APARTMENT BLOCK SWITCHBOARD FOR 2 WIRE ELVOX SYSTEMS

INSTALLATION AND OPERATION MANUAL

Art. 945F

Art. 945F/T

Il prodotto è conforme alla direttiva europea 89/336/CEE e successive.
Product is according to EC Directive 89/336/EEC and following norms.
1. GENERAL INFORMATION
1.1. INTRODUCTORY NOTES
Type 945F enables the set-up of an alphanumeric switchboard for Elvox 2-wire video door entry systems. The device is configured as standard with an alphanumeric LCD display (2 rows x 40 columns) for the display of communication messages to and from the associated system, a handset for audio communication with the system panels and for communication with the riser devices (interphones and monitors) and a multi-function keyboard for call selection, and functional management of operations for switchboard configuration (communication parameters, alphanumeric agenda related to user table, clock and alarms).

The switchboard can also be configured with supplementary units for the management of a video signal: a camera module (internal, in which case the switchboard model name is 945F/T) and a video module (external) on the base unit fitted with the operator control interface:

On start-up, the switchboard displays its specific name (Type 945F), the date and the software version number:

```
*** Elvox 945F ***
GL/MM/AA SW V 0.00
```

and then briefly displays the presentation window:

```
*** Due Fili Elvox System ***
945F Switchboard active +MT
```

The last three characters on display indicate respectively:
- ‘.’ Check in progress of correctness of program memory contents. Replaced by ‘+’ if check is positive and ‘?’ if the check fails.
- ‘M’ indicates the external presence of the monitor.
- ‘T’ indicates the internal presence of the camera module, which means the switchboard model is type 945F/T.

Messages are then displayed regarding initial operating status:

```
Dial digits to number call  Mo 06/11 09:08  E
Press * to alphanumeric call  Mo 06/11 08:39  I
```

these messages are displayed in alternating mode, if the agenda contains at least one name, with:

press * to alphanumeric call

1.2. OPERATOR INTERFACE
1.2.1. Display
The switchboard display is divided into four sections: each section can display specific information for the operator regarding switchboard operating and communication status.
Type 1 Messages: all messages of incoming calls from the riser or entrance panel are displayed or those of switchboard calls in progress;

Type 2 messages: the display shows service information on the specific status of a device, which must be received to enable communication; the right-hand section can be used as an Icon field for the display of additional icons;

Note: Type 1 and type 2 message fields can also be used to display operations carried out on the switchboard configuration menu and call memory status;

Date/Clock : this display section shows the current date and time;

Icons : field used to display icons referring to a specific operating status of the switchboard;

1.2.2. Display icons

<table>
<thead>
<tr>
<th>ICON</th>
<th>DESCRIPTION</th>
</tr>
</thead>
<tbody>
<tr>
<td>(Box with superimposed arrow)</td>
<td>Indicates that there are calls (or other commands) in the memory.</td>
</tr>
<tr>
<td>(Telephone handset):</td>
<td>indicates that the switchboard handset is raised.</td>
</tr>
<tr>
<td>(Cordless phone):</td>
<td>indicates that the optional cordless phone connected to type 69TF (see chapter 5) is active. In the case of simultaneous operation with the switchboard handset, the priority icon is that of the cordless to notify the user that it has been left active.</td>
</tr>
<tr>
<td>(Moon and star):</td>
<td>appears only when both handsets are in the rest status. Indicates that the switchboard is set to Night-time service and therefore the telephone connected to type 69TF will ring for calls and warnings.</td>
</tr>
<tr>
<td>(Key):</td>
<td>Indicates that a door lock release command is in progress or activation of a function.</td>
</tr>
<tr>
<td>(Padlock):</td>
<td>Indicates the keyboard lock by means of external key;</td>
</tr>
<tr>
<td>(I / E):</td>
<td>Indicate the switchboard status (internal or external);</td>
</tr>
</tbody>
</table>

Ringtone mute (by means of keys \[ \text{R} \] and \[ \text{3} \] );

1.2.3. Keyboard

1.2.3.1. Keyboard keys

The switchboard is fitted with a keyboard of 20 keys. The keyboard is divided into two areas: the right-hand area enables the user to make calls, program the switchboard, and cancel operations in progress; the left-hand area enables the activation of functions for porter calls, door lock release, intercommunicating calls, transmission on telephone line and entries.

KEYBOARD DESCRIPTION

<table>
<thead>
<tr>
<th>LEFT-HAND AREA</th>
<th>SYMBOL KEY</th>
<th>DESCRIPTION</th>
</tr>
</thead>
<tbody>
<tr>
<td>SCROLL MEMORIES</td>
<td>Enables the user to consult calls or function activations from interphones or monitors connected to the riser. In programming mode, simulates an UP arrow of the programmer type 950C.</td>
<td></td>
</tr>
<tr>
<td>LOCK OPEN</td>
<td>Enables activation of switchboard terminal “SR” and release of the lock of the main entrance panel in conversation with the switchboard. In programming mode, simulates the 2nd key of the programmer type 950C.</td>
<td></td>
</tr>
<tr>
<td>TRANSFER</td>
<td>Enables transfer of the porter call number to enable: call to the internal device, activation of the intercommunication function, or deletion of the number. In programming mode, simulates a DOWN arrow of the programmer type 950C.</td>
<td></td>
</tr>
</tbody>
</table>
INTERCOMMUNICATING
The key is used to establish conversation between two devices: two interphones (monitors) or interphone (monitor) and main entrance panel. Intercommunicating conversation, or between the main entrance panel and interphone (monitor) is indicated by illumination of the lamp INTERC.

ASTERISK
Key used to start searches in the switchboard alphanumeric agenda. In programming mode, simulates the EXIT key of the programmer type 950C.

INTERNAL/EXTERNAL
The key is used to manually change the switchboard mode from internal to external and vice versa; illumination of the lamp EXTERNAL indicates switchboard external mode.

ENTRY
This key is used to enable switchboard entry in a conversation already in progress. An acoustic signal sent to the devices indicates activation of the audio entry function by the switchboard in the communication in progress.

Right-hand section

SYMBOL KEY  DESCRIPTION

NUMBER SELECTION
Enable the user to dial the user number for calls and modify technical parameters during switchboard programming.

RESET/EXIT CONFIGURATION MENU
Enables cancellation and interruption of any conversation in specific cases.

USER CALL
Enables sending of a call after dialling the number. In the technical programming phase, the key is also used to confirm modifications applied in the configuration menus.

ENTRY TO PROGRAMMING MODE
Pressed simultaneously enable access to the technical programming phase.

1.2.3.2. Keyboard indicators

LED

MEMORY
The lamp illuminates when events are present in the memory (e.g. calls unanswered by the switchboard, activation of functions F1,F2, locks). Flashes during programming of technical parameters if further events are added. To stop flashing, consult the list.

EXTERNAL
When the lamp is off the switchboard is set to internal mode, and otherwise is in external mode.

INTERC
The lamp illuminates during a conversation between two or more interphones (monitors) and the main entrance panel.

LINE
The lamp is lit when at least one device is present on the audio line with the handset raised and in communication with the switchboard.
1.2.5 Switchboard handset

The switchboard communicates with the rest of the system (panel or internal device) via the handset at the left side of the unit. This switchboard is not fitted with a mechanical hook; a magnetic sensor is used for positioning the handset in its seat, to engage the switchboard audio line; in the same way to free the line the handset is simply raised from its seat. When the switchboard receives a call (from a panel or internal device on the riser) with the handset in use, to enable communication the handset must be replaced briefly in its seat; this sequence is envisaged to prevent the switchboard handset (when momentarily placed in the rest position) from entering audio mode without the presence or intentional command by an operator.

These operations are also indicated by an icon (handset symbol: ) which is activated on the LCD display when the handset is not in the rest position.

1.2.6 Summary of main configuration commands

<table>
<thead>
<tr>
<th>KEYS</th>
<th>COMMANDS</th>
</tr>
</thead>
<tbody>
<tr>
<td>0</td>
<td>SWITCHING TO NIGHT-TIME SERVICE</td>
</tr>
<tr>
<td>1</td>
<td>KEYBOARD LOCK CODE ENTRY</td>
</tr>
<tr>
<td>2</td>
<td>DATE-TIME-ALARM PROGRAMMING</td>
</tr>
<tr>
<td>3</td>
<td>AUDIO TONE MUTE AND ENABLE</td>
</tr>
<tr>
<td>4</td>
<td>PARAMETER PROGRAMMING</td>
</tr>
<tr>
<td>-</td>
<td>OPTIONAL FUNCTION ACTIVATION</td>
</tr>
<tr>
<td>+</td>
<td>VIEWING MEMORISED EVENTS (from switchboard rest status)</td>
</tr>
</tbody>
</table>
2. SWITCHBOARD CONFIGURATION
2.1. HARDWARE CONFIGURATION
2.1.1. Switchboard ID configuration

In two wire Elvox systems, up to a maximum of four switchboards can be used, suitably divided by separators.

Factory settings for each switchboard assign an ID value of 1.

The switchboard ID is like other configuration parameters envisaged for global functions, and as such can be modified by entering parameter configuration mode (see paragraph 2.2).

2.1.2. Procedure for switchboard start-up in Elvox 2-wire systems

In each two wire Elvox system there can only be one MASTER or main panel at a time. The main entrance panel is also the only panel that on reset or power-up queries the other system panels to detect the type and presence of each. The system must not be used during this phase. At the end of this procedure the MASTER panel sends a message related to the status of the doors under direct control of the two wire Elvox system. After this message the switchboard connected to the system sends the information of its specific presence to the system.

In this way all devices connected to the system are notified of the presence of the switchboard.

Once the switchboard 945F is connected to the system, it enables operation of the two wire Elvox system in two separate modes by using the specially configured key to alternate between the two switchboard modes (external/internal).

External mode

The switchboard display shows an icon at the top right, indicating external mode.

At the same time as display of the icon, the external mode indicator led illuminates on the switchboard control panel: .

If minuscule, it means the internal call filter is inserted while the switchboard is on “external” mode.

This is the mode in which the switchboard can receive exclusively external calls directly to its ID (from any panel configured with a key for direct calls to the switchboard ID). In this mode the switchboard maintains an active reception status, while not activating for any external call to the riser.

When the key is pressed to switch to external mode, a message is automatically sent to the system, which releases internal devices so that they are free from the switchboard: operations performed on these devices or from entrance panels are the same as those performed on a system without a switchboard.

