ELVOX®

Communicating in style

APARTMENT BLOCK SWITCHBOARD FOR 2 WIRE ELVOX SYSTEMS

INSTALLATION AND OPERATION MANUAL

Art. 945F
Art. 945F/T

DUEFILIELVOX

CE

GB

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:

> **Caution:** If the following consumer unit Art. 945F is installed in place of a previous version, check that the terminals are in the system connector and in the same position as in the connector supplied with the new consumer unit.

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

```
*** Elvox 945F ***
 GG/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. There may also be the character '!' if information is missing for the correctness check.
- '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:

```
                Mo 06/11 09:08     E
      Dial digits to number call
```
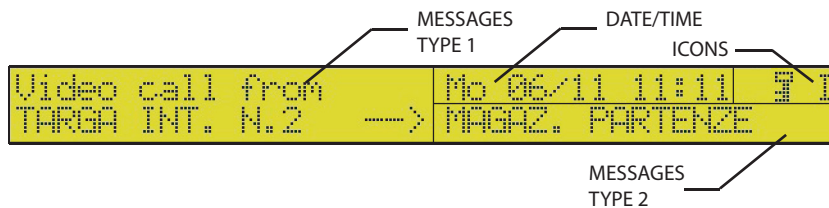
these messages are displayed in alternating mode, if the agenda contains at least one name, with:

```
                Mo 06/11 08:39     I
      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.

MESSAGES
TYPE 1   DATE/TIME
ICONS

```
Video call from      Mo 06/11 11:11   I
TARGA INT. N.2    --->MAGAZ. PARTENZE
```

MESSAGES
TYPE 2

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

ICON	DESCRIPTION
	(Box with superimposed arrow) Indicates that there are calls (or other commands) in the memory.
	(Telephone handset): indicates that the switchboard handset is raised.
	(Cordless phone): 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.
	(Moon and star): 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.
	(Key): Indicates that a door lock release command is in progress or activation of a function.
	(Padlock): Indicates the keyboard lock by means of external key;
	(I / E): Indicate the switchboard status (internal or external);
	Ringtone mute (by means of keys ⓡ and ③ DEF);

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

Left-hand area

SYMBOL KEY	DESCRIPTION
	SCROLL MEMORIES 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.
	LOCK OPEN 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.
	TRANSFER 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.
	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 (Not used) 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	DESCRIPTION
MEMORY	**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	**EXTERNAL** When the lamp is off the switchboard is set to internal mode, and otherwise is in external mode.
INTERC	**INTERC** The lamp illuminates during a conversation between two or more interphones (monitors) and the main entrance panel.
LINE	**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.

1.2.4 Push-buttons and adjustment trimmer
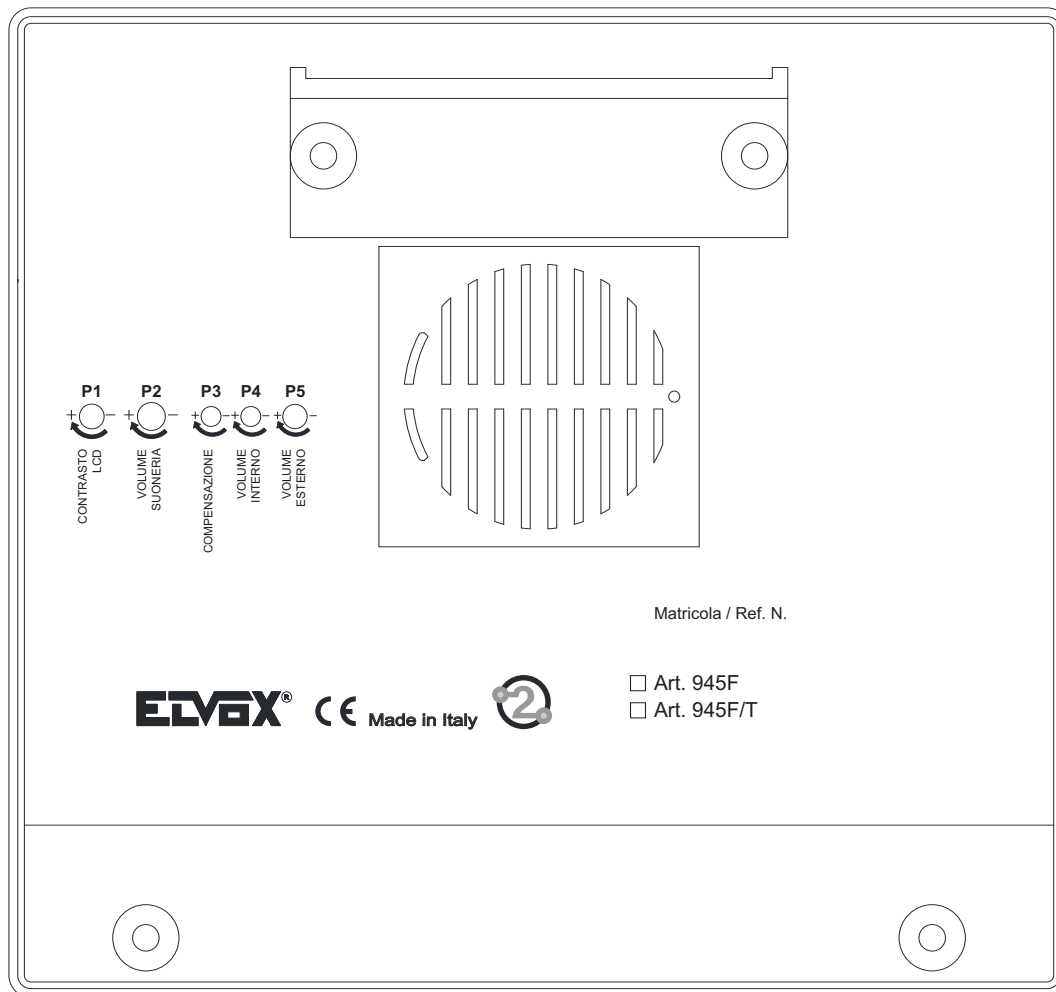
1.2.5. Switchboard handset

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

KEYS	COMMANDS
ℝ + 0	SWITCHING TO NIGHT-TIME SERVICE
ℝ + 1	KEYBOARD LOCK CODE ENTRY
ℝ + 2 ABC	DATE-TIME-ALARM PROGRAMMING
ℝ + 3 DEF	AUDIO TONE MUTE AND ENABLE
ℝ + 4 GHI	PARAMETER PROGRAMMING
🔑	OPTIONAL FUNCTION ACTIVATION
M	VIEWING MEMORISED EVENTS (from switchboard rest status)

For further information on the methods and procedures for configuring the switchboard parameters, refer to paragraph 2.2.

2.   SWITCHBOARD CONFIGURATION

2.1.   HARDWARE CONFIGURATION

2.1.1.   Switchboard ID configuration

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.

```
                                 Mo 06/11 10:49    E
           Dial digits to number call
```

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.

```
                                 Mo 06/11 09:08    E
           Dial digits to number call
```

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.
Even if the keypad is locked it is possible to answer, but not to make calls.

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 ringtone 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:

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

2.2.2. MESSAGE LANGUAGE

```
Messag. Language
English
```

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 ABC)** for English

```
Messag. Language
Italian
```

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

```
Fatto!
Italian
```

The display now changes to:

```
Lingua Messaggi
Italiano
```

Use the key **(M)** 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.

```
SwitchBoard ID
1
```

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

```
Done!
Please wait...
```

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

```
Out of Range
6
```

Use the key **(M)** 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

```
Code Digits #
Sequential Codes
```

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
```
Code Digits #
Sequential Codes
```

- **(2 ABC)** for 4-digit encoding
```
Code Digits #
4-Digit Code
```

- **(3 DEF)** for 8-digit encoding
```
Code Digits #
8-Digit Code
```

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

```
Done!
Sequential Codes
```

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

Use the key **(M)** 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.

```
Devices Numbr  1
```

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:

```
Enter device ID
 45
```

Now press 🔔

```
Devices Numbr 45
1500
```

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

```
Out of Range
888
```

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

To modify the number value, press 🔔 :

```
Devices Numbr 45
```

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

```
Devices Numbr 45
0____
```

and press 🔔 :

```
Done!          Devices Numbr 45
0000
```

To insert a number, enter the digits:

```
Devices Numbr 45
789_
```

To cancel the last digit, use key ℝ :

```
Devices Numbr 45
78__
```

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

```
Devices Numbr 45
7856
```

To cancel press �sp. 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:

```
Code      7856
in use by    99
```

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:

```
Done!
7856
```

To cancel all numbering, starting from where the current value is shown, press 0+ :

```
1=Reset Numbers
```

On request for confirmation, press 1 :

```
1=Reset Numbers
YES
```

and then 🔔 . Press ✸ or 0+ 🔔 to cancel the procedure. If numbering reset is selected, the following is displayed:

```
Please wait...
```

And lastly:

```
Done!
Please wait...
```

2.2.6. Search the entire agenda

Press 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 followed by to see the first name in the agenda, regardless of the initial. Then use keys and to scroll through the entire agenda.

