 5.
- 5 lock release - max 1A (common relay contact)
- 6 intercom call input (12Vac - 150 mA)
- 7 normally closed contact of relay

## INSTALLATION

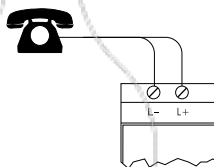
The intercom-telephone interface FT11D in DIN housing 8 modules A can be installed in suitable electrical box provided with bar support in compliance with DIN 46277 standards. It can also be fixed to the wall with two screws and expansion plugs not supplied with the product. **The two plastic protections of the terminal boards must be mounted in case of wall installation.** They can be eliminated in case of installation on DIN bar in electrical box.

## Telephone and electrical connections

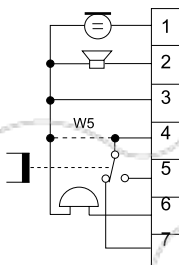
- Connect the two wires of the trunk line (telephone pair) to terminals **TIP** and **RING**.



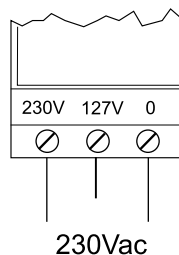
- Connect the two wires of the telephone to terminals **L-** and **L+** (telephone pair). The maximum distance between the interface and the last telephone is 350m with 0.6mm² pair. **Do not lay the telephone cables together with electrical cables.**



- Connect the five wires of the intercom system to terminals **1, 2, 3, 5** and **6**.



- Connect the two wires of the electrical mains to terminals **0** and **230** (or **0-127** according to the ratings of the mains). **It is necessary to provide a disconnecting and safety bipolar switch before the device.**



- Insert the 2 plastic protection of the terminal covers supplied with the product.

## PROGRAMMING THE TELEPHONE ST740W

Both a **standard** telephone and model **ST740** can be used as internal extension.

When using art.**ST740** it is necessary to program it in order to use the buttons dedicated to intercom functions. For information on programming see page 152. Following are the codes that can be assigned to the intercom buttons.

### Button



### Code

**RR**

**RRRR**

can be programmed with a **maximum number of 6 digits** (emergency number, telephone provider special services).

## OPERATION AND USE

**Do not open or tamper with the device since it contains high voltages inside. Installation and maintenance must be done exclusively by specialized personnel.**

Please consider that also if the telephone interface is **ON** for outgoing / incoming calls the telephone is connected to the trunk line directly. To operate the telephone interface set the switch on **"I"**.

A flashing indicator (LED) shows the system is working properly.

### Incoming outside calls

- When receiving a call from the trunk line it is enough to pick up the handset and to answer.

### Outgoing external calls

- Pick up the handset.
- Wait for the dial tone of public exchanger.
- Dial the number.

### Intercom connection without an outdoor incoming call

- Pick up the handset.
- Wait for the dial tone of public exchanger.

(**ST740**) - press

(**Standard**) - the **"R"** key twice (**R+R**) in a 3-seconds lapse of time.




## Intercom call

An intercom call is signalled on the telephone with a faster ringing tone than a conventional incoming outside call. The telephone is automatically connected to the intercom line, to answer it is enough to pick up the handset. If within 25 seconds you don't answer, the telephone is connected again to the trunk line.

## Door-opener

When the telephone is connected to the external door intercom station, the user can open the door by pressing:


(ST740) - the  button

(Standard) - the "R" key twice (R+R) in a 3-seconds lapse of time.

## Intercom call during a telephone conversation

During a telephone conversation, an acoustic signal (beep) indicates the intercom call. The user can:

- answer the intercom call and put the telephone conversation on hold (music on hold) by pressing:

(ST740) - the  button

(Standard) - the "R" key twice (R+R) in a 3-seconds lapse of time.

To retrieve the telephone conversation the user must replace the handset and wait for the telephone ringing back;

- answer to the intercom call and clear the telephone call by replacing the handset and waiting for the incoming intercom call to ring;

- ignore the intercom call and continue the telephone call. The intercom call remains active for 25 seconds, while the beep signal remains active only for 10 seconds.

## Phone call during an intercom conversation

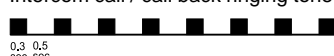
During an intercom conversation, any phone call is signalled by a bip on the background. In order to answer the phone call, the user has to replace the handset and wait for the incoming outside call.

## Emergency

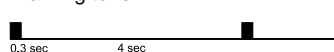
In case of power failure, the telephone is connected directly to the trunk line.

## Signalling table

Intercom call / call back ringing tone



Warning tone



**PR1.** Protection for 1 telephone line.

**PR2.** Protection for 2 telephone lines.

**PRAL.** Protection for electrical line (230Vac).

## WARNINGS

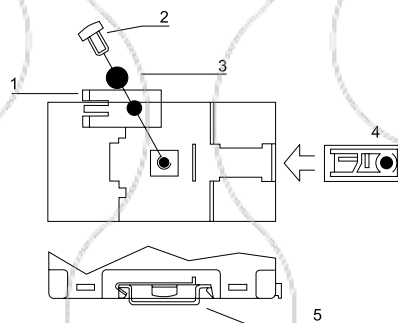
- Do not install the protections in humid places or near heat sources.
- Do not introduce objects or pour liquids inside the protections.
- Do not install the protections during a storm.
- Do not touch non-insulated cables, unless they are not disconnected from the mains.
- The protections do not contain user-serviceable parts: do not open the protection housings. If necessary, contact an authorized service centre.

## MECHANICAL ASSEMBLING

For the mechanical assembling use the fastening means supplied with the kit.

The protection devices can be assembled on G-type (EN 50035) and OMEGA-type (EN 50022) DIN bars.

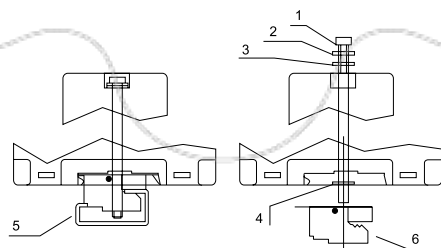
### Assembling on OMEGA bar



- 1 Ground spring
- 2 Fixing screw
- 3 Notched washer Ø5
- 4 Plastic fastener
- 5 Omega bar

**Note:** Only use the plastic fastener in case of assembling on OMEGA bar without ground connection.

### Assembling on G bar



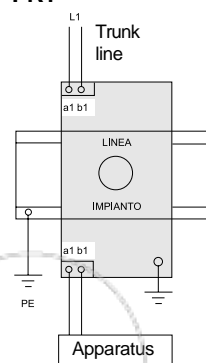
- 1 Fixing screw
- 2 Split washer Ø4
- 3 Flat washer Ø4
- 4 Notched washer Ø4
- 5 Omega bar
- 6 Mechanical fastener and ground terminal

## ELECTRICAL ASSEMBLING

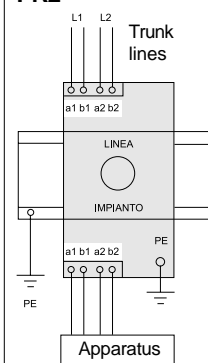
The protection device must be connected to the ground system using the terminals provided and/or the grounded DIN bar. The lower the resistance of the ground system, the higher the efficacy of the protection device. Disconnect the power supply before making the connections and refer to the wiring diagrams.

## INSTALLATION DIAGRAMS

### PR1

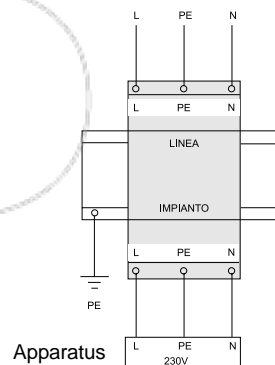


### PR2



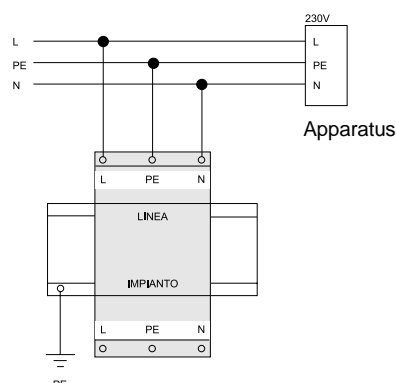
### PRAL

**SERIES connection for monophas power supply**



**PARALLEL connection for monophas power supply**

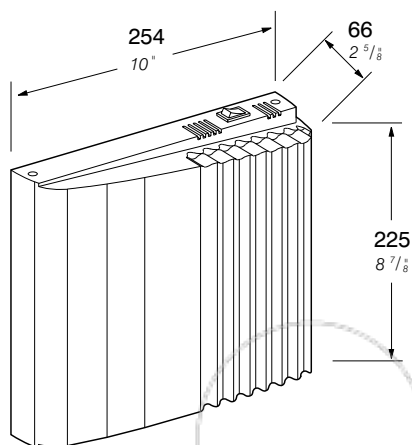
Connect the protection device in parallel to prevent it from being crossed by the operating current. This allows for connecting devices that absorb a higher current than the current stated by the protection device.



## PABX

In addition to the traditional functions, the PABX allows for intercom connection to your own entrance or to the building system intercom and intercommunicating service between Farfisa dedicated telephones (art. **ST740**) or pulse/DTMF standard telephones.

The PABX are sold with basic programming by default. For the intercom connection or for changing the default programming, carefully read the instructions manual supplied with the product.



**FT105P.** PABX with 1 external and 5 extension lines

**FT208P.** PABX with 2 external and 8 extension lines

### SAFETY RULES

- Only use the devices for the purpose it was designed for. The manufacturer is not responsible for possible damages arising from improper, incorrect or unreasonable use.
- The device complies with the EEC directives (CE European Mark).
- The installation must comply with the CE regulations in force.
- A disconnecting and protection switch must be placed before the PABX in the installation.
- Before powering up the PABX, make sure that the rating complies with the power mains.
- Never open the devices when turned ON.
- In case of failure, malfunctioning or modification of the installation, disconnect the power mains by means of the general switch and contact specialized personnel.

### EMERGENCY

In case of power failure, the following lines can be used to make/receive calls:

for **FT105P** extension **41**

for **FT208P** extension **41** for external line 1  
extension **42** for external line 2

An EEPROM memory guarantees the storing of the general programming data (or system data) and restore them when the power is restored.

### Technical data

	<b>FT105P</b>	<b>FT208P</b>
Supply voltage (+6÷-10%):	230Vac	230Vac
Maximum power consumption:	16W	18W
Power consumption in stand-by:	10W	10W
Input protection fuse:	0.315A	0.315A
Maximum distance of an extension line with 0.6 mm <sup>2</sup> telephone pair:	350m	350m
Dimensions:	226x254x66	226x254x66
Weight:	1.3 Kg	1.4 Kg
Operating temperature:	0°÷40°C	0°÷40°C
Maximum humidity permitted:	85%RH	85%RH
Number of external lines:	1	2
Number of extension lines:	5	8
Number of DTMF receivers:	1	2
Simultaneous internal conversations:	2	2
Simultaneous external conversations:	1	2
Paging communication:	1	1
Intercom calls (additional board):	1 or 2	1 or 2
Storing of data in case of power failure:	EEPROM	EEPROM
Extension lines in emergency mode:	41	41 and 42
Extension line for facsimiles, modems, answering machines:	45 *	48 *
Microprocessor control with recorded program		
Solid-state switching matrix		
2-wire internal telephone network		

\* The other extension lines can also be used but in this case the use of the general call function is not recommended.



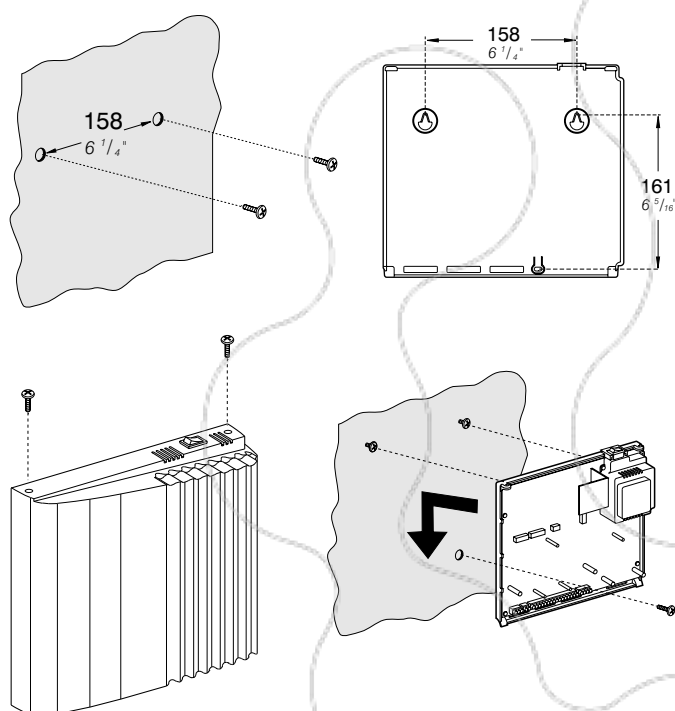
## INSTALLATION

For correct operation, make sure that the openings or slots for ventilation and heat dissipation are not blocked. Install the PABX away from devices generating strong magnetic fields (such as copying machines).

### Mechanical installation

To install the PABX:

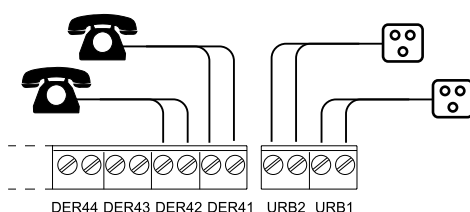
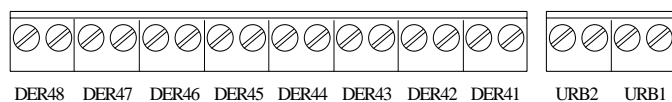
- position two screws on the wall at a distance of 158 mm without tightening them
- unscrew the 2 screws to remove the cover
- hook the PABX to the screws
- mark and drill the bottom hole
- place the PABX on the wall in correspondence with the 2 upper screws and move it downwards
- insert the bottom screw to block the PABX.



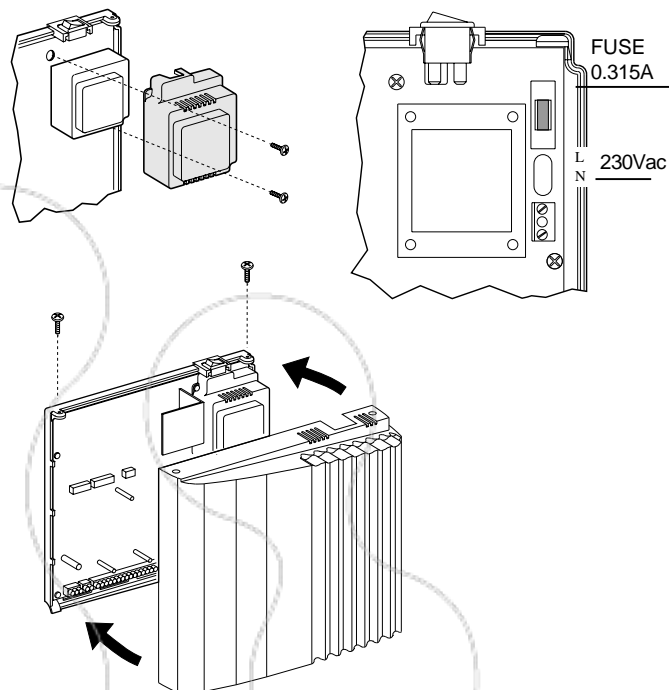
### Telephone and electrical connections

Use a telephone pair to connect telephones and external lines. The maximum distance between the PABX and the last telephone is 350 m. using a 0.6 mm<sup>2</sup> telephone pair. Do not use multi-pair cables to reduce crosstalk problems.

- check that the ON/OFF switch is OFF
- connect the wires of the external lines 1 and 2 to terminals **URB1** and **URB2** (URB1 for FT105P)
- connect the wires of the telephones to **DER41**, .... **DER48** (DER41, ... **DER45** for FT105P)



- unscrew the 2 screws to remove the protection cover of the power supply
- connect the 2 electrical conductors to terminals L and N
- replace the protection cover
- close the PABX
- power ON the PABX.



### Notes

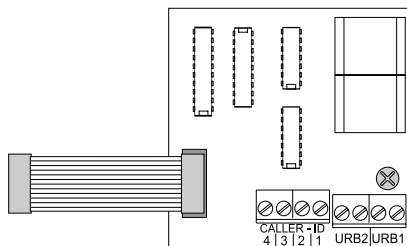
- Although already present in the PABX, place external protections against overvoltage or lightning on the external lines, on the electric mains and on the extension lines, if partially located outside the building.
- The correct operation of the telephone installation is guaranteed when using homologated telephones.
- If the general call function is required, connect facsimiles, modems and answering machines to the last extension (DER45 for FT105P; DER48 for FT208P) because they do not receive the call signal.



