

FREE-HANDS SYSTEMS

duo[®]

WITH SINTHESI PANEL

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FREE-HANDS SYSTEMS DUO WITH SYNTHESI PANEL

The system offers typical free-hands features, i.e.:

- Electronic call from the outside push button panel to the indoor set.
- Conversation from outdoor station to indoor station and vice versa.
- Electric lock opening from the indoor set.
- Possibility of an additional electric control from the indoor set (for example for stairs lighting).

The following installation are only possible:

- Connection to 1 outdoor station.
- Connection to 2 outdoor stations with automatic switching.

The secrecy of conversation function requires a wire more than the normal system in the cable conduit. The phone yield of the new system is higher, since a duplex telephone wiring with electronic balancing has been used. In the case of "speech" on one of the two channels, balancing drastically reduces the other channel, this avoiding the Larsen effect.

The transmission and reception levels are calibrated on optimum value during production. The installer can only adjust amplification towards the outside by acting on the potentiometer mounted in the loudspeaker module Ref. 1145/75. Amplification towards the indoor set is not adjustable.

The new indoor set Ref. 752/33 is compatible and interchangeable with the previous indoor sets Ref. 752/23, Ref. 752/231 and Ref. 4340/23, the same for the power supply.

GENERAL INSTALLATION RULES

For a correct installation of systems the following must be kept in mind:

- System wires must be introduced into metal or plastic tubes, where there shall be no other wire, such as stairs lights lifts, or energy distribution net wires.
- Use twisted coupled wires from power supply to outdoor set:
 - One couple from microphone.
 - One couple for loudspeaking receiver.
- System wires diameter depends on connections lengths, as shown in the side table.

	Section mm ²	Diameter mm	Distance m
Speech circuit and call	0,5	8/10	50
	0,5	8/10	100
	0,8	10/10	200
	1	12/10	300
Door opener	0,5	8/10	50
	0,8	8/10	100
	1	8/10	200
	1,6	8/10	300

Calls from the outdoor station come directly on the indoor set loudspeaker operated by means of a determined frequency. Also foresee wires for push button panel lamps lighting with a separate transformer of adequate power (up to 6 W, the system power supply can be used) and wires for electric lock opener button next to the door.

Name tag light bulb uptake is shown in the following table:

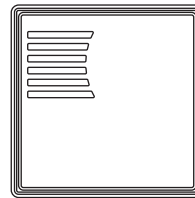
Ref.	Description	Power [W]
1145/71	Microphone module with 1 button	0,35
1145/72	Microphone module with 2 buttons	0,35
1145/11	Module with 1 button	0,35
1145/12	Module with 2 buttons	0,35
1145/13	Module with 3 buttons	0,7
1145/14	Module with 4 buttons	0,7
1145/50	Repertory/house number module	0,7

FREE-HANDS DOOR UNIT

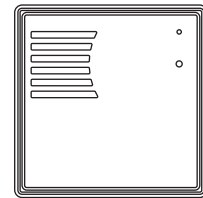
The DUO free-hands system door unit consists of two separate Synthesi panel range modules only.

The Synthesi two-channel door unit consists of the following parts:

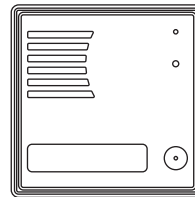
- Loudspeaker module **Ref. 1145/75**
- Microphone module without buttons **Ref. 1145/70**
- Microphone module with 1 button **Ref. 1145/71**
- Microphone module with 2 buttons **Ref. 1145/72**



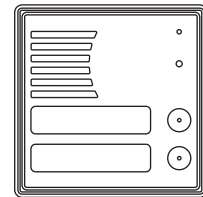
Ref. 1145/75



Ref. 1145/70

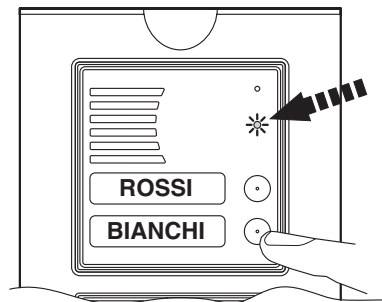


Ref. 1145/71



Ref. 1145/72

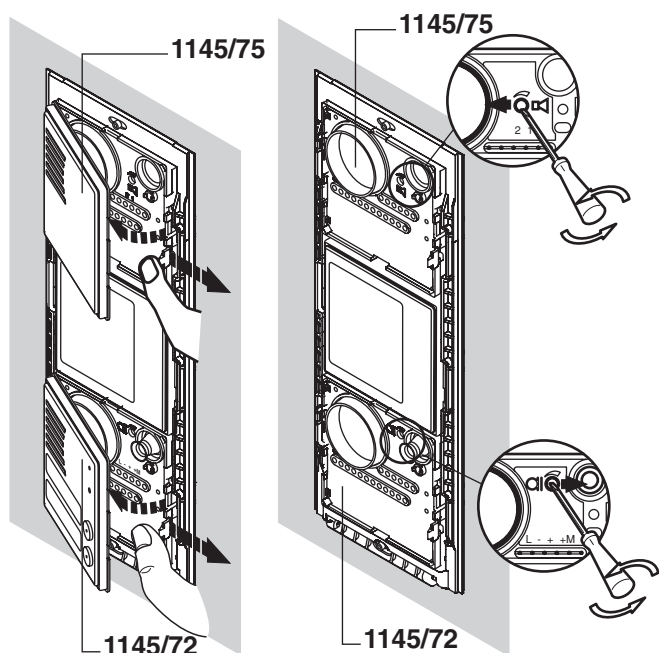
Module dimensions are: 90 x 90mm.



The microphone modules have a "call feedback" function. A visual signal indicating that the call is actually being placed (blinking LED) will be generated by the door unit when a call is being made by any module with buttons.

