



Cód. 50124545

Video Kit
digital installation

Stadio Plus

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 92). 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 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 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

- ☛ Microprocessed system with 3 common wires plus coaxial cable installation or 4 common wires plus twisted pair (only for kits /SC).
- ☛ Fully compatible with 'Stadio' audio systems of 4 common wires installation.
- ☛ Unlimited number of door panels being not necessary the use of switching units.
- ☛ EL560 module for video installations with twisted pair cable, integrated in EL500SE circuit.
- ☛ Communications resistor for the system UNO or PLUS, integrated in EL500SE circuit.
- ☛ 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 2 monitors and 1 telephone in the same apartment without additional power supplies.
- ☛ With T-940 Plus telephones:
 - ⌚ Privacy on audio communications.
 - ⌚ Three-position control for call volume: maximum, medium and minimum.
 - ⌚ 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 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, ...
- ☛ With T-740 Plus telephones, addition to the above features:
 - ⌚ Three-position control for call volume: maximum, medium and off.
 - ⌚ Input for external door release push button.
 - ⌚ Allows one of these functions at once, Configuration with dip switch Sw1 (see page 89):
 - ⌚ "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, addition to the T-940 Plus telephones features:
 - ⌚ Privacy on audio and video communications.
 - ⌚ "Autoswitch-on" function.
 - ⌚ "Video-spy" function with the communication channel remaining free.
 - ⌚ Call to a slave porter's exchange.
 - ⌚ Activation of two auxiliary devices: secondary telecamera, courtesy light, ...
 - ⌚ B/W & Color monitor.
 - ⌚ Brightness and contrast control (color control in case of color screen).

SYSTEM OPERATION

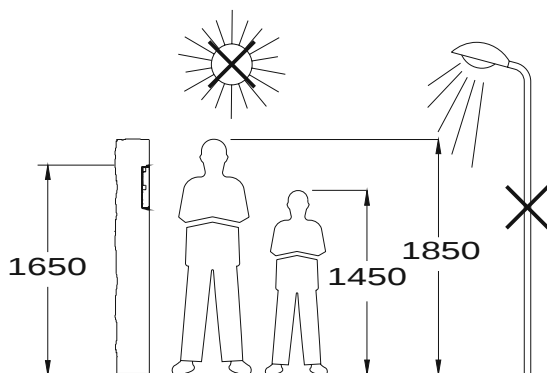
- ⇨ To make a call the visitor should press the push button corresponding to the apartment he wishes to contact. An acoustic tone will be heard confirming the call is in progress once the push button has been pressed. At this moment the call will be received at the monitor (telephone) in the dwelling. 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 access 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.
- ⇨ 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 telephone push buttons description is shown on pages 80, 85 and 89 respectively.

IMPORTANT NOTICE

- ⇨ One way systems are delivered fully programmed.
- ⇨ Wire the door panel push buttons as it is shown on page 74.
- ⇨ In case of two ways systems it will be only necessary to program the monitor which will be called through the left push button.

E

embedding box positioning.



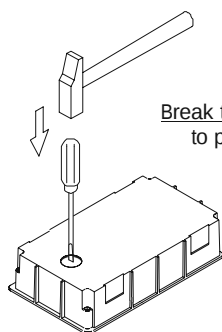
The upper part of the door panel should be placed at 1,65m. height roughly.

The hole dimensions are: 125(W) x 140(AI) x 57(D) mm.

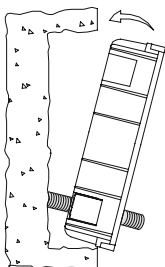
The door panel has been designed to be placed under most of the environmental conditions. However it's recommended to take additional cautions like rainproof covers. To obtain a good quality picture on video door entry systems, avoid direct incidence from light sources.

P

reparing the embedding box.



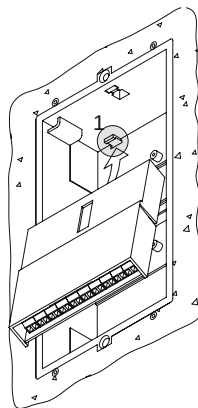
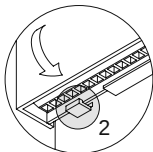
Break the bottom flange
to pass the cables through.



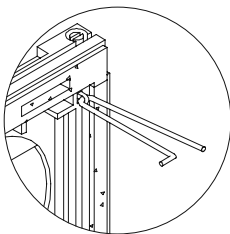
Pass the wiring through the hole made in the bottom part of the embedding box. Level and flush the embedding box. Once the embedding box is placed, remove the protective labels from the attaching door panel holes.

A ssembling the EL500SE microprocessed circuit.

The EL500SE circuit is to be assembled on the top of the embedding box. Insert the circuit in the top flanges of the embedding box (1). Push-in the circuit in the bottom flanges (2) by pressing the pcb board.

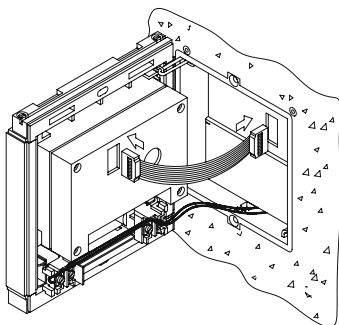
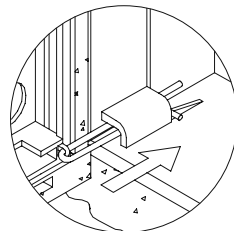


H old the door panel on the embedding box.



Select a direction to open the door panel; this selection should ease the door panel wiring. The opening direction will be settled through the hinges position, that must be passed through the header clips as shown. For example, if the hinges are placed on both clips of the lower header, the door panel will open downwards; if they are placed on the right clips of both headers, the door panel will open to left.

To hold the door panel on the embedding box, insert the hinges in the embedding box lockers as shown.



Link the sound module with the EL500SE microprocessing circuit by using the supplied flat cable.

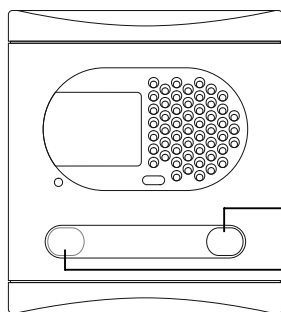
Push buttons wiring.



Plug the push buttons connection cable to the CN6 connector of the EL500SE microprocessor circuit, this cable has 10 conductors (P1 to P8, B and CP) for the connection of push buttons

The CP terminal must be connected to the push buttons common terminal.

Link the push buttons inputs (P1 and P8) to the push buttons, as shown in the example.



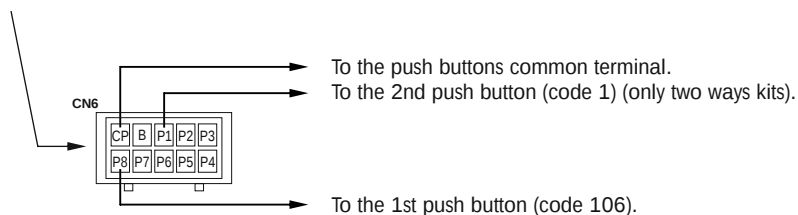
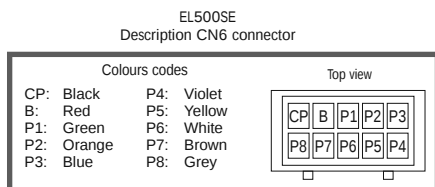
IMPORTANT NOTICE:

Right push button must be connected to P8 terminal.