# PABX

## EXPANSION BOARDS

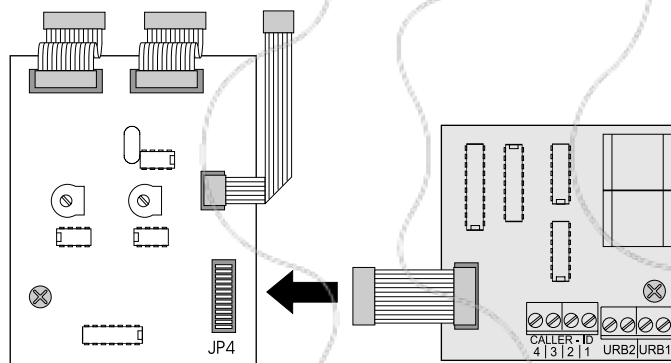
### ES70. Caller identifier board



The installation of the caller identifier board (art. **ES70**) into the **FT105P** or **FT208P** PABX allows you to display the caller's telephone number. The board allows for connecting up to 4 terminals. **The service must be requested to the telephone provider.**

#### Installing the board into the PABX

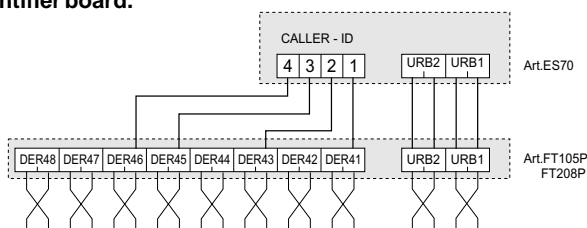
- Check that the PABX is turned OFF
- Remove the cover by unscrewing the 2 top screws
- Fix the board on the provided space
- Connect the ES70 board cable to the JP4 connector of the PABX (fax-switch board)
- Connect the 2 wires of each external line to the URB1 and URB2 terminal boards of the PABX and the ES70 board
- Remember to correctly program the PABX



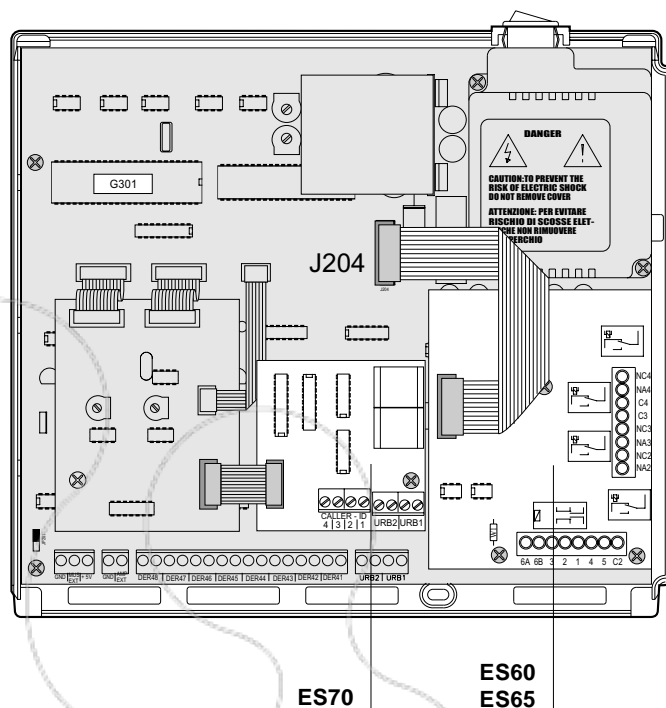
- Connect the **right terminal** of the 1<sup>st</sup> extension to terminal 1 of the CALLER-ID terminal board. Connect the **right terminal** of the 2<sup>nd</sup> terminal to terminal 2 of the CALLER-ID terminal board. Repeat the connection up to the 4<sup>th</sup> extension. You can choose any of the extensions, as long as you comply with the correct sequence (i.e. right terminal of DER 41 connected to terminal 1 of the CALLER-ID terminal board, right terminal of DER 43 connected to terminal 2, right terminal of DER 45 connected to terminal 3, right terminal of DER 46 connected to terminal 4).

**Warning:** If the telephone installation includes the ISDN interface board, for the correct operation of the ES70 check that the microcontroller of the FT105P or FT208P PABX is provided with H301 or G301 software or higher.

#### Connection of the FT105P or FT208P PABX with the ES70 caller identifier board.



Installation of the ES60 (or ES65) intercom interface and ES70 caller identifier board in the FT105P or FT208P PABX.



## PROGRAMMING

You need to enter the number of each extension you require the service for. It is recommended to note down the type of programming in the enclosed table.

- 0 service disabled
- 1 service enabled

#### Program:

- pick up the handset of the extension 41 (dialling tone);
- dial the access code 333316;
  - (only FT105P) – dial 5 digits to program 5 extensions (see Table). **Always dial a number of 5 digits even if extensions are less than 5.**
  - (only FT208P) – dial 8 digits to program 8 extensions (see Table). **Always dial a number of 8 digits even if extensions are less than 8.**
- wait for the acknowledgement tone and hang up.

## Notes

- The caller ID service **will not work** if the external lines are programmed for direct dialling (DISA) (see page 14 of the PABX technical manual for DISA programming).
- **The maximum number of extensions** with the caller ID function is 4. If a higher number of telephones is enabled during programming, the exchanger will automatically recognise only the first 4 telephones and exclude the others from the service.

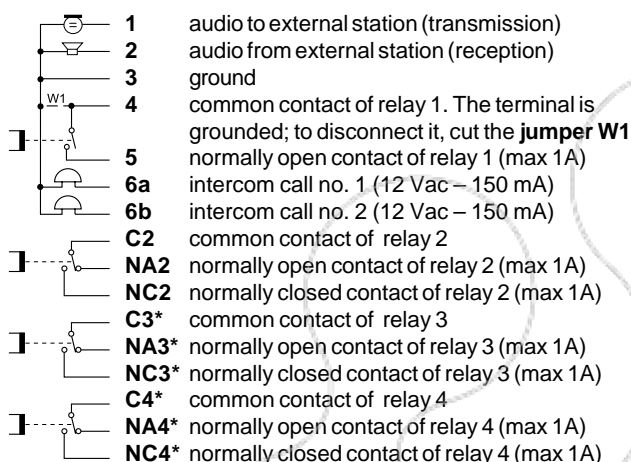


## INTERCOMINTERFACES

The intercom board art. **ES60** or **ES65** can be installed in the PABX in order to connect with the external intercom station, open the door/automatic gate, turn ON the staircase lighting, etc.

- ES60.** Intercom interface with two calls and 2 relays for door-opener.  
**ES65.** Same as ES60, with 4 relays for door-opener and activation of electrical equipment.

### Terminal specifications of the intercom boards

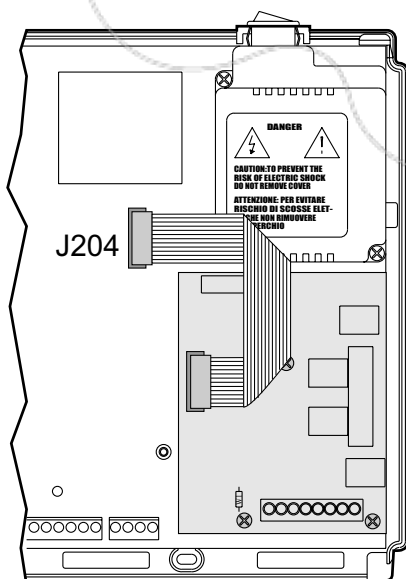


\* Terminals only available on the **ES65** intercom board.

## INSTALLATION

### Installing the board

- Make sure that the PABX is OFF
- Unscrew the 2 upper screws to remove the cover
- Fix the board on the provided place
- Connect the flat cable of the intercom board to the J204 connector
- Connect the intercom wires to the terminal block (see diagrams below)
- Remember to correctly program the PABX



## PROGRAMMING

Programming allows for personalizing the PABX according to the user's needs and for setting the operating mode for the each individual telephone connected to the PABX.

### PROGRAMMING CAN ONLY BE CARRIED OUT FROM EXTENSION 41.

When switching it ON, the PABX is programmed for standard operation. The basic programming is described in the sections of the instructions manual supplied with the product. For information on the PABX programming see the PABX manual.

Only reprogram the PABX parts that need to be modified and leave the rest unchanged.

It is possible to return to base programming at any time, by dialling code **333399** from telephone 41.

PABX are provided with two operating modes: **day** and **night** service. It is possible to simplify the PABX use by selecting the desired programming at any time during the day.

To recall the **day** service, dial **333301** from telephone 41 (operating mode set in the base programming).

To recall the **night** service, dial **333300**.

### PABX programming procedure

- pick up the handset (dialling tone);
- dial the access code;
  - (only **FT105P**) – dial 5 digits to program 5 extensions (see Table). **Always dial a number of 5 digits even if extensions are less than 5.**
  - (only **FT208P**) – dial 8 digits to program 8 extensions (see Table). **Always dial a number of 8 digits even if extensions are less than 8.**
- wait for the acknowledgement tone and hang up.

### HOW TO ASSIGN INCOMING EXTERNAL LINES

The access code for this service is - day **333307**  
 - night **333309**

- 0** the extension: - is not enabled to receive calls from the external lines
- 1** the extension: - is enabled to receive calls from external line 1
- 2** the extension: - is enabled to receive calls from external line 2
- 3** the extension: - is enabled to receive calls from external lines 1 and 2

### HOW TO ASSIGN OUTGOING EXTERNAL LINES

The access code for this service is - day **333306**  
 - night **333308**

- 0** the extension: - is not enabled to make calls on the external lines
- 1** the extension: - is enabled to make calls on external line 1
- 2** the extension: - is enabled to make calls on external line 2
- 3** the extension: - is enabled to receive calls on external lines 1 and 2



## PABX

### ENABLING THE INTERCOM INTERFACE

The access code for this service is - day **333310**  
- night **333312**

- 0** the extension: - is not enabled to have conversations with the external intercom station  
- is not enabled to activate relays (door-opener, staircase lighting, etc.)
- 1** the extension: - is enabled to have conversations with the external intercom station  
- is not enabled to activate relays (door-opener, staircase lighting, etc.)
- 2** the extension: - is not enabled to have conversations with the external intercom station  
- is enabled to activate relays (door-opener, staircase lighting, etc.)
- 3** the extension: - is enabled to have conversations with the external intercom station  
- is enabled to activate relays (door-opener, staircase lighting, etc.)

### ENABLING TO INTERCOM CALLS

The access code for this service is - day **333311**  
- night **333313**

- 0** the extension: - is not enabled to receive calls from the external intercom station
- 1** the extension: - is enabled to receive calls from the external intercom station – button no. 1 (terminal 6a of board ES60 or ES65)
- 2** the extension: - is enabled to receive calls from the external intercom station – button no. 2 (terminal 6b of board ES60 or ES65)
- 3** the extension: - is enabled to receive calls from both buttons of the external intercom station (terminals 6a and 6b of board ES60 or ES65)

### OPERATION

*The functions of the dedicated buttons of the ST740 telephone are factory-set.*

#### Answering an intercom incoming call

This function allows for answering calls coming from one or more external intercom stations (if properly programmed in both the sections "enabling the intercom interface" and "enabling to intercom calls").

When the call from the external station is received:

- pick up the handset and answer

#### Intercom communication without receiving any call

This function allows for having a conversation without receiving a call from one or more external intercom stations (if properly programmed in the section "enabling the intercom section").

- pick up the handset  
- dialling tone

**(ST740)** • press 

**(Standard)** • dial 6


- conversation with the external intercom station starts

#### Transfer an intercom call

To transfer an intercom call to an enabled user:

- hang up to suspend the intercom conversation
- pick up the handset
- call the desired extension and hang up after the message



The called user can:

- press **FLASH**  
**(ST740)** • press 
- (Standard)** • dial 6  
- conversation with the external intercom station starts

#### Relay activation during conversation

This function allows for activating the relays no. 1 and 2 of the intercom board ES60 or ES65 in order to operate electrical locks, turn ON the staircase lighting, etc.

During the conversation with the external intercom station:

- (ST740)** • press the  button to activate relay 1
- press the  button to activate relay 2

For the simultaneous activation of the two relays follow the procedure of the standard telephone.

**(Standard)** • press **FLASH**

- dialling tone
- dial the number of the relay to be activated:
  - 1 immediate enabling of relay 1 for about 3 seconds
  - 2 immediate enabling of relay 2 for about 3 seconds
  - 3 enabling of relays 1 and 2 in sequence.\*

\* Relays 1 and 2 are not enabled at the same time, in order not to overcharge the intercom power supply unit when used to activate electrical locks. Relay 2 is enabled with about 3 sec. delay.

### RELAY ACTIVATION

This function allows for activating the relays of the intercom board **ES60** or **ES65** for auxiliary services (lights, thermostats, heating and air conditioning installations, etc.).

#### Note

**Only one board at time can be added in the PABX (either ES60 or ES65).**

For installing the board and connection terminal block see on page 167.

#### Operation

For the first two relays also refer to the previous sections on this page:

- enabling the intercom interface;
- relay activation during conversation.

- pick up the handset  
- call waiting tone
- dial **78** followed by the number of the relay to be activated
  - 1 relay 1
  - 2 relay 2
  - 3 relay 3
  - 4 relay 4
- select the relay action (only for relays 2, 3 and 4)
  - 0 the relay is deactivated
  - 1 the relay is activated permanently
  - 2 the relay is activated for 3 seconds
- hang up after the acknowledgement tone.

**Example:** - dial 7821 to activate permanently relay 2. To deactivate it, dial 7820.  
- dial 7832 to activate only for 3 seconds relay 3.



## REMOTE ACTIVATION OF AUXILIARY RELAYS USING A CODE

**This service only works when calling over the public line with a DTMF telephone.**

It allows the user with password to activate from long distance the 4 actuator relays for auxiliary services (lights, thermostats, heating and air conditioning installations, etc.) by making a call to the user's number.

### Storing the passwords for external line 1 and 2

Chose a 4-digit password for line no. 1 and no.2 (i.e. 0190, 3233, 0010, etc.) and write them in the table below.

Programming	Code	Password to be stored
External line 1 password	3333-20	----
External line 2 password	3333-21	---- (only FT208P)

To program:

- pick up the handset of the extension 41
    - dialling tone
  - dial the access code 333320 to store password related to external line no.1
  - dial a chosen 4-digit password (from 0000 to 9999). *Always dial a 4-digit number*
  - wait for the acknowledgement tone and hang up.
- Repeat the above procedure with a different access code and password for external line 2 (only FT208P).

**Example:** if the number below has been dialled from the extension 41: 3333200100 the actuator boards installed in the PABX can be activated by making a call to external line 1 and dialling password 0100.

### Operation






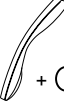















- select the subscriber number to which the PABX is connected from an external telephone
  - Public Exchange call control tone
- wait for the D.I.S.A. post-dialling tone
- dial 7
- dial the password programmed for the specific external line
- dial the number of the relay to be activated
  - 1 relay 1
  - 2 relay 2
  - 3 relay 3
  - 4 relay 4
- select the relay action (only for relays 2, 3 and 4. Relay 1 is always activated for 3 seconds)
  - 0 the relay is deactivated
  - 1 the relay is activated
  - 2 the relay is activated for 3 seconds
- acknowledgement tone.

**Examples:** make the connection with the user's number and dial 7010032: relay 3 is activated for 3 seconds, being 0100 the password related to external line 1 (see example above). To enable relay 1, dial 7 + the password code + 1. Relay 1 can only be activated for about 3 seconds.

### Note

In case of incorrect dialling, wrong password or no password within 5 seconds, the call is automatically sent to all extensions enabled to receive external calls.

## SUMMARY TABLE OF OPERATIONS FOR THE ACTIVATION OF THE MAIN INTERCOM FUNCTIONS

Intercom functions	ST740 telephone connected to:		Standard telephone connected to:		Legenda
	FT11D <sup>(1) (2)</sup>	FT105P FT208P	FT11D <sup>(2)</sup>	FT105P FT208P	
Door lock release during conversation			R + R (twice R)	R + 1	 lift the handset  button of ST740W telephone  button of ST740W telephone
Door lock release without receiving a call	 + 	 + 	 + R+R+R+R (four times R)	 + 6+R+1	R 1 6 telephone numerical and functional buttons
Intercom communication after receiving a call					
Intercom communication without receiving a call	 + 	 + 	 + R+R (twice R)	 + 6	

<sup>(1)</sup> To have these functions you must programme the buttons of the **ST740** telephone (see page 152).

<sup>(2)</sup> Lift the handset and wait for the exchange tone.



