



iLoft Duox Telephone

INSTALLATION AND PROGRAMMING MANUAL

CONGRATULATIONS ON PURCHASING THIS QUALITY PRODUCT!

Fermax Electronica manufactures and develops top class equipment which fulfil the highest design and technology standards.

Your FERMAX telephone will allow you to communicate with the entry panel and open the front door if you wish.

We hope you enjoy its range of functions.

www.fermax.com.

Technical publication of an informative nature published by FERMAX ELECTRONICA.

As part of its constant improvement policy, FERMAX ELECTRONICA reserves the right to modify the content of this document and the characteristics of the products referred to in it at any time and without prior notice.

Any modification will be reflected in subsequent editions of this document.

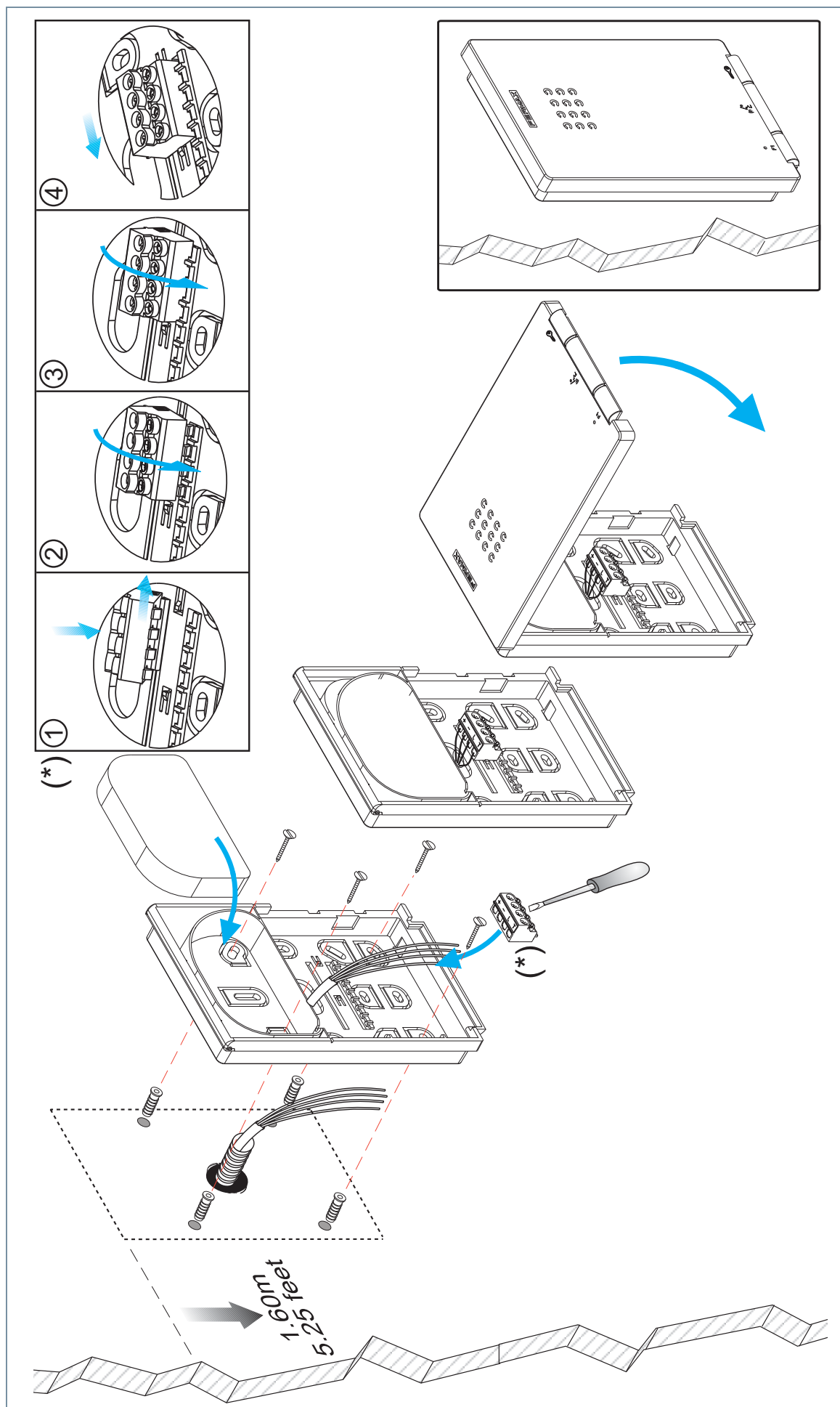
This product is protected with the following patents and utility models:

PATENTS: US 9215410, US 9762852, BE1023440, AU2014203706.

UTILITY MODELS: ES1187384U, ES1141495U, FR3038192, DE202016000632U1, CN205987229(U).

INDEX

iLOFT DUOX TELEPHONE	4
Installation	4
Connections	5
Diagrams	5
Description	7
- Buttons	7
- Leds	8
Available Functions	9
Capacities	9
Technical Characteristics	10
Programming the telephone	10
- a) From the Panel	11
- b) From the doorbell	12
Telephone set tings	13
- Selecting ringtones	13
*From Panel	13
*From Guard Unit	13
- Simplex conversation mode (Push to Talk)	14
- Call Volume Controller	15
Resetting Parameters	16
Operating	17
* Answering a call	17
▪ Activating audio	17
▪ Hanging up	17
▪ Auto-start	17
*Opening the door	19
▪ In conversation	19
▪ Upon receiving a call	19
* Audio volume controller cancelling ringtone	19
* Call to Guard Unit	19
F1 (Additional Functions)	20





CONNECTIONS:

Connection Terminals:

B, B : DUOX Bus: Power, data and audio.

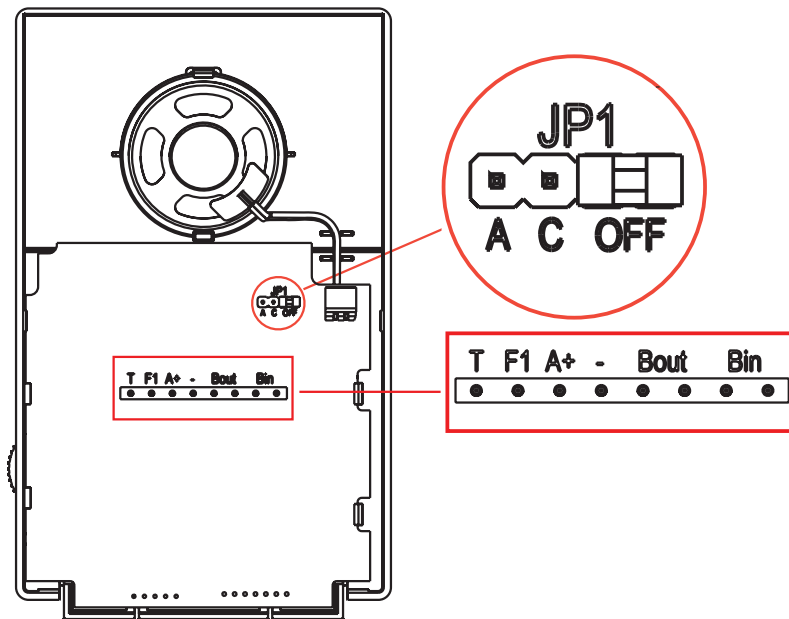
T, -: Connection House entrance "door bell." (**P1**).

A, -: Call extension connection or light and bell activator

F1: Button for additional functions. It provides a negative upon being activated.

