Installer guide

69DM
Due Fili pillar Digibus back interface
Note 1: If in a “TWO WIRE” riser there is no “Master” entrance panel, the interphones/video interphones must be configured with programmer type 950C, or with a temporary Master entrance panel. For convenience, with the temporary entrance panel it is possible to use the software Save Prog (type 69CD) for PC by using the interfaces types 692I or 692I/U.

Note 2: The interface can be present in a “TWO WIRE” riser also without entrance panel.
GENERAL

Article 69DM is an interface for coupling a DigiBus backbone and an ELVOX TWO-WIRE wiring pillar via 2 separate inputs.

The ELVOX TWO-WIRE system is connected to the interface’s CN1 terminal strip. Associations can be made for individual audio or video entry systems up to complete building complexes. The ELVOX TWO-WIRE system must be autonomously powered with power supplied by the relevant devices. The DigiBus system is connected to the interface’s CN5 terminal strip. No power supply is needed. The 69DM interface must be assigned an identity on DIP-switch S1 (fig. 2).

There is not a theoretical limit to the maximum number of 69DM that can be connected to the DigiBus side. For 2-Wire side every 69DM identifies a single system. So it is possible to give the same ID to all interfaces. We suggest to assign the ID 15, selecting the ON position on the DIP switch S1 (TAB. 1). On the contrary it doesn’t make sense to link two 69DM on the same 2-Wire riser.

The DIP switch allows to assign a unique ID as it happens for entrance panels. As with ELVOX TWO-WIRE entrance panels, the interface’s hardware lets you program a unique physical (hardware) identity code. Unlike ELVOX TWO-WIRE entrance panels, the 69DM interface cannot be assigned the identity 1 because it is not a master entrance panel (see Table 1).

2. ELECTRICAL INSTALLATION

The interface connects to the ELVOX TWO-WIRE system via the CN1 terminal strip on the bottom left of the unit.

TERMINAL STRIP CN1

<table>
<thead>
<tr>
<th>MARKING</th>
<th>DESCRIPTION</th>
</tr>
</thead>
<tbody>
<tr>
<td>B1, B2</td>
<td>ELVOX 2-WIRE BUS</td>
</tr>
<tr>
<td>12</td>
<td>Output +12V max 100 mA always present</td>
</tr>
<tr>
<td>M</td>
<td>Reference ground for 12 and +C</td>
</tr>
<tr>
<td>+C</td>
<td>Output +12V max 100 mA, present only when interface is active</td>
</tr>
</tbody>
</table>

The pull-out terminal strip on the DigiBus side is marked as follows.

TERMINAL STRIP CN5

<table>
<thead>
<tr>
<th>MARKING</th>
<th>DESCRIPTION</th>
</tr>
</thead>
<tbody>
<tr>
<td>6</td>
<td>Data line</td>
</tr>
<tr>
<td>8</td>
<td>Audio line</td>
</tr>
<tr>
<td>9</td>
<td>Data/audio ground</td>
</tr>
<tr>
<td>5</td>
<td>N.C.</td>
</tr>
<tr>
<td>M</td>
<td>Video ground</td>
</tr>
<tr>
<td>V</td>
<td>Video, coax cable core</td>
</tr>
</tbody>
</table>

3. RESETTING

Proceed as follows if you ever need to restore the factory default settings.
1. Press and hold the RES button at the top left of the unit.
2. Press and hold the CLR button at the top left of the unit next to the RES button.
3. Hold down the CLR button while releasing the RES button.
4. When the green LED starts to flash, release the CLR button too.
5. The reset is complete when the green LED starts flashing more slowly.

4. HARDWARE CONFIGURATION

Throughout this manual, component locations are described with the interface positioned with the CN1 terminal strip at the bottom left.