IMPORTANT: This service is not available in 12 Vac call systems (Jolly or Superjolly 1st series models) and if button common contacts (G/T) are separated.

The transmission and reception levels are calibrated by default to optimal values. External amplification can be adjusted by means of the potentiometer on the 1145/75 speaker module. Amplification to apartment station cannot be adjusted. The potentiometer fitted in the microphone module acts on the apartment station transmission level only when used as a spare in old Superjolly systems where the + terminal is connected instead of the +M terminal.



DESCRIPTION OF TERMINALS

Speaker module Ref. 1145/75

- 1 } Speaker signal
- 2 }

Microphone modules Ref. 1145/70- /71- /72

- + Microphone signal positive
- +M Microphone signal positive for Superjolly apartment stations
- Microphone negative signal
- L Call feedback LED input
- ~0 } Button and name tag light LED power
- ~12 }
- G/T Call button common (Ref. 1145/71- /72 only)
- U1 Call button (Ref. 1145/71- /72 only)
- G/T2 Call button contact 2 (Ref. 1145/72 only)
- U2 Call button (Ref. 1145/72 only)

INTERCHANGEABLE DEVICES

The Synthesi door units are electrically compatible with Kombi door unit modules and with 4340/27 door units for 625 panels. The frames and holders for fastening to the flush-mounting box must be replaced to fit replacements in Kombi modules. The flush-mounting box must also be replaced for panels with 4340/27 door units. The correspondence between terminals of the various modules is shown in diagram SC101-0211.

SINTHESI PANEL

The module consists of anodised aluminium profile modular elements which can be fitted in specific frames. The innovative feature of this system consists in the possibility of vertical or horizontal installation. Furthermore, the flush-mounting boxes can be coupled by means of shims to create various panel types and configurations with a small number of components. The advantage of needing to stock fewer components is relevant for both wholesalers and installers. Module installation is simple thanks to the pre-wired connections on the modules and system terminal boards on extractable carriages.

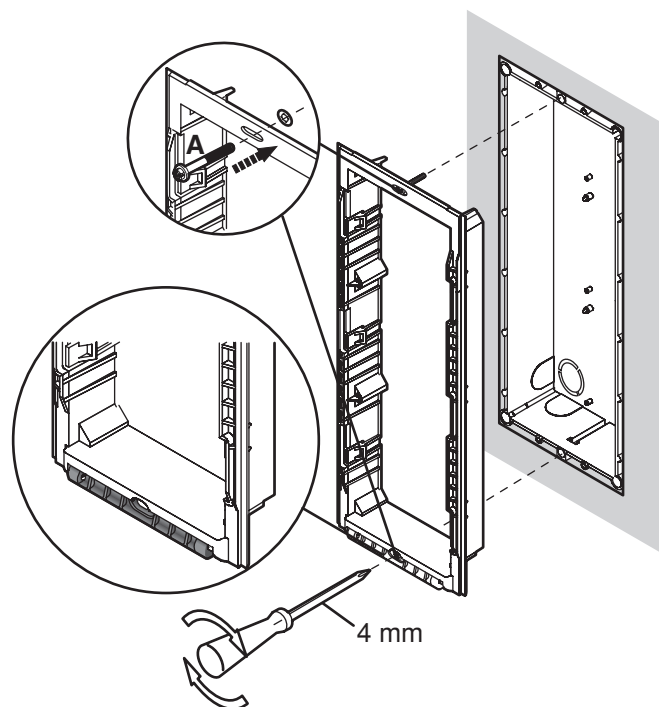
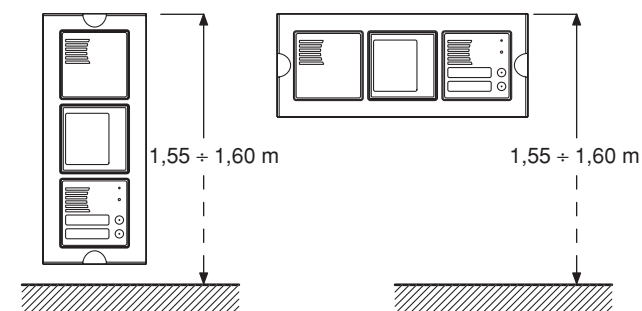
- The following installations are possible:
- Flush-mounting
 - Wall-mounting
 - Half flush-mounting on pillar (max. 3 modules)

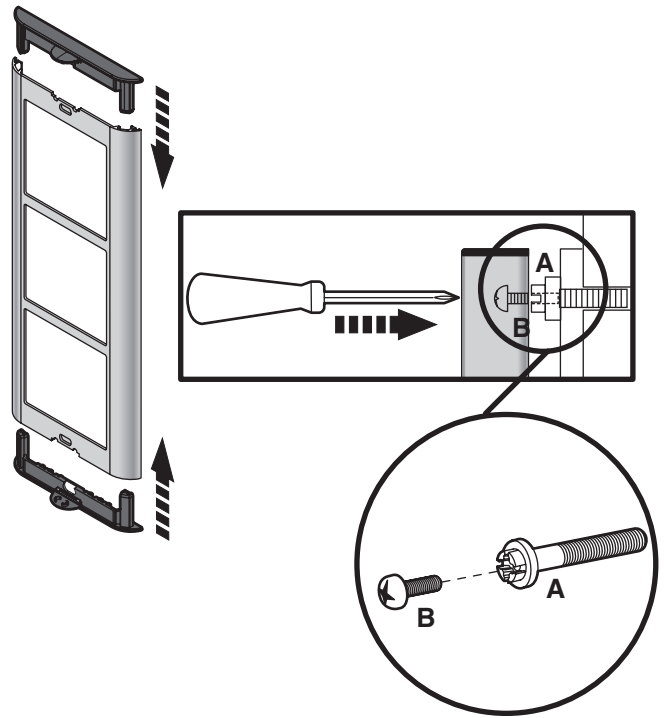
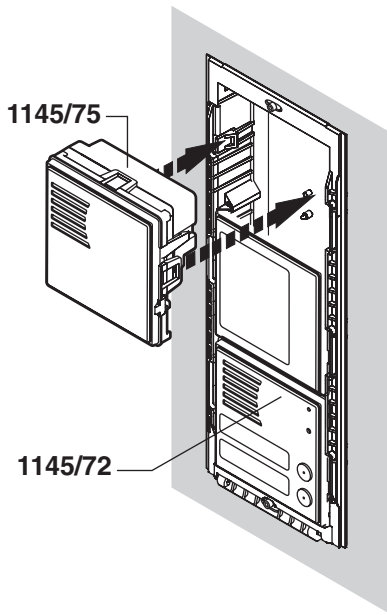
- The system employs the following accessories:
- Flush-mounting boxes which can be jointed together
 - Frames and holder frames (flush-mounting version)
 - Wall cover frames (flush-mounting version)
 - Rain hoods (flush-mounting version)
 - Case and hood (wall-mounting version)

