

Audio and Video
door entry system

(One or several
accesses doors /
General door panel)

Plus Nexa

Instructions manual

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 138). **Never use coaxial antenna cable.** In installations no longer than 100m., **Golmar RAP-5130** cable can be used.

- ☛ 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 environments.
 - ⌚ 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 environments.
 - ⌚ 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).
- ☛ 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.
- ☛ With T-540 Plus and T-740 Plus telephones:
 - ⌚ Privacy on audio communications.
 - ⌚ Three-position control for call volume: maximum, medium and off.
 - ⌚ Input for external door release push button.
 - ⌚ Input for external door bell push button.
 - ⌚ Output for additional call repeater.
 - ⌚ Call to a master porter's exchange.
 - ⌚ Panic call to the porter's exchange.
 - ⌚ Different call reception tones depending where the call is coming from: main or slave door panels, door bell push button, intercom, ...
 - ⌚ Allows one of these functions at once, configuration with dip-switch Sw1 (see pages 130 and 134):
 - ⌚ "Autoswitch-on" function.
 - ⌚ Output for auxiliary relay activation (18Vdc/0,5 A maximum).
 - ⌚ Call to a slave porter's exchange.
 - ⌚ Intercommunication function with other monitor or telephone of the same apartment.

Continue

Coming from previous page

☐ With Tekna Plus monitors:

- ☑ Privacy on audio and video communications.
- ☑ "Autoswitch-on" function.
- ☑ "Video-spy" function with the communication channel remaining free.
- ☑ Intercommunication function with other monitor or telephone of the same apartment.
- ☑ Input for external door bell push button.
- ☑ Output for additional call repeater.
- ☑ Call to a master and slave porter's exchange.
- ☑ Panic call to the porter's exchange.
- ☑ Activation of two auxiliary devices: secondary telecamera, courtesy light, ...
- ☑ B/W & Color monitor.
- ☑ Three-position control for call volume: maximum, medium and minimum.
- ☑ Brightness and contrast control (color control in case of color screen).
- ☑ Different call reception tones depending where the call is coming from: main or slave door panels, door bell push button, intercom, ...

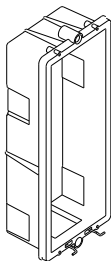
SYSTEM OPERATION

- ☐ 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. 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 confirming the system is busy and the led of busy system from informative window will lights (If it exists).
- ☐ 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 or from another general door panel, an acoustic tone will be heard confirming the system is busy and the led of system busy will blink (in the general door panel). 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 led of system busy from informative window will blink.
- ☐ The call tone will be reproduced on the monitor during 3 seconds: after this time the picture will appear on the master monitor without the visitor being aware of this. To see the picture in a slave monitor press the ⊕ push button, disappearing the picture on the other monitor. If the call is not answered in 45 seconds, the system will be freed.
- ☐ To establish communication pick up the monitor (telephone) handset.
- ☐ The communication will last for one and a half minutes or until the handset is replaced. Once the communication has finished the system will be freed.
- ☐ 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.
- ☐ The monitor and telephones push buttons description is shown on pages 124, 130 & 134 respectively.

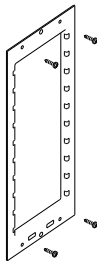
Door panel description.

General detail of parts, for assembly the door panel.

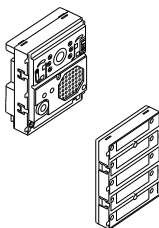
Embedding boxes



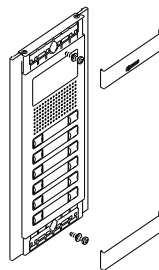
Frame modules



Electronic modules

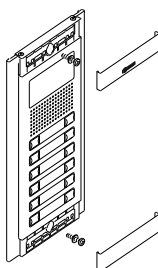


Aluminium modules

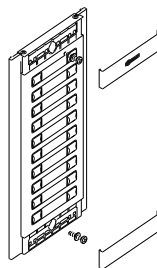


Door panel description.

Main module



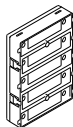
Push buttons module



Sound module

EL631 Plus , on video systems with color camera.

EL640 Plus , on audio systems.



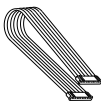
Push buttons electronic module

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



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.

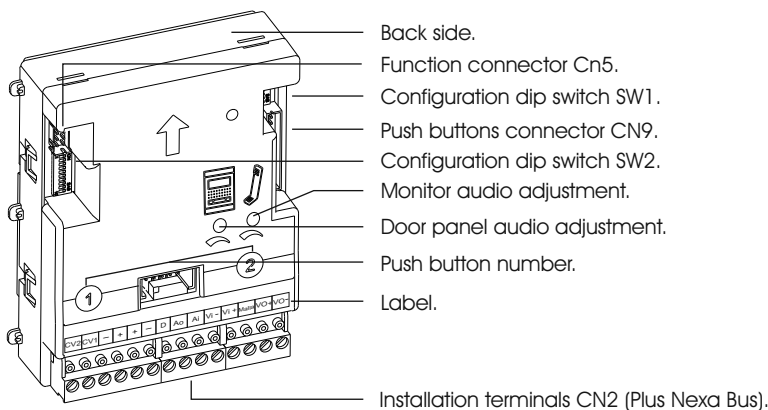
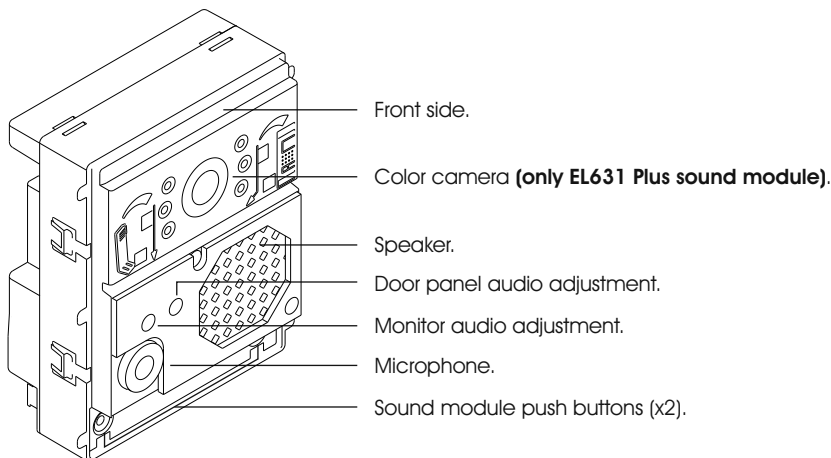


Connection cable RAP-610D (27 cm length).

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 (EL631 Plus and EL640 Plus).

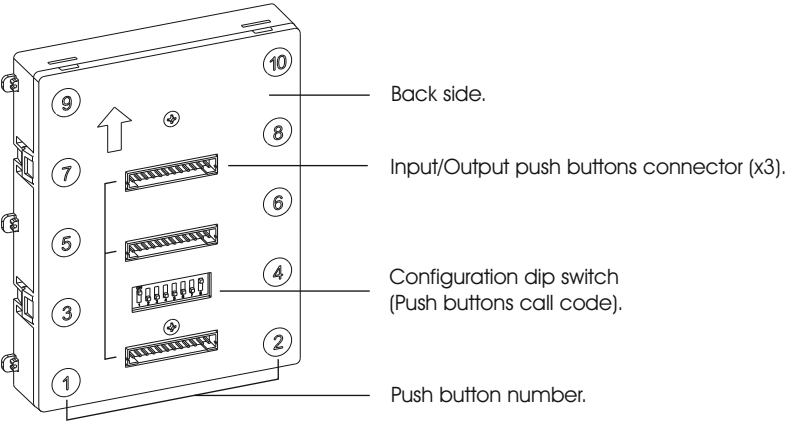
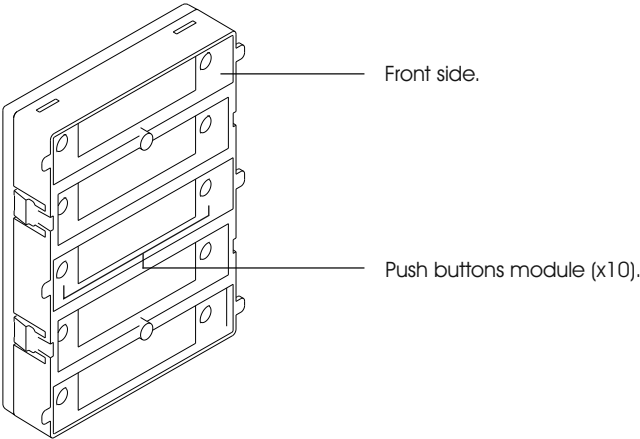


Installation terminals:

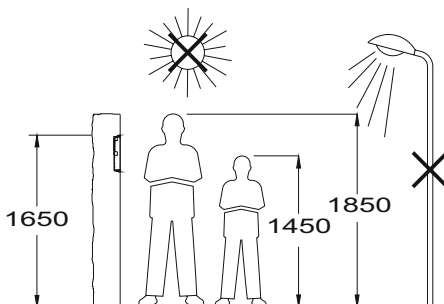
- CV1 : "C" contact free for lock release.
- CV2 : "N.O" contact free for lock release.
- +, - : Positive, ground.
- D : Digital communication.
- Aout : Audio output communication.
- Ain : Audio input communication.
- Vi+, Vi- : Twisted pair video signal input.
- Vo+, Vo- : Twisted pair video signal 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.



E_mbedding box positioning.

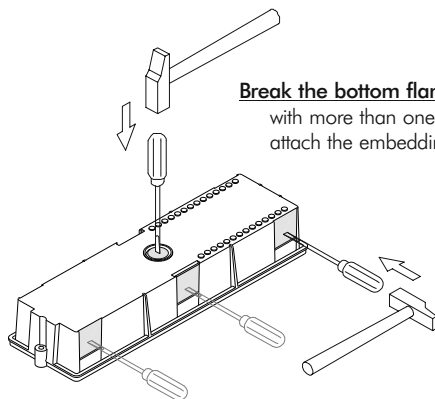


The upper part of the door panel should be placed at 1,65m. height roughly. The hole dimensions will depend on the type of door panel.

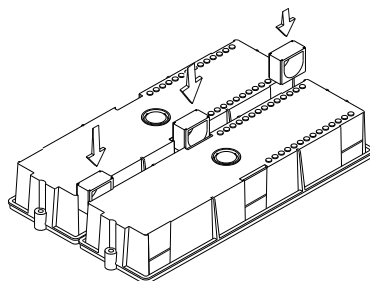
Door panel Model	90CS CEA90C	90C CEV90C	90 CEV90
An	99	99	99 mm.
Al	143	250	328 mm.
P	40	56	56 mm.

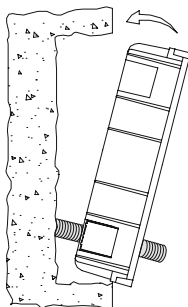
The door panel has been designed to be placed under most of the environmental conditions. However it's recommended to take additional cautions like rainproof covers. To obtain a good quality picture on video door entry systems, avoid direct incidence from light sources.

P_reparing 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.





Place the embedding box.

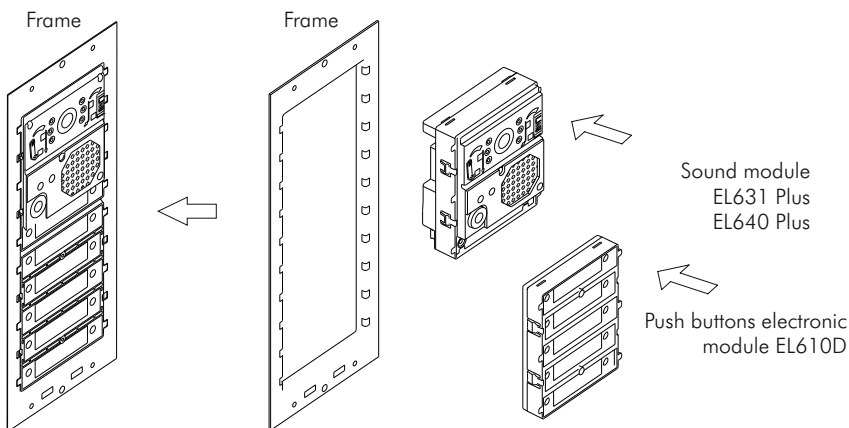
Pass the wiring through the hole made in the bottom part of the embedding box. Level and flush the embedding box. Once the embedding box is placed, remove the protective labels from the attaching door panel holes.

Assembly the electronic modules.

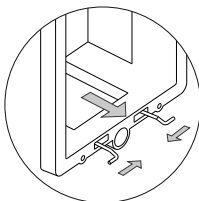
Insert the sound module in the top part of the module frame.

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.