4.1. SIGNALLING (Led)

The green LED located under the DIP switch at the top left functions as follows:
1. The LED flashes rapidly when a reset is being performed, when the unit is switched on for the very first time, and following the reset procedure described in section 3.
2. The LED flashes slowly when the interface is inactive.
3. The LED remains lit when the interface is active or busy with a call.

4.2. BUS TERMINATION

Connector CN2 is located at the bottom right of the interface, to the right of the CN5 terminal strip. Fit a jumper over any of the three positions A-B-C to terminate the video signal on the ELVOX TWO-WIRE bus. Try the jumper in all positions to find the one that gives the best video quality.

4.3. VIDEO TERMINATION

When jumper CN7 is fitted, it provides a 75 Ohm termination for the video signal on the DigiBus side.

4.4. IDENTITY ASSIGNMENT

Device identity is assigned on DIP switch S1 at the top left of the interface. Only identities between 2 and 15 can be assigned.

<table>
<thead>
<tr>
<th>DIP SWITCH</th>
<th>ENTRANCE PANEL ID</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>2</td>
</tr>
<tr>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>NOT ASSIGNED</td>
<td>NOT VALID</td>
</tr>
<tr>
<td>1</td>
<td>2</td>
</tr>
<tr>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>ON</td>
<td>ON</td>
</tr>
<tr>
<td>5</td>
<td>6</td>
</tr>
<tr>
<td>ON</td>
<td>ON</td>
</tr>
<tr>
<td>7</td>
<td>8</td>
</tr>
<tr>
<td>ON</td>
<td>ON</td>
</tr>
<tr>
<td>9</td>
<td>10</td>
</tr>
<tr>
<td>ON</td>
<td>ON</td>
</tr>
<tr>
<td>11</td>
<td>12</td>
</tr>
<tr>
<td>ON</td>
<td>ON</td>
</tr>
<tr>
<td>13</td>
<td>14</td>
</tr>
<tr>
<td>ON</td>
<td>ON</td>
</tr>
<tr>
<td>ON</td>
<td>ON</td>
</tr>
</tbody>
</table>
5. SOFTWARE CONFIGURATIONS

With the exclusion of the interface’s ID assignment, the 950C programmer is required to perform all other configurations. The programmer is connected to connector CN4 at the top right of the unit, accessible from outside the cover. As an alternative you can also use interfaces 6921 or 6921/U and SaveProg PC software (Art. 69CD). The following parameters are configurable:

<table>
<thead>
<tr>
<th>Parameter</th>
<th>Default</th>
<th>Next Item</th>
<th>Previous Item</th>
<th>Subitem</th>
</tr>
</thead>
<tbody>
<tr>
<td>Language</td>
<td>Italian</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>(or local language)</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Number of code digits</td>
<td>8</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Initial number</td>
<td>Blank</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Final number</td>
<td>Blank</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Device numbering</td>
<td>Blank</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Invio presenza</td>
<td>No</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Number of ring tone cycles</td>
<td>2</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Solo audio</td>
<td>No</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Common lock release</td>
<td>Blank</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Common F1</td>
<td>Blank</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Common F2</td>
<td>Blank</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Blocco serratura</td>
<td>No</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Function enabling/disabling</td>
<td>Blank</td>
<td>200 x</td>
<td>O</td>
<td>R</td>
</tr>
</tbody>
</table>

The keys on the programmer are arranged as follows.

![Image of a programmer interface]

The key serves no purpose when the programmer is powered from the bus. There is no auto-shutdown function for the same reason. Press the and keys on the programmer to move to the following item in the main menu.

Select Function: Terminal Mode

The following screen is displayed while waiting for the response from the interface:

Entering Terminal Mode

After a few seconds, the type and version of the interface software appear on the programmer display:

Program: 6901 OK
GS/PM/AA SW 006

When this screen disappears, the first item in the programming menu is displayed. The programming procedure terminates either when timed out or if you press the key from any of the main menu items listed below.