This function is disabled by default:

```
Search all rbk.
NO
```

To activate the function, press :

```
Search all rbk.
YES
```

followed by :

```
Done!
YES
```

To deactivate, press e .

2.2.7. Device names

Press 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.

```
Device Name a  1     Device Name b  1
SEGRETERIA           PROGETT. MECC.
```

To select the device to modify, use keys and . For each device, the name 'a' is displayed first, followed by 'b'. From position 1a, press to move to the next item in the programming menu.

Alternatively, enter the device number required directly:

```
Enter device ID
179
```

Now press :

```
Device Name a179
FILIALE MILANO
```

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

```
Out of Range
888
```

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

To modify the number value, press :

```
Device Name b179
FILIALE FIRENZE▓
```

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 . Press repeatedly to cancel as may characters as required:

```
Device Name b179
FILIALE F▓
```

To enter the characters, use keys .. . 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:

BUTTON	SYMBOL
1	<spazio>1@.,:;?!()<>
2 ABC	ABC2abcÁÀÃÂÄÆÇÈáàãâäæçè
3 DEF	DEF3defíÉÈÊÌéèèî
4 GHI	GHI4ghiÍÌíî
5 JKL	JKL5jkl
6 MNO	MNO6mnoÑñÓÒÕÖóòõö
7 PQRS	PQRS7pqrsRŠršß
8 TUV	TUV8tuvÚÙÜÛúùüû
9 WXYZ	WXYZ9wxyzÝZýz
0	0_$&*#+-=/%"'

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 ![6 MNO] three times consecutively

```
Device Name b179      Device Name b179      Device Name b179
FILIALE FM            FILIALE FN            FILIALE FO
```

To complete 'FOGGIA' press ![4 GHI] for the 'G', wait for the cursor to move forward, ![4 GHI] again for the second 'G', wait for the

cursor to move forward, ![4 GHI] again three times for the 'I', and lastly ![2 ABC] for the 'A'.

Use keys ![M] and ![down] to move within the name These keys can only be used when the entry timeout has elapsed. For exam-

ple, if ![M] is pressed seven times, the cursor moves to the space between 'FILIALE' and 'FOGGIA'

```
Device Name b179      Device Name b179
FILIALE FOGGIA        FILIALE█FOGGIA
```

The cursor flashes between the letters 'E' and 'F'. Press the key ![R] six times to cancel the remaining letters 'ILIALE' The

following figures show what happens when the key ![4 GHI] is pressed several times in sequence

```
Device Name b179      Device Name b179      Device Name b179
FG FOGGIA             FH FOGGIA             FI FOGGIA

Device Name b179      Device Name b179      Device Name b179
F4 FOGGIA             Fg FOGGIA             Fh FOGGIA

Device Name b179
Fi FOGGIA
```

The same procedure is used to complete the word:

```
Device Name b179
Filiale█FOGGIA
```

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

```
RADIO TAXI
   in use by   173
```

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:

```
Done!
Please wait...
```

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 ⓪. In this case the display shows:

```
Rebuilding
phonebook  index
```

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:

```
PHONEBK NOT ORD.
```

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:

```
Program Password
654321
```

To change the value, start to enter the numbers. All numbers from ⓪ to ⑨ are valid.

```
Program Password
123456
```

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

```
Done!
123456
```

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:

```
KeyboardPassword
654321
```

To change the value, start to enter the numbers. All numbers from ⓪ to ⑨ are valid.

```
KeyboardPassword
123456
```

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

```
Done!
123456
```

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:

```
Lock Time
1 s
```

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

```
Lock Time
5 s
```

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

```
Done!
    5 s
```

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

```
Out of Range
999 s
```

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

2.2.11. Function 1 time

Press ⇩ 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:

```
Function 1 Time
    1 s
```

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

```
Function 1 Time
    5 s
```

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

```
Done!
    5 s
```

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

```
Out of Range
999 s
```

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

```
Function 1 Time
0.5 s
```

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

2.2.12. Function 2 time

Press ⇩ 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:

```
Function 2 Time
    1 s
```

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

```
Function 2 Time
    5 s
```

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

```
Done!
    5 s
```

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

```
Out of Range
999 s
```

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

```
Function 2 Time
0.5 s
```

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

2.2.13. Common Lock

Press ⇩ 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:

```
Common Lock 1
Not Assigned
```

Enter a number between 1 and 15:

```
Common Lock 1
5
```

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

Done!
5

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

Out of Range
66

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

Use keys 🔼M 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:

Common F1   1
Not Assigned

Enter a number between 1 and 15:

Common F1   1
5

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

Done!
5

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

Out of Range
66

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

Use keys and to move from one index to another 🔼M e 🔽 . 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:

Common F2   1
Not Assigned

Enter a number between 1 and 15:

Common F2   1
5

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

Done!
5

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

Out of Range
66

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

Use keys and to move from one index to another 🔼M and 🔽 . 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 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:

```
Keyboard Beep
YES
```

Press to activate the tone, or to disable

```
Keyboard Beep
NO
```

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

```
Done!
NO
```

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

2.2.17 Call repeater

Pressing the push-button 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:

.   to disable the function

.   to use the door lock output

.   to use the F1 output

.   to use the F2 output

To cancel press push-button . To confirm press push-button . The command acceptance, as all other commands, is indicated on the first display line:

Pressing the push-button , you can go to the previous function of the programming menu.

2.2.18. Call filter

By pressing the push-button 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:

```
Int. call filter
Filter off
```

Press to disable the filter, press to enable:

```
Int. call filter
Filter on
```

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

```
Done!
Filter on
```

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.

```
Done!
Filter on
```

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

```
Clock
01/01/05 00:00
```

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

```
Clock                    Clock
01▮01/05 00:00           01/01▮05 00:00
```

To move to the right, use key ⬇ and to the left use key ⬆. Modify the values by means of the keys ⓪ .. ⑨. On completion confirm by means of ⬭. If the values are correct the display then shows:

```
Done!
01/01/05 00:01
```

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:

```
Clock
01/88▮05 11:35
```

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

```
Device          1
6209+6009
```

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

```
Device          1
6209+6009 V 3.00
```

If this is not present, the display shows:

```
Device          1
NOT PRESENT
```

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

```
Enter device ID
 85
```

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.

CLASS	MEANING	6209 (+ 6009)	6309
FLAG PROGRAMMING	YES = the monitor switches on when a panel call is made (except for 6209)	Device Monitor ON: YES 2	
	YES = the green led is managed as door open indicator	Device Green LED: YES 2	
	YES = the lock pushbutton is used by the device NO = the pushbutton is used externally (only for 6309/P, 6309/CP)		Device Lock: YES 2
	YES = the stair light pushbutton is used by the device NO = the pushbutton is used externally (only for 6309/P, 6309/CP)		Device Stair Light: YES 2
	YES = the self-start pushbutton is used by the device NO = the pushbutton is used externally (only for 6309/P, 6309/CP)		Device Self-start: YES 2
	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	Device F1/F2 1-8: YES 2	
	YES = the device is working in porter switchboard mode	Device SwitchBoard: NO 2	
	YES = the device sends the lock command automatically when a external speech unit/panel calls, if P6 is closed	Device Autom. Lock: NO 2	
	YES = group G3 functions only for external calls	Device G3 ext.only: NO 2	
	YES = group G4 functions only for internal calls	Device G4 int.only: NO 2	
	YES = eliminates the click sound when a valid key is pressed	Device Do not beep: NO 2	
	YES = does not activate the call repeated output for intercommunicating calls	Device No RIPCH IC: NO 2	
	YES = group G1 functions only for external calls	Device G1 ext.only: NO 2	
	YES = group G2 functions only for internal calls	Device G2 int.only: NO 2	
	YES = the monitor / interphone does not ring for intercommunicating calls	Device No int. ring:NO 2	
	YES = the monitor / interphone does not ring for calls from panels	Device No ext. ring:NO 2	
	YES = After the automatic door lock activation because of the Serr. Aut. flag with P6 close the interphone or the video interphone cancels the call. [NO] The possible automatic door lock does not make the call end (default).	Device End Aut.Lock:NO 2	
	Usually used for a group master. YES = the call is accepted, and then the secondary units ring, even if the group master has ringtone off and therefore does not ring. NO = if a group master turns off the ringtone none rings and there is a warning on the entrance panel.	Device HDK Ring Exc:NO 2	
	YES = the device has no timeout for the intercommunicating conversation. For it to work properly, both parties talking to each other must have it on YES. NO = (Default) and the intercommunicating conversation lasts at most 5 minutes.	Device I.C.unlimit.:NO 2	
	YES = If it is programmed for a head group, this latter, at the call reception from the push-button module type 6120, will inform the other members that it is ringing. If it is programmed for the group members, they will answer at the call from a type 6120 to their head group ringing. In this way it is possible to divide the calls between external, internal and outdoor calls. NO = No reaction.	Device O.D. Group :NO 2	

