
ENGLISH



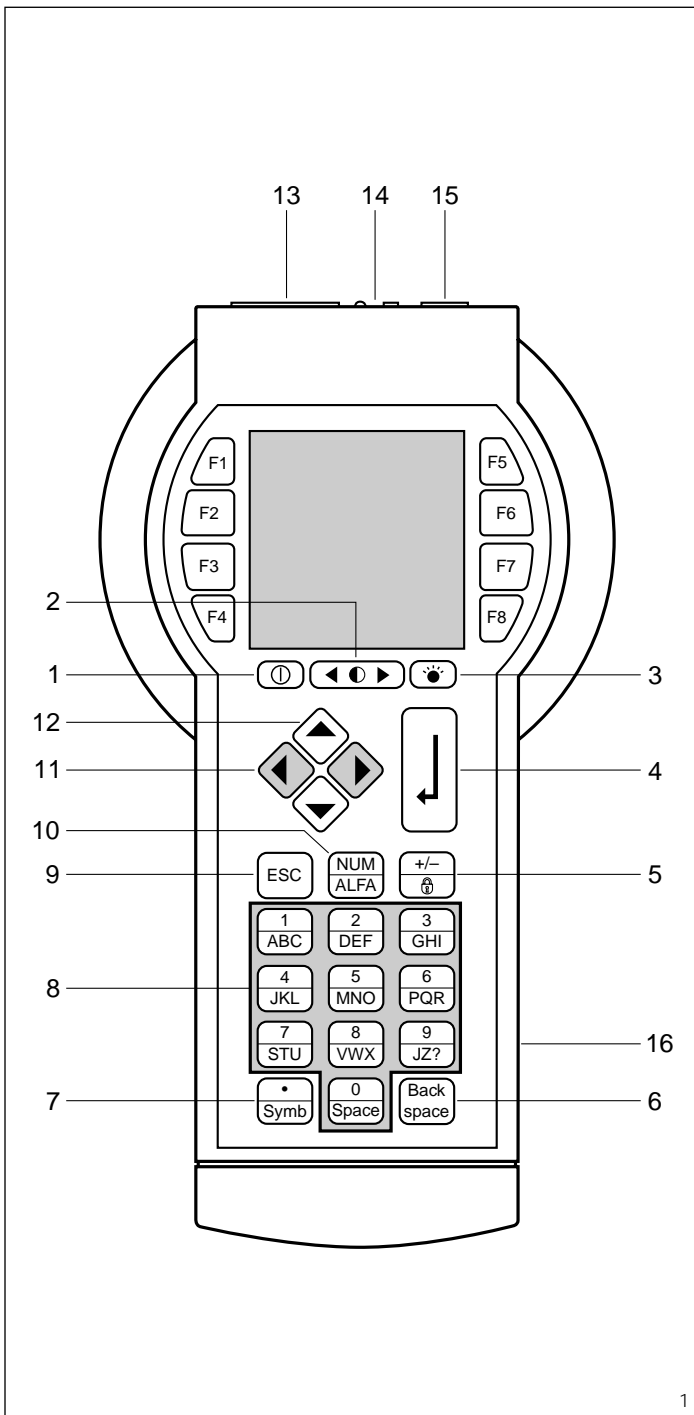
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HANDHELD
PROGRAMMER
MPP/300LR
1.11 Version

INSTRUCTION MANUAL

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HANDHELD PROGRAMMING MODULE MPP/300LR

Handheld module for control and supervision of LONWORKS® networks.

It can be used to programme system 300 installations when wanting to configure the system without accessing receivers, or when the limits imposed by standard programming are exceeded (single block with a maximum of 20 LON® devices such as entry panels and relay actuators).

The system is programmed with the aid of a guided menu and all you need is some familiarity with the structure of the installation and location of the various devices.

To programme user extensions, you can use either standard or personalized programming of the various devices.

In the latter case, you must know the ID number of each receiver (the handheld unit comes with a sheet on which you can attach or note down the label to be found on each receiver, featuring its S/N expressed in hexadecimal format). When programming in this way, you can also set relevant times, special keys and name lists.

The MPP/300LR module is housed in a portable handheld case and is self-powered by means of rechargeable batteries.

It comes with a plug-in power supplier for operating off the mains and for charging the battery pack, as well as a connecting cable for the LON® network ready fitted with an RJ45 connector.

It also features a software package for upgrading the programme via personal computer, along with relevant RS232 cable for connection to the PC.

The programmer itself can be used as an interface between the PC and LONWORKS® network.

Standard functions

- battery powered with rechargeable batteries or mains powered;
- connection to LON® data line via RS485 port;
- connection to PC via RS232 port;
- residential system configuration (see examples);
- use of handheld unit as an interface (LON/PC line) for configuring installations beyond capabilities of MPP/300LR (approx. 50 LON nodes);
- firmware upgrading via PC;
- display lighting;
- graphic 128x128 display;
- 32-key membrane keypad;
- contrast control;
- service LED and button;
- device personalization;
- device replacement;
- diagnostics function on following levels: single LON® device, list of single system devices and data traffic list.

Function of buttons in regular mode

- 1 On/Off
Switch on by keeping the button pressed for at least 1 sec and wait for the main menu to come up
- 2 Contrast control
- 3 Display lighting
Timed for 30 s
- 4 Confirms selected option
- 5 Toggles between upper/lower case characters
An indicator appears bottom left on the display to advise which status is enabled
- 9 Back to previous menu
- 10 Toggles between numerical/alphanumeric keypad
An indicator appears bottom left on the display to advise which status is enabled

- 11 Selects fields on display
- 12 Selects options

Function of buttons in data entry mode

- 4 Confirms the information entered
- 5 Toggles between upper/lower case characters
An indicator appears bottom left on the display to advise which status is enabled
- 6 Deletes previously entered number, letter or symbol and moves text to left
- 7 Enters point
- 8 Enters numbers 1 2 3 4 5 6 7 8 9 0, letters A B C D E F G H I J K L M N O P Q R S T U V W X Y Z, symbol ? and space
- 9 Exits procedure and automatically confirms changes
- 10 Toggles between numerical/alphanumeric keypad
An indicator appears bottom left on the display to advise which status is enabled
- 11 Moves back/forwards
The forwards and back arrows are represented on the menu by the symbols < and >

Function of connectors

- 13 Connector for connection to PC with RS-232 cable
- 14 Service button with LED
- 15 Connector for connection to installation with RJ45 cable
- 16 Power plug for charging batteries

TECHNICAL FEATURES

Mains power supply and battery charging

- Type: 230V AC/9V AC adapter 1.1A, jack 245514.

- Max. current demand: 0.75A with handheld unit on, light on, beeper and fast-charge.

Built-in power supply

- Type: rechargeable NiMh batteries, 3x1.2V size AA, 1,100mAh
- Charging current:
 - 250 mA fast-charge;
 - 31 mA trickle-charge;
 - charge time: max. 4.5 h.
- Battery consumption:
 - 260mA with handheld unit on, light on and beeper;
 - 120 mA with handheld unit on, light off;
 - <300 μ A with handheld unit off.
- Continuous duty time with batteries 100% charged:
 - min. 4 h (light always on);
 - max. 9 h (light always off).
- Indicators: low battery, battery being charged.

Data backup

- Type: rechargeable lithium battery VL2320 3V, 30 mAh.
- Charging voltage: 3.4 V \pm 1.5 V.
- Data storage time: min. 10,000 h.

Serial communication

- Type: RS232.
- Transfer rate: 19,200 bps.
- Settings:
 - parity = n
 - databit = 8
 - stopbit = 1
- Male DB9 connector (13 in fig. 1):
 - 1 nc
 - 2 RXD
 - 3 TXD
 - 4 DTR
 - 5 GND
 - 6 DSR
 - 7 +5 V/10 mA
 - 8 nc
 - 9 nc

LON communication

- Type: transceiver RS485.
- Transfer rate: 78 Kbps.
- RJ45 connector (15 in fig. 1):
 - 1 \lrcorner
 - 2 \lrcorner
 - 3 gnd
 - 4 gnd
 - 5 gnd
 - 6 gnd
 - 7 \lrcorner
 - 8 \lrcorner

Instructions for replacing batteries

The rechargeable batteries can be replaced when damaged or worn out.

Use NiMh 1.2V, size AA rechargeable batteries only with capacity 1,000/1,100 mAh.

To replace batteries, proceed as follows:

1. Turn off the handheld unit with the relevant key.
 2. Disconnect the power supply jack.
 3. Replace the batteries.
- The batteries are housed inside the unit: remove the six screws and take off the upper cover to perform this operation.

4. Perform a complete charging cycle.

WARNING: You are advised against trying to turn the handheld unit on whilst both rechargeable batteries and mains power supply are disconnected.

If this happens, simply plug the mains power supply jack back in to remedy any anomalous condition.

Low battery sensor and theory of operation

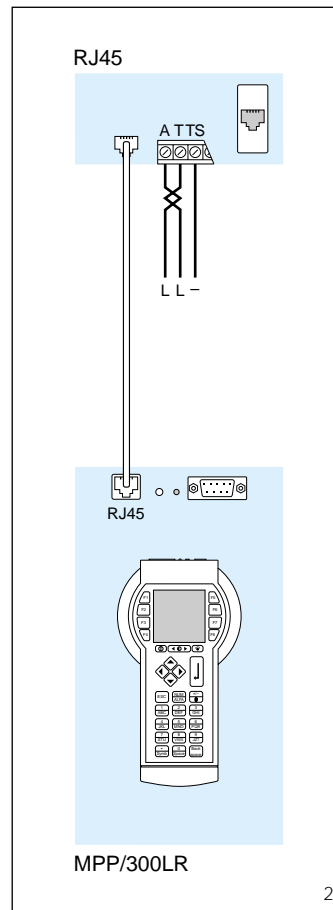
The handheld unit features a low battery sensor that sends a signal to the microprocessor when the battery is low (**Low battery**).

Once the **Low battery** signal is received, you can continue using the handheld unit on battery power only for a short time. During this phase, the handheld unit beeps every 16 seconds to warn you that battery power is about to run out.

Once this time is up, the handheld unit switches off, though the RAM still contains saved data.

At this point, the handheld unit cannot be turned on again with battery power only: you must connect it to the mains.

The batteries are charged to a fourth of their capacity, meaning a complete charge lasts no more than 4-4.5 h (see technical features).



Connection diagram to the RJ45 socket.

Function of each terminal

- A \lrcorner LON data line
- T \lrcorner LON data line
- TS - ground

**MAIN MENU
(SETTINGS AND SERVICES)**

**1 - FUNCTIONS
AVAILABLE WITH MPP/300LR
PROGRAMMER**

Via the **MANAGEMENT** menu, the handheld programmer can be used as an interface between the programme installed on the PC and the installation's data line. To enable this function, simply select the **PC interface** option. Through the **MPP/300L Setup** function, you can instead choose setting and upgrading functions such as:

Language Setup

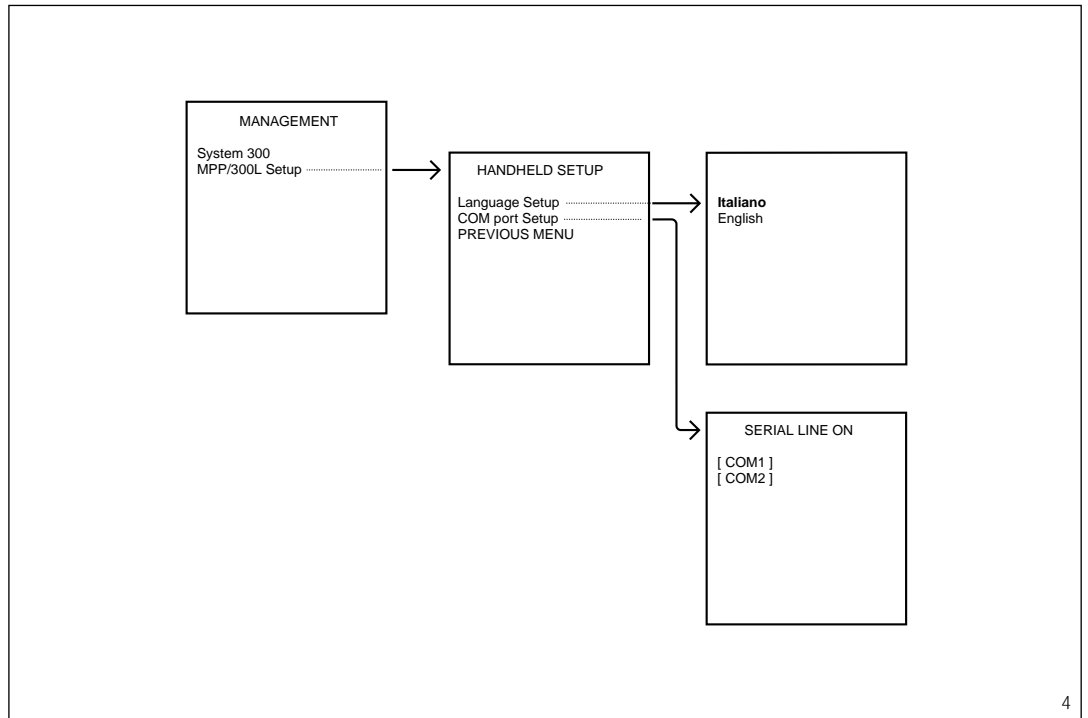
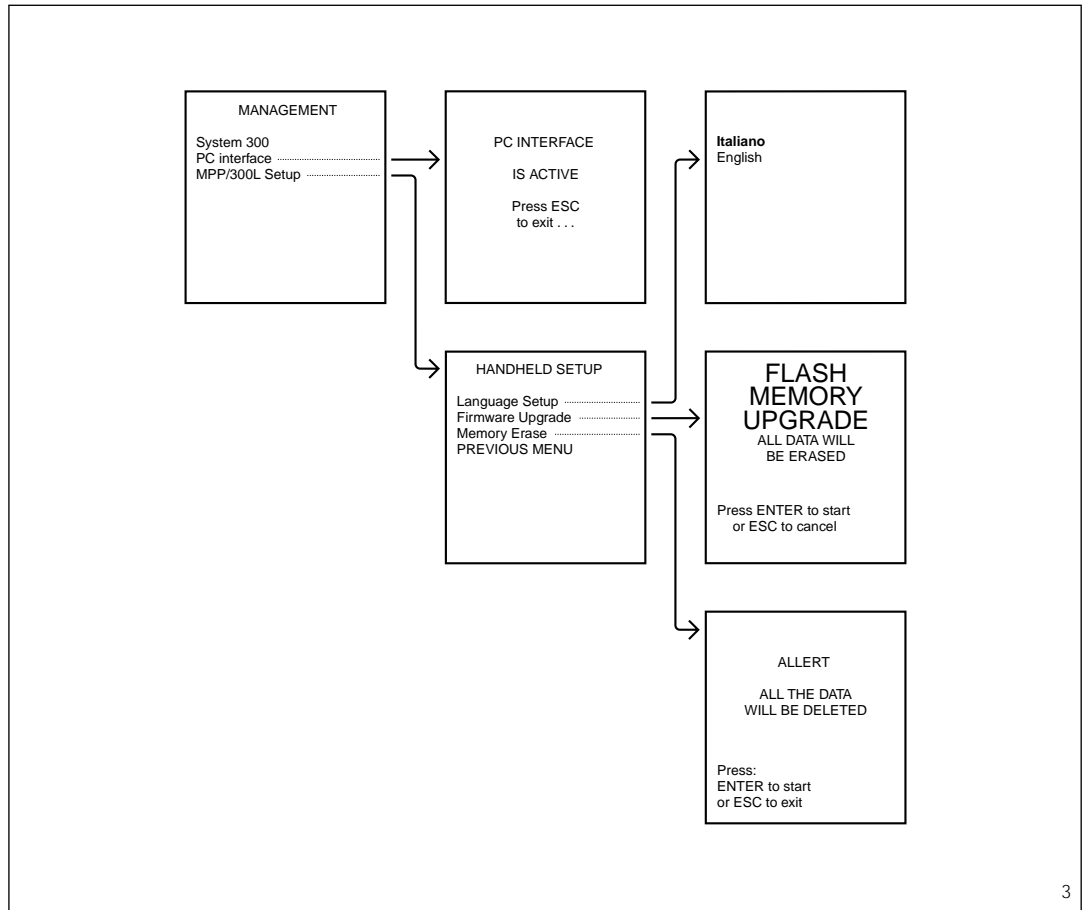
Used to select the type of language used for programming menu text. The available options are Italian and English.