5.1. LANGUAGE

Lingua Messaggi

Italiano

The interface can be programmed to display messages in Italian (or the local or default language) or English. Local languages vary according to the national market. To select your language, simply press for the local language or for English.

Press to cancel. Press to confirm. As with all commands, implementation is confirmed on the first line of the display.

Done! Inglese

The display language now changes.

Entering Terminal Mode

Press to move on to the next item in the programming menu.

5.2. NUMBER OF CODE DIGITS

Press to move to the next menu item and change the number of code digits used by the entrance panel.

Code Digits No.

The available numbering modes are:

- 4 digit coding: the monitors and door entry systems are numbered from 0000 to 9999. If you enter less than 4 digits, they align on the right of the display, and any blank spaces to the left are filled with ‘0’s.
- 8 digit coding: the monitors and door entry systems are numbered from 00000000 to 99999999. If you enter less than 8 digits, they align on the right of the display, and any blank spaces to the left are filled with ‘0’s.

To change the number of digits used, press:

- for 4 digits

- for 8 digits

Press to cancel. Press to confirm. As with all commands, implementation is confirmed on the first line of the display.

5.3. INITIAL NUMBER

Press to move on to the next item in the DigiBus numbering range accepted by the interface. This parameter is left blank by default.
Start Number

Press [OK] to modify the number.

Start Number

Press [R] to cancel the last digit. As soon as you enter a new digit, the previous number is cancelled.

1234567...


Check Other

As the example shows, if any problem is encountered with the order of the numbers in the first line, you are warned to check their correctness. See section 6 for details on how this parameter is used. Press [R] to move on to the next item in the programming menu.

5.4. FINAL NUMBER

Press [R] to move to the next item and change the final number in the DigiBus numbering range accepted by the interface. This parameter is left blank by default.

End Number

Press [OK] to modify the number.

End Number

Press [R] to cancel the last digit. As soon as you enter a new digit, the previous number is cancelled.

End 1234567...

Press [EXIT] to cancel. Press [OK] to confirm. If you enter fewer than the 4 or 8 digits required, any blank spaces to the left are filled with ‘0’s.

As the example shows, if any problem is encountered with the order of the numbers in the first line, you are warned to check their correctness. See section 6 for details on how this parameter is used. Press [R] to move on to the next item in the programming menu.

5.5. DEVICE NUMBERING

Press [R] to move to the next item and change the correspondence between individual DigiBus numbers and the identities of each audio or video door entry system.

Device Number

If a number is displayed, it means that the audio or video door entry system in question (number 1 in the example shown here) is not yet associated, and that the rules given in section 6 therefore apply.

Press [R] and [OK] to select the device to change. In position 1, press [R] to move on to the next item in the programming menu. Alternatively, enter the number of the device you want to change.

Enter device ID

Now press [OK]:

Device Number 45

The first line of the display tells you if any discrepancy is detected.

Out of Range

Press [OK] to skip all intermediate steps and return directly to the previous item in the programming menu. Press [OK] to change the number.

Device Number 45

To cancel the number, simply enter 0.

Device Number 45

Then press [OK] to confirm.

Device Number 45

To enter a number, simply key in the relevant digits.

Device Number 45

If you enter fewer than the 4 or 8 digits required, any blank spaces to the left are filled with ‘0’s.

Device Number 45

Press [EXIT] to cancel. Press [OK] to confirm. The programmer now checks that the number entered is not already associated with another position.

Code 7856

In use by 99

If it is, you are notified as follows. In this example you are warned that the code 7856 is already associated with the device identity 99. If no clashes are found, implementation of the change is confirmed on the first line of the display.

Done! 7856

Press [R] to delete all numbers starting from the location of the current value.

1=Reset Numbers

You are asked to press [1] to confirm.

1=Reset Numbers

Then press [R] or [OK] to cancel the procedure. If you choose to proceed with the number reset, the display reads out:

Please wait...

Then, finally:

Done!

Please wait...