Internal mode

The switchboard display shows an icon at the top right, indicating internal mode.

At the same time as display of the icon , the internal mode indicator led illuminates on the switchboard control panel: .

If minuscule, it means the internal call filter is inserted while the switchboard is on “internal” mode.
This is the mode in which the switchboard can intercept any external call to the riser. In this case the switchboard is activated for communication with the caller.

When the key is pressed to switch to internal mode, a message is automatically sent to the system, which blocks the internal devices so that they depend on the switchboard: operations performed from an external panel connected to the same bus as the switchboard can therefore only be performed with the switchboard (with the presence of an operator). The stairway panel calls, downline of a separator with respect to the switchboard, continue to operate independently from the switchboard.

2.1.3. Switchboard keyboard lock

By pressing keys and simultaneously the user accesses the switchboard keyboard lock procedure: the lock code is requested and the key for confirmation; the top right of the display then shows a padlock icon .

The keyboard is unlocked after pressing keys and simultaneously in the same way as the block procedure and on entry of the keyboard lock code.

2.1.4. Access to programming mode using the reset key

If the parameter menu access password is forgotten, the switchboard envisages a sequence of operations in the initial start-up phase to reset the internal memory of operating parameters to default settings (the configuration menu access password is then reset to the default version: see configuration parameters table). The sequence is as follows:

1) disconnect the power supply to the switchboard and then reconnect, for example by reinserting the plug in the connection boss.

2) wait for the text *** Elvox 2-Wire System *** to appear on display and then immediately press keys and simultaneously for a few seconds.

While the keys are pressed, the MEMORY lamp remains lit, indicating that the switchboard is reading the procedure to enter parameter programming mode.

A numerical code is then requested, comprising 8 digits, identical to that shown on display; after entering the sequence (generated at random each time the procedure is accessed) the key activates the reinitialisation procedure of the switchboard memory with the default parameters.

2.1.5. Night-time service

A night-time service can be combined with the interface 69TF, which consists in the activation of a cordless/standard telephone ringer at the same time as the switchboard tone, connected to type 69TF. For more details, refer to chapter 5.

2.2. SOFTWARE CONFIGURATION

2.2.1. Switchboard parameter configuration menu

By pressing keys and simultaneously the switchboard is set to parameter programming mode: the entry password is requested and if the 6-digit code is correct, the key can be pressed to enter programming mode.

After a brief presentation window, the user can scroll through the parameters shown in the table below by means of the keys (simulates the UP arrow) and (simulates the DOWN arrow). The numerical keypad can be used to modify the parameter values, confirming by means of key ; the key enables the user to exit without applying modifications or exit directly from parameter management mode.
The table of parameters currently available is as follows:

<table>
<thead>
<tr>
<th>Parameter</th>
<th>Minimum value</th>
<th>Maximum value</th>
<th>Default setting</th>
<th>Notes</th>
</tr>
</thead>
<tbody>
<tr>
<td>Messag. language</td>
<td>0 = Local language</td>
<td>1 = English</td>
<td>Local language</td>
<td>Language of the messages shown on the switchboard display.</td>
</tr>
<tr>
<td>Switchboard ID</td>
<td>1</td>
<td>4</td>
<td>1</td>
<td>In Elvox 2-wire systems, up to a maximum of four switchboards can be used with ID from 1 to 4.</td>
</tr>
<tr>
<td>Code digits #</td>
<td>Natural</td>
<td>8</td>
<td>Natural</td>
<td>The numbering schedule can follow the natural order 1..200, or have 4 digits from 0000 to 9999, or 8 digits from 00000000 to 99999999.</td>
</tr>
<tr>
<td>Devices numbr</td>
<td>0000(0000)</td>
<td>9999(9999)</td>
<td>Blank</td>
<td>Assignment of correspondence between 4 / 8 digit and natural numbering if the no. code numbers is not set as natural.</td>
</tr>
<tr>
<td>Search all pbk.</td>
<td>No</td>
<td>Yes</td>
<td>No</td>
<td>When the value is set to Yes, with a name length of 0, the entire agenda can be viewed.</td>
</tr>
<tr>
<td>Device names</td>
<td></td>
<td></td>
<td>2 x 200 names, each of 16 characters.</td>
<td></td>
</tr>
<tr>
<td>Program Password</td>
<td>000000</td>
<td>999999</td>
<td>654321</td>
<td>Code for entry to parameters menu: to modify or read parameters in this table.</td>
</tr>
<tr>
<td>Keyboard Password</td>
<td>000000</td>
<td>999999</td>
<td>654321</td>
<td>Keyboard lock: a padlock icon is displayed.</td>
</tr>
<tr>
<td>Lock time</td>
<td>0 [sec]</td>
<td>255 [sec]</td>
<td>1</td>
<td>Lock timing: 0= lock disabled</td>
</tr>
<tr>
<td>Function 1 time</td>
<td>0 [sec]</td>
<td>255 [sec]</td>
<td>1</td>
<td>F1 criteria timing: 0= 0.5 sec.</td>
</tr>
<tr>
<td>Function 2 time</td>
<td>0 [sec]</td>
<td>255 [sec]</td>
<td>1</td>
<td>F2 criteria timing: 0= 0.5 sec.</td>
</tr>
<tr>
<td>Common Lock</td>
<td>0</td>
<td>15</td>
<td>0, 0, 0, 0</td>
<td>Blank</td>
</tr>
<tr>
<td>Common F1</td>
<td>0</td>
<td>15</td>
<td>0, 0, 0, 0</td>
<td>Blank</td>
</tr>
<tr>
<td>Common F2</td>
<td>0</td>
<td>15</td>
<td>0, 0, 0, 0</td>
<td>Blank</td>
</tr>
<tr>
<td>Keyboard beep</td>
<td>No</td>
<td>YES</td>
<td>YES</td>
<td>If this parameter is set to Yes, a beep is emitted each time a key is pressed.</td>
</tr>
<tr>
<td>Ton repetition</td>
<td>Not assigned</td>
<td>Function F2</td>
<td>Not assigned</td>
<td>Choose what output you want to operate as call repeater: door lock or F1 or F2 (from version 4).</td>
</tr>
<tr>
<td>Int. call filter</td>
<td>0= filter disabled</td>
<td>1= filter enabled</td>
<td>0</td>
<td>When enabled, this filters calls from all system devices (interphone/monitor)</td>
</tr>
<tr>
<td>Warn. swcb. time</td>
<td>0 o 2 [min]</td>
<td>50 [min]</td>
<td>One time! = 0</td>
<td>One time! = message indicating switchboard presence sent to the master panel after a reset once only; When Swb warning Time is set between 2 and 50 min, the switchboard presence message is set periodically at the interval set in Swb. warning time minutes.</td>
</tr>
<tr>
<td>Clock</td>
<td></td>
<td>01/01/05 00:00</td>
<td></td>
<td>Enables configuration of individual monitors/interphones</td>
</tr>
</tbody>
</table>

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2.2.2. MESSAGE LANGUAGE

Programming can be in Italian (default local language) or English. Other local languages will be available for the respective markets.

To change language, press 1 for Italian or 2 for English.

To cancel press *3. To confirm, press 0. Acceptance of the command, as in all cases, is shown on the first line of the display:

The display now changes to:

Use the key † to move to the previous item in the programming menu.

2.2.3. Switchboard ID

Press † to move to the next item in which the switchboard ID can be changed. To change the ID, enter a number between 1 and 4.

To cancel press *3. To confirm, press 0. Acceptance of the command, as in all cases, is shown on the first line of the display:

If the ID is outside the admissible range, the first line of the display shows the error:

Use the key † to move to the previous item in the programming menu.

2.2.4. Coding digit number

Press † to move to the next item in which the numbering used by the switchboard can be changed.

The modes are as follows:
- Sequential encoding (default): the monitors and interphones are numbered from 1 to 200. The numbering can be abbreviated.
  - To specify the first monitor, simply enter 1 rather than 001
  - 4-digit encoding: the monitors and interphones are numbered from 0000 to 9999. 4 digits must always be used
  - 8-digit encoding: the monitors and interphones are numbered from 00000001 to 99999999. 8 digits must always be used

To change the numbering mode, enter:
- 1 for sequential encoding
- 2 for 4-digit encoding
- 3 for 8-digit encoding

To cancel press *3. To confirm, press 0. Acceptance of the command, as in all cases, is shown on the first line of the display:

If sequential encoding is not selected, the code remapping table must also be compiled.

Use the key † to move to the previous item in the programming menu.
2.2.5. Device numbering

If number encoding is programmed for 4 or 8 digits, i.e. when sequential encoding is not selected, press the key to move to the next item to enable modification of the correspondence between ID of each monitor or interphone with the numbering used to call from the switchboard keyboard. If Sequential Encoding has been selected, the system skips directly to the next item.

If the number is made up entirely of '0', this means that there is no association for the specified monitor or interphone (1 in the example) and therefore no direct calls can be made.

To select the device to modify, use keys and . From position 1, press to move to the next item in the programming menu. Alternatively, enter the device number required directly:

Now press

In the event of discrepancies, the first line of the display shows the error:

Use the key to skip all intermediate phases and go to the previous item in the programming menu.

To modify the number value, press :

To cancel the number, enter a single '0':

and press :

To insert a number, enter the digits:

To cancel the last digit, use key :

Numbering comprises 4 or 8 digits which must all be entered or the procedure will not be completed:

To cancel press . To confirm, press . At this point, there is a check that the entered value does not already exist elsewhere. If so, the user is notified:

In this case the system notifies that the code 7856 is already used for the device with ID 99. Otherwise, acceptance of the command, as in all cases, is shown on the first line of the display:

To cancel all numbering, starting from where the current value is shown, press :

On request for confirmation, press :

and then . Press or to cancel the procedure. If numbering reset is selected, the following is displayed:
And lastly:

### 2.2.6. Search the entire agenda

Press $\text{Search}$ to move to the next item in which the switchboard can be configured to scroll through the entire agenda on entry of a blank name as the search criteria. Normally at least the first letter of the name to be searched should be entered. With the flag selected, press $\text{Search}$ followed by $\text{Search}$ by to see the first name in the agenda, regardless of the initial. Then use keys $\text{Up}$ and $\text{Down}$ to scroll through the entire agenda.

