**TAB
40505**

Tab 7 Due Fili Plus hands-free video entryphone

Wall-mount handsfree monitor for Due Fili Plus system with 7" colour LCD display, capacitive keypad for entryphone functions and intercom calls, induction loop for hearing aids, bracket for fixing in round or rectangular mounting box

The instructions manual can be downloaded from the website www.vimar.com

INSTALLATION RULES

Installation must be carried out in compliance with the current regulations regarding the installation of electrical equipment in the country where the products are installed.

STANDARD COMPLIANCE

EMC directive

Standards EN 60065, EN 61000-6-1, EN 61000-6-3 and EN 60118-4.



WEEE - User information

The crossed bin symbol on the appliance or on its packaging indicates that the product at the end of its life must be collected separately from other waste. The user must therefore hand the equipment at the end of its life cycle over to the appropriate municipal centres for the differentiated collection of electrical and electronic waste. As an alternative to independent management, you can deliver the equipment you want to dispose of to the dealer when purchasing a new appliance of an equivalent type. You can also deliver electronic products to be disposed of that are smaller than 25 cm for free, with no obligation to purchase, to electronics retailers with a sales area of at least 400 m². Proper sorted waste collection for subsequent recycling, processing and environmentally conscious disposal of the old equipment helps to prevent any possible negative impact on the environment and human health while promoting the practice of reusing and/or recycling materials used in manufacture.

Description

Wall-mount Tab 7 monitor for Due Fili Plus system with 7" LCD colour display, loudspeaker for calls, capacitive keypad for entryphone functions (unlocking, self-starting, auxiliary services, volume, brightness and contrast controls) and intercom calls.

Desktop installation is possible with the desktop base accessory 40195 (sold separately).

Can be used by wearers of hearing aids.

Technical characteristics

- Wall-mounted, with metal bracket, in box: circular 2M (Vimar V71701), 3M (Vimar V71303, V71703) horizontal and vertical, 4+4M (Vimar V71318, V71718) and square, British standard.
- 7" LCD 16:9 display, resolution 800x480 pixels
- Minimum video signal level on the bus for reception: -20 dBm
- Capacitive touch keypad with backlit symbols.
- Powered from BUS terminals 1, 2 - nominal voltage 28Vdc
- Power consumption:
 - in standby: 25 mA
 - maximum current: 350 mA
- Ambient class: Class A1 (indoor use)
- IP30 protection rating
- Electronic ringer with 10 different melodies.
- Input for landing call.
- Dimensions: 165.8 x 184 x 24.2 mm
- DIP switch for line termination impedance.

Audio frequency function for hearing aids

The video entryphone can be used by people wearing hearing aids.

For correct functioning of the hearing aid, please refer to its instruction manual. Any metal objects or electronic equipment in the vicinity may affect the quality of the sound received by the hearing aid.

Maintenance

Clean using a soft cloth. Do not pour water onto the appliance and do not use any type of chemical product.

Cleaning must be carried out either with the apparatus powered off (= disconnected from the bus) or after activating the keypad cleaning procedure (see the relative paragraph).

Warnings for the user

Do not open or tamper with the appliance.

In the event of faults, contact specialized personnel.

First power up

The 40505 leaves the factory without an ID, as do all other internal units (except kits). On switching on the display by touching the keypad, the only action possible is to assign main  or secondary  internal unit as the ID:



First power up

On choosing one of the two, the internal unit requests ID assignment from the Master external unit and the functions of the keys change as follows:



Initialisation in progress

T1  now serves to cancel a request, **T3**  and **T4**  serve respectively to reduce and increase the speaker volume.

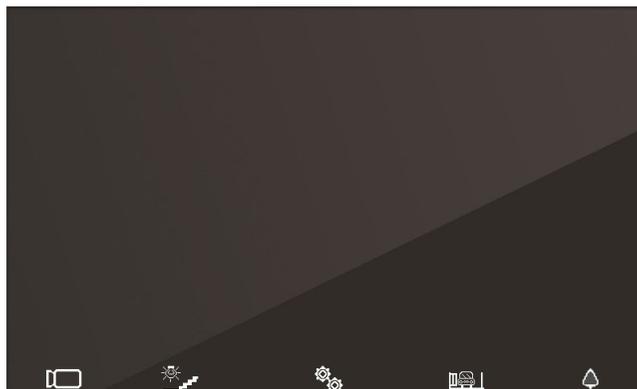
On completion of the ID assignment procedure, the number assigned will appear at the top of the display:



Assigning ID

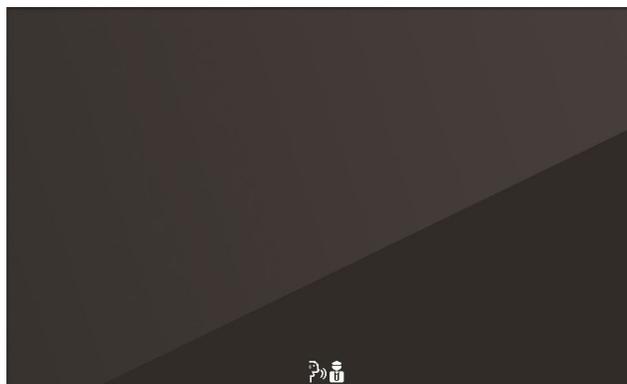
After ID assignment

Once the ID has been assigned, the display, when **woken up**, appears as follows:



Main screen

The **P/A** key toggles between the context displayed (**Operators**) and **Intercom**:

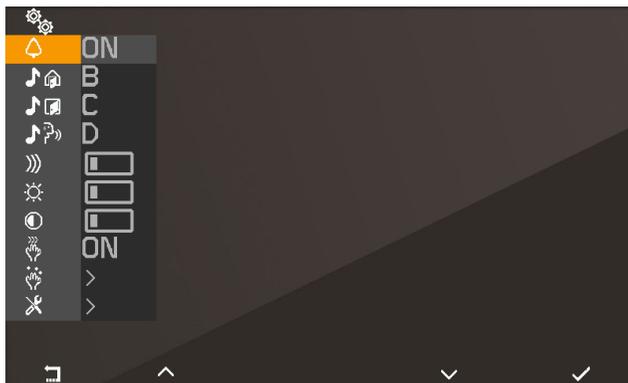


Intercom context

If the **P/A** key is touched when the internal unit is in standby mode, the unit will wake up in the **Intercom** context. By default, it is only possible to call, with the **M** key, a generic porter switchboard. Using the programming procedure described below, it is possible to add up to four other intercom calls, which can also be to specific porter switchboards.

User configuration

Touching the **M** key in the **Operators** context opens the user configuration menu. In all the menus, navigation is circular, i.e. scrolling down past the last option in any menu takes you back to the first option.



User configuration menu

T1 returns you to the **Operators** context, while **T4** takes you to the highlighted configuration option.

Ringer mute

Use  and  to enable/disable the ringtone of the indoor station, **for incoming calls**, as follows:

- **ON**: (ringer enabled)
-  : (ringer disabled) The internal unit does not ring, but otherwise functions normally.
-  : (user absent) The internal unit does not ring and does not switch on. With configuration via SaveProg (flag 22 ACK. Grp. Excl. S) it is possible to ring secondary ringers, otherwise the call from external unit is rejected and unsuccessful.

If the ringtone is disabled, at the end of this process, the  icon will be displayed opposite key T4.

In the case of 'user absent', the icon  is displayed. 'User absent' is the same function assigned by default to T4 when the internal unit is in standby mode.

Ringtone mute affects all incoming calls (from outdoor station, intercom calls, landing calls, calls from switchboard).

Press **T4**  to confirm, **T1**  to cancel without saving.