Refer to the "Door Phone-Video Door Phone Technical Manual", "Synthesi Panel" section for a description of the components and accessories needed to install the panel.

INSTALLATION

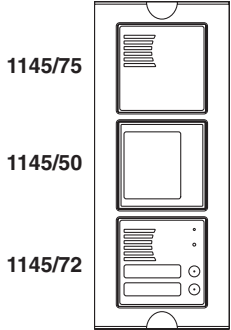
You are advised to install the modules at the heights shown below according to the required system configuration.





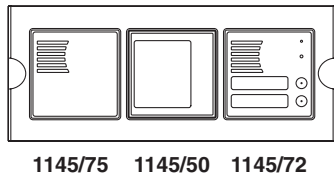
MODULE POSITIONING EXAMPLES

Vertical installation

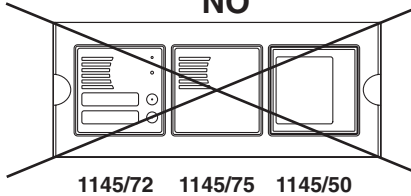


Horizontal installation

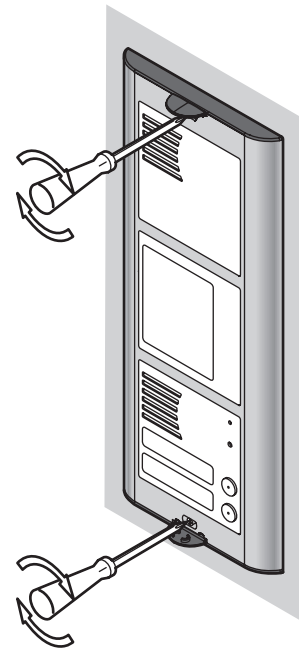
OK



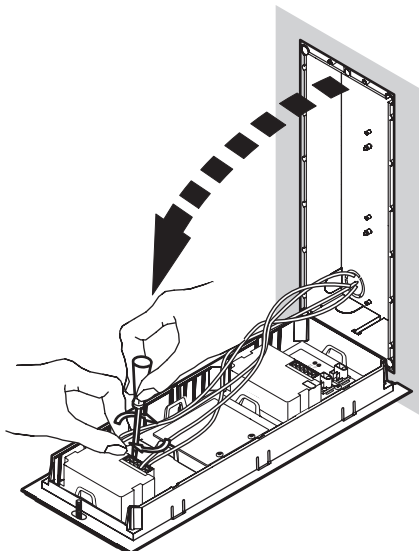
NO



Arrange an additional Sinthesi module (e.g. house number, blank module, etc.) between the speaker module (1145/75) and the microphone (1145/70, 1145/71, 1145/72).



The procedure for horizontal installation of module holders and frames is similar to that described above. The frame hinge will be found on a side instead of on the bottom and will consequently open horizontally. The modules are fastened to the frame in the same way, regardless of the direction of development of the panel.



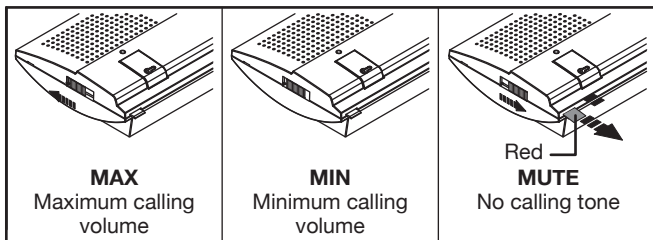
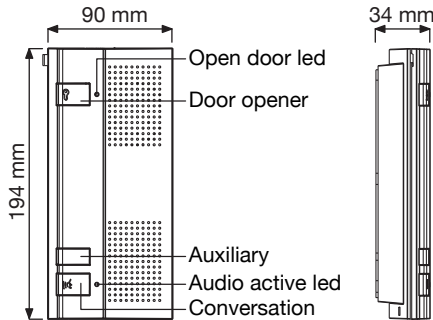
DUO INDOOR SET Ref. 752/33

Duo indoor set Mod. 752 utilizes, as transmitting capsule, an electret microphone that guarantees a more constant and linear transmission. It is arranged to receive the call directly on the loudspeaker with a bitonal sound supplied by the power supply.

Duo indoor set is foreseen for two way of installation:

- Wall surface mounting.
- Wall embedding.

All connections to the line are made after Duo base has been fixed to the wall, thus simplifying all operations.



Don't change the position of the two trimmers placed on the terminal strip.