5.6. SEND PRESENCE

Pressing the button takes you to the next item with which you enable the interface to periodically send a presence warning to the Due Fili cable riser required for certain types of installation so that the speech units that control self-starting are constantly informed. An example is the speech units in the 4100x series.

The current value is shown on the display:

Send Presence

1 period
On entry of digits, the number of cycles can be modified as required:

Value 0 disables the function:

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

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

5.7. NUMBER OF RING TONE CYCLES

Press to move to the next item and change the number of ring tone cycles sent by the interface to the ELVOX TWO-WIRE wiring pillar. Ring tones follow a rhythm of 1 second of sound to 2 seconds of pause, so that each complete cycle lasts 3 seconds. The figure shown is the current setting:

Enter a new number to change the number of cycles:

Press to cancel. Press to confirm. As with all commands, implementation is confirmed on the first line of the display.

Press to move on to the next item in the programming menu.

5.8. AUDIO ONLY

The interface Art. 690M features the video modulator and emits video calls into the Due Fili bus. If used in an installation, or part of an installation, which must be audio-only, then you must configure the interface to be adapted to what you want.

Pressing the button takes you to the next item:

with you select NO = with video, with YES = audio only.

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

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

5.9. COMMON LOCK RELEASE

Press to move to the next item and program what lock actions the interface must notify Digibus of. In practice the lock release output of the Digibus entrance panel downstream can be activated either by a direct command or indirectly, if the lock of another ELVOX TWO-WIRE entrance panel (up to a maximum of four) is released. This parameter is left blank by default.

Enter a number between 1 and 15, being the ID of the entrance panel (in this case the first of four possible choices) to whose lock release the interface must respond.
5.12. LOCK INTERLOCK

Activation of the lock interlock enables operation of the lock only when the electronic unit is in call, conversation or self-start status.

Press \( \text{F1} \) to activate the interlock; press \( \text{F0} \) to deactivate the interlock. Press \( \text{F2} \) to confirm the change.

5.13. ENABLING

ONE or more electronic units can be configured in such a way as to inhibit or enable lock release, F1 and F2 control signals received from indoor units. Letter D is used to indicate the disabled status of Direct control signals transmitted to the electronic unit. Letter C is used to indicate the enabled status of indirect control signals, i.e. activated at the same time as others, for example the lock release of a different electronic unit (see lock / F1 / F2 Common, paragraphs 5.9, 5.10, 5.11).

Use buttons \( \text{R} \) and \( \text{F} \) or the numeric keypad to select the identifier of the indoor unit to which to apply the enabling and confirm with \( \text{F2} \).

Once found, enter changes with \( \text{F0} \). Using buttons \( \text{F1} \) to \( \text{F6} \) enable the controls, see Table:

<table>
<thead>
<tr>
<th>BUTTON</th>
<th>ACTION</th>
</tr>
</thead>
<tbody>
<tr>
<td>0</td>
<td>Direct lock</td>
</tr>
<tr>
<td>1</td>
<td>F1 direct</td>
</tr>
<tr>
<td>2</td>
<td>F2 direct</td>
</tr>
<tr>
<td>3</td>
<td>Common Lock</td>
</tr>
<tr>
<td>4</td>
<td>F1 common</td>
</tr>
<tr>
<td>5</td>
<td>F2 common</td>
</tr>
</tbody>
</table>

Default = direct commands enabled, indirect commands disabled

6. NUMBER CORRESPONDENCE

The ELVOX TWO-WIRE system uses an audio/video door entry system numbering scheme based on the physical address of each device, and ranging from 1 to 200. This applies irrespective of the fact that there are two numbering modes: (up to) 4 and (up to) 8 digits. The DIGIBUS system on the other hand identifies audio/video door entry systems by means of an address of 4 digits (up to 9,999) or 8 digits (up to 99,999,999). There are various ways of getting these two quite different systems to work together.