# INSTALLATION INSTRUCTIONS

## INTERCOM-TELEPHONE SYSTEMS

The installation of intercom interfaces (ES60, ES65 or FT11D) in an intercom system allows for using the telephone (traditional, dedicated or cordless) also for intercom functions.

- conversation with one or more external stations
- electric door lock release (or more locks with boards ES60, ES65)
- activation of electrical equipment in direct or remote mode (with boards ES60, ES65)

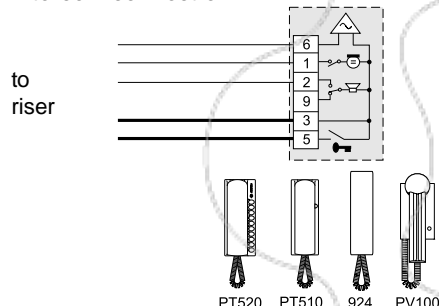
### APPLICATION IN INTERCOM SYSTEMS

The intercom interface boards **ES60**, **ES65** and art. **FT11D** have the same numbers as the terminals and the same functions as a Farfisa intercom connected in 4+1 intercom systems with one or more entrances.

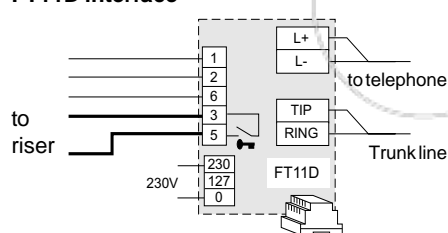
If the private conversation is necessary, the module SM50 must be installed only inside the intercoms, and not in apartments with telephone interfaces because the service is provided by the interface board directly.

The **intercommunicating diagrams cannot be used** because the intercommunicating service is provided by the PABX.

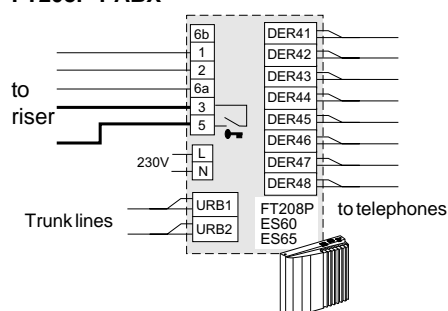
### Intercom connection



### Intercom-telephone connection with FT11D interface



### Intercom-telephone connection with FT208P PABX



## List of diagrams

Following is a list of installation diagrams in which one or more intercom and telephone interfaces can be installed instead of intercoms.

Diagram code	Page reference
Si11MO/1	31
Si11MO/2	33
Si12MO/1	35
Si13MO/1	37
Si16MO/1	39
Si16MO/2	41
Si17MO/1	43

For installation instructions and wire cross-section see page 26.

## VIDEO INTERCOM-TELEPHONE SYSTEMS

For the realisation of a video intercom system combined to a telephone system, it is necessary to install a monitor **ST7100** or **ST7100C** to your domestic telephone. In this case, in addition to the intercom characteristics described in the previous section, you can visualise your own entrance.

### APPLICATION IN VIDEO INTERCOM SYSTEMS

The video intercom diagrams contained in this manual can be converted into video intercom-telephone diagrams with the following variations:

- **intercom connections** (terminals 1, 2, 3 and 5) **must be** connected to the terminal board of the intercom interface and **not** to the terminal board of the monitor bracket;
- **connect the call terminal 9M with call terminal 6 of the interface** (terminal 10 in video intercom diagrams).

The **intercommunicating diagrams cannot be used** because the intercommunicating service is provided by the PABX.

## List of diagrams

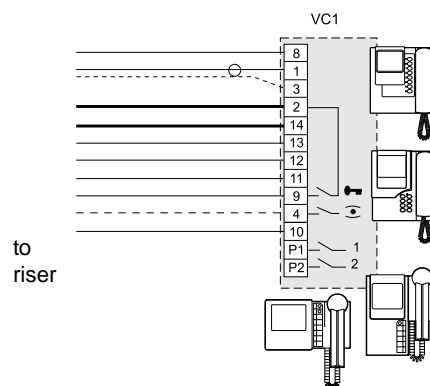
Following is a list of installation diagrams in which one or more intercom-telephone interfaces can be installed instead of video intercoms.

Diagram code	Page reference
Si31MO/1	99
Si31MC/1	101
Si31MO/2	103
Si32MO/1	105
Si32MO/2	107
Si33MO/1	109
Si33MO/2	111
Si33MO/7	113
Si36MO/2	115
Si36MO/3	117
Si36MO/4	119
Si36MO/5	121
Si37MO/1	123

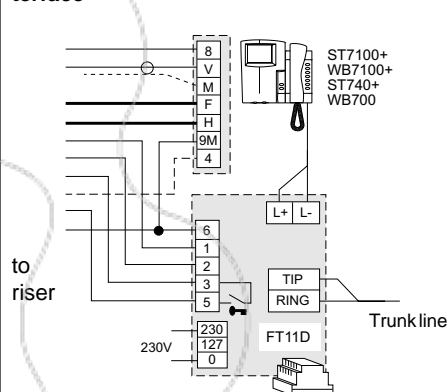
For installation instructions and wire cross-section see pages 91 to 93.

## Video connections with COAXIAL CABLE

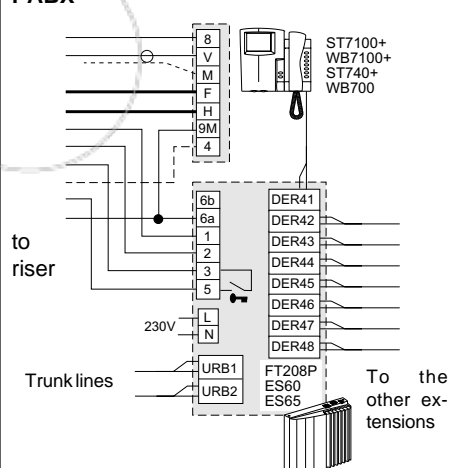
### Traditional video intercom



### Video intercom-telephone with FT11D interface

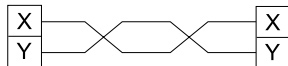


### Video intercom-telephone with FT208P PABX



## VIDEO SIGNAL DISTRIBUTION WITH TWISTED PAIR

If the distance between the camera and the last video intercom in the system is lower than 200m, the connection can be made with 2x0.35mm<sup>2</sup> wires (Ø=0,6mm; AWG22) instead of the coaxial cable. For distances from 100m to 200m a twisted pair must be used.

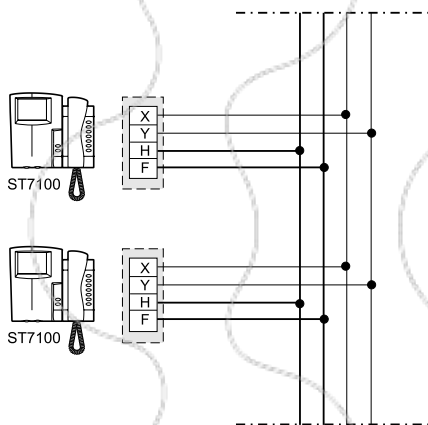


For the connection of the video signal you can choose from:

- connection with junction box
- serial connection (input and output)
- connection with floor distributor

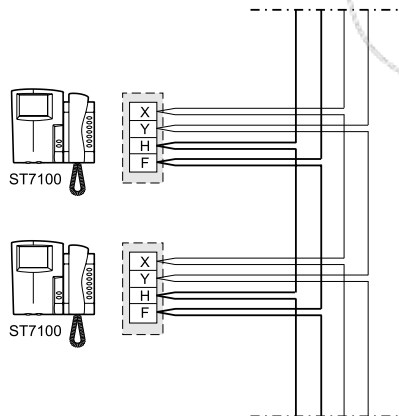
### CONNECTION WITH JUNCTION BOX

All wires are distributed in the floor junction box. Due to the signal loss introduced by each connection, the maximum number of video intercoms that can be connected in serial mode is 20. Two 75Ω resistances must be inserted between X and F and between Y and F in the last video intercom. The maximum distance between the video intercoms and the connector block is 2.5 metres.



### SERIAL CONNECTION

Connections are made on the video intercom brackets, and not in the junction box. Due to the signal loss introduced by each connection, the maximum number of video intercoms that can be connected in serial mode is 20. Two 75Ω resistances must be inserted between X and F and between Y and F in the last video intercom.



### CONNECTION WITH FLOOR DISTRIBUTOR

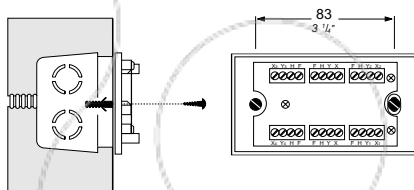
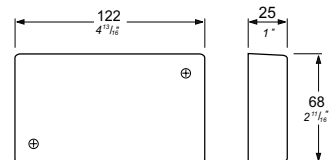
The video wires of each video intercom are insulated from the riser. Connections are made on the DV2D or DV4D floor video signal distributor box.

#### DV2D-DV4D. FLOOR VIDEO SIGNAL DISTRIBUTORS.

They allow for the distribution of the video signal taken from the riser on 2 or 4 outputs. They can be installed on the wall on a wall box, with expansion plugs or it can be placed in the junction box.

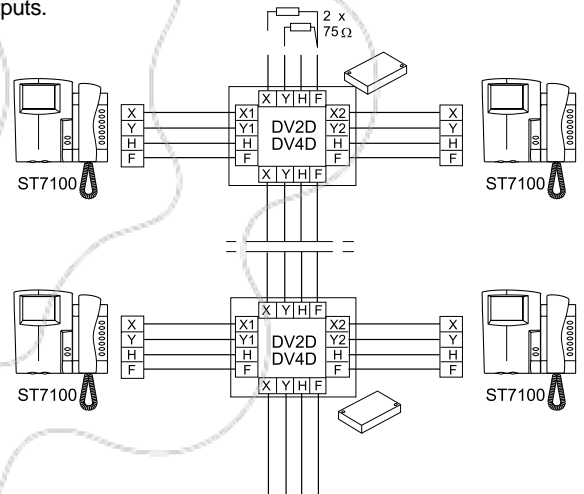
#### Technical data

Power supply	15÷21Vdc
Operating current	60mA
Max. input video signal	2Vpp
Insertion loss	0.8dB
Bandwidth	>5MHz



#### Connection of the video signal on a single riser

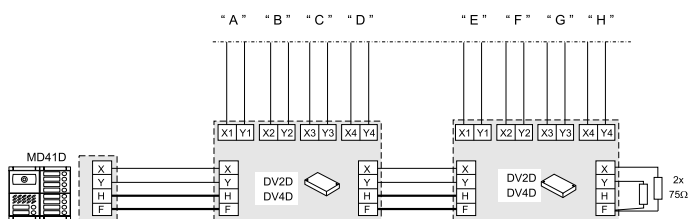
Terminals X and Y of the last distributor must be terminated with the 75Ω resistances supplied with the article. It is not necessary to terminate the unused outputs.



#### Connection of the video signal with distribution on several risers

In video systems with different risers you must use 1 or more video distributors art. DV2D or DV4D.

Terminals X and Y of the last distributor must be terminated with the 75Ω resistances supplied with the article. It is not necessary to terminate the unused outputs.



Example of connection on 8 risers



twisted pair



# EXTERNAL DOOR STATIONS

## VIDEO SIGNAL CONVERSION FROM COAXIAL CABLE TO BALANCED LINE

The **Studio** video intercom line allows for the realisation of video intercom systems by simply using a twisted pair and the camera **MD41D**. If the system includes colour cameras or models for CCTV, you must use a video converter to transform the video signal from coaxial to balanced. The board **CV01** permits this type of conversion and can be fixed on the back of cameras **Mody** or **Matrix** series, or near any **CCTV camera** (in outdoor housings, connector blocks, etc).

### CV 01.

Video signal converter from coaxial cable to balanced line (twisted pairs).

#### Wires

- V (white)** video signal input
- M (green)** video ground
- F (black)** ground
- +H (red)** 12÷21Vdc power supply input (according to the position of jumper J1)

#### Terminals

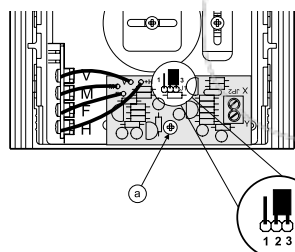
- X** negative balanced video signal output
- Y** positive balanced video signal output

## SYSTEMS WITH MODY OR MATRIX CAMERAS

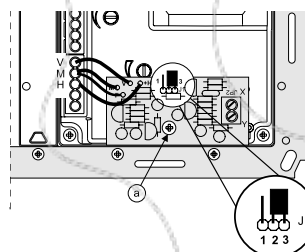
### Installation

- Fix the **CV01** board on the back of the housing of the camera with the screw supplied (a).
- Make the connections as shown on the diagram.
- Check that the **jumper J1** is in position 2-3 (power supply =21Vdc).

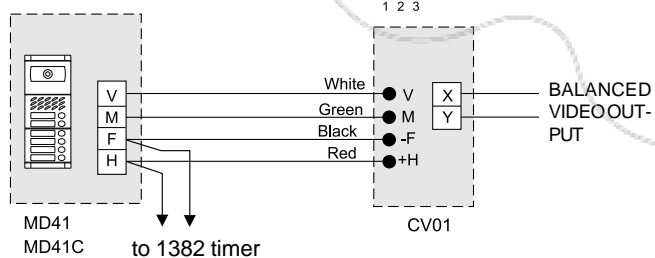
#### Mody



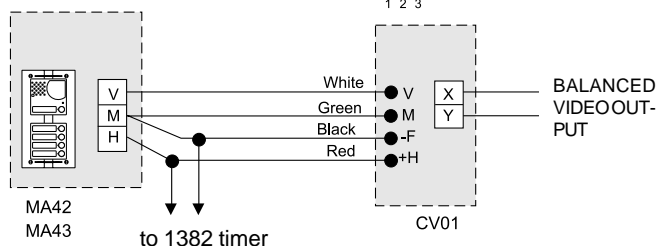
#### Matrix



#### Mody



#### Matrix



## SYSTEMS WITH CCTV CAMERAS

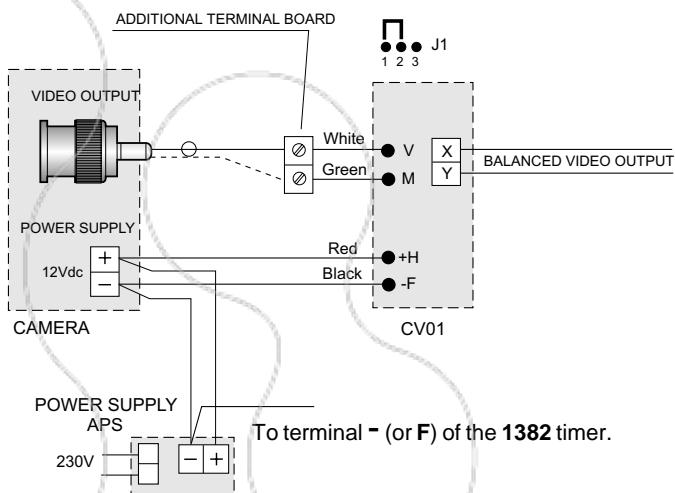
### Installation

- Place the **CV01** board in the outdoor housing of the **CCTV** camera or in any other housing.
- Make the connections as shown on the diagram.

### Connection with 12Vdc CCTV camera

This type of connection allows for powering the board with the camera power supply.

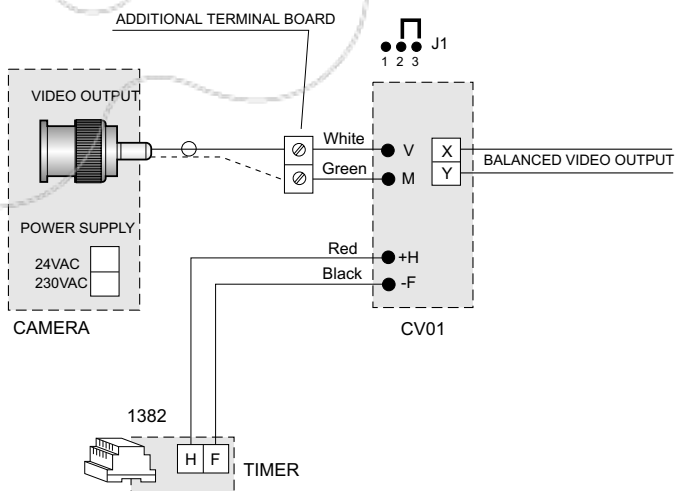
- Move the **jumper J1** from position 2-3 to 1-2 (power supply=12Vdc).



### Connection with 24Vac or 230Vac CCTV camera

This type of connection allows for powering the board in timed mode.

- Check that the **jumper J1** is in position 2-3 (power supply=21Vdc).