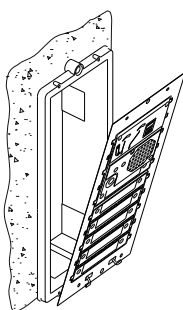


Hold the frame on the embedding box.

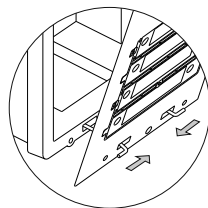


Insert the hinge that it is supplied with the product in the embedding box, as shown in the drawing.

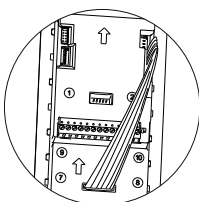
To hold the frame on the embedding box, insert the hinge in the housings arranged for this purpose in the frame, as shown in the drawing.



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

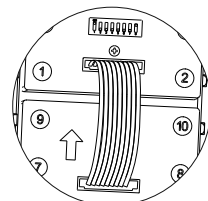
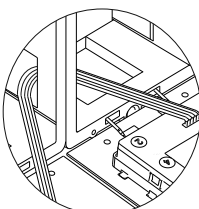


Plug the push buttons with the short connection cable.



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.

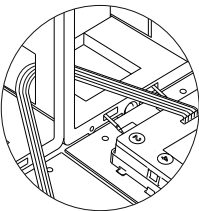
Between push buttons modules EL610D of the same embedding box, insert the short connection cable of the low connector of the first push buttons module to the top connector of the second push buttons module, as shown in the drawing.




Between push buttons modules EL610D of different embedding 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.

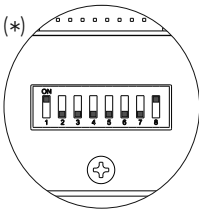
Use the connection cable RAP-610D, for the connection of the push buttons between the sound module and the push buttons module EL610D and between push buttons modules EL610D, when the distance between modules to connecting is greater due to the composition of the door panels.



Configuration of the push-buttons code.

The push buttons module EL610D must be configured, to assign a call code to the push buttons (use the tool  that is supplied with the sound module). 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 know the call code of each push button, as shown in the table below.



Push buttons module EL-610D

		Dip switch							Push buttons code											(1)
		Dip1	Dip2	Dip3	Dip4	Dip5	Dip6	Dip7	Dip8	P1	P2	P3	P4	P5	P6	P7	P8	P9	P10	
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.

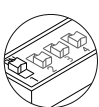
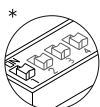
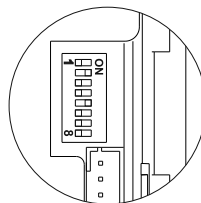
Important: Select a different configuration option for each module EL610D.

(*) Factory default.

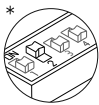
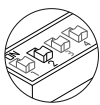
Description of the SW1 configuration dip-switch of the sound module.

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

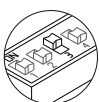
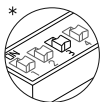
For dip switch settings, use the tool  that is supplied with the sound module.



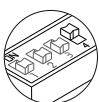
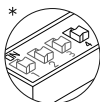
Placed to OFF if the sound module is configured as EL500 operating mode.
Set to ON if the sound module is configured as EL501 operating mode (general door panel).



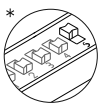
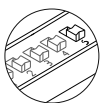
Selects the door opening time, done from the external push button ('AP' terminal), see page 150.
Placed to ON: door opening timed at 3 seconds.
Set to OFF: door opening timed at 15 seconds.



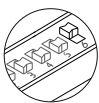
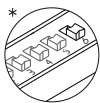
Selects the type of cable to be used for the video signal.
Placed to OFF: coaxial cable RG-59 o RG-11.
Set to ON: twisted pair.



Placed to OFF if the door panel has telecamera. In case of door panels without telecamera (EL640 Plus sound module) set to ON.



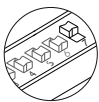
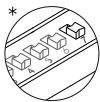
Plus system, loads the installation with a communications resistor **Plus**. For a proper system operation, placed to ON only in the closest door panel to the backbone installation or in the general door panel (if exists), set the rest to OFF.



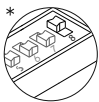
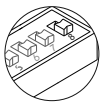
Uno System, loads the installation with a communications resistor **Uno**. For a proper system operation, set to ON only in the closest door panel to the backbone installation, placed the rest to OFF.

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.




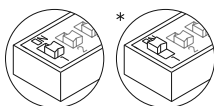
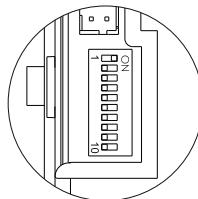
Placed to ON, the calls made on the door panel will be transferred to the porter's exchange (if exists). Set to OFF, the call is received in the apartment.
In general door panels systems with porter's exchange, this function is only applicable to the general door panels not to the inner door panel/s.

* Factory default

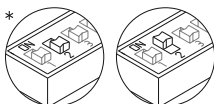
Description of the SW2 configuration dip-switch of the sound module.

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

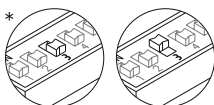
For dip switch settings, use the tool  that is supplied with the sound module.



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).

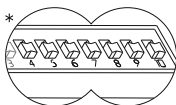


Set to ON for monitor or telephones programming. Once the programming progress is finished return the switch to OFF position. The programming process is described on pages 128 (monitors), 132 and 136 (telephones). In general door panel (EL501 mode), set to ON for general door panel push buttons programming or backbone (building) monitor/telephones. The programming process is described on pages 117 to 119. 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: $64 + 0 + 16 + 0 + 4 + 2 + 1 = 87$

G

eneral door panel (programming modes).

Configure the sound module of the general door panel in EL501 mode, (see page 115).

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.

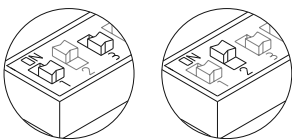
P

rogramming the push buttons of the general door panel.

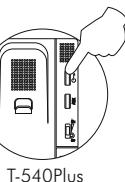
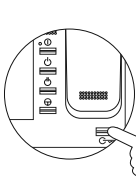
Programming the push button (by call of monitor/telephone):

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

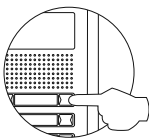
Before the monitors/telephones of the inner door panel/s must be programmed, see page 128 (monitors), 132 and 136 (telephones).



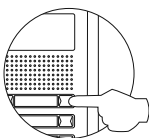
Locate the SW2 configuration dip switch of the general door panel to program, placed at the upper left side (back) of the sound module. With the switches 1 and 3 to OFF, set the switch 2 to ON: to show that the system is ready for programming, the general door panel will reproduce a tone.



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 programming, replace the monitor/telephone handset; to show that the push button has been successfully programmed, the general door panel will reproduce a tone.



Make a call to check that the push button has been successfully programmed.

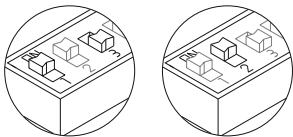
Repeat these steps to program the rest of push buttons.

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.

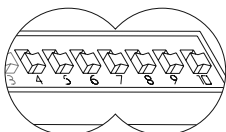
IMPORTANT: Before programming the general door panel push buttons, switch off the porter's exchange (if exists).

Programming the push button (with a backbone code):

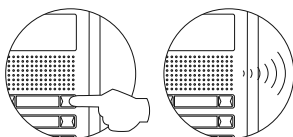
This programming mode allows to assign a backbone code to push button of the general door panel.



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 116).

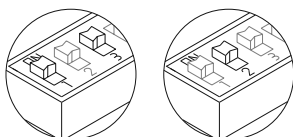


Press the general door panel push button that is wished has this backbone code. At this moment the general door panel will reproduce a tone, confirming that the push button has been successfully programmed.

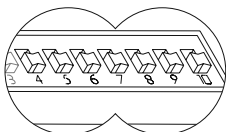
Repeat these steps to program the rest of push buttons. Once the programming has been finished, set to OFF the programming switch. If you don't, the general door panel will reproduce a tone to advise that the system is still in programming mode.

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

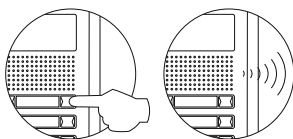
This programming mode allows to assign a monitor/telephone code to push button of the general door panel.



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 116).



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 successfully programmed.

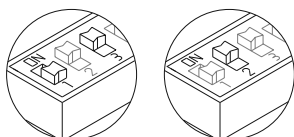
Repeat these steps to program the rest of push buttons. Once the programming has been finished, set to OFF the programming switch. If you don't, the general door panel will reproduce a tone to advise that the system is still in programming mode.

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 118).



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 in the page 128 (monitor), 132 and 136 (telephone), (see manual T1ML if the monitor/telephone is Tekna Uno, T-540 Uno or T-740 Uno).

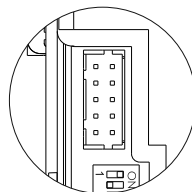
Bear in mind the configuration dip switch (as it is described in the previous step).

DOOR PANEL INSTALLATION

Description of the function connector CN5.

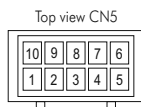
The function connector Cn5 is located at the upper left side of the back of the sound module.

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 115), see connections (page 150).
- ⇒ "ICO" function: For the busy channel indication, it will be realized with terminals "ICO" and "+12".
- ⇒ "Handicap" function: Synthèse vocale from FDI (France). The connector includes all wires for connection (see page 150).

Description connector CN5



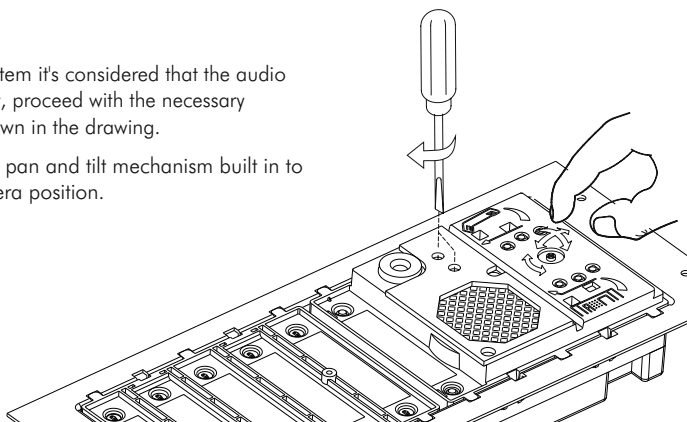
1	Grey	(-)	Ground.
2	Brown	(+12)	12Vdc for activation the lock release.
3	White	(ICO)	Busy channel indicator.
4	Yellow	(AP)	External push button to activate the lock release.
5	Violet	(+H)	For activation of an external illumination.
6	Blue	(OP)	Handicap.
7	Orange	(SC)	Handicap.
8	Green	(ALM)	Handicap.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

F

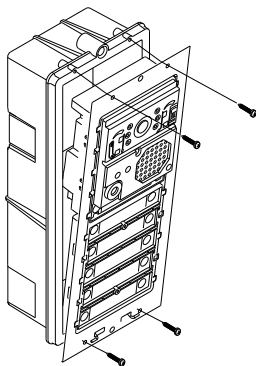
inal adjustments.

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.

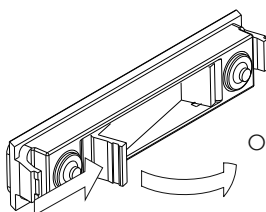


C

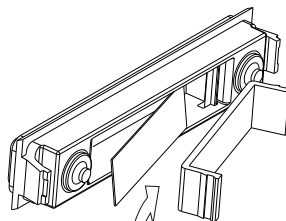
lose the frame.

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

P

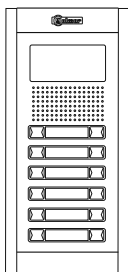
lace the nameplate labels.

Open the label holder.

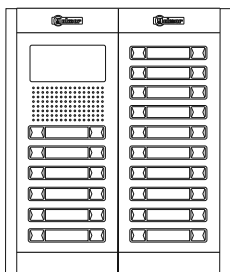


Place the label and close.

Door panel assembly.



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

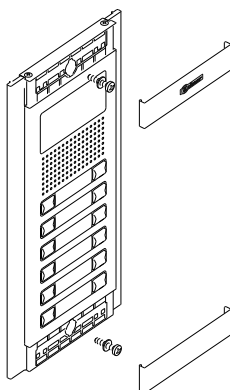


If the door panel to installing is of more than one module it will be necessary make some adjustments to join a door panel with other one.

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.

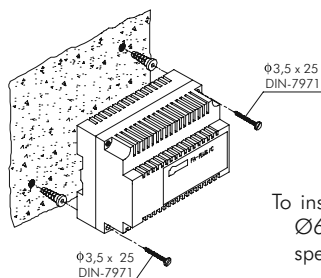
Finish the door panel assembly by placing the closing heads, put the head on one side and then make a slight pressure on the other end, to its correct placement.