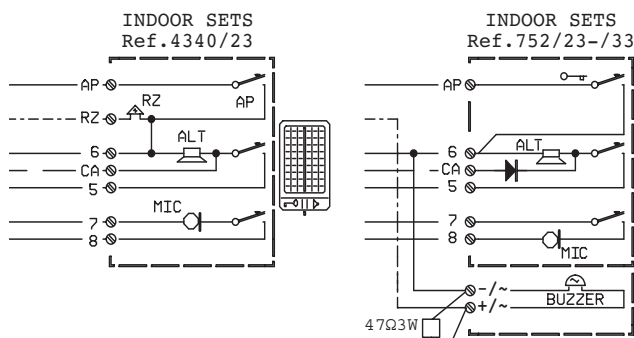
INTERCHANGEABILITY

Duo indoor set **Mod. 752 is interchangeable** with the previous models: Ref. 752/23, Ref. 752/231, Jolly and Superjolly 1st series with carbon transmitting capsule, and Superjolly 2nd series.

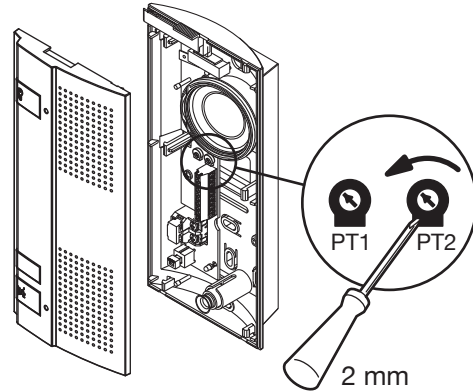
It is not interchangeable with jolly model with loudspeaker instead of carbon capsule.

The fact that the duo is not equipped with a buzzer but only pre-engineered to receive the external call directly on the loudspeaker by means of a two-tone signal provided by the power supply is very important. In the case of replacement of the Jolly and in Superjolly 1st series systems where the call is sent to the buzzer (terminal RZ), the electronic buzzer Ref. 9854/52 must be inserted inside the duo. A terminal of the buzzer must be connected with terminal 6 of the duo; the other terminal must be connected to the call wire that, in old house phones, was connected to the RZ terminal. In the case of replacement of Superjolly 2nd series, the buzzer is not required as the call wire in both systems is sent to terminal CA.

SC101-0211C

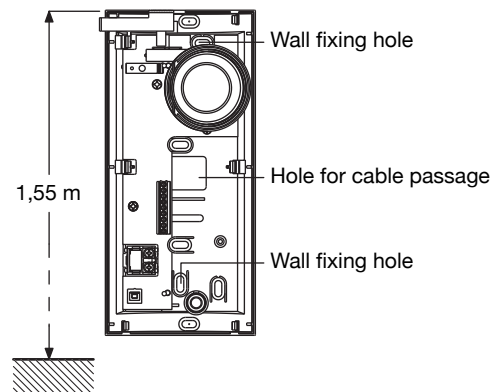


If, after installing the door phone Ref. 752/33 to replace Jolly apartment stations (Ref. 4330/21 or Ref. 4330/23) in systems with power supply Ref. 4330/20, the audio levels are not sufficient, it is suggested to rotate the PT2 trimmer anticlockwise with a slotted 2 mm screwdriver.



SURFACE MOUNTING MODEL

In order to fix Duo to the wall, two screw anchors matching with the two slots present on the base must be used. The central area is the hole used for wires passage.

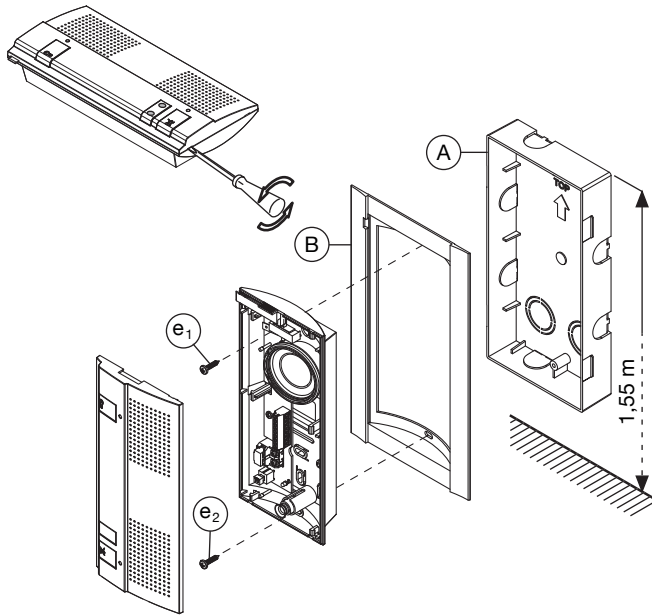


FLUSH MOUNTING MODEL

For this installation mode, use the flush mounting box with frame Ref. 752/60.

For installation, follow the procedure below:

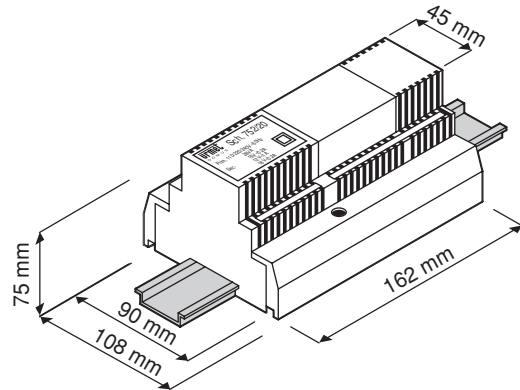
- Install the flush mounting box **A**. The plaster must always be at the same level as the box or jutting from the box (1 cm max.).
- Remove the front panel of the apartment station to reach the connection terminal pins. Put a screwdriver on the suitable slots and lever.
- Insert the base in the frame **B** and screw the base to the flush mounting box with the screws **e1** and **e2**.
- Perform connections.
- Close again the front.