This function is disabled by default:

To activate the function, press $\text{Search}$ followed by $\text{Search}$:

To deactivate, press $\text{Search}$:

### 2.2.7. Device names

Press $\text{Device}$ to go to the next item in which the user can associate each monitor or interphone with one or two names to be used in the alphanumeric searches performed via the switchboard keyboard. The names, indicated with the letters ‘a’ and ‘b’, may be useful, for example, to have the names of wife/husband or family/business etc.

There is no name by default.

To select the device to modify, use keys $\text{Up}$ and $\text{Down}$. For each device, the name ‘a’ is displayed first, followed by ‘b’. From position 1a, press $\text{Number}$ to move to the next item in the programming menu.

Alternatively, enter the device number required directly:

Now press $\text{Number}$:

In the event of discrepancies, the first line of the display shows the error:

Use the key $\text{Red}$ to skip all intermediate phases and go to the previous item in the programming menu.

To modify the number value, press $\text{Number}$:

A flashing cursor appears at the end of the name, corresponding to the position where the next character will be entered.

To delete the character immediately to the left of the cursor, press $\text{Red}$. Press repeatedly to cancel as many characters as required:

To enter the characters, use keys $\text{Up}$ and $\text{Down}$. Each key is associated with more than one symbol. To obtain the required symbol, press the key as many times as required before the timeout of 2 seconds, renewed after each entry. The keys and corresponding symbols are shown in the following table:
<table>
<thead>
<tr>
<th>KEY</th>
<th>SYMBOLS</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>&lt;spazio&gt;1@..?()&lt;&gt;</td>
</tr>
<tr>
<td>2</td>
<td>ABC2abcÅÅğÇçååäç</td>
</tr>
<tr>
<td>3</td>
<td>DEF3defĒĒēēē</td>
</tr>
<tr>
<td>4</td>
<td>GHI4ghiiii</td>
</tr>
<tr>
<td>5</td>
<td>JKL5kl</td>
</tr>
<tr>
<td>6</td>
<td>MNO6mnoōōōōōō</td>
</tr>
<tr>
<td>7</td>
<td>PQRS7pqrs</td>
</tr>
<tr>
<td>8</td>
<td>TUV8tvvūūūu</td>
</tr>
<tr>
<td>9</td>
<td>WXYZ9wxyz</td>
</tr>
<tr>
<td>0</td>
<td>0_,$&amp;*#+-=/%&quot;</td>
</tr>
</tbody>
</table>

If the symbol entered previously was a capital letter, even if the push-button is changed, the system re-starts with a capital. If it was lower case, you will re-start in lower case. If it was a digit, you will re-start with a digit.

If the next symbol to enter is on another key, there is no need to wait for the timeout to elapse before proceeding. If it is on the same key, the timeout interval must first elapse.

For example, to enter the letter ‘O’, press the key six times consecutively.

To complete ‘FOGGIA’ press four times for the ‘G’, wait for the cursor to move forward, again for the second ‘G’, wait for the cursor to move forward, again three times for the ‘I’, and lastly for the ‘A’.

Use keys and to move within the name. These keys can only be used when the entry timeout has elapsed. For example, if is pressed seven times, the cursor moves to the space between ‘FILIALE’ and ‘FOGGIA’.

The cursor flashes between the letters ‘E’ and ‘F’. Press the key six times to cancel the remaining letters ‘ILIALE’.

The following figures show what happens when the key is pressed several times in sequence.

The same procedure is used to complete the word:

To cancel press . To confirm, press . At this point, there is a check that the entered value does not already exist elsewhere. If so, the user is notified:

In this case, the system notifies that the name “RADIO TAXI” is already used for the device with the ID 173.

Otherwise, acceptance of the command, as in all cases, is shown on the first line of the display:
When the user exits this menu and a modification has been made to any of the names, the name indexing procedure is started in the background (i.e. without stopping panel activities) so that the search to make a call is performed in strict alphabetical order, on the basis of the initial letters entered by the user according to the procedure described in the panel instructions. To avoid confusion, the names are sorted ignoring the difference between upper and lower case.

The user can also override the sorting mode by entering 0 on request for the monitor or interphone ID. In this case the display shows:

and the sorting procedure is overridden immediately.

In any event, if the panel is reset before the sorting procedure is completed, it is performed on default on subsequent restart, thus ensuring constant validity of the index.

For an entire list, the sorting procedure lasts a little over 10 seconds. If the user attempts to make an alphabetic search before completion, the display shows:

After a few seconds it returns to idle status and the user can re-attempt the required search.

2.2.8. Programming Password

Press to move to the next item in which the user can modify the password used for the programming procedure. The value shown is the current version, which by default is 654321:

To change the value, start to enter the numbers. All numbers from to are valid.

To cancel press . To confirm, press . Acceptance of the command, as in all cases, is shown on the first line of the display:

Use the key to move to the previous item in the programming menu.

2.2.9. Key Password

Press to move to the next item in which the user can modify the password used for locking the keyboard. The value shown is the current version, which by default is 654321:

To change the value, start to enter the numbers. All numbers from to are valid.

To cancel press . To confirm, press . Acceptance of the command, as in all cases, is shown on the first line of the display:

Use the key to move to the previous item in the programming menu.

2.2.10. Lock time

Press to go to the next item in which the user can modify the time for which the lock is activated. The current value is shown on display:

On entry of digits, the time can be modified in intervals of seconds:
2.2.11. Function 1 time

Press \( \square \) to go to the next item in which the user can modify the time for which output F1 is activated. The current value is shown on display:

On entry of digits, the time can be modified in intervals of seconds:

To cancel press \( \square \). To confirm, press \( \square \). Acceptance of the command, as in all cases, is shown on the first line of the display:

If the time is outside the admissible interval, i.e. over 255 seconds, the first line of the display shows the error:

Value 0 has the special function of activating output F1 for 0.5 seconds:

Use the key \( \uparrow \) to move to the previous item in the programming menu.

2.2.12. Function 2 time

Press \( \square \) to go to the next item in which the user can modify the time for which output F2 is activated. The current value is shown on display:

On entry of digits, the time can be modified in intervals of seconds:

To cancel press \( \square \). To confirm, press \( \square \). Acceptance of the command, as in all cases, is shown on the first line of the display:

If the time is outside the admissible interval, i.e. over 255 seconds, the first line of the display shows the error:

Value 0 has the special function of activating output F2 for 0.5 seconds:

Use the key \( \uparrow \) to move to the previous item in the programming menu.

2.2.13. Common Lock

Press \( \square \) to move to the next item in which the user can set for which other the lock activations the current panel must activate its output. In practice the lock output of the switchboard can be activated not only for a direct command but also indirect so that the lock of a panel (maximum 4) is also activated.

There is no assignment by default:

Enter a number between 1 and 15:
To cancel press 🟦. To confirm, press 🟤. Acceptance of the command, as in all cases, is shown on the first line of the display.

If the ID is outside the admissible range, the first line of the display shows the error:

Out of Range

To cancel the assignment, enter a single '0' as ID.

Use keys 🆑 and 🆒 to move from one index to another. From position 1, press 🆑 to move to the next item in the programming menu.

Use the key 🆒 to skip all intermediate phases and go to the previous item in the programming menu.

2.2.14. Common F1

Press 🆑 to move to the next item in which the user can set for which other F1 activations the switchboard must activate its output. In practice the F1 output of the switchboard can be activated not only for a direct command but also indirect so that the F1 of a panel (maximum 4) is also activated.

There is no assignment by default:

Enter a number between 1 and 15:

To cancel press 🟦. To confirm, press 🟤. Acceptance of the command, as in all cases, is shown on the first line of the display.

If the ID is outside the admissible range, the first line of the display shows the error:

Out of Range

To cancel the assignment, enter a single '0' as ID.

Use keys 🆑 and 🆒 to move from one index to another. From position 1, press 🆑 to move to the next item in the programming menu.

Use the key 🆒 to skip all intermediate phases and go to the previous item in the programming menu.

2.2.15. Common F2

Press 🆑 to move to the next item in which the user can set for which other F2 activations the switchboard must activate its output. In practice the F2 output of the switchboard can be activated not only for a direct command but also indirect so that the F2 of a panel (maximum 4) is also activated.

There is no assignment by default:

Enter a number between 1 and 15:

To cancel press 🟦. To confirm, press 🟤. Acceptance of the command, as in all cases, is shown on the first line of the display.

If the ID is outside the admissible range, the first line of the display shows the error:

Out of Range

To cancel the assignment, enter a single '0' as ID.

Use keys 🆑 and 🆒 to move from one index to another. From position 1, press 🆑 to move to the next item in the programming menu.

Use the key 🆒 to skip all intermediate phases and go to the previous item in the programming menu.
2.2.16. Keyboard beep

Press \[ \text{↓} \] to move to the next item in which the key press check tone on the panel can be activated (default) or deactivated. The current value is shown on display:

Press \[ \text{1} \] to activate the tone, or \[ \text{0} \] to disable.

To cancel press \[ \text{✿} \]. To confirm, press \[ \text{1} \]. Acceptance of the command, as in all cases, is shown on the first line of the display:

Use the key \[ \text{←} \] to move to the previous item in the programming menu.

2.2.17 Call repeater (present in version 4)

Pressing the push-button \[ \text{7} \] you go to the next function, through which you can choose one of the three outputs: door lock or F1 or F2, which works as call repeater. As default none of the outputs is used. An output used as call repeater cannot be used for its own function.

To change the output, digit:

- \[ \text{0} \] to disable the function
- \[ \text{1} \] to use the door lock output
- \[ \text{2} \] to use the F1 output
- \[ \text{3} \] to use the F2 output

To cancel press push-button \[ \text{1} \]. To confirm press push-button \[ \text{7} \]. The command acceptance, as all other commands, is indicated on the first display line:

Pressing the push-button \[ \text{7} \], you can go to the previous function of the programming menu.

2.2.18. Call filter

By pressing the push-button \[ \text{8} \] you go to the first function through which it is possible to activate or deactivate (default) the call filter from the monitors/interphones to the switchboard. The filter can be set in an independent way for the calls from the internal units or from the entrance panel. Choosing the Internal/External mode, the filter assume the programmed value automatically.