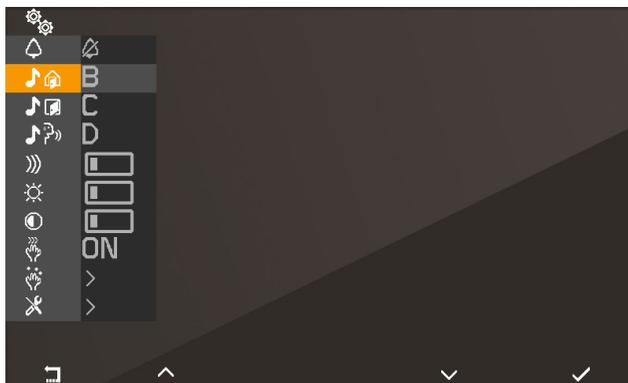
Note: in the remaining part of this manual, it is assumed that the functions of T1 and T4 are understood.

Default: ringer enabled.

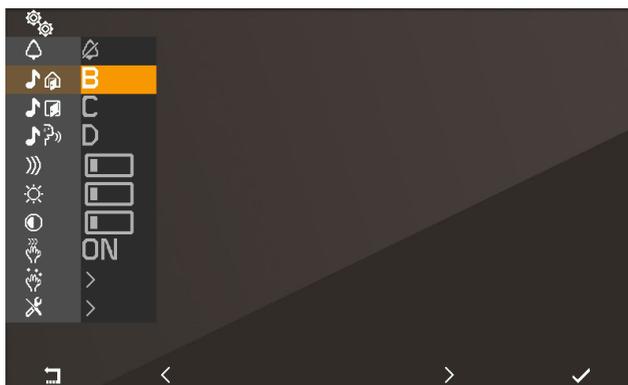
Select melody for calls from external unit

Use  and  to select one of the 10 available melodies (identified by letters A to J) to use as a ringtone for calls from the external unit. The internal unit plays back the selected ringtone.

Default: melody B.



Select melody for call from external unit

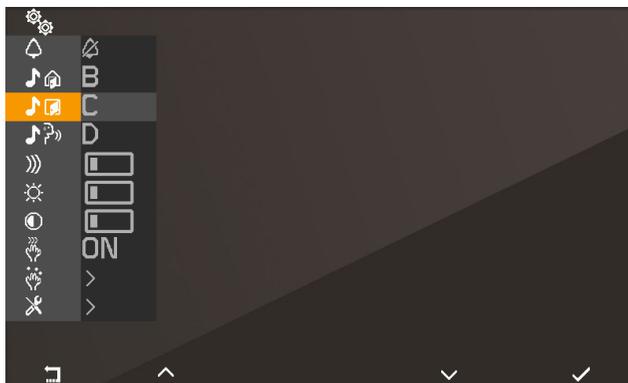


Confirm melody for call from external unit

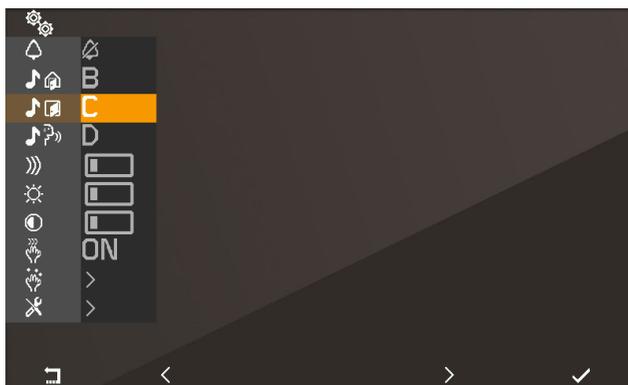
Select melody for calls from landing

Use  and  to select one of the 10 available melodies (identified by letters A to J) to use as a ringtone for calls from the landing. The internal unit plays back the selected ringtone.

Default: melody C.



Select melody for call from landing

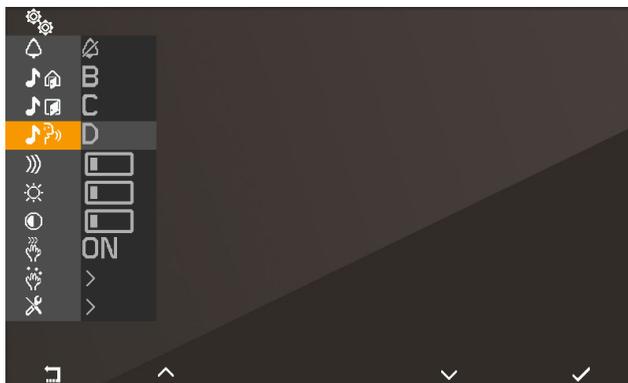


Confirm melody for call from landing

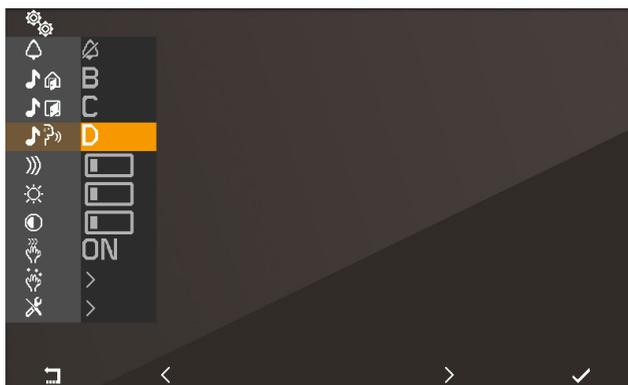
Select melody for calls from internal unit or switchboard

Use **<** and **>** to select one of the 10 available melodies (identified by letters A to J) to use as a ringtone for calls from an internal unit or switchboard. The internal unit plays back the selected ringtone.

Default: melody D.



Select melody for call from internal unit or switchboard



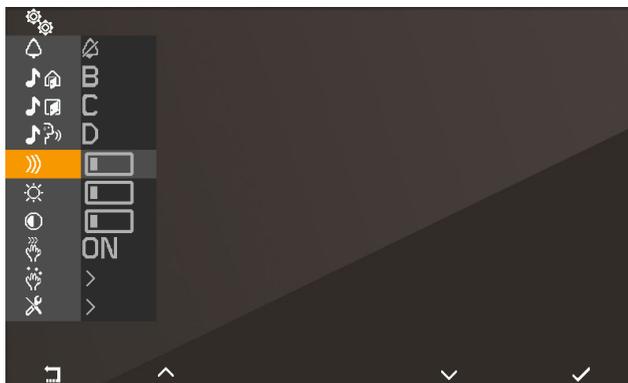
Confirm melody for call from internal unit or switchboard

Ringer volume control)))

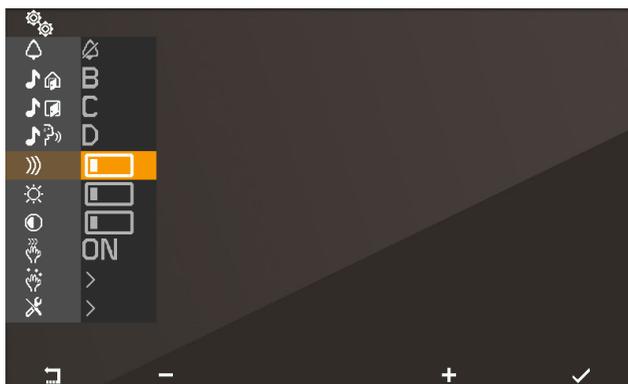
Use **-** and **+** to increase/decrease the ringer volume, which is indicated by the horizontal bar.

NOTE: the level set is used for all ringtone types (calls from the external unit, landing, internal unit or switchboard).

Default: level 5.