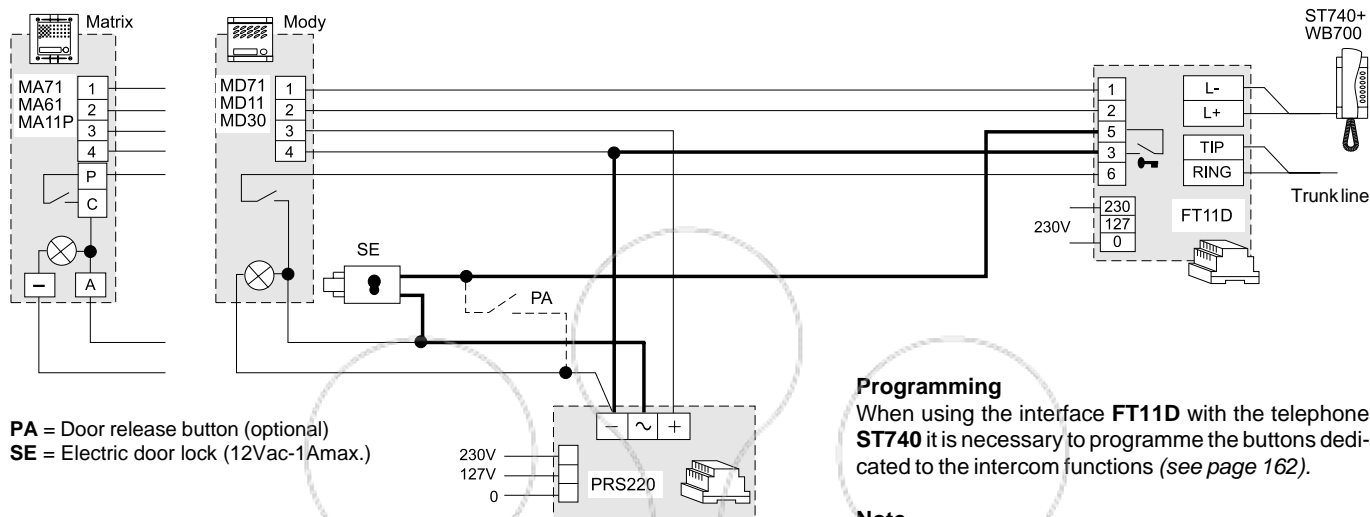
twisted pair



# INSTALLATION DIAGRAMS

## Si 111T/1

### ONE-WAY INTERCOM-TELEPHONE SYSTEM WITH TELEPHONE INTERFACE AND CONNECTION TO ONE EXTERNAL DOOR STATION



#### Programming

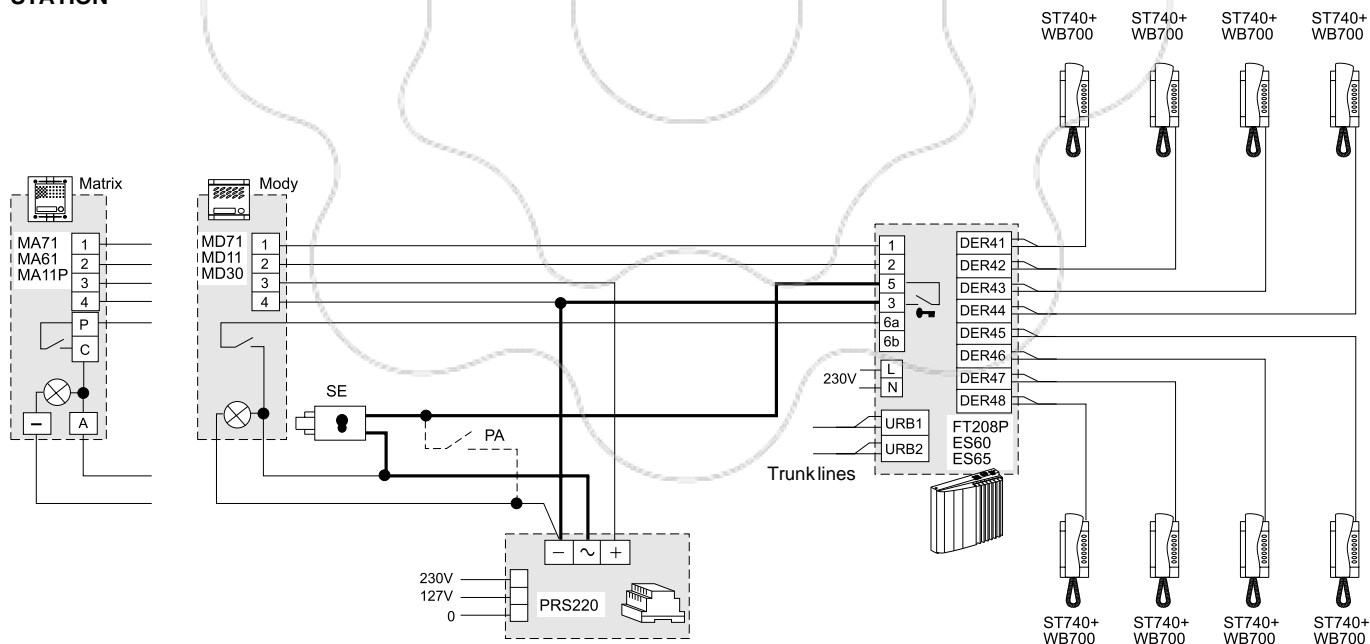
When using the interface **FT11D** with the telephone **ST740** it is necessary to programme the buttons dedicated to the intercom functions (see page 162).

#### Note

For wires dimensioning refer to the installation recommendations and table on page 26.

## Si 111T/2

### ONE-WAY INTERCOM-TELEPHONE INTERCOMMUNICATING SYSTEM WITH PABX AND CONNECTION TO ONE EXTERNAL DOOR STATION



PA = Door release button (optional)

SE = Electric door lock (12Vac-1Amax.)

#### Note

For wires dimensioning refer to the installation recommendations and table on page 26.

#### Programming

For this type of system the following programming must be **absolutely** carried out on the PABX:

- enabling the intercom interface
  - enabling to intercom calls
- See page 168.

If the PABX is **only used for the intercommunicating service**, without connection to the public telephone lines (URB1 and URB2), it is necessary to deactivate the incoming and outgoing external lines with the following programming:

- how to assign incoming external lines
  - how to assign outgoing external lines
- See page 167.



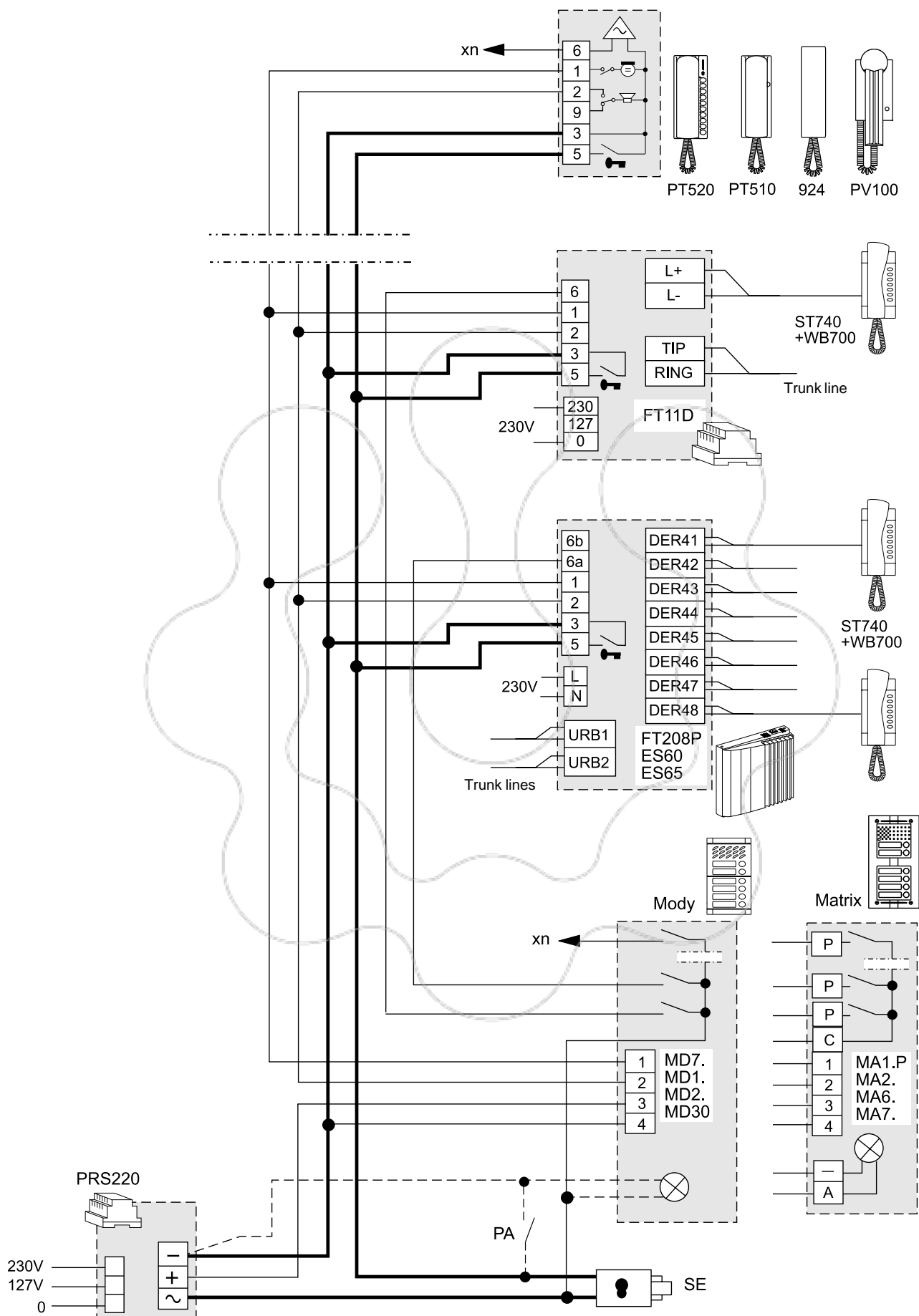
Q.ty	Article	Description
...	<b>PT510W *</b>	Project series intercom
...	<b>ST740W</b>	Studio series telephone
...	<b>WB700</b>	Bracket for telephone
...	<b>FT11D</b>	Intercom-telephone interface
...	<b>FT105P-FT208P</b>	PABX
...	<b>ES60-ES65</b>	Intercom-telephone interface for PABX
1	<b>PRS220</b>	Power supply
1	<b>PA **</b>	Door release push-button ( <i>optional</i> )
1	<b>SE **</b>	Electric door lock (12VAC-1A)

	1 row	2 row	
1	MD71÷74	MD71÷74	Module frames with back box
1	MD10-11-12	MD10-122-124	Modules for electric door speaker
...	MD21 ÷ 24	MD222 ÷ 228	Button modules
...	MD20 - 50	MD20 - 50	Blank and info modules
1	MD82 ÷ 812	MD82 ÷ 812	Hood covers
1	MD92 ÷ 912*	MD92 ÷ 912*	Rain shelters with module frames
1	MD30	MD30	Electric door speaker (amplifier)

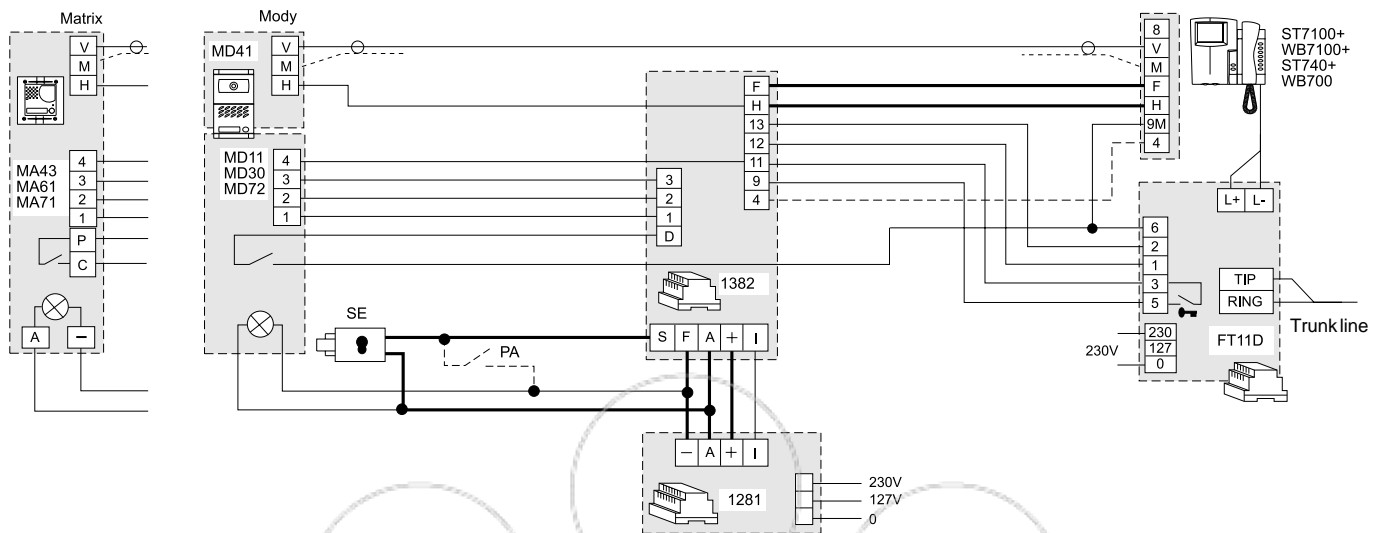
...	<b>MA71÷73</b>	Module frames with back box
1	<b>MA10P-11P-12P</b>	Modules with integrated audio amplifier
...	<b>MA20-22-24</b>	Blank and button modules
...	<b>MA61÷63</b>	Front frames



## MIXED INTERCOM/TELEPHONE SYSTEM CONNECTED TO ONE EXTERNAL DOOR STATION



## ONE-WAY VIDEO INTERCOM-TELEPHONE SYSTEM WITH TELEPHONE INTERFACE AND CONNECTION TO ONE EXTERNAL DOOR STATION



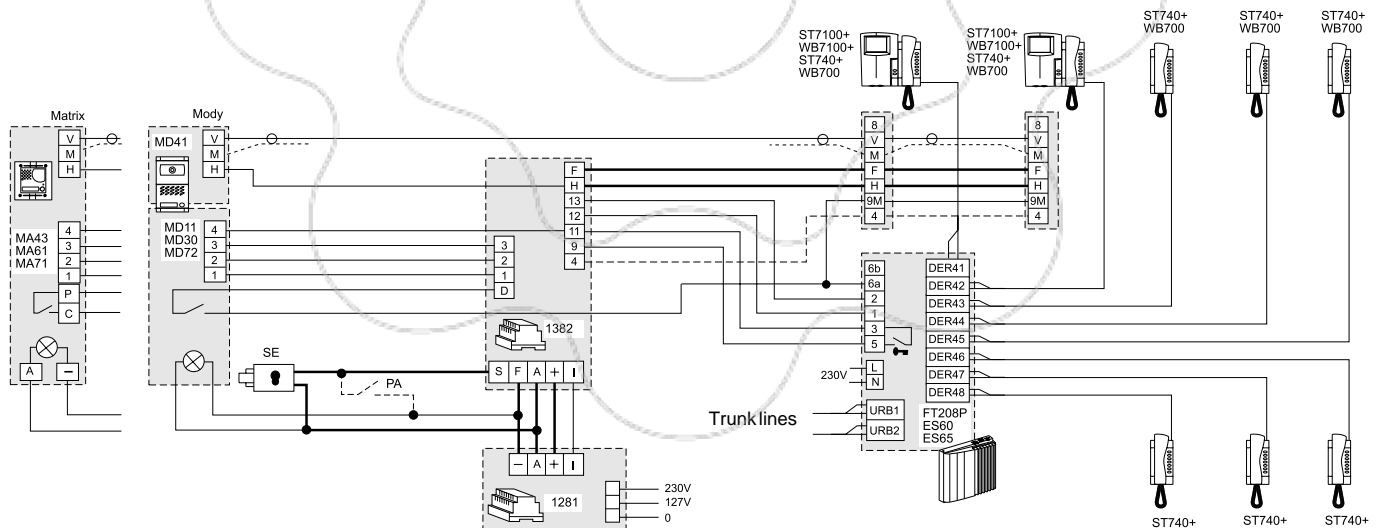
PA = Door release button (optional)  
SE = Electric door lock (12Vac-1Amax.)

**Note**  
For wires dimensioning and video connection refer to the installation instructions and table on pages 91÷93.

**Programming**  
When using the telephone interface **FT11D** with the telephone **ST740** it is necessary to programme the buttons dedicated to the intercom functions (see page 162).