CLASS	MEANING	6209 (+ 6009)	6309
PROGRAMMABLE KEYS	P0 is lock push-button Functions assigned to pushbuttons. P1, P2, P3, P7 and P8 as default (i.e. not programmed) take the specified value	`Device        2` `P0=Door Lock`	
		`Device        2` `P1=Self-start`	
		`Device        2` `P2=Stair Light`	
		`Device        2` `P3=Auxiliary  2`	
		`Device        2` `P4=Not Assigned`	
		`Device        2` `P5=Not Assigned`	
		`Device        2` `P6=Not Assigned`	
		`Device        2` `P7=Function F1`	
		`Device        2` `P8=Function F2`	
GROUPS	First call group programming	`Device        2` `G1=Not Assigned`	
	Fourth and last call group programming	`Device        2` `G4=Not Assigned`	
DOOR CALL	First door call	`Device        2` `C1=Not Assigned`	
	Fourth door call	`Device        2` `C4=Not Assigned`	

CLASS	MEANING	6601	6611	8879
FLAG PROGRAMMING	YES = the monitor switches on when a panel call is made (not for 6601AU or 6611AU)	Device Monitor ON: YES²		
	YES = the green led is managed as door open indicator	Device Green LED: YES²		
	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	Device F1/F2 1-8: YES²		
	YES = the device is working in porter switchboard mode	Device SwitchBoard: NO²		
	YES = group G3 functions only for external calls	Device G3 ext.only: NO²		
	YES = group G4 functions only for internal calls	Device G4 int.only: NO²		
	YES = eliminates the click sound when a valid key is pressed	Device Do not beep: NO²		
	YES = does not activate the call repeater output for intercommunicating calls	Device No RIPCH IC: NO²		
	YES = group G1 functions only for external calls	Device G1 ext.only: NO²		
	YES = group G2 functions only for internal calls	Device G2 int.only: NO²		
	YES = the monitor / interphone dos not ring for intercommunicating calls	Device No int. ring:NO²		
	YES = the monitor / interphone dos not ring for calls from panels	Device No ext. ring:NO²		
	[YES] pressing the door lock push-button ends the conversation (default value in model /F of monitor) NO = the door lock push-button operates normally From version 4 of monitor and entrance panels.	Device End Aut.Lock:NO²		
	[YES] to activate the audio connection press the talk/listen push-button. To deactivate the audio press the push-button again (default value on model /F of monitor). NO = To activate the audio connection the talk/listen push-button must be kept pressed. From version 4 of monitor and entrance panels.	Device T./L. On/Off:NO²		
	Valid only for some Vimar products. [YES] the square button (self-start) becomes the second function regardless of the position of the mechanical switch. NO = has the self-start function.	Device Force 2nd K:NO²		
	Valid only for some Vimar products. [YES] there is home automation. NO = (Default)	Device VIMAR DOMOT.:NO²		
	Usually used for a group master. [YES] the call is accepted, and then the secondary units ring, even if the group master has ringtone off and therefore does not ring. NO = if a group master turns off the ringtone none rings and there is a warning on the entrance panel.	Device End Aut.Lock:NO²		
	[YES] the device has no timeout for the intercommunicating conversation. For it to work properly, both parties talking to each other must have it on YES. NO = (Default) and the intercommunicating conversation lasts at most 5 minutes.	Device I.C.unlimit.:NO²		
	[YES] After the panel ring tones the monitor answers automatically. Even the flag "T./L. On/Off:NO²" must be set to YES. NO = No automatic answer (default).	Device Autom.Answer:NO²		
	[YES] If it is programmed for a head group, this latter, at the call reception from the push-button module type 6120, will inform the other members that it is ringing. If it is programmed for the group members, they will answer at the call from a type 6120 to their head group ringing. In this way it is possible to divide the calls between external, internal and outdoor calls. NO = No reaction.	Device O.D. Group :NO²		

CLASS	MEANING	6601	6611	8879
PROGRAMMABLE KEYS	Functions assigned to pushbuttons. P0, P1, P2, P3, P7 and P8 as default (i.e. not programmed) take the specified value	`Device        2` `P0=Door Lock`		
		`Device        2` `P1=Self-start`		
		`Device        2` `P2=Stair Light`		
			`Device        2` `P3=Auxiliary 2`	
			`Device        2` `P4=Not Assigned`	
			`Device        2` `P5=Not Assigned`	
			`Device        2` `P6=Not Assigned`	
			`Device        2` `P7=Function F1`	
			`Device        2` `P8=Function F2`	

GROUPS	First call group programming	`Device        2` `G1=Not Assigned`		
	Fourth and last call group programming	`Device        2` `G4=Not Assigned`		
DOOR CALL	First door call	`Device        2` `C1=Not Assigned`		
	Fourth door call	`Device        2` `C4=Not Assigned`		
LEVELS	Ringtone volume	`Device        2` `Ringer Volume  7`		
	Hands free volume	`Device        2` `HandsFree Vol. 7`		
	Ringtone type	`Device        2` `Ringer Type    5`		
	Monitor brightness (not 6601AU or 6611AU)	`Device        2` `Brightness     3`		
	Monitor contrast (not 6601AU or 6611AU)	`Device        6` `Contrast       4`		
	Number of ringtone for door call (only for some Vimar products)	`Device        2` `Door  Ring     1`		
	Number of ringtone for intercommunicating call (only for some Vimar products)	`Device        2` `Internal  Ring 2`		

2.3.1. Flag programming

To modify one of the flag settings (YES / NO) use key ⓞ for NO and ① for YES. To confirm, press 🔔 . For example,

press ⓞ and 🔔 on the item "green LED " to display the confirmation

```
Done!
Green LED:    NO
```

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 ⓞ ... ⑨

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:

FUNCTION	DESCRIPTION
Choose Function: Not Assigned	The key takes on the default value. For buttons P0, P1, P2, P3, P7 and P8 the default is a function, indicated in the preceding table.
Choose Function: Intercom.	The button makes an intercommunicating call
Choose Function: Self-start	The button turns on a specific speech unit
Scegli Funzione: Ausiliario	The button turns on one of the relays Type 692R and 69RH
Choose Function: Function F1	The button turns on the output F1 of the entrance panel in conversation or anyhow the last one used
Choose Function: Function F2	The button turns on the output F2 of the entrance panel in conversation or anyhow the last one used
Choose Function: Function F1 spec	The button turns on the output F1 of a specific entrance panel
Choose Function: Function F2 spec	The button turns on the output F2 of a specific entrance panel
Choose Function: No Ring Int.Call	The button switches over the ringtone mute function for intercommunicating calls
Choose Function: No Ring Ext.Call	The button switches over the ringtone mute function for calls from a speech unit

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:

```
Done!
Not Assigned
```

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:

```
Interphone
4
```

To cancel press ✳️ . To confirm, press 🔔 .

```
Done!
33
```

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

```
Device        4
P6=D  33
```

2.3.2.3. Self-start
Enter a panel ID from 1 to 15:

```
Self-start
2
```

To cancel press ✺ . To confirm, press 🔔 . `Done!`
`2`

the display changes as follows, to indicate the specific self-start function:

```
Device            4
P6=P 02
```

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

```
Auxiliary
16
```

To cancel press ✺ . To confirm, press 🔔 .

```
Done!
16
```

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

```
Device            4
P6=A 16
```

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:

```
Done!
Function F1
```

after which:

```
Device            4
P6=F1
```

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

```
Done!
Function F2
```

after which:

```
Device            4
P6=F2
```

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:

```
Function F1 spec
3
```

To cancel press ✺ . To confirm, press 🔔 .

```
Done!
3
```

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

```
Device            4
P6=F1 P03
```

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:

```
Function F2 spec
3
```

To cancel press ✺ . To confirm, press 🔔 .

```
Done!
3
```

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

```
Device            4
P6=F2 P03
```

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

```
Done!
No Ring Int.Call
```

after which:

```
Device            4
P6=NO INT.CALL
```

2.3.2.10. Panel call ringtone mute
No further parameters are required, and therefore the procedure is completed as follows:

```
Done!
No Ring Ext.Call
```

after which:

```
Device            4
P6=NO EXT.CALL
```

2.3.2.11 DOOR LOCK PUSH-BUTTON

It is also possible to re-configure the door lock push-button. As default it activates the lock release of the entrance panel with that is talking or, with hook pressed, with the latest panel it got in touch with.