Push button 1.

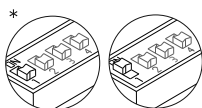
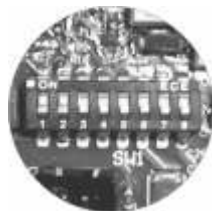
Push button 2, (only two ways kits).

EL500SE description CN6 connector



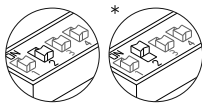
Description of the SW1 configuration dip-switch of the EL500SE microprocessor module.

The SW1 configuration dip-switch is located at the right side of the circuit. It is accessed by opening the terminal connection block protection cover.



Placed to OFF if the EL500SE microprocessor module is configured as EL500 operating mode.

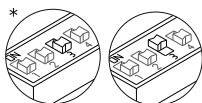
Set to ON if the EL500SE microprocessor module is configured as EL501 operating mode (only general door panel).



Selects the door opening time, done from the external push button ('AP' terminal), see page 97.

Placed to ON: door opening timed at 3 seconds.

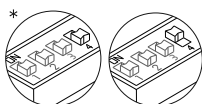
Set to OFF: door opening timed at 15 seconds.



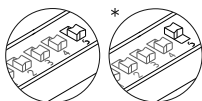
Selects the type of cable to be used for the video signal.

Placed to OFF: coaxial cable RG-59 or RG-11.

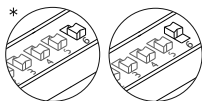
Set to ON: twisted pair.



Selects if the door panel has telecamera or not. In case of door panels without telecamera (EL540 sound module) set to ON.



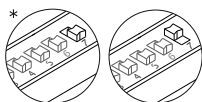
Plus system, loads the installation with a communications resistor Plus. For a proper system operation, placed to ON only in the closest door panel to the backbone installation or in the general door panel (if exists), set the rest to OFF.



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.

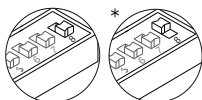
With digital repeater RD Plus/Uno:

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.



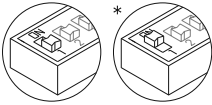
Placed to ON, the calls made on the door panel will be transferred to the porter's exchange (if exists). Set to OFF, the call is received in the apartment.

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.

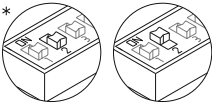
* Factory default

Description of the SW2 configuration dip-switch of the EL500SE microprocessor module.

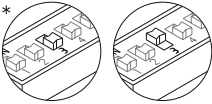
The SW2 configuration dip-switch is located in the center of the circuit. It is accessed by opening the terminal connection block protection cover.



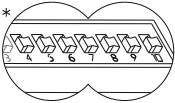
Allows to activate the autoswitch-on function (audio-video communication without previous call) at the door panel that has this switch to ON position. In systems with several door panels activate this function only in one of them; in systems with general door panel this function can be activated in one 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 84 (monitors), 87 and 91 (telephones).



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 EL500SE microprocessor module.

The switches set to OFF have null value. The values of the switches set to ON are shown in the enclosed chart.

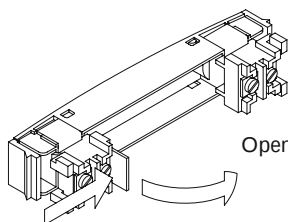
The backbone code will be calculated as the sum result of the switches values set to ON.

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

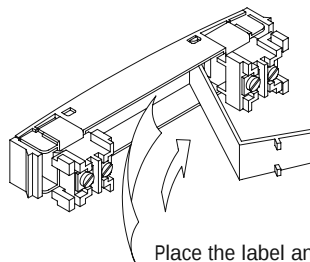


Example: $64 + 0 + 16 + 0 + 4 + 2 + 1 = 87$

Place the nameplate labels.



Open the label holder.



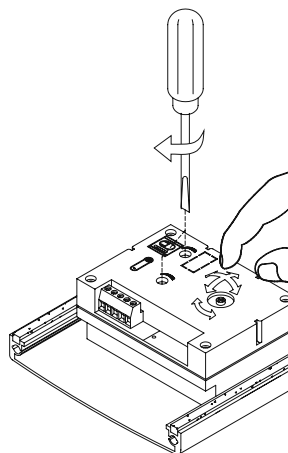
Place the label and close.

Final adjustments.

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

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

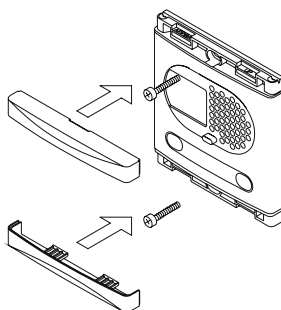
In case of low light conditions, an external illumination can be activated by connecting a SAR-12/24 relay between terminals '+H' and 'L2' of the sound module.



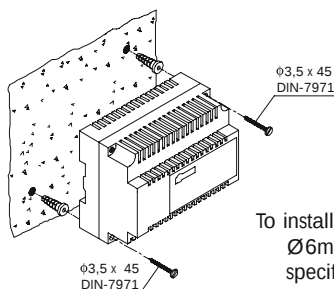
Close the door panel.

Fix the door panel by using the supplied screws.

Finish the door panel assembly by pressing the closing heads.



Installing the FA-805 power supply.

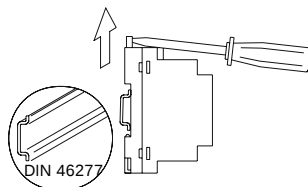


The power supply must be installed in a dry and protected place. It's recommended to protect the power supply by using a thermo-magnetic circuit breaker.

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-805 power supply uses 6 units over DIN guide.

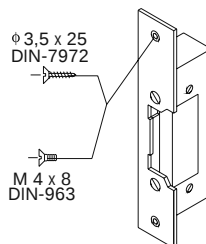


Remember to protect the input terminals with the supplied cover.

LOCK RELEASE INSTALLATION

Lock release installation.