1. We can remap only those DIGIBUS numbers needed to enter the DIGIBUS 4 or 8 digit code in the position in the table described in section 5.5 and corresponding to the ELVOX TWO-WIRE number intended. It
is irrelevant whether we encode the ELVOX TWO-WIRE audio-video door entry system first or complete the table first.

2. The programming described in sections 5.3 and 5.4 defines a range of DIGIBUS numbers corresponding at the most to the physical numbers 1 to 200.

If the position in the table in section 5.5 corresponding to the caller is programmed, the address contained in it is used for messages from the ELVOX TWO-WIRE system to the Digibus. If the initial number has been programmed, the calling Digibus address takes this number, adds the ELVOX TWO-WIRE address and subtracts 1. For example, if the initial number is 1234 and the ELVOX TWO-WIRE address is 79, the Digibus address used is 1234 + 79 – 1 = 1312. In other cases the message is not forwarded to the Digibus network. Reference to the table in section 5.5 is also made to forward messages coming into the ELVOX TWO-WIRE system from the Digibus network. 5. If the number is found in the table, the corresponding index is used as destination. Otherwise the initial and final numbers from the evaluated and set respectively to 1 and 200 if not programmed. If the Digibus number falls within the interval between the initial and final numbers inclusive, the ELVOX TWO-WIRE address takes this number, subtracts the initial number and adds 1. For example, if a call arrives for 1312, then 1312 – 1234 + 1 = 79. In other cases the call is not forwarded to any destination.

7. FUNCTION CORRESPONDENCE
The ELVOX TWO-WIRE system’s F1 and F2 commands are translated into the corresponding Digibus F1 and F2 commands. The first 6 actuators are translated as F3, F4, ..., F8.

8. FUNCTIONING WITH SWITCHBOARD
Proceed as follows to perform the basic functions when using the interface in conjunction with the Digibus 945B switchboard.

8.1. CALLS FROM ENTRANCE PANEL
- The switchboard operator receives the call.
- He speaks with the external speech unit.
- He calls the internal number required by pressing the \[button\] on its own or by entering the number on the keypad and then pressing .
- He presses \[button\] to connect the entrance panel and the internal user.

8.2. INTERCOMMUNICATING CALLS VIA THE SWITCHBOARD
Two internal users on the same ELVOX TWO-WIRE system can call each other by means of a specially programmed button. They can also, however, ask the switchboard operator to put them in touch. The steps required to do this are as follows.
- The switchboard operator receives a call, makes a call directly, or takes a call from the queue.
- When the first user answers, the operator then enters the number of the second user, and calls him by pressing \[button\]. The first user enters wait status and the second user system rings and waits for a reply.
- As soon as the second user replies, the operator presses \[button\] to place the two users in communication.
- If the second user called does not reply or is engaged, to resume the call with the first user press “R” \[button\] and call back the first user entering the code followed by the “Bell” \[button\].

9. DOOR LOCK TYPICAL CONFIGURATION

9.1 WITHOUT 2-WIRE ENTRANCE PANELS

In this case the P0 push button (door lock function) of every monitor or interphone device, has to be programmed into the 69DM. If, as suggested before, every 69DM of the system was identified by ID 15, the programming procedure is the same for every device.

Nel caso si fossero usati ID diversi, si dovrà usare montante per montante l’ID della rispettiva interfaccia, 15 nell’esempio.

9.2 WITH 2-WIRE ENTRANCE PANELS
It is not important if the 2-Wire entrance panel is master or slave. If you want to open the local door lock together with the main door lock, you have to remember to assign the common door lock with the same ID of the 69DM. The P0 bush buttons have to be programmed like the previous paragraph.