TERMINAL PINS DESCRIPTION

SP	Open door signal
T1	} Auxiliary service button
T2	
5	Loudspeaker signal
CA	Call signal
AP	Door lock release command
6	Loudspeaker signal
7	} Microphone signal
8	
+	Positive power supply for open door indicator led

POWER SUPPLY Ref. 752/20



The power supply Ref. 752/20 consists of:

- 28 VA transformer.
- Primary 110-230V.
- Secondary 12V, 1A (supply for door opener and buzzer terminals 0 and 12).
- Secondary 18V, 0.2A (terminals 0 and 18).
- Secondary 15Vdc, 0.2A (connected internally - supply for amplifying circuits).
- Output for bitonal call on loudspeaker with F1= 1200Hz, F2 = 1800Hz with sweep rate 10-20Hz.
- Inwards amplifier (input terminals 3-4, output terminals 5-6).
- Outwards amplifier (input terminals 7-8, output terminals 1-2).
- Dissipated power after 1 average working hour: 4,2 W.

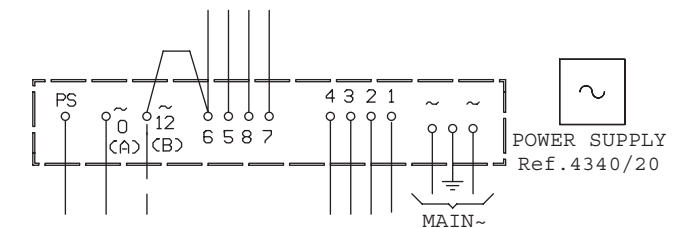
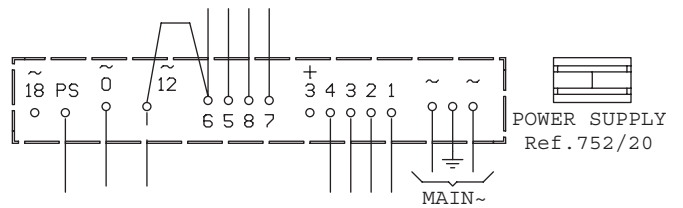
The power supply can be mounted on drawn bars according to 'DIN 46277' specifications or fixed to the wall by means of two screws and nogs.

The length of 162 mm corresponds to 9 modules of 18 mm each, in accordance with 'DIN 43880' specifications.

INTERCHANGEABILITY

It is interchangeable with the previous model Ref. 4340/20. On the contrary, it is not interchangeable with the Jolly type Ref. 4330/20. In this case it is necessary to replace also the outdoor station.

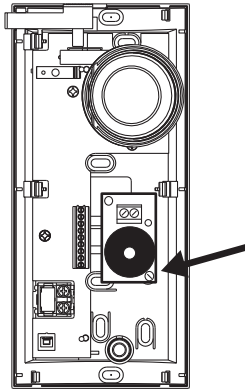
SC101-0211C



**ADDITIONAL ELECTRONIC BUZZER
Ref. 9854/52**

The device Ref. 9854/52 can be used for an additional call. To mount the buzzer inside the indoor set proceed as follows:

- Fix the buzzer to the base using the two 2.9 x 6,5mm screws.
- Connect the system wires to the two terminals.

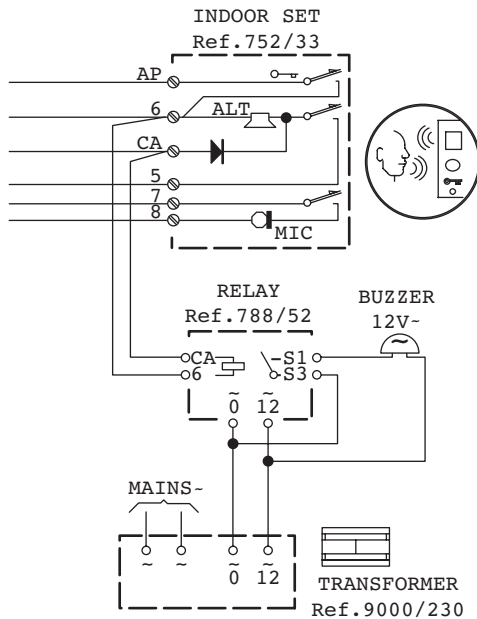


CALL REPEATER RELAY Ref. 788/52

As previously described, the call coming from the outside push button panel towards the indoor sets takes place directly on the loudspeaker with a bitonal sound supplied by the power supply. When the call has to be sent also to additional ringers, it is necessary to use the call repeater Ref. 788/52 or Ref. 788/21 to be parallel connected to the indoor set loudspeaker. For its connection, proceed as follows:

- Connect terminals 6 and CA to the indoor set corresponding terminals.

Feed the call repeater relay by means of a 12Vac transformer, the voltage of which can feed the additional ringer.