Raising the hook, starting from a rest position and by pressing the lock release push-button, you make a call to an existing lodge switchboard. For details see instructions concerning the individual video interphones or interphones.

If properly programmed, it is always possible and in any case to activate a specific entrance panel lock release, independently from the one you are talking or you were talking to. Other possible programmings are: activation of a relay type 69RH, intercommunicating call etc. according to the previous table: "Programming programmable push-buttons" by replacing "self-start" with the following string:

FUNCTION	DESCRIPTION
Scegli Funzione: Non Assegnato	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.
Scegli Funzione: Serratura	The key activates the lock of the specific panel

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

```
Door Lock
     5
```

To cancel press ✳ . To confirm, press 🔔 .

```
Done!
   5
```

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

```
Device          1
P0=L 05
```

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:

```
Enter device ID
      9
```

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

```
Device          4
G1= 9
```

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

```
Device          4
G1=Not Assigned
```

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):

```
Device          6
Ringer Volume   4
```

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

```
Done!
Ringer Volume   4
```

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):

```
Device          6
HandsFree Vol.  2
```

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

```
Done!
HandsFree Vol. 2
```

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:

```
Device          6
Ringtone Type   1
```

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

```
Done!
Ringer Type     1
```

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):

```
Device          6
Brightness      5
```

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

```
Done!
Brightness      5
```

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)

```
Device          6
Contrast        4
```

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

```
Done!
Contrast        4
```

2.3.5. CONFIGURATION OF REMOTE BUTTON MODULE

Press ⏬ to move to the next item by which you can program 8 Button Modules Type 6120.

At the outermost part of this function you move by pressing ⏫(M) and ⏬ to select the required Module. The type of Button Module and the respective firmware version are shown on the second line.

```
Button      0
6120     V 0.00
```

If this is not present, the display shows:

```
Button      0
6120     V??.??
```

Otherwise, enter the number of the module, from 0 to 7:

```
Enter Button ID
5
```

To cancel, press ✳. To confirm, press 🔔 .

After selecting the required module, press 🔔 to start viewing / editing the various parameters. The two buttons correspond respectively to P5 and P6 of an audio door entry unit 6209. For this reason, when moving with the arrow keys, you only see:

```
Button      0    Button      0
P5=Not Assigned  P6=Not Assigned
```

On reaching relevant button press 🔔 to edit the programming. With buttons ⏫(M) and ⏬ you move within the list given in the following table:

Function	Description
Choose Function: Not Assigned	The button performs no function.
Choose Function: Interphone	The button makes an intercommunicating call that simulates a door call.
Choose Function: Auxiliary	The button activates one of the relays Type 69RH.
Choose Function: Door Lock	The button activates the lock of a specific entrance panel.
Choose Function: Function F1 spec	The button activates the output F1 of a specific entrance panel.
Choose Function: Function F2 spec	The button activates the output F2 of a specific entrance panel.

For example, you go onto the second item and select "Intercommunicating". Then press 🔔 and for example 1 .

```
Intercom.
1
```

In this way the module is being prepared to make a call (a door call in this case) to flat 1. Final confirmation is made with:

```
Done!
1
```

That after a short time changes into:

```
Button      0
P5=D   1
```

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:

```
Video call from       Mo 06/11 09:14    E
TARGA EXT. N.1
```

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.

```
Talking with          Mo 06/11 09:14▯   E
TARGA EXT. N.1
```

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:

```
Video call from    Mo 06/11 09:15     I
TARGA INT. N.2   --> MAGAZ. PARTENZE
```

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:

```
Talking with       Mo 06/11 09:16▯   I
TARGA INT. N.2   --> MAGAZ. PARTENZE
```

At the same time, the green LINE 🔊 **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 ⑧⇓ to put the caller panel on hold, with display of the following sequence:

```
                   Mo 06/11 09:16▯   I
( waiting ...)   --> MAGAZ. PARTENZE
```

alternating with:

```
                                 Mo 06/11 09:16🔔    I
     TARGA INT. N.2    --> MAGAZ. PARTENZE
```

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

```
     Calling          Mo 06/11 09:17🔔    I
     MAGAZ. PARTENZE   TARGA INT. N.2
```

alternating with:

```
     Calling          Mo 06/11 09:17🔔    I
     MAGAZ. PARTENZE   ( waiting ...)
```

- 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:

```
     Talking between    Mo 06/11 09:18🔔    I
     TARGA INT. N.2   <-> MAGAZ. PARTENZE
```

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:

```
       No  Answer       Mo 06/11 09:18🔔    I
     MAGAZ. PARTENZE     ( waiting ...)
```

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 tit 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:

```
     Video call from     Mo 06/11 09:21     I
     MAGAZ. PARTENZE
```

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:

```
     Calling            Mo 06/11 09:30🔔    I
     MAGAZ. PARTENZE
```

If the internal device does not exist or is not properly connected to the system the switchboard display shows the message type:

```
        No Answer            Mo 06/11 09:30    I
MAGAZ. PARTENZE
```

Audio communication between the switchboard and internal recipient is indicated by the message type:

```
        Talking with         Mo 06/11 09:32    I
MAGAZ. PARTENZE
```

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 ⟨🎧 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:
```
        Calling              Mo 06/11 09:30    I
MAGAZ. PARTENZE
```

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:

```
        Talking between      Mo 06/11 09:34    I
MAGAZ. PARTENZE   <-> SEGRETERIA
```

At the same time, the green INTERC ⟨🎧 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 ⟨🎧 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.:1=🔑, 2=F₁, 3=F₂, R=Exit
```
alternating with:
```
Activ. panel N. 1    Mo 06/11 09:35     I
Act. panel: 4=🔑, 5=F₁, 6=F₂
```

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).

ACTIVATION	DOOR LOCK	F1	F2
LOCAL	**1**	**2** ABC	**3** DEF
REMOTE	**4** GHI	**5** JKL	**6** MNO

At any activation a respective icon appears above on the right hand side of display.

```
Activ. panel N. 1     Mo 06/11 09:36   🔔 I
Local act.:1=🔔, 2=🔔, 3=🔔, R=Exit
```

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 local-ly 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 us 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.

```
Appointment  1       Mo 06/11 09:38
.MTWTF.   15◊49
```

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:

KEY	DAY
1 −	Sunday
2 ABC	Monday
3 DEF	Tuesday
4 GHI	Wednesday
5 JKL	Thursday
6 MNO	Friday
7 PQRS	Saturday

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

```
Out of Range          Mo 06/11 09:39
.MTWTFS   09◊88
```

and the inconsistency is shown by the symbol :

```
Appointment  2       Mo 06/11 09:39
.MTWTFS   09:88◊
```

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.

REPETITION	DISPLAY	NOTE
None	Appointment 3 25◊May 06 12:02	Default or compile fields set to '—'
Annual	Appointment 3 25 May ——◊12:02	Press at the year from which to start from no repetition
Monthly	Appointment 3 25◊—— —— 12:02	Press at the month from which to start from no repetition
Alarm	Appointment 3 ....T..◊ 12:23	Press at the day of the month from which to start from no repetition. Press again to return to no repetition
Weekly	Appointment 3 —◊Th —— 12:33	Press at the year from which to start no repetition and then press at the day of the month
Daily	Appointment 3 —◊Th —— 12:33	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
Hourly	Appointment 3 —◊—— 6 12:43 month	Press at the year from which to start no repetition and then press at the day of the

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.

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

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

```
                                  Mo 06/11 09:48    I
            Switchboard app.   3
```

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 ⓡ + ②ABC : in the same way as for the switchboard meetings. With ⓡ you move to the internal unit appointments. Use keys ⬆M or ⬇B 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 ⌣  I
            123
```

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 us 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 ⬆M or ⬇B .

```
            Device      123     Mo 06/11 10:08 ⌣  I
            64Nov 06 10:08
```

Once in the selected field, highlighted by the symbol ▦, use keys ⓪+ .. ⑨WXYZ 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:

KEY	DAY
① _	Sunday
② ABC	Monday
③ DEF	Tuesday
④ GHI	Wednesday
⑤ JKL	Thursday
⑥ MNO	Friday
⑦ PQRS	Saturday

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

```
Out of Range          Mo 06/11 10:09 ⸝  I
— —— —— 11♦99
```

and the inconsistency is shown by the symbol ⬚ :

```
Device        123     Mo 06/11 10:09 ⸝  I
— —— —— 11:99♦
```