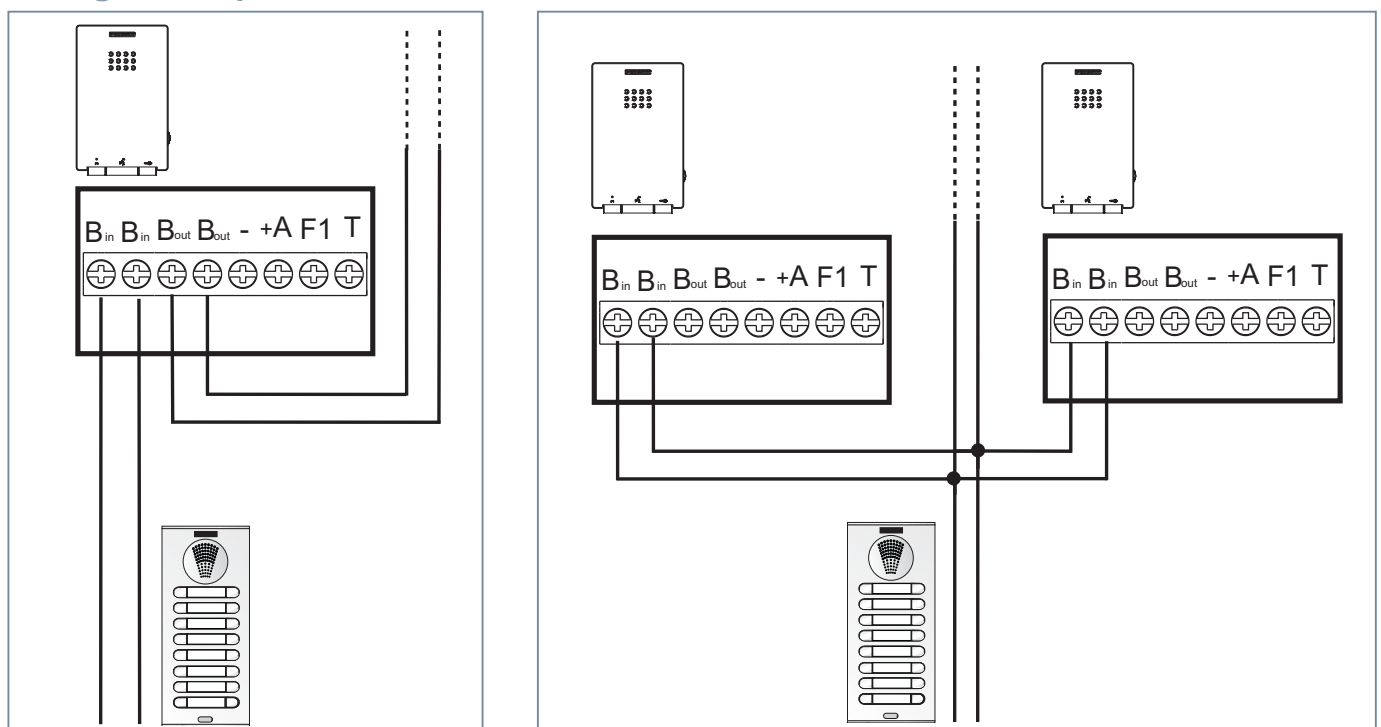
JP1: Line adaptation bridge:

- Right: Without line adaptation.
- Centre: Type C adaptation.
- Left: Type A adaptation.



DIAGRAMS

Wiring: 2 non-polarised wires.



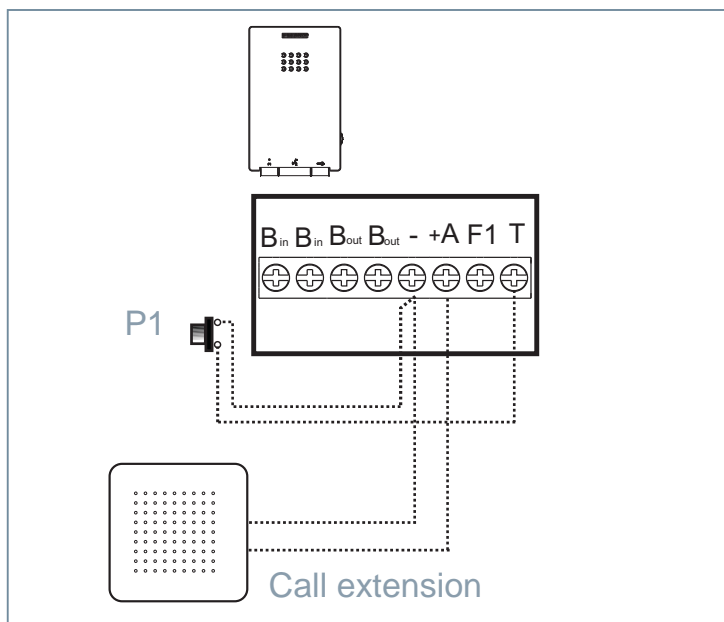
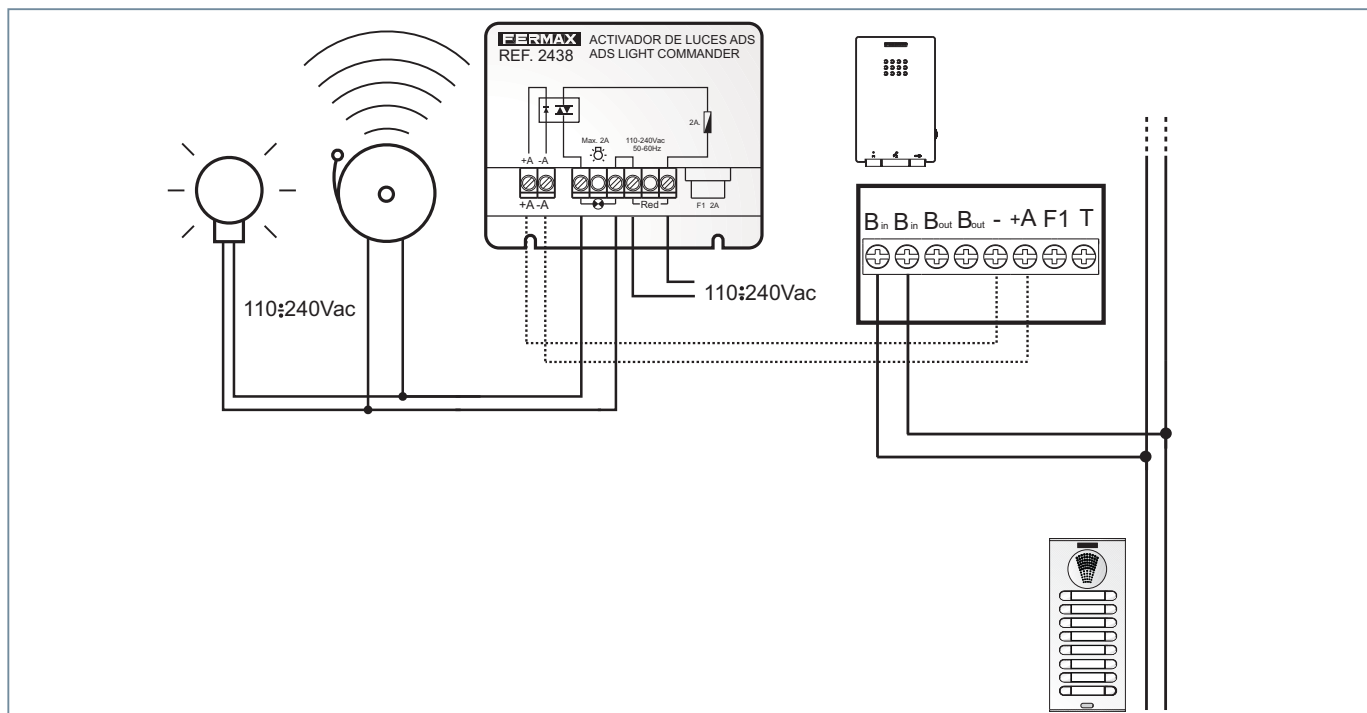
P1 (T, -): You can place an external button to make a call to the "Door bell" (this bell would replace the ding-dong of the home entrance).

Notes:

- The doorbell can not be changed and is different from those selected for entry panels or guard unit.
- The do not disturb function silences this tone.
- You can program the phone's address with this button. See chapter: Programming the phones address via the doorbell.

A, -: The phone has these terminals, to which you can connect a call extender ref. 2040 or a light and doorbell activator ref. 2438, which are activated when a call is received or from a outdoor panel, guard unit or from the home's frontdoor.