## Si 311T/2

## ONE-WAY VIDEO INTERCOM-TELEPHONE SYSTEM WITH PABX AND CONNECTION TO ONE EXTERNAL DOOR STATION



PA = Door release button (optional)  
SE = Electric door lock (12Vac-1Amax.)

**Note**  
For wires dimensioning and video connection refer to the installation instructions and table on pages 91÷93 and read note 3 on page 124.

**Programming**  
For this type of system the following programming must be **absolutely** carried out on the PABX:  
- enabling the intercom interface  
- enabling to intercom calls  
See page 168.

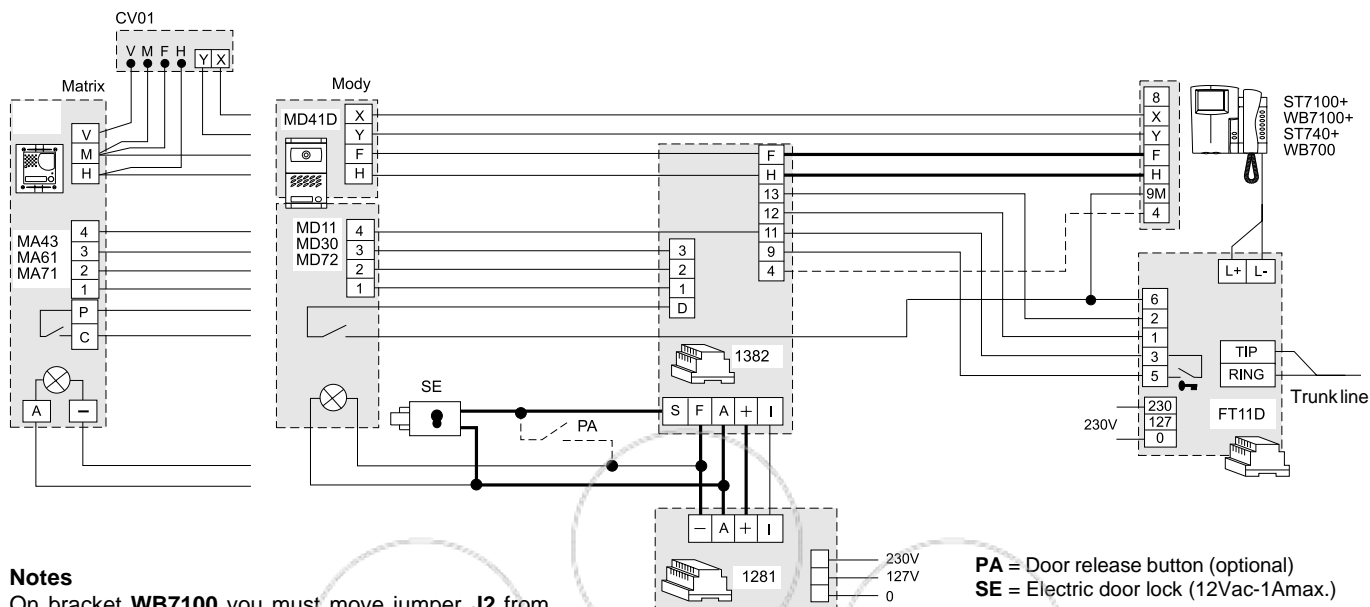
If the PABX is **only** used for the intercommunicating service, without connection to the public telephone lines (URB1 and URB2), it is necessary to deactivate the incoming and outgoing external lines with the following programming:  
- how to assign incoming external lines  
- how to assign outgoing external lines  
See page 167.



COAX



## ONE-WAY VIDEO INTERCOM-TELEPHONE SYSTEM WITH TELEPHONE INTERFACE AND CONNECTION TO ONE EXTERNAL DOOR STATION



## Notes

On bracket **WB7100** you must move jumper **J2** from position **1-2** to **2-3**.

For the video connection with twisted pair, use the camera **MD41D** or add the video converter **CV01** (see page 172).

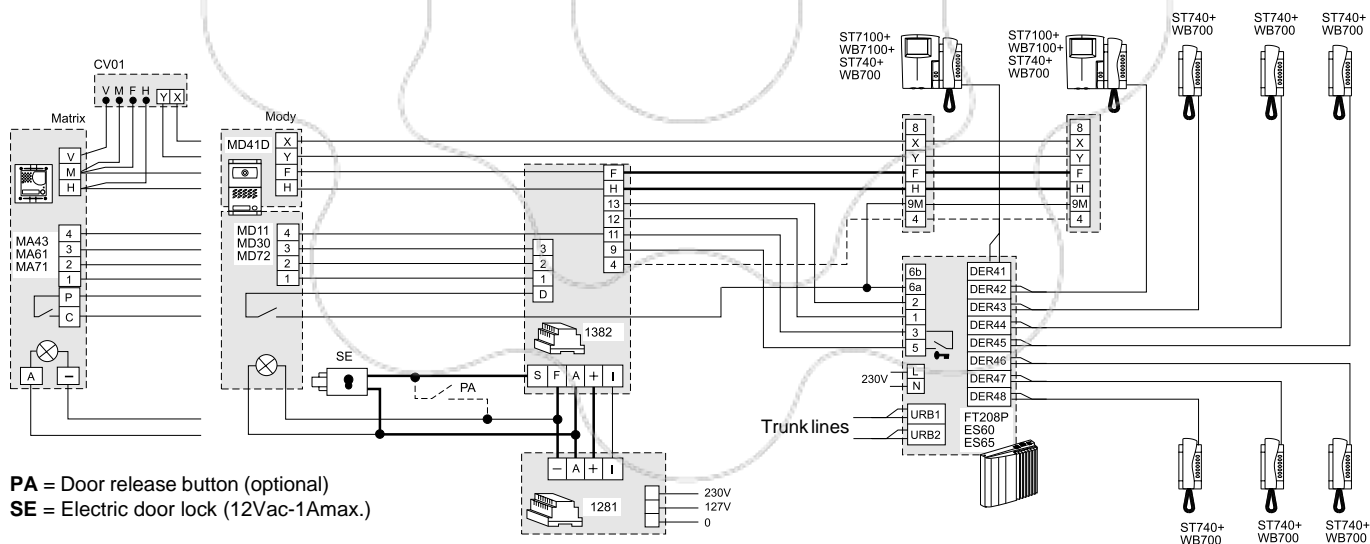
For wires dimensioning refer to the installation instructions and table on page 91.

## Programming

When using the telephone interface **FT11D** with the telephone **ST740** it is necessary to programme the buttons dedicated to the intercom functions (see page 162).

## Si 311T/7

## ONE-WAY VIDEO INTERCOM-TELEPHONE SYSTEM WITH PABX AND CONNECTION TO ONE EXTERNAL DOOR STATION



PA = Door release button (optional)

SE = Electric door lock (12Vac-1Amax.)

## Notes

With brackets **WB7100** you must:

- move the **mobile jumper J2** from position **1-2** to **2-3**;
- **cut** the resistances **R7** and **R10** of the fixing brackets **WB7100**;
- add 2-75Ω resistances between terminals X-F and Y-F of the last monitor.

For the video connection with twisted pair, use the camera **MD41D** or add the video converter **CV01** (see page 172).

For wires dimensioning refer to the installation instructions and table on page 91.

## Programming

For this type of system the following programming must be **absolutely** carried out on the PABX:

- enabling the intercom interface
  - enabling to intercom calls
- See page 168.

If the PABX is **only used for the intercommunicating service**, without connection to the public telephone lines (URB1 and URB2), it is necessary to deactivate the incoming and outgoing external lines with the following programming:

- how to assign incoming external lines
  - how to assign outgoing external lines
- See page 167.



twisted pair



## MIXED VIDEO INTERCOM / VIDEO INTERCOM-TELEPHONE SYSTEM CONNECTED TO ONE EXTERNAL DOOR STATION

Q.ty	Article	Description
...	<b>PT 5160 + WB 5100</b>	Videointercom FLAT + wall bracket
...	<b>PT 5660 + WB 5600 + 1283</b>	Videointercom + wall bracket + back box
...	<b>PT 5860 + WB 5600</b>	Videointercom reflex + wall bracket
...	<b>PV 1260 + WB1200 + 1283</b>	Videointercom + wall bracket + back box
...	<b>PV 2160 + WB 2100</b>	Videointercom FLAT + wall bracket
...	<b>ST 7100W + WB7100</b>	Studio series monitor + wall bracket
...	<b>ST740W +WB700</b>	Studio series telephone + wall bracket
...	<b>FT11D</b>	Intercom-telephone interface
...	<b>FT105P-FT208P</b>	PABX
...	<b>ES60-ES65</b>	Intercom-telephone interface for PABX
...	<b>DV2-4</b>	Video distributor
1	<b>1281</b>	Power supply
1	<b>1382</b>	Timer
1	<b>PA **</b>	Door release push-button ( <i>optional</i> )
1	<b>SE **</b>	Electric door lock (12VAC-1A)

**Door station series Mody** (for the composition see pages 82÷85)

	1 row	2 row	
1	<b>MD41</b>	<b>MD41</b>	Camera
...	<b>MD72÷74</b>	<b>MD72÷74</b>	Module frames with back box
1	<b>MD10-11-12</b>	<b>MD10-122-124</b>	Modules for electric door speaker
...	<b>MD21 ÷ 24</b>	<b>MD222 ÷ 228</b>	Button modules
...	<b>MD20 - 50</b>	<b>MD20 - 50</b>	Blank and info modules
1	<b>MD82 ÷ 812</b>	<b>MD82 ÷ 812</b>	Hood covers
1	<b>MD92 ÷ 912*</b>	<b>MD92 ÷ 912*</b>	Rain shelters with module frames
1	<b>MD30</b>	<b>MD30</b>	Electric door speaker (amplifier)

**Matrix series** (for the composition see pages 88÷89)

1	<b>MA42-43</b>	Camera modules with integrated audio amplifier
...	<b>MA20-22-24</b>	Blank and button modules
...	<b>MA61-62-63</b>	Front frames
...	<b>MA71-72-73</b>	Back boxes and module frames

... Refers to number of users.

\* Rain shelters are used instead of back boxes and hood covers.

\*\* Articles not supplied by ACI Farfisa.

**Working instructions.** See pages 94, 162 and 168.**Notes**

- If the maximum number of extensions is 5, you can use the PABX **FT105P**.
- For the connection of name plate lamps read notes 6, 7 and 8 of the installation instructions on page 91.
- If the control switching ON is necessary, connect terminal 4 of the timer (dashed wire).
- For wires dimensioning and video connection refer to the installation instructions and table on pages 91÷93.
- For other types of push-button panels see the general catalogue.

**Programming**

When using the telephone interface **FT11D** with the telephone **ST740** it is necessary to programme the buttons dedicated to the intercom functions (see page 162).

When using the PABX, the following programming must be **absolutely** carried out:

- intercom interface activation
- activation to receive intercom calls

See page 168.

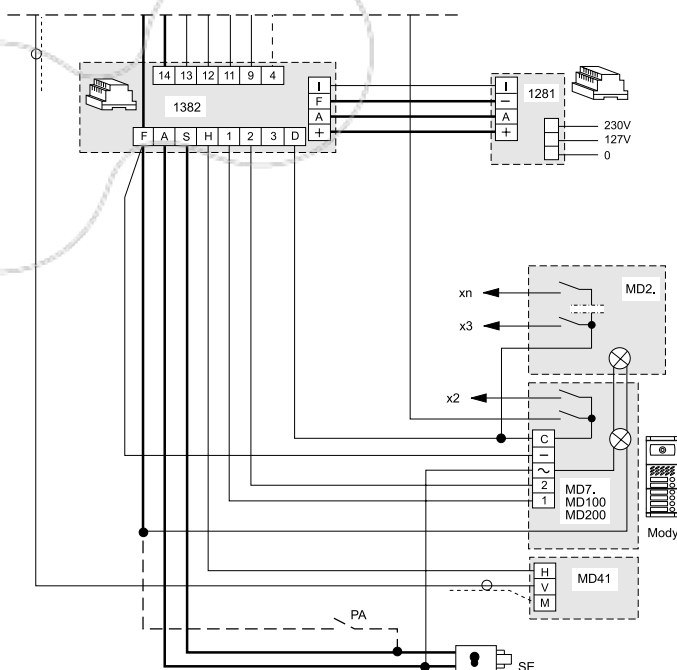
If the PABX is **only used for the intercommunicating service**, without connection to the public telephone lines (URB1 and URB2), it is necessary to deactivate the incoming and outgoing external lines with the following programming:

- how to assign incoming external lines
- how to assign outgoing external lines

See page 167.

**Application diagram**

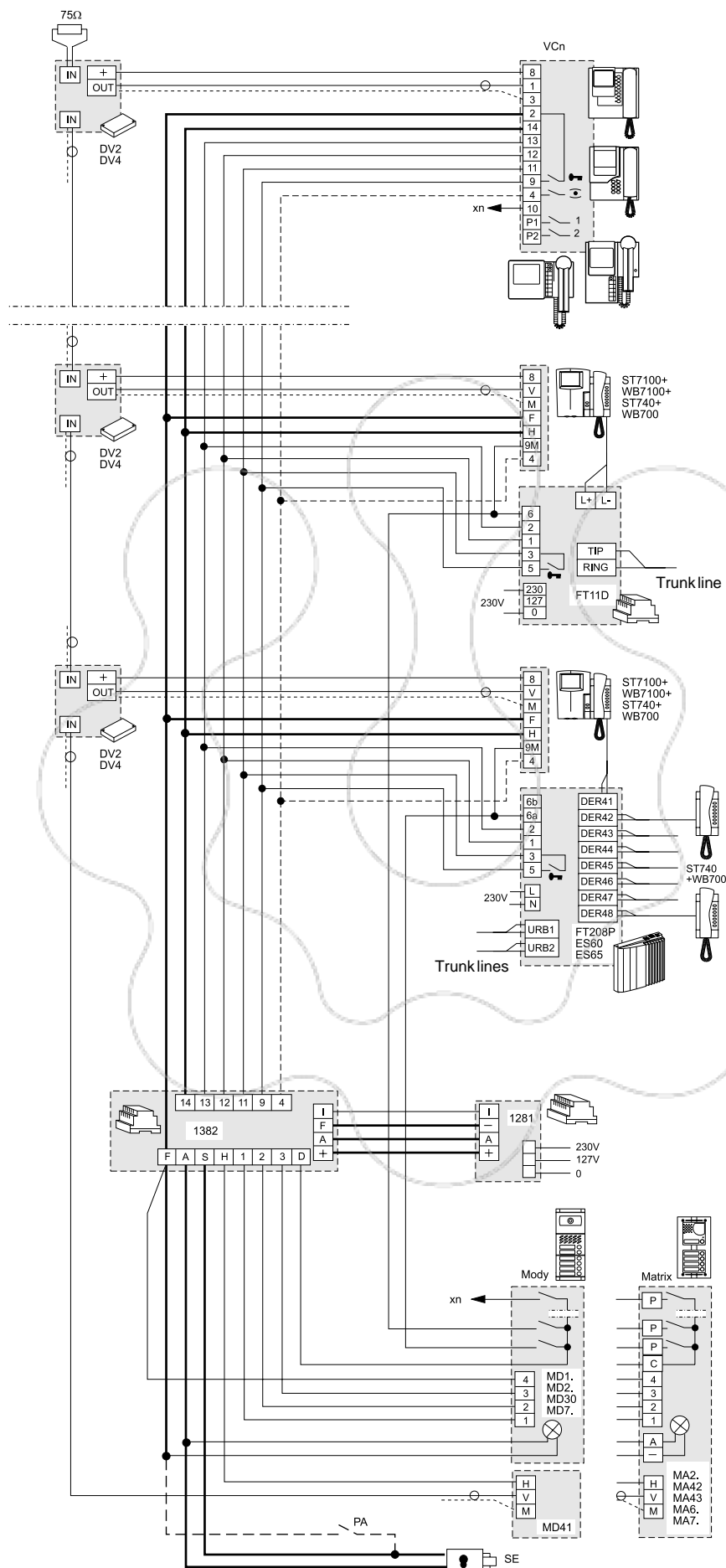
When using **MD100**, **MD200** amplified external door stations, place this diagram on the diagram on page 179 and line it up with the riser.



coax



## MIXED VIDEO INTERCOM / VIDEO INTERCOM-TELEPHONE SYSTEM CONNECTED TO ONE EXTERNAL DOOR STATION



INTERCOMS \* VIDEO INTERCOMS \* TELECOMMUNICATION



## VIDEO INTERCOM-TELEPHONE SYSTEM CONNECTED TO ONE EXTERNAL DOOR STATION

Q.ty	Article	Description
...	<b>ST 7100W + WB7100</b>	Studio series monitor + wall bracket
...	<b>ST740W +WB700</b>	Studio series telephone + wall bracket
...	<b>FT11D</b>	Intercom-telephone interface
...	<b>FT105P-FT208P</b>	PABX
...	<b>ES60-ES65</b>	Intercom-telephone interface for PABX
...	<b>DV2D-4D</b>	Video distributor
1	<b>1281</b>	Power supply
1	<b>1382</b>	Timer
1	<b>PA **</b>	Door release push-button (optional)
1	<b>SE **</b>	Electric door lock (12VAC-1A)

**Door station series Mody** (for the composition see pages 82÷85)

	1 row	2 row	
1	<b>MD41D</b>	<b>MD41D</b>	Camera
...	<b>MD72÷74</b>	<b>MD72÷74</b>	Module frames with back box
1	<b>MD10-11-12</b>	<b>MD10-122-124</b>	Modules for electric door speaker
...	<b>MD21 ÷ 24</b>	<b>MD222 ÷ 228</b>	Button modules
...	<b>MD20 - 50</b>	<b>MD20 - 50</b>	Blank and info modules
1	<b>MD82 ÷ 812</b>	<b>MD82 ÷ 812</b>	Hood covers
1	<b>MD92 ÷ 912*</b>	<b>MD92 ÷ 912*</b>	Rain shelters with module frames
1	<b>MD30</b>	<b>MD30</b>	Electric door speaker (amplifier)

**Matrix series** (for the composition see pages 88÷89)

1	<b>MA42-43</b>	Camera modules with integrated audio amplifier
1	<b>CV01</b>	Video signal converter
...	<b>MA20-22-24</b>	Blank and button modules
...	<b>MA61-62-63</b>	Front frames
...	<b>MA71-72-73</b>	Back boxes and module frames

... Refers to number of users.