2.2.18.1 On internal mode

The message corresponds to the current value:

Press \[ \text{0} \] to disable the filter, press \[ \text{1} \] to enable:

To cancel press \[ \text{✿} \]. To confirm, press \[ \text{1} \]. Acceptance of the command, as in all cases, is shown on the first line of the display:
2.2.18.2 On external mode

By pressing push-button  you can go to the following function through which you can activate or deactivate (default) the call filter from the monitors / interphones to the switchboard on external mode. The message displayed corresponds to the current value:

![Ext. call filter]

Filter off

By pressing push-button  the filter is deactivated, by pressing  the filter is activated.

![Ext. call filter]

Filter on

Press push-button  to cancel. Press  to confirm. The command acceptance, the same as for all other commands, is indicated on the first display line.

2.2.19. Switchboard warning time

Press  to move to the next item in which the user can select to disabled (default) or modify the frequency of the warning emitted by the switchboard to the MASTER panel that it is connected to the system and operational. This is useful in cases where potential switchboard faults are to prevented, leading to possible shutdown of the entire system because no interphone/monitor rings as inhibited by the presumed presence of the switchboard itself. On activation of this setting, the maximum shutdown time is double the same value.

The warning is disabled by default. The switchboard notifies the system that it is operational only when connected or reset:

![Warn. swcb. time]

one time!

Use keys  to change the time from 2 to 50 minutes:

![Warn. swcb. time]

2 min

To cancel press  . To confirm, press  . Acceptance of the command, as in all cases, is shown on the first line of the display:

![Done!]

2 min

If the time is outside the admissible interval, i.e. 2-20 minutes, the display shows the error:

![Out of Range]

1 min
2.2.19. Clock
The clock can be programmed so that the alarm service is performed correctly The date and time are stored also when the switchboard is switched off, for at least 2 days, by means of a SuperCap capacitor There are no batteries of any type. On initial activation of the clock, or when the switchboard is left switched off for a prolonged period, the date is set to the 1st January 2005 and the time at 00:00

It can be modified via the keypad. Press the key . The modifiable field is indicated by a rectangle to the right:

To move to the right, use key and to the left use key . Modify the values by means of the keys . On completion confirm by means of . If the values are correct the display then shows:

If there is an error, for example if the month is set as 88, modifications are rejected and the rectangle moves to the position of the error:

The weekday does not need to be entered as it is calculated automatically.

2.3. MONITOR/INTERPHONE CONFIGURATION MODIFICATION
Press to go to the next item in which the user can program the values of a number of flags, programmable keys and call groups for each monitor/interphone Programming is by means of low level messages sent to the bus of the Elvox 2-wire system, querying individual monitors/interphones, referred to below in general as “Devices”. For this reason answers to queries or modifications are not immediate.

In the preliminary procedure for this function, use keys and to select the device required

The device type is shown on the second line. The device software version number appears on the right:

If this is not present, the display shows:

Otherwise, enter the device number, from 1 to 200:

To cancel press . To confirm, press .

After selecting the required device, press the key to start viewing/modifying the various parameters The data displayed depends on the type of device and software version The following table summarises the information available for each device.
<table>
<thead>
<tr>
<th>Class</th>
<th>Meaning</th>
<th>6209 (+ 6009)</th>
<th>6309</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>YES = The monitor switches on when called by the panel (not for 6209 alone)</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>YES = the green led is managed as door open indicator</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>YES = the lock pushbutton is used by the device NO = the pushbutton is used externally</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>YES = the stair light pushbutton is used by the device NO = the pushbutton is used externally</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>YES = the self-start pushbutton is used by the device NO = the pushbutton is used externally</td>
<td></td>
<td></td>
</tr>
<tr>
<td>FLG PROGRAMMING</td>
<td>YES = if the F1 / F2 pushbutton is programmed directly on a specific panel, only panels 1 to 8 can be programmed NO = only panels 9 to 15</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>YES = the device is working in porter switchboard mode</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>YES = the device sends the lock command on a panel call if P6 is closed</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>YES = group G3 functions only for external calls</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>YES = group G4 functions only for internal calls</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>YES = eliminates the click sound when a valid key is pressed</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>YES = does not activate the call repeated output for intercommunicating calls</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>YES = group G1 functions only for external calls</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>YES = group G2 functions only for internal calls</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>YES = the monitor / interphone does not ring for intercommunicating calls</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>YES = the monitor / interphone does not ring for calls from panels</td>
<td></td>
<td></td>
</tr>
<tr>
<td>PROGRAMMABLE KEYS</td>
<td>P0 is the lock key Functions assigned to pushbuttons, P1, P2, P3, P7 and P8 as default (i.e. not programmed) take the specified value</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Device Monitor ON: YES</td>
<td>Device Monitor ON: YES</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Device Green LED: YES</td>
<td>Device Green LED: YES</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Device Lock: YES</td>
<td>Device Lock: YES</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Device Stair Light: YES</td>
<td>Device Stair Light: YES</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Device Self-start: YES</td>
<td>Device Self-start: YES</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Device F1/F2 1-8: YES</td>
<td>Device F1/F2 1-8: YES</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Device SwitchBoard: NO</td>
<td>Device SwitchBoard: NO</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Device Auto. Lock: NO</td>
<td>Device Auto. Lock: NO</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Device G3 ext. only: NO</td>
<td>Device G3 ext. only: NO</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Device G4 int. only: NO</td>
<td>Device G4 int. only: NO</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Device do not beep: NO</td>
<td>Device do not beep: NO</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Device No RING IC: NO</td>
<td>Device No RING IC: NO</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Device G1 ext. only: NO</td>
<td>Device G1 ext. only: NO</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Device G2 int. only: NO</td>
<td>Device G2 int. only: NO</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Device No int. ring: NO</td>
<td>Device No int. ring: NO</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Device No ext. ring: NO</td>
<td>Device No ext. ring: NO</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Device P0=Door Lock 1</td>
<td>Device P0=Door Lock 1</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Device P1=Self-start 2</td>
<td>Device P1=Self-start 2</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Device P2=Stair Light 2</td>
<td>Device P2=Stair Light 2</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Device P3=Auxiliary 2</td>
<td>Device P3=Auxiliary 2</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Device P4=Not Assigned 2</td>
<td>Device P4=Not Assigned 2</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Device P5=Not Assigned 2</td>
<td>Device P5=Not Assigned 2</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Device P6=Not Assigned 2</td>
<td>Device P6=Not Assigned 2</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Device P7=Function F1 2</td>
<td>Device P7=Function F1 2</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Device P8=Function F2 2</td>
<td>Device P8=Function F2 2</td>
<td></td>
</tr>
</tbody>
</table>

GROUPS

- First call group programming
- Fourth and last call group programming
<table>
<thead>
<tr>
<th>CLASS</th>
<th>MEANING</th>
<th>6601</th>
<th>6611</th>
<th>8879</th>
</tr>
</thead>
<tbody>
<tr>
<td>SI (yes) = the monitor turns on at the entrance panel call (not for 6601/AU or 6611/AU)</td>
<td>Device Monitor ON: YES</td>
<td>2</td>
<td>2</td>
<td>2</td>
</tr>
<tr>
<td>YES = the green led is managed as door open indicator</td>
<td>Device No R/PFC IC: NO</td>
<td>2</td>
<td></td>
<td></td>
</tr>
<tr>
<td>YES = if the F1 / F2 pushbutton is programmed directly on a specific panel, only panels 1 to 8 can be programmed NO = only panels 9 to 15</td>
<td>Device F1/F2 1-8: YES</td>
<td>2</td>
<td></td>
<td></td>
</tr>
<tr>
<td>YES = the device is working in porter switchboard mode</td>
<td>Device SwitchBoard: NO</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>YES = group G3 functions only for external calls</td>
<td>Device G3 ext.only: NO</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>YES = group G4 functions only for internal calls</td>
<td>Device G4 int.only: NO</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>YES = eliminates the click sound when a valid key is pressed</td>
<td>Device Do not beep: NO</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>YES = does not activate the call repeated output for intercommunicating calls</td>
<td>Device No R/PFC IC: NO</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>YES = group G1 functions only for external calls</td>
<td>Device G1 ext.only: NO</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>YES = group G2 functions only for internal calls</td>
<td>Device G2 int.only: NO</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>YES = the monitor / interphone does not ring for communicating calls</td>
<td>Device No int. ring: NO</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>YES = the monitor / interphone does not ring for calls from panels</td>
<td>Device No ext. ring: NO</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>SI (Yes) = the pressing of the door lock push-button terminates the conversation. (Default value in model /F of monitor) NO = the door lock push-button operates normally From version 4 of monitors and entrance panels</td>
<td>Device DoorLock End: YES</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>SI (Yes) = to activate the audio line press the talk/listen push-button. To deactivate the audio line press the push-button again. (default value in model /F of monitor) NO = to activate the audio line the talk/listen push-button must be kept pressed. From version 4 of monitors and entrance panels.</td>
<td>Device T/L. On/Off: YES</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>P0 is the lock key Functions assigned to pushbuttons, P1, P2, P3, P7 and P8 as default (i.e. not programmed) take the specified value.</td>
<td>Device P0= Door Lock</td>
<td>1</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Device P1= Self-start</td>
<td>2</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Device P2= Stair Light</td>
<td>2</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Device P3= Auxiliary</td>
<td>2</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Device P4= Not Assigned</td>
<td>2</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Device P5= Not Assigned</td>
<td>2</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Device P6= Not Assigned</td>
<td>2</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Device P7= Function F1</td>
<td>2</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Device P8= Function F2</td>
<td>2</td>
<td></td>
<td></td>
</tr>
<tr>
<td>GROUPS</td>
<td>First call group programming</td>
<td>Device 61= Not Assigned</td>
<td>2</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Fourth and last call group programming</td>
<td>Device 64= Not Assigned</td>
<td>2</td>
<td></td>
</tr>
<tr>
<td>LEVELS</td>
<td>Ringtone volume</td>
<td>Device Ringer Volume</td>
<td>4</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Hands free volume</td>
<td>Device HandsFree Vol.</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Ringtone type</td>
<td>Device Ringer Type</td>
<td></td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>Monitor brightness (not AU versions)</td>
<td>Device Brightness</td>
<td>6</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Monitor contrast (not AU versions)</td>
<td>Device Contrast</td>
<td></td>
<td>4</td>
</tr>
</tbody>
</table>
2.3.1. Flag programming

To modify one of the flag settings (YES / NO) use key for NO and for YES. To confirm, press . For example, press and on the item "green LED" to display the confirmation.

Use the key to skip all intermediate phases and go to the next group; from flags the system goes to programmable keys, then to groups, and then from groups to flags.