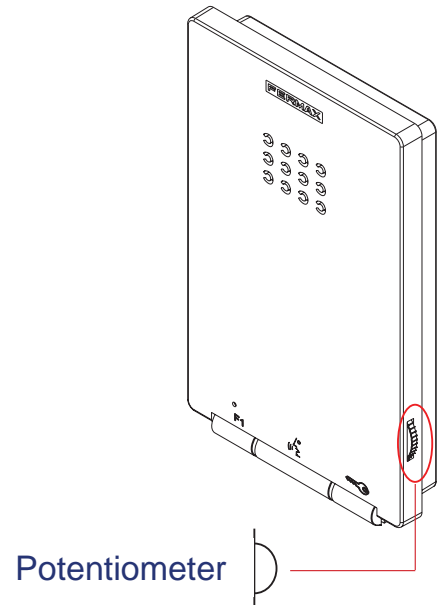
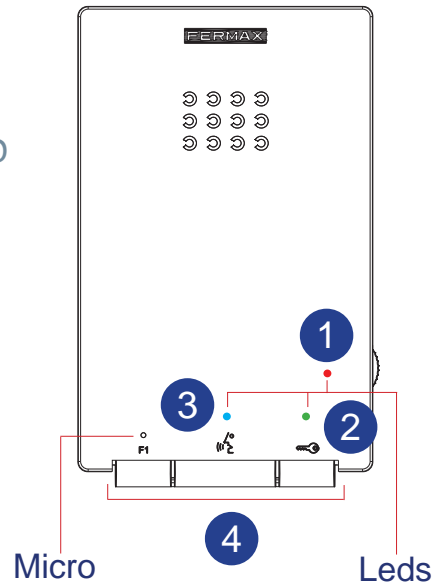
Note: If the call disconnection (do not disturb mode), is activated, the terminal will continue working. Through this, the same tone sounds as that configured for the call answering tone from the panel, guard unit or doorbell.





iLOFT DUOX TELEPHONE DESCRIPTION

- 1 Red LED
- 2 Green LED
- 3 Blue LED
- 4 Buttons



Buttons

Micro

Leds

Potentiometer



Door open / guard unit call button (function available depending on type of installation).

- While in conversation with the Outdoor Panel (audio activated), pressing it will activate the open door lock-release.
- Upon receiving a call (audio not activated). If the phone is not answered you have 30 seconds to open the door.
- When you press this button with the telephone hung-up (standby) a call will be made to the guard unit (where one exists).



Audio activation, hang up and auto-start button.

On receiving a call the user has 30 seconds to answer. *(The red led flashes during this time to indicate a pending call).*

- Audio activation: When a call is received, press this button to speak to the visitor. The audio channel is opened from the panel entrance to residence, *(the blue led lights up indicating a conversation with the panel entrance, and everything said will be heard by it).*
- Hang-Up: Press to terminate communication. *(When finished the blue led light again turns off and the red light is turned on).*
The conversation is limited to 90".
The conversation is private, no other terminal can hear it.
- Auto-start (panel 0 in the same block): In standby, press and release this button (the blue led lights up). If the panel or channel is busy, you will hear a busy tone and return to standby.
Auto-start: Only with video outdoor panel.

Notes:

- "Hands free" mode is default mode.
- While the audio channel is open the input audio can be regulated with the potentiometer, without affecting the call volume. The selected setting will not be altered if the call volume is subsequently adjusted.

- If the telephone is configured in “simplex mode”, (press to speak and release to listen), the audio channel will be activated to hear sound at street level.
- If making a call from the 0 panel to another home, during the 30 second wait for the home to answer, auto-start with the 0 panel will not be possible. If the line is busy or there is another busy telephone in the same home either.
- During the conversation “hands free” can be adjusted to “simplex mode”.
- If there are various telephones in the same home, the audio will only come from the first one picked-up, leaving the remaining phones in standby.

F1 Auxiliary F1 function.

F1 configured as exit:

- It is initially configured, by default, as an exit and sends a negative.

Note:

- From the telephone you can activate an auxiliary relay connected to a F1 terminal for an extra function such as the landing light, alarm activation, etc.
- When you press the F1 button the telephone generates a beep and via the bus transmits a command to activate a Duox relay (if installed). Simultaneously the F1 terminal provides a negative, as the button is pressed.

Leds

Red LED:

On. Programmed telephone (standby)

RAPID blinking. Telephone not programmed (standby).







SLOW blinking. Indicates that the do not disturb function is activated.

Blue Led:

On. Conversation in hands free audio model.

On/Blinking. Conversation in simplex audio mode

Green LED: According to configuration.

LED FUNCTIONS	BLUE led	GREEN led	RED led
Not programmed			
Standby			
Call/Called			
Handsfree audio			
Output Audio (simplex mode)			
Input Audio (simplex mode)			
Do not Disturb			
Doormatic (depending on configuration)			



AVAILABLE FUNCTIONS

The functions available on the telephone are summarised in the following list:

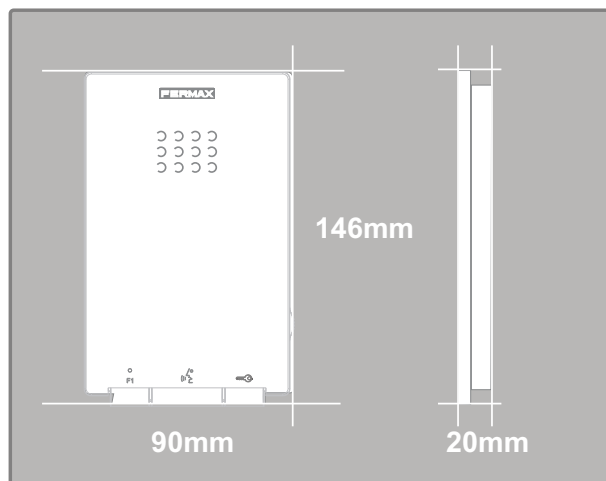
- Guard Unit Call
- Opening the door
- Call to Guard Unit.
- Ringtone selection.
- Programming from panel and door bell
- Audio connection upon picking up
- Volume regulation
- Auxiliary F1 function.
- Doorbell
- Light and Doorbell Activation
- Hands free audio mode / "simplex (Push to talk)"
- **DOORMATIC** (depending on configuration)

CAPACITIES

- Number of terminals per home: maximum 3. Properly size consumption of the power source.
- Number of terminal addresses per sub-block: 99.
- Number of terminal addresses per block: 9999.
- Number of blocks: 99.
- Address for each telephone: 6 decimal digits: 000000. 999999. The address 000000 is the default address and the telephone does not work.
- Number of conversation channels: 2 per BUS (*If there is only audio amplifiers in the installation*).
- Wiring: 2 non-polarised wires, depending on the wire, distances and terminal charges are stipulated.
- Number of different optional ringtones: 5.
- Call Volume Regulation.
 - Input and output audio volume regulation.
- Maximum conversation time. 90 seconds
- Maximum time to pick up on receiving the call: 30 seconds
- Maximum time to programme the telephone: 2.5 minutes.



TECHNICAL FEATURES



Telephone Dimensions (Height x Width x Depth*.):
146 x 90 x 20 mm

Notes:

- this telephone can be installed directly at surface level, to the wall or in a standard flush mounted box.
- **XX** : standard box.

IP: 30 / IK: 04

Power supply (non-polarised)	18 Vdc
Consumption ($\pm 5\%$)	
in standby + led	18 mA
maximum	210 mA
Maximum number of terminals per residence	3
Telephone address: 6 decimal digits	000001...999999
Operating Temperature	-5°, +40°C
Call Ring tone Selection	
Number of conversation channels: 2 per BUS	



PROGRAMMING THE iLOFT DUOX TELEPHONE

There are two options to program the phone:

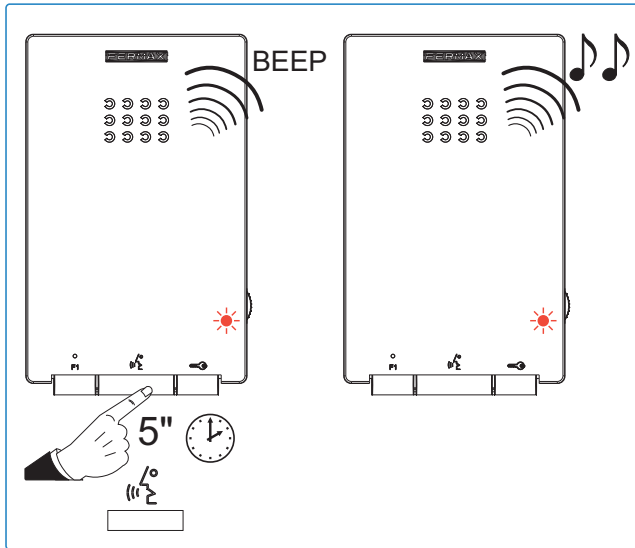
- From the Panel.
- From the Doorbell.