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.



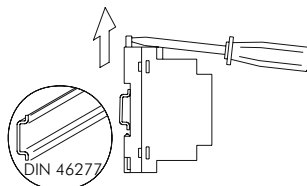
It's recommended to protect the power supply by using a thermo-magnetic circuit breaker. Use a ground connection with FA-Plus power supply.

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.



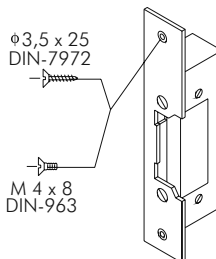
IMPORTANT: the maximum number of units that can be connected to a FA-Plus/C power supply is 10, and 50 units in case of a FA-Plus model. Link power supplies to connect more units than the specified as it's shown on page 149.

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.

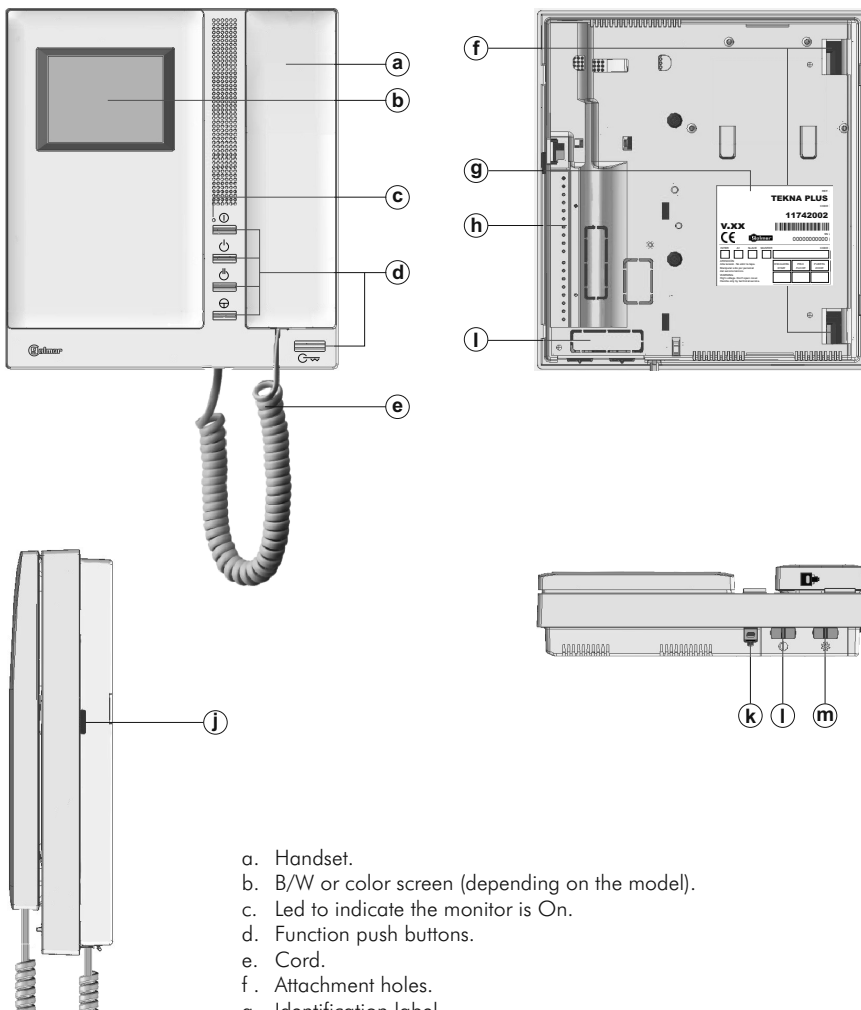


IMPORTANT: the lock release must be of 12Vd.c. or a.c.

See page 149 (a.c. lock releases) and page 137 to 148 (d.c lock releases)






D

escription of the Tekna Plus monitor.



- a. Handset.
- b. B/W or color screen (depending on the model).
- c. Led to indicate the monitor is On.
- d. Function push buttons.
- e. Cord.
- f. Attachment holes.
- g. Identification label.
- h. Connecting points.
- i. CN4 connector.
- j. Three positions call reception volume control.
- k. Cable slot.
- l. Contrast control (color control in case of color screen).
- m. Brightness control.

Function push buttons.

-  On-Off push button. After any monitor reset and during the next 45 seconds, all the monitor functions will be disabled, with the exception of call reception.
-  If the handset is on the cradle allows the activation of an optional second camera (*). If not, allows to make an intercom call or to activate the second camera (*).
-  If the handset is on the cradle allows the activation of an optional device. If not, allows to call to a slave porter's exchange (*) or to activate the optional device.
-  If the handset is on the cradle allows to see the picture from the master door panel. If not, allows to establish audio and video communication with the door panel that has been configured with the autoswitch-on function. This function is disabled if a communication is already established.
-  If the handset is on the cradle sends a panic call to the porter's exchanges that have enabled the reception of this type of call. If not, allows to call to the master porter's exchange. During call reception and communication progresses allows the lock release activation.

(*) Second camera activation and call to a slave porter's exchange functions require an internal modification of the monitor. If any of these functions are required, contact with your nearest authorized distributor.
Second camera activation disables the intercomm function and call function to a slave porter's exchange disables optional device function.

Description of the identification label.


REF:


TEKNA PLUS

CODE

11742002

V.XX





SN

00000000000

INTER

A1

SLAVE

MASTER

CODE

INTER

A1

SLAVE

MASTER

ESCALERA
STAIR

PISO
FLOOR

PUERTA
DOOR

ATENCIÓN

Atta tensión. No abrir la tapa.

Manténla sólo por personal

del servicio técnico.

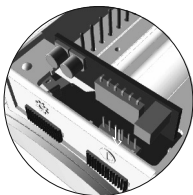
WARNING

High voltage. Don't open cover.

Handle only by technical service.

For an easiest repair, replacement or increase of the existing monitors, fill the identifying label information.

- MASTER: master monitor.
- SLAVE: slave monitor.
- INTER: slave monitor with intercom function.
- A1: monitor connected to an auxiliary device.
- CODE: push button code (see page 114).
- STAIR: backbone code (building) (see page 116).

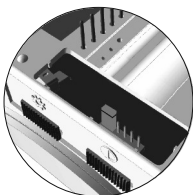


EL562 module for video installations with twisted pair cable.

Locate the CN4 connector, that's placed in the monitor base. Remove the existing jumper and plug the EL562 module.

NOTE: on this type of installations the sound module must be setting with SW1 -3 to ON (page 115). Refer to the specific installation diagram.

Handling the end of line jumper.

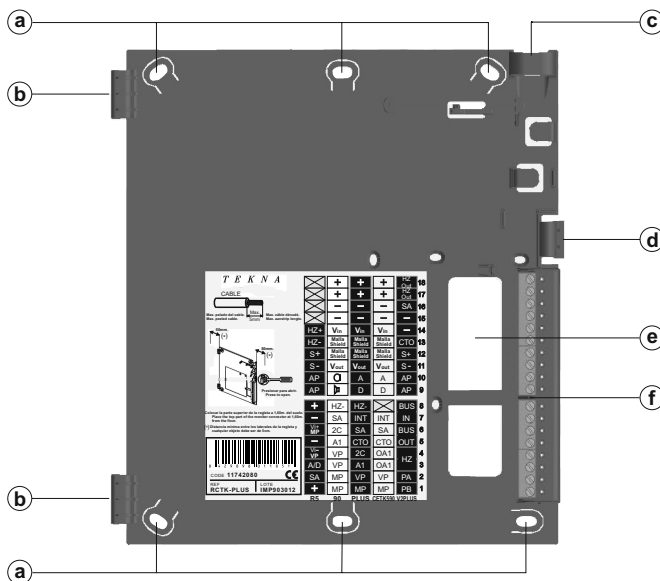


The end of line jumper is placed on the CN4 connector, that can be located on the monitor base.

In case of twisted pair cable installations, the end of line jumper is placed in the EL562 module, also located in the CN4 connector of the monitor base.

Do not remove the jumper on monitors where the video cable finish. Remove the jumper on monitors where the video cable continue.

Description of the RCTK-PLUS monitor connector.



a. Wall attachment hole (x6).

b. Monitor attachment hook (x2).

c. Vertical wiring input.

d. Attachment clip.

e. Wiring input hole.

f. Installation terminals:

+, -:	positive, ground.
Vin :	video signal coaxial input.
Malla:	coaxial shield.
Vout :	video signal coaxial output.
A :	audio communication.
D :	digital communication.
HZ- :	door bell push button input.
INT :	intercom.
SA :	auxiliary calling device output.
CTO :	video distributor activation output.
2C :	2nd camera activation output.
A1 :	optional device activation output.
Vp, Mp :	twisted pair video signal.

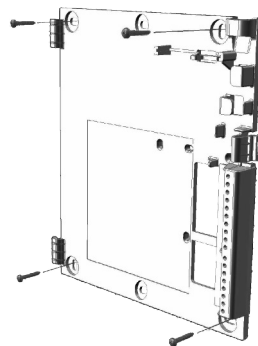
Terminals +, - and Malla (shield) are duplicated for easiest cascade installation of parallel monitors or telephones. If the first monitor is not placed on the connector, cascade parallel units will not be powered.

Fix the monitor connector to the wall.

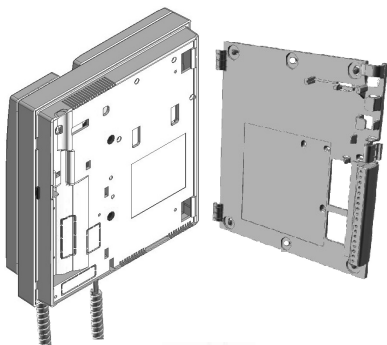
Avoid to place the monitor near to heating sources, in dusty locations or smoky environments.

To install the monitor directly over the wall, drill two holes of $\varnothing 6\text{mm}$. and use the supplied screws.

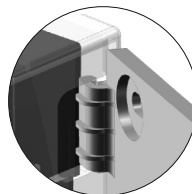
The upper part of the monitor connector must be placed at 1,60m. height roughly. The minimum distance between the monitor connector and the closest object must be 5cm.



Fix the monitor.

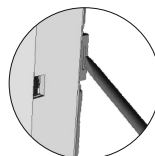
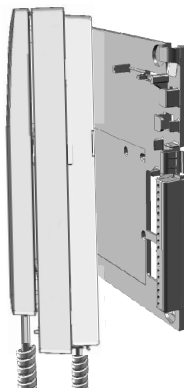


Place the monitor at right angles to the connector and align the attaching holes of the monitor with the attachment hooks of the connector, as it is shown on the drawing.



Lock out the monitor. Press the right side till the attachment clip locks the monitor firmly.

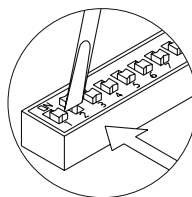
To disassemble the monitor from the connector, use a plain screwdriver to release the attachment clip. Remove the monitor from the connector, with special attention do not falls.



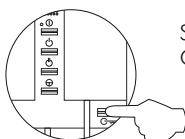
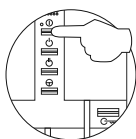
Programming the Tekna Plus monitors.

Set to ON the switch number 2 of the SW2 configuration dip switch, placed at the upper left side (back) of the module EL631/Plus. The door panel will reproduce a sound to advise that the system has entered into programming mode.

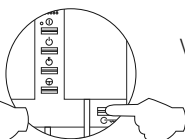
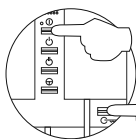
In systems with more than one door panel, the programming process shall be done on the master door panel only.



To program the monitor from a general door panel (if it exists), see page 119.



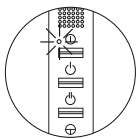
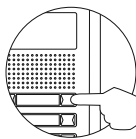
Switch off the monitor to be programmed.
Once the monitor is off, press the door release push button.



With the door release push button pressed switch on the monitor.

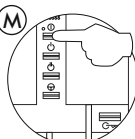


To show that the system is ready for programming, the door panel will reproduce a tone and the picture will appear on the monitor. At this moment, the door release push button can be released. Lift the handset to establish audio communication with the door panel.

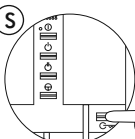


Press the door panel push button that will call to this monitor. At this moment the door panel will reproduce a tone and the monitor led will blink.

(M)



(S)




(SI)



To program the monitor as **Master**, switch it off and on again.

To program it as **Slave**, press the door release push button.

To program it as **Slave with intercom** function press the  push button.