Firmware Upgrade

Lets you upgrade the MPP/300LR's programme. Once the function is enabled, you have 10 sec to run the upgrade programme via PC. Refer to the instructions on the floppy disc attached for use of the upgrade programme via PC.

Memory Erase

This function allows you to delete all stored data (settings and installation files). It does not erase the resident programme. Once the function is selected, press the **↵** key to delete the data stored, or **ESC** to cancel the command.



**2 - FUNCTIONS AVAILABLE
WITH MPP.EXE PROGRAMME
INSTALLED ON PC**

Various setup options can be chosen from this menu, such as:

Language Setup

Used to select the type of language used for programming menu text. The available options are Italian and English.

COM port Setup

Used to choose between serial communication port **COM1** (default setting) and **COM2**.

MAIN MENU

(INSTALLATION PROGRAMMING)

Installation programming is performed in 3 main stages:

- 1 - Data on devices are entered in programmer MPP/300LR;
- 2 - With the aid of a guided menu, the individual devices are associated in a structure that mirrors the installation;
- 3 - The resulting programme is transferred to the installation.

1 - ENTERING INSTALLATION DATA

Select the **System 300** option from the **MANAGEMENT** menu.

The handheld programmer can accommodate the data of various installations, each in a specific file (*).

Select the **New file** option to create a new installation file, then enter the installation's name.

The name can be up to 8 numbers and/or letters long, in upper or lower case.

If you have already entered the name or if you want to add other data to an existing installation file, select **Open file** instead.

(*) What installation data can be contained in a handheld programmer depends on memory content, which is different for each individual device.

As a rough guide, we can estimate an installation of approx. 200 users and 20 entry panels/LON devices. Larger installations can be dealt with using the same programme loaded on a PC.

Data Collection

Data collection consists in entering the ID codes of the devices in the installation file.

There are various possible methods for entering data depending on what group devices belong to (main X2 line or 300 bus).

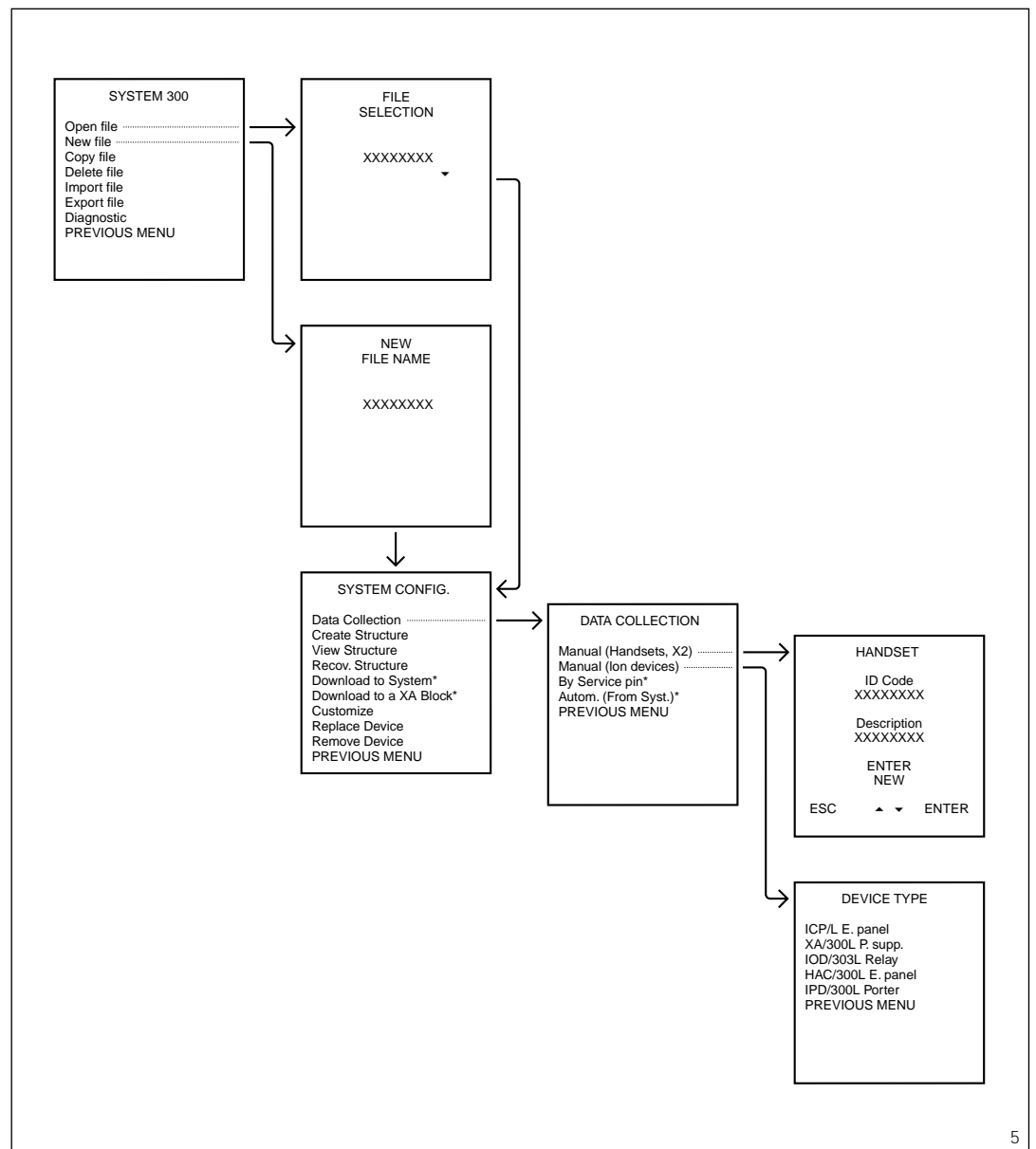
NOTE. All devices connected to the main X2 line such as user extensions, intercom selectors, telephone interfaces and X2 entry panels, can be programmed either by entering the ID code featured on each receiver in the programmer, or by associating the user extension with the call button using standard programming (self-learning) once programming is complete.

To this end, refer to instructions given on power supplier XA/300LR.

Manual (Handsets, X2)

Use this function to enter the ID code of the device connected to the main X2 line in the file.

Each receiver features a removable label with its ID code, whilst the code must be copied down for devices such as intercom selectors, X2 entry panels and telephone interfaces. The code is hexadecimal



and made up of 8 numbers and letters.

To make traceability within the installation easier, you are also prompted to enter a description of the unit (free field containing max. 16 numbers and/or letters).

Use the ▼ or ▲ key to step from the **ID code** field to the **Description** field.

Press the ↵ key to confirm and start entering data for a new user extension.

Press **ESC** to return to previous menu.

Manual (lon devices)

Use this function to enter the ID code of the LON device connected to data line L in the file.

It can be used when adding or replacing a device.

The ID code is to be found in each device on a clearly visible label.

The code is hexadecimal, made up of 12 numbers and letters, and identifies the LON device uniquely. You are prompted to select the type of device to be entered.

To make traceability within the installation easier, you are also prompted to enter a description of

the unit (free field containing max. 16 numbers and/or letters).

By Service pin*

Use this function to enter the ID code of the LON device by data transfer using the **Service** key on the device itself.

It can be used when adding or replacing a device.

To make traceability within the installation easier, you are also prompted to enter a description of the unit (free field containing max. 16 numbers and/or letters).

(*) *You must be connected to the LON line.*

Autom. (From Syst.)*

Use this function to enter the ID codes of all LON devices connected to the installation automatically. During scanning, the number of devices found for each type of device is displayed.

It does not include user extensions and devices connected to the main X2 line.

(*) *You must be connected to the LON line.*

SYSTEM CONFIG.

- Data Collection
- Create Structure
- View Structure
- Recov. Structure
- Download to a XA Block*
- Customize
- Replace Device
- Remove Device
- PREVIOUS MENU

SYSTEM STRUCTURE

- New structure
- Handsets position.
- Add XA block
- Add X2 block
- Add dvs on XA block
- Add dvs on main
- Mod. selectors lines
- PREVIOUS MENU

300/X2 SYSTEM TYPE

- With one XA/300L
- With many XA/300L
- PREVIOUS MENU

BLOCKS & MAIN DEV.

XA/300L Blocks	1
HAC/300L E. pan.	0
ICP/L E. pan.	0
IOD/303L Relay	0
IPD/300L Porter	0

ESC ENTER

XA/300L BLOCK 1

IPD/300L Porter 0

ESC ENTER

XA/300L BLOCK 1

X2 Blocks	0
HAC/300L E. pan.	0
ICP/L E. pan.	0
IOD/303L Relay	0

ESC ENTER

XA/300L BLOCK 1

X2 Blocks	1
HAC/300L E. pan.	0
ICP/L E. pan.	0
IOD/303L Relay	0

ESC ENTER

XA/300L BLOCK 1

Total users	1
VSE/300 Select.	0

ESC ENTER

XA/300L BLOCK 1

Direct users	1
VSE/300 Select.	0

ESC ENTER

XA/300L BLOCK 1

Device

Description ▲
XXXXXXXXXXXXXXXXX ▼

ID Code
XXXXXXXXXXXXX

ESC ENTER

XA/300L BLOCK 1

Device

Description ▲
XXXXXXXXXXXXXXXXX ▼

ID Code
XXXXXXXXXXXXX

ESC ENTER

X2 BLOCK 1

Users	1
HEC-HEV E. panel	1
VSE/300 Select.	0

ESC ENTER

X2 BLOCK 1

Device

Description ▲
XXXXXXXXX ▼

ID Code
XXXXXXXXXX

ESC ENTER

2 - CREATING INSTALLATION STRUCTURE (PROGRAMMING)

Once the file has been opened and IDs of the devices entered, we can move on to the structure creation function.

The function allows you to enter the number of devices in the installation and their location via a series of guided menus.

Start by selecting the **Create Structure** option, then select **New Structure** to enter the **300/X2 SYSTEM TYPE** menu.

Select one of the options below as the system used:

With one XA/300L

Installation with a single XA/300LR power supplier with or without X2 blocks.

At this point, you will be asked whether the installation has one or more porter switchboards.

With many XA/300L

Installation with a number of XA/300LR power suppliers with or without X2 blocks.

In a residential system-300 installation (**With many XA/300L**), you will be asked how many blocks there are (corresponding to the number of XA/300LR power suppliers) and the number, by type, of devices shared with the rest of the installation (main devices).

As a default setting, all main devices are considered as being connected to the first ICB/300 block selector.

The system can be expanded to a maximum of 4 ICB/300 block selectors to enable a number of simultaneous conversations via main entry panels/porter switchboards.

If additional block selectors are used, select the **Mod. Selectors Lines** function.

For installations **With one XA/300L**, you are only asked how many IPD/300LR porter switchboards there are.

Once the main devices/porter switchboards have been entered, you can start entering the devices connected to the block/power supplier XA/300LR as well as the number of X2 blocks (X2 front plates type HEC-HEV-HEVC-HET master) or number of 300-series front plates. The block diagram in fig. 5 illustrates an example with or without X2 blocks.

If there are no X2 blocks, you are asked how many users in total there are connected to the power supplier (including intercom devices associated with selector VSE/300) and how many VSE/300 intercom selectors there are.

With a view to expanding the system by adding users, it is advisable always to provide for a greater number of users in so far as the front plates allow.

The guided system now prompts you to select the devices assigned

XA/300L BLOCK	1
Total users	2
VSE/300 Select.	1
ESC	ENTER

to the block.

First of all, you will be asked to select the power supplier XA/300LR followed by the entry panels and any IOD/303LR relays.

If there is more than one entry panel, you must bear in mind that the order in which they are entered in the programmer also determines which order they are scanned in (Self-connection key).

If you have decided to programme user extensions directly with the handheld programmer instead of using standard programming, you

XA/300L BLOCK	1
Handset position	1
Description XXXXXXXX	▲ ▼
ID Code XXXXXXXX	
ESC	ENTER
< next menu	> skip position

are asked to associate the user extension with the position of the key on the front plate (for digital front plates, this corresponds to the personalized code transferred by the programmer to the front plate, e.g.:

- block XA/300L = 1 and extension position = 1, the personalized code is 11, up to 9 users;

- block XA/300L = 1 and extension position = 1, the personalized code is 101, up to 99 users).

The extension can be selected by scrolling with the ▲ or ▼ key.

As you can see, the scrolling order corresponds to the order in which the user was entered in the **Data Collection** menu. Consequently, to speed up the operation, it is best to enter the various extensions in the same order in which they will later be called.

As extensions are being associated, you can also edit the **Description** text to correct or add

information of use in locating the devices.

If more extensions have been provided for than those actually inserted in the installation, you can continue programming by skipping to the next menu using the ◀ key.

You can also continue programming where an extension is not present, or has been installed in an inaccessible place, using the ▶ key.

Next associate selector VSE/300 (if installed).

The guided menu continues with association of the number of the button the extension is to be called with for intercommunication.

VSE/300 Select.	1
Intercom pushbutton	1
Description XXXXXXXX	▲ ▼
ID Code XXXXXXXX	
ESC	ENTER
< next menu	> skip position

Use key ▲ or ▼ to select the intercom extensions to be associated with selector VSE/300 or each intercom call (1-10).

If there are X2 blocks, you are asked to enter the number of total users, the number of entry panels and number of intercom selectors for each block.

X2 BLOCK	1
Users	1
HEC-HEV E. panel	1
VSE/300 Select.	1
ESC	ENTER

The guided system now prompts you to select the devices assigned to the block.

First of all, you will be asked to select the **X2 master entry panel**, i.e. the entry panel connected directly to the main line coming from the power supplier. You can then select any additional entry panels.

The latter can be selected regardless of their physical position in the installation, and instead asso-

ciated in the preferred sequence for entry panel scanning.

If you have decided to programme user extensions directly with the handheld programmer instead of using standard programming, you are asked to associate the user

XA/300L BLOCK	1
Handset position	1
Description XXXXXXXX	▲ ▼
ID Code XXXXXXXX	
ESC	ENTER
< next menu	> skip position

extension with the position of the key on the entry panel.

Next associate selector VSE/300 (if installed).

The guided menu continues with association of the number of the button the extension is to be called with for intercommunication.

VSE/300 Select.	1
Intercom pushbutton	1
Description XXXXXXXX	▲ ▼
ID Code XXXXXXXX	
ESC	ENTER
< next menu	> skip position

Use key ▼ or ▲ to select the intercom extension to be associated with selector VSE/300 for each intercom call (1-10). User extensions can be associated with the same call (position) from the entry panel.

If you do not have the ID of a particular receiver, you can use the ▶ key to skip to the next intercom button.