2.3.2. Programmable keys

To modify the programmable keys, select the item required using and , or by pressing one of the keys ... directly Then press A list of assignable functions to each key is displayed, seen in the following order by means of the key , starting from the current value of the pushbutton:

<table>
<thead>
<tr>
<th>FUNCTION</th>
<th>DESCRIPTION</th>
</tr>
</thead>
<tbody>
<tr>
<td>Choose Function: Not Assigned</td>
<td>The key takes on the default value. For keys P1, P2, P3, P7 and P8 the default is a function, as specified in the table above.</td>
</tr>
<tr>
<td>Choose Function: Intercom</td>
<td>The key makes an intercommunicating call</td>
</tr>
<tr>
<td>Choose Function: Self-start</td>
<td>The key activates a specific panel</td>
</tr>
<tr>
<td>Choose Function: Auxiliary</td>
<td>The key activates one of the relay types 692R AND 69RH</td>
</tr>
<tr>
<td>Choose Function: Function F1</td>
<td>The key activates the output F1 of the panel in conversation or the last one used</td>
</tr>
<tr>
<td>Choose Function: Function F2</td>
<td>The key activates the output F2 of the panel in conversation or the last one used</td>
</tr>
<tr>
<td>Choose Function: Function F1 spec</td>
<td>The key activates the output F1 of a specific panel</td>
</tr>
<tr>
<td>Choose Function: Function F2 spec</td>
<td>The key activates the output F2 of a specific panel</td>
</tr>
<tr>
<td>Choose Function: No Ring Int.Call</td>
<td>The key switches the ringtone mute function for intercommunicating calls</td>
</tr>
<tr>
<td>Choose Function: No Ring Ext.Call</td>
<td>The key switches the ringtone mute function for panel calls</td>
</tr>
</tbody>
</table>

After selecting the function required, press A specific procedure exists for each function.

20.3.2.1. Not Assigned

No further parameters are required, and therefore the procedure is completed as follows:

For keys P0, P1, P2, P3, P7 and P8 a value other than Not Assigned is then displayed, as if not programmed these have a specific function.

2.3.2.2. Intercommunicating

Enter the ID of an interphone / monitor from 1 to 200:

To cancel press . To confirm, press .

the display changes as follows, to specify the intercommunicating function:

2.3.2.3. Self-start

Enter a panel ID from 1 to 15:

To cancel press . To confirm, press .
the display changes as follows, to indicate the specific self-start function:

2.3.2.4. Auxiliary
Enter the ID of an auxiliary from 1 to 16:

To cancel press ✗. To confirm, press ．

the display changes as follows, to specify activation of an auxiliary:

Note that auxiliaries 1-2 correspond to the first and second relay of the first actuator. Auxiliaries 15-16 correspond to the relays of the eighth actuator.

2.3.2.5. F1 function
No further parameters are required, and therefore the procedure is completed as follows:
after which:

2.3.2.6. F2 function
No further parameters are required, and therefore the procedure is completed as follows:
after which:

2.3.2.7. F1 function specific
This is an F2 output command of a specific panel. Enter a panel ID from 1 to 15:

To cancel press ✗. To confirm, press ．

the display changes as follows, to indicate the specific F1 function:

2.3.2.8. F2 function specific
This is an F2 output command of a specific panel. Enter a panel ID from 1 to 15:

To cancel press ✗. To confirm, press ．

the display changes as follows, to indicate the specific F2 function:

2.3.2.9. Intercommunicating call ringtone mute
No further parameters are required, and therefore the procedure is completed as follows:
after which:

2.3.2.10. Panel call ringtone mute
No further parameters are required, and therefore the procedure is completed as follows:
after which:
2.3.2.11. Lock key
The lock key of the panels can also be reconfigured. By default, it activates the lock of the panel with which it is communicating or was last communicating. If suitably programmed, the lock of the same panel can be activated in all conditions, regardless of which panel is communicating.

<table>
<thead>
<tr>
<th>FUNCTION</th>
<th>DESCRIPTION</th>
</tr>
</thead>
<tbody>
<tr>
<td>Lock key</td>
<td>The key takes the default value, i.e. lock activation on the panel with which the interphone / monitor is or was last in contact with.</td>
</tr>
<tr>
<td>Servizi</td>
<td>The key activates the lock of the specific panel</td>
</tr>
</tbody>
</table>

If activation of a specific panel is selected, press the lock key and specify the panel number from 1 to 15:

To cancel press . To confirm, press .

the display changes as follows, to indicate the specific function:

2.3.3. Group call
To specify which device is one of the 4 group masters for the monitor / interphone being programmed, move to the item of the corresponding menu and press . Then enter the number of the group master, from 1 to 200:

To cancel press . To confirm, press . The display changes as follows:

To cancel the group master, enter 0 as the ID:

2.3.4. Levels
The monitors 66x1 and interphone 66x1/AU enable the adjustment of some levels by means of software commands.

2.3.4.1. Ringtone volume
This is the volume of the ringtone, for panel calls, intercommunicating calls and door calls. To change, press a key from 0 (ringtone mute) to 8 (maximum volume):

To cancel press . To confirm, press . The display changes as follows:

2.3.4.2. Hands free volume
This is the hands free volume during conversations. To change, press a key from 0 (minimum volume) to 8 (maximum volume):

To cancel press . To confirm, press . The display changes as follows:

2.3.4.3. Ringtone type
This is the volume of the ringtone, for panel calls. To change, press a key from 0 to 6:

To cancel press . To confirm, press . The display changes as follows:

2.3.4.4. Brightness (not versions AU)
This is the level of monitor brightness 66x1 and 67x1. To change, press a key from 0 (minimum brightness) to 7 (maximum brightness):
To cancel press \( \star \). To confirm, press \( \square \). The display changes as follows:

2.3.4.5  **Monitor contrast (not AU versions)**

This is the level of monitor contrast 66x1 and 67x1. To change, press a key from 0 (minimum contrast) to 7 (maximum contrast)

To cancel press \( \star \). To confirm, press \( \square \). The display changes as follows:
3. OPERATING MODES
This chapter describes the operations which must be made with the switchboard to communicate with a panel or internal device, or enable intercommunicating calls between two internal devices.

As described above (see paragraph 2.1.2) the switchboard can operate in two separate ways: external and internal mode.

3.1. SWITCHBOARD IN EXTERNAL MODE
In this way the switchboard can only receive calls from a panel with the only recipient being the switchboard; if a call is made from the panel to the switchboard with the same ID as the recipient, the switchboard display shows a message similar to:

This message appears at the same time as a call signal on the loudspeaker of the switchboard base; after raising the handset from its seat the operator can then enter in communication with the panel making the call.

3.2. SWITCHBOARD IN INTERNAL MODE
When the switchboard is set to internal mode, all external calls received (from panels) are checked and routed by the switchboard.

Note: in this mode, the switchboard can always receive external calls specifically directed to its ID (direct call to switchboard), in which case the items shown on display are the same are those described in the above paragraph only with the icon (top right).

3.2.1. Panel call to internal device
In this case the call is made from a panel specifically to an internal number but this call is diverted to the switchboard. At the same time as the call signal, the switchboard display shows the following type of message:

In the example: the message informs the operator that a call has been made from internal panel N.2 to the internal unit DEPARTURES WAREHOUSE.

If the operator does not want to answer, he can cut off the call directly using key , or answer by simply raising the handset to enter into communication with the caller panel, in which case the display shows the message type:

At the same time, the green LINE led illuminates to indicate audio communication active with the switchboard.

The switchboard operator can then put the caller panel into communication with the required internal device according to the following sequence of operations:

- press the key to put the caller panel on hold, with display of the following sequence:
alternating with:

- make the call to the internal device requested by pressing . The following text is displayed:

alternating with:

- if the internal device consents, the switchboard operator uses the key to connect the caller panel to the internal device, and the switchboard display shows confirmation of communication in progress with:

At the same time, the green INTERC led illuminates to indicate audio communication active between the panel and internal device. At the same time the led indicating communication with the switchboard LINE turns off.

- if the internal device does not exist or is not properly connected to the riser, the display shows the message:

The switchboard the automatically returns to communication mode with the panel previously put on hold. In this case audio communication is resumed with the requesting panel: at this point, a call can be ended or repeated from the switchboard to any internal device to connect it to the panel according to the procedures described above. The same happens if the internal device called is effectively connected to the system but does not answer the call (the handset release from the monitor/interphone is not performed).

It is always possible to override the return to the panel on hold from the switchboard by means of key to resume audio communication. In a similar way to above, a call can be ended or repeated to any internal device (by first setting the panel on hold) according to the procedures described above. Communication between the panel and internal device terminates when the internal device handset is replaced or on elapse of the set communication time interval.

Note:

The switchboard, by means of the enable key (preceded by a suitable warning tone), can intercept communication to request interruption: this would be for the purpose of releasing the riser and enabling other calls to or from internal devices controlled by the switchboard. After the audio enable key is pressed , the switchboard operator can end communication in progress by means of the key .

3.2.2. Internal call to switchboard

In internal mode the switchboard can also receive calls from an internal device. The call is made by pressing the lock key of an interphone that has the hook raised and without other operations in progress; in practice this means the user has to raise the hook and press the lock key. It must also be enabled by programming the switchboard to = YES (default), see instructions for panels 89F3-5-8 or 89F4-7-9 or of programmer 950C. The call request by a internal device is indicated by activation of the loudspeaker on the base of the switchboard and the display message:

If the operator does not want to answer, he can cut off the call directly using key , or answer by simply raising the handset.

This enables audio communication. At the same time, the green LINE led illuminates to indicate audio communication active with the switchboard. Communication terminates when the switchboard operator or internal caller handset is replaced or on elapse of the set communication time interval.

3.2.3. Call from switchboard to internal device

As well as receiving calls the switchboard can also make calls to internal devices. With the switchboard handset raised, the number of the required internal device is dialled via the numerical keypad, followed by key for confirmation.

In this way the call is sent to the required internal device, and the display shows the message:

If the internal device does not exist or is not properly connected to the system the switchboard display shows the message type:
Audio communication between the switchboard and internal recipient is indicated by the message type:

The switchboard envisages three types of numerical selection associated with an internal device:
- natural encoding: in this case the number to dial coincides with the HW ID of the internal device (monitor/interphone) to be called;
- 4_digit: a 4-digit code is associated, which represents a unique ID of the internal device to be called;
- 8_digit: an 8-digit code is associated, which represents a unique ID of the internal device to be called;

This encoding methods are set in the switchboard SW configuration menu (see paragraph: 2.2).

