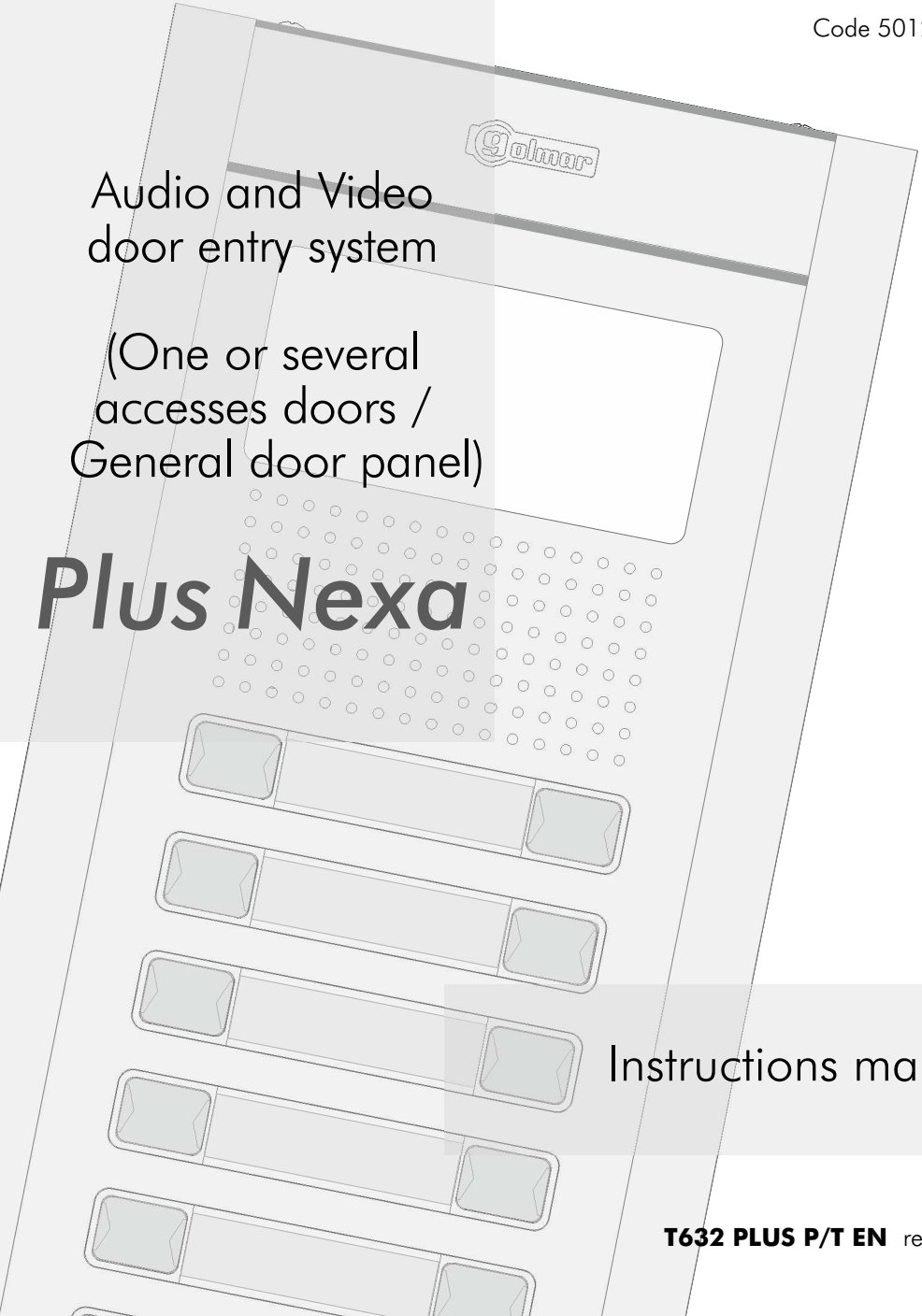
Code 50122328



Audio and Video
door entry system

(One or several
accesses doors /
General door panel)

Plus Nexa

Instructions manual

T632 PLUS P/T EN rev.0118

INTRODUCTION

First of all we would like to thank and congratulate you for the purchase of this product manufactured by Golmar.

The commitment to reach the satisfaction of our customers is stated through the ISO-9001 certification and for the manufacturing of products like this one.

Its advanced technology and exacting quality control will do that customers and users enjoy with the legion of features this system offers. To obtain the maximum profit of these features and a properly wired installation, we kindly recommend you to expend a few minutes of your time to read this manual.

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STARTING RECOMMENDATIONS

- Do not use excessive force when tightening the power supply connector screws.
- The entire installation must be at least **40cm**. away from any **other installation**.
- Before to connect the system, check the connections between door panel, monitors, telephones, and the transformer connection. Do always follow the enclosed information.
- Each time the power supply is restarted, or after a modification, the system will remain blocked during 30 seconds.
- Always use RG-59 B/U MIL C-17 or RG-11 coaxial cables, (see page 94). **Never use coaxial antenna cable.** In installations no longers than 100m., **Golmar RAP-5130** cable can be used.

SAFETY PRECAUTIONS

- Install or modify the equipment **without the power connected**.
- The installation and handling of these equipments must be performed by **authorised personnel**.
- The entire installation must be at least **40 cm**. away from any **other installation**.
- With power supply:
  - Do not use excessive force when tightening the connector screws.
  - Install the power supply in a dry and protected place without risk of drip or water projections.
  - Avoid to place it near to heating sources, in dusty locations or smoky enviroments.
  - Do not block ventilation holes of the unit so that air can circulate freely.
  - To avoid damage, the power supply has to be firmly fixed.
  - To avoid an electrical shock, neither remove the protection cover nor handle the connected wire in the terminals.
- With monitor, telephones and distributor:
  - Do not use excessive force when tightening the connector screws.
  - Install the equipments in a dry and protected place without risk of drip or water projections.
  - Avoid to place it near to heating sources, in dusty locations or smoky enviroments.
  - Do not block ventilation holes of the equipments so that air can circulate freely.
- Remember, the installation and handling of these equipments must be performed by authorized personnel and in the absence of electrical current.
- Do always follow the enclosed information.

SYSTEM CHARACTERISTICS

- Audio and video door entry system with simplified installation:
  - Audio door entry system with 4 common wires installation.
  - Video door entry system with 3 common wires plus coaxial cable installation.
  - Video door entry system with 4 common wires plus twisted pair installation.
- Sound module with two operating modes(EL500 or EL501).
- Sound module EL632 Plus P/T with pan and tilt mechanism to adjust the telecamera position.
- Bus Nexa: It allows the connection of illumination module (coded panel, see manual **TCode/CA Nexa**) (NFC module, see manual **TCode/CA NFC Nexa**).
- Unlimited number of door panels (access) being not necessary the use of switching units.
- Up to 120 monitors/telephones per installation or backbone.
- General door panel (EL501 mode): Up to 120 monitors/telephones, distributed in max. 120 buildings.
- EL560 module for video installations with twisted pair cable, integrated in sound module.
- Communications resistor for the system UNO or PLUS, integrated in sound module.
- Acoustic busy channel and call acknowledgement signals.
- Door opening timed at 3 seconds.
- Input for external door release push button (timed at 3 or 15 seconds).
- a.c or d.c lock release operated by relay.
- Up to three monitors or telephones in the same apartment without additional power supplies.
- Monitor Tekna Plus SE:
  Description, installation, configuration and programming of the monitor (see manual TTEKNA PLUS SE "Code 50123594") available in: https://doc.golmar.es/search/manual/50123594.
- Telephone T540 Plus SE:
  Description, installation, configuration and programming of the telephone (see manual T540 PLUS SE "Cód. 50122199") disponible en: https://doc.golmar.es/search/manual/50122199.
- Telephone T540 Uno SE:
  Description, installation, configuration and programming of the telephone (see manual T540 UNO SE "Cód.50122257") disponible en: https://doc.golmar.es/search/manual/50122257

IMPORTANT NOTICE

Uno system:

- Tekna Uno monitor and T-540 Uno telephone are fully compatible with Tekna Plus monitor and T-540 Plus telephone. However, **a Uno communications resistor must be setting with the SW1 configuration dip switch of the door panel,** (see page 85).
- If the distance from the door panel to the farest monitor or telephone is longer than 200 meters, or the building has more than 200 apartment units, a **RDPlus/Uno SE** repeater must be installed.

SYSTEM OPERATION

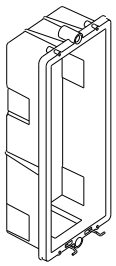
- To make a call the visitor should press the push button corresponding to the apartment he wishes to contact. An acoustic tone will be heard confirming the call is in progress once the push button has been pressed and the door panel led will turn on. At this moment the call will be received at the monitor (telephone) in the dwelling. During the call the visitor can correct his call by pressing a push button corresponding to a different apartment, in which case the original call is cancelled.
- In systems with several accesses doors, the other(s) door panel(s) will be automatically disconnected: If a visitor tries to call from other door panel an acoustic tone will be heard and the door panel led will be on confirming the system is busy.
- General door panel (EL501 mode): If the call is made from the general door panel, the inner door panel of the building called and other possible general door panel will remain automatically disconnected, if another visitor tries to call from an inner busy door panel an acoustic tone will be heard and the door panel led will be on confirming the system is busy or from another general door panel, an acoustic tone will be heard confirming the system is busy and the general door panel led will blink for 3 seconds. The door panels of the others inner buildings will remain free to be used.
- General door panel (EL501 mode): In the case that the call is made from an inner door panel, the rest of inner door panels will remain free to be used. From general door panels only will be able to make calls to the inner buildings whose door panels are not in use, if the visitor tries to make a call to a busy inner door panel, an acoustic tone will be heard confirming the system is busy and the general door panel led will blink for 3 seconds.
- The call lasts for 45 seconds, during which time an image appears on the apartment's monitors for 2 seconds after the call is received without the visitor knowing, and the status LED on the master monitor will illuminate (green). If the call is not answered within 45 seconds, the master monitor's status LED will illuminate (red), LED on the door panel will turn off and the channel will be free.
- To establish communication, lift the handset of the monitor (telephone), and the monitor's status LED (green) and the door panel's LED will illuminate.
- The communication will last for one and a half minutes or until the handset is replaced. After the communication, the monitor's status LED will illuminate (red), the door panel's LED will turn off and the channel will be free.
- To open the door, press the door release push button during call or communication progresses: with one press, the door release operates during 3 seconds. During the lock release activation an acoustic tone will be heard on the door panel confirming the lock release is activated and the led will also turn on for 3 seconds.

DOOR PANEL DESCRIPTION

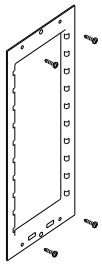
Door panel description.

General detail of parts, for assembly the door panel.

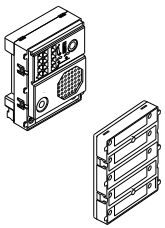
Embedding boxes



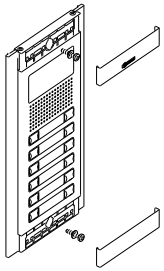
Frame modules



Electronic modules

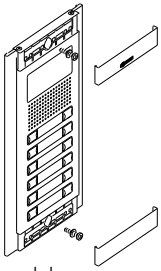


Aluminium modules

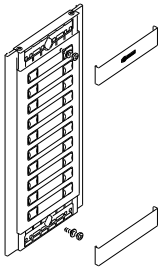


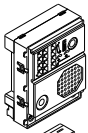
Door panel description.

Main module



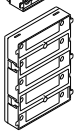
Push buttons module





Sound module

EL632 Plus P/T, on video systems with color camera.
EL642 Plus , on audio systems.



Push buttons electronic module

EL610D, for 5 single push-buttons or 10 double push buttons.



Bus Nexa connection cable (length 50 cm).

For the connection of the EL632 Plus P/T or EL642 Plus modules with others Bus Nexa modules (see page 83).