\* Rain shelters are used instead of back boxes and hood covers.

\*\* Articles not supplied by ACI Farfisa.

**Working instructions.** See pages 94, 162 and 168.**Notes**

- If the maximum number of extensions is 5, you can use the PABX **FT105P**.
- For the video connection with twisted pair, use the camera **MD41D** or add the video converter **CV01** (see page 172).
- For wires dimensioning refer to the installation instructions and table on page 91.
- For the connection of name plate lamps read notes 6, 7 and 8 of the installation instructions on page 91.
- If the control switching ON is necessary, connect terminal 4 of the timer (dashed wire).
- For other types of push-button panels see the general catalogue.

**Programming**

When using the telephone interface **FT11D** with the telephone **ST740** it is necessary to programme the buttons dedicated to the intercom functions (see page 162).

When using the PABX, the following programming must be **absolutely** carried out:

- intercom interface activation
- activation to receive intercom calls

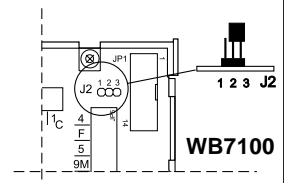
See page 168.

If the PABX is **only used for the intercommunicating service**, without connection to the public telephone lines (URB1 and URB2), it is necessary to deactivate the incoming and outgoing external lines with the following programming:

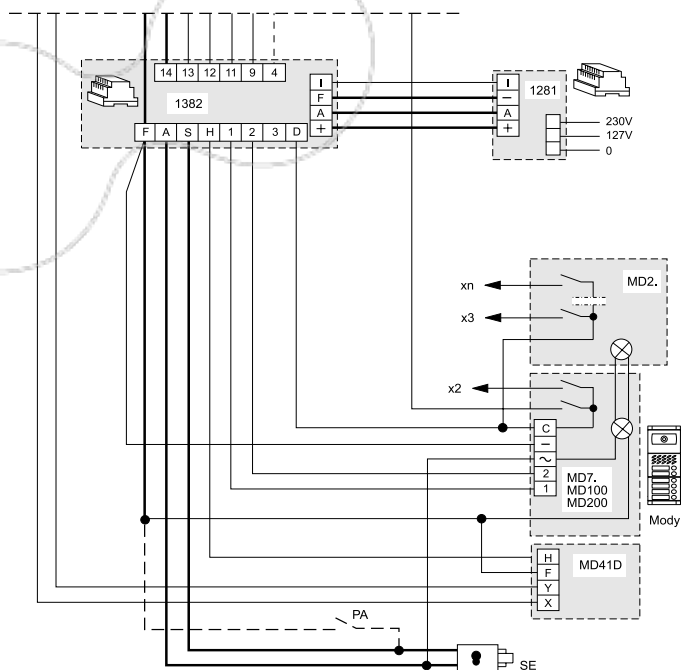
- how to assign incoming external lines
- how to assign outgoing external lines

See page 167.

On bracket **WB7100** you must move jumper **J2** from position 1-2 to 2-3.

**Application diagram**

When using **MD100**, **MD200** amplified external door stations, place this diagram on the diagram on page 181 and line it up with the riser.



twisted pair



twisted  
pair



## VIDEO INTERCOM-TELEPHONE SYSTEM CONNECTED TO TWO EXTERNAL DOOR STATIONS

Q.ty	Article	Description
...	<b>ST 7100W + WB7100</b>	Studio series monitor + wall bracket
...	<b>ST740W +WB700</b>	Studio series telephone + wall bracket
...	<b>FT11D</b>	Intercom-telephone interface
...	<b>FT105P-FT208P</b>	PABX
...	<b>ES60-ES65</b>	Intercom-telephone interface for PABX
...	<b>DV2D-4D</b>	Video distributor
1	<b>1281</b>	Power supply
1	<b>1382</b>	Timer
1	<b>1273TV</b>	Exchanger
2	<b>PA **</b>	Door release push-button ( <i>optional</i> )
2	<b>SE **</b>	Electric door lock (12VAC-1A)

**Door station series Mody** (for the composition see pages 82÷85)

	1 row	2 row	
2	<b>MD41D</b>	<b>MD41D</b>	Camera
...	<b>MD72÷74</b>	<b>MD72÷74</b>	Module frames with back box
2	<b>MD10-11-12</b>	<b>MD10-122-124</b>	Modules for electric door speaker
...	<b>MD21 ÷ 24</b>	<b>MD222 ÷ 228</b>	Button modules
...	<b>MD20 - 50</b>	<b>MD20 - 50</b>	Blank and info modules
2	<b>MD82 ÷ 812</b>	<b>MD82 ÷ 812</b>	Hood covers
2	<b>MD92 ÷ 912*</b>	<b>MD92 ÷ 912*</b>	Rain shelters with module frames
2	<b>MD30</b>	<b>MD30</b>	Electric door speaker (amplifier)

**Matrix series** (for the composition see pages 88÷89)

2	<b>MA42-43</b>	Camera modules with integrated audio amplifier
2	<b>CV01</b>	Video signal converter
...	<b>MA20-22-24</b>	Blank and button modules
...	<b>MA61-62-63</b>	Front frames
...	<b>MA71-72-73</b>	Back boxes and module frames

... Refers to number of users.

\* Rain shelters are used instead of back boxes and hood covers.

\*\* Articles not supplied by ACI Farfisa.

**Working instructions.** See pages 94, 162 and 168.**Notes**

- If the maximum number of extensions is 5, you can use the PABX **FT105P**.
- For the video connection with twisted pair, use the camera **MD41D** or add the video converter **CV01** (see page 172).
- For wires dimensioning refer to the installation instructions and table on page 91.
- For the connection of name plate lamps read notes 6, 7 and 8 of the installation instructions on page 91.
- If the control switching ON is necessary, connect terminal 4 of the timer (dashed wire).
- For other types of push-button panels see the general catalogue.

**Programming**

When using the telephone interface **FT11D** with the telephone **ST740** it is necessary to programme the buttons dedicated to the intercom functions (see page 162).

When using the PABX, the following programming must be **absolutely** carried out:

- intercom interface activation
- activation to receive intercom calls

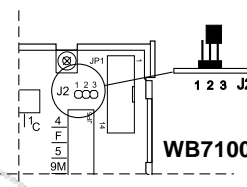
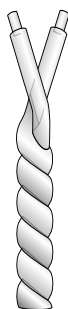
See page 168.

If the PABX is **only used for the intercommunicating service**, without connection to the public telephone lines (URB1 and URB2), it is necessary to deactivate the incoming and outgoing external lines with the following programming:

- how to assign incoming external lines
- how to assign outgoing external lines

See page 167.

On bracket **WB7100** you must move jumper **J2** from position 1-2 to 2-3.

**WB7100**

twisted pair



twisted  
pair



Q.ty	Article	Description
4	<b>ST 7100W</b>	Studio series monitor
4	<b>WB7100</b>	Bracket for monitor
8	<b>ST740W</b>	Studio series telephone
8	<b>WB700</b>	Bracket for telephone
1	<b>FT208P</b>	PABX
1	<b>ES60-ES65</b>	Intercom-telephone interface for PABX
1	<b>DV2</b>	Video distributor
1	<b>1281</b>	Power supply
1	<b>1382</b>	Timer
1	<b>PA **</b>	Door release push-button ( <i>optional</i> )
1	<b>SE **</b>	Electric door lock (12VAC-1A)

1	<b>MD72</b>	Module frames with back box
1	<b>MD12</b>	Module for electric door speaker
1	<b>MD82</b>	Hood cover
1	<b>MD92*</b>	Rain shelter with module frames
1	<b>MD30</b>	Electric door speaker (amplifier)
1	<b>MD41</b>	Camera

1	<b>MA42</b>	Camera module with integrated audio amplifier
1	<b>MA22</b>	Button modules
1	<b>MA62</b>	Front frame
1	<b>MA72</b>	Back box and module frames

\*\* Articles not supplied by ACI Farfisa.

- If the maximum number of extensions is 5, you can use the PABX **FT105P**.
- For the connection of name plate lamps read notes 6, 7 and 8 of the installation instructions on page 91.
- If the control switching ON is necessary, connect terminal 4 of the timer (dashed wire).
- For wires dimensioning and video connection refer to the installation instructions and table on pages 91-93.

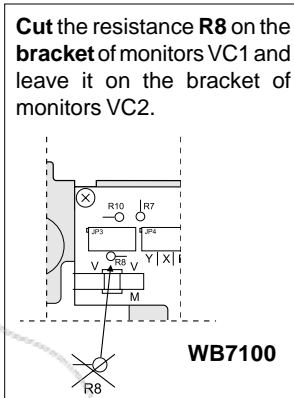
When using the PABX, the following programming must be **absolutely** carried out:

- intercom interface activation
- activation to receive intercom calls
- how to assign incoming external lines
- how to assign outgoing external lines

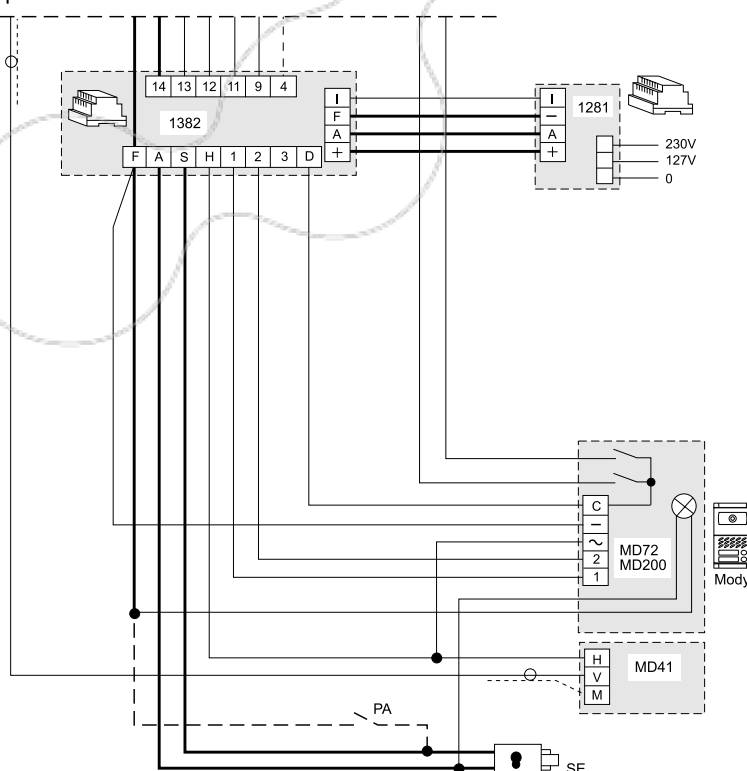
*See pages 167 and 168.*



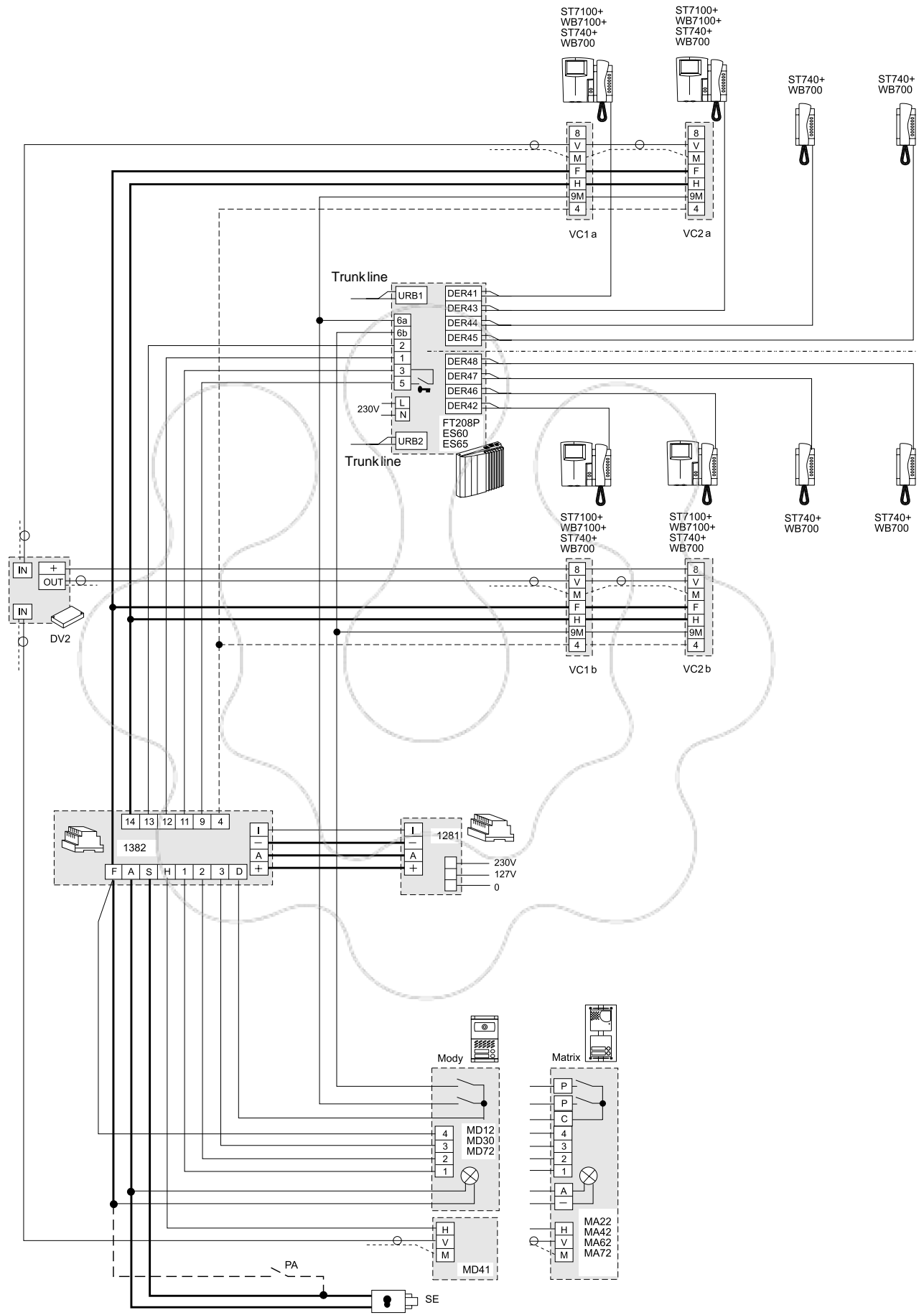
coax



When using **MD200** amplified external door stations, place this diagram on the diagram on page 185 and line it up with the riser.

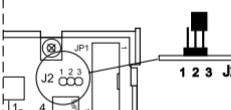


TWO-WAY VIDEO INTERCOM-TELEPHONE INTERCOMMUNICATING SYSTEM WITH PABX CONNECTED TO ONE EXTERNAL DOOR STATION



Q.ty	Article	Description
4	<b>ST 7100W</b>	Studio series monitor
4	<b>WB7100</b>	Bracket for monitor
8	<b>ST740W</b>	Studio series telephone
8	<b>WB700</b>	Bracket for telephone
1	<b>FT208P</b>	PABX
1	<b>ES60-ES65</b>	Intercom-telephone interface for PABX
1	<b>DV2D</b>	Video distributor
1	<b>1281</b>	Power supply
1	<b>1382</b>	Timer
1	<b>PA **</b>	Door release push-button (optional)
1	<b>SE **</b>	Electric door lock (12VAC-1A)

On bracket **WB7100** you must move jumper **J2** from position **1-2** to **2-3**.