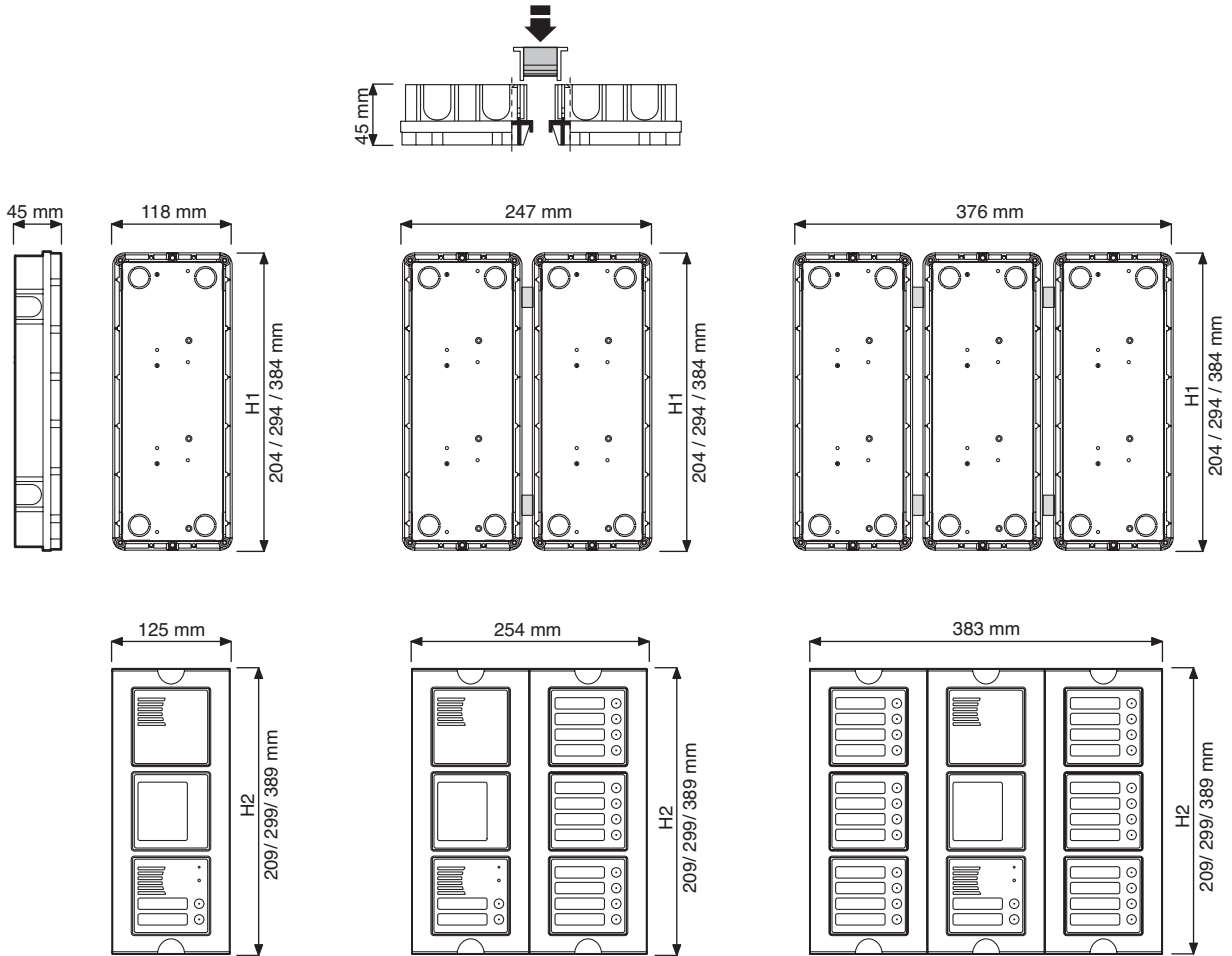


CONNECTION MISTAKES AND MOST COMMON FAILURES

- **Operation failure from indoor set to outdoor station**
On the outdoor set disconnect wires 1 and 2 and measure the loudspeaker resistance (the resulting resistance varies from 45Ω to 515Ω, since the circuit is made of a 45 Ω loudspeaker with a series connected 470 Ω potentiometer). If the loudspeaker is not defective, the failure might be caused by the loudspeaker line (line 1-2) or by the indoor set transmitting capsule line (line 7-8). In this case, insulation and continuity of the above lines must be carefully checked. If the failure does not fall within the above mentioned cases, the power supply will have to be checked and probably replaced since it might be causing the failure.
- **Operation failure from outdoor station to indoor set**
Defective electret microphone circuit. A check with a tester is not possible. Try to replace the outdoor set. If the failure is still present, check line 3-4 disconnecting the two wires from outdoor set and power supply, and measuring continuity and insulation. Make same check on the indoor sets loudspeaker line (5-6). If the failure does not fall within the above mentioned cases, the power supply will have to be checked and probably replaced since it might be causing the failure.
- **Operation failure on both directions**
Check the 315mA fuse: if burnt, it shall be replaced with one of the same value.
Check network voltage.
- **Lock does not open**
Check that there is a voltage of 12V between terminals 0 and 12 of the power supply.
Check the door release lines between terminals AP, 6 or that the contact of the door release key is working correctly.
- **NO calls on loudspeaker**
Check that the power supply generates the call signal through insertion of a 45Ω resistance between terminals PS and 6 of the power supply.
- **“Whistle” or Larsen effect**
If the system presents a “whistle” due to Larsen effect, duly adjust the potentiometer of the loudspeaker module, reducing the volume until the effect disappears. The inwards amplification is not adjustable.

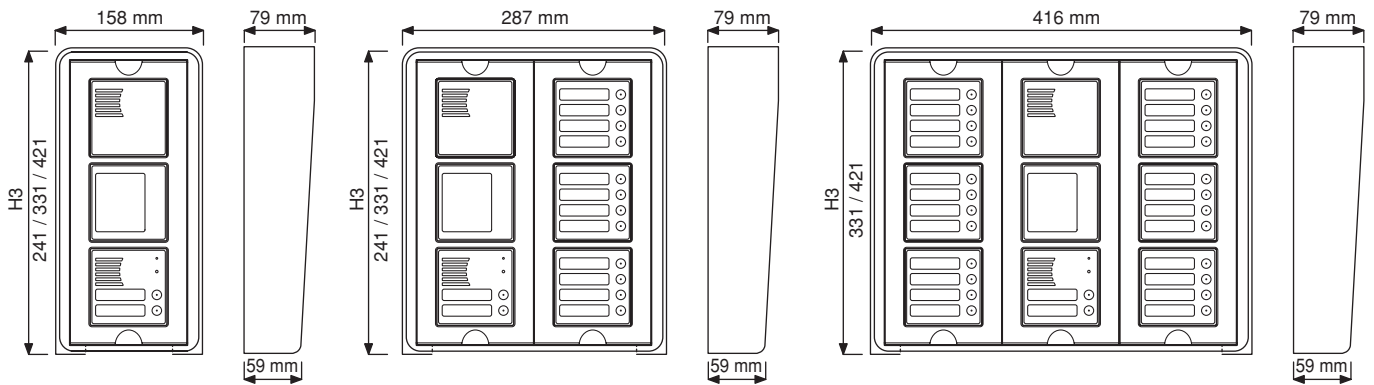


FLUSH-MOUNTED VERSION



H1= 204, 294, 384 indicates flush mounting height and H2= 213, 303, 393 indicates to total height relative to 2, 3 and 4 module versions