Notes:

- **The telephone will not function until it has been programmed.**
- You can see that the telephone does not have a programmed address because the led blinks. Once the telephone's address is programmed it is indicated via a fixed red light.
- Programming is always done from the panel activated as the **master panel**. Configuring as master panel Press the SW1 **button 3 consecutive times quickly**. After 2 seconds, a confirmation tone is heard, and the **master** panel is activated. Once having completed the monitor's programming, deactivate the MASTER panel **by pressing the SW1 button 3 consecutive times**. You can also configure it via a code on the keypad. For more information see the DUOX Panel Settings at www.fermax.es.
- The **programming from the Doorbell** is only available if the telephone has not been previously programmed, that is, if no address is recorded.
- **If there is a guard unit, it must be in night mode.**

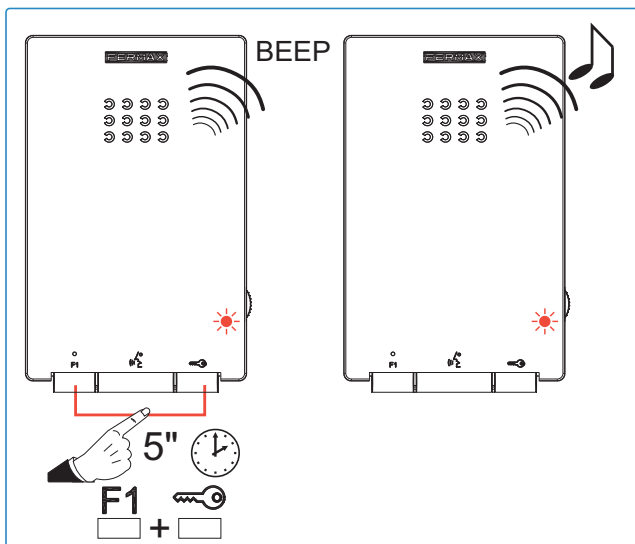
a) Programming a telephone address from the entry panel


With the telephone connected and hung-up:



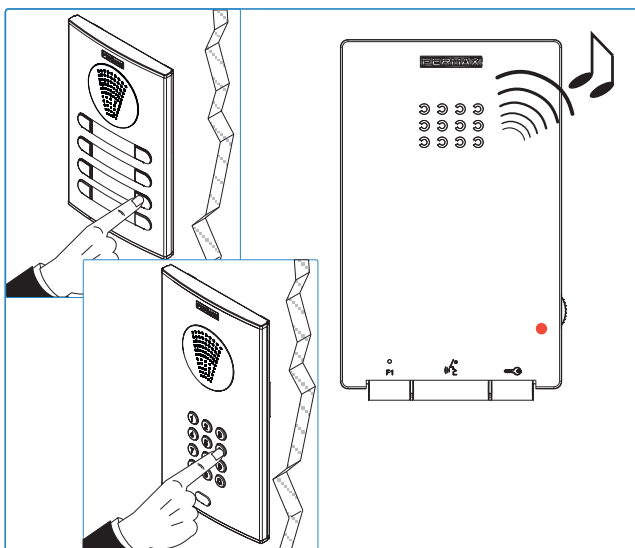
1. The user should start in the "Ringtone Selection" configuration menu. from the outdoor panel". Press and hold the  button for 5 seconds until you hear a "beep" then release, a ringtone will sound on the current panel. While in this mode:

Note: Telephone not yet programmed, red LED blinks quickly.



2. Press the F1 and the  button simultaneously for 5 seconds until you hear a tone (BEEP). Release.

Note: Optional: pick up the telephone to establish communication with the entry panel to indicate which residence you are in.



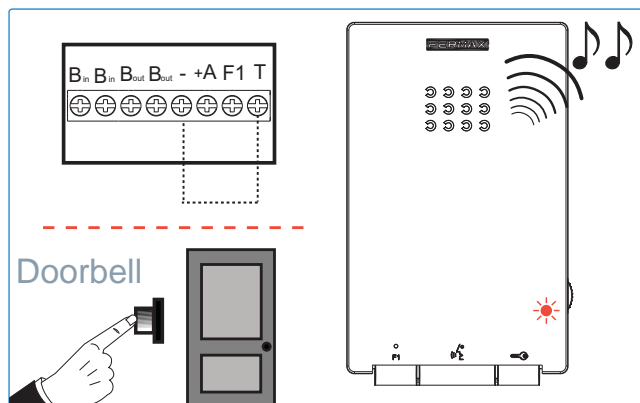
3. Press the button/residential call code from the panel. A confirmation tone will sound on the telephone. The telephone is programmed, (red led off)

Note: The time from which you hear the confirmation beep for entering in telephone programming, and the call is made from the panel to program the phone's address must be less than 2 and half minutes.

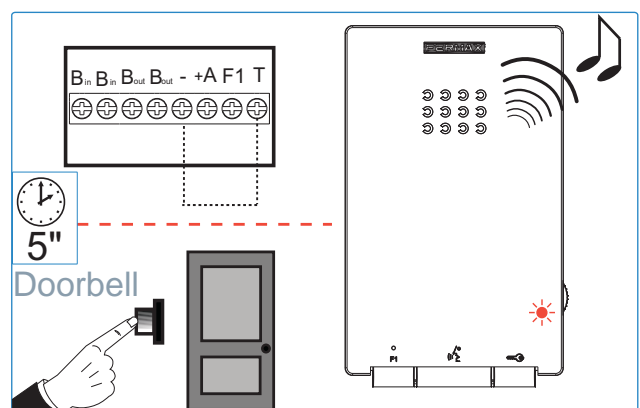
b) Programming the phones address via the doorbell.

Note: Only if the phone has not been previously programmed, that is, if no address has been saved. Telephone not yet programmed, red LED blinks.

With the telephone connected and hung-up:

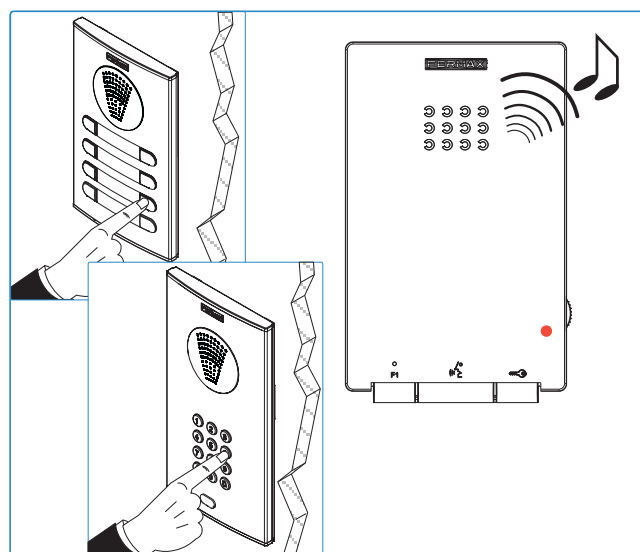


1. Press the door bell or short terminals "T" and "-".
Upon performing this operation you hear a doorbell.



2. After 5 seconds short or maintaining the door bell pressed, the entering programming tone sounds.
After this moment you can stop shorting or pressing the door bell. While in this mode:

Note: Optional: pick up the telephone to establish communication with the entry panel to indicate which residence you are in.