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 ⬚ and the MEMORY ⬆ MEMORY 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 ⬆ from rest statues to view the most recent event:

```
                              Mo 06/11 10:24 ⸝  I
      [001/008]15/03 08:56 Extern.Call3
```

The information displayed are read as follows:
1.   This is the first of 8 events [001/008]
2.   The event occurred on 15 March at 8.56 am   15/03 08:56
3.   The event is a call from a panel to an interphone/monitor with the ID 3 Extern.Call3

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

```
                              Mo 06/11 10:23 ⸝  I
      [001/008]06/11 10:21 Extern.CallChiara
```

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:

```
                              Mo 06/11 10:21 ⸝  I
      [001/008]06/11 10:21 ⸝=>Benedetta
```

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 :

```
                              Mo 06/11 10:31 ⸝  I
      [001/009]06/11 10:28 Sub. Call  6
```

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

```
                              Mo 06/11 10:30 ⸝  I
      [001/009]06/11 10:28 Sub. Call  Giulia
```

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

```
                              Mo 06/11 10:29 ⸝  I
      [001/009]06/11 10:28 ⸝ ▤Margherita
```

However, an event such as the use of a lock code is displayed as follows:

```
                              Mo 06/11 10:27 ⸝  I
      [001/009]06/11 10:27 Use lock key     68
```

A appointment event for the switchboard to which no answer was given is displayed as :

```
                                   Mo 06/11 10:32 ⓜ  I
            [004/004]06/11 10:02 Switchboard app.  3
```

Press the key 🔧 to see the associated text:

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

            Wake-up
```

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
            [001/005]06/11 10:34 Device Appoint.  7
```