2.1 - ADDITIONAL FUNCTIONS FOR SYSTEM STRUCTURE

2.1.1 - Adding an extension with the same call to the block

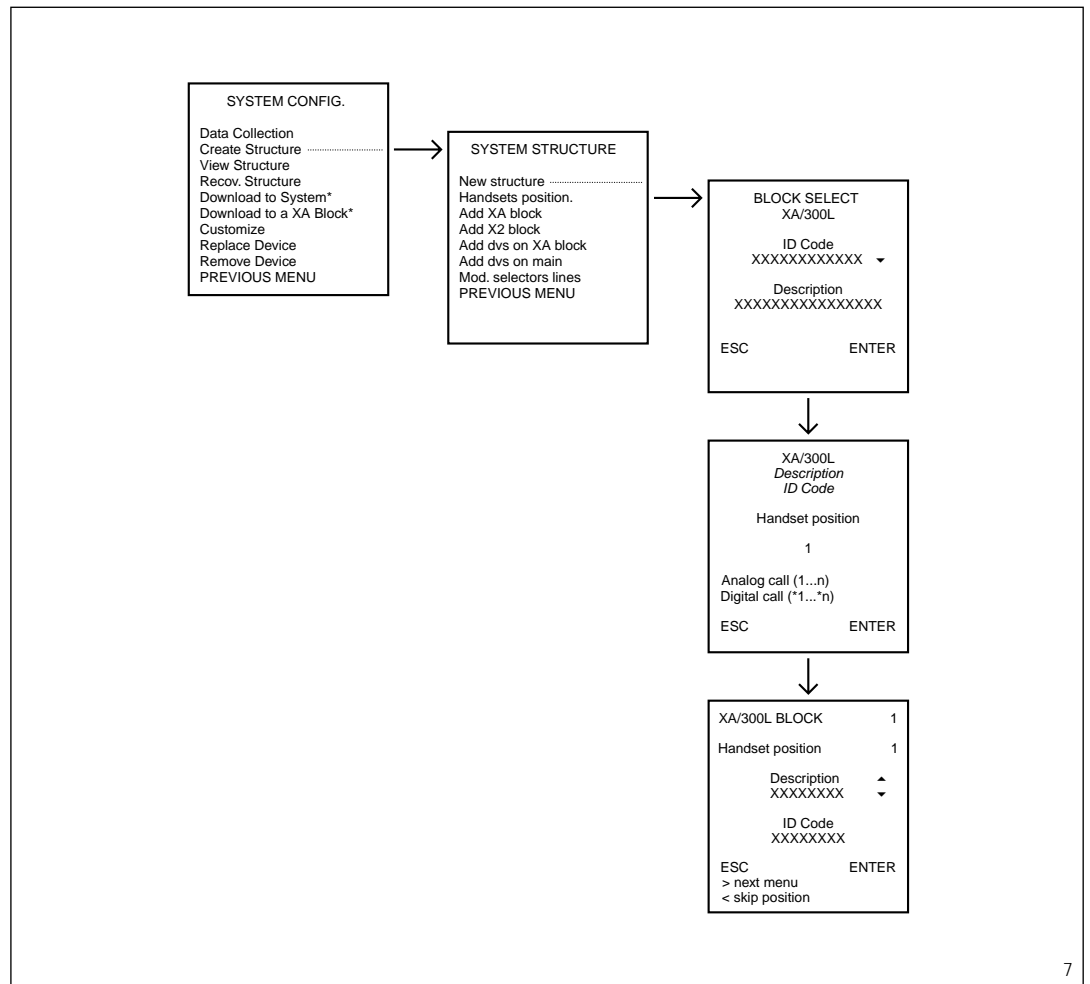
This function can be used to assign a new receiver the same call (position) as a receiver entered in the XA/300L block (receiver in parallel).

You can also use this function to assign receivers in positions provided for within the structure, at a later date.

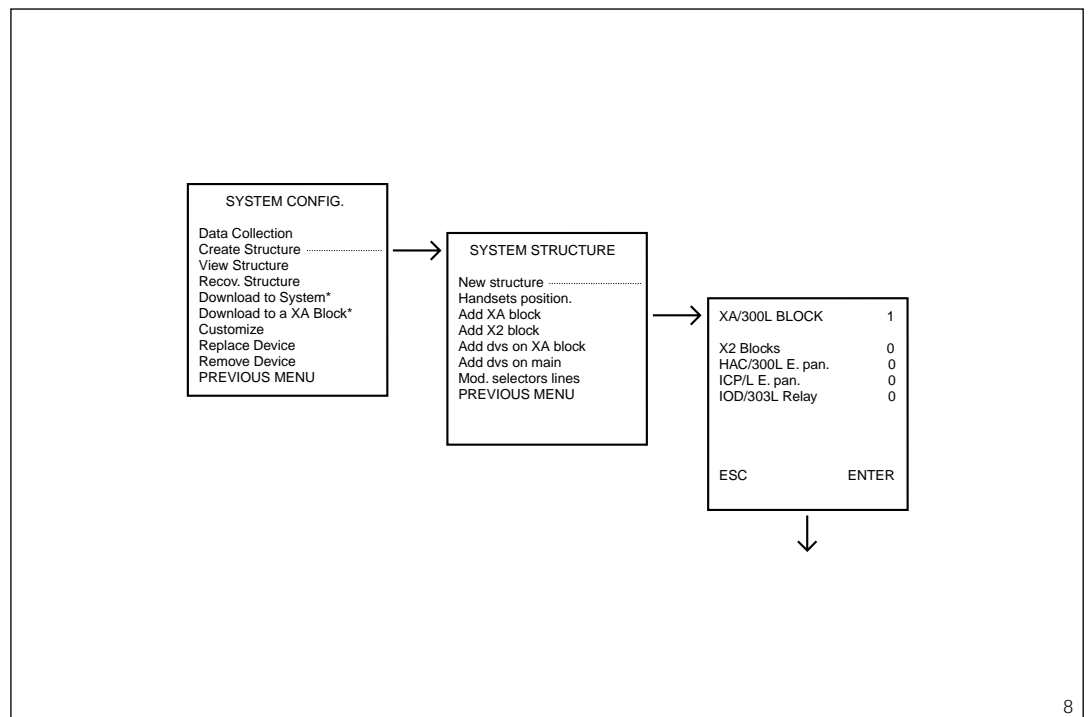
The receiver must have been entered beforehand using the Data collection function.

First of all, you need to select the block to which the receiver is to be added, then enter the number of the position the receiver is to be called with, and lastly, select receiver using its ID or description.

The latter can be edited directly by typing in the new descriptive text.



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2.1.2 - Adding a XA/300L block to the system

This menu allows you to add a new XA/300L block without having to reprogramme the existing installation.

Follow the instructions given by the guided menu as you did to create the structure.

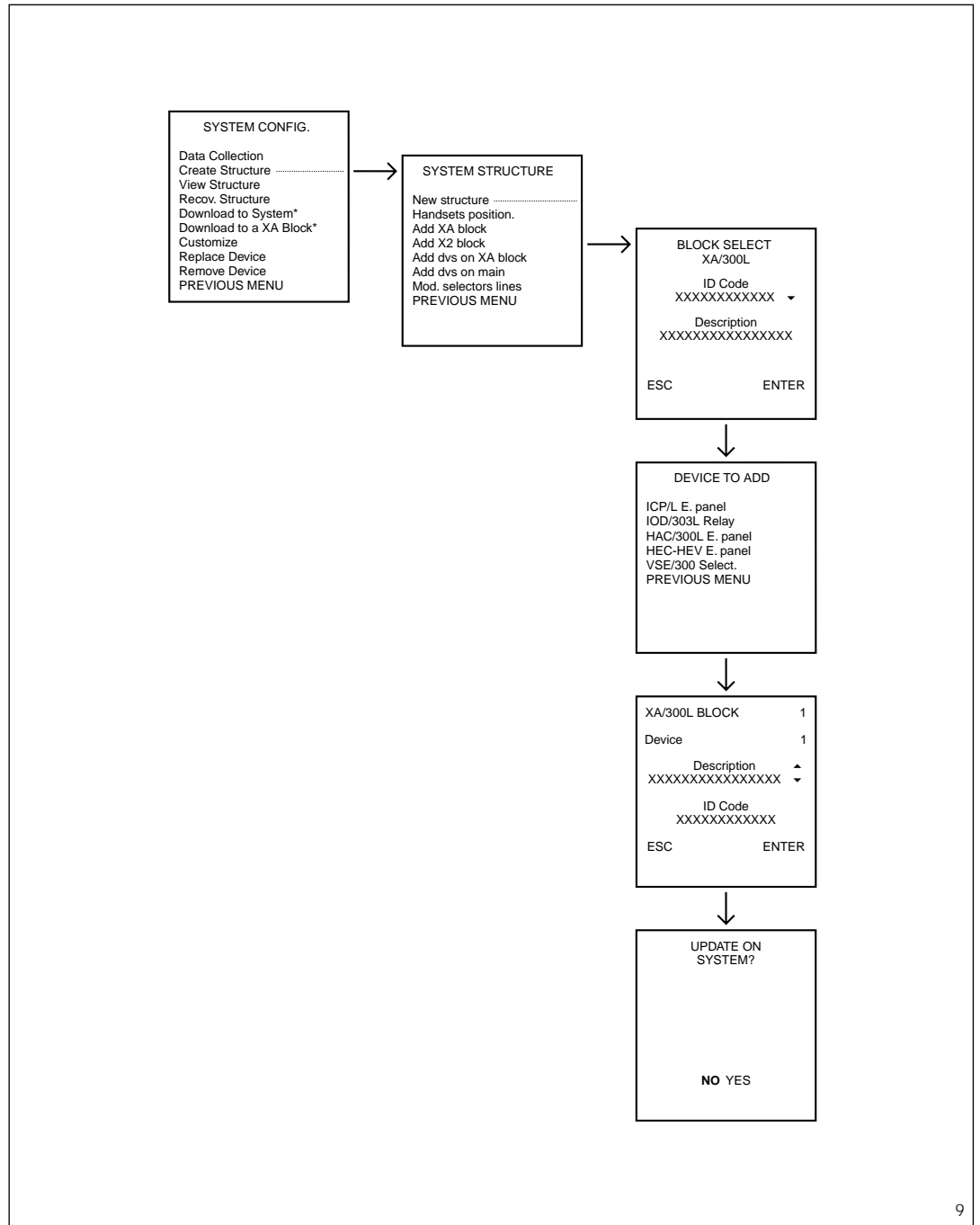
2.1.3 - Adding a device to a XA/300L block

This function can be used to add a series-300 device to an XA/300LR block, or an additional X2 entry panel to an existing X2 block.

You are prompted to select the XA/300L block to which the device is to be added, then to select the device by type and by ID.

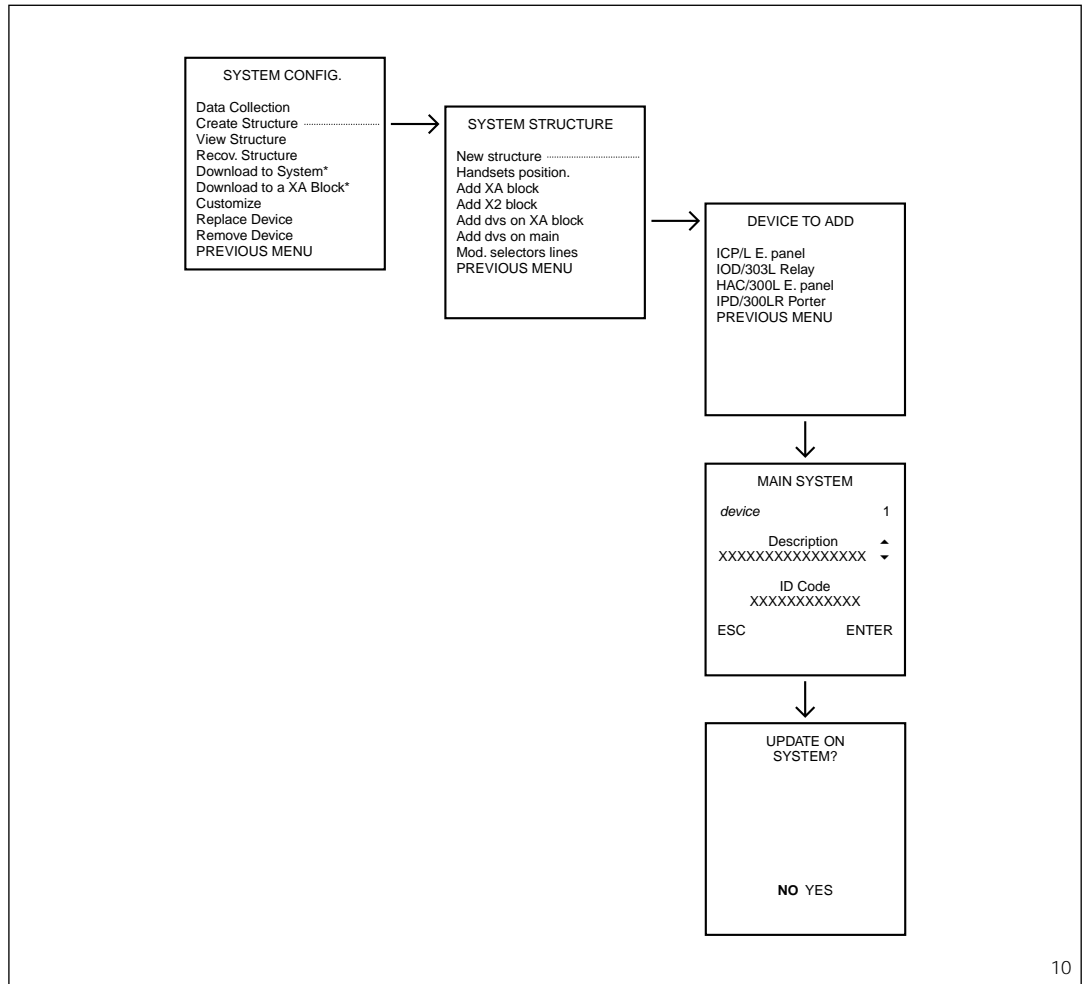
Lastly, you will be asked to confirm whether you really want to update the device located in the installation.

Opting not to update the device at this point does not stop the device from being stored in the programmer's file.



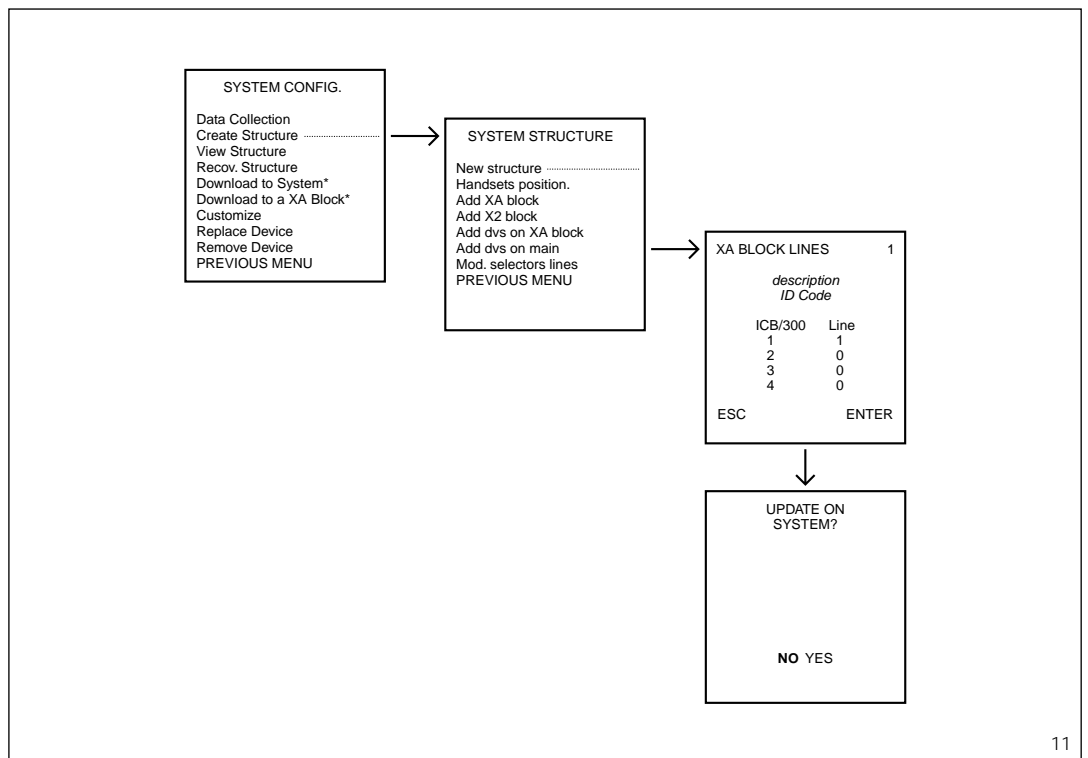
2.1.4 - Adding a device to an installation in the main entry panel

Any of the following devices can be entered: entry panels with ICP/LR or with HAC/300LR, relay actuators IOD/303LR and porter switchboards IPD/300LR. You are prompted to select the device by type and by ID. Lastly, you will be asked to confirm whether you really want to update the device located in the installation. Opting not to update the device at this point does not stop the device from being stored in the programmer's file.