Short connection cable, It is supplied with EL610D module (16 cm length).

For the connection of the push-buttons between the sound module and the push buttons module EL610D and between push-buttons modules EL610D.

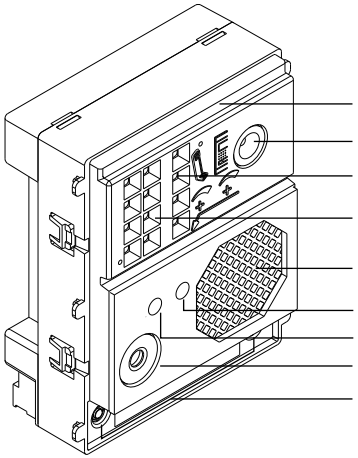


Connection cable RAP-610D (27 cm length).

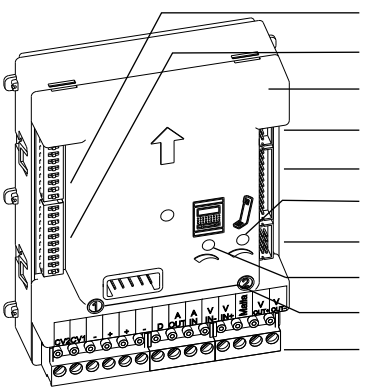
For the connection of the push-buttons between the sound module and the push buttons module EL610D and between push-buttons modules EL610D.

This cable is necessary when the distance between modules to connecting is greater due to the distribution of these modules in the door panel/s.

Sound module description (EL632 Plus P/T and EL642 Plus).



Front side.
Color camera **(only EL632 PLUS P/T module)**.
Leds (visual indications for people with impaired hearing).
Leds illumination **(only function with EL632 PLUS P/T module)**.
Speaker.
Door panel audio adjustment.
Monitor audio adjustment.
Microphone.
Sound module push buttons (x2).

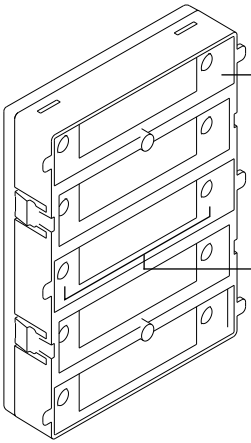


Configuration dip switch SW2.
Configuration dip switch SW1.
Back side.
Bus Nexa connector CN8.
Push buttons connector CN6.
Monitor audio adjustment.
Function connecto CN3.
Door panel audio adjustment.
Push button number.
Installation terminals CN1.

CV1	: "C" contact free for lock release. Relay 3.
CV2	: "N.O" contact free for lock release. Relay 3.
+, $\bar{}$	: Positive, ground.
D	: Digital communication.
Aout	: Audio output communication.
Ain	: Audio input communication.
Vi+,Vi-	: Twisted pair video signal input.
Vo+,Vo-	: Twisted pair video signal output.
Malla	: Coaxial shield.
Vi+	: Video signal coaxial input.
Vo+	: Video signal coaxial output.

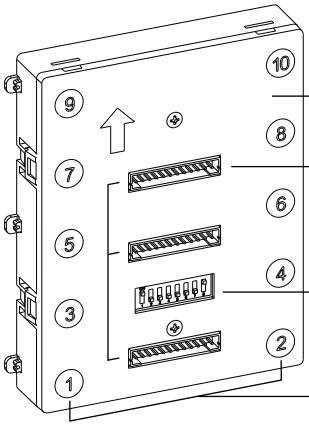
Note: See installation diagrams for wiring.

Push buttons electronic module EL610D description.



Front side.

Push buttons module (x10).



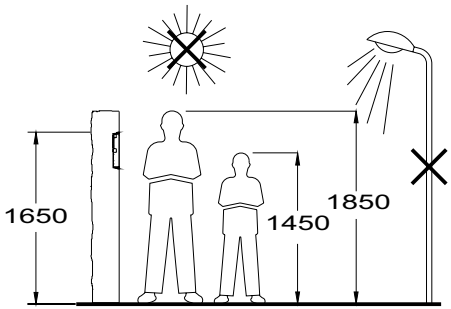
Back side.

Input/Output push buttons connector (x3).

Configuration dip switch
(Push buttons call code).

Push button number.

Embedding box positioning.

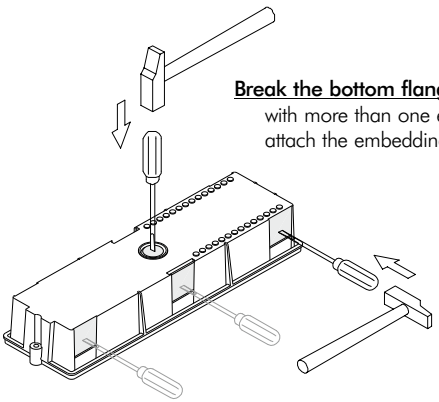


The upper part of the door panel should be placed at 1,65m. height roughly. The hole dimensions will depend on the type of door panel.

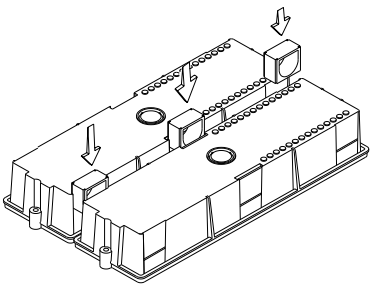
Door panel Model	90CS CEA90C	90C CEV90C	90 CEV90
An	99	99	99 mm.
Al	143	250	328 mm.
P	40	56	56 mm.

The door panel has been designed to be placed under most of the environmental conditions. However it's recommended to take additional cautions like rainproof covers. To obtain a good quality picture on video door entry systems, avoid direct incidence from light sources.

Preparing the cables entry.

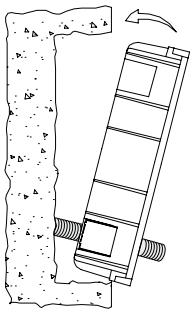


Break the bottom flange to pass the cables through. In case of door panels with more than one embedding box, break the side flanges and attach the embedding boxes using UC junctions.



DOOR PANEL INSTALLATION

Place the embedding box.

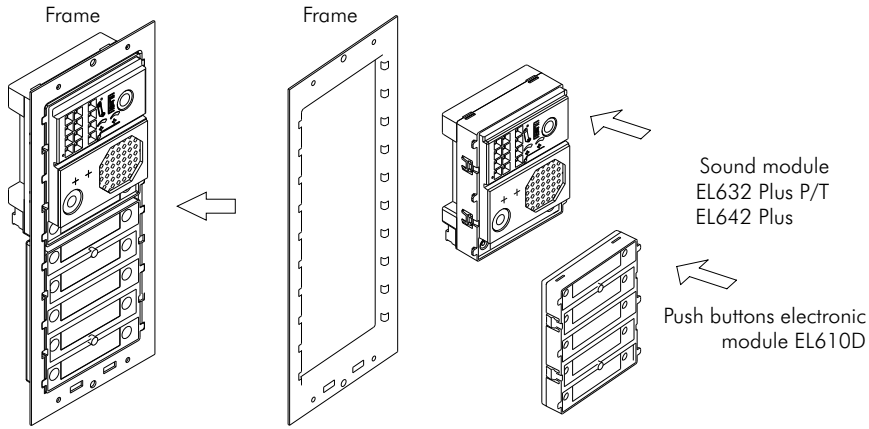


Pass the wiring through the hole made in the bottom part of the embedding box. Level and flush the embedding box. Once the embedding box is placed, remove the protective labels from the attaching door panel holes.

Assembly the electronic modules.

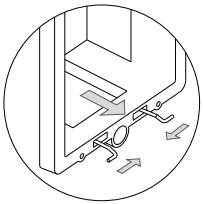
Insert the sound module in the top part of the module frame.
Align the tabs on the sound module in their respective housings of the module frame and later exercise a light pressure until correct placement.

If there is push buttons module repeat the above process, locating under the sound module, as shown in the drawing.

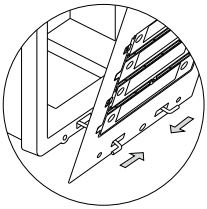


DOOR PANEL INSTALLATION

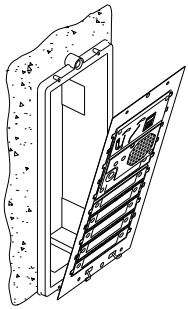
Hold the frame on the embedding box.



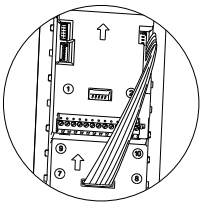
Insert the hinge that it is supplied with the product in the embedding box, as shown in the drawing.



To hold the frame on the embedding box, insert the hinge in the housings arranged for this purpose in the frame, as shown in the drawing.

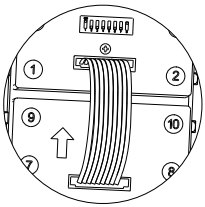


The frame can now be folded horizontally facilitating the connection and adjustments in the sound module and push buttons electronic module.

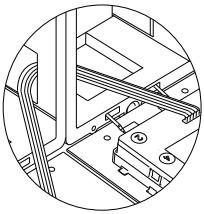


Plug the push buttons with the short connection cable.

Insert the short connection cable that it is supplied with the product EL610D, in the push buttons connector of the sound module and the other end of the connection cable in the connector placed in the top part of the push buttons EL610D module, as shown in the drawing.



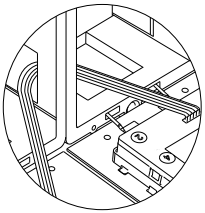
Between push buttons modules EL610D of the same embedding box, insert the short connection cable of the low connector of the first push buttons module to the top connector of the second push buttons module, as shown in the drawing.



Between push buttons modules EL610D of different embeddingt boxes, insert the short connection cable in the low connector of the last module EL610D of the first embedding box and the other end of the connection cable in the middle connector of the last push buttons module EL610D placed in the low part of the second embedding box, as shown in the drawing.

Plug the push buttons with the connection cable RAP-610D.

Use the connection cable RAP-610D, for the connection of the push buttons between the sound module and the push buttons module EL610D and between push buttons modules EL610D, when the distance between modules to connecting is greater due to the composition of the door panels.



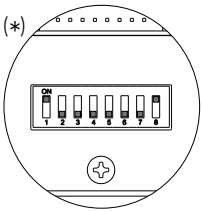
Configuration of the push-buttons code.

The push buttons module EL610D must be configured, to assign a call code to the push buttons. Make this configuration with the dip switch placed in the back side of the module.

Depending on the setting selected, the push buttons are assigned to a specific call code.

In case to combine these door panels with coded door panels or porter's exchange, it will be necessary to known the call code of each push button, as shown in the table below.

(*)



Push buttons module EL-610D

		Dip switch								Push buttons code										
		Dip1	Dip2	Dip3	Dip4	Dip5	Dip6	Dip7	Dip8	P1	P2	P3	P4	P5	P6	P7	P8	P9	P10	(1)
Module configuration option	1	**On**	Off	Off	Off	Off	Off	Off	**On**	1	2	3	4	5	6	7	8	9	10	(*)
	2	Off	**On**	Off	Off	Off	Off	Off	**On**	11	12	13	14	15	16	17	18	19	20	
	3	Off	Off	**On**	Off	Off	Off	Off	**On**	21	22	23	24	25	26	27	28	29	30	
	4	Off	Off	Off	**On**	Off	Off	Off	**On**	31	32	33	34	35	36	37	38	39	40	
	5	Off	Off	Off	Off	**On**	Off	Off	**On**	41	42	43	44	45	46	47	48	49	50	
	6	Off	Off	Off	Off	Off	**On**	Off	**On**	51	52	53	54	55	56	57	58	59	60	
	7	Off	Off	Off	Off	Off	Off	**On**	**On**	61	62	63	64	65	66	67	68	69	70	
	8	**On**	Off	Off	Off	Off	Off	Off	Off	71	72	73	74	75	76	77	78	79	80	
	9	Off	**On**	Off	Off	Off	Off	Off	Off	81	82	83	84	85	86	87	88	89	90	
	10	Off	Off	**On**	Off	Off	Off	Off	Off	91	92	93	94	95	96	97	98	99	100	
	11	Off	Off	Off	**On**	Off	Off	Off	Off	101	102	103	104	105	107	108	109	110	111	
	12	Off	Off	Off	Off	**On**	Off	Off	Off	112	113	114	115	116	117	118	119	120	121	
	13	Off	Off	Off	Off	Off	**On**	Off	Off	122	123	124	125	126	127	128	129	130	131	

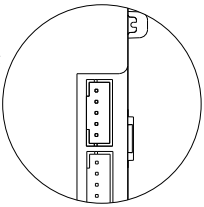
(1)P1- P10: Push button 1 to push button 10.