At the same time, the green LINE led illuminates to indicate audio communication active with the switchboard.

As in the previous cases, communication terminates when the switchboard operator or internal caller handset is replaced or on elapse of the set communication time interval.

### 3.2.4. Intercommunicating call between two internal devices

The switchboard is designed to connect and establish communication between two internal intercommunicating devices. Two internal devices can always communicate, independently from the switchboard. The procedure to establish intercommunicating conversation between two internal devices by the switchboard is as follows:

It calls the first internal device:

The switchboard enters audio communication with the first internal device and puts the user on hold by means of the key .

The switchboard operator dials the second internal device number and confirms by means of key .

If the call recipient accepts, the switchboard connects the two internal devices by means of key and .

The switchboard display shows the message indicating communication in progress, type:

At the same time, the green INTERC led illuminates to indicate audio communication active between the two internal devices. At the same time the led indicating communication with the switchboard LINE turns off.

Communication between the two internal devices terminates when one of the handsets is replaced or on elapse of the set communication time interval.

Also in this case the switchboard can intervene in the communication according to the same procedure as described in paragraph 3.2.1.

### 3.3. ACTIVATION COMMANDS: LOCAL AND REMOTE

In normal operating mode, the switchboard envisages two methods for activating controls related to the lock and auxiliary functions F1 and F2 (local and/or related to a remote panel), methods without communication and method during communication with a panel.

Both are available by means of the lock key .

#### 3.3.1. Mode without communication

With the switchboard in rest status, the key enables access to the menu related to local and remote controls, with display of the following:

```
Activ. panel N. 1  Mo 06/11 09:35 I
Local act. f1=1, 2=F1, 3=Exit
```

alternating with:

```
Activ. panel N. 1  Mo 06/11 09:35 I
Act. panel 4=F1, 5=F1, 6=Exit
```

the displayed panel is the last with which the switchboard was in communication. As default it is the 1, i.e. the MASTER.

The pressing of the numerical push-buttons indicated on the second line of display allows the local or remote switchboard operation (criteria for door lock and auxiliary functions F1 and F2).

<table>
<thead>
<tr>
<th>ACTIVATION</th>
<th>DOOR LOCK</th>
<th>F1</th>
<th>F2</th>
</tr>
</thead>
<tbody>
<tr>
<td>LOCAL</td>
<td>1</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>REMOTE</td>
<td>4</td>
<td>5</td>
<td>6</td>
</tr>
</tbody>
</table>
At any activation a respective icon appears above on the right hand side of display.

Through push-buttons and it is possible to select the increasing or decreasing number of panel on which to effect the operations forseen with the numerical push-buttons shown on the second line of display:

By pressing the push-button you can return to the switchboard rest initial state.

3.3.2 Mode for “communication with the entrance panel”.

With the switchboard in “communication with the entrance panel” mode, through push-button it is possible to operate locally with the switchboard or activate the remote ones related to the connected entrance panel. Everything is the same as the previous paragraph, with the exception of push-button with which you can go back to the previous state for the switchboard viewing.

3.4. SWITCHBOARD APPOINTMENTS

Up to 10 appointments can be inserted, regarding the single porter switchboard. Each appointment can be associated with a different text note of maximum 40 characters. Each appointment can (or may not) have a periodic repetition. The available repetitions are:

- No repetition (single). The event occurs once only at the set date and time and then is disabled.
- Annual repetition. The event is repeated each year at the same set time.
- Monthly repetition. The event is repeated each month at the same set time. If a month does not have a sufficient number of days (for example if programmed for the date 30 and the current month is February) the last effective day is selected.
- Alarm. A series of days can be specified in which the appointment is activated at a set time.
- Weekly repetition. The event is repeated each week at the same set day and time.
- Daily repetition. The event is repeated every day at the same set time.
- Hourly repetition. The event is repeated at the selected hour interval starting from the set time.

Enter programming mode by pressing . Use keys and to move from one appointment to another, or press for appointment 1, for the second, for the tenth and so on. From position 1, press to move to internal device appointments.

Use key to skip all intermediate phases and go directly to the internal device appointments.

To enable or disable an appointment, use key . The enabled status is indicated by the symbol in the last position. This can be done independently from modifications to the appointment.

To modify an appointment, press the key . If the appointment has never been programmed:
a unique event is proposed a the current date and time. This can be modified by moving through the fields using keys ▼ and ▼. Once in the selected field, highlighted by the symbol ✂, use keys ◆ .. ◆ . for the numerical fields.

For the month field, enter the number 01 for January, through to 12 for December.

For fields requiring a weekday, use the keys according to the following scheme:

<table>
<thead>
<tr>
<th>KEY</th>
<th>DAY</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Sunday</td>
</tr>
<tr>
<td>2</td>
<td>Monday</td>
</tr>
<tr>
<td>3</td>
<td>Tuesday</td>
</tr>
<tr>
<td>4</td>
<td>Wednesday</td>
</tr>
<tr>
<td>5</td>
<td>Thursday</td>
</tr>
<tr>
<td>6</td>
<td>Friday</td>
</tr>
<tr>
<td>7</td>
<td>Saturday</td>
</tr>
</tbody>
</table>

To confirm the appointment, press . If all is correct, the new selections are saved; otherwise the error message is displayed.

and the inconsistency is shown by the symbol ❌.

To change the text associated with the appointment, press the key . On completion confirm by means of or press ❌ to cancel. To enter a text, use the same technique described in paragraph 2.2.7 regarding device names. Remember that the maximum length of a text is 40 characters. To change the type of repetition use key while in appointment editing mode. Depending on the previous situation and position, the configuration changes.

<table>
<thead>
<tr>
<th>REPETITION</th>
<th>DISPLAY</th>
<th>NOTE</th>
</tr>
</thead>
<tbody>
<tr>
<td>None</td>
<td>Default or compile fields set to ‘—’</td>
<td></td>
</tr>
<tr>
<td>Annual</td>
<td>Press ◆ at the year from which to start from no repetition</td>
<td></td>
</tr>
<tr>
<td>Monthly</td>
<td>Press ◆ at the month from which to start from no repetition</td>
<td></td>
</tr>
<tr>
<td>Alarm</td>
<td>Press ◆ at the day of the month from which to start from no repetition. Press ◆ again to return to no repetition</td>
<td></td>
</tr>
<tr>
<td>Weekly</td>
<td>Press ◆ at the year from which to start no repetition and then press at the day of the month</td>
<td></td>
</tr>
<tr>
<td>Daily</td>
<td>Press ◆ at the year from which to start no repetition and then press stn the month, and lastly press at the day of the month</td>
<td></td>
</tr>
<tr>
<td>Hourly</td>
<td>Press ◆ at the year from which to start no repetition and then press at the day of the month</td>
<td></td>
</tr>
</tbody>
</table>
When the switchboard is in the rest status, the system checks whether the time of the first active appointment has elapsed according to the natural sequence. The check is performed every minute but is not synchronized with the clock.

If the time has elapsed, the switchboard speaker emits three beeps at a frequency of approx. 1300 Hz and duration of 200 ms with pauses of 200 ms for 60 seconds, with a repetition cycle of 2 seconds. The second line of the display shows the message programmed together with the event.

If no message is entered, a default version is displayed:

To inform the switchboard that the event has been acknowledged, press the key before the timeout of 60 seconds.

3.5. INTERNAL DEVICE APPOINTMENTS

An appointment can be entered for each system interphone/monitor. Unlike the switchboard appointments, no text notes can be associated. Each appointment can (or may not) have a periodic repetition. The available repetitions are:

- No repetition (single). The event occurs once only at the set date and time and then is disabled.
- Annual repetition. The event is repeated each year at the same set time.
- Monthly repetition. The event is repeated each month at the same set time. If a month does not have a sufficient number of days (for example if programmed for the date 30 and the current month is February) the last effective day is selected.
- Alarm. A series of days can be specified in which the appointment is activated at a set time.
- Weekly repetition. The event is repeated each week at the same set day and time.
- Daily repetition. The event is repeated every day at the same set time.
- Hourly repetition. The event is repeated at the selected hour interval starting from the set time.

You enter in programming mode with: in the same way as for the switchboard meetings. With you move to the internal unit appointments. Use keys or to move from one appointment to another, or enter the internal device number from 1 to 200.

Choose device ID = Mo 06/11 10:07  

and press to confirm. From position 1, press to move to the next item in the programming menu. Use key to skip all intermediate phases and go directly to the switchboard appointments.

To enable or disable an appointment, use key . The enabled status is indicated by the symbol in the last position. This can be done independently from modifications to the appointment.

To modify an appointment, press the key . If the appointment has never been programmed a unique event is proposed at the current date and time. This can be modified by moving through the fields using keys or .

Once in the selected field, highlighted by the symbol , use keys for the numerical fields. For the month field, enter the number 01 for January, through to 12 for December. For fields requiring a weekday, use the keys according to the following scheme:

<table>
<thead>
<tr>
<th>KEY</th>
<th>DAY</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Sunday</td>
</tr>
<tr>
<td>2</td>
<td>Monday</td>
</tr>
<tr>
<td>3</td>
<td>Tuesday</td>
</tr>
<tr>
<td>4</td>
<td>Wednesday</td>
</tr>
<tr>
<td>5</td>
<td>Thursday</td>
</tr>
<tr>
<td>6</td>
<td>Friday</td>
</tr>
<tr>
<td>7</td>
<td>Saturday</td>
</tr>
</tbody>
</table>
To confirm the appointment, press \[⑦\]. If all is correct, the new selections are saved; otherwise the error message is displayed and the inconsistency is shown by the symbol \[⑧\].

To change the type of repetition use key while in appointment editing mode. The configuration changes according to the previous situation and position. Refer to the table in the previous paragraph.

Each minute, though not synchronized with the clock, the system checks whether the time of the first active appointment has elapsed according to the natural sequence regarding the interphones/monitors. If the interphone/monitor is in the rest status, a 50-second timer is started up on the addressed device, during which the device emits three beeps at a frequency of approx. 1300 Hz for a duration of 200 ms with pauses of 200 ms, and a repetition cycle of 2 seconds. If the user raises the handset, the device sends a message to the switchboard to notify of the answered call. At the same time, the handset will emit a tone at a lower frequency but at the same interval for a maximum time of 30 seconds, after which the tone is replaced by silence. Starting from a situation with the hook raised, the sound will first be emitted on the loudspeaker, after which when the handset is replaced the standard situation is restored in which the call can be answered as described previously. If the switchboard does not receive an answer within 55 seconds, it will consider the call unanswered and place in the unprocessed category.