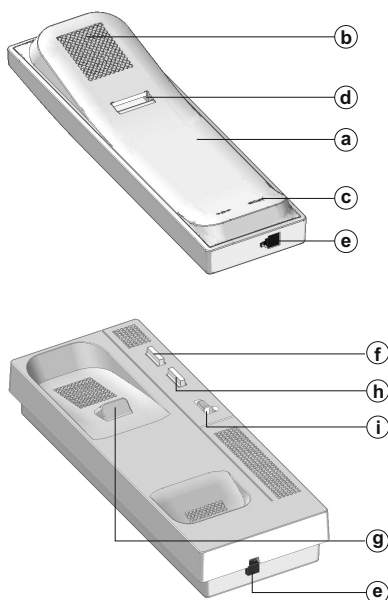
Each apartment must have one master unit only; in case of parallel units configure them as slaves, both monitors or telephones.



Make a call to check that the monitor has been successfully programmed.
Repeat these steps to program the rest of monitors.

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

Description of the T-540 Plus telephone.



- a. Telephone handset.
- b. Speaker grille.
- c. Microphone hole.
- d. Subjection hole.
- e. Telephone cord connectors.
- f. Door release push button.
- g. Hook switch.
- h. Auxiliary function push button.
- i. Volume control.

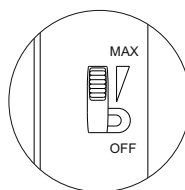
Terminal connector description.

+	-	A	D	AI	-	HZ	SA	+	Int	PA
---	---	---	---	----	---	----	----	---	-----	----

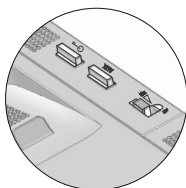
- +, - : Positive, ground.
- A, D : Audio, digital communication.
- AI : Connection to external door release push button.
- HZ : Door bell push button input.
- SA : Auxiliary calling device output SAV-90.
- INT : Intercom.
- PA : Output for aux. relay activation (18Vdc/0,5A max.)

Call volume control.

The telephone allows to regulate the call volume with a maximum, medium and off value. With the help of the switch of three positions placed in the right front of the telephone.



Function push buttons.

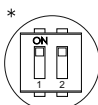
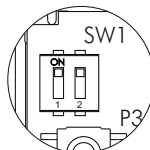


KEY If the handset is on the cradle sends a panic call to the porter's exchanges that have enabled the reception of this type of call. If not, allows to call to the master porter's exchange. During call reception and communication progresses allows the lock release activation.

AUX Auxiliary function push button, depending on setting in the SW1 dip switch will realize one of the following functions: Autoswitch-on, "PA" output, call to a slave porter's exchange and intercommunication.

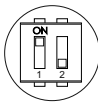
Description of configuration dip switch.

The SW1 configuration dip switch is located at the top left part of the circuit, it is accessed by opening the telephone and allow the next operation modes for the auxiliary function push button:



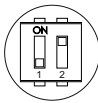
* "Autoswitch-on" mode: switches 1 and 2 to ON.

With the handset off the cradle, allows to establish audio communication with the door panel that has been configured with the autoswitch-on function. This function is disabled if a communication is already established.



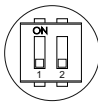
"PA" output mode: switches 1 to ON and 2 to OFF:

Regardless of the handset's position, it activates the "PA" telephone output.



"Call to a slave porter's exchange" mode: switches 1 to OFF and 2 to ON.

With the handset off the cradle, allows to call to a porter's exchange that it is configured as slave.



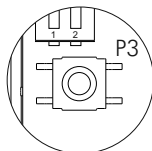
"Intercommunication" mode: switches 1 and 2 to OFF.

With the handset off the cradle, allows to make an intercom call between two units of the same apartment.

IMPORTANT: Select the auxiliary function push button mode before programming the telephone.

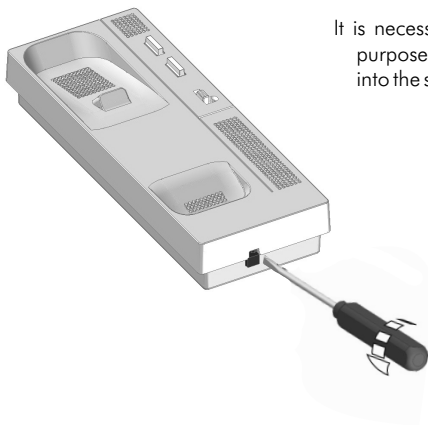
* **Factory default**

Description of programming push button.



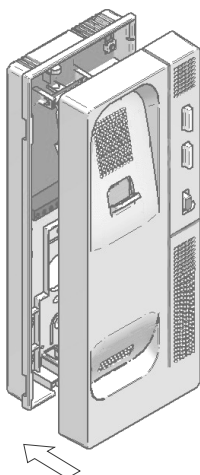
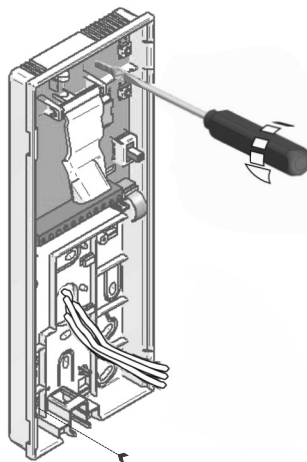
The P3 programm push button is located at the top left part of the circuit, it is accessed by opening the telephone. Allows to telephone enter in programming mode with the door panel, (see programming process on page 132).

Fix the telephone to the wall.



It is necessary to open the telephone for wiring and fixing purposes. To open the telephone, insert a plain screwdriver into the slots and gently lever as shown in the drawing.

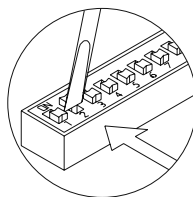
Avoid placing the telephone near sources of heat, in dusty locations or smoky environments. The telephone can be fixed using an electrical embedding box or directly on the wall, as shown on the picture. If the telephone will be installed directly over the wall, drill two holes of $\varnothing 6\text{mm}$ on the specified positions, using 6mm wall plugs and $\varnothing 3.5 \times 25\text{mm}$ screws.



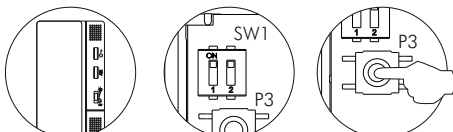
Pass the installation wires through the corresponding hole and connect them as shown on the installation diagrams. Close the telephone as shown on the picture. Once the telephone is closed, connect the handset using the telephone cord and put it on the cradle.

Programación de los teléfonos T-540 Plus.

Set to ON the switch number 2 of the SW2 configuration dip switch, placed at the upper left side (back) of the sound module. The door panel will reproduce a sound to advise that the system has entered into programming mode. In systems with more than one door panel, the programming process shall be done on the master door panel only.



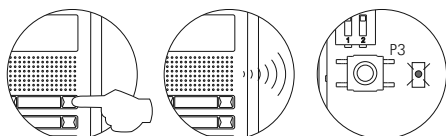
To program the telephone from a general door panel (if it exists), see page 119.



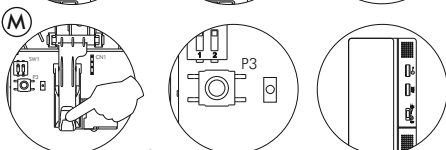
Open the telephone to programming (see page 131). Select in the SW1 dip switch the function mode for the auxiliary function push button (see page 130) and later press the P3 programming push-button.



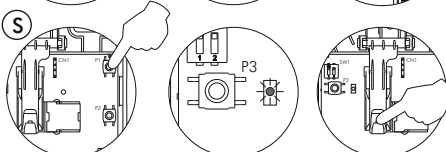
To show that the system is ready for programming, the door panel and the telephone's handset will reproduce a tone (the telephone led will light). Audio communication can be established.



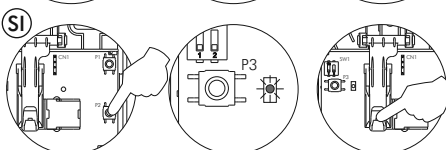
Press the door panel push button that will call to this telephone. At this moment both door panel and handset will reproduce tones (the telephone led will slow blink).



To program the telephone as **Master**, press the hook switch (the telephone led will off). Close the telephone.



To program the telephone as **Slave**, press the P1 door release push button (the telephone led will quick blink) and later press the hook switch (the led will off). Close the telephone.



To program the telephone as **Slave + Intercom.**, press the P2 auxiliary function push button (the led will quick blink) and later press the hook switch (the led will off). Close the telephone.

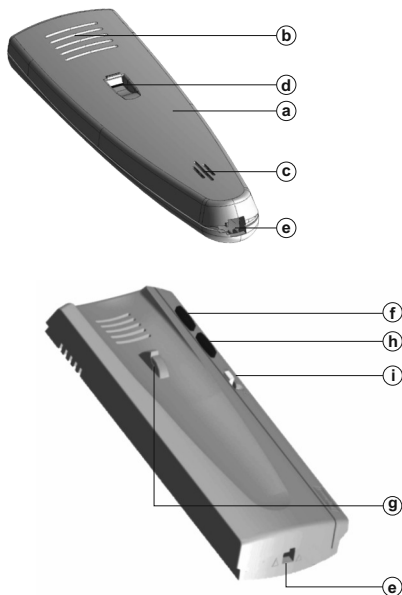
Each apartment must have one master unit only; in case of parallel units configure them as slaves, both monitors or telephones.



Make a call to check that the telephone has been successfully programmed. Repeat these steps to program the rest of telephones.

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

Description of the T-740 Plus telephone.



- a. Telephone handset.
- b. Speaker grille.
- c. Microphone hole.
- d. Subjection hole.
- e. Telephone cord connectors.
- f. Door release push button.
- g. Hook switch.
- h. Auxiliary function push button.
- i. Volume control.

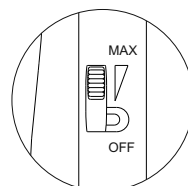
Terminal connector description.

+	-	A	D	AI	-	HZ	SA	+	Int	PA
---	---	---	---	----	---	----	----	---	-----	----

- +, - : Positive, ground.
- A, D : Audio, digital communication.
- AI : Connection to external door release push button.
- HZ : Door bell push button input.
- SA : Auxiliary calling device output SAV-90.
- INT : Intercom.
- PA : Output for aux. relay activation (18Vdc/0,5A max.)


Call volume control.


The telephone allows to regulate the call volume with a maximum, medium and off value. With the help of the switch of three positions placed in the right front of the telephone.



Function push buttons.

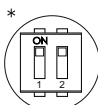
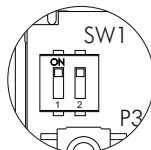


 If the handset is on the cradle sends a panic call to the porter's exchanges that have enabled the reception of this type of call. If not, allows to call to the master porter's exchange. During call reception and communication progresses allows the lock release activation.

 Auxiliary function push button, depending on setting in the SW1 dip switch, it will realize one of the following functions: Autoswitch-on, "PA" output, call to a slave porter's exchange and intercommunication.

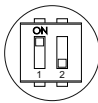
Description of configuration dip switch.

The SW1 configuration dip switch is located at the top left part of the circuit, it is accessed by opening the telephone and allow the next operation modes for the auxiliary function push button:



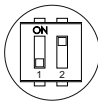
"Autoswitch-on" mode: switches 1 and 2 to ON.

With the handset off the cradle, allows to establish audio communication with the door panel that has been configured with the autoswitch-on function. This function is disabled if a communication is already established.



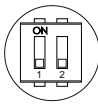
"PA" output mode: switches 1 to ON and 2 to OFF:

Regardless of the handset's position, it activates the "PA" telephone output.



"Call to a slave porter's exchange" mode: switches 1 to OFF and 2 to ON.

With the handset off the cradle, allows to call to a porter's exchange that it is configured as slave.



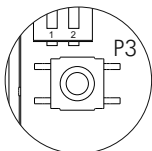
"Intercommunication" mode: switches 1 and 2 to OFF.

With the handset off the cradle, allows to make an intercom call between two units of the same apartment.

IMPORTANT: Select the auxiliary function push button mode before programming the telephone.

* **Factory default**

Description of programming push button.



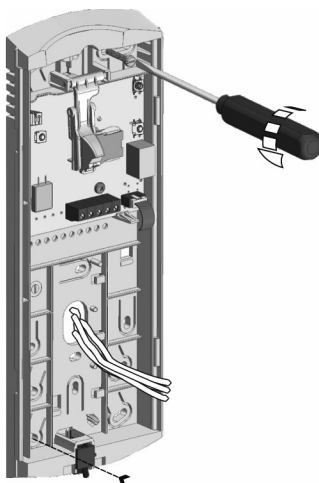
The P3 programm push button is located at the top left part of the circuit, it is accessed by opening the telephone. Allows to telephone enter in programming mode with the door panel, (see programming process on page 136).

Fix the telephone to the wall.



It is necessary to open the telephone for wiring and fixing purposes. To open the telephone, insert a plain screwdriver into the slots and gently lever as shown in the drawing.