2.1.5 - Adding or editing additional block lines and selectors

Installations with heavy communication traffic may require a number of block selectors per XA/300LR power supplier. Block selectors allow access to a block via one or more communication lines. The lines themselves are actually channels on a 300 bus through which audio/video communication can be established between two devices in the system. Where devices can communicate with only part of the installation, you may encounter the need to introduce more communication lines than there are block selectors. For instance, an installation with 10 blocks and a porter switchboard IPD/300LR per block would need 10 block selectors to achieve the same number of simultaneous calls, though if calls were kept to each individual block, just 2 selectors would be required: one for each porter and one for inter-communications between blocks or devices shared within the installation. In this case, there would be a total of 11 lines. To programme this function, simply define, for each main device, the line number corresponding to the block selector used. The line number can be selected



at will up to 255, though it must be identical for all devices connected to the same line. Lastly, you will be asked to confirm whether you really want to update the device located in the installation. Opting not to update the device at this point does not stop the device from being stored in the programmer's file.

3 - PROGRAMME TRANSFER TO INSTALLATION

Once the structure has been created and entered in the programmer, the individual devices can be updated using the **Download to System*** function.

During transfer, the devices programmed are displayed until the installation is complete.

An appropriate message advises you of any devices not programmed owing to incorrect data or communication failures.

If the system is being expanded, you can opt to transfer only those data relating to the block added. In this case, choose the **Download to a XA block*** function.

You will be prompted to select the number of the block to be added; confirm to start transfer.

Receivers can now be called from the entry panels by pressing the number as illustrated in the following examples.

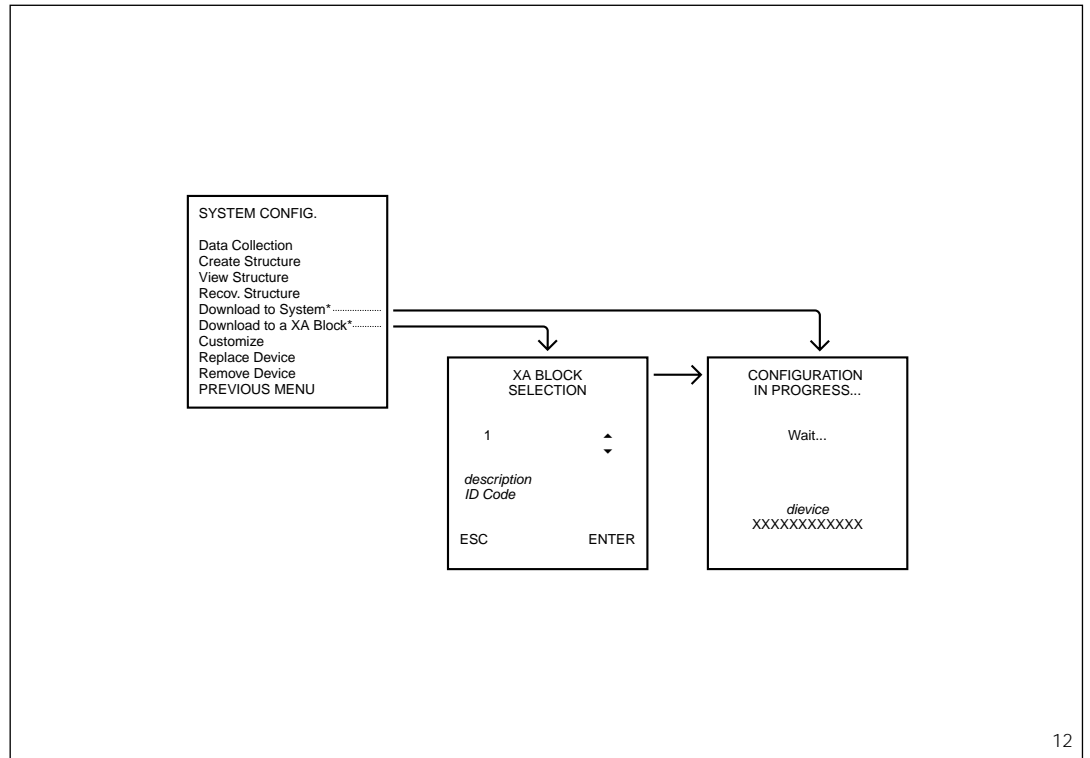
Pushbutton front panel with ICP/LR:

button n° 1 porter call, in installations with a switchboard; or 1st receiver of series-300 block.

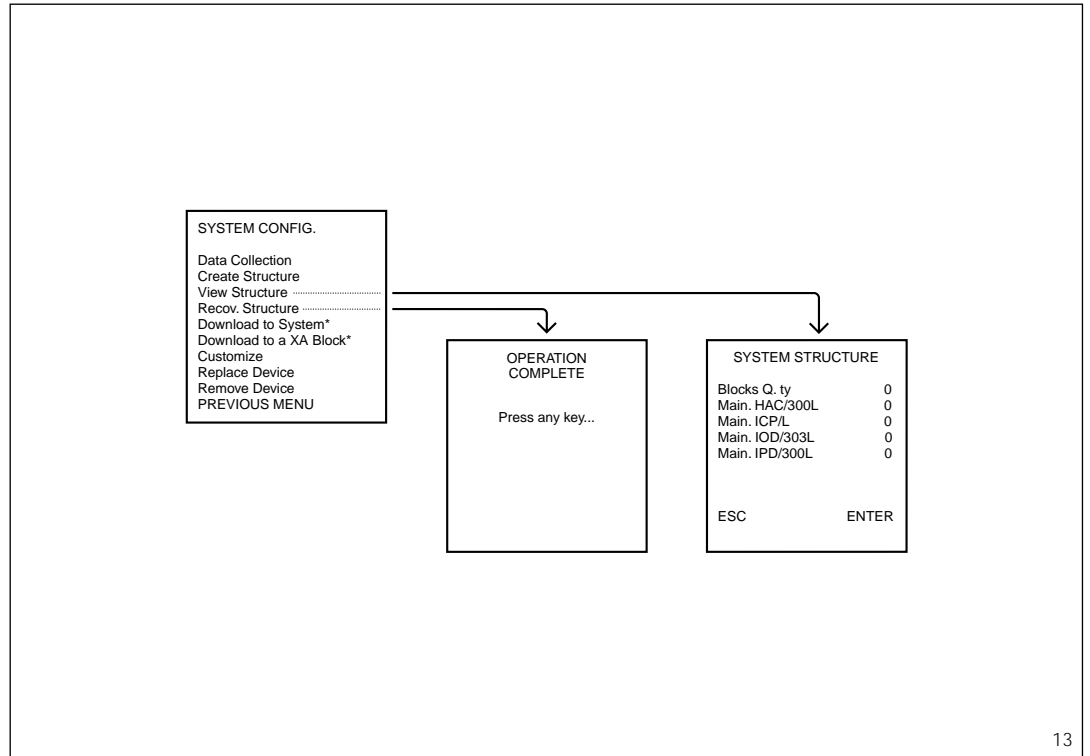
Digital front panel HAC/300LR:

The receiver of the 1st XA/300LR block will be called with button n° 1 followed by the position in which said receiver was entered. E.g.:

- block 1 and position 1 = 11 (up to 9 receivers);
- block 1 and position 1 = 101 (up to 99 receiver).



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3.1 - STRUCTURE UTILITY FUNCTIONS

The **View Structure** function can be used to view the data summarizing the structure created.

Data are displayed via an initial general page on the structure of the installation and one page of information for each system-300 block.

The **Recov. Structure** function is instead used to reconstruct a previously created structure that has been deleted by mistake (the system's general data only).

The programme acts on data contained in each single LON device

loaded in the active installation file.

The same function can be used to reconstruct the structure of an existing installation, the only limitation being that the installation's data must first be collected.

PERSONALIZE MENU

1 - PERSONALIZING ENTRY PANEL WITH ICP/LR

Via this menu, you can personalize the following attributes of the device:

Door Timeout

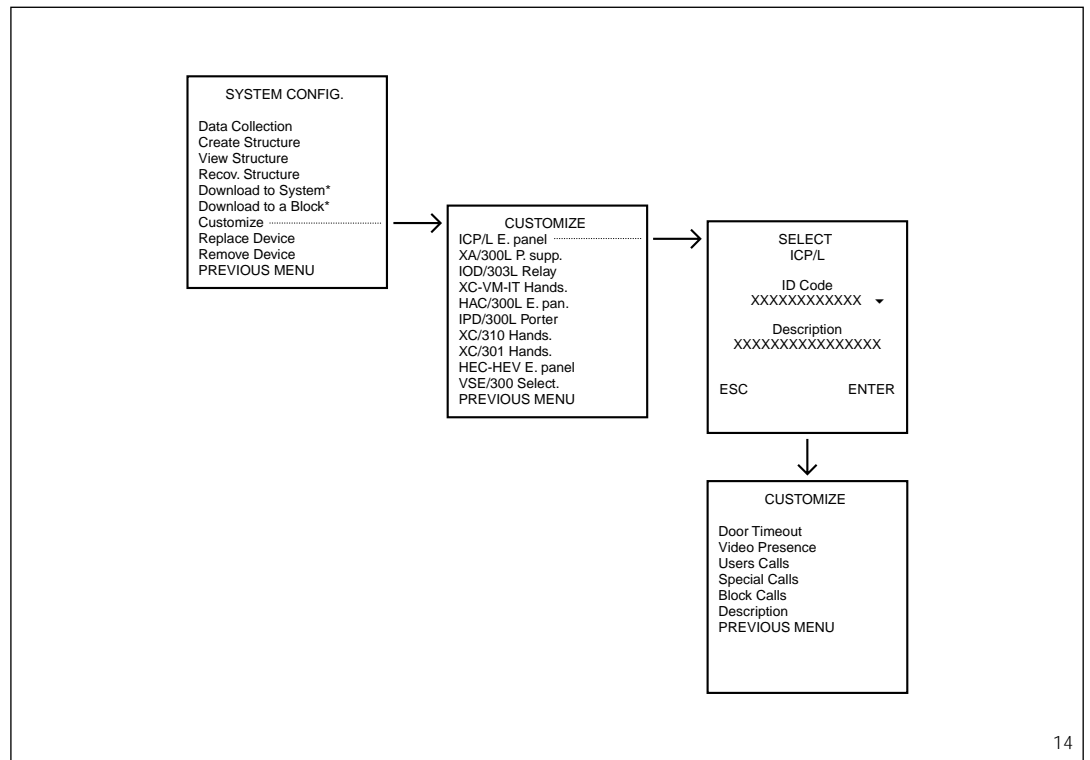
```

ICP/L
ID Code
description

Door Timeout (s)

1 (max. 255)

ESC          ENTER
    
```



14

A time can be set individually for each single entry panel during which the solenoid door lock is activated.

Enter the chosen time in the range 1 to 255 s.

The default setting is 1 s.

Video Presence

```

ICP/L
ID Code
description

Video Presence

ESC  ▲ ▼  ENTER
    
```

This parameter tells the system whether there is a surveillance camera fitted or not in a given entry panel.

The default setting is **Video Present**.

Select **Video Absent** using key ▼ or ▲ if the entry panel does not feature a camera.

This change is only required where the installation is a mixed one - audio and video entry control systems - so that text describing the entry panel used to make the call can be seen on the monitor when there is no video signal.

Users calls

```

ICP/L
ID Code
description

Users
from      to
  1        n

Pushbuttons
from      to
  1        n

ESC  < >  ENTER
    
```

This function enables you to limit the number of calls that can be made from a given entry panel.

The function can be used to call just one user or a limited group of users from a secondary entry panel using just the necessary number of buttons.

To edit the preset number of users entered on creating the structure, proceed as follows:

- enter the first number of the user to be called (**from** field) and confirm;

- select the to field using the ► key and enter the last number of the user to be called and confirm.

The descriptive text in the buttons field is updated automatically, and features the number of buttons used.

Special calls

```

ICP/L
ID Code
description

Pushbutton
  2

Function
USER CALL ▲
                ▼

ESC  < >  ENTER
    
```

This function allows you to associate the first 4 buttons with special functions such as a porter call or service call (e.g. TRADESMAN). The programmer automatically designates the first call button as the porter call button if there is at least one porter switchboard in the installation.

To edit how keys have been assigned, proceed as follows:

- use key ◀ or ▶ to select the **Pushbutton** field; next use key ▼ or ▲ to select the number of the key to be edited;

- use key ◀ or ▶ to select the **Function** field; next use key ▼ or ▲ to select the desired mode.

A button cannot be assigned special functions if it has been set as a user call button before.

Block calls

```

ICP/L
ID Code
description

Pushbuttons
from 1      to 1

Call to XA Block
description ▲
ID Code    ▼

ESC  < >  ENTER
    
```

Allows you to assign a group of call buttons with a block (power supplier).

It can be used to add keys on a block entry panel for calls to users belonging to a different block.

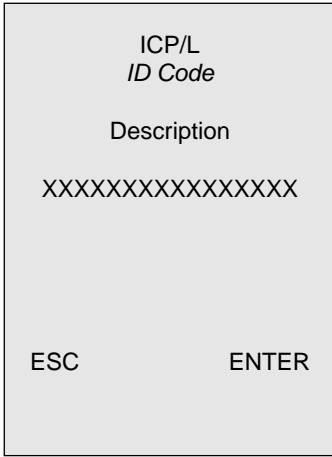
To add buttons, proceed as follows:

- use key ▼ or ▲ to select the block the users to be called belong to;

- use key ◀ or ▶ to select the **Pushbuttons** field; next enter the number of the call buttons' first free position.

WARNING. You must stick to the limit of 64 call buttons per entry panel managed by ICP/LR.

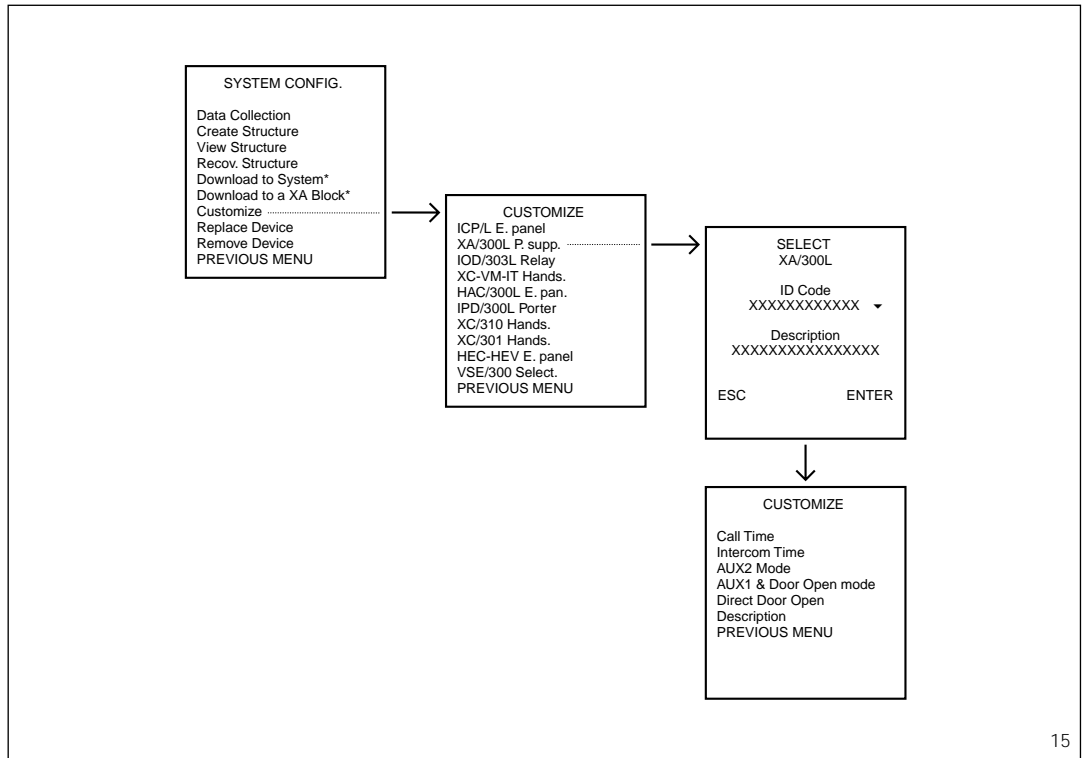
Description



Allows you to edit the text describing the entry panel. This text is used to identify the location of the device during programming and is displayed on the monitor when a call or request for self-connection to the entry panel is made.