1	<b>MD72</b>	Module frames with back box
1	<b>MD12</b>	Module for electric door speaker
1	<b>MD82</b>	Hood cover
1	<b>MD92*</b>	Rain shelter with module frames
1	<b>MD30</b>	Electric door speaker (amplifier)
1	<b>MD41D</b>	Camera

1	<b>MA42</b>	Camera module with integrated audio amplifier
1	<b>CV01</b>	Video signal converter
1	<b>MA22</b>	Button modules
1	<b>MA62</b>	Front frame
1	<b>MA72</b>	Back box and module frames

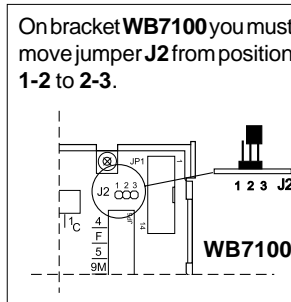
\*\* Articles not supplied by ACI Farfisa.

- If the maximum number of extensions is 5, you can use the PABX **FT105P**.
- For the video connection with twisted pair, use the camera **MD41D** or add the video converter **CV01** (see page 172).
- For wires dimensioning refer to the installation instructions and table on page 91.
- For the connection of name plate lamps read notes 6, 7 and 8 of the installation instructions on page 91.
- If the control switching ON is necessary, connect terminal 4 of the timer (dashed wire).

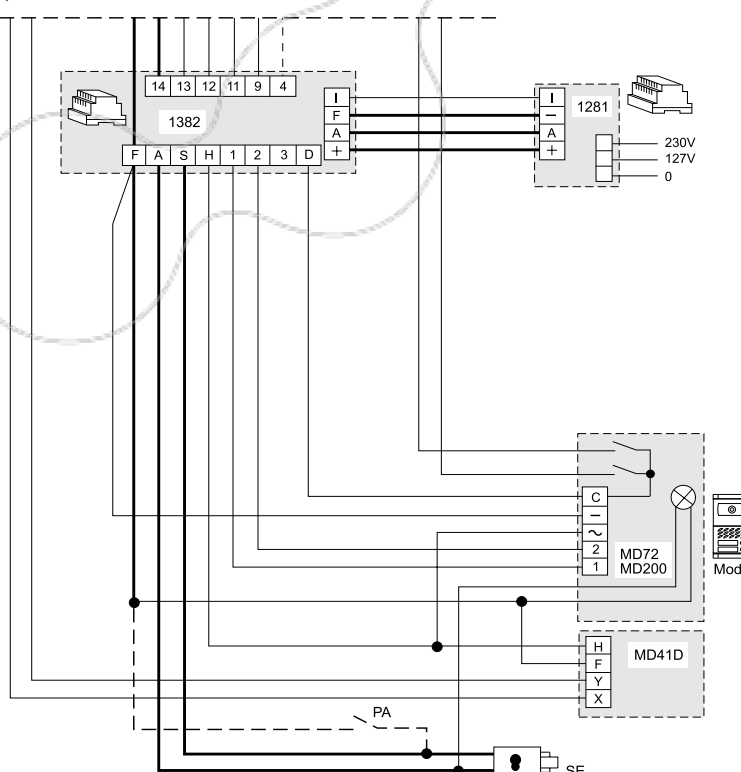
When using the PABX, the following programming must be **absolutely** carried out:

- intercom interface activation
- activation to receive intercom calls
- how to assign incoming external lines
- how to assign outgoing external lines

*See pages 167 and 168.*



When using **MD200** amplified external door stations, place this diagram on the diagram on page 187 and line it up with the riser.



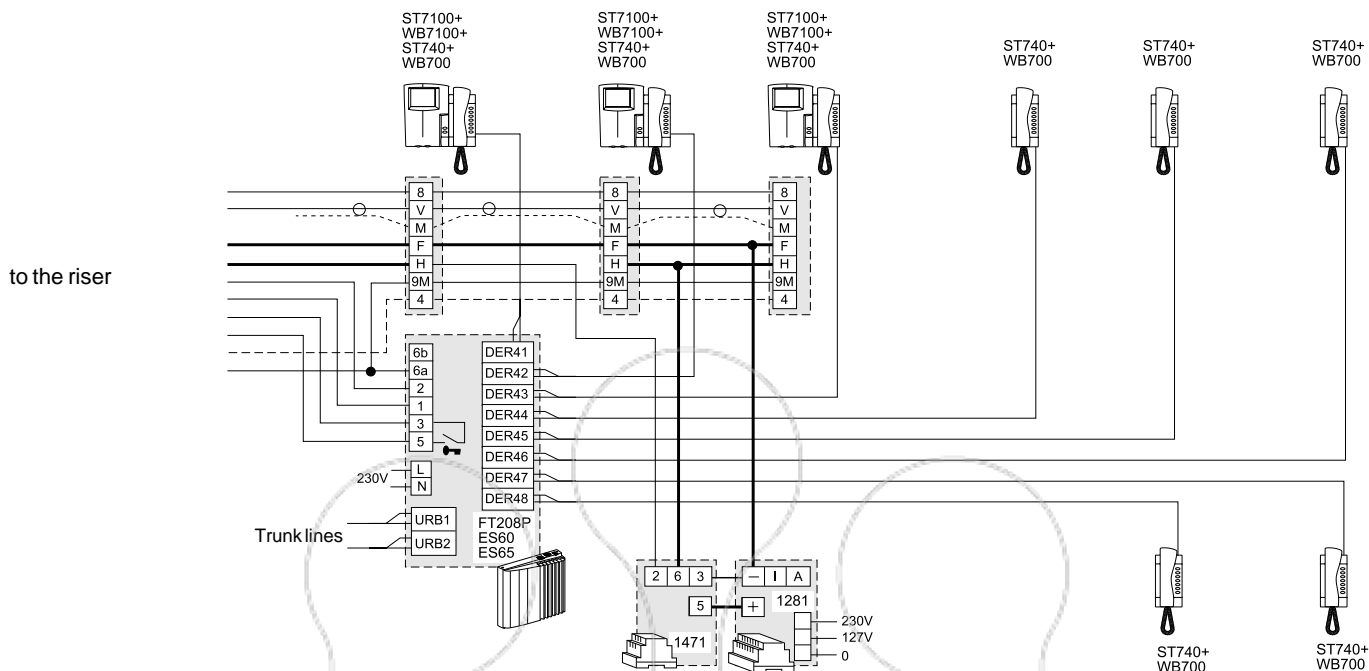
twisted  
pair



## VIDEO INTERCOM-TELEPHONE additional diagrams

**Note:** the extension diagrams of these 2 pages can be applied to all video intercom installation diagrams with video connection with **coaxial cable**.

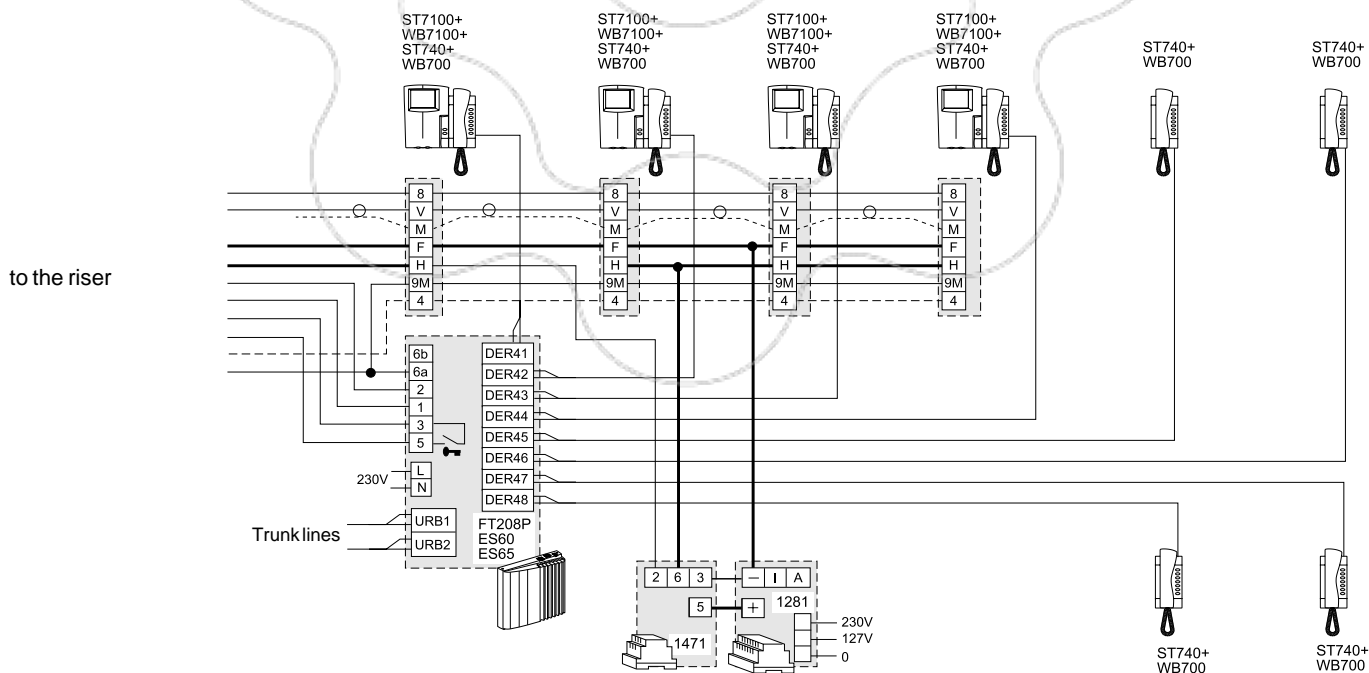
### 1 PABX, 3 VIDEO INTERCOM-TELEPHONE SETS AND 5 INTERCOMMUNICATING TELEPHONES



#### Note

If the video system is realized with coaxial cable connected in serial mode (input and output from the video intercom), you must **cut the 75Ω resistance R8** of the bracket **WB7100** and leave it only on the last video intercom.

### 1 PABX, 4 VIDEO INTERCOM-TELEPHONE SETS AND 4 INTERCOMMUNICATING TELEPHONES



#### Note

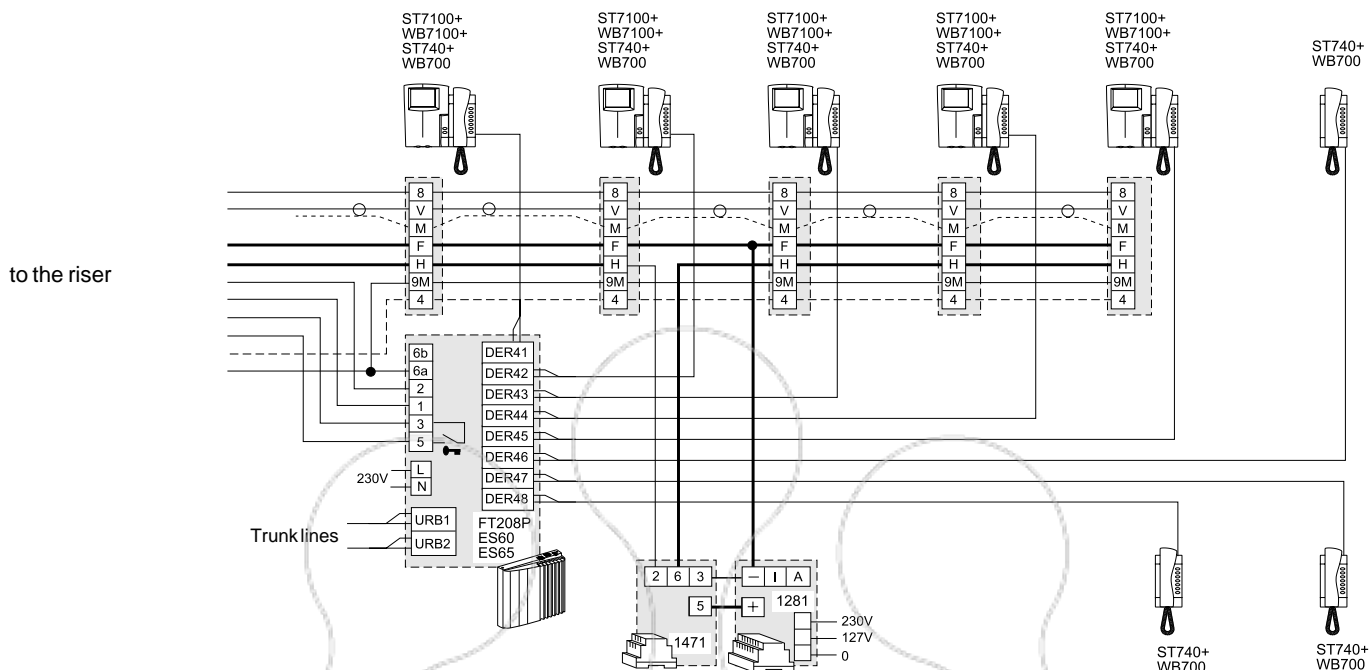
If the video system is realized with coaxial cable connected in serial mode (input and output from the video intercom), you must **cut the 75Ω resistance R8** of the bracket **WB7100** and leave it only on the last video intercom.



coax



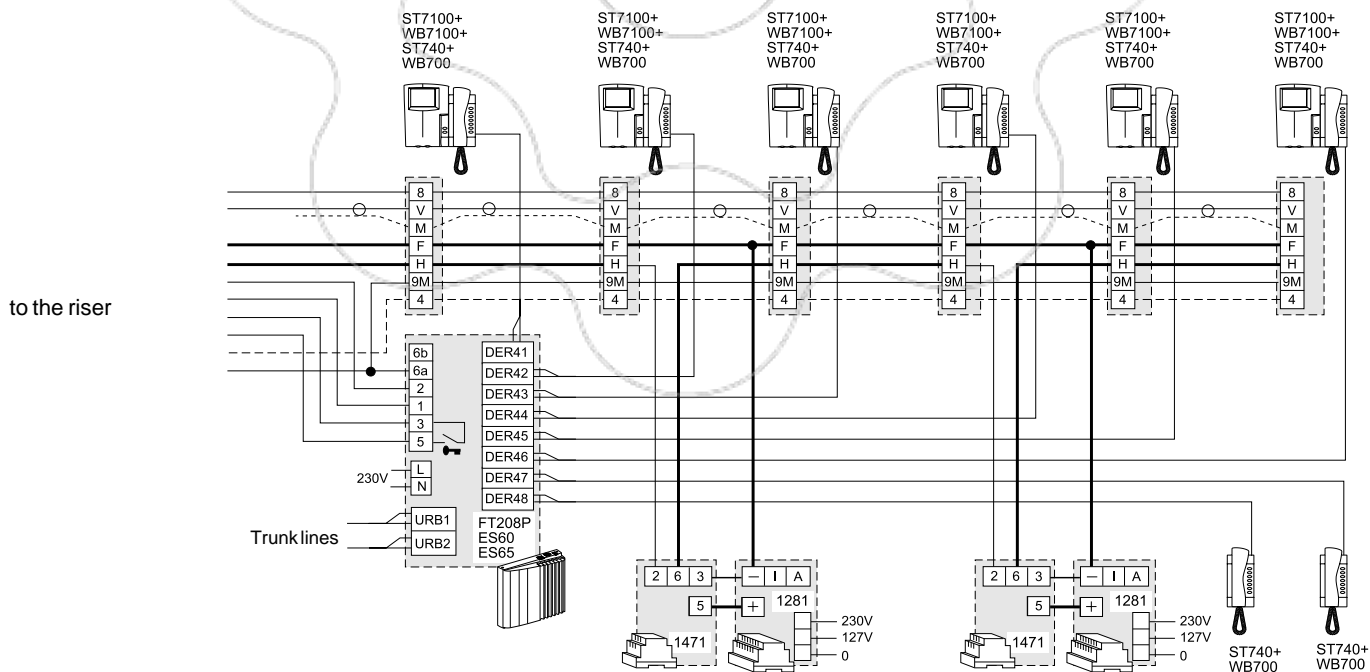
## 1 PABX, 5 VIDEO INTERCOM-TELEPHONE SETS AND 3 INTERCOMMUNICATING TELEPHONES



### Note

If the video system is realized with coaxial cable connected in serial mode (input and output from the video intercom), you must **cut the 75Ω resistance R8** of the bracket **WB7100** and leave it only on the last video intercom.