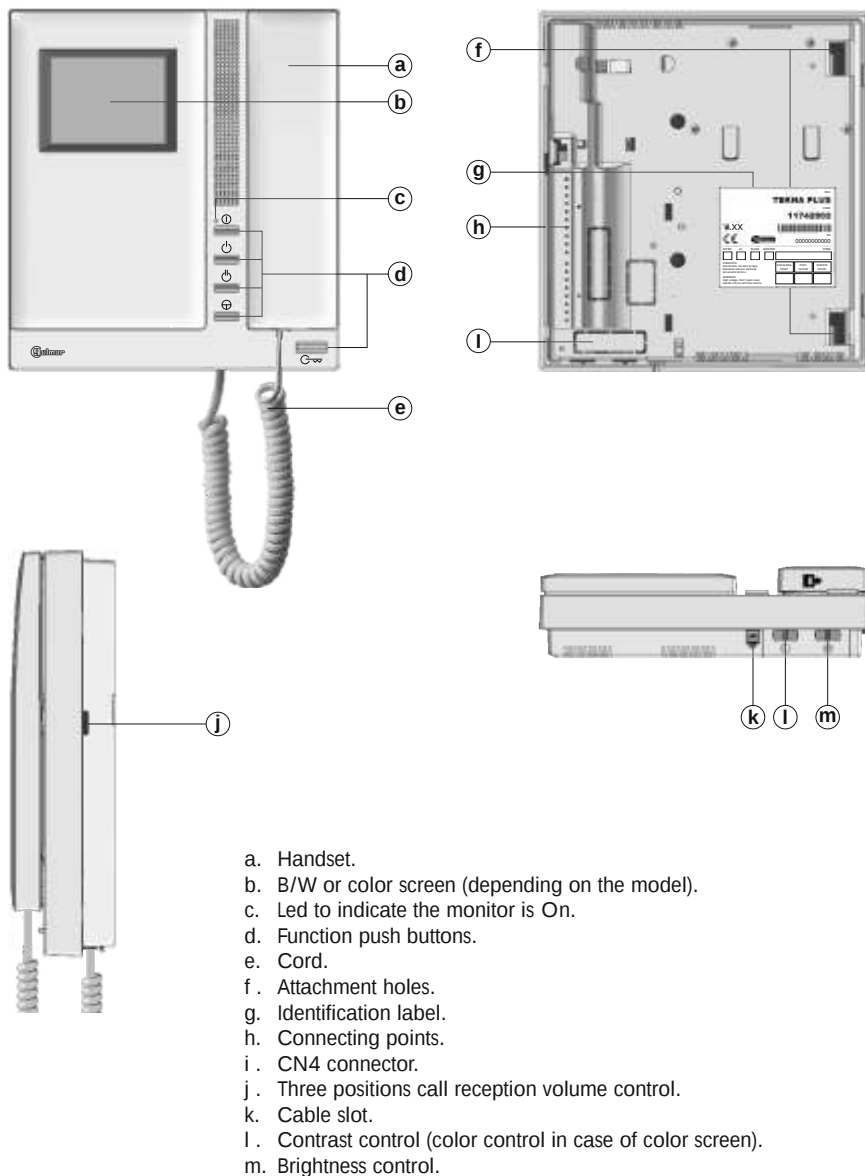
If the lock release will be installed in a metal door, use a Ø3,5mm. drill and tap the hole. In case of wood door, use a Ø3mm. drill.



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

See page 92 (a.c. lock releases) and page 93 - 96 (d.c lock releases)

Description of the Tekna Plus monitor.



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

ESCALERA
STAIR

PISO
FLOOR

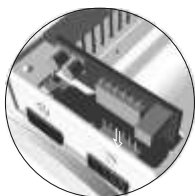
PUERTA
DOOR

ATENCION
Atta tenadón. No abrir la tapa.
Manipular sólo por personal
del servicio técnico.

WARNING
High voltage. Don't open cover.
Handle only by technical service.

For an easiest repair, replacement or increasement of the existing monitors, fill the indentifying label information.

MASTER: master monitor.
SLAVE: slave monitor.
INTER: slave monitor with intercom function.
A1: monitor connected to an auxilliary device.
CODE: push button code (see page 74).
STAIR: backbone code (building) (see page 76).



EI562 module for video installations with twisted pair cable.

The monitors included in kits /SC come with the EI562 module plugged in the CN4 connector, that's placed in the monitor base.

NOTE: on this type of installations the EL500SE microprocessed circuit must be setting with SW1-3 to ON (page 75). Refer to the specific installation diagram.

Handling the end of line jumper.

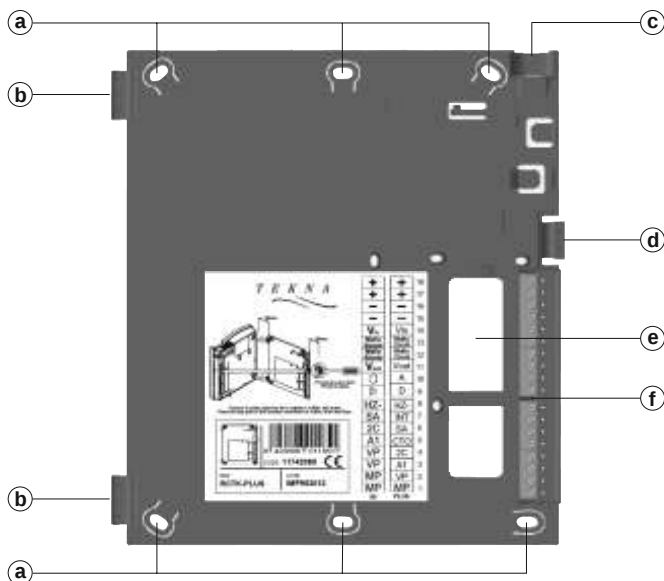


The end of line jumper is placed on the CN4 connector, that can be located on the monitor base. In case of twisted pair cable installations, the end of line jumper is placed in the EI562 module, also located in the CN4 connector of the monitor base.

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

D

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 units will not be powered.

Fix the monitor connector to the wall.

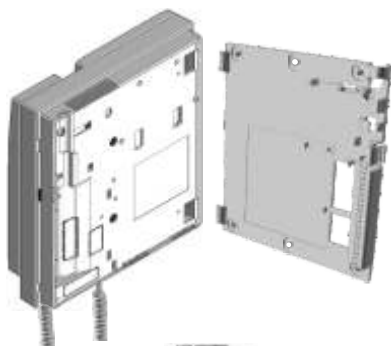
Avoid to place the monitor near to heating sources, in dusty locations or smoky environments.

To install the monitor directly over the wall, drill two holes of Ø6mm. 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.

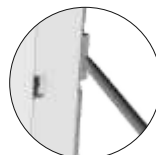


Place the monitor at right angles to the connector and align the attaching holes of the monitor with the attachment hooks of the connector, as it is shown on the drawing.



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.

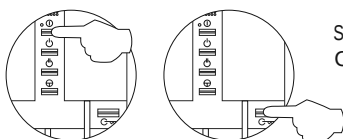
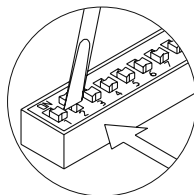


Programming the Tekna Plus monitors.

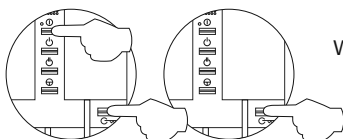
Set to ON the switch number 2 of the SW2 configuration dip switch, that's accessible in the EL500SE module by opening the terminal connector protection cover.

The door panel will reproduce a sound to advise that the system has entered into programming mode.

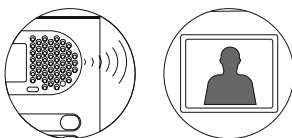
In systems with more than one door panel, the programming process shall be done on the master door panel only.