Note: Sound module, factory set the code "*106*" in P1 and "*132*" in P2.

Important: Select a different configuration option for each module EL610D.

(*) Factory default.

Description CN8 Bus Nexa connector.



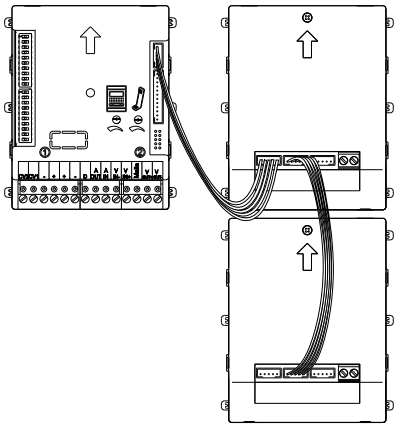
The connector CN8 Bus Nexa is located at the upper left side of the back of the sound module.

Insert the connection cable that it is supplied with the module in the CN8 connector of the sound module and the other end of the connection cable in the module with connector Bus Nexa.

The modules to connect with connector Bus Nexa are the next :

- ⇨N3403/AL: Connect to the module to add to the system with a graphic display module (coded panel, see **TCode/CD Nexa** manual).
- ⇨N3301/AL: Connect to the module to add to the system with an access control module and coded panel, (see **TCode/CD Nexa** manual).
- ⇨N3301A/AL: Connect to the module to add to the system with an alphabetic module, (see **TCode/CD Nexa** manual).
- ⇨EL4502/NFC: Connect to the module to add to the system with an NFC access control (see manual **TCode/CA NFC Nexa**).
- ⇨EL3002: Connect to power the illumination module (Maximum 2 EL3002 modules).
- ⇨CD-NEXA/BT: Connect to the module to add to the system with a configuration RFC interface (wireless device of 2,4 Ghz). Only for N3301 and N3403 modules.

Connection with EL3002 illumination modules.

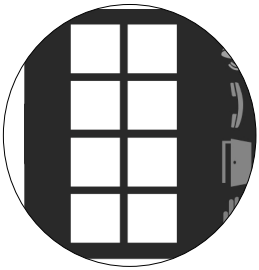


Insert the Bus Nexa connection cable that it is supplied with the product, in the CN8 connector of the sound module and the other end of the connection cable in any of the three connectors placed at the bottom of the EL3002 illumination module.

To connect to other illumination modules use any of the two free connectors.

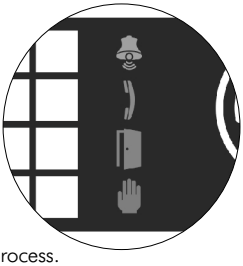
NOTE: Only the EL632 Plus P/T or EL642 Plus sound module must be connected to power supply. The EL3002 illumination module take the power through Bus Nexa connection cable (once the Bus Nexa connection cable has been connected in the sound module).

Description illumination leds.



The door panel illumination leds, will turn on during call and communication progresses. Allowing us to see from apartment´s monitor the person who has called. (Only EL632 Plus P/T sound module).

Description visual indications leds.



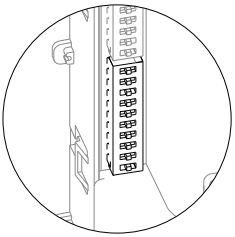
Visual indications on the door panel for people with impaired hearing:

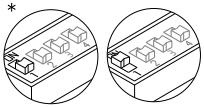
- While calling: The led will turn on during the call time process.
- During communication: The led will turn on during communication process.
- During door release: The led will turn on during door release.
- End of communication: The led will turn off.
- In systems with several accesses doors in the building and one access door panel is in comunication: The other accesses doors panels would have the led of busy system turn on until end communication.
- While calling and the monitor is switch off: The led will blink during 3 seconds.

Description of the SW1 configuration dip-switch of the sound module.

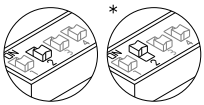
The SW1 configuration dip-switch is located at the upper right side of the back of the module.

Note: The dip-switches 9 and 10 without function.

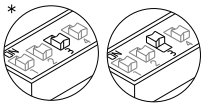




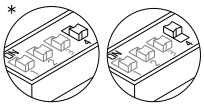
* Placed to OFF if the sound module is configured as EL500 operating mode.
Set to ON if the sound module is configured as EL501 operating mode (general door panel).



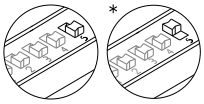
Selects the door opening time, done from the external push button ('AP' terminal), see page 106.
Placed to ON: door opening timed at 3 seconds.
* Set to OFF: door opening timed at 15 seconds.



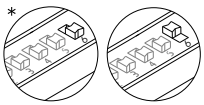
* Selects the type of cable to be used for the video signal.
Placed to OFF: coaxial cable RG-59 o RG-11.
Set to ON: twisted pair.



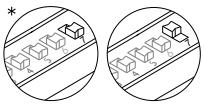
* Placed to OFF if the door panel has telecamera. In case of door panels without telecamera (EL642 Plus sound module) set to ON.



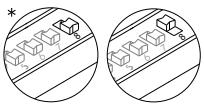
Plus system, loads the installation with a communications resistor **Plus**. For a proper system operation, placed to ON only in the closest door panel to the backbone installation or in the general door panel (if exists), set the rest to * OFF.



Uno System, loads the installation with a communications resistor **Uno**. For a proper system operation, set to ON only in the closest door panel to the backbone installation, placed the rest to * OFF.
With digital repeater RD Plus/Uno:
In the backbone installation or after the inner door panel in systems with general door panels, placed the door panel/s to OFF.



* Set to ON so that the volume tone emitted by the door panel:
(call reception, busy system and lock release) are *HIGH,* or placed to OFF if a *LOW* volume tone is desired.

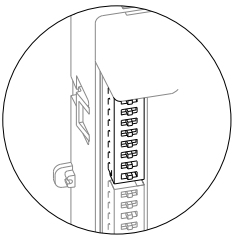


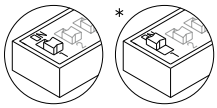
* Placed to ON, the calls made on the door panel will be transferred to the porter's exchange (if exists). Set to OFF, the call is received in the apartment.
In general door panels systems with porter's exchange, this function is only applicable to the general door panels not to the inner door panel/s.

* **Factory default**

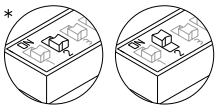
Description of the SW2 configuration dip-switch of the sound module.

The SW2 configuration dip-switch is located at the upper left side of the back of the module.



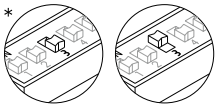


Allows to activate the autoswitch-on function (audio-video communication without previous call) at the door panel that has this switch to ON position. In systems with several door panels activate this function only in one of them; in systems with general door panel this function can be activated in one door panel of each inner backbone (building).



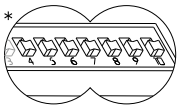
Set to ON for monitor or telephones programming. Once the programming progress is finished return the switch to OFF position. The programming process is described on corresponding monitor / telephone manual, (see page 74 for manual web link).

In general door panel (EL501 mode), set to ON for general door panel push buttons programming or backbone (building) monitor/telephones. The programming process is described on pages 87 to 89. Once the programming progress is finished return the switch to OFF position.



Set to OFF in case of a master door panel. Each system must have only one master door panel; the rest must be slaves (ON).

In systems with general door panel, set as master one door panel of each inner backbone (building) and the general door panel as slave. Of this way, the user will be able to distinguish since door panel are calling him.

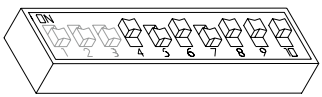


Switches number 4 to 10 set the building code. In backbones with several door panels, set the same code in all the panels; in systems with general door panel, set different codes for each inner backbone (building). Set a code between 1 and 120 for inner backbones (up to 127 with coded panel) and a code 0 (Factory default) for general door panel/s. To set the code use binary coding as shown on the next paragraph.

* **Factory default**

Binary coding of the SW2 configuration dip switch of the sound module.

The switches set to OFF have null value. The values of the switches set to ON are shown in the enclosed chart.
The backbone code will be calculated as the sum result of the switches values set to ON.



Switch number:	4	5	6	7	8	9	10
ON value:	64	32	16	8	4	2	1

Example: 64+0+16+0+4+2+1=87

GENERAL DOOR PANEL INSTALLATION

General door panel (programming modes).

Configure the sound module of the general door panel in EL501 mode, (see page 85).

The general door panel permits the following programming modes:

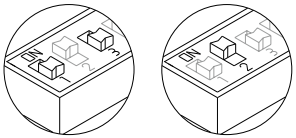
- Programming the push button (by call of monitor).
- Programming the push button (with a backbone code).
- Programming the push button (with a monitor/telephone code).
- Programming the monitor/telephone.

Programming the push buttons of the general door panel.

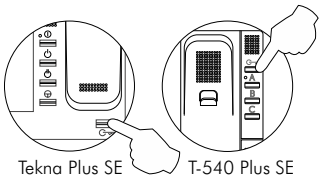
Programming the push button (by call of monitor/telephone):

This programming mode allows to assign a monitor / telephone (programmed) to the push button of the general door panel that it wishes to call.

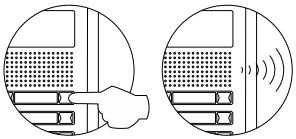
Before the monitors/telephones of the inner door panel/s must be programmed, see the corresponding monitor / telephone manual, (see page 74 for manual web link).



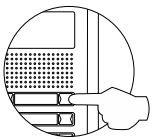
Locate the SW2 configuration dip switch of the general door panel to program, placed at the upper left side (back) of the sound module. With the switches 1 and 3 to OFF, set the switch 2 to ON: to show that the system is ready for programming, the general door panel will reproduce a tone.



Pick up the monitor/telephone handset of the apartment to program and press the door release push button until to establish communication of audio with the general door panel.



Press the general door panel push button that will call to this monitor or telephone. At this moment the general door panel will reproduce a tone. To finish the push button programmation, replace the monitor/telephone handset; to show that the push button has been succesfully programmed, the general door panel will reproduce a tone.



Make a call to check that the push button has been succesfully programmed. Repeat these steps to program the rest of push buttons.

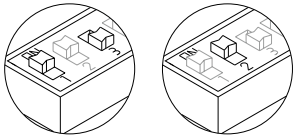
Once the programming has been finished, set to OFF the programming switch. If you don't, the general door panel will reproduce a tone to advise that the system is still into programming mode.

IMPORTANT: Before programming the general door panel push buttons, switch off the porter's exchange (if exists).

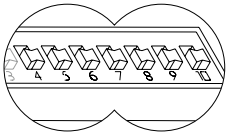
GENERAL DOOR PANEL INSTALLATION

Programming the push button (with a backbone code):

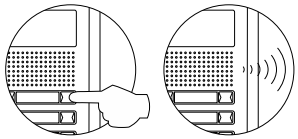
This programming mode allows to assign a backbone code to push button of the general door panel.



Locate the SW2 configuration dip switch of the general door panel to program, placed at the upper left side (back) of the sound module. With the switch 1 to ON and 3 to OFF, set the switch 2 to ON: to show that the system is ready for programming, the general door panel will reproduce a tone.