WALL-MOUNTED VERSION



H3 referred to the total height may differ according to the number of modules that the case may contain.

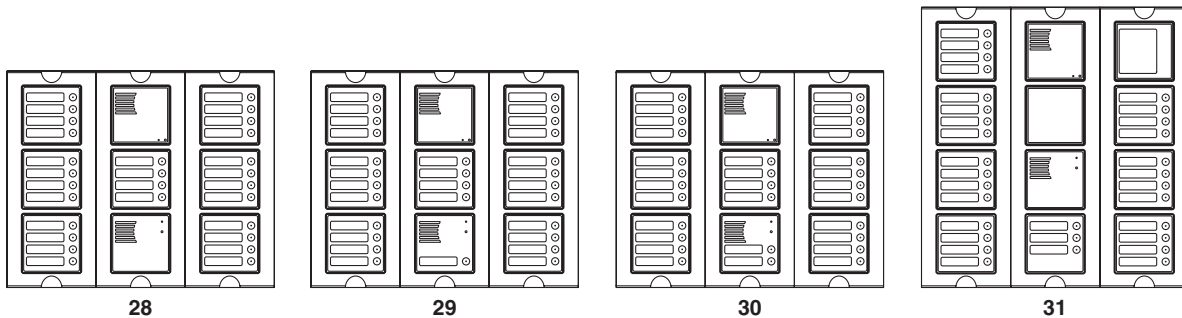
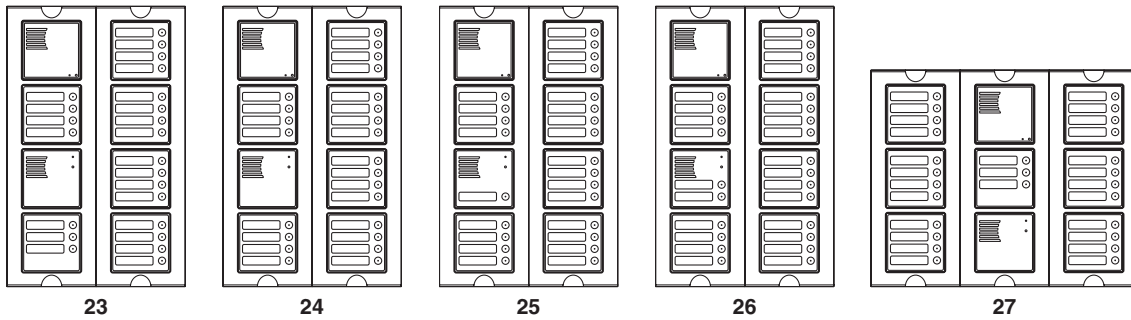
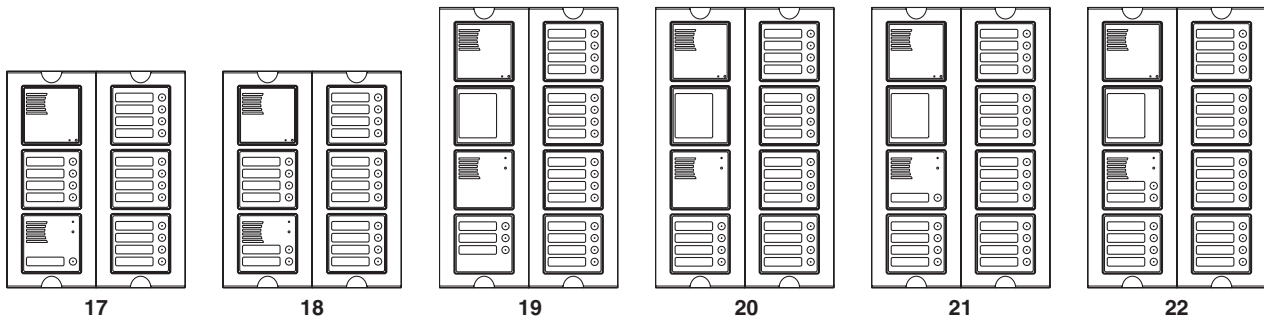
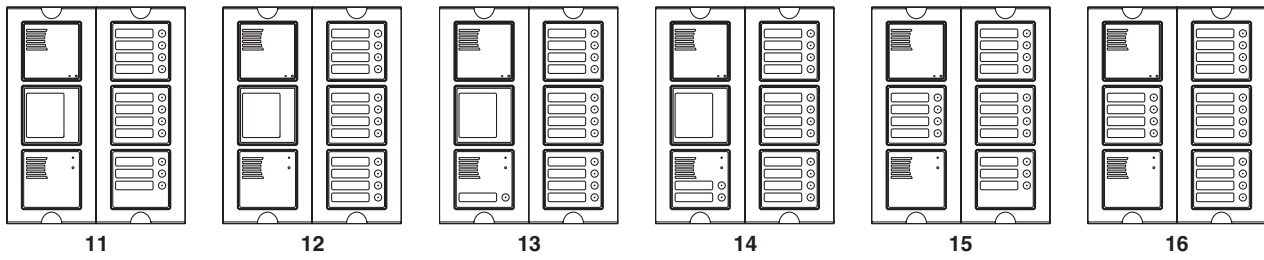
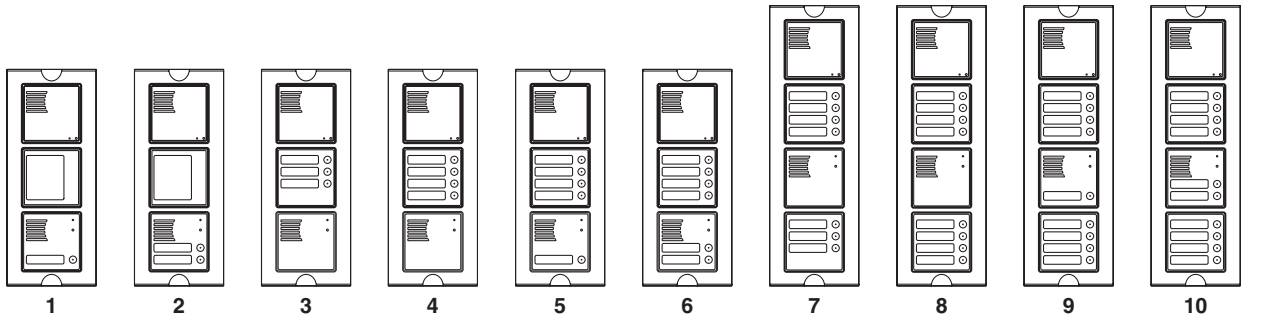