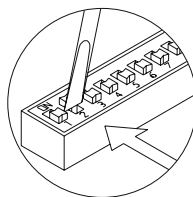
Avoid placing the telephone near sources of heat, in dusty locations or smoky environments. The telephone can be fixed using an electrical embedding box or directly on the wall, as shown on the picture. If the telephone will be installed directly over the wall, drill two holes of $\varnothing 6\text{mm}$ on the specified positions, using 6mm wall plugs and $\varnothing 3.5 \times 25\text{mm}$ screws.



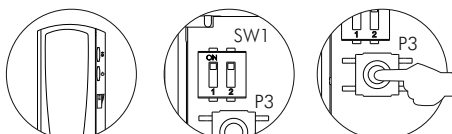
Pass the installation wires through the corresponding hole and connect them as shown on the installation diagrams. Close the telephone as shown on the picture. Once the telephone is closed, connect the handset using the telephone cord and put it on the cradle.

Programación de los teléfonos T-740 Plus.

Set to ON the switch number 2 of the SW2 configuration dip switch, placed at the upper left side (back) of the sound module. The door panel will reproduce a sound to advise that the system has entered into programming mode. In systems with more than one door panel, the programming process shall be done on the master door panel only.



To program the telephone from a general door panel (if it exists), see page 119.



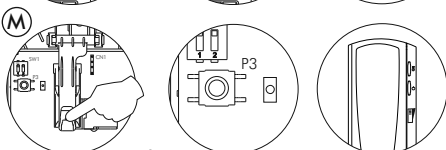
Open the telephone to programming (see page 135). Select in the SW1 dip switch the function mode for the auxiliary function push button (see page 134) and later press the P3 programming push-button.



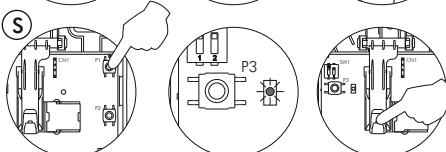
To show that the system is ready for programming, the door panel and the telephone's handset will reproduce a tone (the telephone led will light). Audio communication can be established.



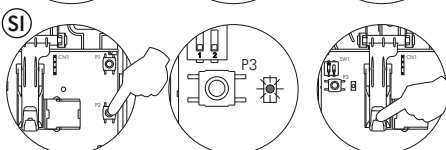
Press the door panel push button that will call to this telephone. At this moment both door panel and handset will reproduce tones (the telephone led will slow blink).



To program the telephone as **Master**, press the hook switch (the telephone led will off). Close the telephone.



To program the telephone as **Slave**, press the P1 door release push button (the telephone led will quick blink) and later press the hook switch (the led will off). Close the telephone.



To program the telephone as **Slave + Intercom.**, press the P2 auxiliary function push button (the led will quick blink) and later press the hook switch (the led will off). Close the telephone.

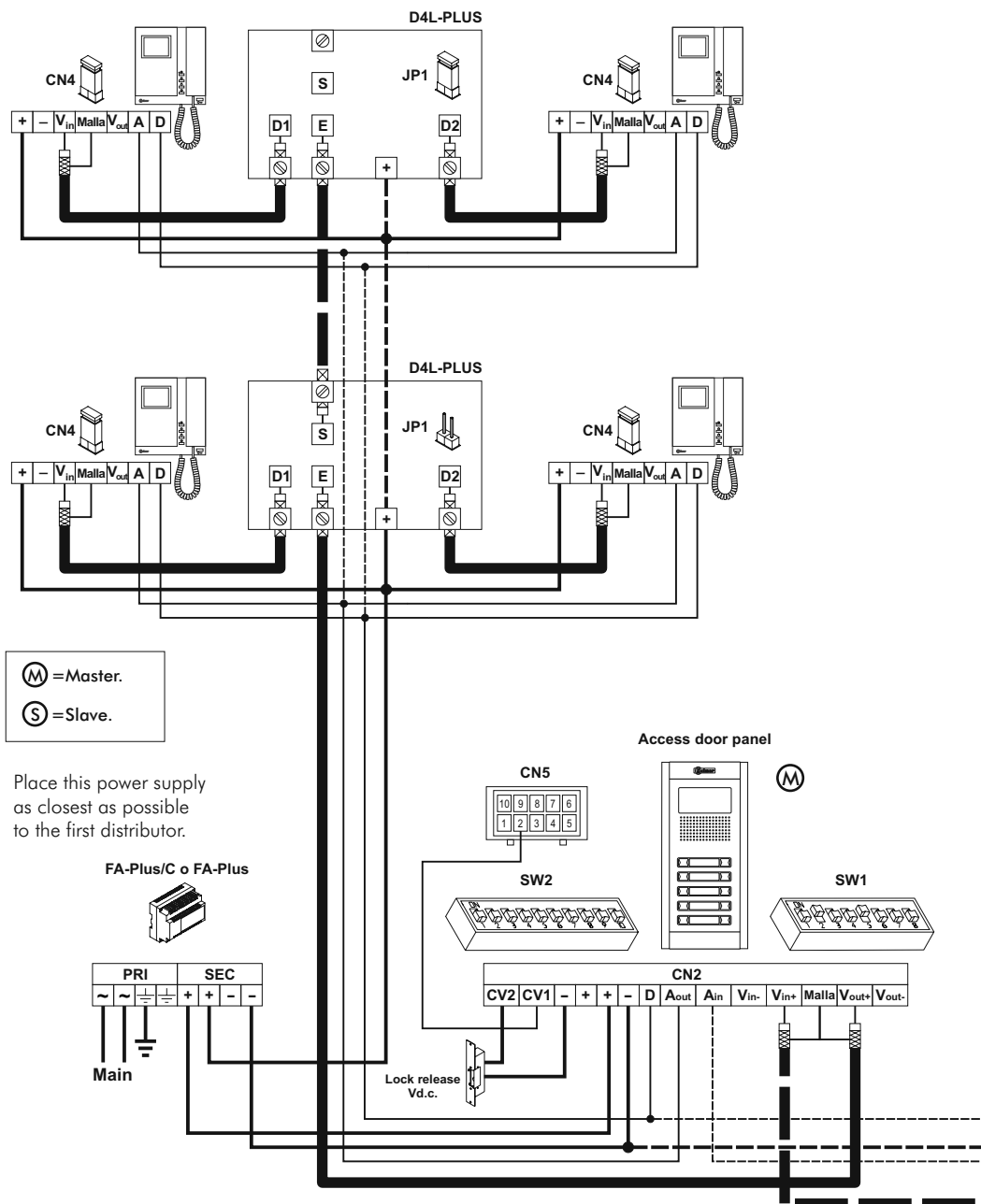
Each apartment must have one master unit only; in case of parallel units configure them as slaves, both monitors or telephones.



Make a call to check that the telephone has been successfully programmed. Repeat these steps to program the rest of telephones.

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

Take off JP1 jumper
of all the distributors
except in the last one.



Video installation with coaxial cable.

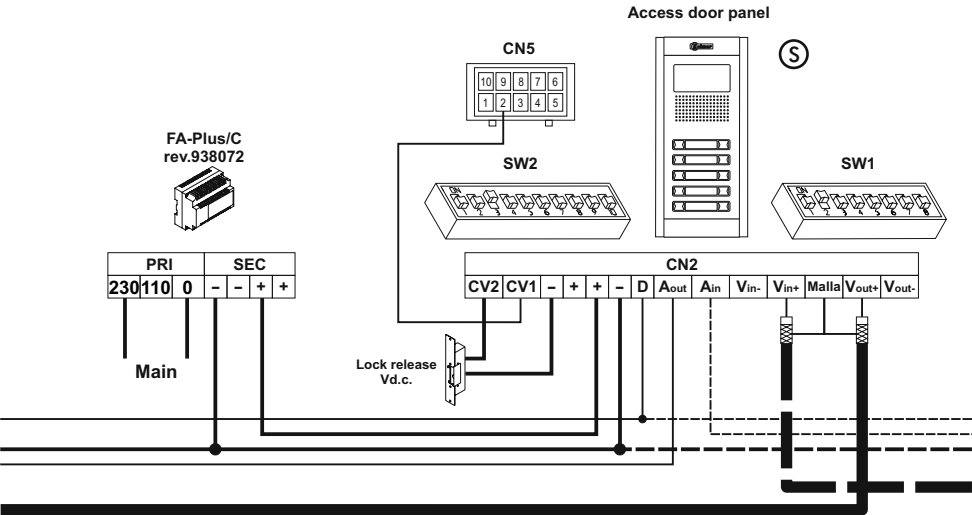
The installation diagram shows the connection of a video system with one or several door panels for the same building.

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	
	50m.	150m.
Terminal		
+, -, CV1, CV2	1,00mm ²	2,50mm ²
A _{in} , A _{out} , A, D	0,25mm ²	0,25mm ²
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 resistance to 20°C	
Copper core	≤158 Ω/Km
Copper shield	≤10 Ω/Km
Nominal capacitance	≤67pf/m
Characteristic impedance	75 ± 3 Ω
Velocity of Propagation	≥66,6 %





Access door panel

©

SW1

Lock release
Vd.c.

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.

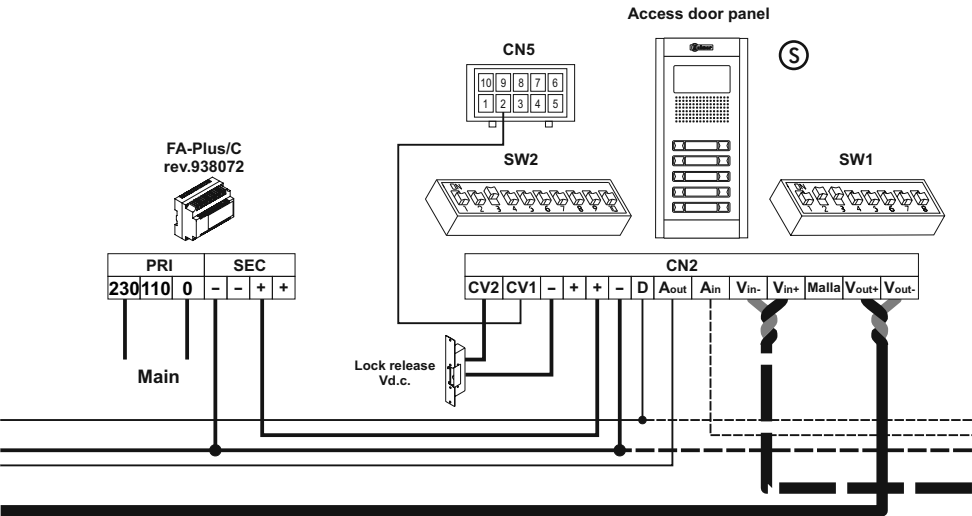
If the system has one access door panel only, override the wiring to the second door panel.

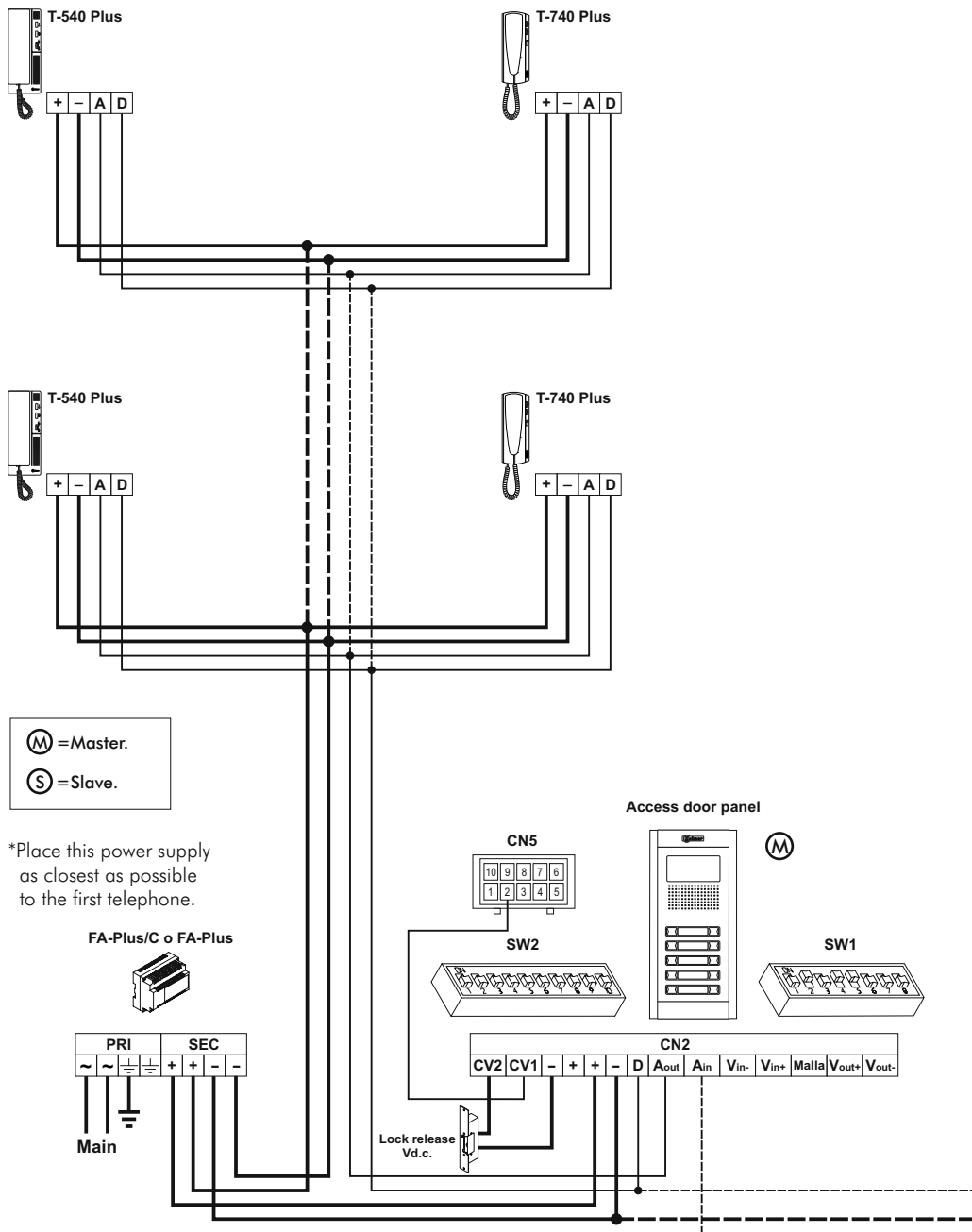
If the system has more than one access door panel, wire the second panel as shown on the diagram.