Define a backbone code to program with dip switches Sw2-4 to Sw2-10. Set a code between 1 and 120. To set the code use binary coding, (see page 86).

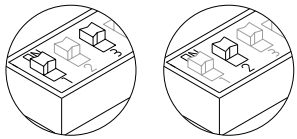


Press the general door panel push button that is wished has this backbone code. At this moment the general door panel will reproduce a tone, confirming that the push button has been succesfully programmed.

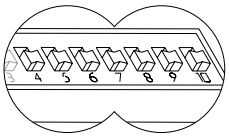
Repeat these steps to program the rest of push buttons. Once the programming has been finished, set to OFF the programming switch. If you don't, the general door panel will reproduce a tone to advise that the system is still into programming mode.

Programming the push button (with a monitor/telephone code):

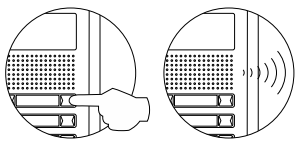
This programming mode allows to assign a monitor/telephone code to push button of the general door panel.



Locate the SW2 configuration dip switch of the general door panel to program, placed at the upper left side (back) of the sound module. With the switches 1 and 3 to ON, set the switch 2 to ON: to show that the system is ready for programming, the general door panel will reproduce a tone.



Define a monitor/telephone code to program with dip switches Sw2-4 to Sw2-10. Set a code between 1 and 120. To set the code use binary coding, (see page 86).



Press the general door panel push button that is wished has this monitor/telephone code. At this moment the general door panel will reproduce a tone, confirming that the push button has been succesfully programmed.

Repeat these steps to program the rest of push buttons. Once the programming has been finished, set to OFF the programming switch. If you don't, the general door panel will reproduce a tone to advise that the system is still into programming mode.

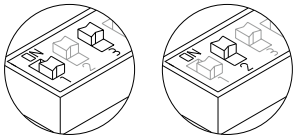
GENERAL DOOR PANEL INSTALLATION

Programming the monitors and telephones from a general door panel.

Programming the monitor/telephone:

This programming mode allows to assign to a monitor / telephone a push button of the general door panel that it wishes to call.

Before the push button of the general door panel must be programmed with backbone and monitor/telephone code, (see page 88).



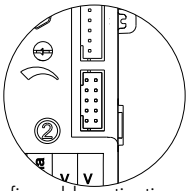
Locate the SW2 configuration dip switch of the general door panel to program, placed at the upper left side (back) of the sound module. With the switch 1 to OFF and 3 to ON, set the switch 2 to ON: to show that the system is ready for programming, the general door panel will reproduce a tone.

Then program the monitor/telephone, as it is described on corresponding monitor / telephone manual, (see page 74 for manual web link).

Bear in mind the configuration dip switch (as it is described in the previous step).

DOOR PANEL INSTALLATION

Description of the function connector CN3.



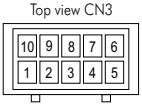
The function connector Cn3 is located at the upper left side of the back of the sound module.

Plug the cable that is supplied with the module, to realize the following functions:

- ⇨"AP" function: It activates the relay of the lock release "CV1" and "Cv2", configurable activation time of 3 or 15 seconds via dip switch SW1-2 (page 85), see connections (page 106).
- ⇨"ICO" function: For the busy channel indication, it will be realized with terminals "ICO" and "+12".
- ⇨"Handicap" function: Synthese vocale from FDI (France). The connector includes all wires for connection (see page 106).

Description connector CN3

Top view CN3

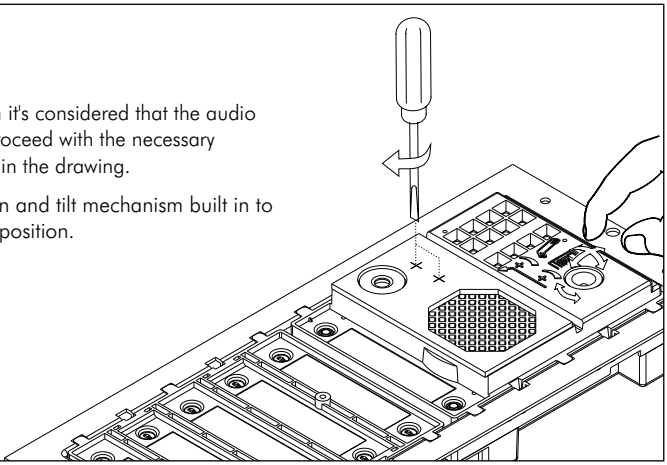


1	Grey	(-)	Ground.
2	Brown	(+12)	12Vdc for activation the lock release.
3	White	(ICO)	Busy channel indicator.
4	Yellow	(AP)	External push button to activate the lock release.
5	Violet	(+H)	For activation of an external illumination.
6	Blue	(OP)	Handicap.
7	Orange	(SC)	Handicap.
8	Green	(ALM)	Handicap.
9	Red	(PDB)	Handicap.
10	Black	(-)	Ground.

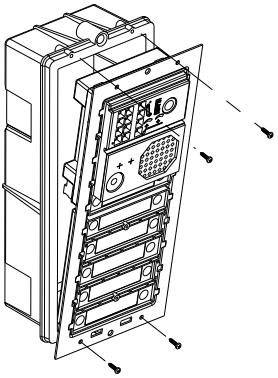
Final adjustments.

If after starting the system it's considered that the audio volume isn't correct, proceed with the necessary adjustments as shown in the drawing.

The telecamera has a pan and tilt mechanism built in to adjust the telecamera position.

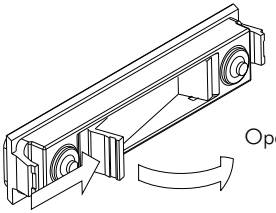


Close the frame.

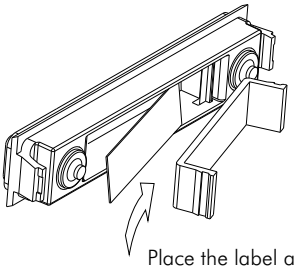


Once finished the works of wiring, configuration and final adjustments, fix the frame in the embedding box with the supplied screws.

Place the nameplate labels.



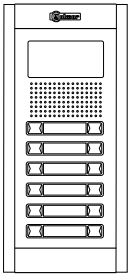
Open the label holder.



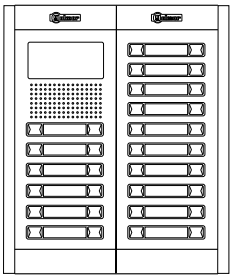
Place the label and close.

DOOR PANEL INSTALLATION

Door panel assembly.



In assemblies of a single door panel, it is ready from factory to be mounted.

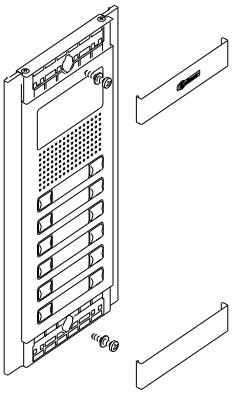


If the door panel to installing is of more than one module it will be necessary make some adjustments to join a door panel with other one.

IMPORTANT:

To make these adjustments of joining several door panels, see the document that is supplied with the door panel and follow the steps that are described in the section" Mechanical assembly for double door panel" and once finished the adjustments stick the adhesive gasket (that is supplied with the push buttons module) in the rod of joining modules.

Close the door panel.



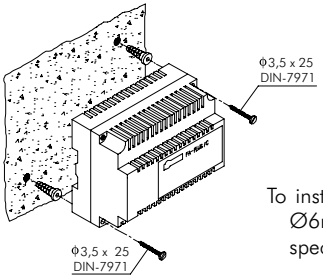
Fix the door panel by using the supplied screws.

Finish the door panel assembly by placing the closing heads, put the head on one side and then make a slight pressure on the other end, to its correct placement.

POWER SUPPLY INSTALLATION

Installing the FA-PLUS and FA-PLUS/C power supplies.

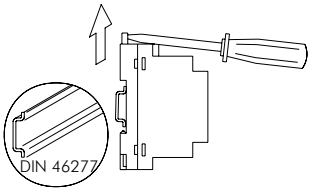
Install the power supply in a dry and protected place without risk of drip or water projections.
To avoid an electrical shock, neither remove the primary protection cover nor handle the connected wire in the terminals.
The installation and handling of these equipments must be performed by authorised personnel and without the power connected.
To avoid damage, the power supply has to be firmly fixed.



It's recommended to protect the power supply by using a thermo-magnetic circuit breaker. Use a ground connection with FA-Plus power supply.

To install the power supply directly on the wall, drill two holes of Ø6mm. and insert the wallplugs. Fix the transformer with the specified screws.

The power supply can be installed on a DIN 46277 guide simply pressing it.
To disassemble the power supply from the DIN guide, use a plain screwdriver to lever the flange as shown on the picture.
The FA-Plus/C model uses 6 units over DIN guide and 10 units the FA-Plus model.



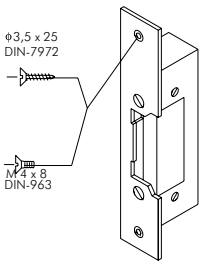
IMPORTANT: the maximum number of units that can be connected to a FA-Plus/C power supply is 10, and 50 units in case of a FA-Plus model. Link power supplies to connect more units than the specified as it's shown on page 105.

Replace the protection cover once the input terminals have been wired.

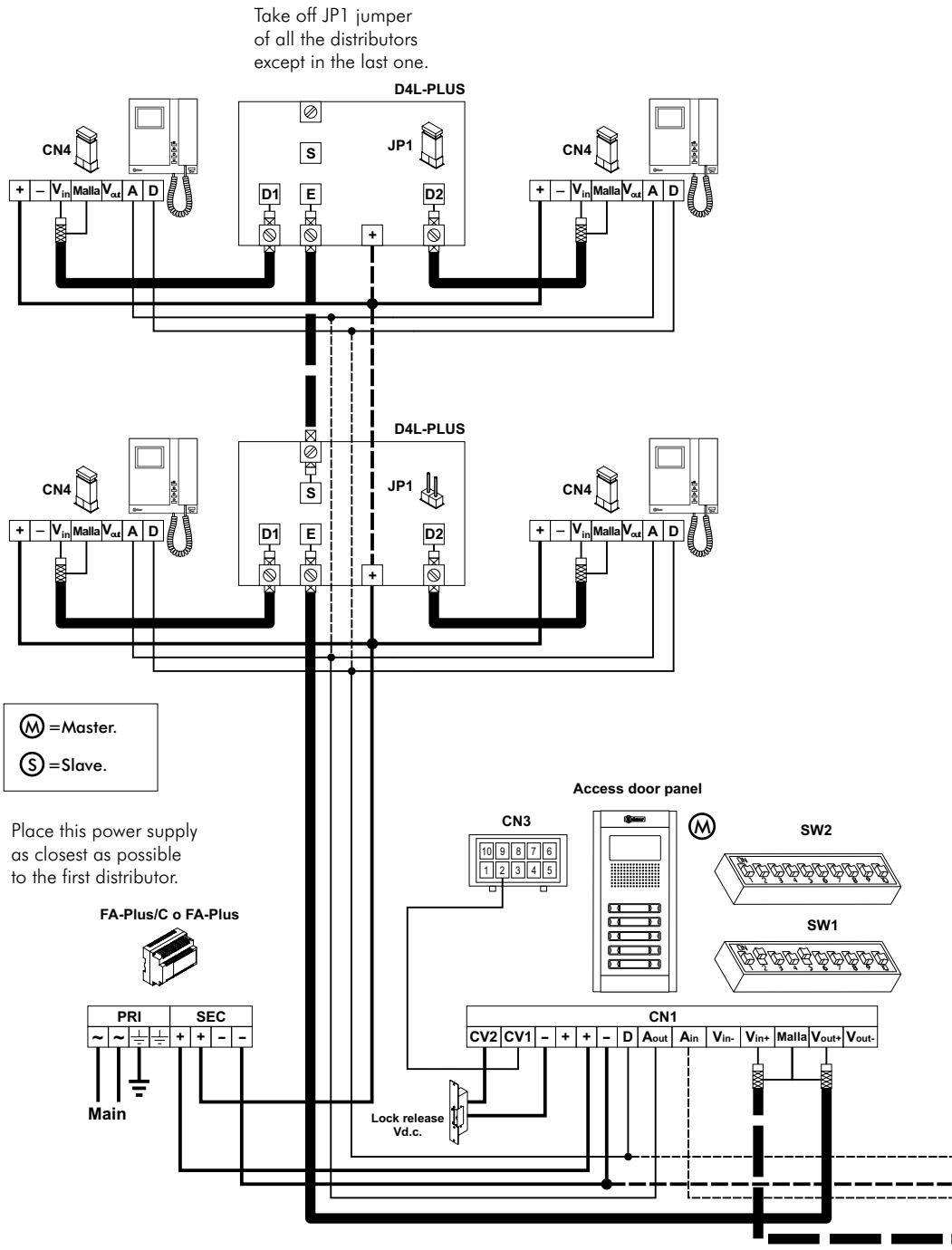
LOCK RELEASE INSTALLATION

Lock release installation.