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
            3
```

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:

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

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

The MEMORY 🏠 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:
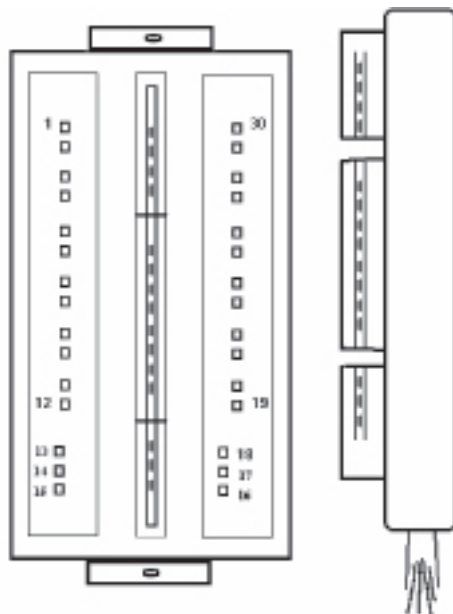
Connection stud
(switchboard-riser)

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).

Name terminal boss (corresponding terminal number)	Mark	Colour of corresponding wire	Switchboard signal analogue
1	V	Coaxial cable (internal wire)	Video signal from camera
2	M	Coaxial cable (sheath)	Video ground from camera
3		Grey-Green	
4		White-Violet	
5		Blue	
6	SR	Red	Lock output (open collector)
7	M	White-grey	Ground
8	F2	White-Orange	F2 output (open collector)
9	F1	Grey_Violet	F1 output (open collector)
10	-L	White-Black	Switchboard active output (open collector)
11	~	Grey red	Supply voltage from type 6923
12	~	Dark grey	Supply voltage from type 6923
13	M	Violet	Ground
14	2	White-Yellow	Cable riser Bus 2
15	1	Red (Ø 0.5)	Cable riser Bus 1

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

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.

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

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.

CAUTION: IF THE FOLLOWING CONSUMER UNIT ART. 945F IS INSTALLED IN PLACE OF A PREVIOUS VERSION, CHECK THAT THE TERMINALS ARE IN THE SYSTEM CONNECTOR AND IN THE SAME POSITION AS IN THE CONNECTOR SUPPLIED WITH THE NEW CONSUMER UNIT.

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 i 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 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

SYMBOL KEY	TELEPHONE KEYS
0 ... 9	0....9
R	*
(bell)	#
(M)	FLASH + 1
(key)	FLASH + 2
(down arrows)	FLASH + 3
(mail)	FLASH + 4
(people)	FLASH + 5
(snowflake)	FLASH + 6
(phone)	FLASH + 7
(hand)	FLASH + 8
R and 1 at the same time	FLASH + 9
R and 2 ABC at the same time	FLASH + 0
R and 3 DEF at the same time	FLASH + *
R and 4 GHI at the same time	FLASH + #

It has been decided to associate R a * e (bell) a # 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 R . If the FLASH key is pressed inadvertently, this can be cancelled by pressing the same key again. In any event the FLASH is cancelled if no digit follows within 5 seconds.

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 (down arrows) ➤ FLASH + 3.
Dial the required internal number.

Confirm by means of (bell) ➤ #.

On answer, transfer the call by means of (people) ➤ 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:

Mark terminal block	945F boss terminal (Number / name)
A	21 / A
M	22 / M
TO	23 / TO
TI	24 / TI
RX	25 / RX
TX	26 / TX

Conductor section				
Terminals	Ø up to 10m	Ø up to 50m	Ø up to 100m	Ø up to 150m
1, 2, B1, B2 (*)	0,5 mm^2	0,5 mm^2	0,75 mm^2	1 mm^2