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 1 15) and the monitors must have an EL562 plugged in each (page 1 25).

SECTIONS CHART	Distance	
	50m.	150m.
+, -, CV1, CV2	1,00mm ²	2,50mm ²
A _{in} , A _{out} , A, D	0,25mm ²	0,25mm ²
V _{in+} , V _{out+} , V _{p,d} , M _{p,d}	CAT-5	CAT-5





Audio installation.

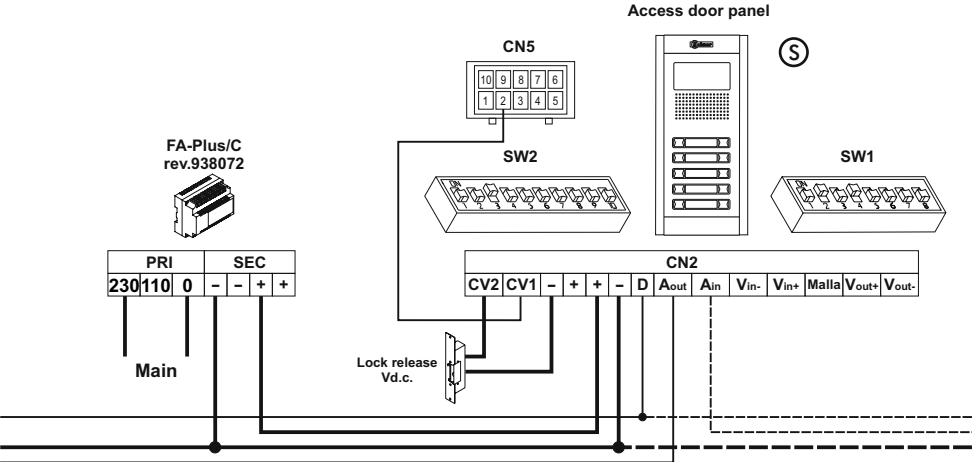
The installation diagram shows the connection of an audio system with one or several door panels for the same building.

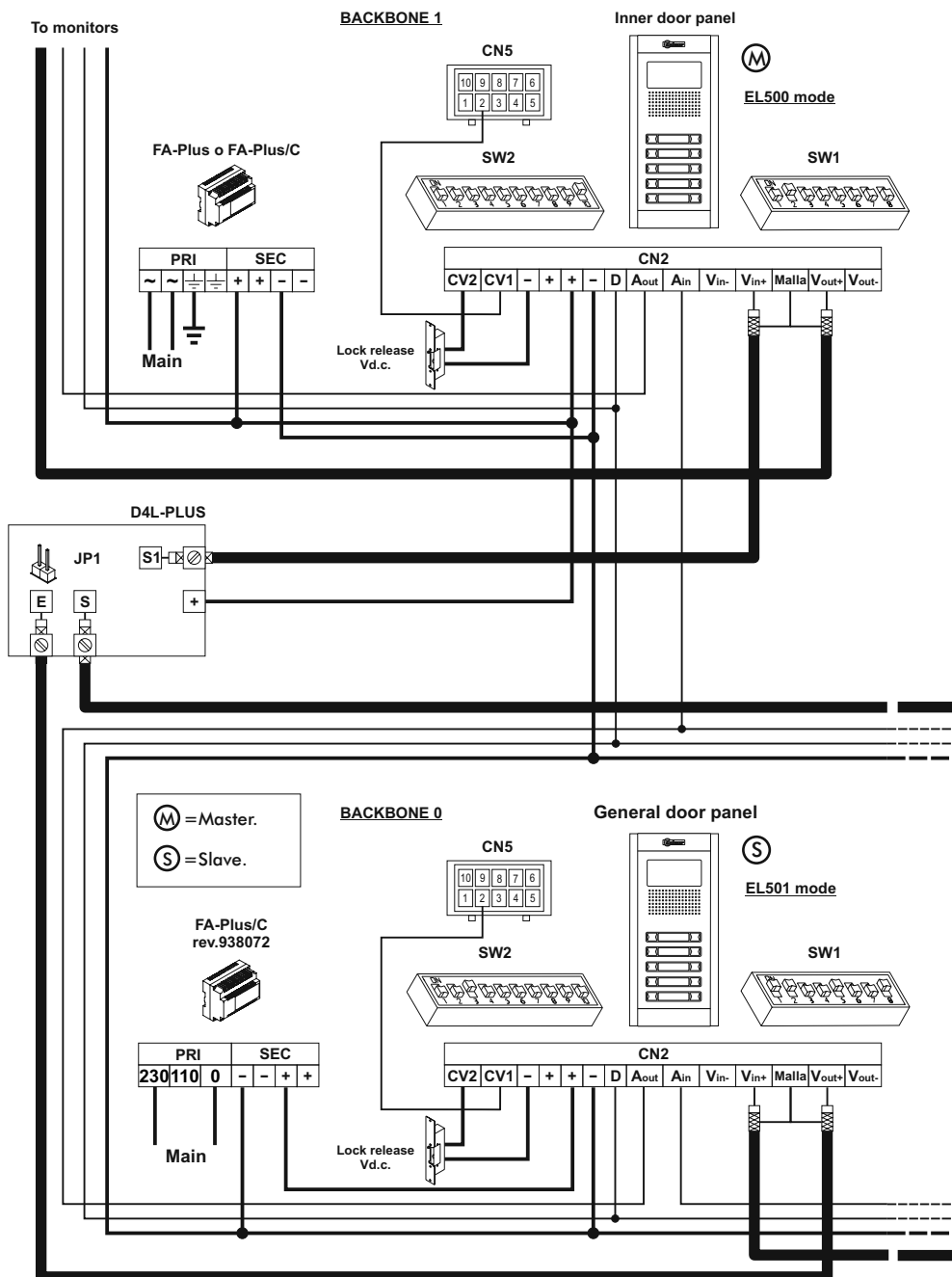
If the system has one access door panel only, override the wiring to the second door panel.

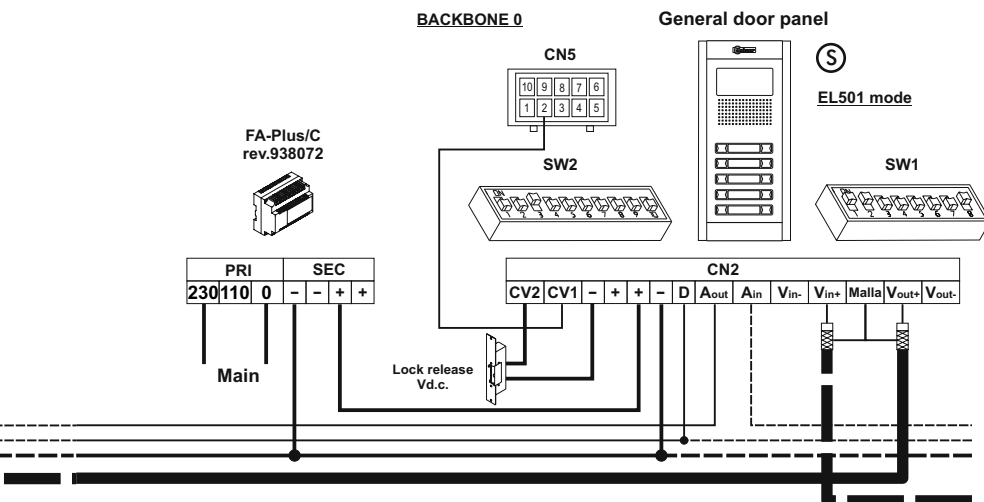
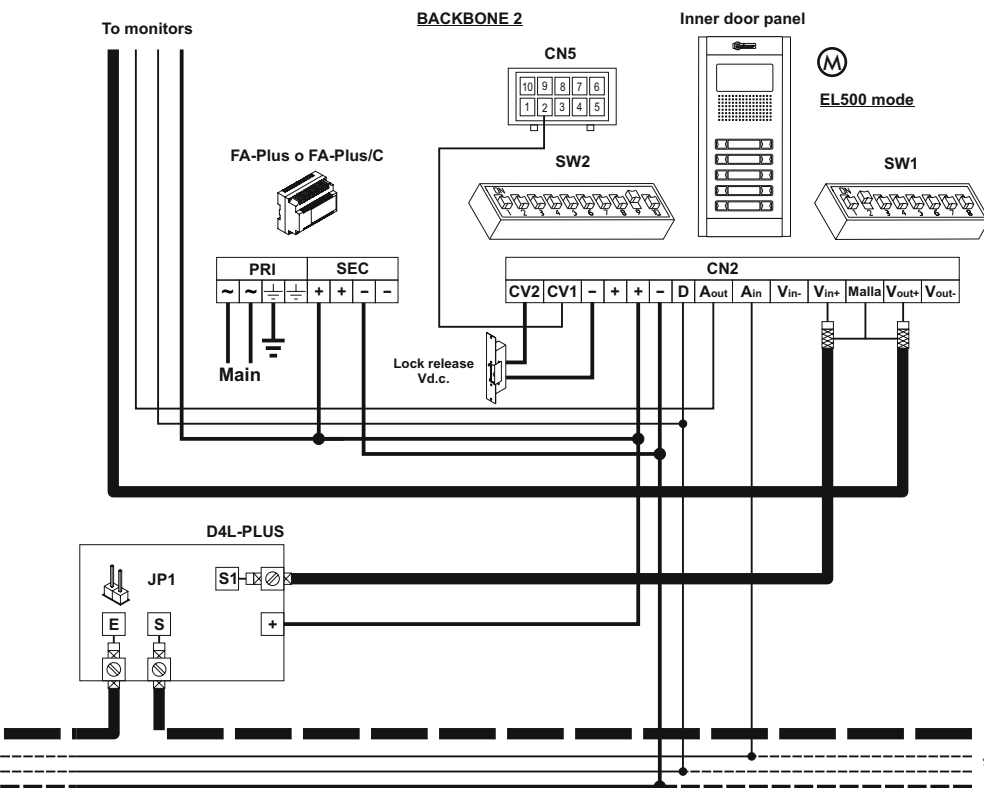
If the system has more than one access door panel, wire the second panel as shown on the diagram.