Select ringer volume control



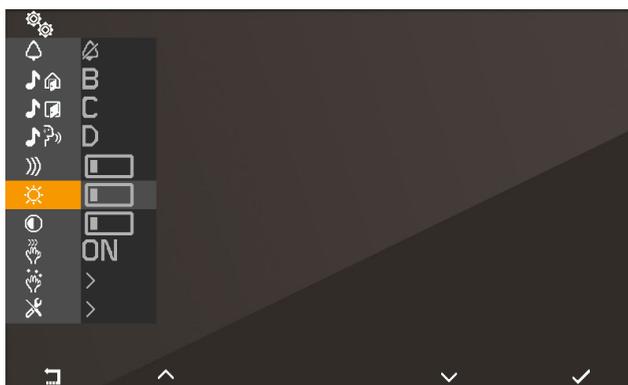
Ringer volume control

Brightness control

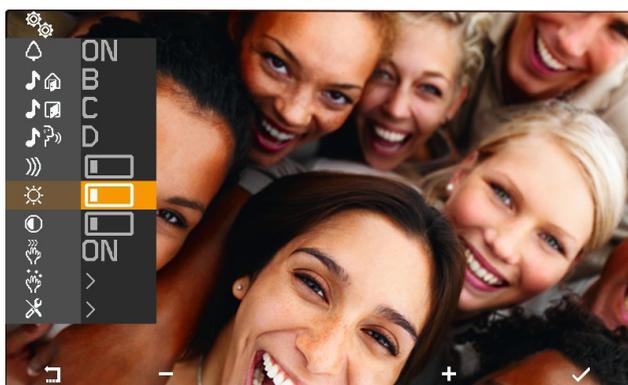
Use **-** and **+** to increase / decrease the brightness of the video signal from an external unit, the level of which is indicated by the horizontal bar. The internal unit automatically requests the Master external unit to perform a self-start procedure so that the user can see the effect of the brightness control.

NOTE: the level set is used for all external units.

Default: level 5.



Select brightness control



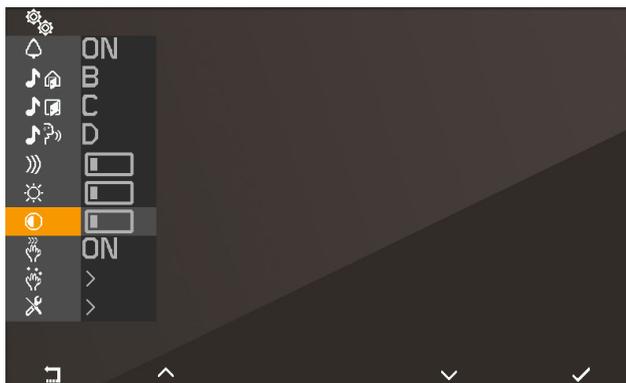
Brightness control

Contrast control

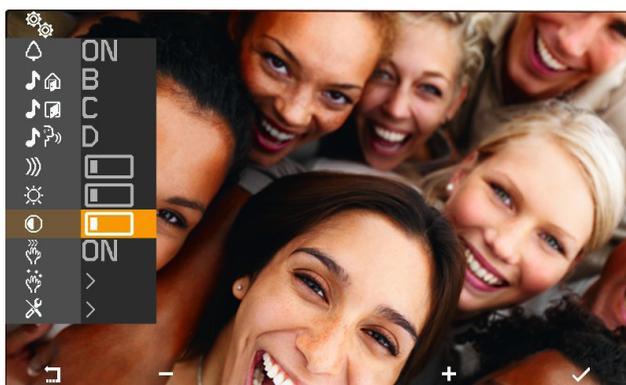
Use **-** and **+** to increase / decrease the contrast of the video signal from an external unit, which is indicated by the horizontal bar. The internal unit automatically requests the Master external unit to perform a self-start procedure so that the user can see the effect of the contrast control.

NOTE: the level set is used for all external units.

Default: level 5.



Select contrast control

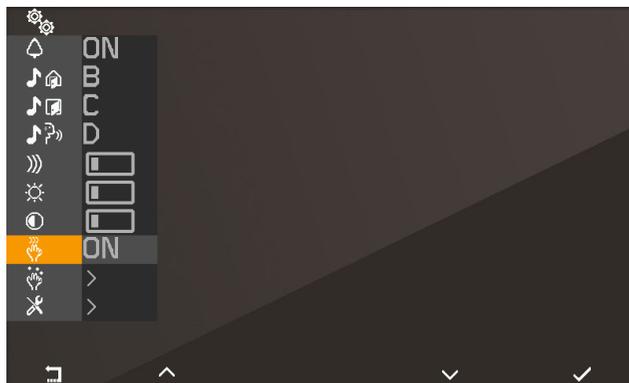


Contrast control

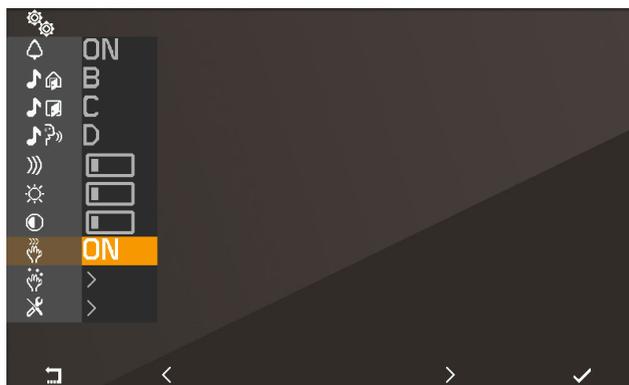
Key tones

Use the keys < and > to enable/disable the tone produced whenever a key is touched (keystroke feedback).

Default: enabled



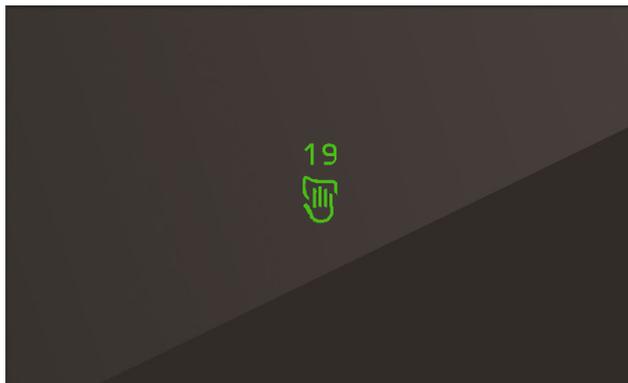
Key tone



Key tone

Keypad cleaning

Activates the keypad cleaning function:



Keypad cleaning activation

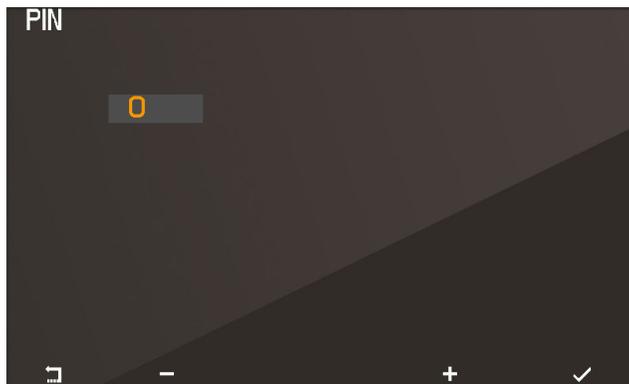
The **keypad cleaning** procedure lasts 20 seconds and this time period cannot be extended by pressing the keys, which remain disabled until the keypad cleaning procedure is completed.

Installer configuration

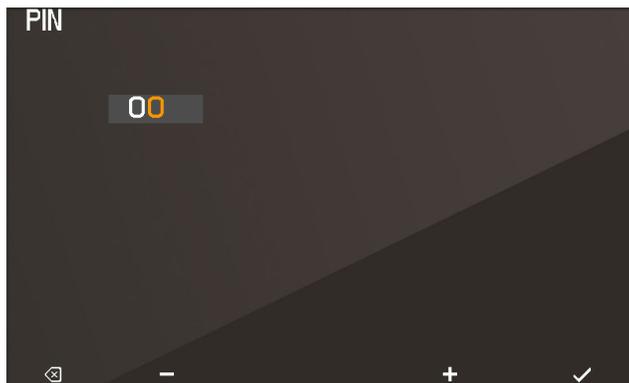
To access the installer menu, you must enter the 3-digit code (PIN). The default PIN is 000, but this can be changed as described below. The PIN is entered using the following keys:

- **T1**  to cancel the last digit, provided that the cursor is on the second or third digit, otherwise use  to return to the user configuration menu.
- **T2**  to change the digit highlighted in colour in the sequence 0 – 9 – 8 ... – 2 – 1 – 0 ...
- **T3**  to change the digit highlighted in colour in the sequence 0 – 1 – 2 ... – 8 – 9 – 0 ...
- **T4**  to confirm the selected digit, and after the third digit, if the PIN entered is correct, to access the installer configuration procedure. If the PIN is not correct, you are returned to the user configuration menu.