Cable	Art. 732H, Art. 732I	Art. 732H, Art. 732I	Art. 732H, Art. 732I	Art. 732H, Art. 732I
Electric lock	1,5 mm^2	-	-	-
Others: -, +U, +I, -L (#)	1 mm^2	1 mm^2	1,5 mm^2	2,5 mm^2

SIMPLE AUDIO ENTRANCE PANEL SYSTEM WITH APARTMENT BLOCK SWITCHBOARD TYPE 945F (N° SI226)

Cable riser

Phone
Art. 6601/AU
Art. 660C/AU
Art. 6711/AU
Art. 6611/AU
Art. 661C/AU
Art. 6711/AU

Cable
Art. 732H
Art. 732I

+12
CH
1
2
E+
E-
FP
M
A
B
C
K

Cable
Art. 732H
Art. 732I

Phone
Art. 8879

1
2
4
5
6S
6P
C
B
A
K

Cable
Art. 732H
Art. 732I

Phone
Art. 6209

T1
T2
T3
T4
1
2
4
5
6S
6P
-
+
K
VIDEO
A
B
C

Cable
Art. 732H
Art. 732I

✱

V
M

M
+5
TX
RX
TI
TO
M
A
M
+L
+E
CV
+12

SR
M
F2
F1
-L
~
~
M
2
1

Switchboard
Art. 945F

Cable
Art. 732H
Art. 732I

Power supply
Art. 6923

Mains

PRI

- +U +I

Mains

Power supply
Art. 6922

1 2 B1 B2

Cable
Art. 732H
Art. 732I

Cable
Art. 732H
Art. 732I

✱

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

C0

B2
B1
EXT+
EXT-
VLED
X
M
PA
CA
M
S+
S-
+12V
-L
SR
F2
F1
M

C0

P

C

B2
B1
EXT+
EXT-
VLED
X
M
PA
CA
M
S+
S-
+12V
-L
SR
F2
F1
M

C

P

C -   AUDIO ENTRANCE PANEL ART. 89F3/...
C0- AUDIO ENTRANCE PANEL ART. 89F4
L -   12V ELECTRIC LOCK
K -   PUSH-BUTTON FOR OUTDOOR CALL
P -   LOCK RELEASE CONTROL
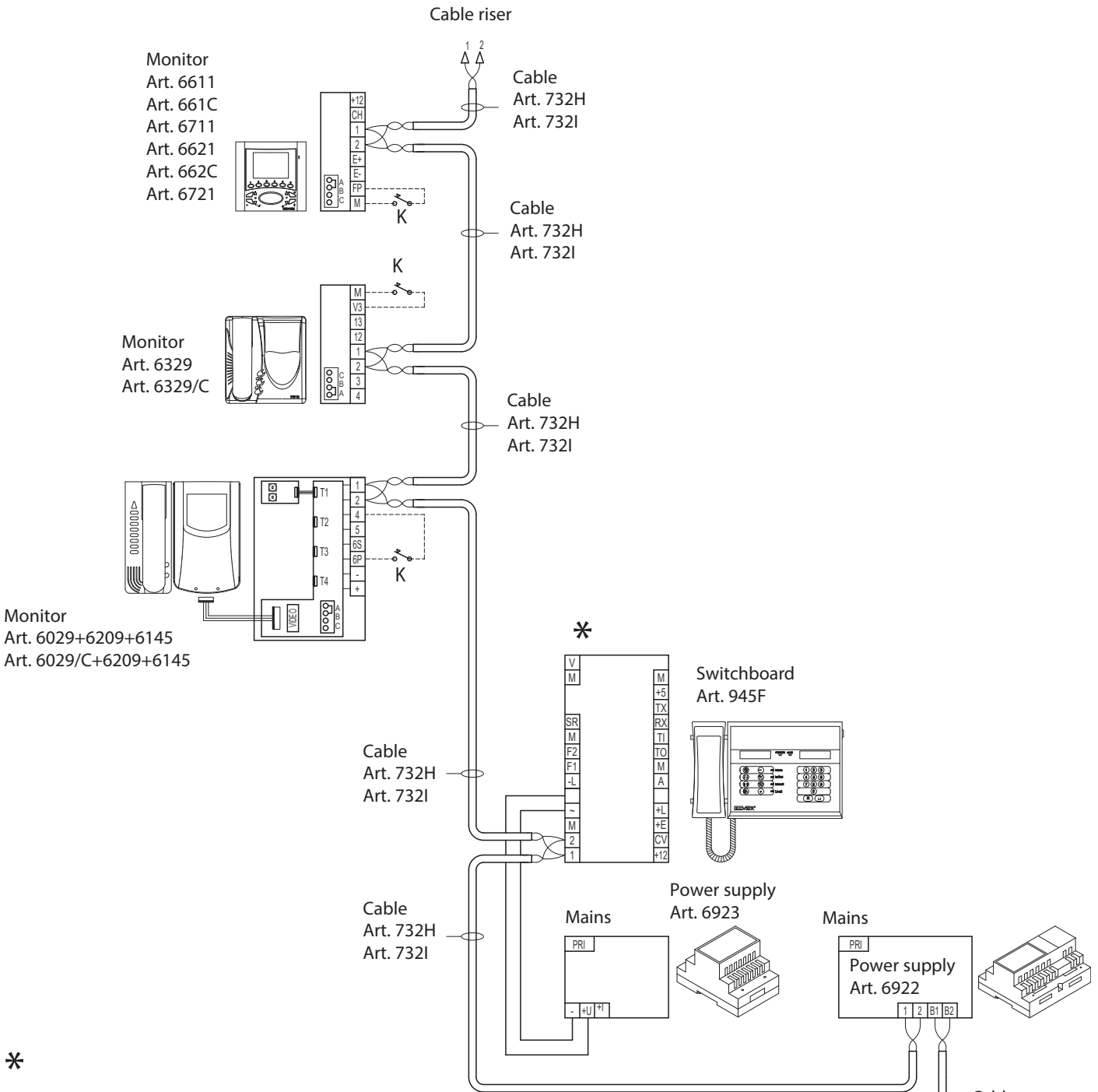
L

L

Cable riser

Monitor
Art. 6611
Art. 661C
Art. 6711
Art. 6621
Art. 662C
Art. 6721

Cable
Art. 732H
Art. 732I

Cable
Art. 732H
Art. 732I

Monitor
Art. 6329
Art. 6329/C

Cable
Art. 732H
Art. 732I

Monitor
Art. 6029+6209+6145
Art. 6029/C+6209+6145

Switchboard
Art. 945F

Cable
Art. 732H
Art. 732I

Power supply
Art. 6923

Mains

Cable
Art. 732H
Art. 732I

Mains

Power supply
Art. 6922

Cable
Art. 732H
Art. 732I

✳

✳

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

D - VIDEO ENTRANCE PANEL
    ART. 89F5/..., 89F5/C
D0- VIDEO ENTRANCE PANEL
    ART. 89F7, 89F7/C
L - 12V ELECTRIC LOCK
K - PUSH-BUTTON FOR OUTDOOR CALL
P - LOCK RELEASE CONTROL
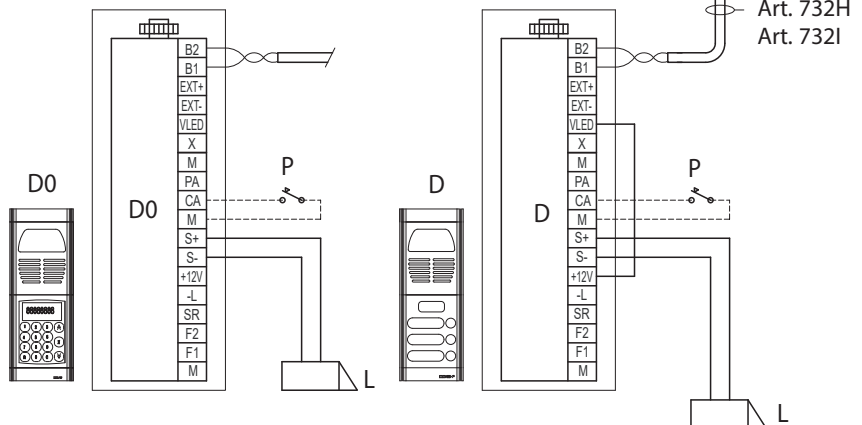
VARIATION ON THE CONNECTION OF THE APARTMENT BLOCK SWITCHBOARD TYPE 945F WITH MONITOR TYPE 6009 - 6009/C BY MEANS OF THE TABLE-TOP CONVERSION KIT TYPE 6A92 (N° SI228).

✱

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

Cable riser

1 2

Cable
Art. 732H
Art. 732I

Mains

PRI

- +U +I

Power supply
Art. 6923

✱

| V |
| M |
| SR |
| M |
| F2 |
| F1 |
| -L |
| ~ |
| ~ |
| M |
| 2 |
| 1 |

| M |
| +5 |
| TX |
| RX |
| TI |
| TO |
| M |
| A |
| M |
| +L |
| +E |
| CV |
| +12 |

Switchboard
Art. 945F

Cable
Art. 732H
Art. 732I

MAX 20 cm

| +12 |
| CH |
| 1 |
| 2 |
| E+ |
| E- |
| FP |
| M |

A
B
C

VIDEO

Monitor
Art. 6029 + 6A92
Art. 6029/C + 6A92

Cable
Art. 732H
Art. 732I

1 2

Cable riser

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.

Cable riser

1 2

Cable
Art. 732H
Art. 732I

Mains

PRI

Power supply
Art. 6923

- +U +I

Mains

PRI

Power supply
Art. 6982

- +U -L

Camera
T.V.C.C.

+T
-
V
M

75 Ohm