If the lock release will be installed in a metal door, use a Ø3,5mm. drill and tap the hole. In case of wood door, use a Ø3mm. drill.



IMPORTANT:
- **The lock relese must be of (Golmar) 12Vd.c or a.c.**
  (See page 105 (a.c lock release) and pages 93 to 104 (d.c lock release).
- **A varistor is supplied with the sound module. In case to connect an a.c. lock release, place the varistor on the lock release terminals directly to ensure a proper system operation.**


Take off JP1 jumper
of all the distributors
except in the last one.
D4L-PLUS
CN4
JP1
S
D1
E
D2
+
– Vin Malla Vout A D
D4L-PLUS
CN4
JP1
S
D1
E
D2
+
– Vin Malla Vout A D
Ⓜ =Master.
Ⓢ =Slave.
Place this power supply
as closest as possible
to the first distributor.
FA-Plus/C o FA-Plus
PRI
SEC
~ ~ ⏚ ⏚ + + – –
Main
Access door panel
CN3
10 9 8 7 6
1 2 3 4 5
Ⓜ
SW2
SW1
CN1
CV2 CV1 – + + – D Aout Ain Vin- Vin+ Malla Vout+ Vout-
Lock release
Vd.c.

ONE OR SEVERAL ACCESSES DOORS

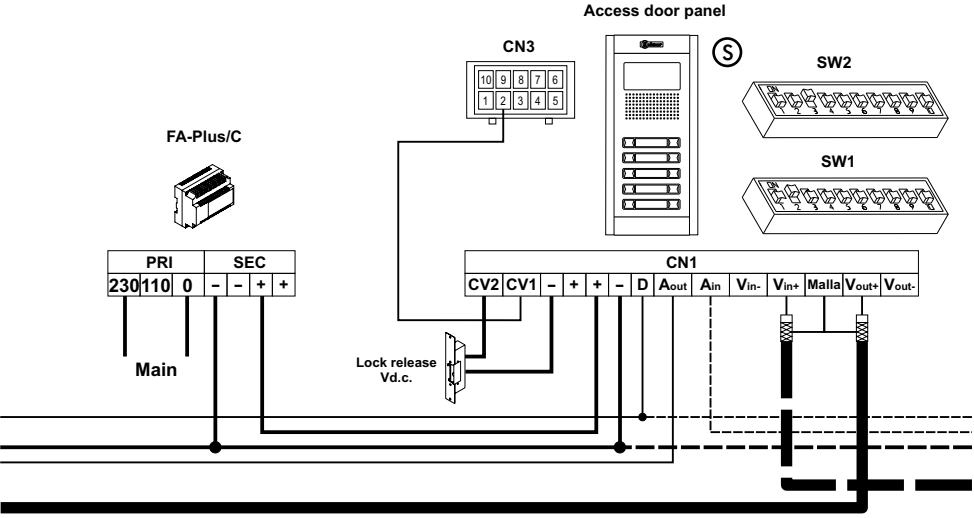
Video installation with coaxial cable.

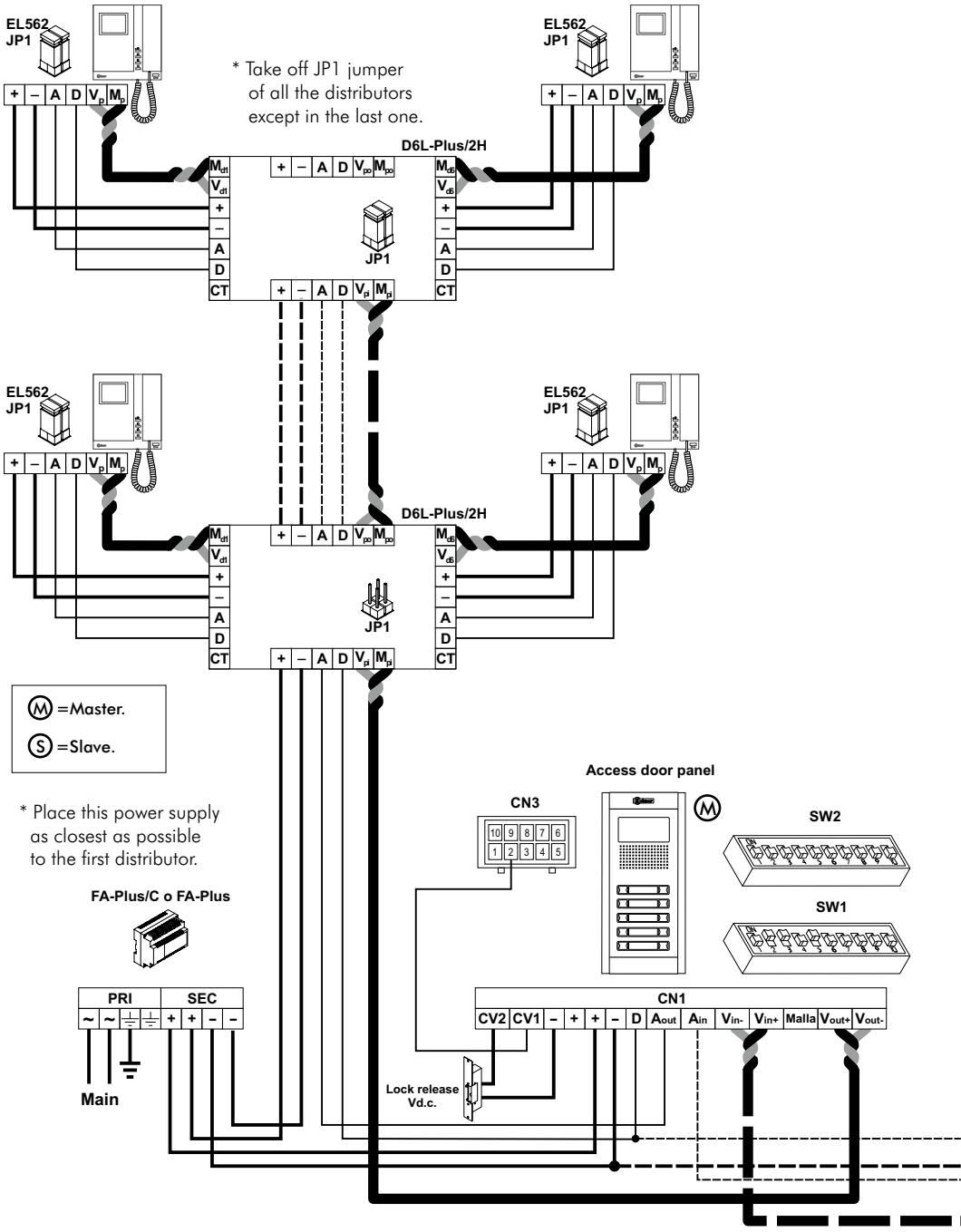
The installation diagram shows the connection of a video system with one or several door panels for the same building.
If the system has one access door panel only, override the wiring to the second door panel.
If the system has more than one access door panel, wire the second panel as shown on the diagram. In case of more than two door panels, wire them as the second is connected.

SECTIONS CHART	Distance	
Terminal	50m.	150m.
+, –, CV1, CV2	1,00mm²	2,50mm²
A_{in}, A_{out}, A, D	0,25mm²	0,25mm²
V_{in+}, V_{out+}, V_{in}, V_{out}	*RG-59	*RG-59

Coaxial cable characteristics RG-59 B/U MIL C-17.

*	ELECTRICAL CHARACTERISTICS	VALUES
	Core max. electrical resistence to 20°C Copper core Copper shield	 ≤158 Ω/Km ≤10 Ω/Km
	Nominal capacitance	≤67pf/m
	Characteristic impedance	75 ± 3 Ω
	Velocity of Propogation	≥66,6 %




EL562
JP1
+ – A D Vp Mp
* Take off JP1 jumper of all the distributors except in the last one.
D6L-Plus/2H
Mdf
Vdf
+
–
A
D
CT
Mpo
Vpo
Mpi
Vpi
JP1
Mde
Vde
Ⓜ =Master.
Ⓢ =Slave.
* Place this power supply as closest as possible to the first distributor.
FA-Plus/C o FA-Plus
PRI
SEC
~ ~ ⏚ ⏚ + + – –
Main
Access door panel
CN3
10 9 8 7 6
1 2 3 4 5
SW2
SW1
CN1
CV2 CV1 – + + – D Aout Ain Vin- Vin+ Malla Vout+ Vout-
Lock release
Vd.c.

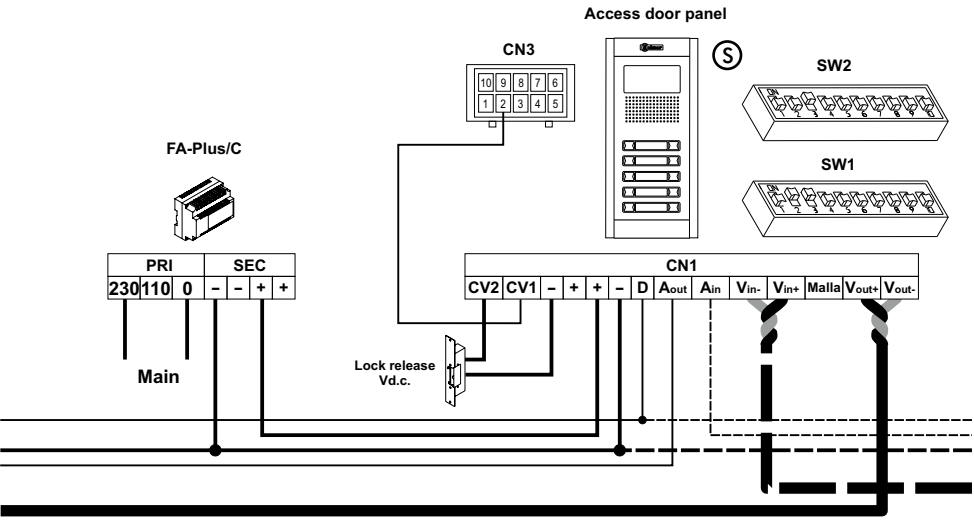
ONE OR SEVERAL ACCESSES DOORS

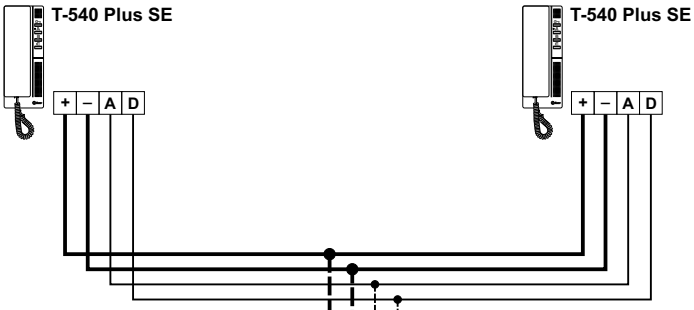
Video installation without coaxial cable.