10. TYPICAL CALL CONFIGURATION

10.1 HOW TO SET STARTING AND FINAL NUMBERS (PARAGRAPHS 5.3 AND 5.4)
For example think we have set the riser’s ID interphones starting from 3 till 42 (this is because it is not necessary to start from 1). For example think we have an entrance panel type 1287 with which we want to call interphone ID 3 with \[button\] and interphone 4 with number \[button\] and so on. We have to set the STARTING NUMBER described on paragraph 5.3 as:

8
STARTING = 100 – 3 + 1 = 98

The FINAL NUMBER described on paragraph 5.4 is:

FINAL = 98 + 42 – 3 = 137

So in STARTING NUMBER we program 98 and in FINAL NUMBER 137.
Anyway we suggest to avoid difficult numbering. If IDs are assigned starting from 1, the STARTING NUMBER is equal to the lower number we want to use by keypad. Also for this reason it is good to use a standard criteria for example dividing numbers on buildings. For example for the first building you can use those numbers (if every riser’s IDs start from number 1):

<table>
<thead>
<tr>
<th>Building</th>
<th>From:</th>
<th>To:</th>
<th>STARTING NUMBER</th>
<th>FINAL NUMBER</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>1 2 3</td>
<td>1 2 3</td>
<td>101</td>
<td>140</td>
</tr>
<tr>
<td>2</td>
<td>1 2 3</td>
<td>1 2 3</td>
<td>201</td>
<td>240</td>
</tr>
<tr>
<td>....</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>9</td>
<td>1 2 3</td>
<td>1 2 3</td>
<td>901</td>
<td>940</td>
</tr>
</tbody>
</table>
In this example we stopped with 9 types 69DM, but we could go on.

It is also possible to use the same numeration between main DigiBus entrance panel and secondary 2-Wire entrance panels, without mapping again IDs. In this case the maximum number of interphones and monitors has to be 200. For example thinks to have 5 buildings with 20 interphones for every building. (5 buildings From left to right ID 1..20, 21..40, 41..60, 61..80, 81..100. 5 69DM with starting-finish 1-20, 1-40, 1-60, 1-80, 1-100).

Mapping again the numeration into 2-Wire stairs entrance panels with display and keypad, the limit of 200 doesn’t exist anymore, and the system can be configured in this way:

(5 buildings. From left to right ID 1..20, 1..20, 1..20, 1..20, 1..20. 5 69DM with starting-finish 1-20, 21-40, 41-60, 6-80, 81-100).

Into the entrance panels with display and keypad is necessary for example to do the following programming:

- Stairs 3:
  - For ID=1 the code to be programmed is 41
  - For ID=20 the code to programmed is 60

- Stairs 5:
  - For ID=1 the code to be programmed is 81
  - For ID=20 the code to be programmed is 100

The push button entrance panels have not to be mapped again. The only reason to map again is if the push buttons aren’t utilized consecutively starting from number one (it means without jumps or missing push buttons). On the contrary, you have to refer to electronic unit’s manual instructions.
11. OPEN BRIDGE SYSTEM VOLUME CONTROL

11.1 Trimmer 69DM functions
TX 2 Fili volume control towards the inside
RX 2 Fili volume control towards the outside
COMP 2 Fili Due Fili compensation control
COMP DB Digibus compensation control

First switch on OPEN BRIDGE system with External Panel series 1200 and 1300 (the 69DM and Digibus panel controls must be kept at their default values)