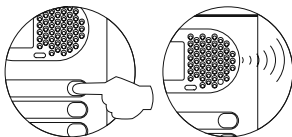
Switch off the monitor to be programmed.
Once the monitor is off, press the door release push button.



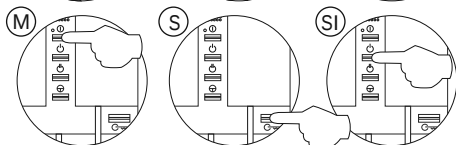
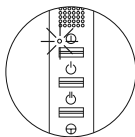
With the door release push button pressed switch on the monitor.



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.

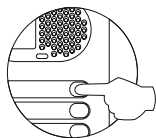


To program the monitor as *Master*, switch it off and on again.

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

To program it as *Slave + 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.



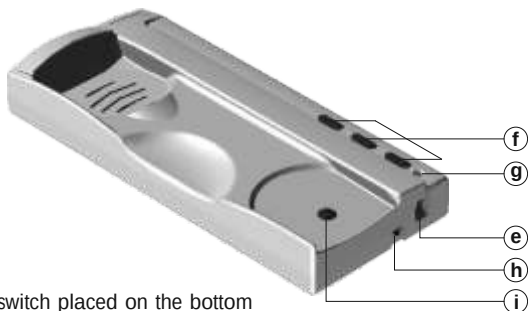
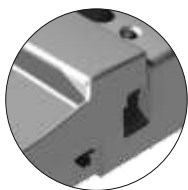
Make a call to check that the monitor has been successfully programmed.
Repeat these steps to program the rest of monitors.

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-940 Plus telephone.



- a. Telephone handset.
- b. Speaker grille.
- c. Microphone hole.
- d. Subjection hole.
- e. Telephone cord connectors.
- f. Function push buttons.
- g. On-Off light indicator.
- h. Call reception volume control.
- i. Hook switch.



The telephone has a three positions switch placed on the bottom part of the telephone (closest to the telephone cord connector) that allows to control the call reception level volume.

Function push buttons.



- a. On-Off push button.
After any telephone reset, and during the next 45 seconds, all the telephone functions will be disabled, with the exception of call reception.
- b. This push button allows to make an intercom call when the handset is not on the cradle. This function is described on page 99.
- c. 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.

Terminal connector description.



+ , - : positive, ground.

A , D : audio, digital communication.

INT : intercom.

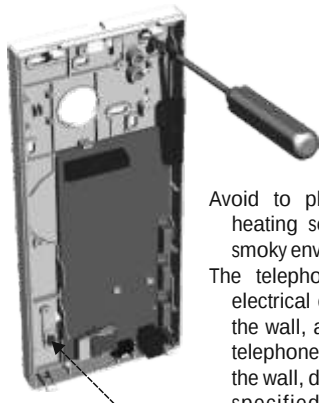
SA : auxiliary calling device output.

HZ- : door bell push button input.

TELEPHONE INSTALLATION

Fix the telephone.

It will be necessary to open the telephone for wiring and fixing purposes. To open the telephone insert a plain screwdriver into the slots and rotate it as shown.



Avoid to place the telephone near to heating sources, 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 Ø6mm. on the specified positions, using 6mm. wallplugs and Ø3,5 x 25mm. screws.



Pass the installation wires through the corresponding hole and connect them as shown on the installation diagrams.

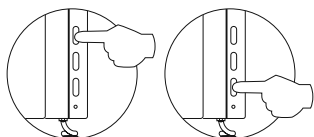
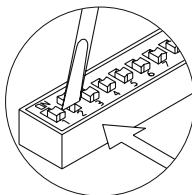
Close the telephone as shown on the picture. Once the telephone is closed, connect the handset using the telephone cord and put it on the cradle.

Programming the T-940 Plus telephones.

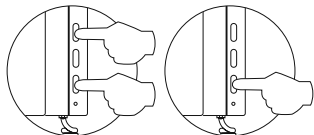
Set to ON the switch number 2 of the SW2 configuration dip switch, that's accessible in the EL500SE module by opening the terminal connector protection cover.

The door panel will reproduce a sound to advise that the system has entered into programming mode.

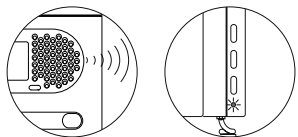
In systems with more than one door panel, the programming process shall be done on the master door panel only.



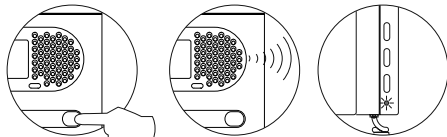
Switch off the telephone to be programmed.
Once the telephone is off, press the door release push button.



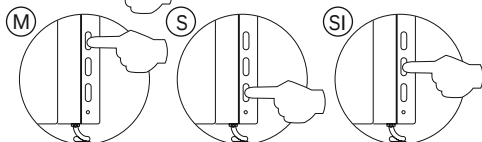
With the door release push button pressed switch on the telephone.



To show that the system is ready for programming, the door panel will reproduce a tone and the telephone led will blink. 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 telephone. At this moment the door panel will reproduce a tone and the telephone led will blink.

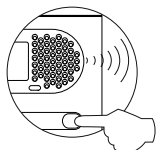


To program the telephone as *Master*, switch it off and on again.

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

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

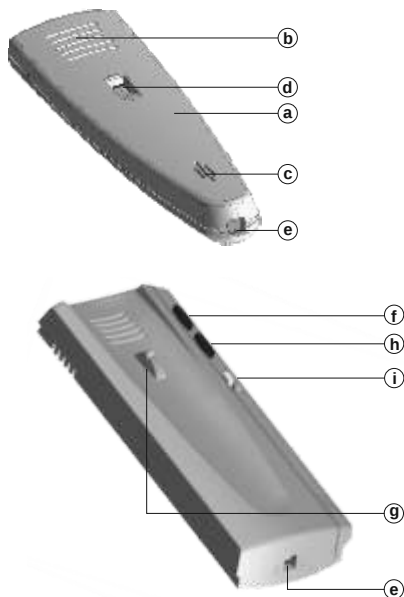
Each apartment must have one master unit only; in case of parallel units configure them as slaves, both monitors or telephones.



Make a call to check that the 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.

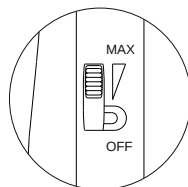
Terminal connector description.

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

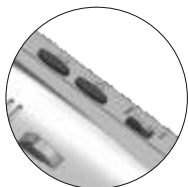
- +, - : Positive, ground.
- A, D : Audio, digital communication.
- AI : Connection to external door release push button.
- HZ : Door bell push button input.
- SA : Auxiliary calling device output SAV-90.
- INT : Intercom.
- PA : Output for aux. relay activation (18Vdc/0,5A max.)

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.

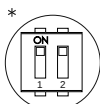
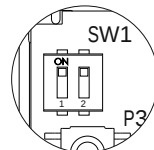


 If the handset is on the cradle sends a panic call to the porter's exchanges that have enabled the reception of this type of call. If not, allows to call to the master porter's exchange. During call reception and communication progresses allows the lock release activation.

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

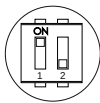
Description of configuration dip switch.