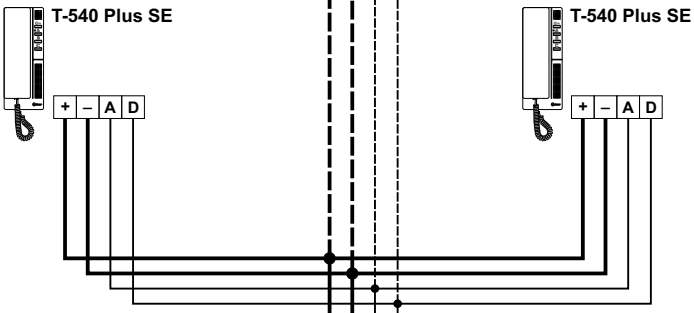
The installation diagram shows the connection of a video system with one or several door panels for the same building.
If the system has one access door panel only, override the wiring to the second door panel.
If the system has more than one access door panel, wire the second panel as shown on the diagram. In case of more than two door panels, wire them as the second is connected.

IMPORTANT: For this type of installation, the door panels must have configured the switch n°.3 of the SW1 configuration dip-switch to ON in each (page 85) and the monitors must have an EL562 plugged in each (see page 74 for manual web link or QR in box monitor).

SECTIONS CHART	Distance	
Terminal	50m.	150m.
+, –, CV1, CV2	1,00mm²	2,50mm²
A_{in}, A_{out}, A, D	0,25mm²	0,25mm²
$V_{in+,-}$, $V_{out+,-}$, $V_{p,d}$, $M_{p,d}$	CAT-5	CAT-5





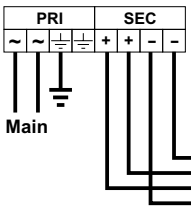


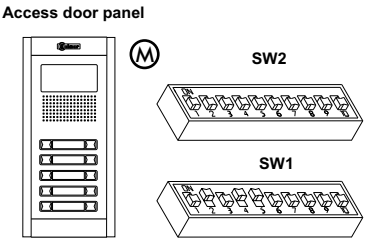
Ⓜ =Master.

Ⓢ =Slave.

*Place this power supply as closest as possible to the first telephone.





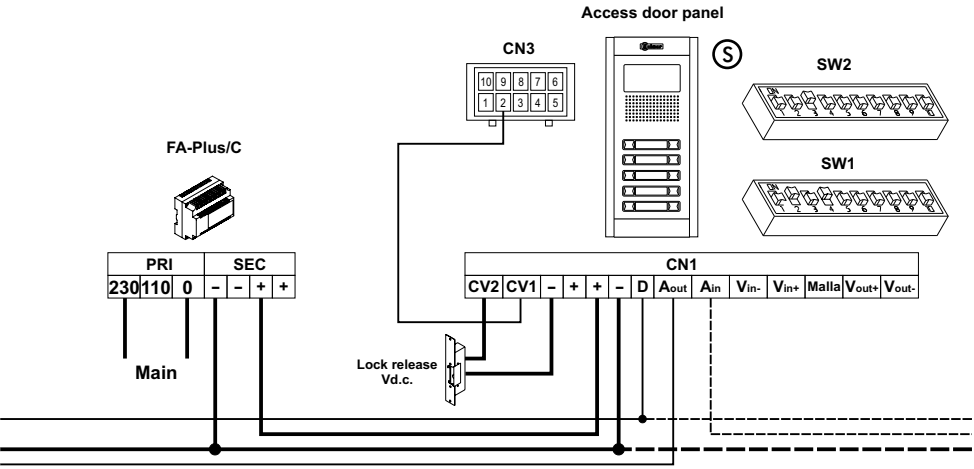


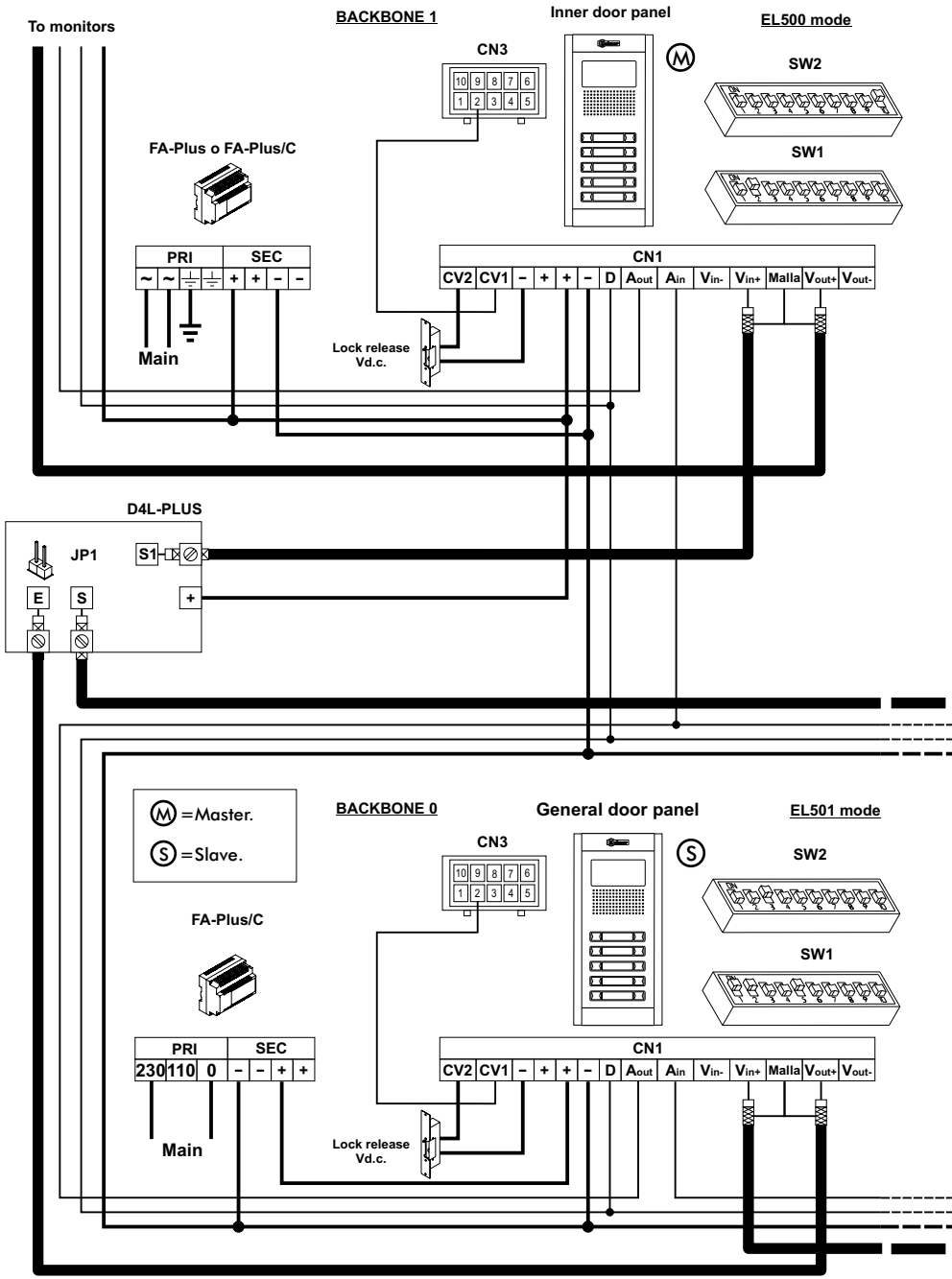
ONE OR SEVERAL ACCESSES DOORS

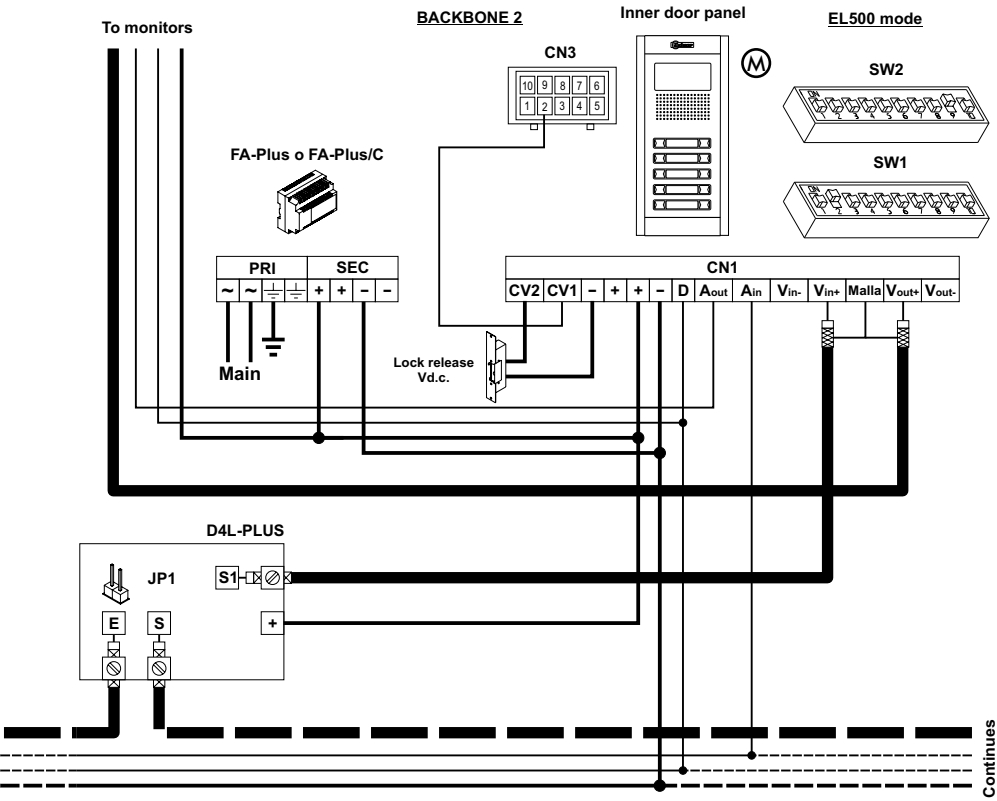
Audio installation.

The installation diagram shows the connection of an audio system with one or several door panels for the same building.
If the system has one access door panel only, override the wiring to the second door panel.
If the system has more than one access door panel, wire the second panel as shown on the diagram. In case of more than two door panels, wire them as the second is connected.

