Audio
door entry system
for
residential complexes
4+'n' installation

Stadio Plus

Instructions manual

INTRODUCTIÓN

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.

IMPORTANT NOTICE

O This instruction manual describes the assembly and wiring of audio door entry systems with 4+N wires installation for residential complexes: several internal buildigns and one or several general entrance door panels.
O Do not use the instructions manuals included in the EL551 sound modules packages.
O The installation diagram is also included in this instructions manual.
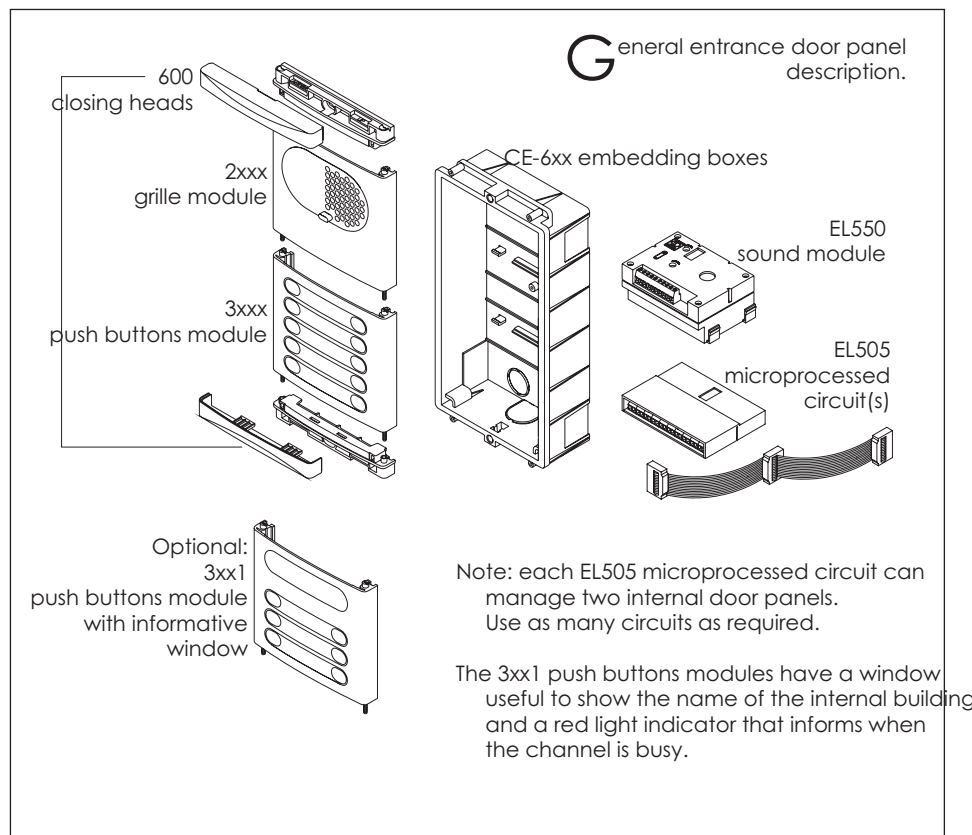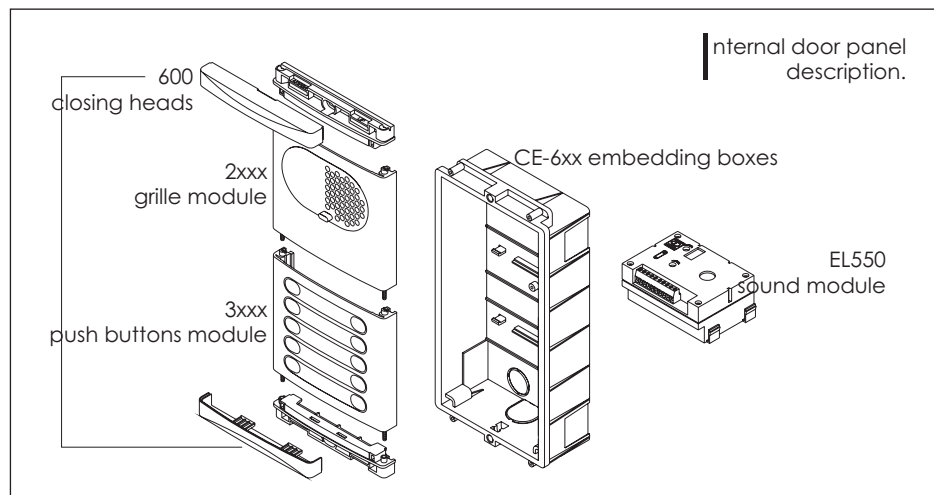
SYSTEM CHARACTERISTICS