Note: once the correct PIN has been entered and you have returned to the user menu, it will not be necessary to enter the PIN again to access the installer menu, until the internal unit returns to standby mode.



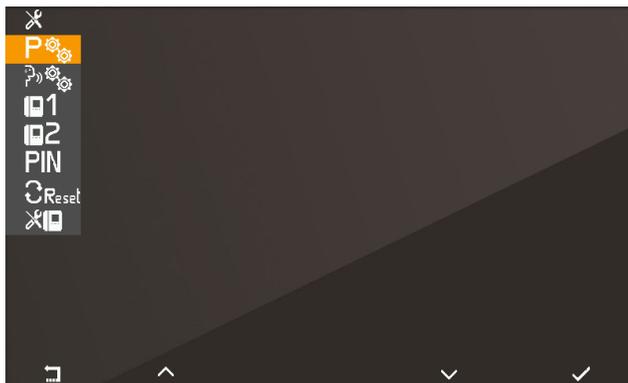
Entering the PIN



Entering the PIN



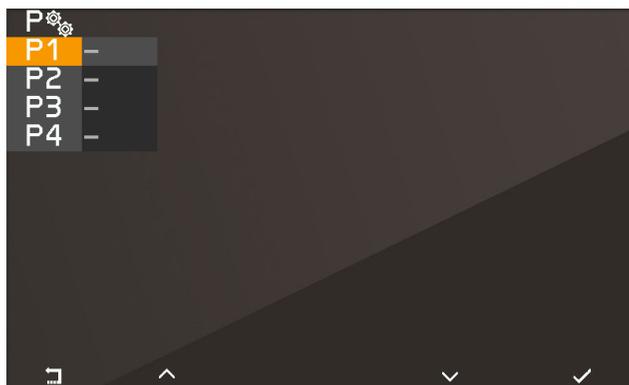
Entering the PIN



Installer menu

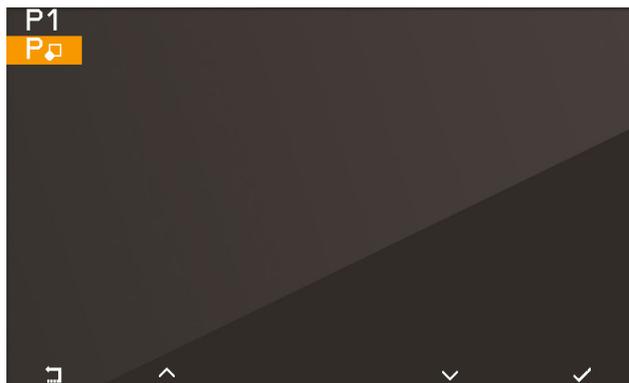
Selection of key icons in the *Operators* context

With the option  you can change the icons that appear above the keys in the **Operators** context. The default setting is blank:

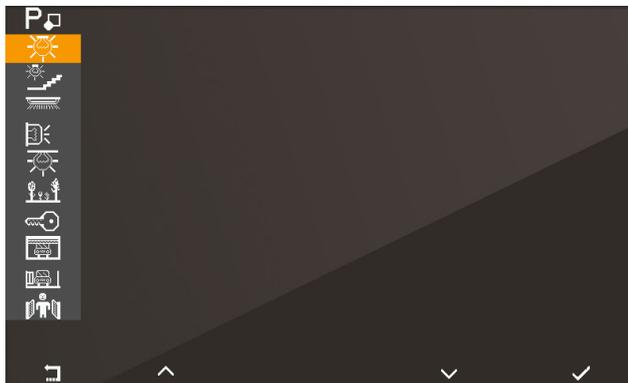


Selection of key icons in the Operators context

Which means that the preset icons i.e., those which first appear, will be used. When assigning icons starting from the default setting, touching **T4**  opens the following menu:

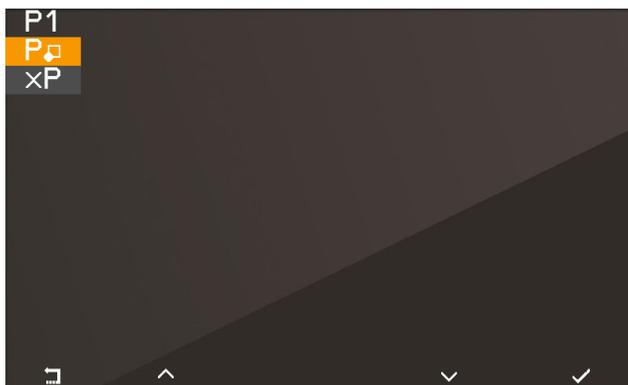


On confirming with **T4** , a list of selectable icons appears:



Selection of key icons

If an icon has already been assigned, an option will be added to the specific menu that allows you to cancel the assigned icon and replace it with the default icon.



Selection of key icons

This operation must be confirmed:

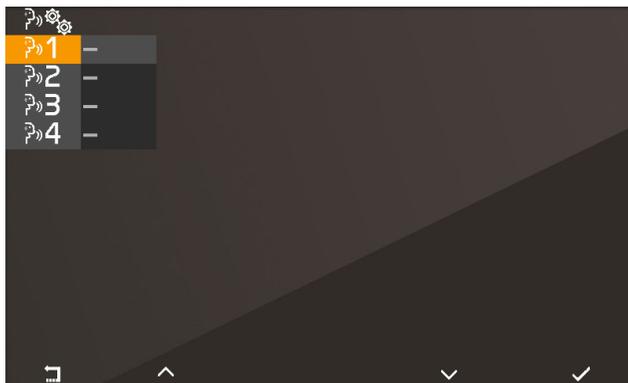


Confirm icon cancellation

To change an icon, you do not need to cancel it first, just simply replace it with a new icon.

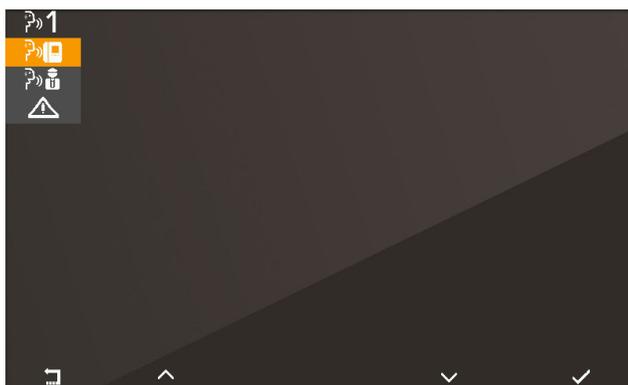
Intercom

With the option   you can change the IDs of internal units or porter switchboards to be used in the **Intercom** context. The default setting is blank:



Intercom menu

Each line corresponds to one of the four keys in the **Intercom** context. On selecting one of these four options, a sub menu opens:



Selection of intercom type

The three options that appear are:

-  to associate an internal unit with the selected position.
-  to associate a porter switchboard with the selected position.
-  to associate the Alert function with the selected position.

-  to cancel the association with the selected position (visible only if the position is programmed).