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



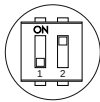
"Autoswitch-on" mode: switches 1 and 2 to ON.

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.



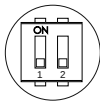
"PA" output mode: switches 1 to ON and 2 to OFF:

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.



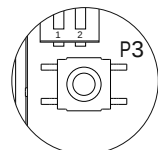
"Intercommunication" mode: switches 1 and 2 to OFF.

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 in the top part left 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 91).

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.

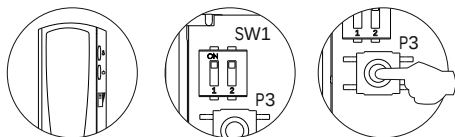
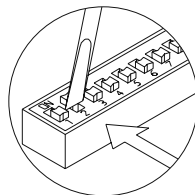
Avoid placing the telephone near sources of heat, in dusty locations or smoky environments. The telephone can be fixed using an electrical embedding box or directly on the wall, as shown on the picture. If the telephone will be installed directly over the wall, drill two holes of $\varnothing 6\text{mm}$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



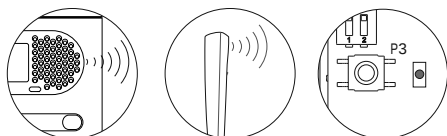
Pass the installation wires through the corresponding hole and connect them as shown on the installation diagrams. Close the telephone as shown on the picture. Once the telephone is closed, connect the handset using the telephone cord and put it on the cradle.

Programming the T-740 Plus telephones.

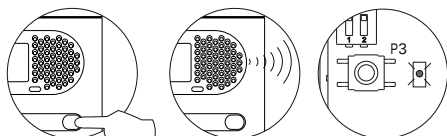
Set to ON the switch number 2 of the SW2 configuration dip switch, that's accessible in the EL500SE module by opening the terminal connector protection cover. The door panel will reproduce a sound to advise that the system has entered into programming mode. In systems with more than one door panel, the programming process shall be done on the master door panel only.



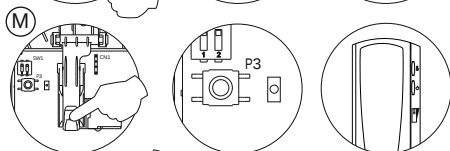
Open the telephone to programming (see page 90). Select in the SW1 dip switch the function mode for the auxiliary function push button (see page 89) and later press the P3 programming push-button.



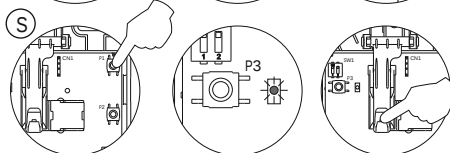
To show that the system is ready for programming, the door panel and the telephone's handset will reproduce a tone (the telephone led will light). Audio communication can be established.



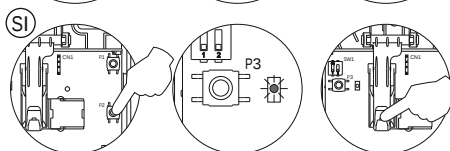
Press the door panel push button that will call to this telephone. At this moment both door panel and handset will reproduce tones (the telephone led will slow blink).



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

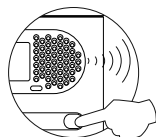


To programm the telephone as *Slave*, press the P1 door release push button (the telephone led will quick blink) and later press the hook switch (the led will off).
Close the telephone.



To programm 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.



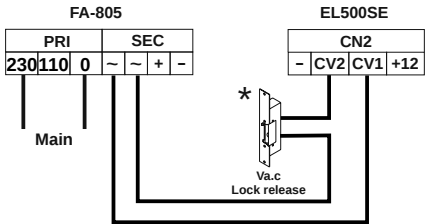
Make a call to check that the telephone has been successfully programmed. Repeat these steps to program the rest of telephones.

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.

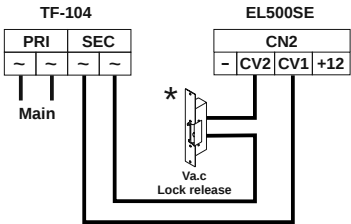
Connexion of an a.c. lock release.

If an alternating current lock release has been installed, use an alternating current output of the FA-805 power supply or the TF-104 transformer and connect it to the lock release as it is shown on the respective diagram.

FA-805 and a.c Lock release



TF-104 and a.c Lock release



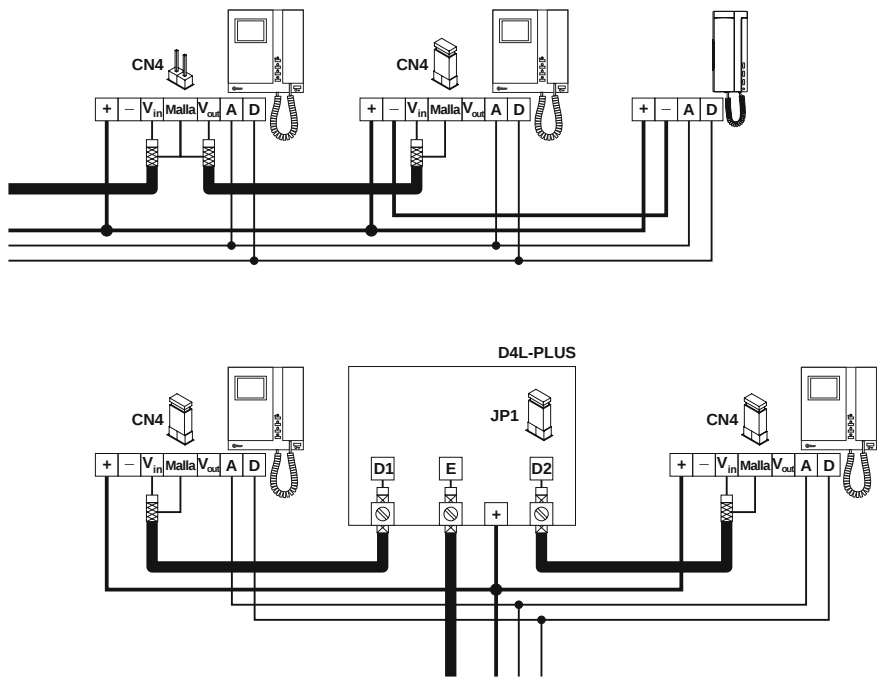
★Note: If the alternating current lock release has a consumption greater than 0,8A, use the installation mode with TF-104 transformer,(maximum consumption: 1,5A).

Sections chart.