O Audio system with 4 + N wires installation.
O Just 1 TF-104 transformer (12Va.c., 1.5A) will be required for each building door panel and 2 units for each general entrance door panel.
O Electronic call with acoustic acknowledgement signal.
O Two selectable electronic call types at the door panel.
O Luminous and acoustic busy channel acknowledgement signals.
O a.c. lock releases activation.
O Timed door open activation.
O Up to three telephones in the same apartment.

STARTING RECOMMENDATIONS

O Do not use excessive force when tightening the transformer connector screws.
O Install the equipment without the power connected. Disconnect from power before any system modification. Check that the input voltage is lower than 230Va.c.
O Before to connect the system, check the connections between door panel and telephones, and the transformer connection. Do always follow the enclosed information.
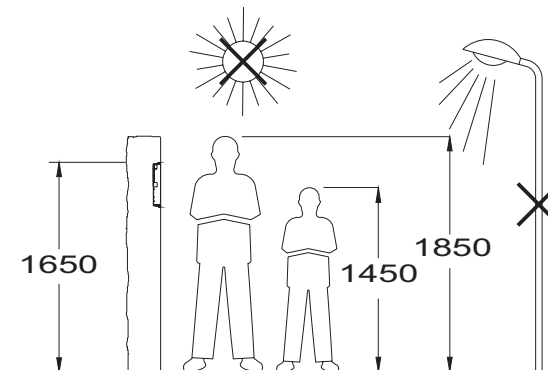
Internal door panel description.

600 closing heads

2xxx grille module

CE-6xx embedding boxes

3xxx push buttons module

EL550 sound module

General entrance door panel description.

600 closing heads

2xxx grille module

CE-6xx embedding boxes

3xxx push buttons module

EL550 sound module

EL505 microprocessed circuit(s)

Optional: 3xx1 push buttons module with informative window

Note: each EL505 microprocessed circuit can manage two internal door panels. Use as many circuits as required.

The 3xx1 push buttons modules have a window useful to show the name of the internal building and a red light indicator that informs when the channel is busy.

Embedding box positioning.
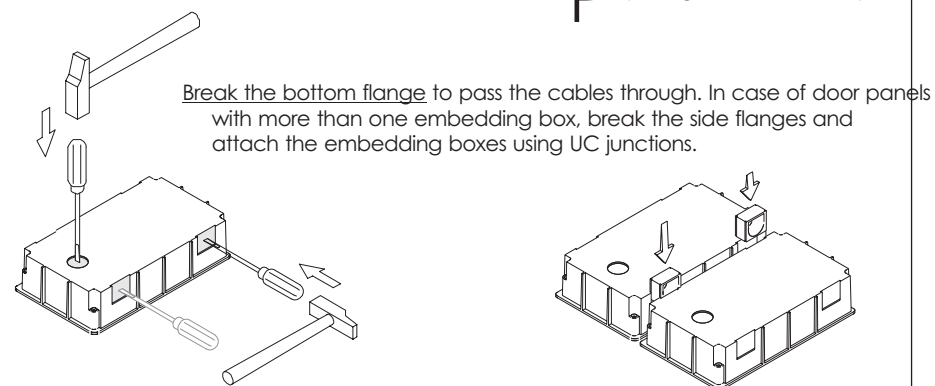
1650   1850   1450

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

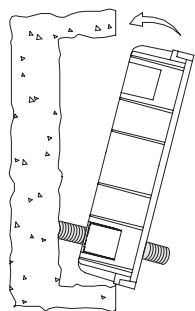| Modules	1	2	3
Model	CE610	CE620	CE630
W	125	125	125 mm.
H	140	257	374 mm.
D	56	56	56 mm.

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.

Preparing the cables entry.