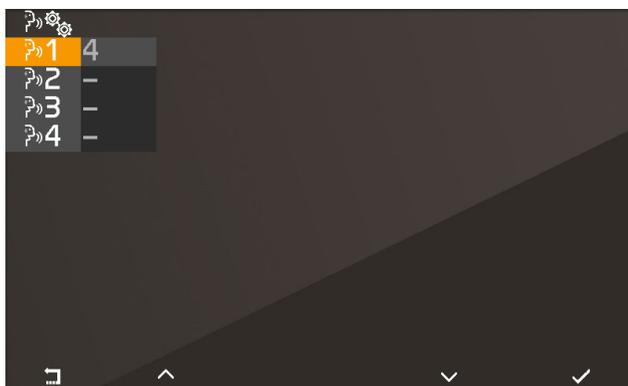
Association of an internal unit



Selection of intercom type

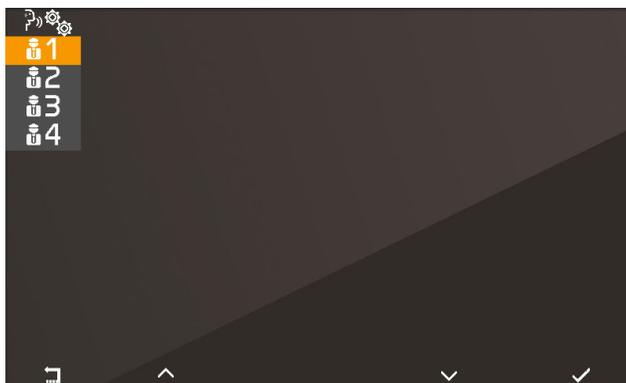
In this condition, on the internal unit that is to be called, press a key that can be identified unequivocally. It is advisable to use a key that controls opening of a lock, but you can also use a key that operates a relay or controls one of the F1 or F2 outputs of an external unit. If the internal unit that is to be called has a handset, it is advisable to use the lock with the handset replaced.

Once the association has been made, the basic menu of the **Intercom** context will appear as follows (the internal unit to be called is number 4):



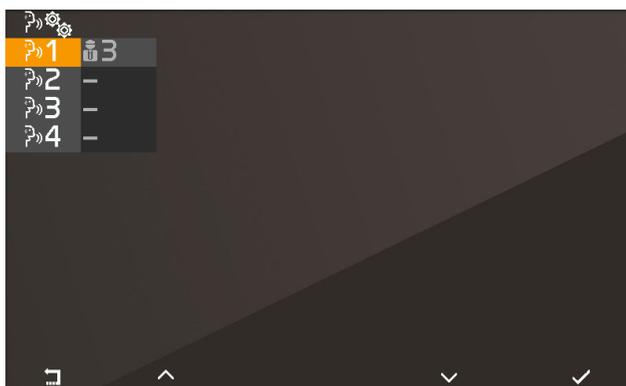
Awaiting association of the internal unit to be called

Association of a porter switchboard



Selection of the switchboard to be called

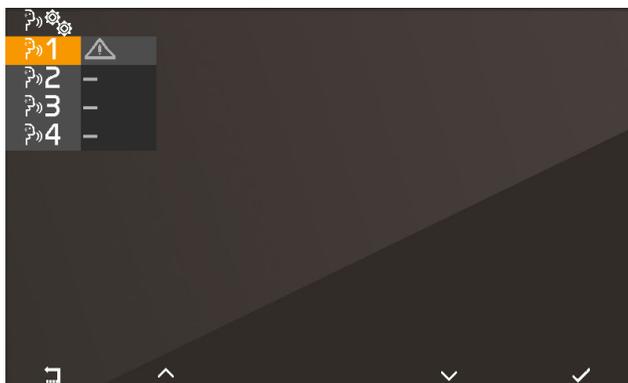
Select the porter switchboard you wish to assign to the previously selected key in the **Intercom** context and confirm. The basic menu of **Intercom** context will appear as follows:



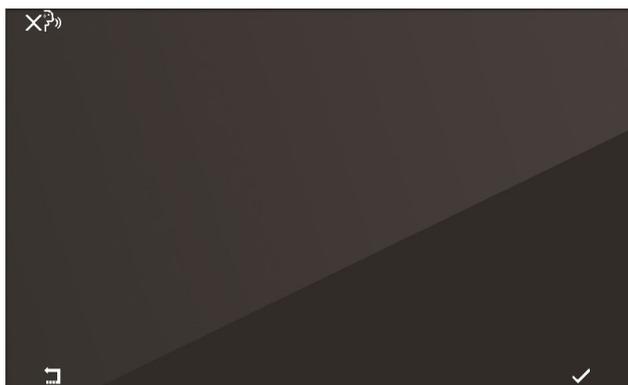
Selection of the switchboard to be called

Association of the Alert function

On confirming the function, the Alert function is immediately assigned to the previously selected key in the **Intercom** context:



Cancelling an association



Awaiting confirmation of intercom cancellation

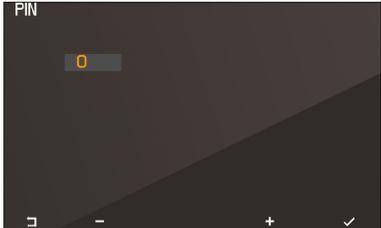
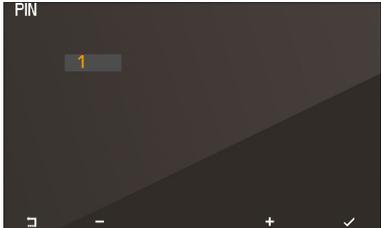
Confirm or cancel removal of the association between previously selected key in the **Intercom** context.

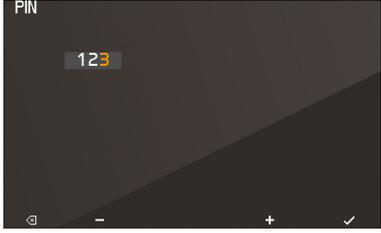
Assignment of main and secondary ID

For descriptions of these procedures, refer to the beginning of the paragraph *First power up*.

Changing the PIN

To change the PIN, follow the same procedure as that used to enter it to access the installer configuration menu. The following example shows how to set the PIN to 123:

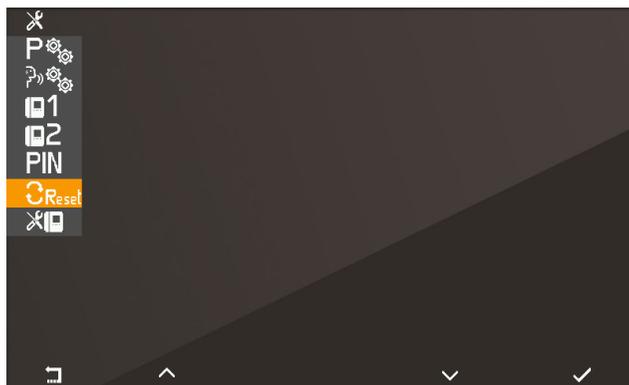
| | |
|---|---|
|  | Touch  |
|  | Touch  |
|  | Touch  |
|  | Touch  2 times |

| | |
|---|--|
|  | <p>Touch </p> |
|  | <p>Touch  3 times</p> |
|  | <p>Touch </p> |

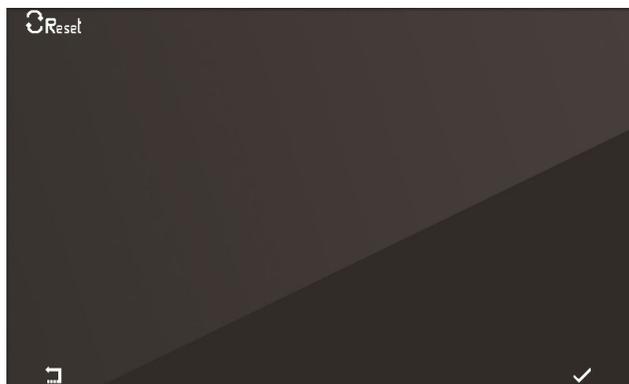
The PIN has now been changed to 123.