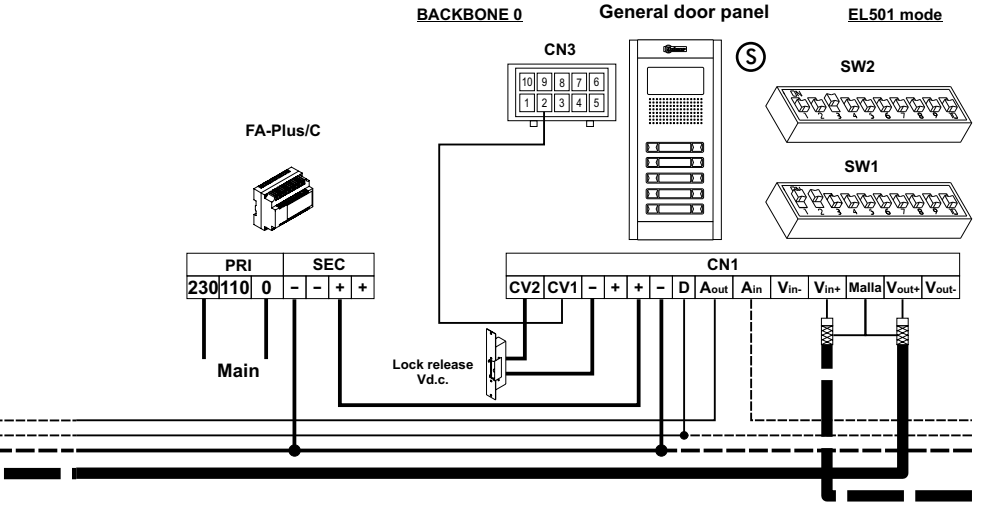
SECTIONS CHART	Distance	
Terminal	50m.	150m.
+, –, CV1, CV2	1,00mm²	2,50mm²
A_{in}, A_{out}, A, D	0,25mm²	0,25mm²

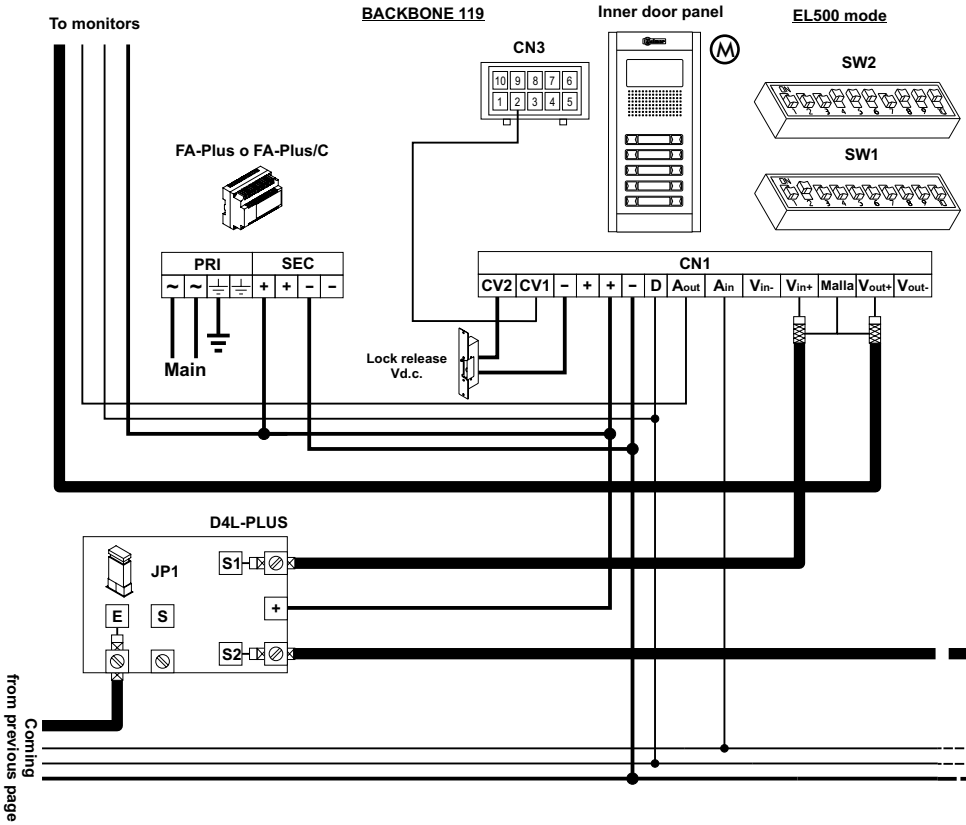



To monitors
BACKBONE 1
Inner door panel
EL500 mode
CN3
SW2
SW1
FA-Plus o FA-Plus/C
PRI
SEC
~ ~ ⏚ ⏚ + + – –
Main
CN1
CV2 CV1 – + + – D Aout Ain Vin- Vin+ Malla Vout+ Vout-
Lock release
Vd.c.
D4L-PLUS
JP1
S1
E
S
+
Ⓜ =Master.
Ⓢ =Slave.
BACKBONE 0
General door panel
EL501 mode
CN3
SW2
SW1
FA-Plus/C
PRI
SEC
230 110 0 – – + +
Main
CN1
CV2 CV1 – + + – D Aout Ain Vin- Vin+ Malla Vout+ Vout-
Lock release
Vd.c.



Continues
in the following page

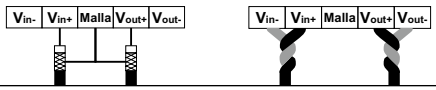




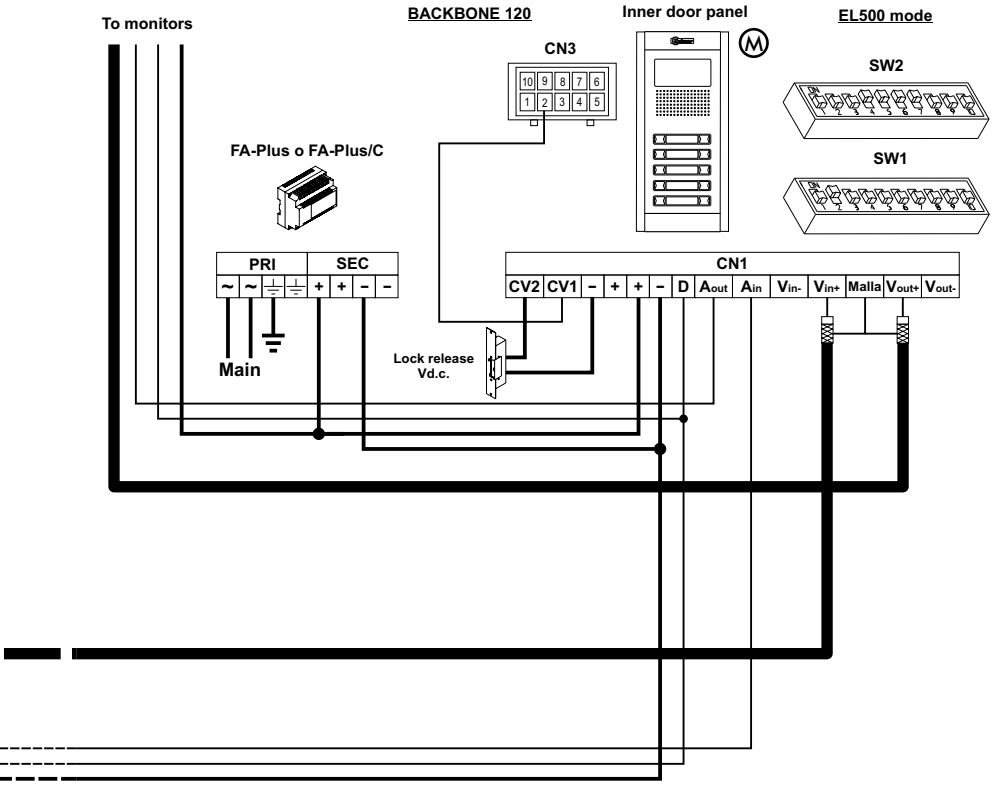
Video installation with general door panel to large residential complexes.

IMPORTANT NOTES:

To install and configure properly, do always follow the enclosed information.
The installation diagram shows the connection of a video system with two general door panels and up to 120 inner door panels (backbones/buildings).
In case of more than two door panels, wire them as the second is conected.
In video systems use a D4L-Plus distributor before each inner building except in the last one. Take off JP1 jumper of all the distributors except in the last one.
In video systems with twisted pair use the D6L-Plus/2H distributor instead of D4L-Plus distributor. Take off JP1 jumper of all the distributors except in the last one. Add a negative in the inner building installation riser, (see page 95).
Below shows the connection of the twisted pair instead of coaxial cable.



GENERAL DOOR PANEL

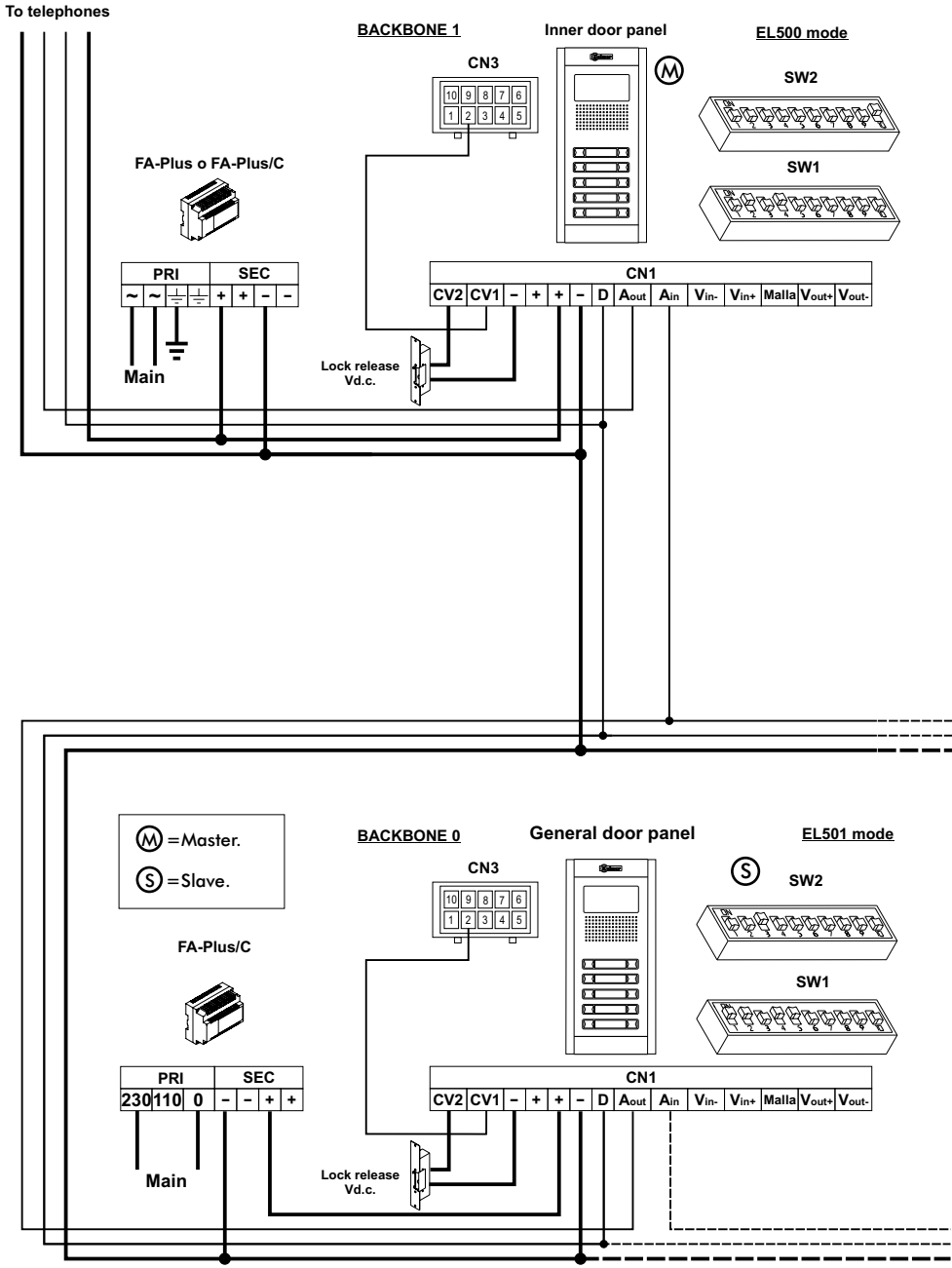


Video installation with general door panel to large residential complexes.