SECTIONS CHART	Distance			
	50m.	150m.		
Terminal	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} +	★ RG-59	★ RG-59	Coaxial	Sw1-3 Off
V _{in} +, V _{out} +, V _{p,d} , M _{p,d}	CAT-5	CAT-5	Twisted pair	Sw1-3 On

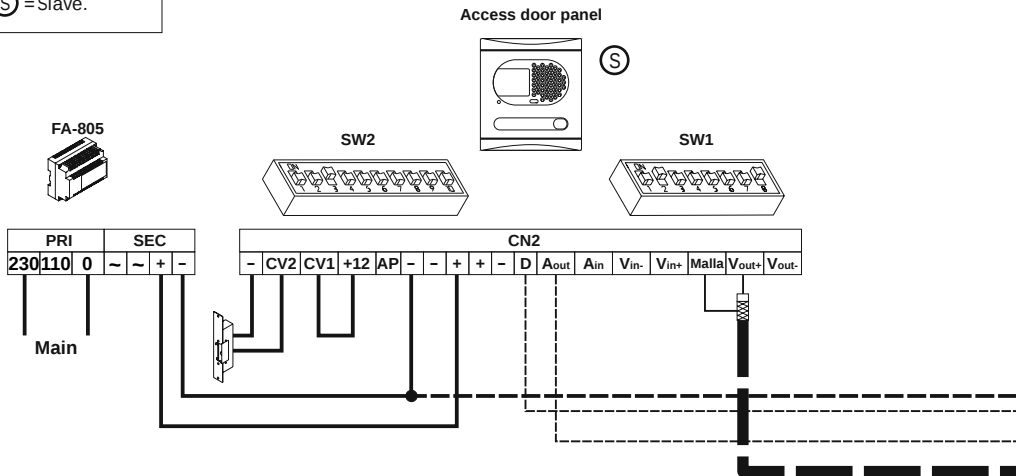
Coaxial cable characteristics RG-59 B/U MIL C-17.

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



(M) = Master.

(S) = Slave.



Cascade installation example.

Remove the jumper from the CN4 connector in all the monitors (see page 81), except on the one where the video cable finishes (don't use the video output).

Distributed installation example.

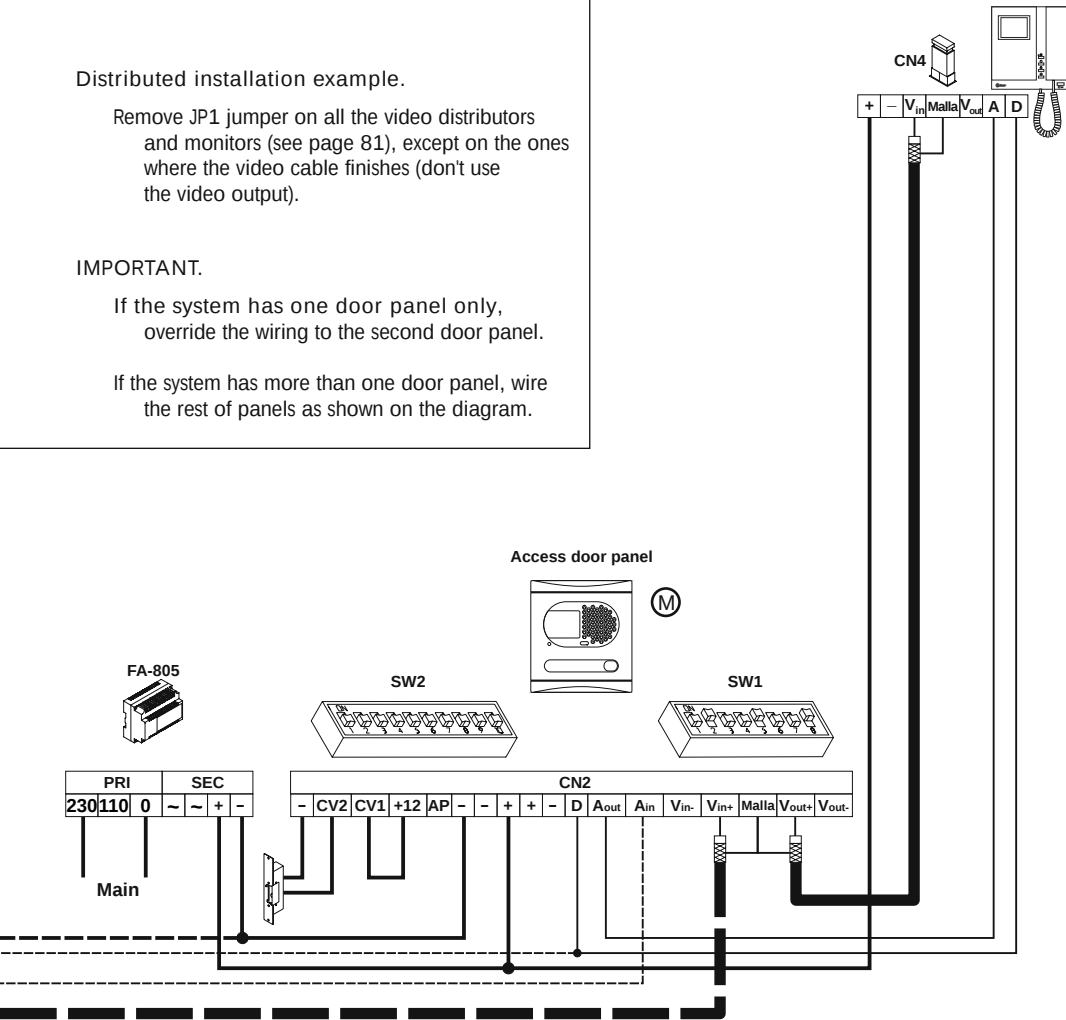
Remove JP1 jumper on all the video distributors and monitors (see page 81), except on the ones where the video cable finishes (don't use the video output).

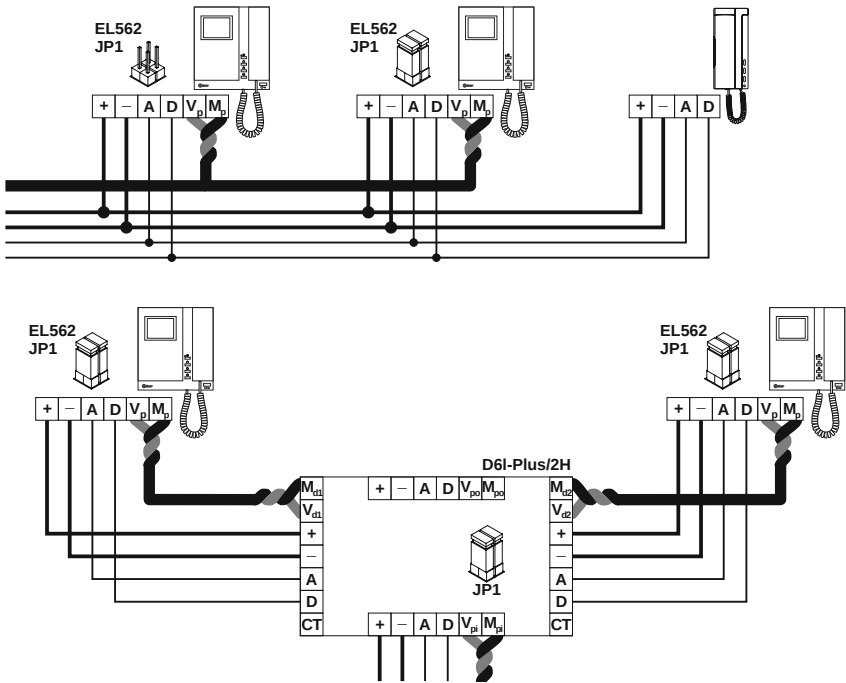
IMPORTANT.