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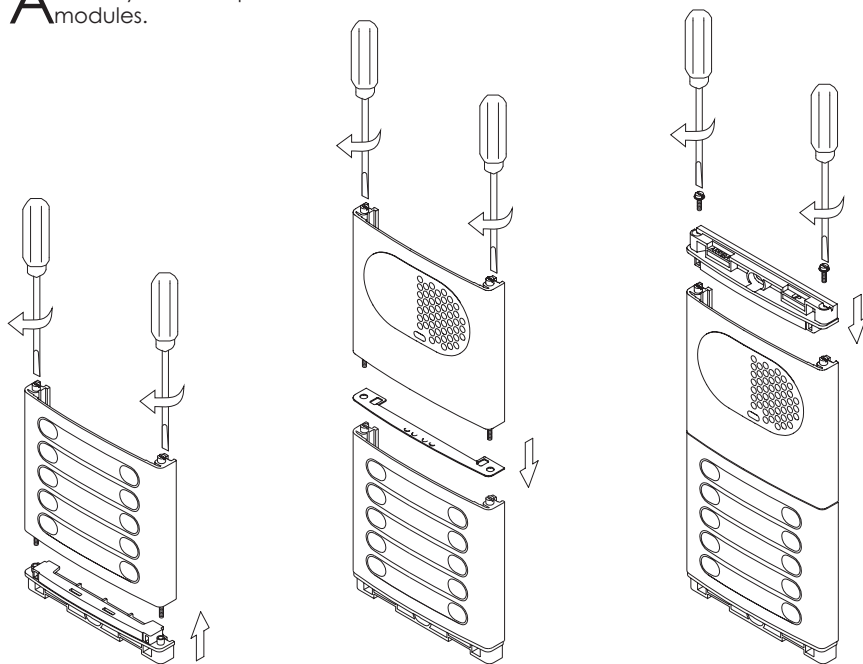
P lace the embedding box.

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.

A ssembly the door panel modules.

Insert the header DOWN marked in the lower module and fix it by screwing the module shafts.
Place the module spacer between lower and next modules, assuring that the spacer adjustment notches are inside the panel. Fix the module by screwing the shafts. Repeat this procedure in case of door panels with one more module (the maximum number of modules placed vertically is three).
Insert the header UP marked in the last module and fix it by screwing the supplied screws.

A ssembly the sound module.
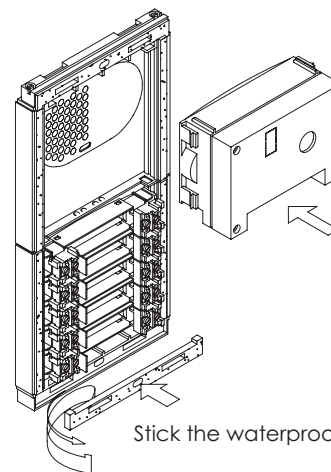
Insert the sound module in the grille module. For a proper assembly, align the light push button and the microphone rubber of the sound module with its corresponding holes in the grille module.

Stick the waterproof seals on the upper and lower headers.

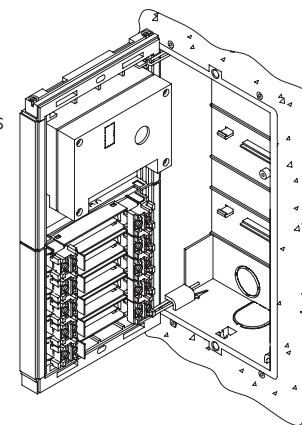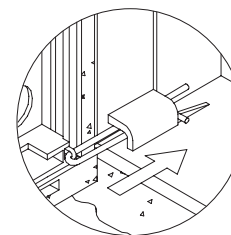H old the door panel on the embedding box.
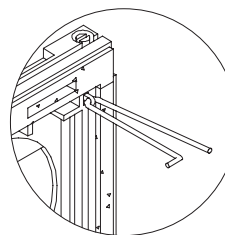
Select a direction to open the door panel; this selection should ease the door panel wiring.
The opening direction will be settled through the hinges position, that must be passed through the header clips as shown.
For example, if the hinges are placed on both clips of the lower header, the door panel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

Assembly and wiring of the EL505 microprocessed circuits in the general entrance door panel(s).

These circuits are 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.