11.2 Procedure for sound control in the event of Larsen effect in the system
1. Turn the trimmer TX2F on the 69DM anti-clockwise to lower the volume towards the inside
   a) If the internal volume is acceptable without the Larsen effect go to point 7
   b) If the internal volume is not acceptable, keep the internal level with a slight Larsen effect and go to the next point
2. Turn the trimmer COMP 2F on the 69DM clockwise until the Larsen effect is eliminated
   a) If the internal sound is acceptable, go to point 7
   b) If the internal sound is not acceptable, go to the next point
3. Turn the trimmer TX 2F on the 69DM clockwise to obtain an acceptable internal volume
   a) If the internal sound is acceptable, go to point 7
   b) If the internal sound is not acceptable because as the level increases the Larsen effect appears again, keep that level and go to the next point
4. Turn the trimmer COMP 2F on the 69DM clockwise again until the Larsen effect is eliminated
   a) If the internal sound is acceptable, go to point 7
   b) If the Larsen effect persists, go to the next point
5. Turn the trimmer RX 2 fili on the 69DM anti-clockwise to lower the volume towards the Digibus panel
   a) If the Larsen effect disappears and the internal volume is acceptable go to point 7
   b) If the Larsen effect persists slightly, go to the next point
6. Turn the trimmer COMP DB on the 69DM anti-clockwise to eliminate the Larsen effect
   a) If the internal sound is acceptable, go to point 7
   b) If the level of the internal sound is not acceptable, go to point 3 for final adjustment
   c) If the second adjustment of the trimmer COMP DB does not eliminate the Larsen effect, go to point 7
7. If required, turn the trimmer RX 2 Fili on the 69DM clockwise to obtain an acceptable outside volume without causing any Larsen effect
   a) If the external sound is acceptable, go to point 8
   b) If the external sound is acceptable but there is a slight Larsen effect, go to point 6
8. Adjust the balance on the Digibus panel
9. End of system calibration

11.3 Procedure for controlling the system sound without the Larsen effect
1. Check and if necessary set the Digibus panel controls to the default values
   a) If this causes the Larsen effect, check or set the controls on trimmers TX2F, RX2F, COMP 2F and COMP DB on the 69DM to mid-stroke and follow the procedure for adjusting the sound if the system presents the Larsen effect
   b) If the Larsen effect is not caused, go to the next step
2. Turn the trimmer TX 2F on the 69DM clockwise to obtain an acceptable internal volume
   a) If the internal sound is acceptable, go to point 6
   b) If the internal sound is not acceptable because as the level increases the Larsen effect appears, keep that level and go to the next point
3. Turn the trimmer COMP 2F on the 69DM clockwise again until the Larsen effect is eliminated
   a) If the internal sound is acceptable, go to point 6
   b) If the Larsen effect persists, go to the next point
4. Turn the trimmer RX 2 fili on the 69DM anti-clockwise to lower the volume towards the Digibus panel
   a) If the Larsen effect disappears and the internal volume is acceptable go to point 6
   b) If the Larsen effect persists slightly, go to the next point
Legenda for wiring diagram

* BUS TERMINATION

This note applies to all devices with Due Fili Plus technology equipped with "BUS termination connector or dip-switch", which is identified by the screen-printed letters "ABC" and marked on the wiring diagrams with *.

For correct adaptation of the line, make the setting according to the following rule:

Maintain position "A" if the BUS enters and exits from the device;
Move to position "B" (if Elvox cable) or to position "C" (if CAT5 twisted pair cable) if the BUS line terminates in the device itself.

*A* = NO TERMINATION
*B* = TERMINATION 100 ohm
*C* = TERMINATION 50 ohm

INSTALLATIONS WITH PASSIVE DISTRIBUTOR 692D
(DIN rail version)

ALWAYS use output 1 on distributor type 692D (the only one that has no termination jumper).
For termination of type 692D: If outputs "OUT", "2", "3" or "4" are not used, KEEP the jumper on the "TOUT", "T2", "T3" or "T4" connector. The default "TOUT" connector is in the "100” position (Elvox cable), position it to “50” only if using a CAT5 twisted pair cable.

INSTALLATIONS WITH ACTIVE DISTRIBUTOR 692D/2.
The termination jumper must be positioned on "B" (for Elvox cable) or on "C" (for CAT5 twisted pair cable) IF AND ONLY IF the BUS terminates at the device itself. It must be left on “A” if effecting entry-exit using terminals 1-2 on 692D/2.