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

If the system has more than one door panel, wire the rest of panels as shown on the diagram.

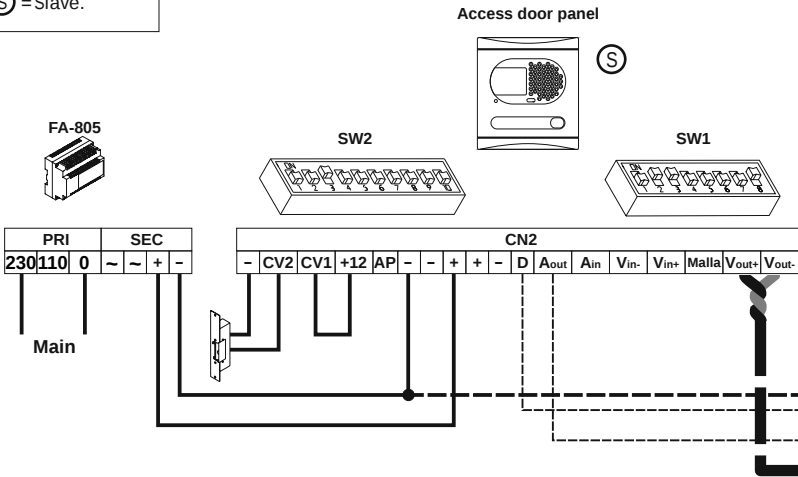
One or several accesses with coaxial cable.





(M) = Master.

(S) = Slave.



Cascade installation example.

Remove JP1 jumper from all of the EL562 monitor modules (see page 81), except on the one where the twisted pair cable finishes (don't uses the video output).

Distributed installation example.

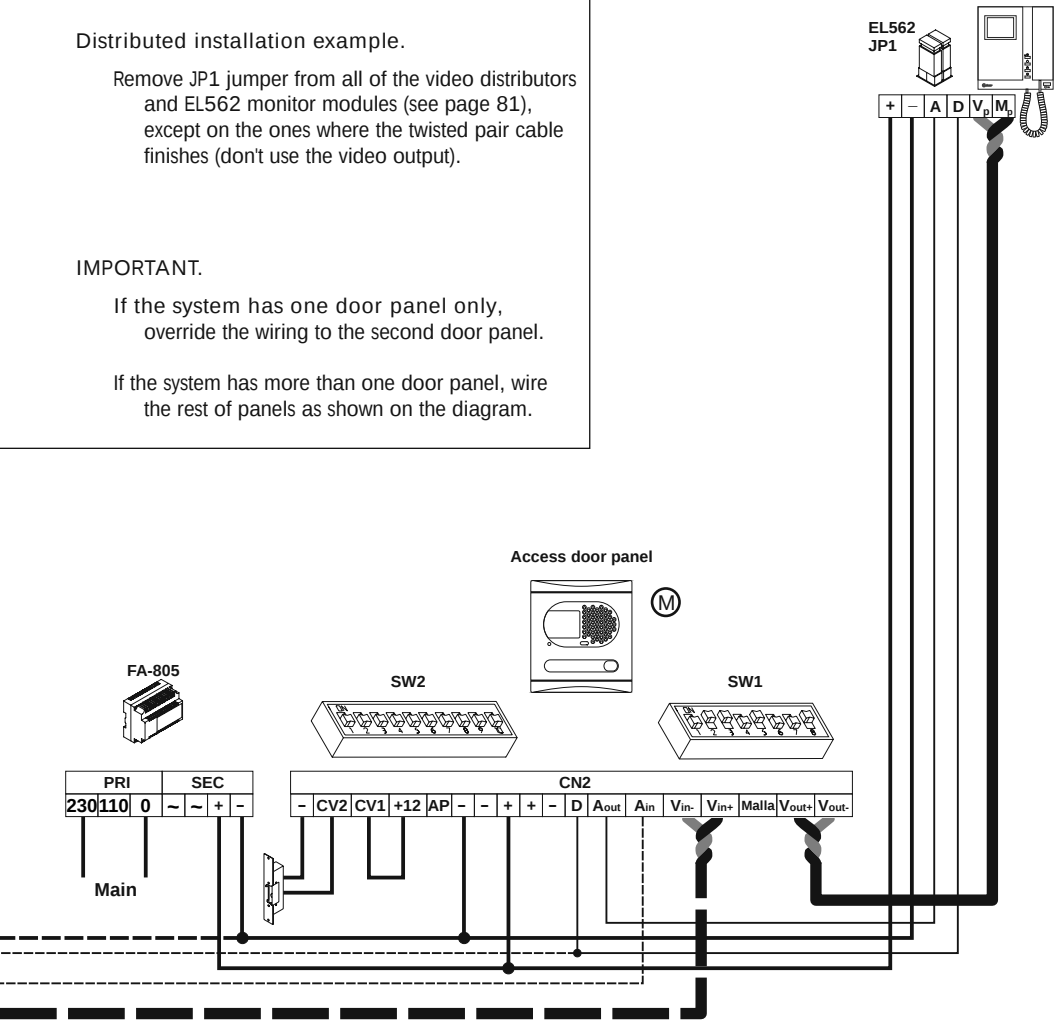
Remove JP1 jumper from all of the video distributors and EL562 monitor modules (see page 81), except on the ones where the twisted pair cable finishes (don't use the video output).

IMPORTANT.

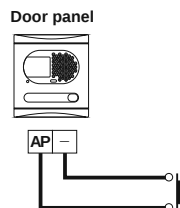
If the system has one door panel only, override the wiring to the second door panel.

If the system has more than one door panel, wire the rest of panels as shown on the diagram.

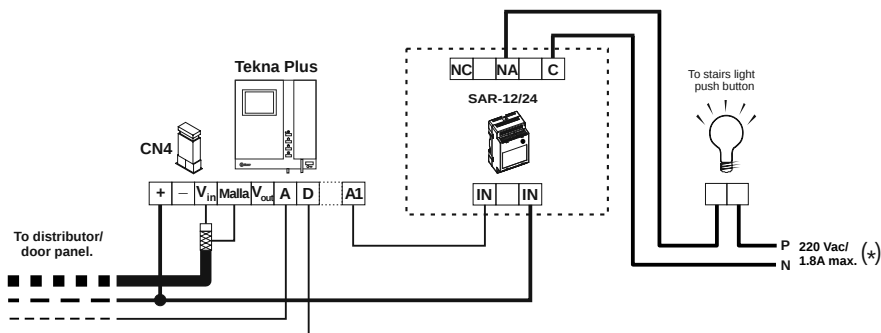
○ ne or several accesses with twisted pair.