To assembly more than one EL505 circuit in the same embedding box, fix the second circuit by screwing the top tab of the case to one of the plastic lugs of the embedding box.
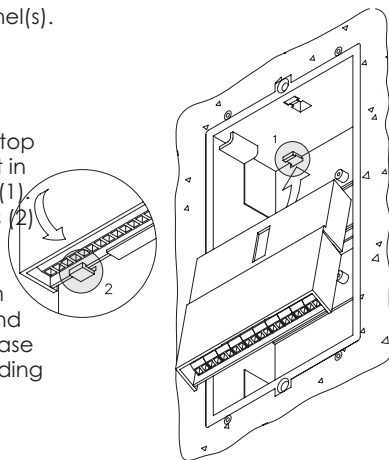
Link the EL551 sound module with the EL505 microprocessed circuit by using the supplied flat cable. In door panels with more than one EL505 circuit, connect all the circuits by linking flat cables.

To link flat cables remove the protection plug and connect to the next cable. If the circuits are placed in different embedding boxes, pass the cable through the embedding box junctions. Don't remove the protection plug of the last cable as prevention against the humidity.
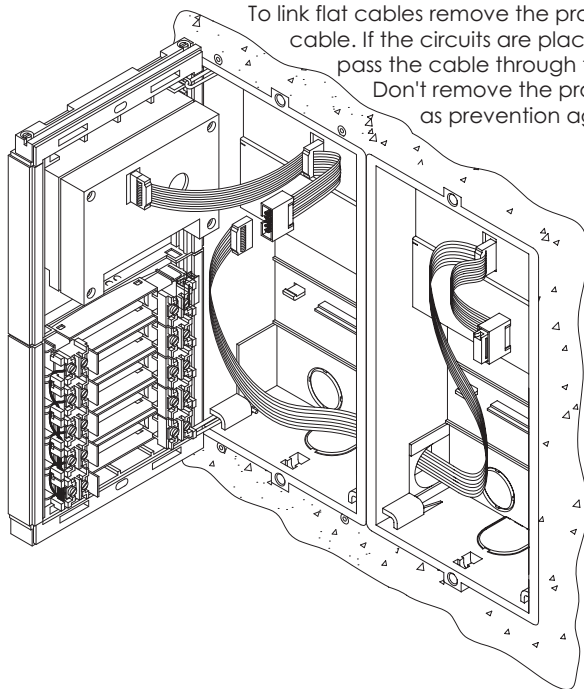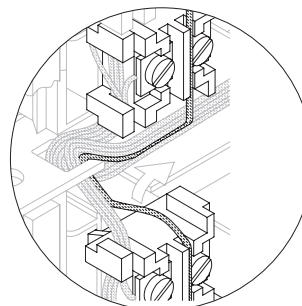
Push buttons wiring.

For a quality finish, pass the push buttons wires through the spacer hole of the closest module.
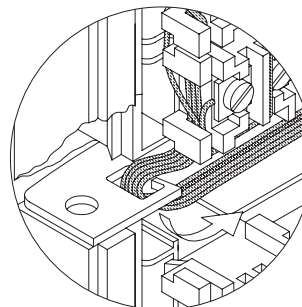
Twist the independent call wires as shown.
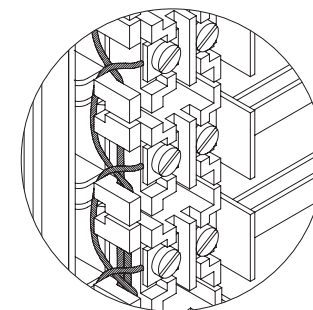
IMPORTANT: link the common terminal of the push buttons corresponding to the same internal building. This wire must be connected to the corresponding CP terminal of the EL505 microprocessed circuit.
The common terminal of the push buttons contained in a module are linked from factory; in case that one module contains push buttons that call to different internal buildings, separate the common terminal.

Placing the identifying label of the 3xx1 window

Before to wire the window module circuits, the indetifying label must be placed.
Insert a plain screwdriver into the slots and lever to remove the pcb board.
Once the label has been placed, assembly the pcb board again.
The connection of the circuit terminals is shown on page 14.

Place the nameplate labels.

Open the label holder.

Place the label and close.

Final adjustments.

Once the nameplate labels are placed, wire the lamps from different modules and connect them to terminals L1 and L2 of the sound module, as it's shown on the installation diagrams.