3. Press the button/residential call code from the panel. A confirmation tone will sound on the telephone. The telephone is programmed, (red led off)

Note: The time from which you hear the confirmation beep for entering in telephone programming, and the call is made from the panel to program the phone's address, must be less than 2 and half minutes.



iLOFT DUOX TELEPHONE SETTINGS

Ringtone Selection.

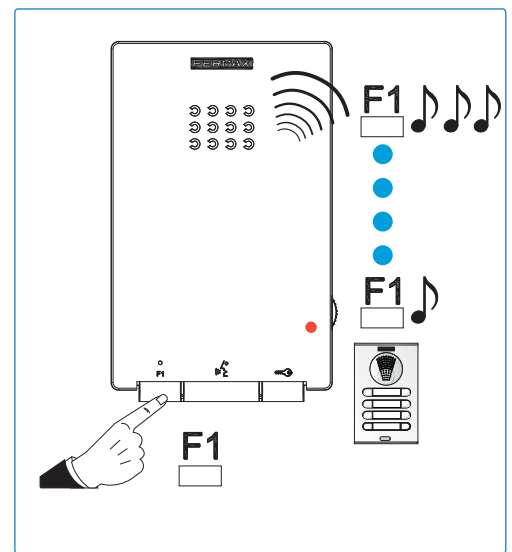
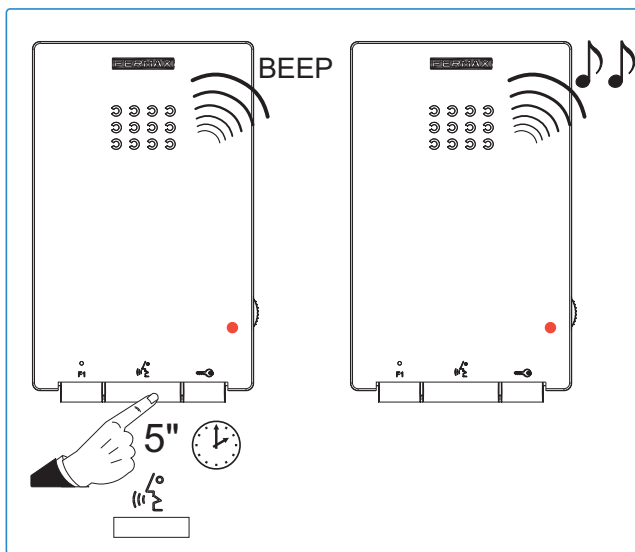
The telephone allows you to select different ringtones for calls from the entry panels and calls made from guard unit.

Accessing "Ringtone Selection" Mode

We can select from 5 ringtones.

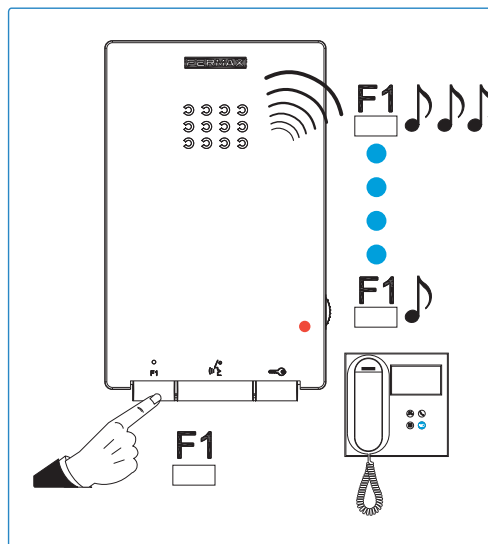
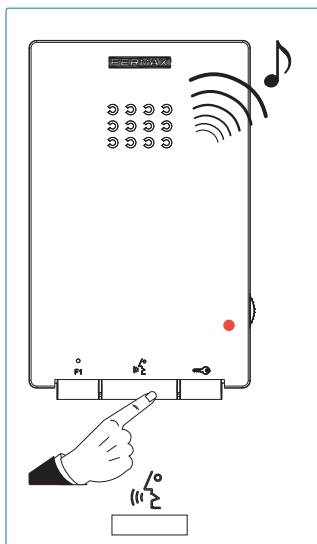
1. From the panel: With the telephone in standby and hung-up:

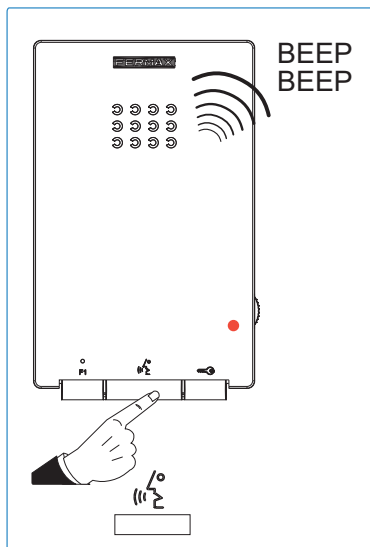
1. Press and hold the button for 5 seconds until you hear a "beep" then release, a ringtone will sound on the current panel.
2. Press the F1 button to select the ringtone, (circular sequence), the last one played will be the one selected.



2. From Guard Unit: Being in "ringtone selection from the panel" mode:

3. Press the button to select "configure the ringtone from guard unit", you will hear the current guard unit ringtone.
4. Press the F1 button to select the ringtone, (circular sequence), the last one played will be the one selected.

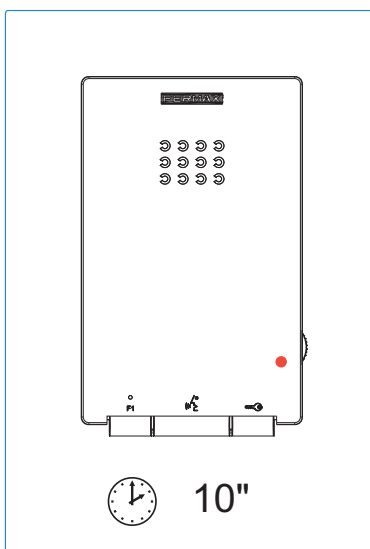




Exit ringtone selection (standby):

- When in the "selecting ringtone from guard unit" if you short press the button you will hear a double beep and you will exit the menu and return to standby.

Note: The last ringtone produced in each menu is saved.



Notes:

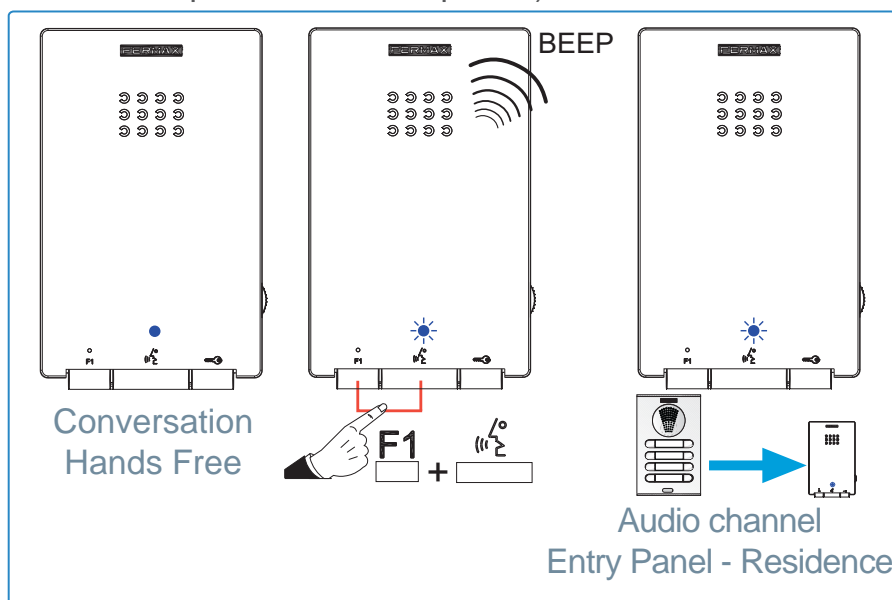
- You can also exit the guard unit ringtone menu from the panel, after inactivity for 10 seconds (storing the last ringtone played). The exit is confirmed with a single beep.
- You can also exit the guard unit ringtone menu from reception, after inactivity for 10 seconds (storing the last ringtone played). The exit is confirmed with a double beep.