3.6. EVENT MANAGEMENT
Switchboard type 945F memorises up to 200 events, divided into:
- Unanswered calls
  - or Call to interphone/monitor in internal mode
  - or Calls to switchboard by an interphone/monitor
  - or Call to switchboard by a panel
- Warnings
  - or Use of codes for lock, F1 or F2 from a panel type 89F4-7-9
  - or Alarm

When there is at least one event, the icon area displays the corresponding symbol \[⑨\] and the MEMORY \[⑩\] led lights up. A certain type of event involving the same object replaces the less recent event. For example if an interphone/monitor calls the switchboard several times, only the last call appears in the events list. This is to avoid filling the list when calls are made repeatedly to the switchboard.

3.6.1. Viewing the list
Use the key \[⑪\] from rest statues to view the most recent event:

The information displayed are read as follows:
1. This is the first of 8 events
2. The event occurred on 15 March at 8.56 am
3. The event is a call from a panel to an interphone/monitor with the ID 3

If the interphone/monitor with ID 3 has an associated name, this appears in place of the number:

This applies provided that the length is less than or equal to 8 characters. In the case of longer names, the display changes using the symbols:

If an interphone/monitor calls the switchboard and receives no answer as the switchboard is not manned at the time, the event is displayed as:

Once again, the event may appear in the form of its entire name if the length is less than or equal to 8 characters:

Or the event will be displayed in abbreviated symbolic form if the name length exceeds 8 characters:

However, an event such as the use of a lock code is displayed as follows:
A appointment event for the switchboard to which no answer was given is displayed as:

```
Mo 06/11 10:32 % I
```

Press the key  to see the associated text:

```
Wake-up
Mo 06/11 10:32 % I
```

**CAUTION: THE TEXT IS VALID ONLY IF THE APPOINTMENT HAS NOT BEEN CANCELLED OR MODIFIED.**

An alarm event (appointment for internal device) to which no answer was given, is displayed as follows:

```
Mo 06/11 10:36 % I
```

Press  to scroll through all events in sequence. After the last event the cursor returns to the first.

### 3.6.2 Extraction of number from list

If the event is an unanswered call or appointment for internal device, the key  enables extraction of the relative ID to enable subsequent calls to the interphone/monitor concerned.

```
Dial digits
Mo 06/11 10:37 % I
```

The key  makes the call, and  cancels extraction.

At the same time the event is cancelled.  cancels the event in any event, even if it is not a call.

### 3.6.3. Canceling a list

To delete all events, without viewing all, from the switchboard rest status, press and hold  for three seconds. The display confirms deletion:

```
NO EVENTS
Mo 06/11 10:41 % I
```

Note that the symbol  and the MEMORY  led are now off.

The MEMORY  led flashes quickly when a new event is added to the list, while it cannot be served. For example, if the switchboard is in programming mode, and a call arrived from an interphone or panel, these are denied and added to the list. To return to the normal situation, consult at least one item in the list of events. The led turns to steady or switches off if there are no more events.

### 3.6.4. Corrupt list

If the symbol  is flashing, this means that the list is corrupt and that it must be deleted, retrieving events where possible, before other events can be added. This must never occur during normal switchboard operation. If this does occur, contact technical assistance.

### 4. INSTALLATION

#### 4.1. SYSTEM CONNECTION TERMINAL BLOCK

The switchboard receives power and is integrated in any Elvox 2-wire system by means of an external terminal block called BOSS. This comprises two rows of terminals to which all signals required by the switchboard are connected, and a comb type connection between the terminal block and a multi-pole cable with suitably polarised connector (PLUG) returns the signals directly to the switchboard interior. The boss envisages one method of insertion of the comb type connector on the multi-pole connector: this polarisation prevents incorrect power supply to the switchboard.

The following illustrates the connection boss and relative meaning of each terminal:

![Connection Stud](image_url)

The stud consists of:
- base equipped with a double row of terminals (15 terminals each side)
- free polarized plug to insert in connector and base comb (the free plug connects 30 wires, whose code is indicated in the cross-reference table in the technical documentation).
<table>
<thead>
<tr>
<th>Name terminal boss (corresponding terminal number)</th>
<th>Mark</th>
<th>Colour of corresponding wire</th>
<th>Switchboard signal analogue</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>V</td>
<td>Coaxial cable (internal wire)</td>
<td>Video signal from camera</td>
</tr>
<tr>
<td>2</td>
<td>M</td>
<td>Coaxial cable (sheath)</td>
<td>Video ground from camera</td>
</tr>
<tr>
<td>3</td>
<td></td>
<td>Grey-Green</td>
<td></td>
</tr>
<tr>
<td>4</td>
<td></td>
<td>White-Violet</td>
<td></td>
</tr>
<tr>
<td>5</td>
<td></td>
<td>Blue</td>
<td></td>
</tr>
<tr>
<td>6</td>
<td>SR</td>
<td>Red</td>
<td>Lock output (open collector)</td>
</tr>
<tr>
<td>7</td>
<td>M</td>
<td>White-grey</td>
<td>Ground</td>
</tr>
<tr>
<td>8</td>
<td>F2</td>
<td>White-Orange</td>
<td>F2 output (open collector)</td>
</tr>
<tr>
<td>9</td>
<td>F1</td>
<td>Grey_Violet</td>
<td>F1 output (open collector)</td>
</tr>
<tr>
<td>10</td>
<td>-L</td>
<td>White-Black</td>
<td>Switchboard active output (open collector)</td>
</tr>
<tr>
<td>11</td>
<td>~</td>
<td>Grey red</td>
<td>Supply voltage from type 6923</td>
</tr>
<tr>
<td>12</td>
<td>~</td>
<td>Dark grey</td>
<td>Supply voltage from type 6923</td>
</tr>
<tr>
<td>13</td>
<td>M</td>
<td>Violet</td>
<td>Ground</td>
</tr>
<tr>
<td>14</td>
<td>2</td>
<td>White-Yellow</td>
<td>Cable riser Bus 2</td>
</tr>
<tr>
<td>15</td>
<td>1</td>
<td>Red (Ø 0.5)</td>
<td>Cable riser Bus 1</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Name terminal boss (corresponding terminal number)</th>
<th>Mark</th>
<th>Colour of corresponding wire</th>
<th>Switchboard signal analogue</th>
</tr>
</thead>
<tbody>
<tr>
<td>16</td>
<td>+12</td>
<td>Blue (Ø 0.5)</td>
<td>+12V max 100mA to monitor 6009 or for F1 / F2 / SR</td>
</tr>
<tr>
<td>17</td>
<td>CV</td>
<td>Dark green</td>
<td>Monitor 6009 video presence/command</td>
</tr>
<tr>
<td>18</td>
<td>+E</td>
<td>Light green</td>
<td>Rectified ~ voltage output</td>
</tr>
<tr>
<td>19</td>
<td>+L</td>
<td>Dark brown</td>
<td>Switchboard active output (positive 12V command)</td>
</tr>
<tr>
<td>20</td>
<td>M</td>
<td>Yellow</td>
<td>Ground</td>
</tr>
<tr>
<td>21</td>
<td>A</td>
<td>Black</td>
<td>DTMF telephone interface</td>
</tr>
<tr>
<td>22</td>
<td>M</td>
<td>Orange</td>
<td>Ground</td>
</tr>
<tr>
<td>23</td>
<td>TO</td>
<td>Pink</td>
<td>Telephone Interface audio output</td>
</tr>
<tr>
<td>24</td>
<td>TI</td>
<td>White</td>
<td>Telephone Interface audio input</td>
</tr>
<tr>
<td>25</td>
<td>RX</td>
<td>Medium blue</td>
<td>Data input from Telephone Interface</td>
</tr>
<tr>
<td>26</td>
<td>TX</td>
<td>Grey-Black</td>
<td>Data output from Telephone Interface</td>
</tr>
<tr>
<td>27</td>
<td>+5</td>
<td>Light grey</td>
<td>Telephone interface supply voltage</td>
</tr>
<tr>
<td>28</td>
<td>M</td>
<td>Grey-Blue</td>
<td>Ground</td>
</tr>
<tr>
<td>29</td>
<td></td>
<td>Light brown</td>
<td></td>
</tr>
<tr>
<td>30</td>
<td></td>
<td>Grey-Orange</td>
<td></td>
</tr>
</tbody>
</table>
4.2. MONITOR BOSS FOR SWITCHBOARD 945F

The monitor 6009 with desktop base 6A92 is fitted with a cable with one end equipped with a plug for connection to a boss with the following connections. External connections are also specified between the two bosses to ensure correct system operation.

<table>
<thead>
<tr>
<th>Mark terminal boss</th>
<th>Colour of corresponding wire</th>
<th>Terminal boss 4945F (Number/name)</th>
</tr>
</thead>
<tbody>
<tr>
<td>+12 / 15</td>
<td>Light blue</td>
<td>16 / +12</td>
</tr>
<tr>
<td>CH / 14</td>
<td>White</td>
<td>17 / CV</td>
</tr>
<tr>
<td>1 / 13</td>
<td>Pink</td>
<td>15 / 1</td>
</tr>
<tr>
<td>2 / 12</td>
<td>Orange</td>
<td>14 / 2</td>
</tr>
<tr>
<td>E+ / 11</td>
<td>Blue (Ø 0.5)</td>
<td></td>
</tr>
<tr>
<td>E- / 10</td>
<td>Red (Ø 0.5)</td>
<td></td>
</tr>
<tr>
<td>FP / 9</td>
<td>Black</td>
<td></td>
</tr>
<tr>
<td>M / 8</td>
<td>Yellow</td>
<td>13 / M</td>
</tr>
</tbody>
</table>

If used, terminals E+ and E- are connected respectively to terminals +U and - of an additional power supply type 6923, different from that connected to the switchboard.

CAUTION: STRICTLY OBSERVE ALL CONNECTIONS ON ALL MOUNTINGS. INVERTED CONNECTIONS IN WIRING MAY LEAD TO DAMAGE TO THE SWITCHBOARD AND/OR MONITOR.