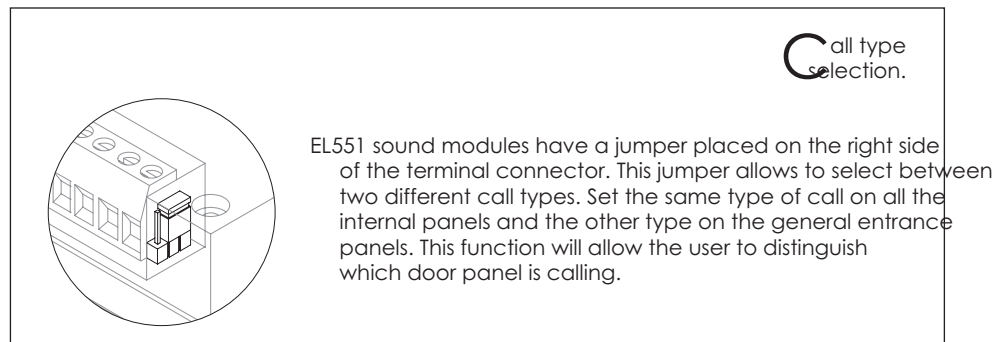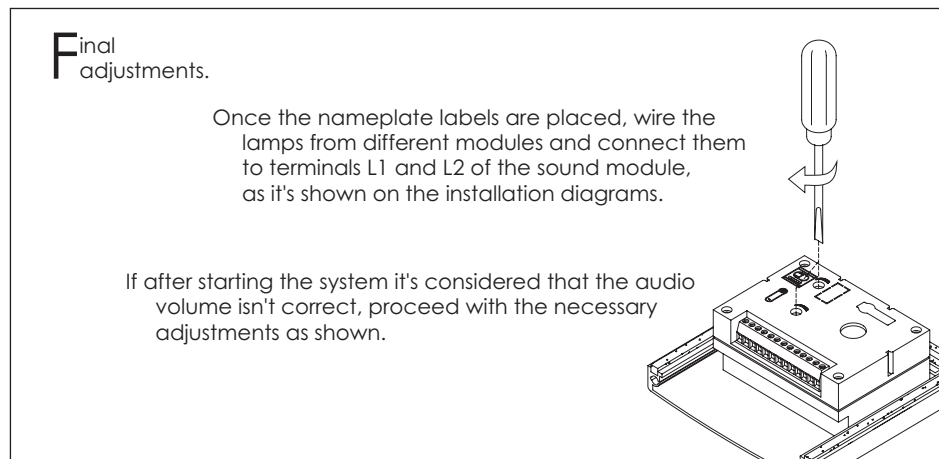If after starting the system it's considered that the audio volume isn't correct, proceed with the necessary adjustments as shown.

Call type selection.

EL551 sound modules have a jumper placed on the right side of the terminal connector. This jumper allows to select between two different call types. Set the same type of call on all the internal panels and the other type on the general entrance panels. This function will allow the user to distinguish which door panel is calling.

Close the door panel.

Fix the door panel by using the supplied screws.

Finish the door panel assembly by pressing the closing heads.

LOCK RELEASE INSTALLATION

Lock release installation.

If the lock release will be installed in a metal door, use a Ř3,5mm. drill and tap the hole. In case of wood door, use a Ř3mm. drill.

⌀3,5 x 25
DIN-7972

M 4 x 8
DIN-963
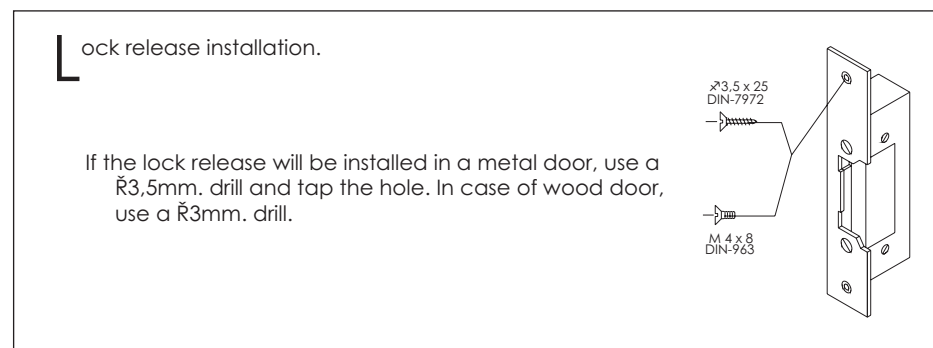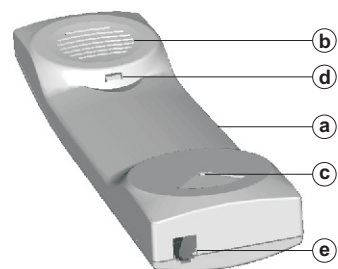
Description of the T-900 telephone.