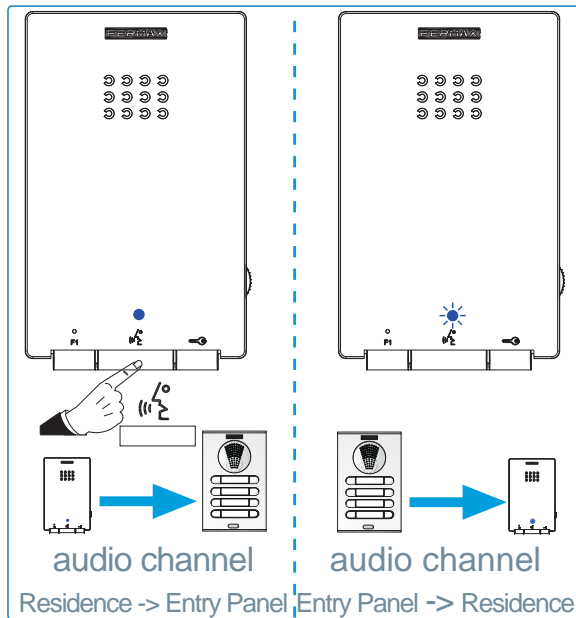
Simplex (Push to Talk) conversation mode


Default conversation mode on the telephone is "handsfree"


During a "handsfree" conversation, you can reset to simplex conversation mode (press the button to speak and release to listen).


- Starting from a handsfree conversation: press the F1 button and simultaneously until you hear a "BEEP" and see the blue led flashing intermittently, while input audio remains active (you can hear the panel on the telephone).

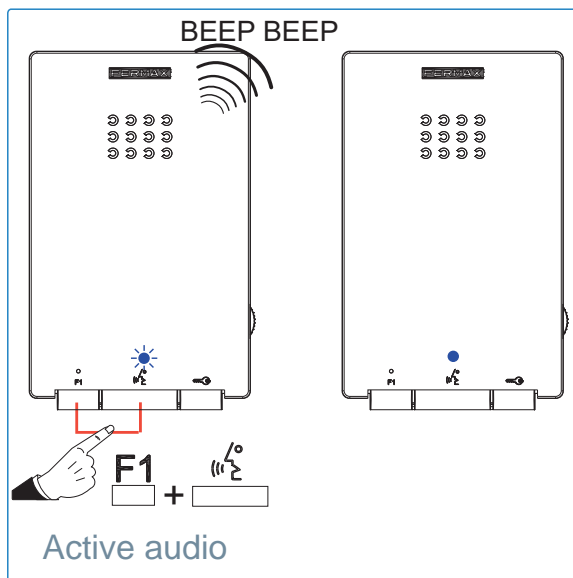





- From this point every time you press the  button, the output audio channel will activate (you will hear the telephone on the panel) and a constant blue led will light up.

On releasing the button the input  audio channel will activate (you will hear the panel on the telephone) and the intermittent blue led will light up.

Once you enter "simplex mode" it will remain activated by default. The next time the audio is connected, the input channel will activate when you press the  button (short press).



- To re-establish "handsfree" conversation mode once the audio channel is open, press F1 and the  button simultaneously until you hear a BEEP BEEP, (a fixed blue light)

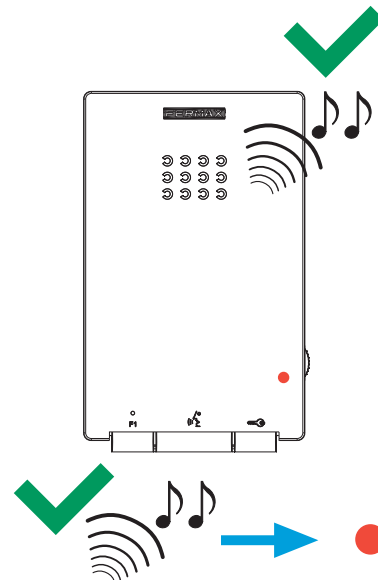
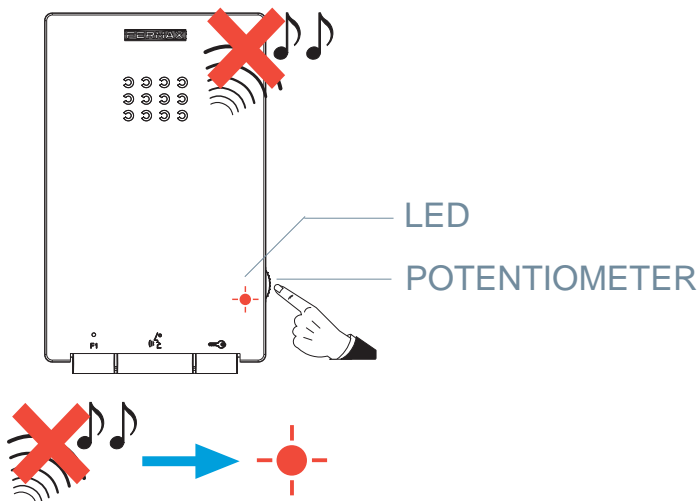
Call Volume Regulation

The telephone allows for call ringtone volume regulation and the output audio volume. Starting from **standby** mode, use the controller to adjust the call volume to any setting between the maximum and minimum levels.

Setting the call volume to minimum provokes the disconnection or Do not disturb mode. In this mode the led remains flashing. To reactivate the ringtone, you must move the controller above the minimum level.

With the telephone in **conversation** mode you can slide the controller to change the input audio volume to one of the 8 possible levels. In this case the volume level of the ringtone does not change.

Disconnecting a call: Do not disturb mode



Notes:

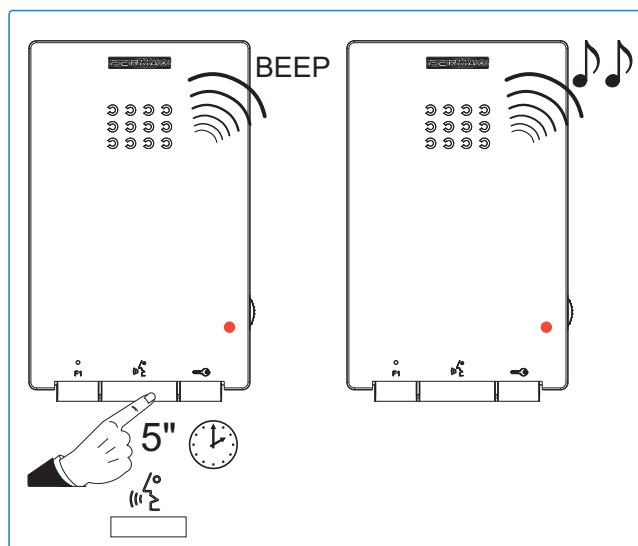
- Regulation affects all ringtones generated by the telephone: outdoor panels and entrance doorbells.
- To hear the selected setting you can:
 - make a call from the entry panel.
 - enter ringtone selection mode.
- Call volume regulation does not affect the incoming audio settings.
- If during call volume regulation the potentiometer is turned down to its minimum level, a red led blinks indicating that the **call has been disconnected (Do not disturb mode)**.
- The disconnection affects all ringtones generated by the telephone.
- If you want to disconnect the call, the call extension sounds or the lights and bell activator is activated. This terminal is not affected. Through this, the same tone sounds as that configured for the call answering tone from the panel, guard unit or doorbell.


Resetting Parameters

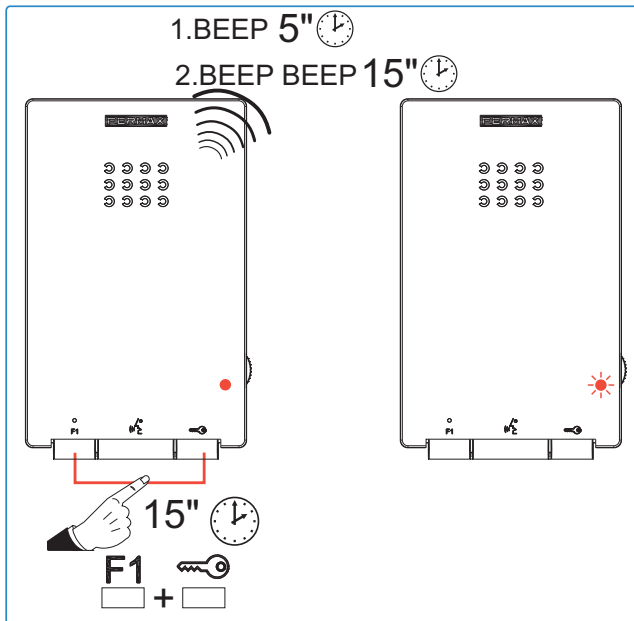
The installer reset sets ALL telephone values to default.