Before exiting the menu, you are prompted to confirm whether you really want to update the device located in the installation.

Whatever choice you make at this point, the edited data are saved in the current file.

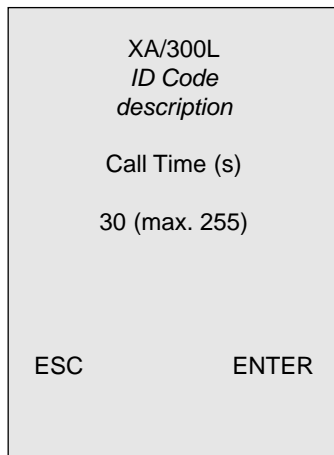


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2 - PERSONALIZING XA/300LR POWER SUPPLIER

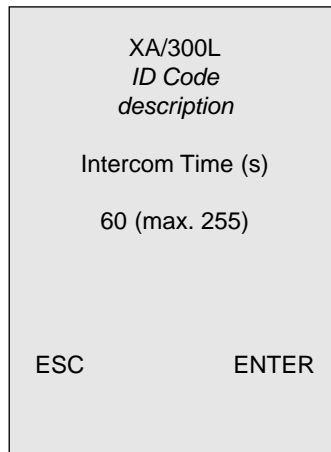
Via this menu, you can personalize the following attributes of the device:

Call Time



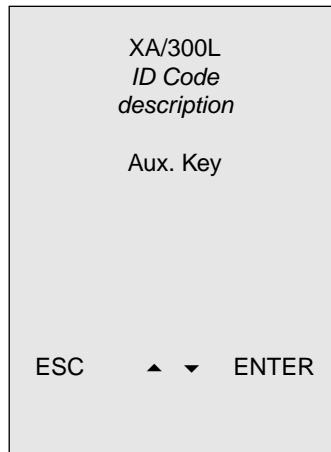
The call time can be programmed in the range 1 to 255 s. The default setting is 30 s. This is the time during which the call can be answered before the system returns to stand-by.

Intercom Time



The conversation time can be programmed in the range 1 to 255 s. The default setting is 60 s. The time starts the moment the handset is lifted.

AUX2 Mode



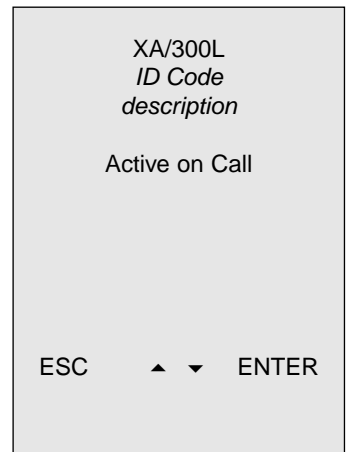
This is the function associated with the AUX 2 key on the receiver. The receiver is factory set for the key to generate a message addressed to remote actuator IOD/303L.

If there is a porter switchboard, the programmer automatically designates the **Porter Call** function.

To edit how the key has been assigned, select the desired function using key \blacktriangledown or \blacktriangle .

The command is enabled at all times regardless of whether the receiver is activated or not.

AUX1 Mode & Door open mode



Control enablement mode.

The receiver is factory set so that controls are only enabled when the user extension is activated.

Use key \blacktriangledown or \blacktriangle to select **Active all Time** mode.

In this case, the door lock release command is relayed, according to the default setting, to the 1st entry panel in the system-300 block.

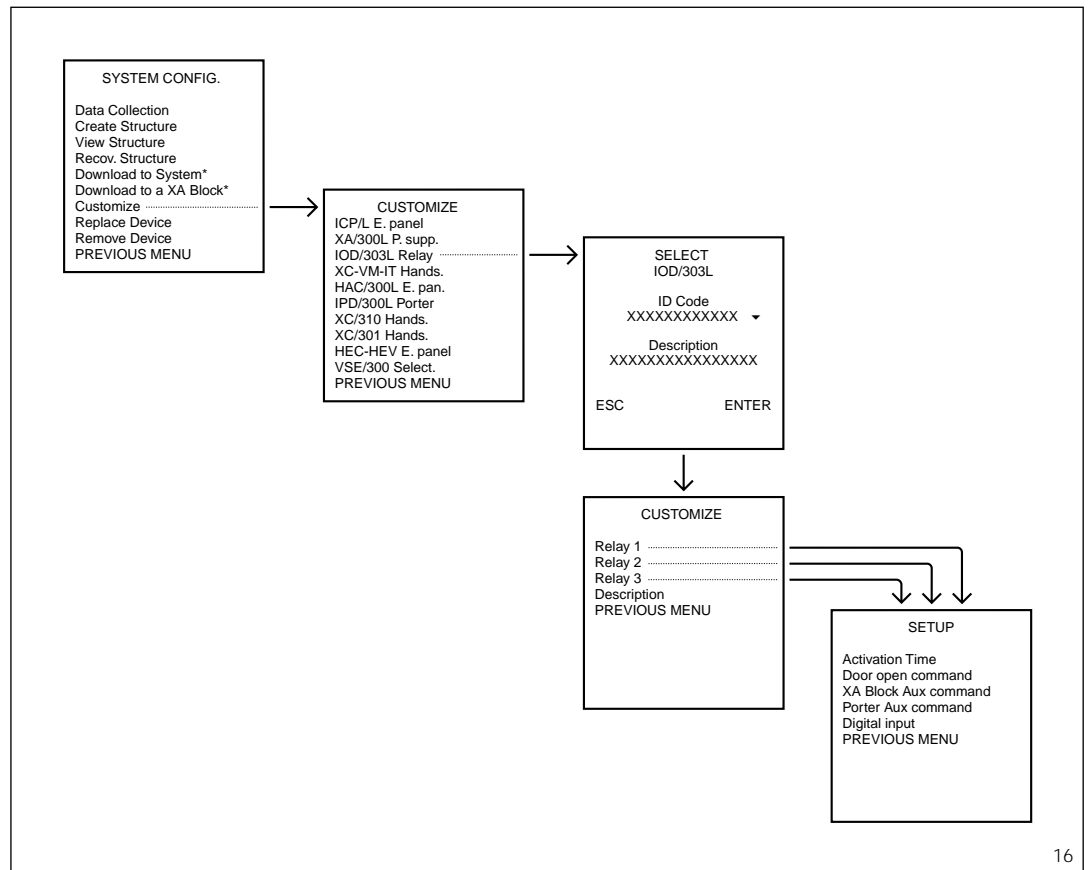
Direct Door open

Door open for
ICP/L E. Panel
HAC/300L E. Panel
None
PREVIOUS MENU

Used to identify which entry panel the door lock release command is to be sent to when the button is pressed on a receiver that has not been activated.

You are prompted to select the type of series-300 entry panel device the door lock release command is to be relayed to.

The control only works if the **Active all Time** mode has been selected.



16

Description

XA/300L
ID Code

Description
XXXXXXXXXXXXXXXXXX

ESC ENTER

Allows you to edit the text describing the power supplier. This text is used to identify the location of the device during programming.

Before exiting the menu, you are prompted to confirm whether you really want to update the device located in the installation.

Whatever choice you make at this point, the edited data are saved in the current file.

3-PERSONALIZING RELAY ACTUATOR IOD/303LR

The actuator comes factory set to receive auxiliary and door lock release commands from user extensions.

The individual relays are configured with the following modes:

Relay 1

- Activation mode: monostable.
- Activation time: 1 s.
- Command the relay is associated with: door lock release.
- Number of associated E.P. for door lock command: 1st entered during programming.

Relay 2

- Activation mode: monostable.
- Activation time: 1 s.
- Command the relay is associated with: auxiliary 2.
- Number of users enabled for AUX 2 com.: all (*).

Relay 3

- Activation mode: monostable.
- Activation time: 1 s.
- Command the relay is associated with: auxiliary 1.
- Number of users enabled for AUX 1 com.: all (*).

(* If IOD/303LR has been installed with programmer MPP/300LR and resides in a block unit, the only users are those in said block.

Via this menu, you can personalize the following attributes of the device:

Activation time

IOD/303L
ID Code

1

MONOSTABLE

ESC ENTER

Relay activation time and mode setting.

The default setting for the 3 relays is the monostable mode with an activation time of 1 s.

To edit this setting, use key ▼ or ▲ to select the desired mode:

- 0: Bistable
- 1-3,600 s: Monostable.

Door open command

Function for associating the door lock release command, usually sent to an entry panel, with one or more relays.

Select the entry panel type and device the door lock release control is to work on.

Select **No device** to disable the control.

DEVICE CONNECTED

ICP/L E. Panel
HAC/300L E. Panel
HEC-HEV E. Panel
None
PREVIOUS MENU

Block Aux command

Aux command
1

Users
from 1 to 1

of XA Block
description
ID Code

ESC < > ENTER

Function for associating the user extensions' auxiliary controls 1-12 with one or more relays.

To edit the programmer's factory setting, proceed as follows:

- 1) Use the ▼ key to select the type of auxiliary control (0=none, 1=AUX1, 2=AUX2...12=AUX12).
- 2) Use the ► key to select the of Block field; next use key ▼ or ▲ to select the relevant block.
- 3) Use the ◀ key to select the Users field; next key in the initial and final number of the group of user extensions enabled to operate the relay.

Porter Aux command

```

SCELTA
IPD/300L

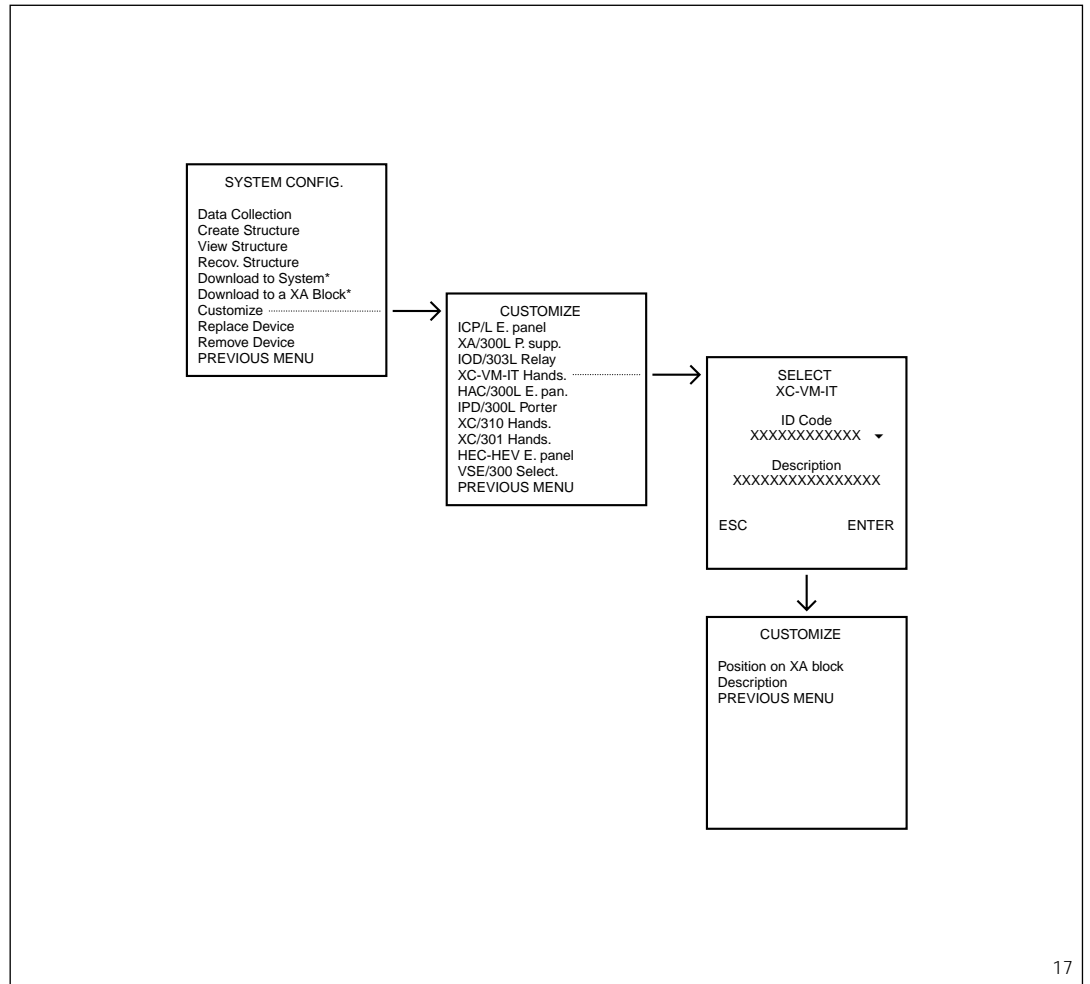
Identificativo
XXXXXXXXXXXXX ▲
XXXXXXXXXXXXX ▼

Descrizione
XXXXXXXXXXXXXXXXX

ESC          ENTER
  
```

Function for associating the porter switchboard's auxiliary control with one or more relays.

Use key ▼ or ▲ to select the type of IPD/300LR the AUX1 button is to be associated with.



Digital input

```

IOD/303L
identificativo
descrizione

Attiva il relè

ESC  ▲ ▼  ENTER
  
```

Allows you to send the command relating to entrances I1-I2-I3 directly to relays 1-2-3 and as a message over the network too.

The device is factory set so that every time the command is given, the relevant relay is operated.

Use key ▼ or ▲ to select the Not activate relay function.

Before exiting the menu, you are prompted to confirm whether you really want to update the device located in the installation.

Whatever choice you make at this point, the edited data are saved in the current file.

4 - PERSONALIZING RECEIVERS

Via this menu, you can personalize the following attributes of the device:

Position on block

```

XA/300L
identificativo
descrizione

Derivato interno

1

Ch. Anal. (1...3)
Ch. Digit. (*1...*3)

ESC          ENTER
  
```

This function can be used to move an receiver within the system-300 block from one position (call) to another.

To reposition a receiver, enter the new number of the extension's position then confirm.

Description

```

XC-VM-IT
identificativo

Descrizione
XXXXXXXXXX

ESC          ENTER
  
```

Allows you to edit the text describing the receiver.

This text is used to identify the location of the device during programming.

Before exiting the menu, you are prompted to confirm whether you really want to update the device located in the installation.

Whatever choice you make at this point, the edited data are saved in the current file.

5 - PERSONALIZING ENTRY PANEL WITH HAC/300LR

Via this menu, you can personalize the following attributes of the device:

Door Timeout

HAC/300L
ID Code
description

Door Timeout (s)

1 (max. 255)

ESC ENTER

A time can be set individually for each single entry panel during which the solenoid door lock is activated.