a. Telephone handset.
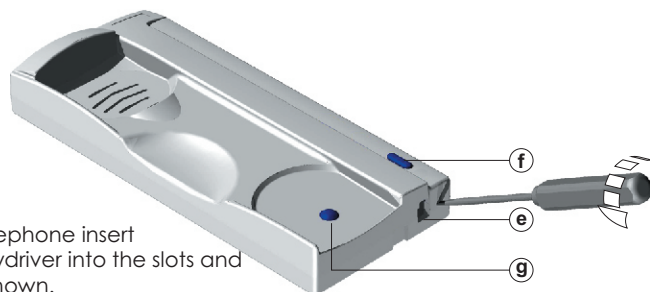b. Speaker grille.
c. Microphone hole.
d. Subjection hole.
e. Telephone cord connectors.
f. Door release push button.
g. Hook switch.

- b
- d
- a
- c
- e
- f
- e
- g

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 Ř6mm. on the specified positions, using 6mm. wallplugs and Ř3,5 x 25mm. screws.
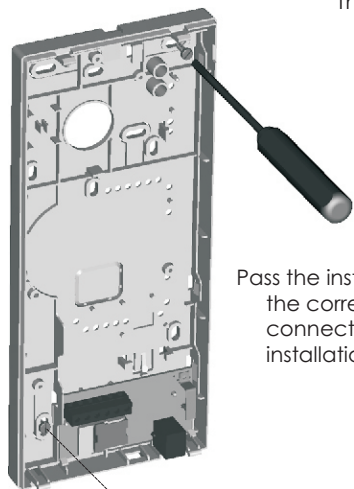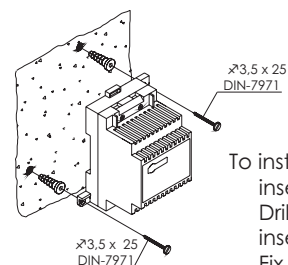
Pass the installation wires through the corresponding hole and connect them as shown on the installation diagrams.

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 craddle.

Installing the TF-104 transformer.