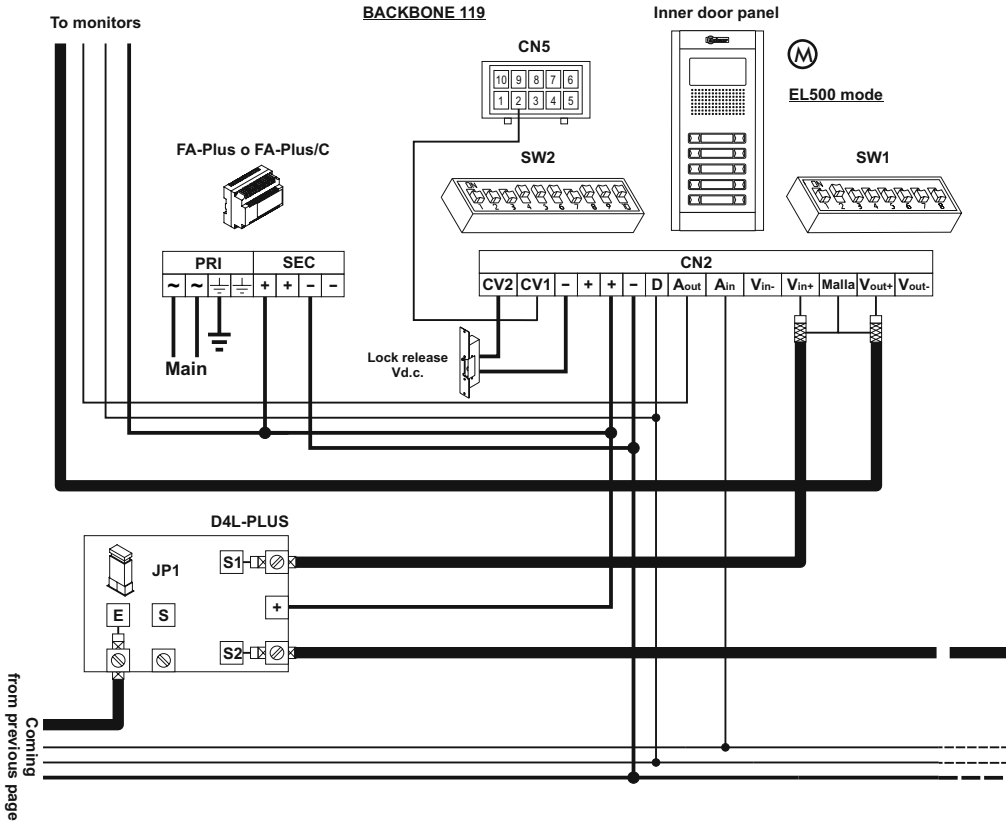
In case of more than two door panels, wire them as the second is connected.

SECTIONS CHART	Distance	
	50m.	150m.
+, -, CV1, CV2	1,00mm ²	2,50mm ²
A _{in} , A _{out} , A, D	0,25mm ²	0,25mm ²





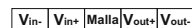
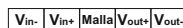


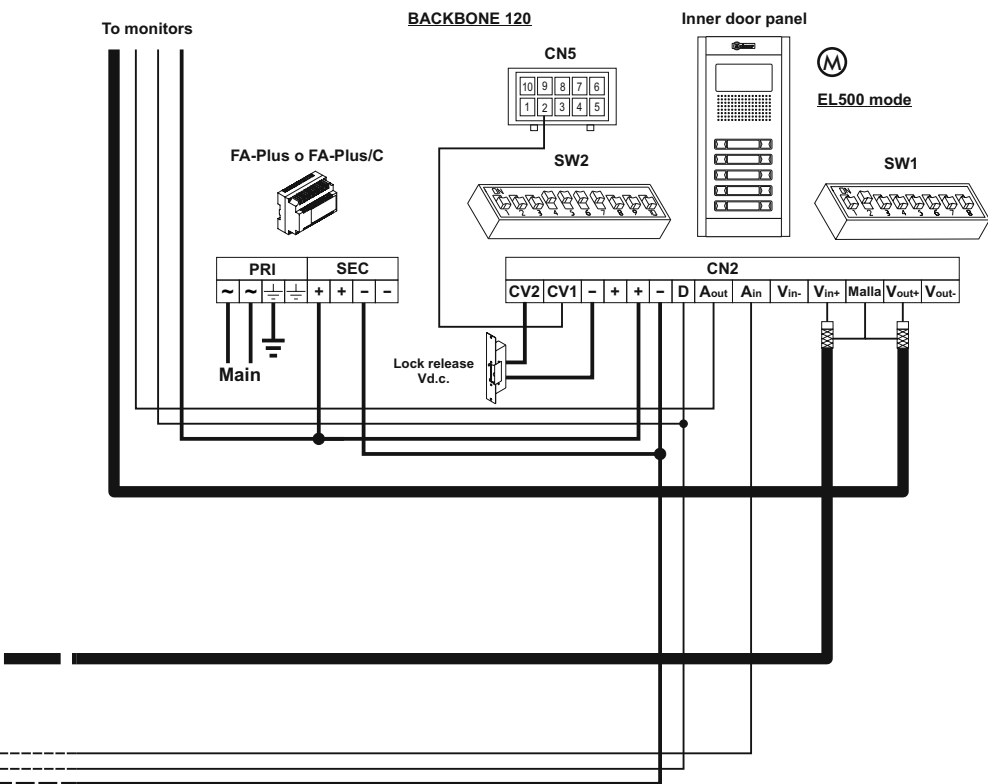


Video installation with general door panel to large residential complexes.

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 connected.
- 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 139).
- Below shows the connection of the twisted pair instead of coaxial cable.





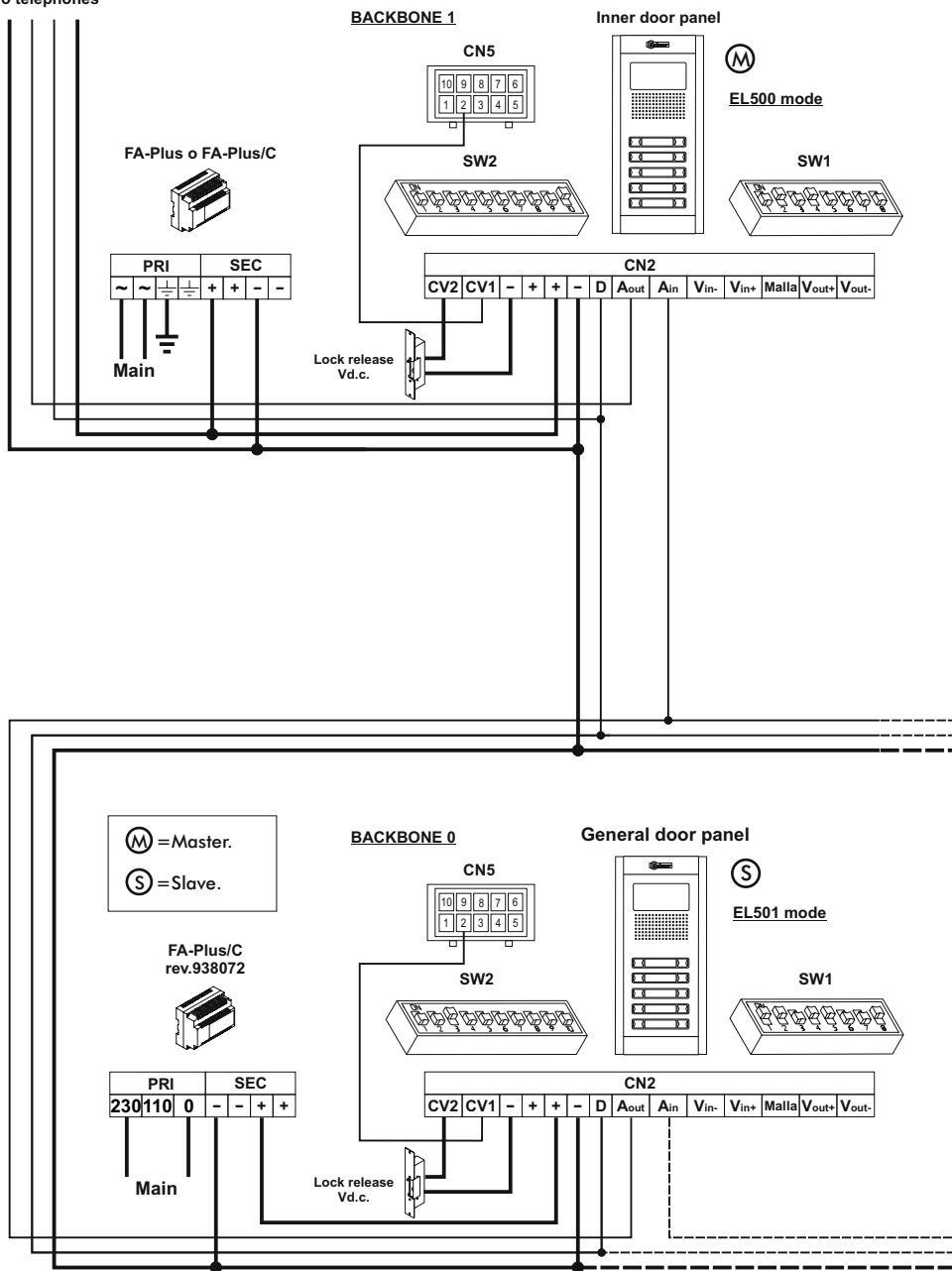
Video installation with general door panel to large residential complexes.

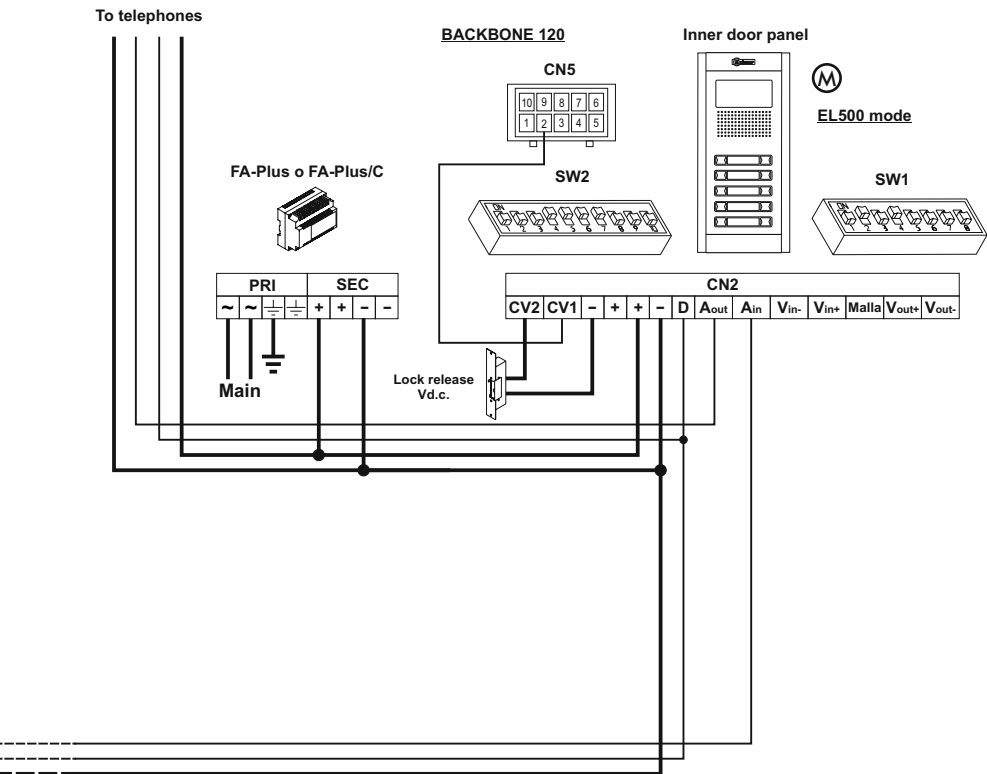
SECTIONS CHART	Distance			
Terminal	100m.	300m.		
+, -, CV1, CV2	1,50mm ²	2,50mm ²		
A _{in} , A _{out} , A, D	0,25mm ²	0,25mm ²		
V _{in+} , V _{out+}	* RG-59	* RG-59	Coaxial	Sw1-3 Off
V _{in+} , V _{in-} , V _{out+} , V _{out-}	CAT-5	CAT-5	Twisted pair	Sw1-3 On

For greater distances contact our technical support department.

* Coaxial cable characteristics RG-59 B/U MIL C-17, (see page 138).

To telephones





IMPORTANT NOTES:

A

udio installation with general door panel to large residential complexes.

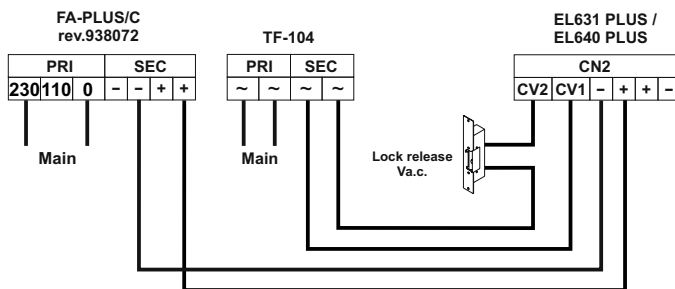
To install and configure properly, do always follow the enclosed information. The installation diagram shows the connection of an audio system with one general door panel and up to 120 inner door panels (backbones/buildings). In case of more than one general door panel, wire them as it shows in the video installation diagram, (see page 143).

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.