4.3. WIRING DIAGRAMS FOR CONNECTION TO 2-WIRE SYSTEM

The switchboard has three standard installation configurations:

CONFIGURATION A: base configuration type A where the switchboard is connected to the main cable riser on which monitors/interphones and main/secondary panels are connected;

CONFIGURATION B: base configuration type A where the switchboard is connected to the main cable riser on which main/secondary panels and separators are connected (each separator activates a cable riser reconnected to user devices only: interphones/monitors);

4.4. SERVICE SERIAL LINES

4.4.1. Interface with personal computer

For use with type 692I and the SaveProg program version 1.0.1.0 or later. Enable management of switchboard programming as if it were a panel, thus the user can read a file, write starting from a file, edit names etc. It is also possible to merge the remapping and/or names of a panel in a switchboard or between two switchboards or any other combination.

5. TELEPHONE INTERFACE TYPE 69TF

The interface type 69TF enables remote control of the switchboard keyboard, by simulating it on the keypad of a wired or cordless phone.

NOTE: THE INTERFACE ONLY RECOGNISES MT TONE DIALLING AND NOT PULSE DIALLING (DC).

Unlike the option on the switchboard, dialling is not possible with the handset replaced unless redialling from the telephone.

When the telephone is raised, the icon is always replaced to notify that the user that the telephone is not in the rest status. Audio must always be assigned to the switchboard if its handset is raised at the same time as that of the telephone. Communication can be transferred from the switchboard to telephone and vice versa, by simply passing from a situation which both are with the handset raised to then replace the unit which is to be excluded from the conversation.

5.1. NIGHT-TIME SERVICE

The telephone can dial from any switchboard status. However it only rings if the switchboard has the Night-time service option. With the switchboard set to night-time service and all handsets in the rest status, an icon appears in place of the hook icon to indicate that the service is active.

To change to Night-time Service, press and hold keys and together. On each changeover, if enabled, the loudspeaker emits a beep at 400Hz for 500 ms.
NOTE: THE TELEPHONE RINGS ONLY IF THE SWITCHBOARD IS SET TO NIGHT-TIME SERVICE, BUT CAN DIAL AND THE HOOK IS ALWAYS ENABLED.

5.2. CORRESPONDENCE OF KEYS ON SWITCHBOARD AND REMOTE TELEPHONE

The corresponding keys between the switchboard and telephone keypad are shown in the following table:

<table>
<thead>
<tr>
<th>SYMBOL KEY</th>
<th>TELEPHONE KEYS</th>
</tr>
</thead>
<tbody>
<tr>
<td>0...9</td>
<td>0...9</td>
</tr>
<tr>
<td>*</td>
<td>#</td>
</tr>
<tr>
<td>#</td>
<td>FLASH + 1</td>
</tr>
<tr>
<td></td>
<td>FLASH + 2</td>
</tr>
<tr>
<td></td>
<td>FLASH + 3</td>
</tr>
<tr>
<td></td>
<td>FLASH + 4</td>
</tr>
<tr>
<td></td>
<td>FLASH + 5</td>
</tr>
<tr>
<td></td>
<td>FLASH + 6</td>
</tr>
<tr>
<td></td>
<td>FLASH + 7</td>
</tr>
<tr>
<td></td>
<td>FLASH + 8</td>
</tr>
<tr>
<td>1</td>
<td>FLASH + 9</td>
</tr>
<tr>
<td>2</td>
<td>FLASH + 0</td>
</tr>
<tr>
<td>3</td>
<td>FLASH + *</td>
</tr>
<tr>
<td>4</td>
<td>FLASH + #</td>
</tr>
</tbody>
</table>

It has been decided to associate * and # because they have the same position on the switchboard keyboard and the telephone keypad.

The FLASH key is often indicated on telephones as R, but is has been described with the full term here to avoid confusion with the switchboard key . If the FLASH key is pressed inadvertently, this can be cancelled by pressing the same key again. Any command can be performed virtually, including switchboard programming.

Two keys cannot be pressed simultaneously, unless as specified in the table above.

Obviously the switchboard display is not shown on the telephone display, and so the user has to proceed without the option of viewing information.

5.3. EXAMPLES OF REMOTE TELEPHONE USE

The following describes the operations to answer a panel call on the telephone, with subsequent routing to a user different from the original recipient. On reception of the call from the panel, the telephone rings together with the switchboard.

To answer, simply activate the telephone by raising the handset, pressing open voice key or specific answer key.

To put the external user on hold, enter FLASH + 3.

Dial the required internal number.

Confirm by means of #.

On answer, transfer the call by means of FLASH + 5.
5.4. CONNECTIONS TO BOSS
The 6-way terminal located to the lower left in CS2741, is connected by means of 6 wires to the switchboard boss:

<table>
<thead>
<tr>
<th>Mark terminal block</th>
<th>945F boss terminal (Number / name)</th>
</tr>
</thead>
<tbody>
<tr>
<td>A</td>
<td>21 / A</td>
</tr>
<tr>
<td>M</td>
<td>22 / M</td>
</tr>
<tr>
<td>TO</td>
<td>23 / TO</td>
</tr>
<tr>
<td>TI</td>
<td>24 / TI</td>
</tr>
<tr>
<td>RX</td>
<td>25 / RX</td>
</tr>
<tr>
<td>TX</td>
<td>26 / TX</td>
</tr>
</tbody>
</table>
Attention:
In the connection stub respect attentively the connections. The inversions in cablings may damage the switchboard and/or the moniteur.

C - AUDIO ENTRANCE PANEL ART. 89F3/..., 89F4
L - 12V ELECTRIC LOCK
K - PUSH-BUTTON FOR OUTDOOR CALL
P - LOCK RELEASE CONTROL
Attention:
In the connection stub respect attentively the connections. The inversions in cabling may damage the switchboard and/or the moniteur.

D - VIDEO ENTRANCE PANEL
  ART. 89F5/..., 89F5/C..., 89F7, 89F7/C
L - 12V ELECTRIC LOCK
K - PUSH-BUTTON FOR OUTDOOR CALL
P - LOCK RELEASE CONTROL
VARIATION ON THE CONNECTION OF THE APARTMENT BLOCK SWITCHBOARD TYPE 945F WITH MONITOR TYPE 6009 - 6009/C BY MEANS OF THE TABLE-TOP CONVERSION KIT TYPE 6A92 (N° SI228).

*  

Attention:  
In the connection stub respect attentively the connections. The inversions in cabling may damage the switchboard and/or the moniteur.
VARIATION ON THE CONNECTION OF THE APARTMENT BLOCK SWITCHBOARD TYPE 945F – 945F/T WITH MONITOR TYPE 6009 - 6009/C BY MEANS OF THE TABLE-TOP CONVERSION KIT TYPE 6A92 AND LODGE CAMERA CCTV TYPE (N° SI229).

* Attention: In the connection stub respect attentively the connections. The inversions in cablings may damage the switchboard and/or the moniteur.
VARIATION ON THE CONNECTION OF THE APARTMENT BLOCK SWITCHBOARD TYPE 945F – 945F/T WITH TWO RELAYS TYPE 170/001 FOR THE ACTIVATION OF TWO AUXILIARY FUNCTIONS “F1 – F2” (N° SI230).

Attention:
In the connection stub respect attentively the connections. The inversions in cabling may damage the switchboard and/or the moniteur.
VARIATION ON THE CONNECTION OF THE APARTMENT BLOCK SWITCHBOARD TYPE 945F – 945F/T WITH ONE RELAY TYPE 170/001 AND TRANSFORMER TYPE 832/030 FOR THE ELECTRIC LOCK CONTROL (N° SI231).

**Attention:**
In the connection stub respect attentively the connections. The inversions in cabling may damage the switchboard and/or the moniteur.

VARIATION ON THE CONNECTION OF THE APARTMENT BLOCK SWITCHBOARD TYPE 945F – 945F/T WITH TELEPHONE INTERFACE TYPE 69TF TO TRANSFORM THE WIRED OR CORDLESS TELEPHONE SWITCHBOARD INTO REMOTE VERSION (NIGHT SERVICE) (N. SI231).

**Attention:**
In the connection stub respect attentively the connections. The inversions in cabling may damage the switchboard and/or the moniteur.
SAFETY INSTRUCTIONS FOR INSTALLERS

- Carefully read the instructions on this leaflet: they give important information on the safety, use and maintenance of the installation.
- After removing the packing, check the integrity of the set. Packing components (plastic bags, expanded polystyrene etc.) are dangerous for children. Installation must be carried out according to national safety regulations.
- It is convenient to fit close to the supply voltage source a proper bipolar type switch with 3 mm separation (minimum) between contacts.
- Before connecting the set, ensure that the data on the label correspond to those of the mains.
- Use this set only for the purposes designed, i.e. for electric door-opener systems. Any other use may be dangerous. The manufacturer is not responsible for damage caused by improper, erroneous or irrational use.
- Before cleaning or maintenance, disconnect the set.
- In case of failure or faulty operation, disconnect the set and do not open it.
- For repairs apply only to the technical assistance centre authorized by the manufacturer.
- Safety may be compromised if these instructions are disregarded.
- Do not obstruct opening of ventilation or heat exit slots and do not expose the set to dripping or sprinkling of water.
- Installers must ensure that manuals with the above instructions are left on connected units after installation, for users’ information.
- All items must only be used for the purposes designed.
- This leaflet must always be enclosed with the equipment.

Directive 2002/96/EC (WEEE)

The crossed-out wheelie bin symbol marked on the product indicates that at the end of its useful life, the product must be handled separately from household refuse and must therefore be assigned to a differentiated collection centre for electrical and electronic equipment or returned to the dealer upon purchase of a new, equivalent item of equipment.

The user is responsible for assigning the equipment, at the end of its life, to the appropriate collection facilities. Suitable differentiated collection, for the purpose of subsequent recycling of decommissioned equipment and environmentally compatible treatment and disposal, helps prevent potential negative effects on health and the environment and promotes the recycling of the materials of which the product is made. For further details regarding the collection systems available, contact your local waste disposal service or the shop from which the equipment was purchased.

Risks connected to substances considered as dangerous (WEEE).

According to the WEEE Directive, substances since long usually used on electric and electronic appliances are considered dangerous for people and the environment. The adequate differentiated collection for the subsequent dispatch of the appliance for the recycling, treatment and dismantling (compatible with the environment) help to avoid possible negative effects on the environment and health and promote the recycling of material with which the product is compound.