⬈3,5 x 25
DIN-7971

⬈3,5 x 25
DIN-7971

The transformer must be installed in a dry and protected place. It's recommended to protect the transformer by using a thermo-magnetic circuit breaker.
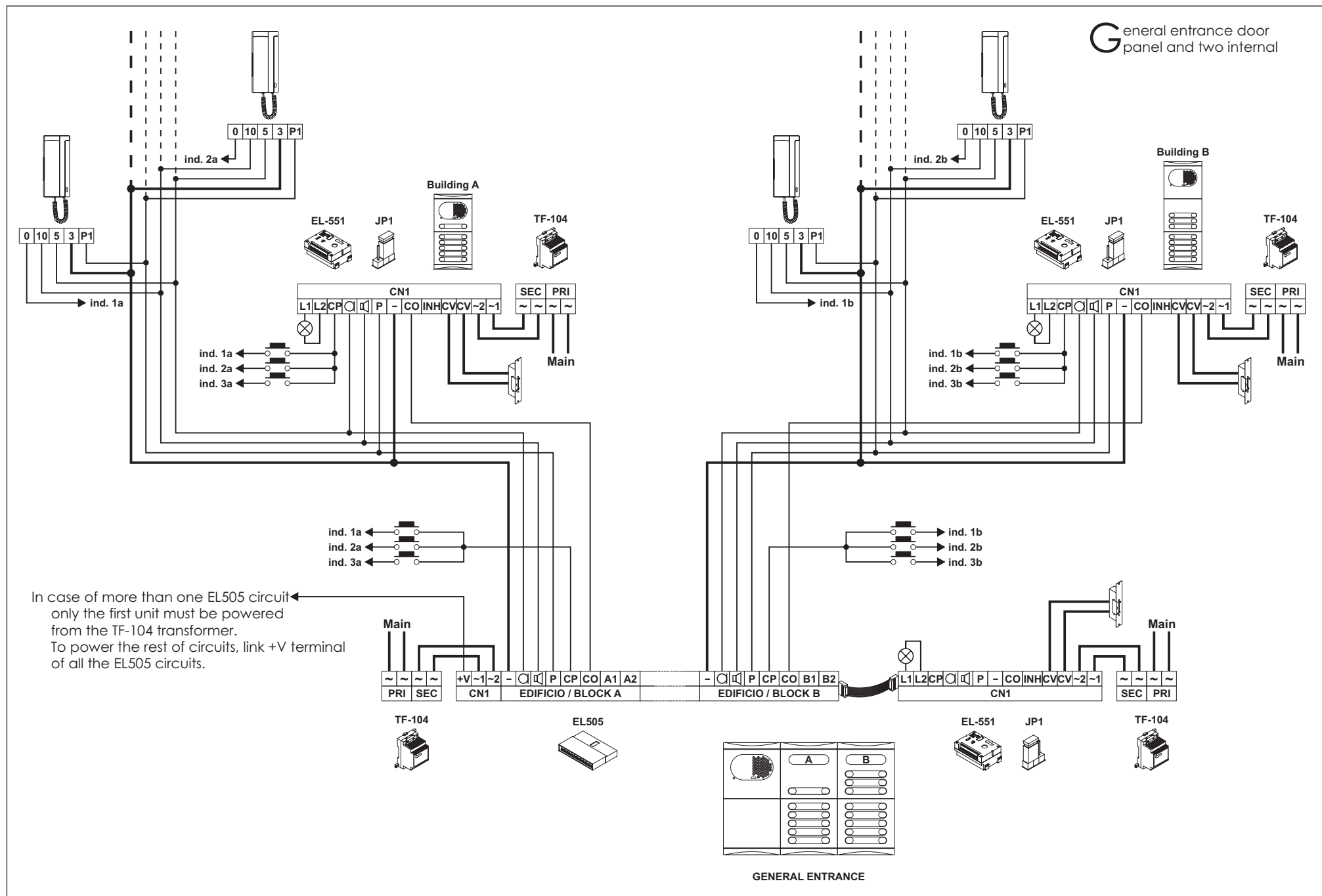
To install the transformer directly on the wall, insert the fixing flanges.
Drill two holes of Ř6mm. and insert the wallplugs.
Fix the transformer with the specified screws.
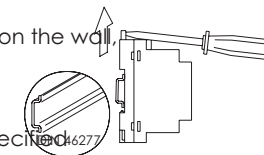
The transformer can be installed on a DIN guide (3 units) simply pressing it.
To disassemble the transformer from the DIN guide, use a plain screwdriver to lever the flange as shown on the picture.

SYSTEM OPERATION

O   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 as the push button is pressed. At this moment the call will be received at the telephone in the dwelling.
If the call has been made from a general entrance door panel, the corresponding internal door panel will be automatically disconnected, and its light push button will change to red color: if a visitor tries to call from this internal door panel an acoustic tone will be heard confirming the system is busy.
If the call has been made from a internal door panel, the push buttons of the general entrance panel corresponding to this internal building will be disconnected: if a visitor tries to call to a telephone of the busy internal panel an acoustic tone will be heard confirming this internal panel is busy.
In case that the general entrance panel contains 3xx1 window modules, the busy status will be also showed on the corresponding window.
If the call is not answered in 30 seconds, the system will be freed.

O   To establish communication pick up the 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.

O   To open the door, press the door release push button during call and communication progresses: with one press, the door release operates during 3 seconds.

General entrance door panel and two internal

Building A

0 10 5 3 P1
ind. 2a

0 10 5 3 P1
ind. 1a

EL-551   JP1   **Building A**   TF-104

	CN1												SEC	PRI
L1	L2	CP			P	–	CO	INH	CV	CV	~2	~1	~ ~	~ ~

ind. 1a
ind. 2a
ind. 3a

Main

ind. 1a
ind. 2a
ind. 3a

In case of more than one EL505 circuit only the first unit must be powered from the TF-104 transformer.
To power the rest of circuits, link +V terminal of all the EL505 circuits.