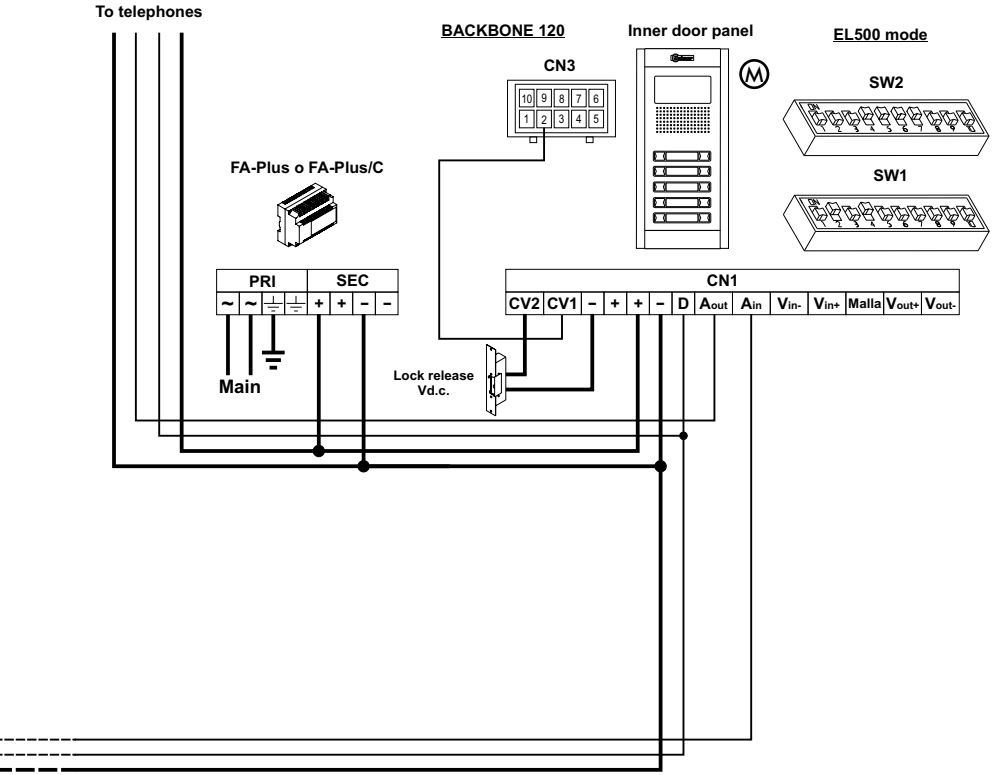
SECTIONS CHART	Distance			
Terminal	100m.	300m.		
+, –, CV1, CV2	1,50mm²	2,50mm²		
A_{in}, A_{out}, A, D	0,25mm²	0,25mm²		
V_{in+}, V_{out+}	* RG-59	* RG-59	Coaxial	Sw1-3 Off
V_{in+}, V_{in-}, V_{out+}, V_{out-}	CAT-5	CAT-5	Twisted pair	Sw1-3 On

For greater distances contact our technical support department.

* Coaxial cable characteristics RG-59 B/U MIL C-17, (see page 94).


To telephones
BACKBONE 1
Inner door panel
EL500 mode
CN3
SW2
SW1
FA-Plus o FA-Plus/C
PRI
SEC
~ ~ ⏚ ⏚ + + – –
Main
CN1
CV2 CV1 – + + – D Aout Ain Vin- Vin+ Malla Vout+ Vout-
Lock release
Vd.c.
Ⓜ =Master.
Ⓢ =Slave.
BACKBONE 0
General door panel
EL501 mode
CN3
Ⓢ
SW2
SW1
FA-Plus/C
PRI
SEC
230 110 0 – – + +
Main
CN1
CV2 CV1 – + + – D Aout Ain Vin- Vin+ Malla Vout+ Vout-
Lock release
Vd.c.

GENERAL DOOR PANEL



Audio installation with general door panel to large residential complexes.

IMPORTANT NOTES:

To install and configure properly, do always follow the enclosed information.

The installation diagram shows the connection of an audio system with one general door panel and up to 120 inner door panels (backbones/buildings).

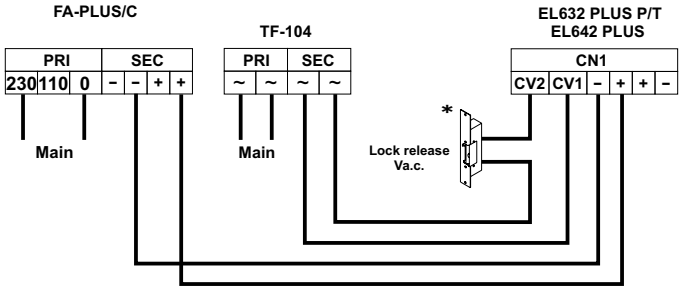
In case of more than one general door panel, wire them as it shows in the video installation diagram, (see page 99).

SECTIONS CHART	Distance	
Terminal	100m.	300m.
+, –, CV1, CV2	1,50mm^2	2,50mm^2
A_{in}, A_{out}, A, D	0,25mm^2	0,25mm^2

For greater distances contact our technical support department.

Connexion of an a.c. lock release.

If an alternating current lock release has been installed, use a TF-104 transformer and connect it to the lock release as it is shown on the diagram.



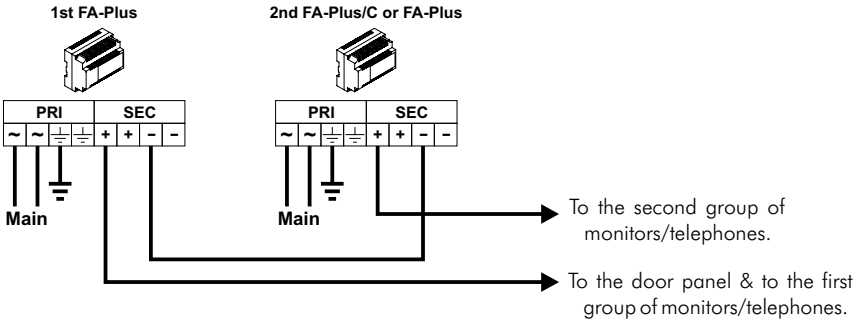
∗ **Important:** Place the varistor supplied with the sound module on the lock release terminals directly to ensure a proper system operation.

Link of several power supplies units.

If the quantity of monitors or telephones to be connected is bigger than the supported from one power supply (see page 92), use additional power supplies to match the required quantity. The first power supply should be connected to the door panel and to the first group of monitors or telephones; connect the next groups to the positive terminal of its corresponding power supply.

To wire several power supplies link their ground terminals.

NEVER link positive terminals of different power supplies.

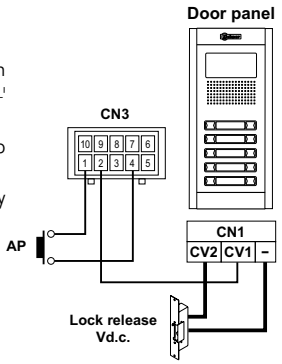


External lock release activation.

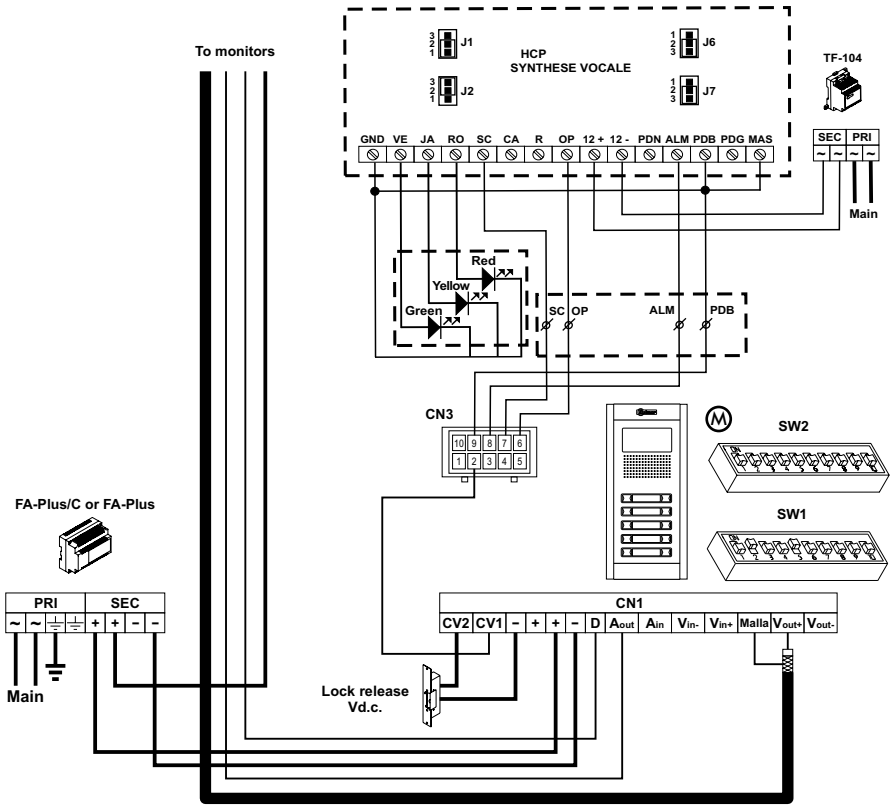
The lock release can be activated at any moment by using an external push button, that must be connected between 'AP' and '–' terminals of the connector Cn3 from door panel (see page 89).

Door opening timed at 3 or 15 seconds, with the help of the dip switch SW1-2 (see page 85).

This function will allows to exit from the building being not necessary the use of a key.



Connection to the synthese vocale module of FDI (for France).



An easy way to check that the system is working properly is to disconnect the wiring from the door panel and to check the monitor directly connected to the sound module.
No shortcircuit will damage the connected units, with the exception of a shortcircuit between CTO and '–' monitor or distributor terminals.

- Nothing operates.
  - Check the output power supply voltage between '–' and '+' terminals: it should have 17,5 to 18,5Vd.c. If not, disconnect the power supply from the installation and measure again. If it's correct now, it means there is a short circuit in the installation: disconnect the power supply from mains and check the installation.
  - Check that 'D' terminal is not shortcircuited with '–' or '+' terminals.
  - Check that 'D' terminal hasn't been changed by 'A' terminal somewhere in the installation.
- Inappropriate audio level.
  - Adjust the level volumes as shown on page 90. In case of feedback, reduce the audio levels until feedback fade out. If feedback don't dissapears refer to the following hint.
- Continuous audio feedback.
  - Check that 'A' terminal is not shortcircuited with other terminals.
- Door open function no operates.
  - Remember that this function is only available during call and communication progresses.
  - The CV1 and CV2 terminals for door opening are voltage free outputs. The cable requires a connection depending on whether 12Vdc (page 93 to 104) or 12Vac (page 105) is needed.
  - Make a short circuit between the 'CV1' and 'CV2' terminals on the sound module; there should be12V (d.c. or a.c. depending on the type door release installed) between the terminals on the door release. If so, check the lock release and its wiring.
- The system cannot be programmed.
  - Check that the switch number 2 of the SW2 configuration dip switch is set to ON (see page 86) and that the programming steps are correctly followed.
  - Check that 'D' terminal is not shortcircuited with other terminals.
- Some units don't receive calls.
  - Remember that each apartment must have a master unit only. Check that the units are switched on and correctly programmed.
- There are no video image.
  - Check the number 4 of the dip switch SW1 of the module 632 Plus P/T is in OFF (see page 85).
  - Check there is supply in the distributors, the voltage between '+' and '-' terminals should have 15 to 18 Vd.c.
- Push buttons don't work.
  - Check that pressing the push button the door panel reproduce an acoustic confirming tone, if not check the wiring and configuration of the push buttons (pages 81 to 82).
  - If confirmation of pulsation exists, check the monitors or telephones programming on corresponding monitor / telephone manual, (see page 74 for manual web link).

NOTAS/NOTES

NOTAS/NOTES

Este producto es conforme con las disposiciones de las Directivas Europeas aplicables respecto a la Seguridad eléctrica ***2014/35/CEE*** y la Compatibilidad Electromagnética ***2014/30/CEE***.

This product meets the essentials requirements of applicable European Directives regarding Electrical Safety ***2014/35/ECC,*** *Electromagnetic Compatibility* ***2014/30/ECC***.

NOTA: El funcionamiento de este equipo está sujeto a las siguientes condiciones:
(1) Este dispositivo no puede provocar interferencias dañinas, y (2) debe aceptar cualquier interferencia recibida, incluyendo las que pueden provocar un funcionamiento no deseado.

NOTE: *Operation is subject to the following conditions:*
(1) This device may not cause harmful interference, and (2) this device must accept any received interference, including the ones that may cause undesired operation.

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