## 1 PABX, 6 VIDEO INTERCOM-TELEPHONE SETS AND 2 INTERCOMMUNICATING TELEPHONES



### Note

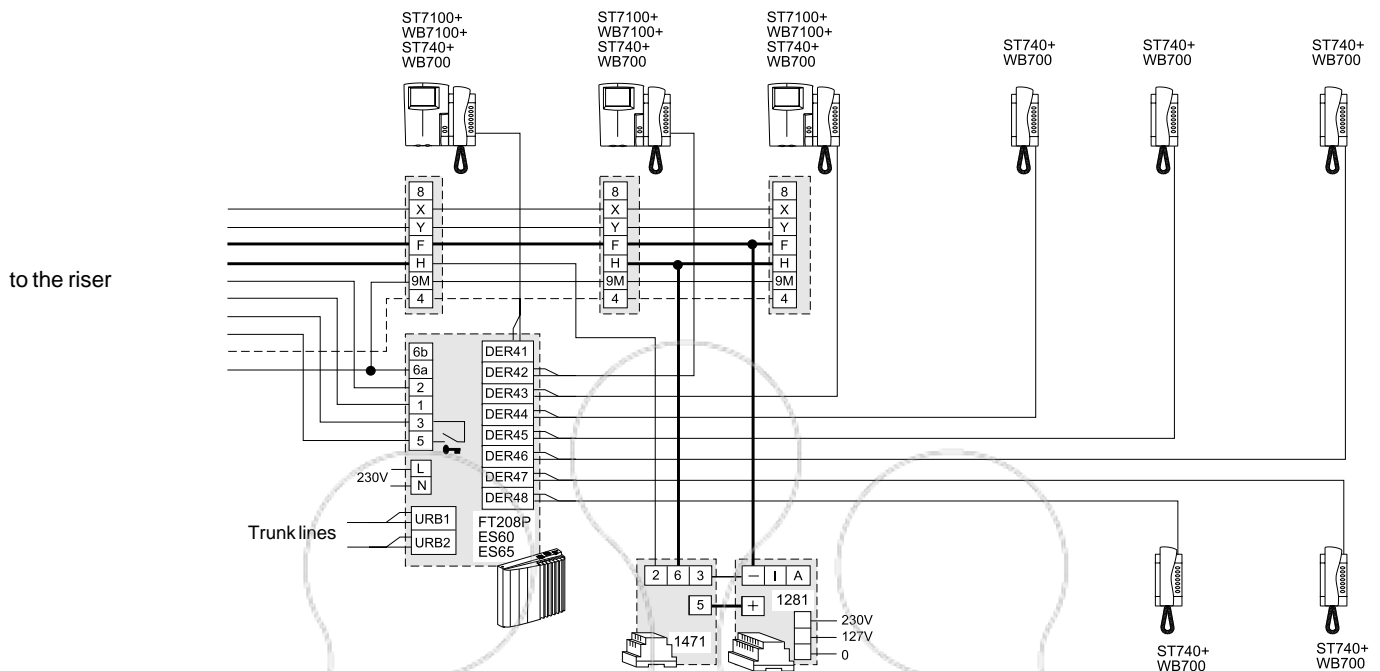
If the video system is realized with coaxial cable connected in serial mode (input and output from the video intercom), you must **cut the 75Ω resistance R8** of the bracket **WB7100** and leave it only on the last video intercom.



## VIDEO INTERCOM-TELEPHONE additional diagrams

**Note:** the extension diagrams of these 2 pages can be only applied to Si311T/4, Si31MT/2 and Si32MT/1 installation diagrams (page 177, 181 and 183, respectively) because of the video connection with **twisted pair**.

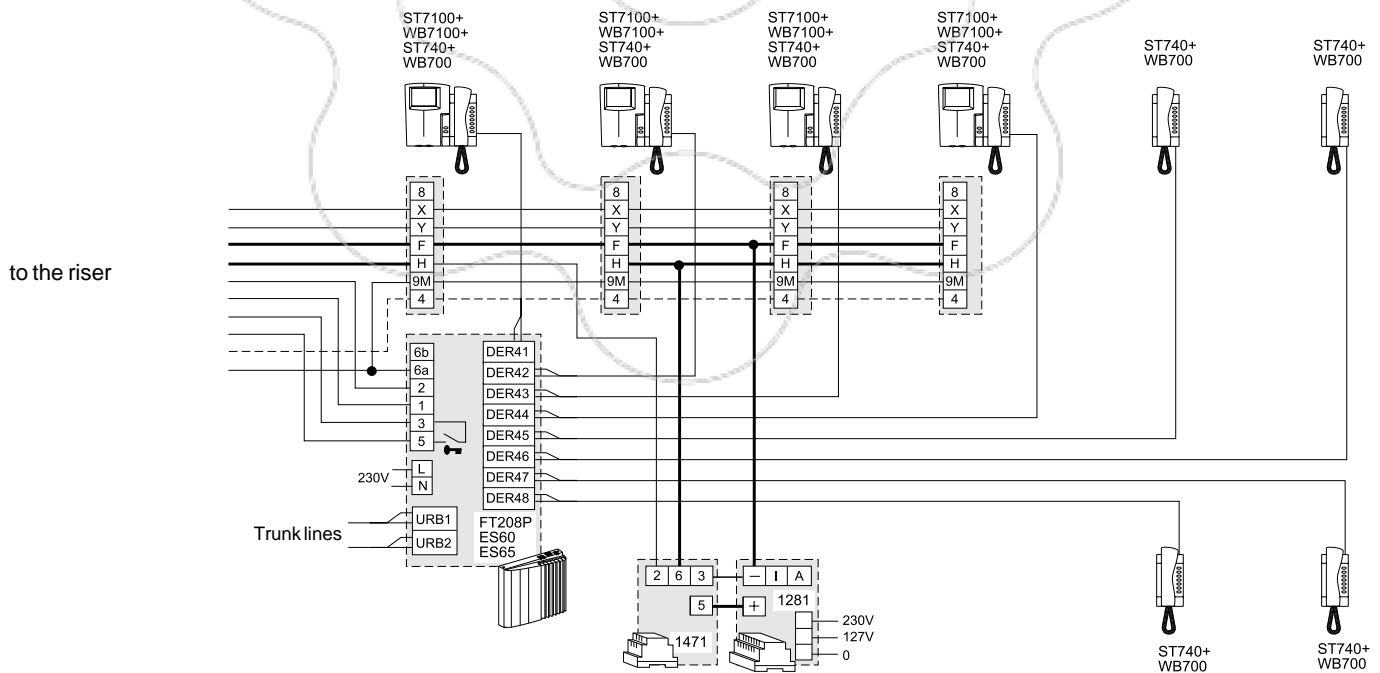
### 1 PABX, 3 VIDEO INTERCOM-TELEPHONE SETS AND 5 INTERCOMMUNICATING TELEPHONES



#### Note

On bracket **WB7100** you must move jumper **J2** from position **1-2** to **2-3**.

### 1 PABX, 4 VIDEO INTERCOM-TELEPHONE SETS AND 4 INTERCOMMUNICATING TELEPHONES



#### Note

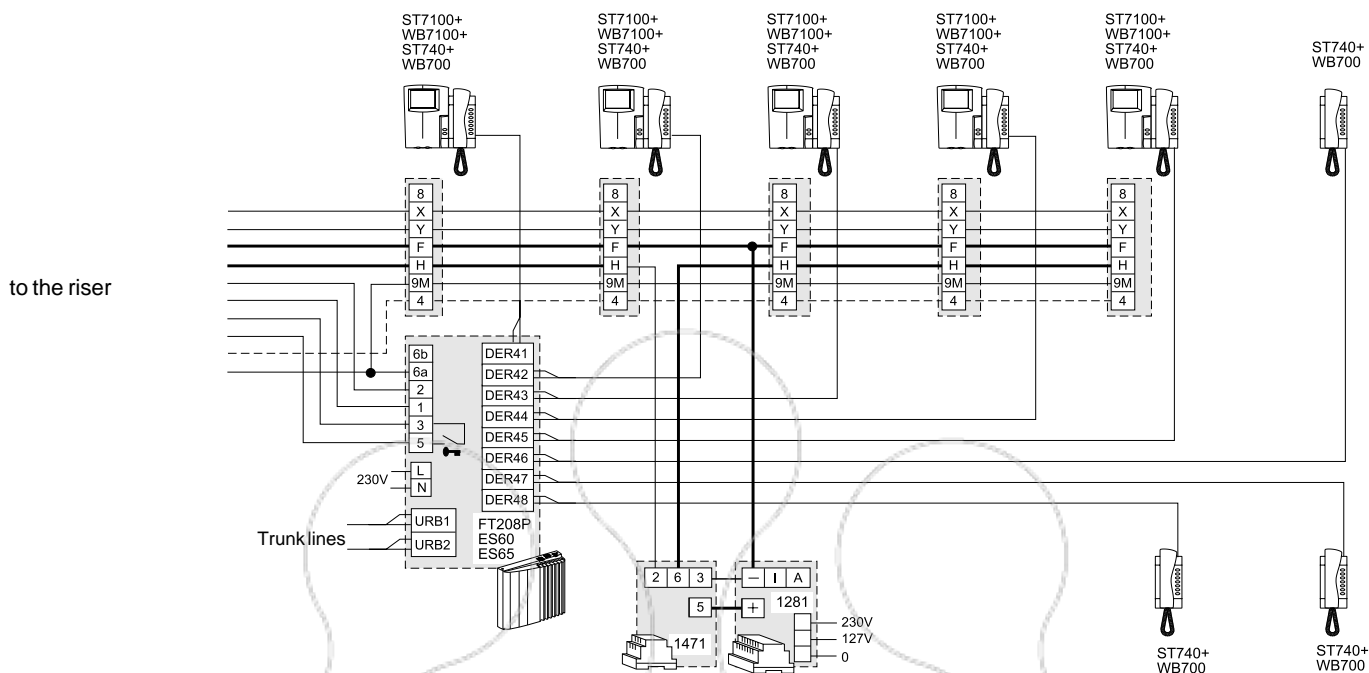
On bracket **WB7100** you must move jumper **J2** from position **1-2** to **2-3**.



twisted pair



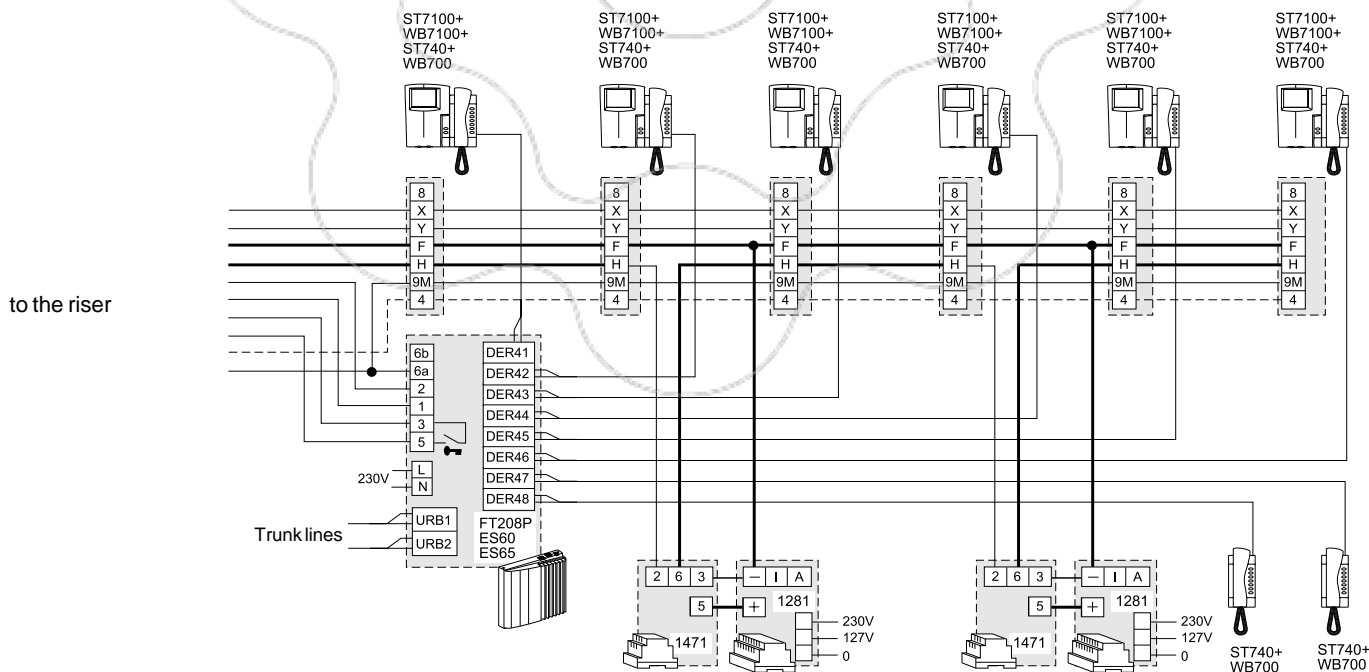
## 1 PABX, 5 VIDEO INTERCOM-TELEPHONE SETS AND 3 INTERCOMMUNICATING TELEPHONES



### Note

On bracket **WB7100** you must move jumper **J2** from position **1-2** to **2-3**.

## 1 PABX, 6 VIDEO INTERCOM-TELEPHONE SETS AND 2 INTERCOMMUNICATING TELEPHONES



### Note

On bracket **WB7100** you must move jumper **J2** from position **1-2** to **2-3**.

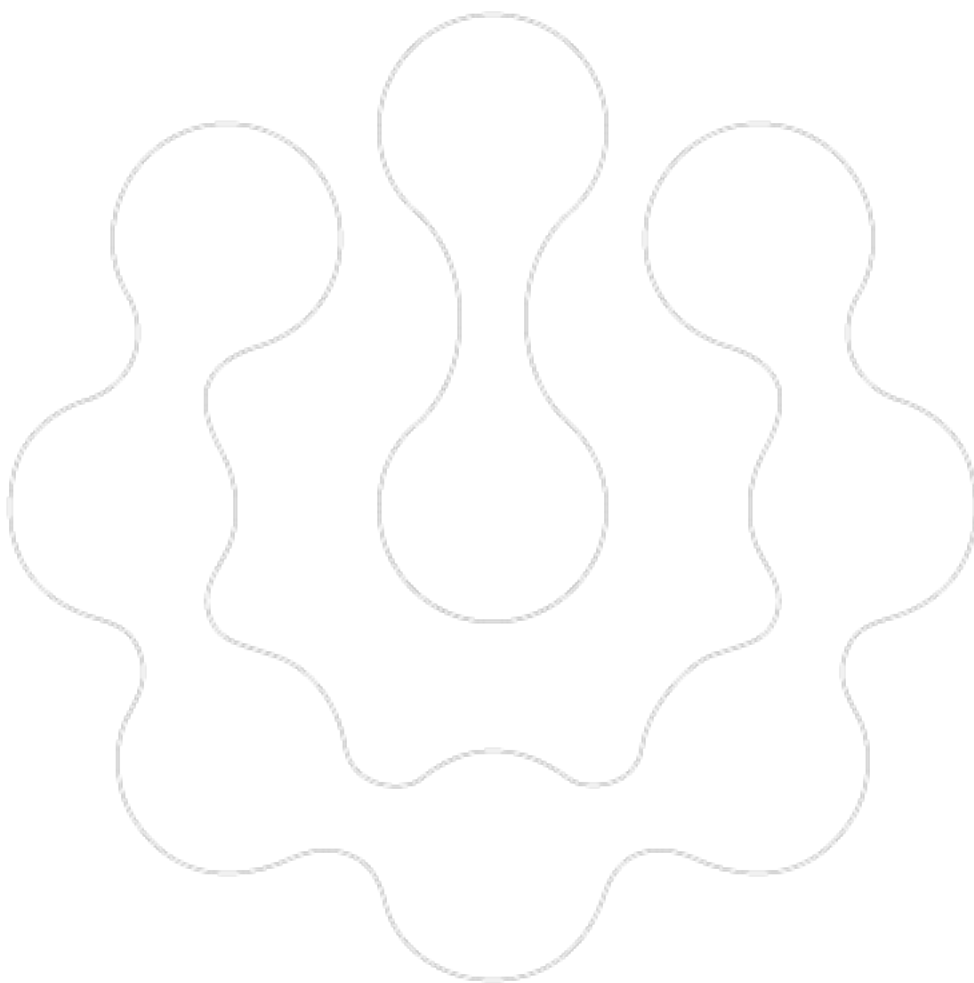


# PRODUCT LIST

List of article that can be used in electronic call systems with page reference.

Article	Description	Page ref.	Article	Description	Page ref.
337C	Electric door-speaker for ErreP/R push-button panel	22	MD912	Rain shelter for 12 modules (3 frames with 4 modules)	7
476	5-output video distributor	93	MD100	Amplified door station with 1 push-button	9
910W	White open-voice intercom Slim series	6	MD122	Module for door speaker with 2 push-buttons, 2 row	8
924W	White intercom Slim series	6	MD124	Module for door speaker with 4 push-buttons, 2 row	8
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