Enter the chosen time in the range 1 to 255 s.

The default setting is 1 s.

Video Presence

HAC/300L
ID Code
description

Video Presence

ESC ▲ ▼ ENTER

This parameter tells the system whether there is a surveillance camera fitted or not in a given entry panel.

The default setting is **Video presence**.

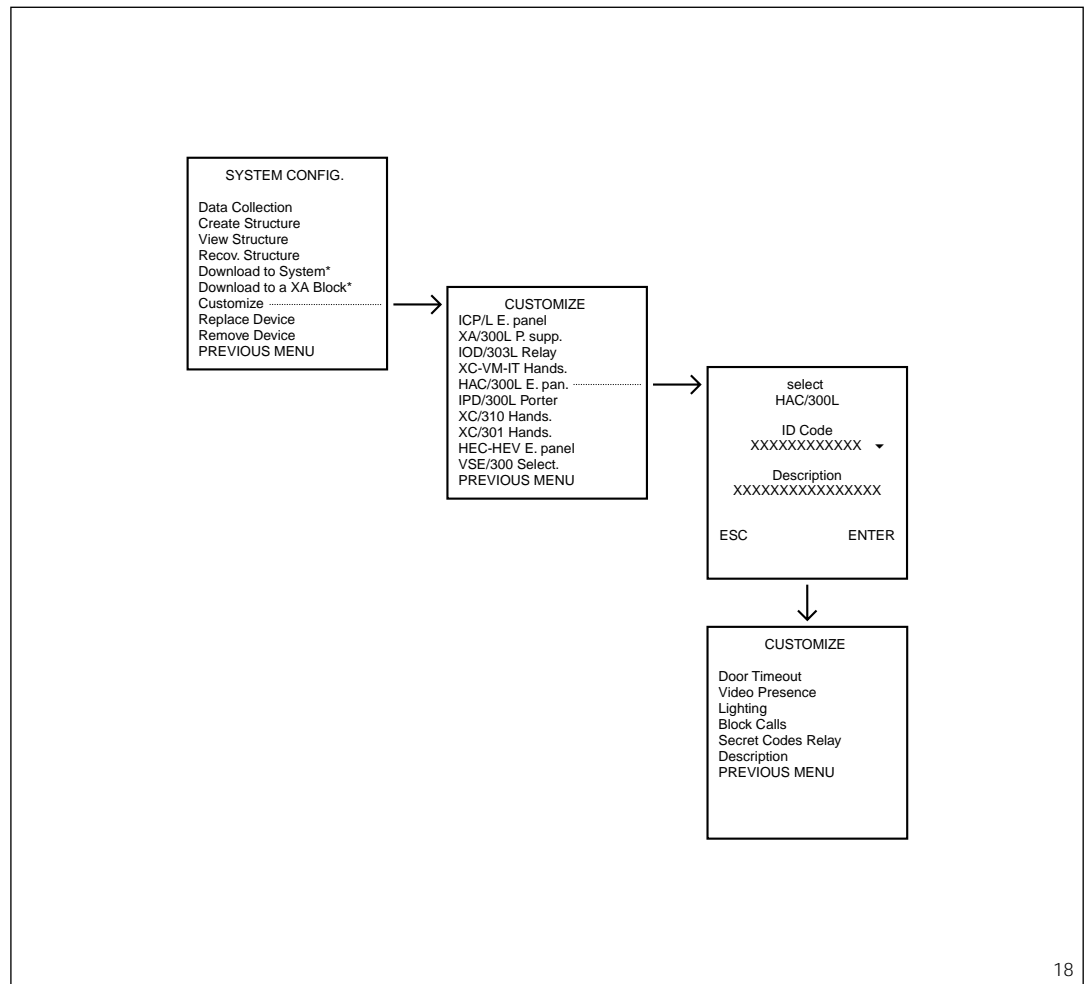
Select **Video absent** using key ▼ or ▲ if the entry panel does not feature a camera.

This operation is only required where the installation is a mixed one - audio and video entry control systems - so that text describing the entry panel used to make the call can be seen on the monitor when there is no background video signal.

Lighting

Operating mode of the display's and keypad's lighting.

The two available options are



18

HAC/300L
ID Code
description

Permanent lighting

ESC ▲ ▼ ENTER

Permanent lighting (default setting) and **Timed lighting**.

In the latter case, when the display and pushbuttons are idle for 60 seconds, the relevant lighting goes off. This applies to all but the ▲ key, which remains lit at all times.

Use key ▼ or ▲ to edit the lighting mode and confirm with the ↵ key.

XA/300LR Block Calls

This function allows you to add calls (personalized codes) addressed to receivers belonging to other blocks, or to rename the personalized code displayed on the entry panel.

To view which calls are possible from a given entry panel, select the **Show-Modify** option and, if

calls can be made to a number of blocks, select the block to receive the call using key ▼ or ▲.

When wanting to edit the default personalized code, enter the new value (e.g. 101 with 1, or 101 with TEXT 1) in the **Codes from** field.

The personalized code can be up to 9 numbers and/or letters long and, apart from the progressive

of calls (personalized codes) by moving onto the **Codes** field using the ◀ key. Select the **Delete** option to remove the group of calls associated with a block.

Secret Codes Relay

BLOCK CALLS

Show-Modify
Add
Delete
PREVIOUS MENU

code section, is the same for all call numbers for that block.

To edit the personalized code of a single user, use the entry panel's resident programming menu.

To enter calls belonging to other blocks, select the **Add** option followed by the block to receive the call using key ▼ or ▲. Where necessary, edit the group

SELECT
IOD/303L

ID Code
XXXXXXXXXXXXXXXXX ▼

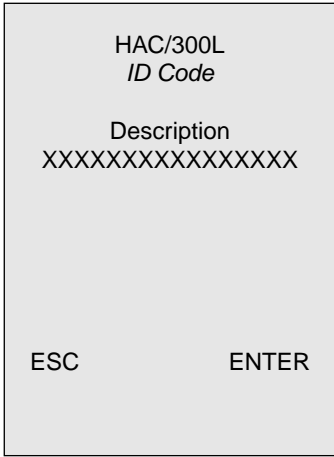
Description
XXXXXXXXXXXXXXXXX

ESC ENTER

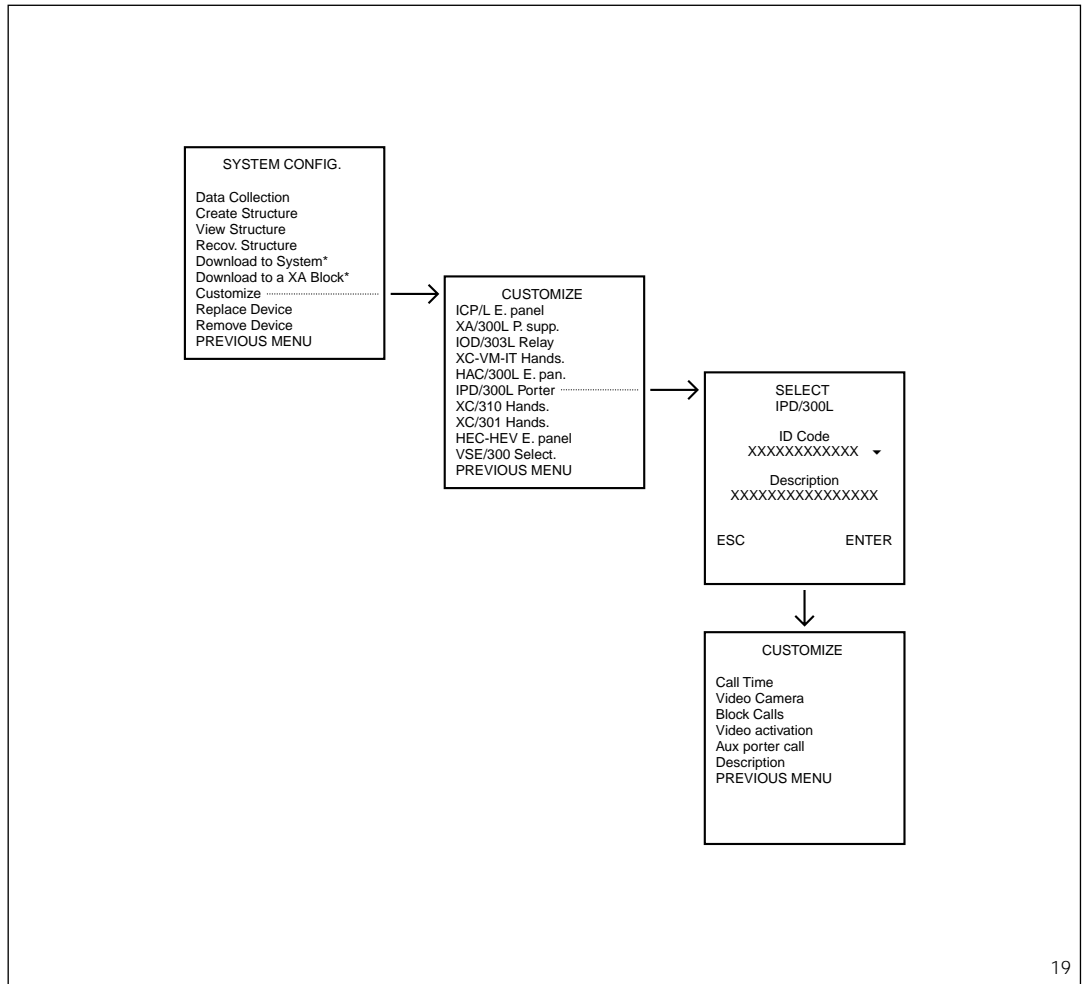
Allows you to select a IOD/303LR relay actuator to be associated with the secret codes sent by the entry panel.

The device is factory set to send the command to the 1st relay actuator installed.

Description



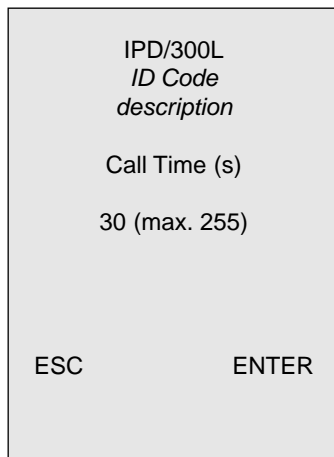
Allows you to edit the text describing the entry panel. This text is used to identify the location of the device during programming and is displayed on the monitor when a call or request for self-connection to the entry panel is made. *Before exiting the menu, you are prompted to confirm whether you really want to update the device located in the installation. Whatever choice you make at this point, the edited data are saved in the current file.*



6 - PERSONALIZING PORTER SWITCHBOARD IPD/300LR

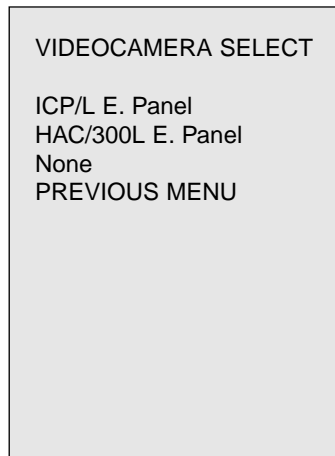
Via this menu, you can personalize the following attributes of the device:

Call Time



The time of the call to the switchboard can be programmed in the range 1 to 255 s. The default setting is 30 s. This is the time during which the call can be answered before the system returns to stand-by or, for calls to the receiver, how long the warning tone sounds to advise the listener of a call from the entry panel.

Video Camera



This function can be used to enter a porter surveillance camera so that every time a user extension is called, the image from the camera comes up on the porter switchboard as well as on the user station. Any entry panel already inserted in the installation can be used as a porter camera. To designate an entry panel as the porter camera, use key ▼ or ▲ to select the type of entry panel and type of device to be associated. Select the **None** option to eliminate any associated entry panels.

Block calls



This function allows you to delete and add calls (personalized codes) addressed to user extensions belonging to the various blocks, or to rename the personalized code displayed on the switchboard. To view which calls are possible from a given switchboard, select the **Show-Modify** option and select the available blocks using key ▼ or ▲. Select the **Delete** option to remove the group of calls associated with a block. To re-enter calls belonging to other blocks, select the **Add** option followed by the block to receive the call using key ▼ or ▲.

Where necessary, edit the group of calls (personalized codes) by moving onto the **Codes** field using the **◀** key.

When wanting to edit the default personalized code, enter the new value (e.g. 101 with 1, or 101 with TEXT 1) in the **Codes from** field.

The personalized code can be up to 9 numbers and/or letters long and, apart from the progressive code section, is the same for all call numbers for that block.

To edit the personalized code of a single user, use the switchboard's resident programming menu.

WARNING: *Before editing personalized codes set by the programmer, make sure you note down the association between the old and new code to avoid losing track of which personalized codes correspond to which entry panels.*

Video activation

```

IPD/300L
ID Code
XXXXXXXXXXXXX

Description
XXXXXXXXXXXXXXXXX

Immediate Video

ESC  ▲ ▼  ENTER
  
```

This function allows you to adjust the display's behaviour following a call to the porter when addressed to a number of porter switchboards.

It might be useful to alter the default setting when, for installations featuring a number of porter switchboards listing different users, you want to view the image from the entry panel's camera as soon as the call is made and not when the receiver is lifted.

To change the setting, select the **Immediate video** mode using key **▼** or **▲** and then press the **↵** key.

Aux porter call

Negli impianti con più centrali installazioni featuring a number of porter switchboards, porter calls can also be made by user extensions using auxiliary buttons.

This allows you to call up to 12 porter switchboards (with handset XC/310) individually.

To designate the auxiliary button as a porter call button, simply enter the number of the relevant auxiliary control (e.g.: • = Aux 1, 1st intercom button = Aux 3 etc.).

NOTE. *If you want to use the Aux 1 control, the XA/300LR power supplier's default setting (command sent with system on only) must be*

```

IPD/300L
ID Code
XXXXXXXXXXXXX

Description
XXXXXXXXXXXXXXXXX

Aux porter call
0 (max. 15)

ESC          ENTER
  
```

edited.

*To avoid sending the door lock release command with the system off too, select the **None** option for the **Direct Door Open** function, again in power supplier XA/300LR.*

Description

```

IPD/300L
ID Code

Description
XXXXXXXXXXXXXXXXX

ESC          ENTER
  
```

Allows you to edit the text describing the porter switchboard.

This text is used to identify the location of the device during programming and is also displayed on the user's monitor station when a call is received.

Before exiting the menu, you are prompted to confirm whether you really want to update the device located in the installation.

Whatever choice you make at this point, the edited data are saved in the current file.

7 - PERSONALIZING INTERCOM RECEIVERS XC/310

Via this menu, you can personalize the following attributes of the device:

1st (2nd-3rd) Position on block

```

XA/300L
description
ID Code

Handset position

n

Anal. Call (1...10)
Digit. Call (*1...*10)

ESC          ENTER
    
```

This function can be used to move an receiver within the system-300 block from one position (call) to another.

A 2nd and 3rd position can also be assigned, to enter the name of another component of the series, for instance, or to be able to use a single button to call a number of users that also receive single calls. To assign the receiver a new position or to enter a new call, key in the new position number and confirm.

NOTE. This function can be programmed using the MPP/300LR unit only when the receiver does not belong to an intercom group (VSE/300).

Only position 1 can be used for intercom button association.