✳

V
M

Switchboard
Art. 945F- 945F/T

SR
M
F2
F1
-L
~
~
M
2
1

M
+5
TX
RX
TI
TO
M
A
M
+L
+E
CV
+12

Cable
Art. 732H
Art. 732I

MAX 20 cm

+12
CH
1
2
E+
E-
FP
M

A
B
C

Monitor
Art. 6029 + 6A92
Art. 6029/C + 6A92

VIDEO

Cable
Art. 732H
Art. 732I

1 2
Cable riser

44

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).

Cable riser

1 2

Mains

Power supply
Art. 6923

Relais
Art. 0170/001

Relais
Art. 0170/001

Cable
Art. 732H
Art. 732I

PRI

- +U +I

1 2 3 4 5   1 2 3 4 5

✳

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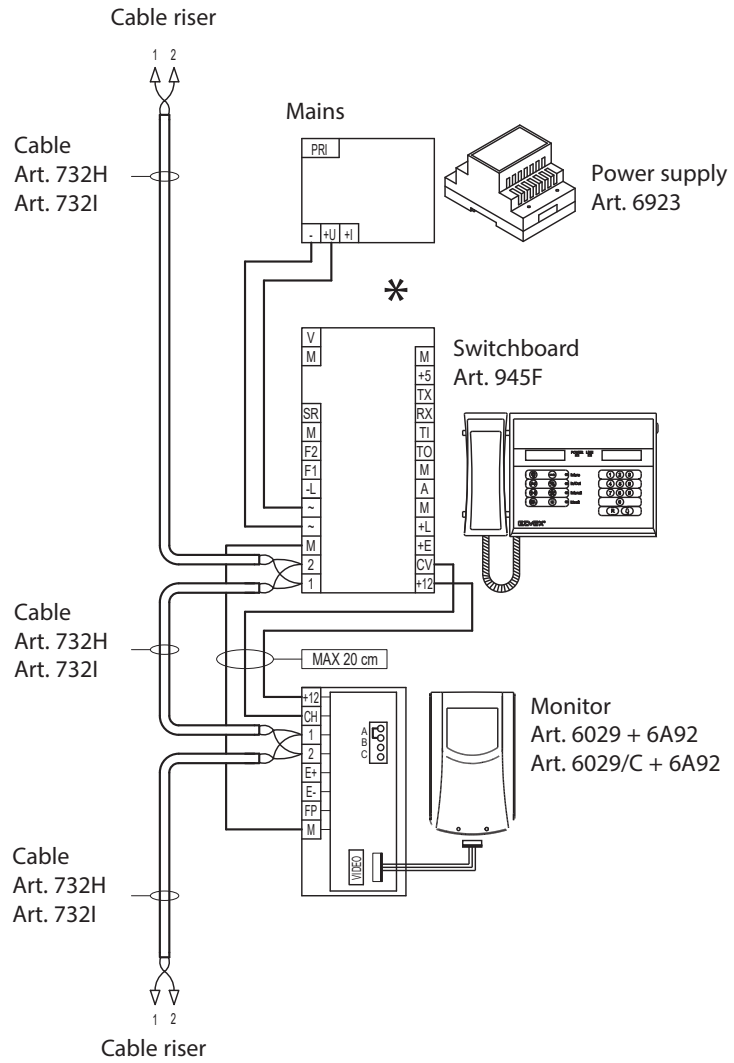may damage the switchboard and/or the
moniteur.

✳

| V |
| M |

Switchboard
Art. 945F- 945F/T

| M |
| +5 |
| TX |
| RX |
| TI |
| TO |
| M |
| A |
| M |
| +L |
| +E |
| CV |
| +12 |

| SR |
| M |
| F2 |
| F1 |
| -L |
| ~ |
| ~ |
| M |
| 2 |
| 1 |

Cable
Art. 732H
Art. 732I

1 2

Cable riser

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).

Transformer
Art. 0832/030

Cable riser

Mains

Power supply
Art. 6923
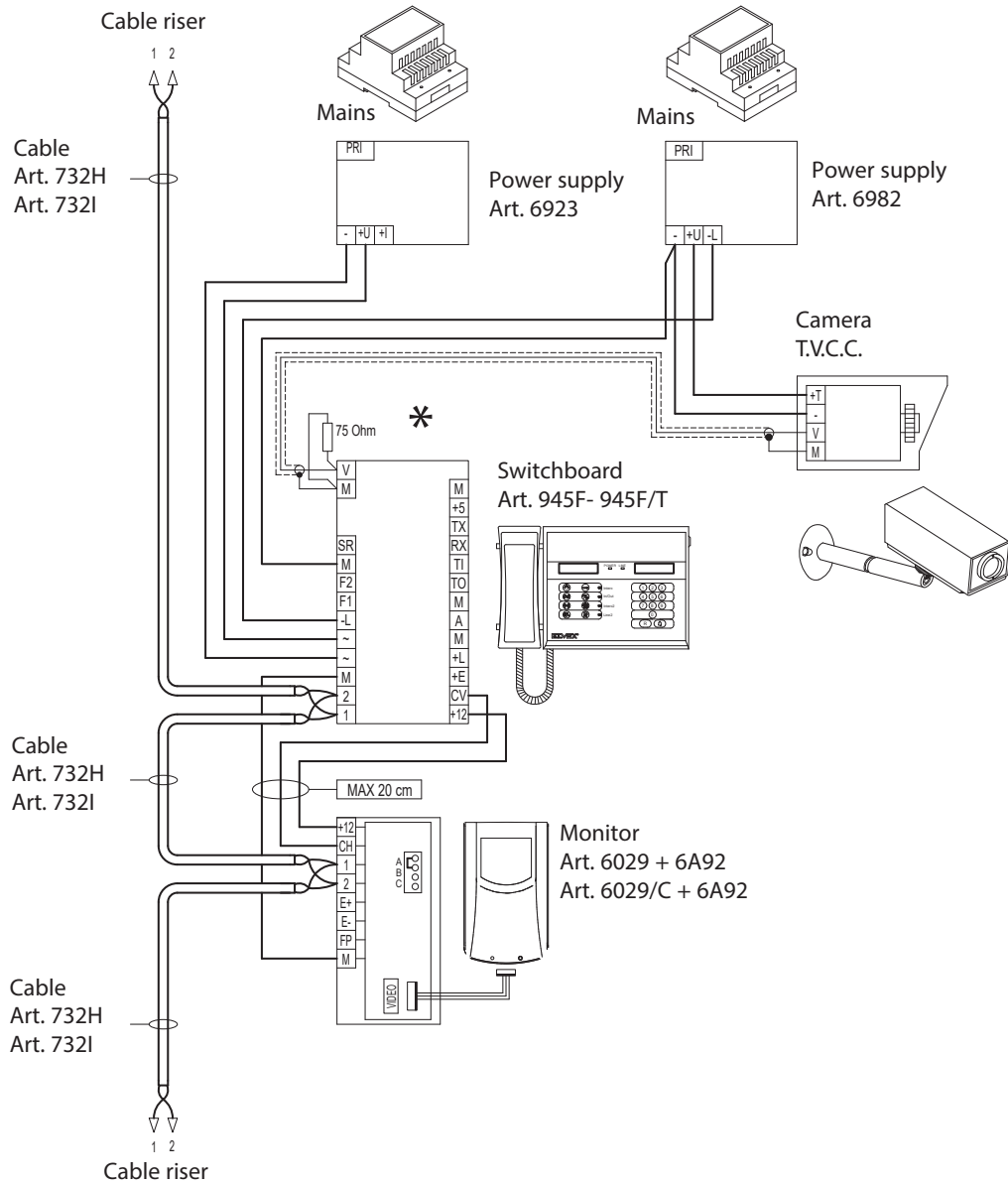
Relay
Art. 0170/001   Mains

Cable
Art. 732H
Art. 732I

✱

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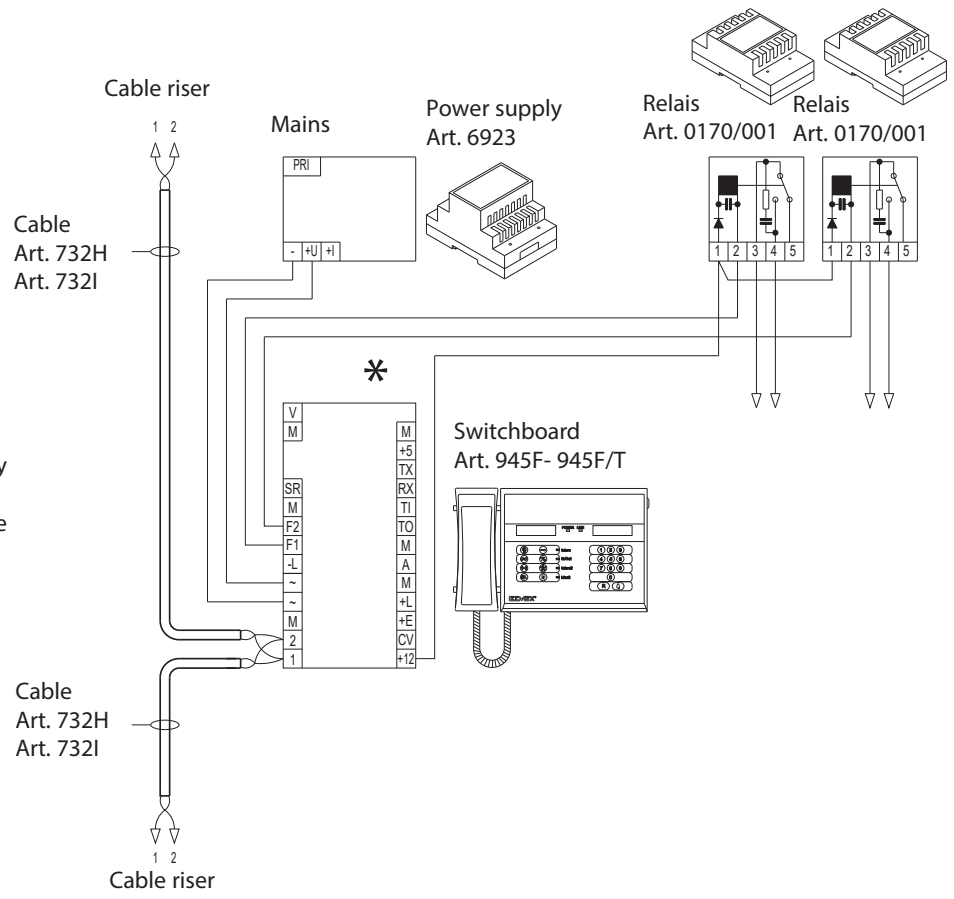may damage the switchboard and/or the
moniteur.

✱

Switchboard
Art. 945F- 945F/T

P

L

Cable
Art. 732H
Art. 732I

L - 12V ELECTRIC LOCK
P - LOCK RELEASE CONTROL

Cable riser

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 VER-
SION (NIGHT SERVICE) (N. SI231).

Cable riser

Power supply
Art. 6923

Mains

Mains

Cable
Art. 732H
Art. 732I

Telephone inteface
Art. 69TF

✱

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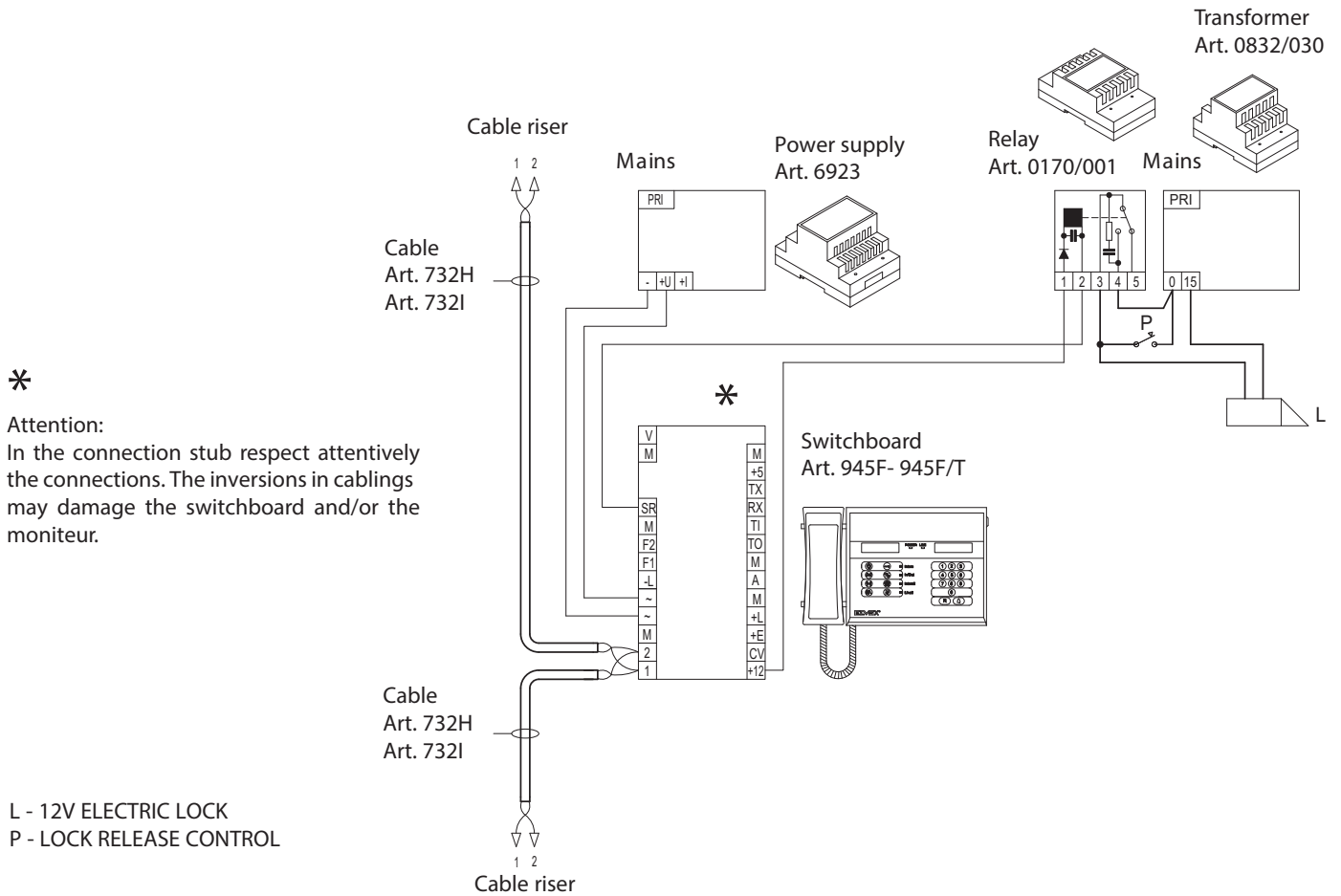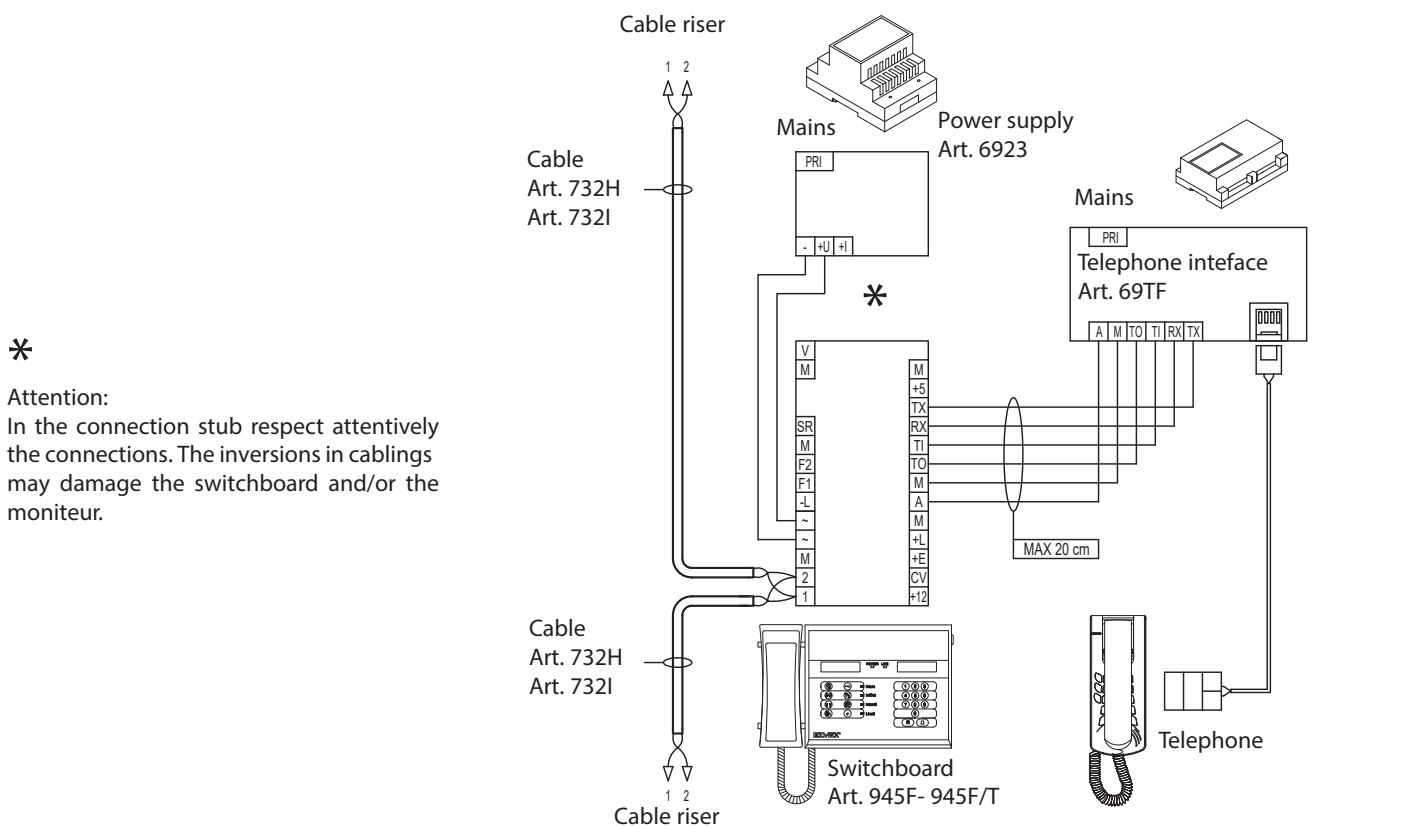may damage the switchboard and/or the
moniteur.

MAX 20 cm

Cable
Art. 732H
Art. 732I

Switchboard
Art. 945F- 945F/T

Telephone

Cable riser

Installation rules

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

Conformity

EMC directive

Standards EN 61000-6-1 and EN 61000-6-3.

REACH (EU) Regulation no. 1907/2006 – Art.33. The product may contain traces of lead.

WEEE - Information for users

If the crossed-out bin symbol appears on the equipment or packaging, this means the product must not be included with other general waste at the end of its working life. The user must take the worn product to a sorted waste center, or return it to the retailer when purchasing a new one. Products for disposal can be consigned free of charge (without any new purchase obligation) to retailers with a sales area of at least 400m^2, if they measure less than 25cm. An efficient sorted waste collection for the environmentally friendly disposal of the used device, or its subsequent recycling, helps avoid the potential negative effects on the environment and people's health, and encourages the re-use and/or recycling of the construction materials.

CE

CE

VIMAR