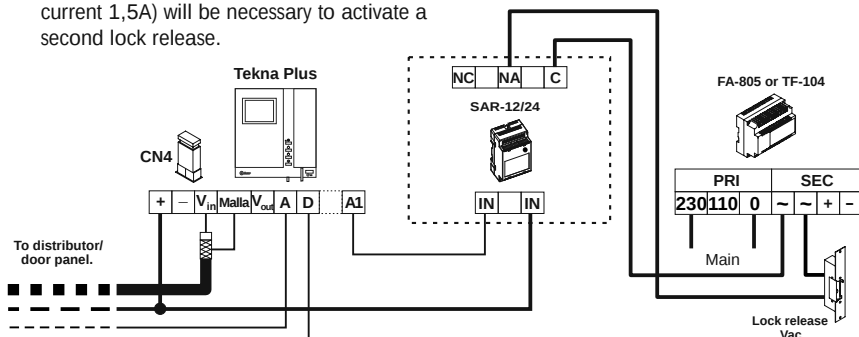
This function will allow to exit from the building being not necessary the use of a key.



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



The use of a FA-805 power supply (maximum current 0,8A) or TF-104 transformer (maximum current 1,5A) will be necessary to activate a second lock release.

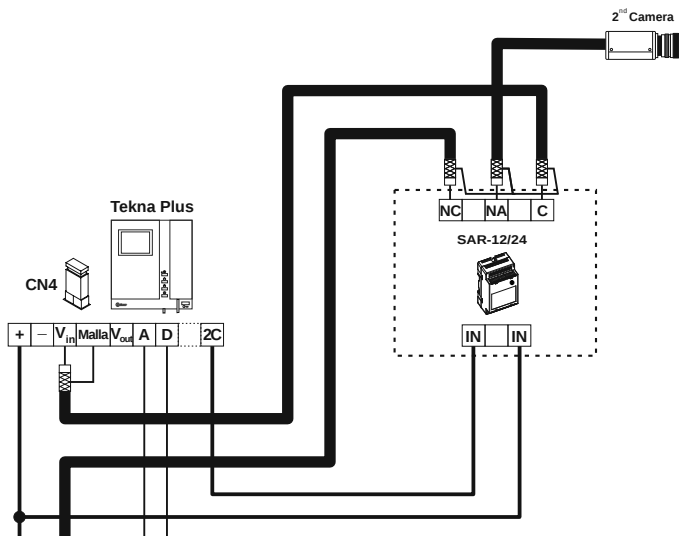


A ctivation of a second camera.

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 80. This facility disables the intercom function. If both functions are required, use A1 terminal to activate the second camera. To activate this function, press ϕ monitor push button at any moment with no dependence of the handset position.

If this device is shared for all the Tekna Plus 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.

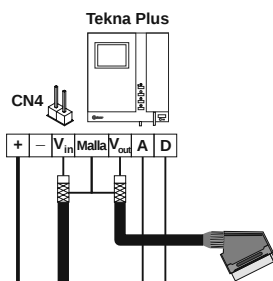
This push button can be used to activate other auxiliary devices, as the 2C terminal is used. Usual applications are the surveillance of the elevator entrance, reception hall, ...



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.



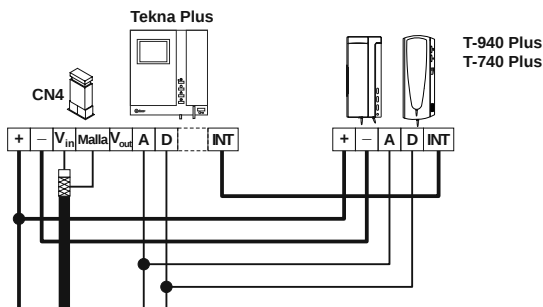
Intercom function.

Tekna Plus monitor and (*) T-740Plus and T-940 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 84, 87 and 91. 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.

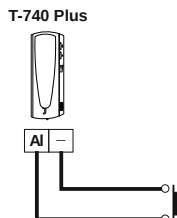
The reproduced acoustic tones are different depending on their provenance, that allows the user to distinguish where the call is made from.



★ **IMPORTANT:** The T-740 Plus telephone must be configured with SW1 dip switch in "Intercom" mode function (see page 89).

External lock release activation with T-740Plus telephone.

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.



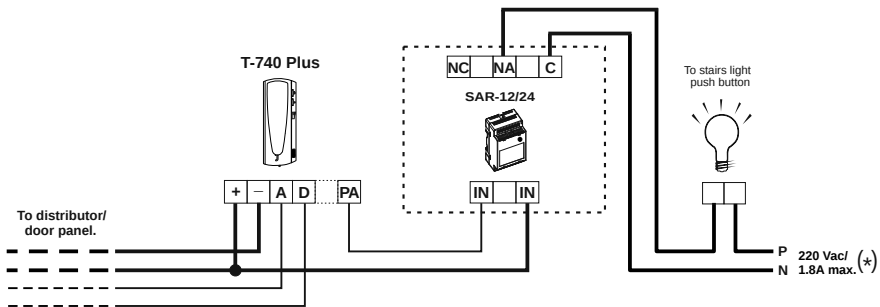
Auxiliary devices activation with T-740 Plus telephone.

First the T-740 Plus telephone must be configured with SW1 dip switch in "PA" output mode function (see page 89).

To activate auxiliary devices the use of a SAR-12/24 relay unit will be required. If this device is shared for all the 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  telephone push button at any moment with no dependence of the handset position.

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

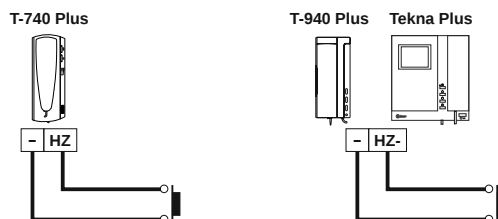


(*) The neutral supply from the stairs light will be wired through the relay contacts SAR-12/24, the maximum current for stairs light will be 1.8A.

Door bell push button connection.

The Tekna Plus monitor and the T-740 Plus and T-940 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 EL500SE circuit.

No shortcircuit will damage the connected units, with the exception of a shortcircuit between CTO and '-' monitor or distributor terminals.

☞ Nothing operates.

☞ Check the output power supply voltage between '-' and '+' terminals: it should have 17,5 to 18,5Vd.c. If not, disconnect the power supply from the installation and measure again. If it's correct now, it means there is a short circuit in the installation: disconnect the power supply from mains and check the installation.

☞ Check that 'D' terminal is not shortcircuited with '-' or '+' terminals.

☞ Check that 'D' terminal hasn't been changed by 'A' terminal somewhere in the installation.

☞ Inappropriate audio level.

☞ Adjust the level volumes as shown on page 77. In case of feedback, reduce the audio levels until feedback fade out. If feedback don't dissapears refer to the following hint.

☞ Continuous audio feedback.

☞ Check that 'A' terminal is not shortcircuited with other terminals.

☞ Door open function no operates.

☞ Remember that this function is only available during call and communication progresses.

☞ The CV1 and CV2 terminals for door opening are voltage free outputs. The cable requires a connection depending on whether 12Vdc (page 93 to 96) or 12Vac (page 92) is needed.

☞ Make a short circuit between the 'CV1' and 'CV2' terminals on the EL500SE microprocessor circuit; 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 76) 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.

[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 Mercado CE 93/68/CEE.

This product meets the essentials requirements of applicable European Directives regarding Electrical Safety 2006/95/CEE, 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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