Intercom call

```

XC/310
ID Code
XXXXXXXXXX

Description
XXXXXXXXXX

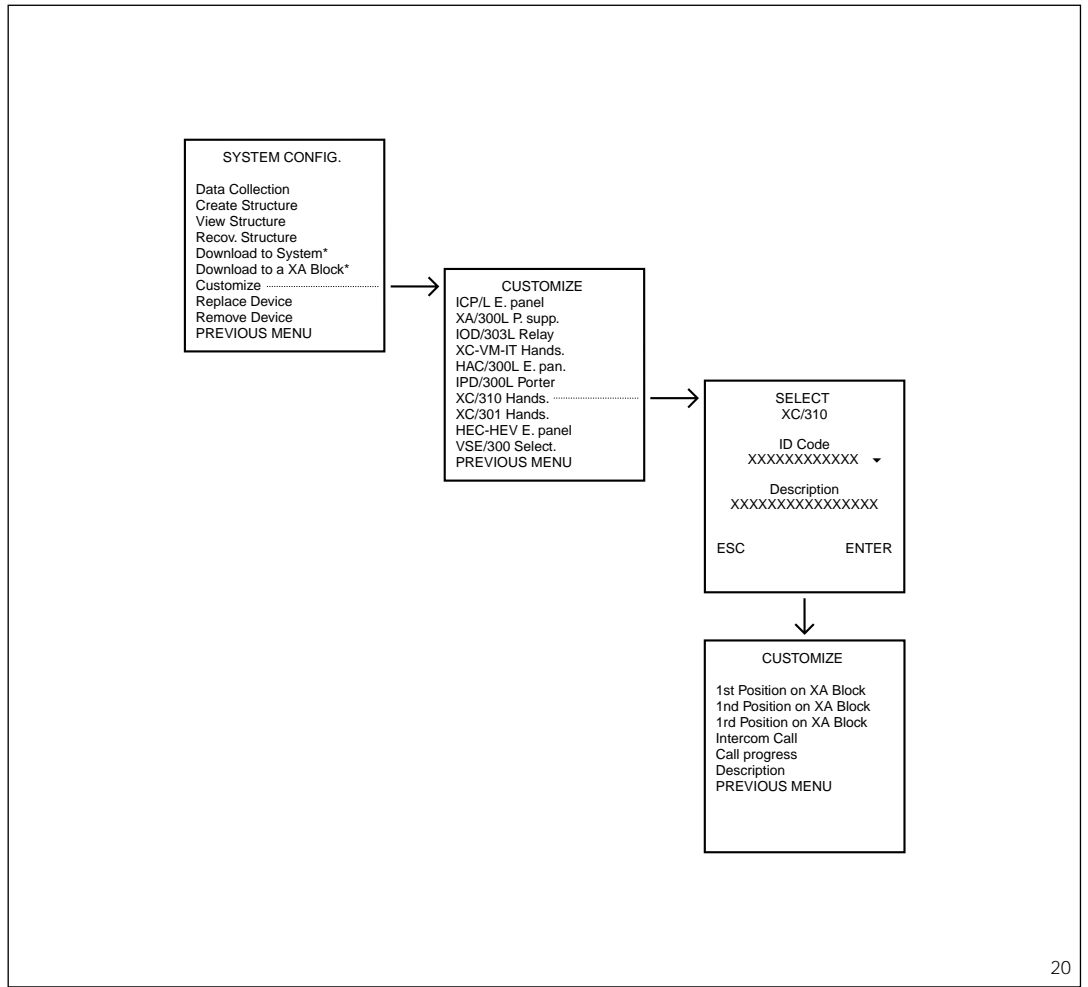
Intercom call

n (max. 10)

ESC          ENTER
    
```

Used to assign a new number with which the intercom receiver can be called from another intercom receiver. Enter the new number (1-10) and confirm.

NOTE. The intercom call refers to the receiver's position 1 (position 2 and 3 are disregarded).



Call progress

```

XA/300L
description
ID Code

Handset position

n

Ch. Anal. (1...10)
Ch. Digit. (*1...*10)

ESC          ENTER
    
```

This function allows you to divert the call to another receiver if there is no reply within the call time (default setting 30 s).

To set a call diversion, you must enter the position number of the receiver the call is to be transferred to.

Proceed as follows:

- 1) Use key ▼ or ▲ to select the XA/300LR block where the receiver is located.
- 2) Enter the position number (call) of the receiver to receive the call. Enter 0 (zero) to cancel the association.

Description

```

XC/310
ID Code

Description
XXXXXXXXXX

ESC          ENTER
    
```

Allows you to edit the text describing the user extension.

This text is used to identify the location of the device during programming.

Before exiting the menu, you are prompted to confirm whether you really want to update the device located in the installation.

Whatever choice you make at this point, the edited data are saved in the current file.

8 - PERSONALIZING RECEIVERS XC/301

Via this menu, you can personalize the following attributes of the device:

1st (2nd-3rd) Position on block

XA/300L
description
ID Code

Handset position

n

Anal. Call (1...10)
Digit. Call (*1...*10)

ESC ENTER

This function can be used to move an receiver within the system-300 block from one position (call) to another.

A 2nd and 3rd position can also be assigned, to enter the name of another component of the series, for instance, or to be able to use a single button to call a number of users that also receive single calls. To assign the receiver a new position or to enter a new call, key in the new position number and confirm.

Call progress

XA/300L
description
ID Code

Handset position

n

Ch. Anal. (1...10)
Ch. Digit. (*1...*10)

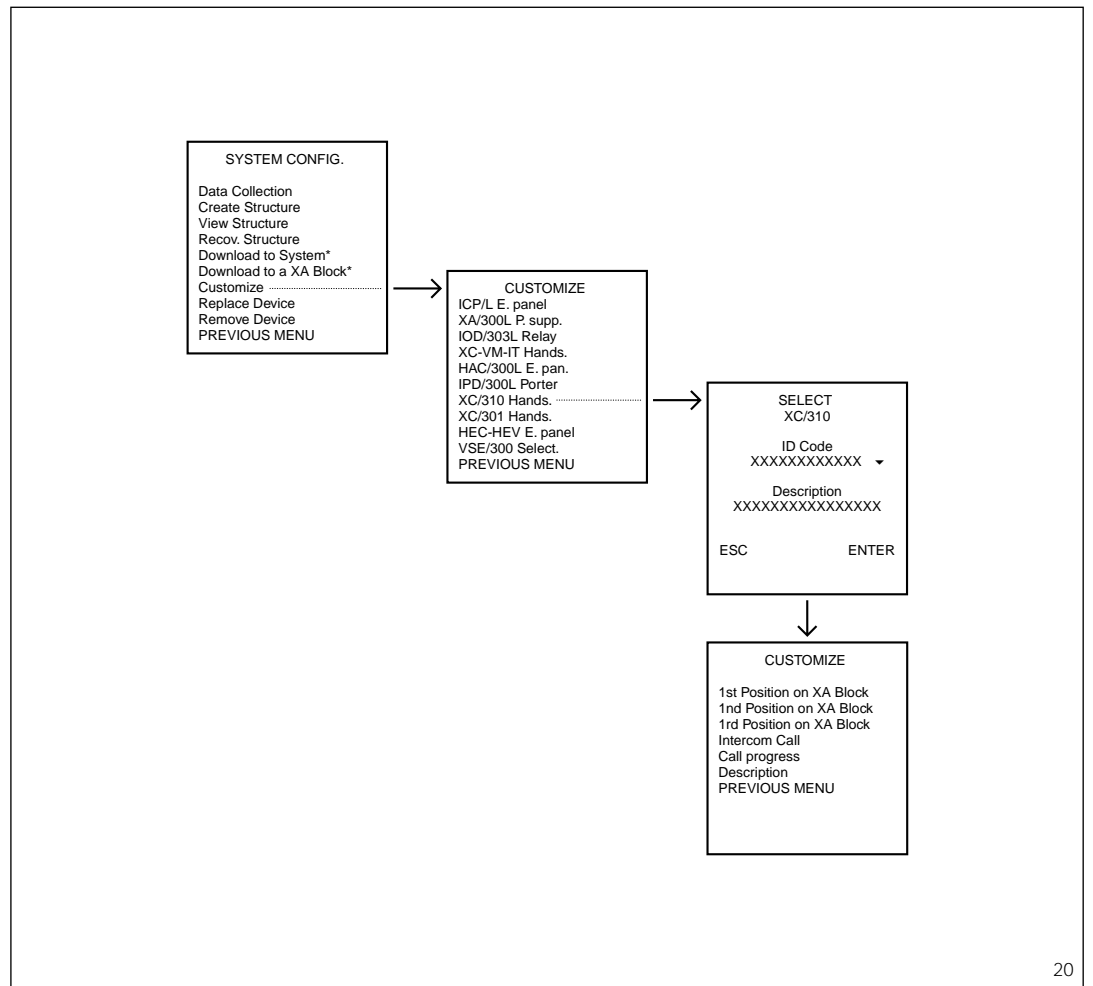
ESC ENTER

This function allows you to divert the call to another receiver if there is no reply within the call time (default setting 30 s).

To set a call diversion, you must enter the position number of the receiver the call is to be transferred to.

Proceed as follows:

- 1) Use key \blacktriangledown or \blacktriangle to select the XA/300LR block where the receiver is located.
- 2) Enter the position number (call) of the receiver to receive the call. Enter 0 (zero) to cancel the association.



20

Description

XC/310
ID Code

Description
XXXXXXXXXX

ESC ENTER

Allows you to edit the text describing the user extension.

This text is used to identify the location of the device during programming.

Before exiting the menu, you are prompted to confirm whether you really want to update the device located in the installation.

Whatever choice you make at this point, the edited data are saved in the current file.

9 - PERSONALIZING X2 ENTRY PANELS

Via this menu, you can personalize the following attributes of the device:

Used pushbuttons

HEC-HEV
ID Code
XXXXXXXX

Description
XXXXXXXX

Used pushbuttons
1 (max. 4)

ESC ENTER

Used to identify the number of buttons located on the X2 front plate. The front plate comes with a single button connected and the MPP/300LR programmer configures the system allowing for this button alone.

When wanting to use the additional buttons accommodated by X2 front plates, you must enter the number of buttons actually connected (max. 4).

You can also opt to disable button n° 1 supplied by setting the number of buttons to 0 (zero).

Users Calls

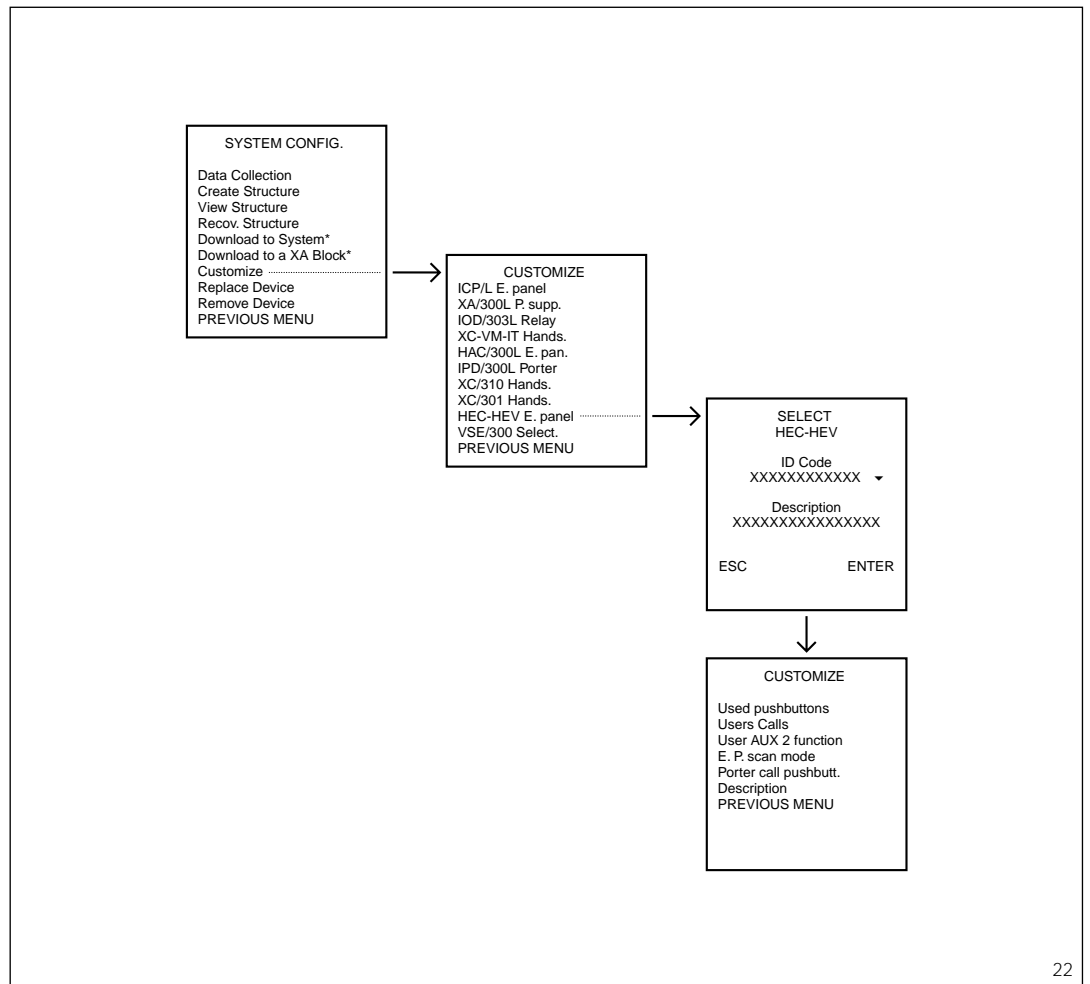
HEC-HEV
description
ID Code

Users
from to
1 n

Pushbuttons
from to
1 n

ESC < > ENTER

This function enables you to limit the number of calls that can be made from a given X2 entry panel. To edit the call group - set with programmer MPP/300LR whilst creating the structure - you must enter the initial and final number of the group of users by using key ◀ or ▶ to step through the fields. **NOTE. If the installation features a porter switchboard, user calls will start from button n° 2.**



22

Users AUX2 function

HEC-HEV
ID Code
XXXXXXXX

Description
XXXXXXXX

Aux command

ESC ▲ ▼ ENTER

Function used to designate the receiver's AUX2 key as the **Aux command** or **Porter call** button. The X2 entry panel is configured with the same auxiliary 2 control on each entry panel belonging to the X2 block. If the installation features a porter switchboard, the control is automatically converted into the **Porter call** button. In this case, the command is sent to the porter and locally to X2 entry panel n° 1 or master entry panel only. In all cases, when wanting to edit the set status, use key ▼ or ▲ .

E. P. scan mode

HEC-HEV
ID Code
XXXXXXXX

Description
XXXXXXXX

Only X2 E. Panel

ESC ▲ ▼ ENTER

Receivers are factory set to switch between X2 entry panels only (from 1 to 4). To include 300-series entry panels too, you must edit the setting by selecting the **X2 & 300 E. P. mode** using key ▼ or ▲ . In this case, the receiver first scans the X2 entry panels followed by the series-300 panels, nonetheless continuing within the latter.

Porter call pushbutt.