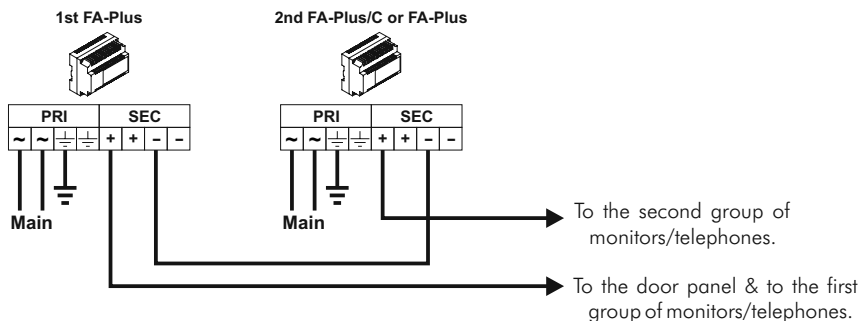
If an alternating current lock release has been installed, use a TF-104 transformer and connect it to the lock release as it is shown on the diagram.



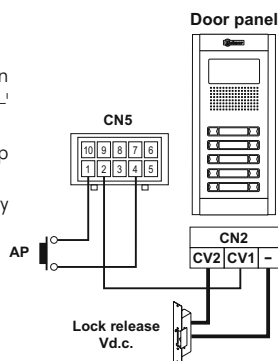
Link of several power supplies units.

If the quantity of monitors or telephones to be connected is bigger than the supported from one power supply (see page 122), 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.




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



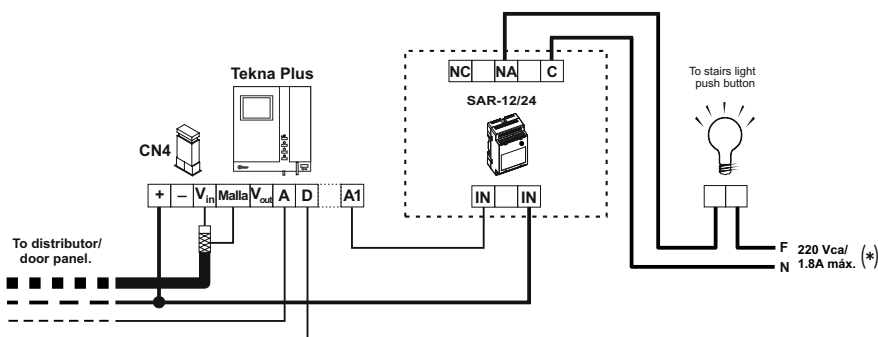
The diagram illustrates the wiring for the FA-Plus/C or FA-Plus unit. The central unit, labeled 'HCP SYNTHÈSE VOCALE', features several connectors: J1 and J2 (3-pin), J6 and J7 (5-pin), a 16-pin terminal block (GND, VE, JA, RO, SC, CA, R, OP, 12+, 12-, PDN, ALM, PDB, PDG, MAS), a 10-pin connector (CN5), a 16-pin connector (SW2), a 16-pin connector (SW1), a 16-pin connector (CN2), and a 16-pin connector (CN1). The unit is connected to a 'To monitors' block, a 'Main' power source, a 'TF-104' transformer, a 'SW2' switch, a 'SW1' switch, a 'CN2' connector, and a 'CN1' connector. The diagram also shows a 'Lock release Vd.c.' connection.

Auxiliary devices activation with Tekna Plus monitors.

To activate auxiliary devices the use of a SAR-12/24 relay unit will be required. If this device is shared for all monitors, link their A1 terminal and use just one relay unit. In case that each monitor has its own application use a SAR-12/24 relay unit for each monitor and don't link the A1 monitor terminals.

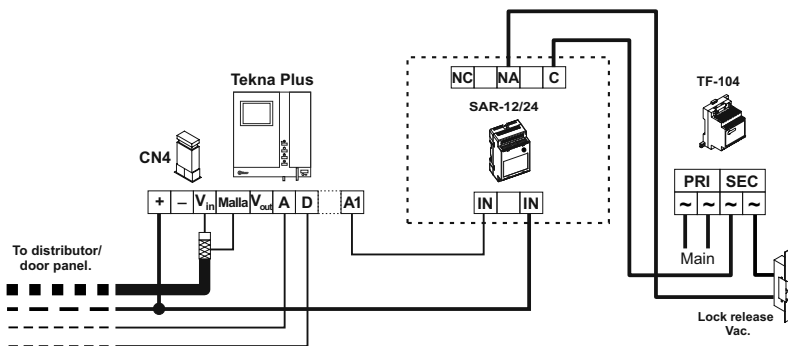
To activate this function, press  monitor push button at any moment with no dependence of the handset position.

Usual applications are the activation of stairs light, second lock release, ...



(*) The neutral supply from the stairs light will be wired through the relay contacts SAR-12/24, the maximum current for stairs light will be 1.8A.

The use of a TF-104 transformer will be necessary to activate a second lock release.



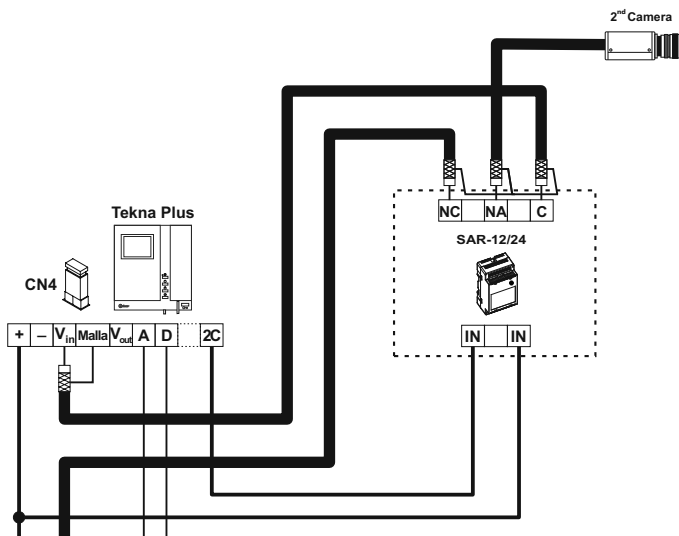
A ctivation of a second camera.

The use of a SAR-12/24 relay will be required to activate a second camera and an internal modification on the monitor shall be done, as it's described on page 124. This facility disables the intercom function. If both functions are required, use A1 terminal to activate the second camera. To activate this function, press \odot monitor push button at any moment with no dependence of the handset position.

If this device is shared for all monitors, link their 2C terminal and use just one relay unit. In case that each monitor has its own camera use a SAR-12/24 relay unit for each monitor and don't link the 2C monitor terminals.

This push button can be used to activate other auxiliary devices, as the A1 terminal is used.

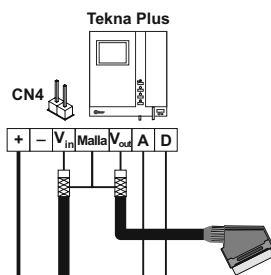
Usual applications are the surveillance of the elevator entrance, reception hall, ...



C onnecting the Tekna Plus monitor to a video recorder or TV.

If your TV or video recorder have a SCART connector, it will be possible to view the picture from the door panel on the TV screen.

Remove the end of line jumper, that's placed on the CN4 connector. Connect the coaxial cable between terminals 17 (shield) and 20 (hot) of the SCART connector.



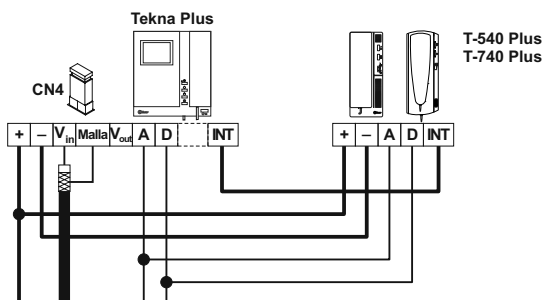
Intercom function.

Tekna Plus monitor and (*) T-540Plus and T-740 Plus telephones have intercom facility between two units of the same apartment. To enable this function check the following conditions:

- One of the units has been configured as master and the other unit as slave with intercom, as described on pages 128, 132 and 136. In case to intercom one monitor with one telephone, configure the monitor as master.
- Link the INT terminal of the units, as it is shown on the enclosed diagram.

To establish an intercom communication lift the handset and press the intercom push button, acoustic tones will be reproduced on the handset confirming the call is in progress or that the other unit is communicating with the door panel. To establish communication lift the handset of the called unit. If during an intercom communication a call is made from the door panel, acoustic tones will be heard on the master unit handset and the picture will appear in case of a monitor; press the intercom push button of the master unit to establish communication with the door panel, or press the door release push button to activate the lock release.

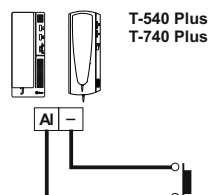
The reproduced acoustic tones are different depending on their provenance, that allows the user to distinguish where the call is made from.



*** IMPORTANT:** T-540 Plus and T-740 Plus telephones must be configured with SW1 dip switch in "Intercom" mode function (see pages 130 and 134 respectively).

External lock release activation with T-540 Plus/T-740Plus telephones.


During call reception and communication progresses allows the lock release activation, by using an external push button, that must be connected between 'AI' and '-' terminals of the telephone.



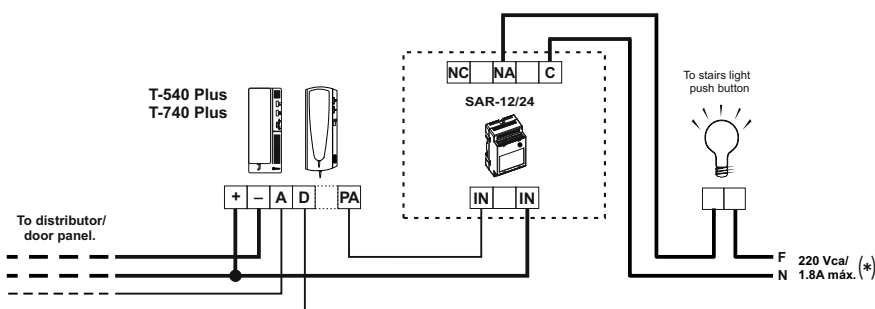
Auxiliary devices activation with T-540 Plus/T-740 Plus telephones.

First the T-540 Plus and T-740 Plus telephone must be configured with SW1 dip switch in "PA" output mode function (see pages 130 and 134 respectively).

To activate auxiliary devices the use of a SAR-12/24 relay unit will be required. If this device is shared for all T-540 Plus/T-740 Plus telephones, link their PA terminal and use just one relay unit. In case that each telephone has its own application use a SAR-12/24 relay unit for each telephone and don't link the PA telephone terminals.


To activate this function, press the 'Aux' push button with T-540 Plus or press  push button with T-740 Plus telephone at any moment with no dependence of the handset position.

Usual applications are the activation of stairs light, second lock release, ...

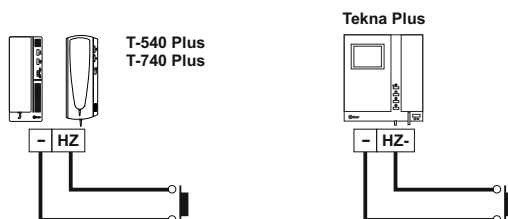


(*) The neutral supply from the stairs light will be wired through the relay contacts SAR-12/24, the maximum current for stairs light will be 1.8A.

Door bell push button connection.

Tekna Plus monitor and the T-540 Plus and T-740 Plus telephones can be used to receive the calls made from the apartment door, saving the use of a bell. Wire the push button of the apartment door to the 'HZ' and  monitor or telephone terminals.

The reproduced acoustic tones are different depending on their provenance, that allows the user to distinguish where the call is made from. If during a conversation a call is made from the apartment door, acoustic tones will be reproduced on the handset to advise that someone is calling.



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 'L' monitor or distributor terminals.

⇒ Nothing operates.

- ⌚ Check the output power supply voltage between 'L' 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 'L' 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 120. In case of feedback, reduce the audio levels until feedback fade out. If feedback don't dissappears 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 137 to 148) or 12Vac (page 149) is needed.

- ⌚ Make a short circuit between the 'CV1' and 'CV2' terminals on the sound module; there should be 12V (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 116) 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 631 Plus is in OFF (see page 115).

- ⌚ Check there is supply in the distributors, the voltage between '+' and 'L' terminals should have 15 to 18Vd.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 113 to 114).

- ⌚ If confirmation of pulsation exists, check the monitors or telephones programming (pages 128, 132 and 136).

[illegible]

[illegible]

[illegible]

Este producto es conforme con las disposiciones de las Directivas Europeas aplicables respecto a la Seguridad eléctrica **2006/95/CEE** y la Compatibilidad Electromagnética **2004/108/CEE**, así como con la ampliación en la Directiva del Marcado CE **93/68/CEE**.

*This product meets the essentials requirements of applicable European Directives regarding Electrical Safety **2006/95/ECC**, Electromagnetic Compatibility **2004/108/ECC**, and as amended for CE Marking **93/68/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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