### Minimum wire section (in mm2) for systems with DIGIBUS technology

<table>
<thead>
<tr>
<th>Conductors</th>
<th>Ø up to 50 m.</th>
<th>Ø up to 100 m.</th>
<th>Ø up to 200 m.</th>
<th>Ø up to 500 m.</th>
</tr>
</thead>
<tbody>
<tr>
<td>4, 5</td>
<td>0.75 mm²</td>
<td>1 mm²</td>
<td>1.5 mm²</td>
<td>4 mm²</td>
</tr>
<tr>
<td>+, -, 15, 0, S1, lock</td>
<td>1 mm²</td>
<td>1.5 mm²</td>
<td>2.5 mm²</td>
<td>-</td>
</tr>
<tr>
<td>Others</td>
<td>0.5 mm²</td>
<td>0.75 mm²</td>
<td>1 mm²</td>
<td>2.5 mm²</td>
</tr>
<tr>
<td>Video</td>
<td>Coaxial cable 75 Ohm (RG59 or RG11 double insulation)</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Legenda for wiring diagram

<table>
<thead>
<tr>
<th>Minimum conductor section</th>
</tr>
</thead>
<tbody>
<tr>
<td>Terminals</td>
</tr>
<tr>
<td>Electric lock</td>
</tr>
<tr>
<td>Others: +U, +I, -L (#)</td>
</tr>
</tbody>
</table>

# Additional power supply units (type 6923, 6582, 6962) must be installed as near as possible to the device to which they are connected.
VIDEO DOOR ENTRY SYSTEM WITH DIGIBUS ENTRANCE PANEL, INTERFACE ART. 69DM AND ELVOX TWO-WIRE VIDEO DOOR ENTRY SYSTEM WIRING PILLAR (REF. SI565)

B1 - MONITOR SERIES 7200 Art. 7211
B2 - MONITOR SERIES 6600
   Art. 6621, 662C, 6721
   Art. 6611, 661C, 6711
   Art. 6xxx/F
B3 - MONITOR SERIES 6800
   Art. 6801, Art. 68MV + 68M1
B4 - MONITOR SERIES PETRARCA
   Art. 6009/C + 6209 + 6145
   Art. 6009 + 6209 + 6145
B5 - MONITOR SERIES GIOTTO
   Art. 6309, 6309/C, 6329, 6329/C, 6349, 6359
Dd - VIDEO ENTRANCE PANEL WITH PUSH-BUTTONS Art. 8845/C, 1285
D0d - VIDEO ENTRANCE PANEL WITH KEYPAD AND DISPLAY Art. 8847/C, 1287
F - SYSTEM POWER SUPPLY UNIT
K - CALL BUTTON OUTSIDE DOOR
L - 12Vdc ELECTRIC LOCK
P - DOOR OPENING COMMAND
X - CABLE Art. 732H, 732I
T - TRANSFORMER Art. M832
CONNECTING A DIGIBUS MAIN ENTRANCE PANEL AND INTERFACE ART. 69DM TO CONNECT UP ELVOX 2-WIRE SECONDARY ENTRANCE PANELS (RIF. SI566)

C- AUDIO ENTRANCE PANEL “Two wire ELVOX”
D- VIDEO ENTRANCE PANEL “Two wire ELVOX”
Ddd- VIDEO ENTRANCE PANEL WITH PUSH-BUTTONS Art. 8845/C, 1285
DdDd- VIDEO ENTRANCE PANEL WITH KEYPAD AND DISPLAY Art. 8847/C, 1287
F- SYSTEM POWER SUPPLY UNIT
H- ADDITIONAL POWER SUPPLY Art. 6582
I- SEPARATOR Art. 6925
J- CONCENTRATOR Art. 692C
K- CALL BUTTON OUTSIDE DOOR
L- 12Vdc ELECTRIC LOCK
P- DOOR OPENING COMMAND
X- CABLE Art. 732H, 732I
T- TRANSFORMER Art. M832
To deactivate the current generator, cut the metal jumper "J1" on the back (bottom right) of the electronic control unit.