Reset factory configuration

This procedure allows you to cancel any settings and programming of the internal unit and to restore it to the original default condition. The system asks for confirmation that you wish to proceed with the reset:



Selection of Reset factory configuration

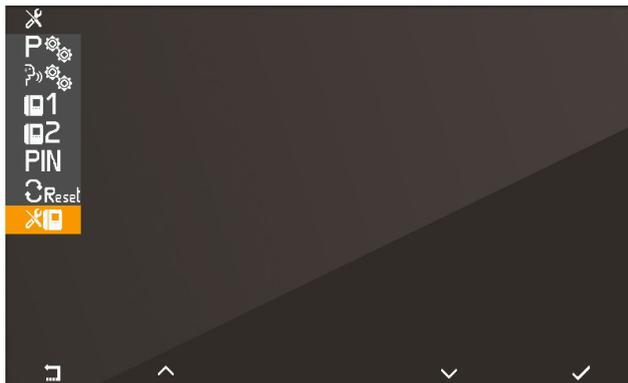


Awaiting confirmation of Reset factory configuration

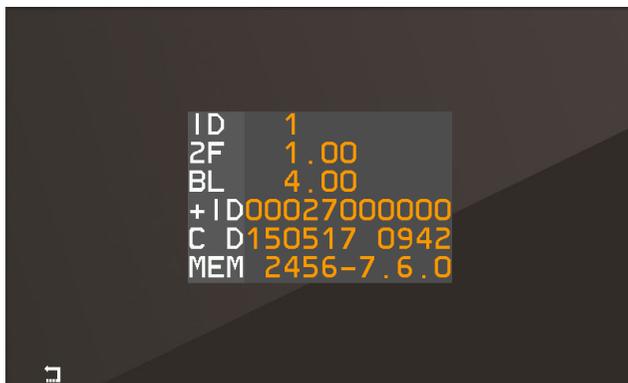
From this moment, the internal unit is in the **First power up** condition.

System information

From this menu, useful information can be obtained for Vimar customer service (SAC / TSX), including ID, Firmware version, etc.:



System information



Information display

- The information reported, from the top downwards, is as follows:
- ID of the internal unit
- FW version
- Bootloader version
- UID
- FW compilation date and time
- Available memory – FreeRTOS version used

Programming with SaveProg

SaveProg manages Art. 40505 from version 3.3.2.1 onwards. The correspondence between the keys P1..P8 of SaveProg and the keys T1..T4 in the two operating contexts is as follows:

| KEY | OPERATORS | INTERCOM |
|-----|-----------|----------|
| T1 | P1 | P3 |
| T2 | P2 | P4 |
| T3 | P7 | P5 |
| T4 | P8 | P6 |

The **LOCK** key corresponds to P0.

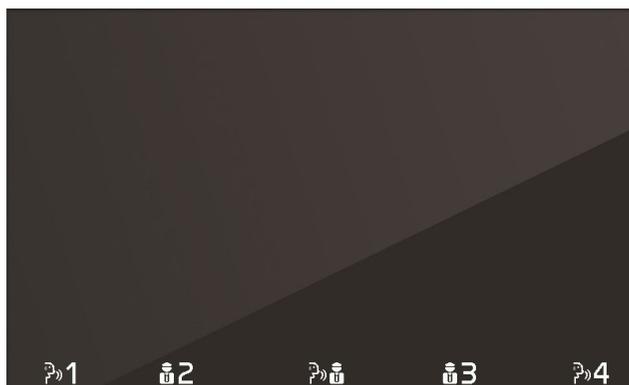
Call to internal unit (outgoing)

Note: before connecting the audio channels with any other device, the internal unit 40505 determines the best possible communication parameters. During this stage, which lasts approximately 1 second, a waiting tone is transmitted to the user.

To make a call to another internal unit, at least one call must be programmed as described above.

No specific programming is required for a generic porter switchboard.

The figure below shows the situation when all the keys are programmed. This operating context, designated **Intercom**, is obtained by touching the **P/A** key when in standby mode or by switching from the **Operators** context, also by touching **P/A**.



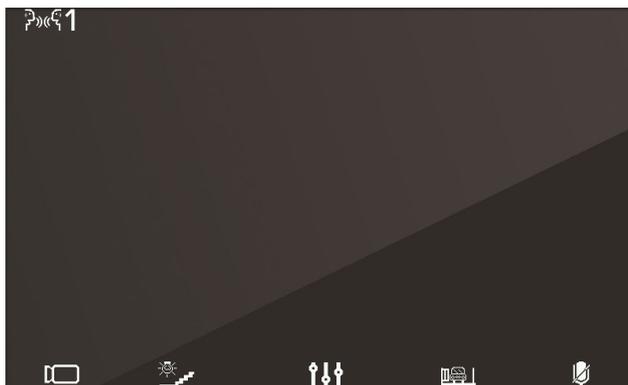
Call to internal unit

T1 and **T4** make a call to an internal unit, **T2** and **T3** call two specific porter switchboards, **M** call a generic porter switchboard.

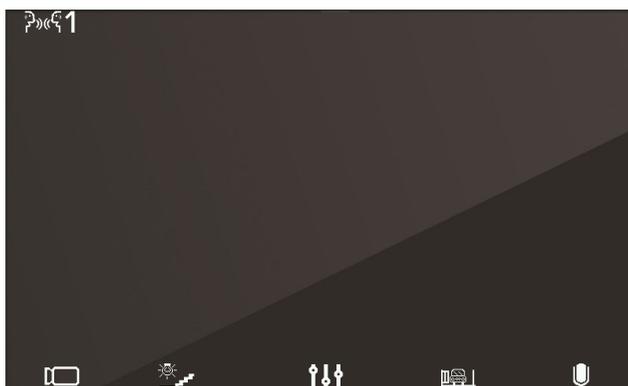
The call is initiated by touching one of the above keys. Before the call is answered, the display changes to the following:



The icons at the top left of the display indicate that a call is being made to the internal unit programmed as **T1**. While waiting for an answer, you can press **T2** and **T3**. On receiving an answer, the display changes to:



The centre key, now , and **T4** are enabled.  gives access to the context **Audio only settings**. **T4** has the function of microphone mute  or enable .



The **Audio only settings** context allows loudspeaker volume control only.



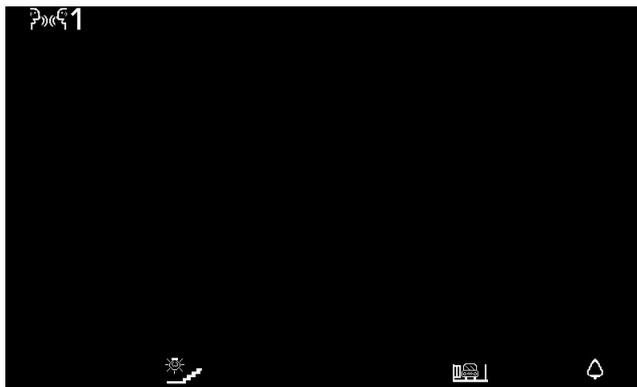
The T1  and T2  keys turn grey respectively when the minimum and maximum levels are reached.

The centre key, now , allows you to return to the previous context.

The conversation can be ended with the **P/A** key or by the internal unit to which the call was made using the appropriate procedure.

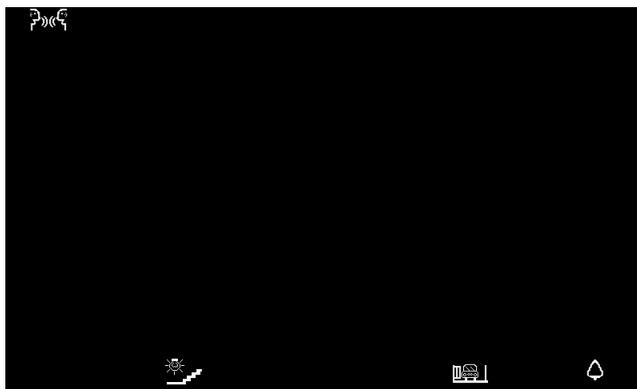
Call from internal unit (incoming)

On receiving a call from another internal unit, the display appears like this:



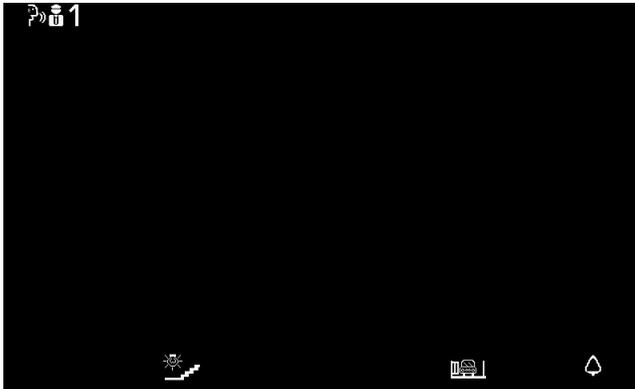
Incoming call from internal unit

The number at the top left indicates the position of the caller in the list of keys in the **Intercom** context. If the caller is not present in the list, no number will be displayed.