HEC-HEV
ID Code
XXXXXXXX

Description
XXXXXXXX

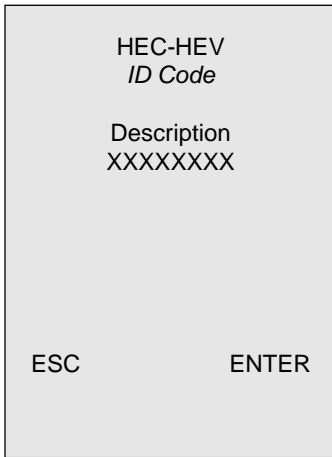
Pushbutton present

ESC ▲ ▼ ENTER

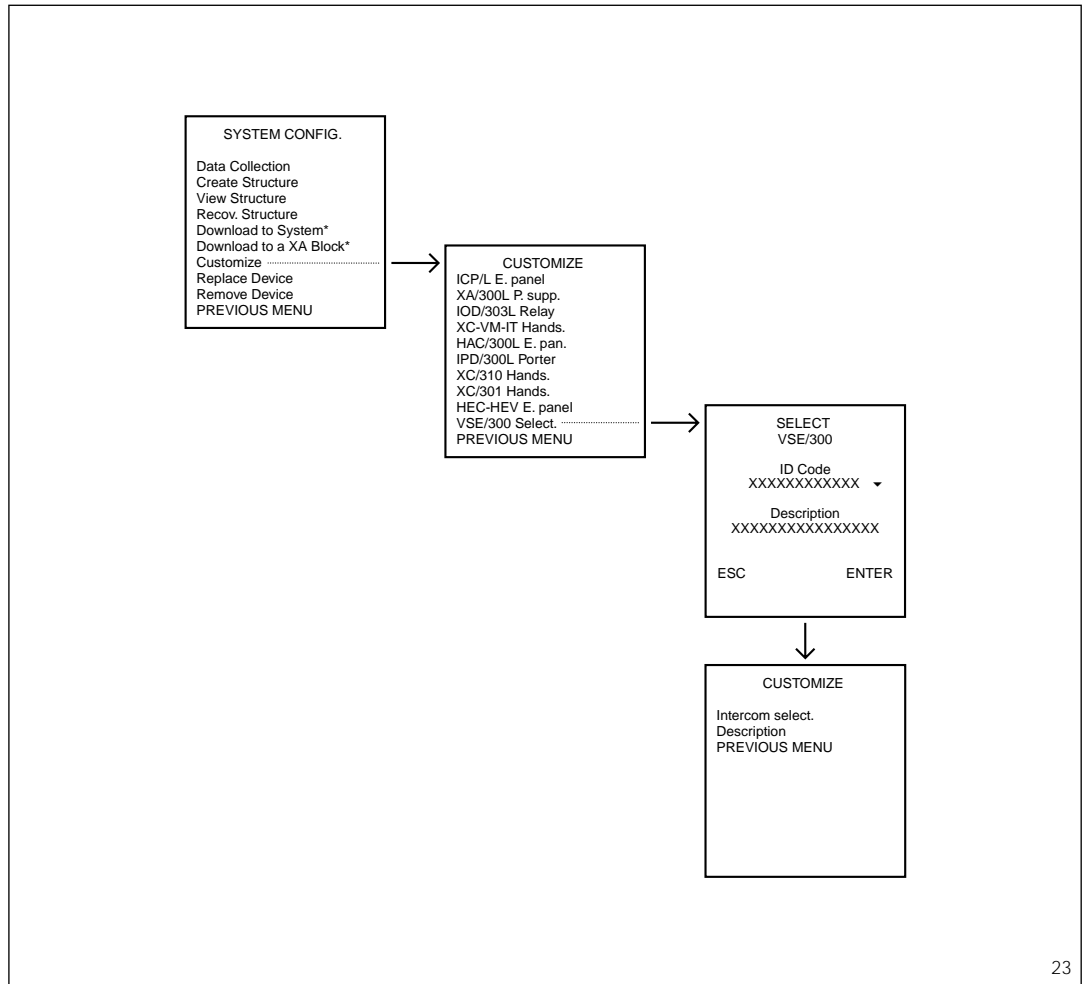
This option is used to determine the function of the 1st key on the front plate. In installations with porter switchboard IPD/300LR, programmer MPP/300LR assigns it the porter call function automatically. To use the key for calling users, you must select the **Pushbutton absent** option using key ▼ or ▲ .

Description

Allows you to edit the text describing the entry panel. This text is used to identify the location of the device during programming.



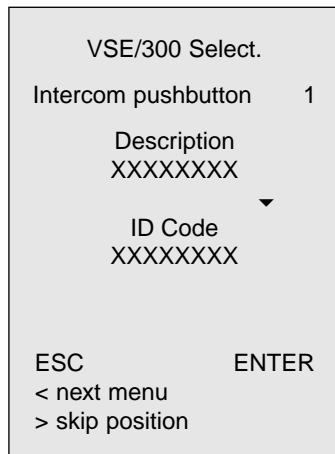
Before exiting the menu, you are prompted to confirm whether you really want to update the device located in the installation. Whatever choice you make at this point, the edited data are saved in the current file.



10 - PERSONALIZING INTERCOM SELECTOR VSE/300

Via this menu, you can personalize the following attributes of the device:

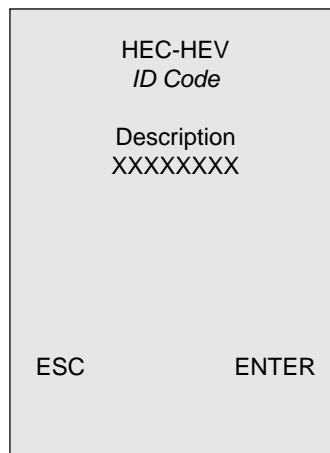
Intercom select



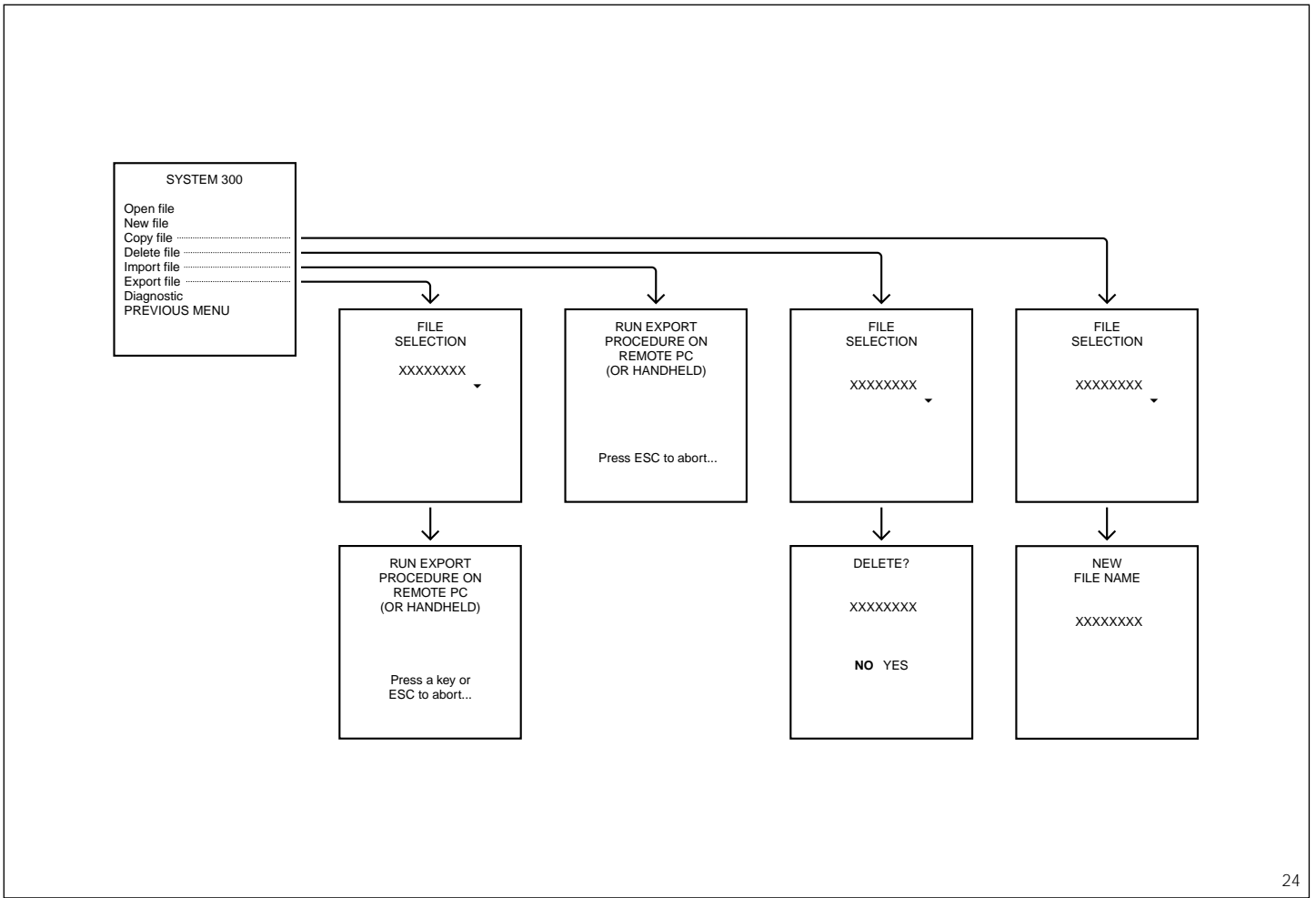
This function allows you to associate receivers not available at the time of structure creation with an intercom selector. To do this, you will nonetheless need to have entered the device's code through the **Data collection** menu and have associated it with a call button through the **Create structure** and **Handsets position** menu.

This same function can be used to simply edit the intercom call number. To assign or edit the intercom position of a receiver, simply use key ▼ or ▲ to select the type of intercom receiver to be assigned to intercom button n° 1. Once the first receiver has been confirmed, the programme automatically proposes association of the 2nd intercom button. If a user receiver's data are missing, or when wanting to edit a single position, use the ◀ key to skip to the next button. Press the ▶ key if you need to stop setting before you reach button n° 10.

Description



Allows you to edit the text describing the intercom selector. This text is used to identify the location of the device during programming. *Before exiting the menu, you are prompted to confirm whether you really want to update the device located in the installation. Whatever choice you make at this point, the edited data are saved in the current file.*



FILE MANAGEMENT

These functions allow you to manage the installation files in the handheld programmer itself (to copy and delete files) and to handle file transfer between two handheld programmers or between the handheld unit and a PC.

Copy file

You can create a copy of the installation's configuration in the handheld programmer to rename or save the original configuration and work on the copy. You will be asked the name of the file to be copied and the new name to be assigned to the installation.

The name can be up to 8 numbers and/or letters long, in upper or lower case.

Delete file

Allows you to delete any of the installation files contained in the handheld programmer.

You will be asked to select the file to be deleted and confirm its actual deletion.

Import file

This function allows you to transfer any of the installation files from a PC or other handheld programming device.

1) Before commencing transfer, the two devices must be connected with the 9-pin null-modem RS-232 cable supplied.

If the device the file is being transferred from is a PC, you must take care to plug the cable into serial communication port COM 1 (default setting) or COM2.

In the latter case, you will need to edit the COM port setting accordingly via the **HPP/300L Setup** menu.

2) Run the import function on the receiving device.

3) Select the file to be transferred and run the export function on the source device.

The main menu reappears on both devices to advise you transfer is complete.

Export file

This function allows you to transfer any of the installation files from the handheld programmer to a PC or other programming device.

1) Before commencing transfer, the two devices must be connected with the 9-pin null-modem RS-232 cable supplied.

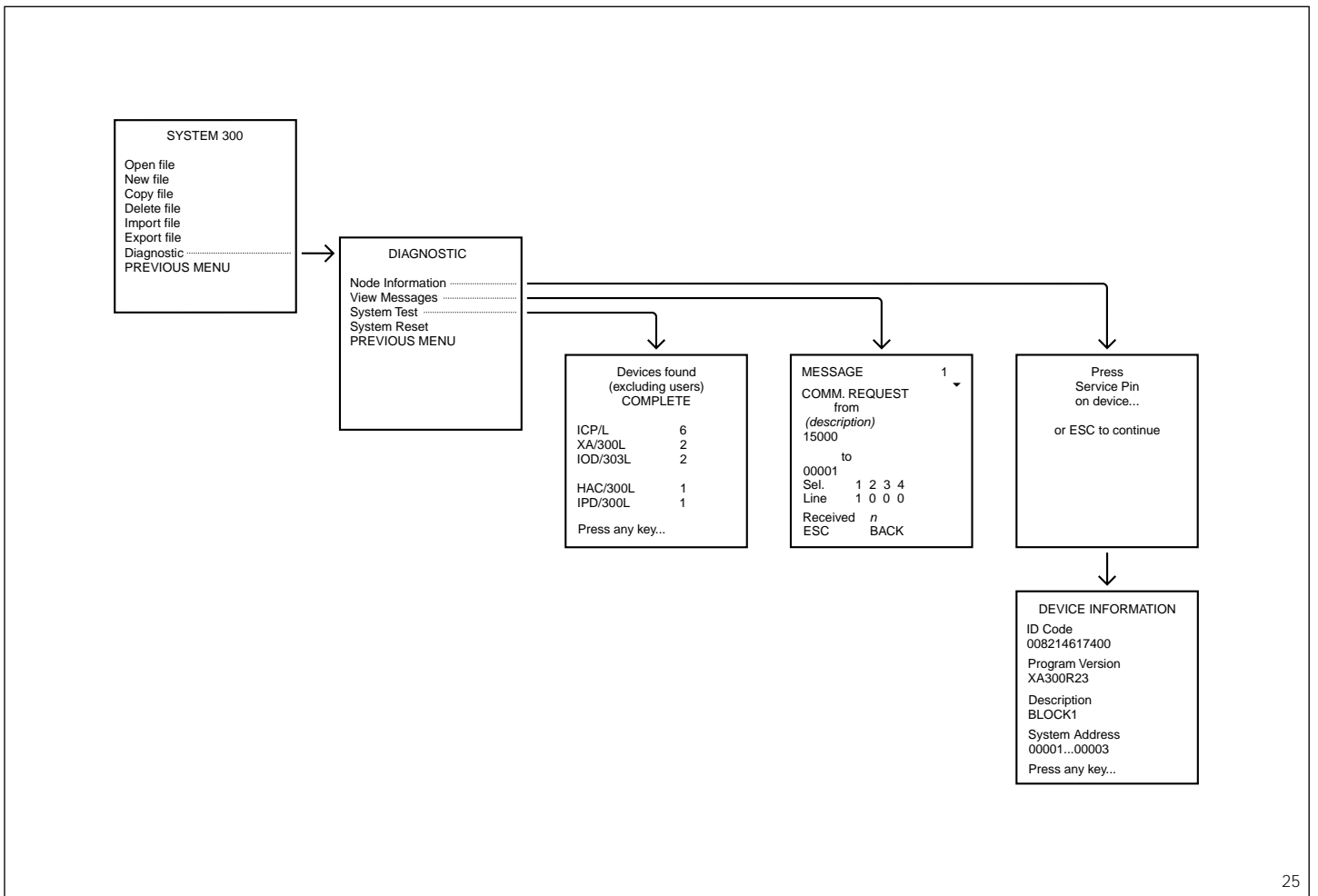
If the device the file is being transferred to is a PC, you must take care to plug the cable into serial communication port COM1 (default setting) or COM2.

In the latter case, you will need to edit the COM port setting accordingly via the **HPP/300L Setup** menu.

2) Run the import function on the receiving device.

3) Select the file to be transferred and run the export function on the source device.

The main menu reappears on both devices to advise you transfer is complete.



SYSTEM ANALYSIS FUNCTIONS

Via the **Diagnostic** menu, you can obtain information from the system on devices and communication traffic between them or, in general, use it to check whether all LON devices connected to the system are present.

In detail, the following options are available:

Node Information

Allows you to access data on a LON node level.

You are asked to press the service button on the device to be analysed.

The following information can be obtained from the device:

ID Code

This is a hexadecimal code, made up of 12 numbers and letters, and identifies the LON device uniquely.

This is the same code featured on the label attached to each device.

Program version

Allows you to identify the article in question as well as the programme version used.

E.g. XA300R20 identifies article XA/300LR with version 2.0.

Description

This is a field up to 16 numbers and/or letters long enabling the

description assigned to the device to be viewed.

System Address

This code is used by the communication protocol to inform system devices as to the messages' source and destination.

View Messages

Allows you to view traffic data. Up to 50 messages are available for viewing and can be selected using key \blacktriangledown or \blacktriangle .

The message structure consists in:

message type: type of function performed;

source: message complete with system address and description;

destination: message complete with system address and line n° of the block, where applicable (see section entitled **Create Structure**);

number of messages received: indicates stored messages.

Received messages can be deleted by pressing the **Back space** button.

System Test

Locates all LON devices in the network.

This command may also prove useful to check whether all LON devices are connected and communicating properly.

System Reset

Sends a reset command to all devices, as happens every time the system is switched on.