Note: If there is a **guard unit**, it must be in night mode.

With the telephone connected and hung-up:



1. The user should start from the "Ringtone Selection" configuration menu. Press and hold the  button for 5 seconds until you hear a "beep" then release, a ringtone will sound on the current panel. While in this mode:






- Press the F1 button and the  button simultaneously for 15 seconds until you hear a double tone (BEEP BEEP) and release. After 5" you hear a BEEP and after 10" you hear a BEEP BEEP.

Note: Since reset deletes the programmed address, when the LED is blinking it indicates that the reset has completed.



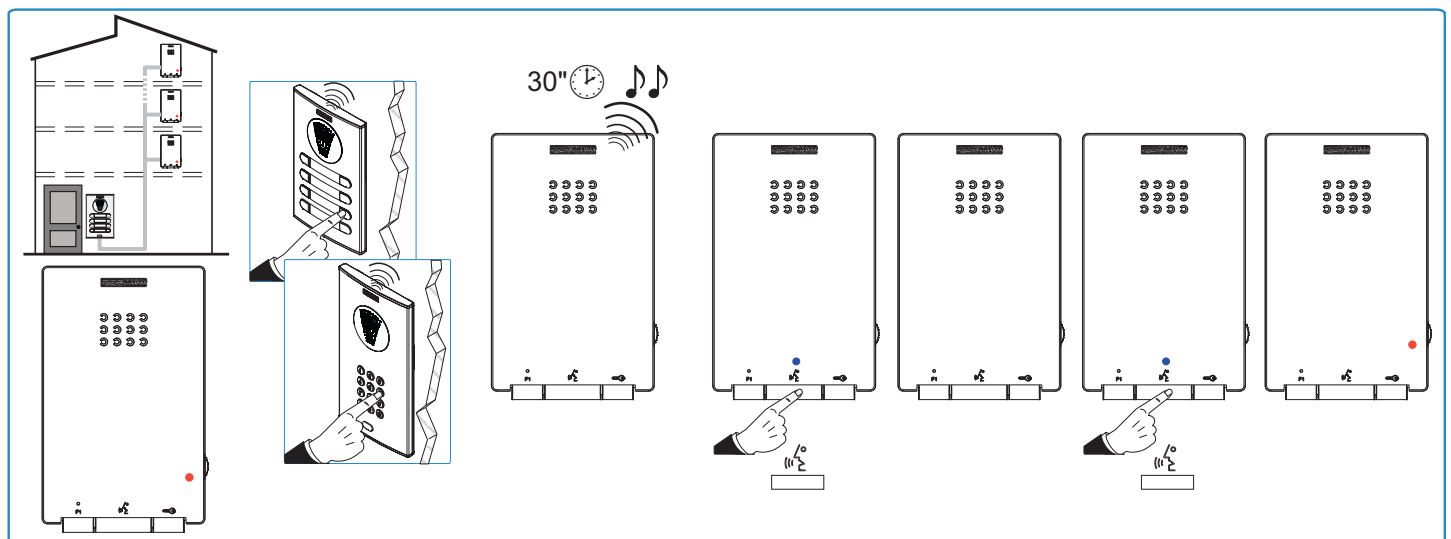
iLOFT DUOX TELEPHONE OPERATIONS


Answering a call






- Upon pressing the call button, a call tone is produced both on the **outdoor panel** and the **telephone**.
- On receiving a call on the telephone the user has 30 seconds to answer. The red led flashes during this time to indicate a pending call.
- Audio activation:** Upon pressing and releasing the  button within this time communication is established with the entry panel that has made the call, (constant blue led).
- Hang-Up:** Press the  button to end communication, if not, the conversation will be disconnected after 90 seconds. When finished the blue led light again turns off and the red light is turned on.
- Auto-Start:** With the telephone on standby, press and release this button  (short press), the blue led lights up. This function is possible with the panel in the same block; if the panel is in standby and programmed as "0"; and if there is a conversation channel available, (if it isn't available, upon hanging up you will hear a busy tone for 15 seconds). Auto-start: Only with video outdoor panel.

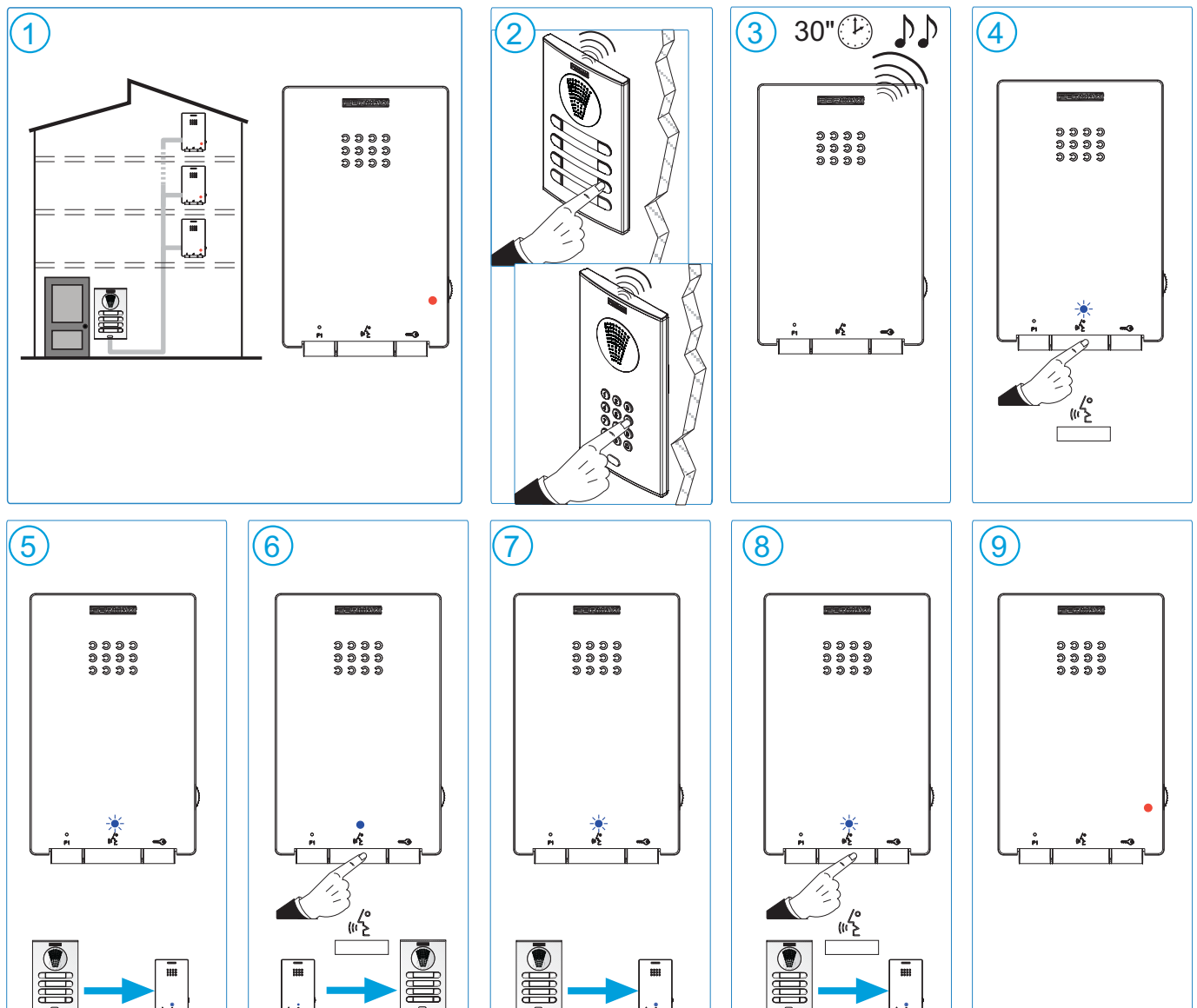
Notes:

- If the phone is not programmed, the auto-start will not function.
- If you made a call from the 00 panel to another home and you are within the waiting time to pick-up (30 seconds), you can not communicate with the 00 panel.