Call from internal unit not belonging to the intercom context

If the caller is a switchboard, different icons appear at the top left of the display:



Call from switchboard 1

For incoming intercom calls, it is not possible to mute the ringer before a call is received. It is only possible to mute the ringer for the current call. Once muted, the ringer cannot be switched back on during the current call, so the icon disappears.

The call is answered using the **P/A** key, after which the situation is the same as with an outgoing call.

The conversation can be ended using the **P/A** key or by the calling internal unit using the appropriate procedure.

Switchboard scenarios

If the unit either making or receiving the call is a porter switchboard, there are other possible scenarios. For example, the switchboard operator could connect an internal unit to another internal unit, to an external unit or to a second porter switchboard.

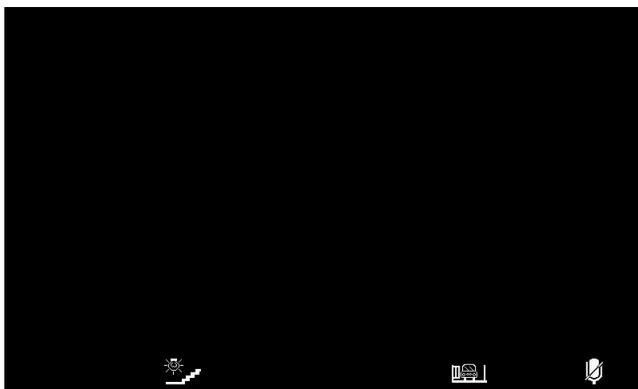
If the switchboard operator already has the other internal unit, external unit or switchboard on hold, he/she will connect it directly.

Alternatively, he/she could put this internal unit on hold while carrying out the necessary operations to call the other party. The switchboard operator can only connect an external unit to the internal unit if the external unit is already on hold:



Internal unit connected to external unit

During the wait, the internal unit will emit a specific tone. The internal unit can also cancel the wait by putting the internal unit in standby mode using the **P/A** key.

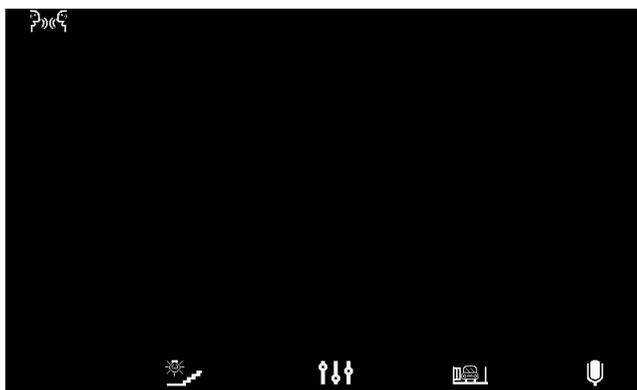


Internal unit put on hold

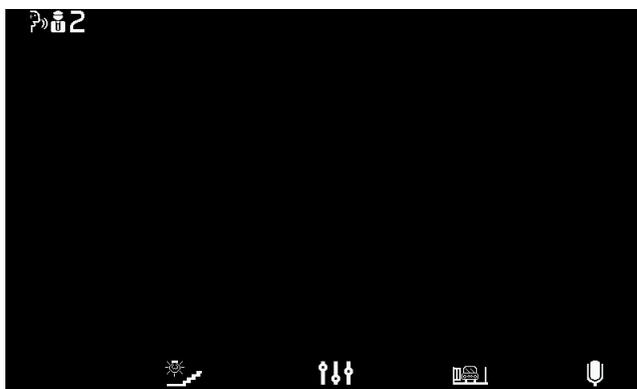
During the wait, the microphone is obviously muted and will remain as such also when the switchboard operator

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connects the the internal unit to the other party, which means that, once connected, it will be necessary to use T4  to re-enable the microphone. Alternatively, you can also use T4  before the new connection is made. In this case the microphone will already be enabled. Given that it is not possible to know beforehand the exact moment at which the switchboard operator will connect the internal unit to the other party, this strategy has been chosen in order to ensure that the other party hears nothing unless at the explicit request of the party waiting.



Internal unit connected to another internal unit

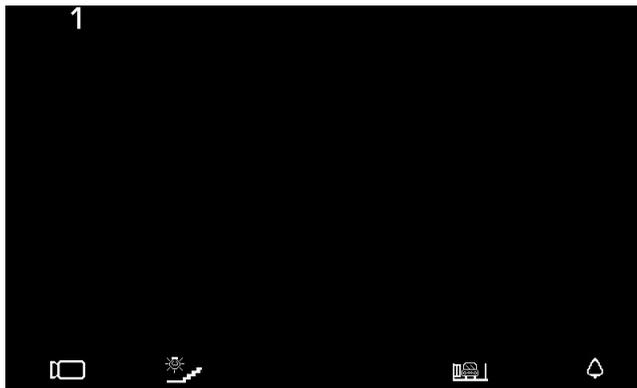


Internal unit connected to a porter switchboard

The conversation will proceed as if held directly between the internal unit and the other party.

Call from external unit (incoming)

On receipt of a call from an external unit, the display can appear in two different ways, depending on whether the call is coming from an audio only or from an audio/video external unit:



Call from external unit (incoming), Audio



Call from external unit (incoming), Video

Note: the display of internal unit Art. 40505 switches on on receiving a call from an external unit to display the signal of the external unit in accordance with its own programming, as indicated in the table below.

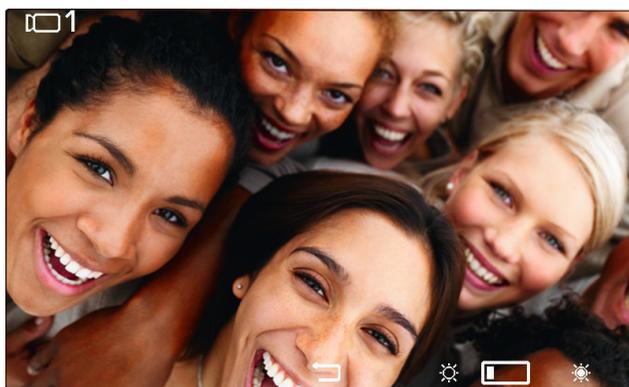
| CALL FROM VIDEO EXTERNAL UNIT | FLAG 1 (MONITOR ON) | RESULT |
|---|---------------------|--------------------|
| Direct | ACTIVE | Switches on |
| | NOT ACTIVE | Does not switch on |
| Indirect (belongs to a group with only one secondary unit) | ACTIVE | Switches on |
| | NOT ACTIVE | Does not switch on |
| Indirect (belongs to a group with at least two secondary units) | ACTIVE | Does not switch on |
| | NOT ACTIVE | Does not switch on |

Note: The secondary internal units ring at a reduced, fixed volume (level 2 out of 10).

On answering, the display switches on to show the video from the external unit calling.

T4, with the icon , allows you to mute the ringer for the call currently in progress. Once muted, the ringer cannot be switched back on during the current call, so the icon disappears.

Before answering, if the display is showing the video signal from the external unit, you can adjust the brightness by accessing the the **Video only settings** with  :



Video adjustments

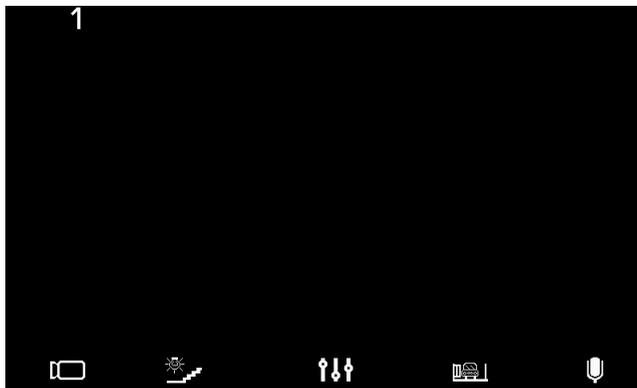
If the call originates from an audio external unit, it will not be possible to make any adjustments.