Main

~	~	~	~	+V	~1	~2	–			P	CP	CO	A1	A2		–			P	CP	CO	B1	B2		L1	L2	CP			P	–	CO	INH	CV	CV	~2	~1		~	~	~	~
PRI		SEC		CN1				EDIFICIO / BLOCK A								EDIFICIO / BLOCK B												CN1												SEC		PRI

TF-104   EL505   EL-551   JP1   TF-104

A   B

GENERAL ENTRANCE

Building B

0 10 5 3 P1
ind. 2b

0 10 5 3 P1
ind. 1b

EL-551   JP1   **Building B**   TF-104

ind. 1b
ind. 2b
ind. 3b

Main

ind. 1b
ind. 2b
ind. 3b

Main

Parallel telephones installation.
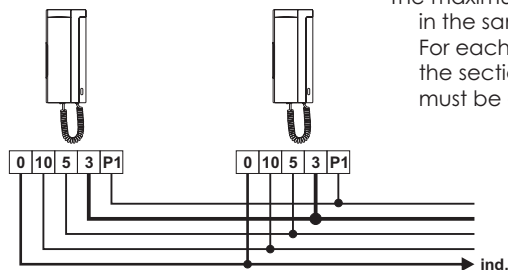
The maximum number of telephones placed in the same apartment is three.
For each telephone placed in parallel the section corresponding to the call wire must be doubled.

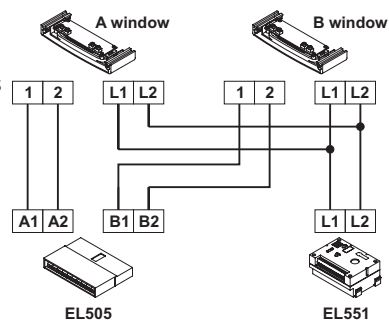| 0 | 10 | 5 | 3 | P1 |

| 0 | 10 | 5 | 3 | P1 |

ind.

External lock release activation.

The lock release can be activated at any moment by using an external push button, that must be connected between '~1' y 'CV' terminals of the corresponding door panel sound module.
This function will allows to exit from the building being not necessary the use of a key.

| INH | CV | CV | ~2 | ~1 |
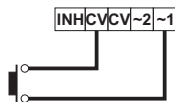
Linking 3xx1 modules.

If the general entrance door panel contains 3xx1 window modules to show the busy status (see pages 2 and 7), connect the window circuits as shown.

A window   **B window**

| 1 | 2 | | L1 | L2 | | 1 | 2 | | L1 | L2 |

| A1 | A2 | | B1 | B2 | | L1 | L2 |

EL505   **EL551**

Sections chart.

	Distance	
Terminal	100m.	300m.
0, ind, 5, ⌒, 10, ⍾, P, P1, CO	0,25mm.	0,50mm.
–, 3	0,50mm.	1,00mm.
~1, ~2, CV	1,00mm.	2,50mm.

For longer distances than the specified contact with your distributor.

O Nothing operates.
 w Check the output transformer voltage between SEC terminals: it should have 12
   to 17Va.c. If not, disconnect the transformer from the installation and
   measure again. If it's correct now, it means there is a short circuit in the
   installation: disconnect the transformer from mains and check the installation.
O Inappropriate audio level.
 w Adjust the level volumes as shown on page 6. In case of feedback, reduce the
   audio levels until feedback fade out.
O Door open function no operates.
 w Remember that this function is only available during call and communication
   progresses.
 w Disconnect the lock release from the sound module and short-circuit terminals '–'
   and 'P' of the sound module or of the EL505 circuit: at that moment the output
   voltage between 'CV' terminals of the sound module should be 12Va.c. If it's
   so check the lock release, its wiring and the wiring of the terminal 'P' to the
   telephones. If these tests don't solve the problem, replace the sound module.
O No telephones receive the call or acknowledgement call signal is not reproduced.
 w Check that the push buttons common terminal are correctly connected to the
   'CP' terminal of the sound module (in case of internal door panels) or to the
   corresponding 'CP' terminal of the EL505 circuit (in case of general door
   panels).
O From the moment a call is made on the general entrance door panel, the voltage
   between '-' and 'CO' terminals of the internal called door panel should be
   lower than 3Vd.c. If not, check the continuity of the 'CO' wire. The same
   status should be occurs if the call is made from a internal door panel.
O Once a communication is finished the system remains on busy status.
 w If the busy status remains for a three minutes period, even if the handset of the
   called telephone is on the craddle, check that all the telephones are
   correctly replaced.
O The acknowledgement busy signal is not reproduced.
 w When someone tries to make a call during busy status, the light push button
   should change its color and busy signal should be heard at the door panel. If
   the called telephone is not a T-900 model, and is not correctly replaced or it
   is in communication, the busy signal will not be reproduced.
O NOTE: in case of any problem, check that the connection between the sound
   module and the EL505 microprocessed circuit, through the flat cable, is