While in simplex conversation mode press the  button to speak and release to listen (-Push to Talk).

- Upon pressing the call to **Outdoor Panel** button, a call tone is produced both on the outdoor panel and the telephone.
- On receiving a call on the telephone the user has 30 seconds to answer. The red led flashes during this time to indicate a pending call.
- Press and release the  button, the blue led will flash, the input audio will remain active (you will hear the panel on the telephone).
- From this point every time you press the  button, the output audio channel will activate (you will hear the telephone on the panel) and a constant blue led will light up.
- Upon releasing the  button the input audio channel will activate (you will hear the panel on the telephone) and the intermittent blue led will light up.
- **Hung-up:** press the  button to finish communication, if not, the conversation finishes in 90 seconds. When finished the blue led light turns off again and the red light is turned on.
- **Auto-Start:** With the telephone on standby, press and release this button  (short press), the blue led flashes. This function is possible with the panel in the same block; if the panel is in standby and programmed as "0"; and if there is a conversation channel available, (if it isn't available, upon hanging up you will hear a busy tone for 15 seconds). Auto-start: Only with video outdoor panel.

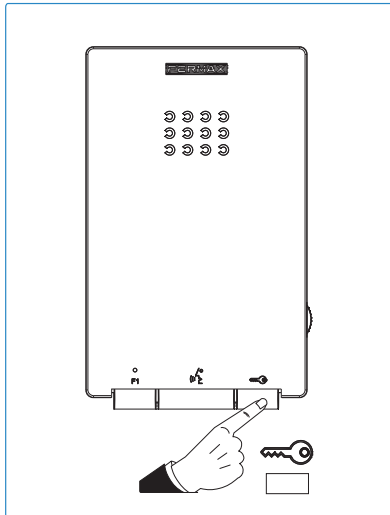


Door lock-release

When a call is received from the entry panel, you can open the door at any time, by pressing the  button.

In conversation (audio activated). If picked-up, it can occur during the conversation with an entry panel. The lock is released on the panel that called.

Upon receiving the call (audio not activated). If the phone is not answered you have 30 seconds to open the door.

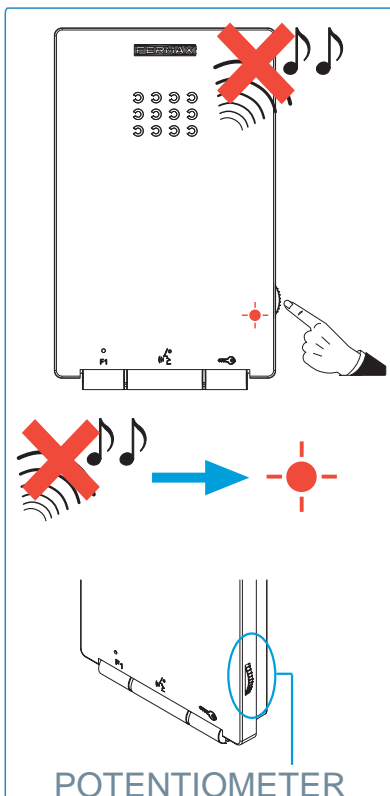


Controlling audio volume and cancelling the ringtone

The telephone allows for call ringtone volume regulation and the output audio volume. Starting from **standby** mode, use the controller to adjust the call volume to any setting between the maximum and minimum levels.

If during call volume regulation the control is taken down to the lowest volume, it provokes the call disconnection. In this mode the led remains flashing. To reactivate the ringtone, you must move the controller above the minimum level.


The disconnection option affects all ringtones generated by the telephone:

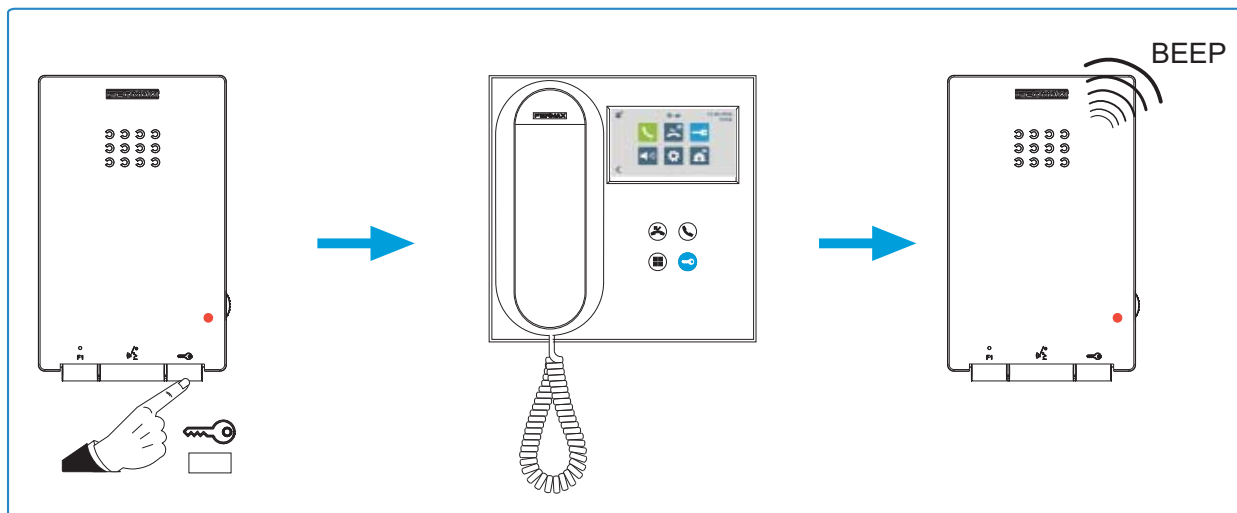


Notes:

- The red led flashes when a call is being received whether enabled or not.
- If the call is disconnected, the call extension function or light and doorbell activation is not affected. The connected device sounds.
- For more operating information: See "**Call Volume Regulation**".

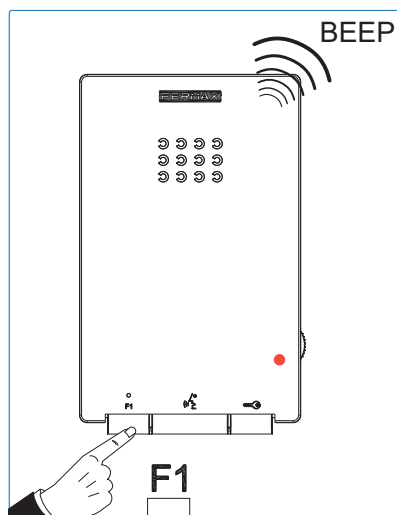
Call to Guard Unit

This is done by pressing the  button when the telephone is in standby and hung-up. The call to Guard Unit is made to the Guard Unit that is activated for the block in which the telephone is, sounding a beep when the confirmation is received from this Guard Unit. If the block's guard unit is not active (night mode) the call to a guard unit is made to the general guard unit if there is one active. If the installation does not have an active guard unit, the phone will not beep.



Note:

- If the receiver is picked-up right after calling the guard unit and before it answers, a busy tone is heard for the next 30 seconds.



F1 (Additional Functions)

Ask your installer which function is programmed.

F1:

- From the telephone you can activate an auxiliary relay (connected to a F1 terminal) for an extra function such as the landing light, alarm activation, etc.

Note: When you press F1 the telephone beeps.



Avda. Tres Cruces, 133 • 46017 Valencia (Spain)
Tel. 96 317 80 00 • Fax 96 377 07 50
Tel. Export: 00 34 96 317 80 02
www.fermax.com • fermax@fermax.com