The **T3**  and **T4**  keys turn grey respectively when the minimum and maximum levels are reached.

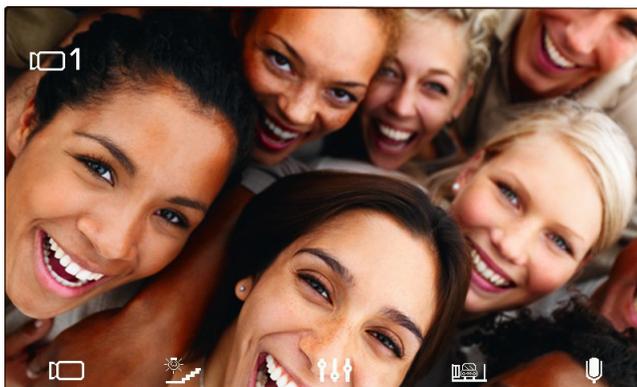
The centre key, now , allows you to return to the previous context.

Before answering, whatever condition the internal unit is in, it is possible to use the **Operators** context or the **LOCK** key, unless programmed for another function.

To answer the call, use the **P/A** key.



Answering an audio call



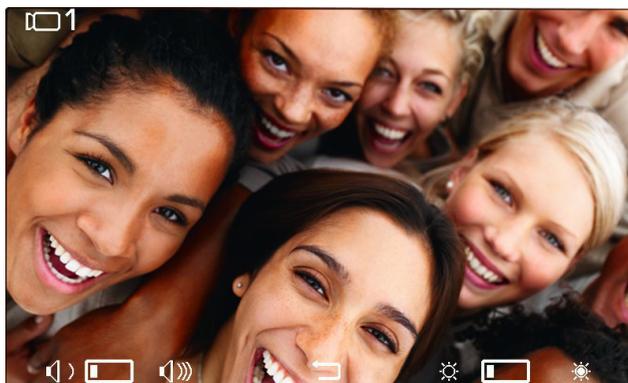
Answering a video call

As in a conversation with an internal unit, **T4** has the function of muting  or re-enabling  the microphone. After answering, it is possible to use the **Operators** context or the **LOCK** key, unless programmed for another function.

During the conversation, the   key serves to enter the **Audio only settings** context if the call originates from an audio external unit or **Audio and video settings** context if the call originates from an audio/video external unit.



Audio settings



Audio/video settings

The **T1** and **T3**, **T2** and **T4** keys turn grey respectively when the minimum and maximum levels are reached. The conversation can be ended using the **P/A** key or by the calling external unit in the appropriate manner.

Self-start

The self-starting of an external unit is performed with the audio signal relayed from the external unit to the internal unit activated so that from the internal unit, the user can hear but not be heard:



Self-start activation

As can be seen from the icon on **T4**, the microphone of the internal unit is muted. It can be enabled or muted again by touching the **T4** key. The **P/A** key interrupts conversation regardless of whether the microphone is enabled or muted.

During self-start, it is possible to use the **Operators** context or the **LOCK** key, unless programmed for another function.

The  key gives access to the **Audio only settings** context if the call originates from an audio external unit or **Audio and video settings** context if the call originates from an audio/video external unit.

The conversation can be ended using the **P/A** key or from the external unit, using the appropriate procedure.

Alert

Internal Unit Art. 40505, together with porter switchboard Art. 40510, creates a system that can send an alert to the switchboard operator even when the Due Fili bus is busy.

To activate this service:

1. Program using SaveProg or the same Internal Unit one of the **T1..T4** keys in the *Intercom* context to perform the Alert function (managed internally by the unit as an intercom call to itself). The icon displayed is . More than one key may be programmed to perform the same function, but the results will be indistinguishable.
2. It is possible to use the pair of terminals FP-M as a remote input for the Alert function.. Their use does not preclude programming of **T1..T4**, and vice versa, but the landing call function will be lost. The FP-M operating mode is selected using SaveProg. Closing the terminals FP-M has the same operational effect as that described below for the **T1..T4** keys.
3. Enter the *Intercom* context.
4. Touch one of the previously programmed keys.
5. The Internal Unit sends the alert.

This is what happens then:

6. The Internal Unit waits to receive the alert from the switchboard. In the meantime, the LED on the **LOCK** key flashes with the cadence 0.5 s on / 0.5 s off. On receipt of the message, the switchboard emits a double beep and displays a red envelope icon to alert the operator.
7. If it does not receive a replay, the Internal Unit resends the message every 10 s. After 5 attempts with no reply the Internal Unit stops sending the messages.
8. When the Internal Unit receives confirmation that the switchboard has received the message, the LED on the **LOCK** key flashes with the cadence 0.1 s on / 0.1 s off. Normally the time between the sending of the request and confirmation of reception is less than a second.
9. Until the switchboard calls the Internal Unit to service the request, the Internal Unit resends the message every 120 s. At each message, the switchboard emits two beeps and increases count of messages received. The counter can be viewed by opening the list of alerts in the switchboard. The sending of messages never terminates. It continues until the end of the service described in the next point, unless the switchboard is powered off or removed from the system, in which case the Internal Unit, after 5 unsuccessful attempts starting from the first timeout of 120 s, will return to standby mode and the LED on the **LOCK** key will stop flashing.
10. If the operator calls the Internal Unit starting from the list of alerts (and only if the call is made from this list) a message is sent via the bus to the Internal Unit to terminate its internal procedure, and consequently the LED on the **LOCK** key will stop flashing.

Note: the LED on the **LOCK** key may be on beforehand or may request to be switched on during the alert procedure due to a door being opening in the Due Fili system. The flashing has priority over this condition, and on completion of the procedure, the LED on the **LOCK** key will either stay on or off according to whether or not a door is open in that moment.

If the bus is engaged in another conversation or by another 40505 already powered on, the *Intercom* context is inaccessible. If at least one of the **T1..T4** keys is programmed as the Alert function, then LEDs relative to this function will flash for 10 s while waiting for the user to touch any one of these keys. No other keys are enabled and the display is not switched on. Once the function has been initiated, all the LEDs of the Alert function will switch off and the Internal Unit will return to standby mode; in any case, the Internal Unit will return to standby after 10 s.

Alert Configuration

Use SaveProg to select some of the characteristics of the Alert function:

1. Enabling
 - a. Disabled (default)
 - b. Enabled
2. Active state polarity

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- a. Contact normally open (default)
 - b. Contact normally closed
3. Activation delay
- a. 0.1 seconds (default)
 - b. 0.5 seconds
 - c. 1 second
 - d. 2 seconds
4. Signalling mode
- a. None
 - b. LED associated with the **LOCK** key (default)
 - c. Sound

According to the selected signalling type, apart from the first, the timer is as follows:

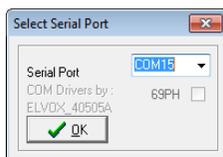
| STATUS | LED TIMER | SOUND TIMER |
|---|---|------------------------------|
| The Indoor Station is waiting to receive a warning from the switchboard | Flashing with a cycle of 0.5 seconds on / 0.5 seconds off | A 2 KHz tone for 0.2 seconds |
| The Indoor Station has received confirmation of receipt of the message from the switchboard | Flashing with a cycle of 0.1 seconds on / 0.1 seconds off | A 1 KHz tone for 0.1 seconds |

Updating the FW

WinBoot manages Art. 40505 from version 7.2.1.3 onwards.

PC Drivers

The drivers are the same as for the other device in the TAB family. The first time a device is connected to a USB port, the PC must associate the drivers to the peripheral device even if a TAB device has already been associated. The internal unit is identified at the level of WinBoot / SaveProg, as ELVOX_40505A:



CE

49400914C0_MU_EN 00 2111



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