FREE-HANDS SYSTEMS DUO WITH SYNTHESI PANEL
EXAMPLES OF MODULAR CONSTRUCTIONS WITH VARIOUS CAPACITIES

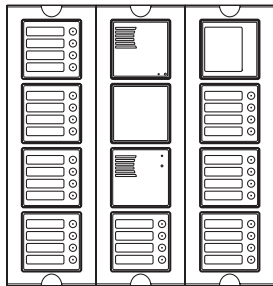


EXAMPLES OF VERTICAL CONFIGURATIONS

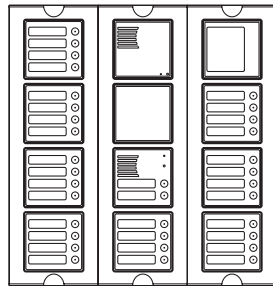
FREE-HANDS SYSTEMS DUO WITH SYNTHESI PANEL



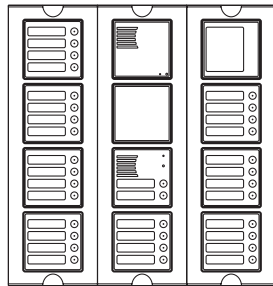
FREE-HANDS SYSTEMS



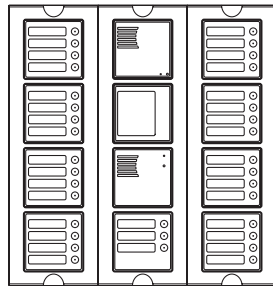
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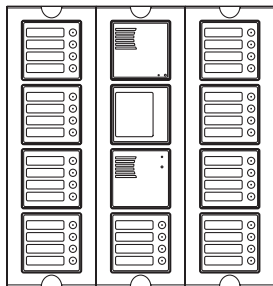
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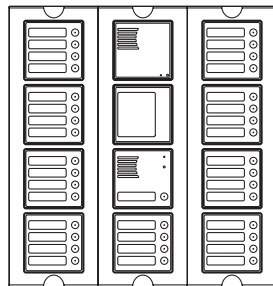
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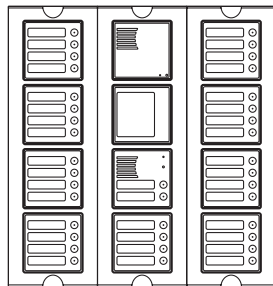
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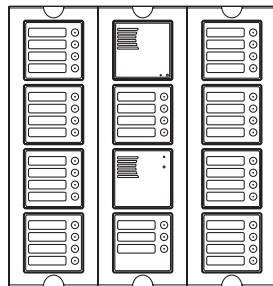
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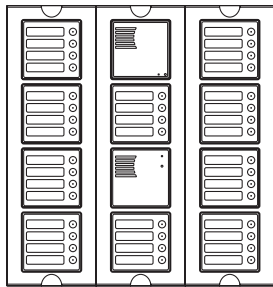
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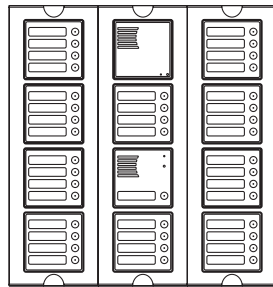
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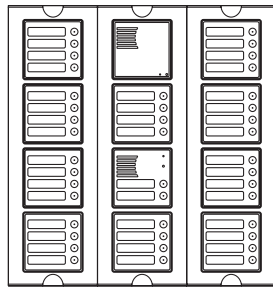
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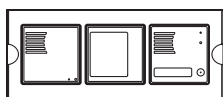


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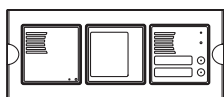


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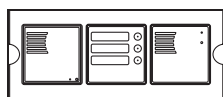
EXAMPLES OF HORIZONTAL CONFIGURATIONS



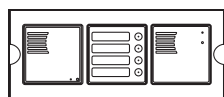
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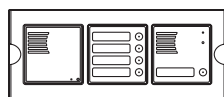
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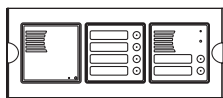
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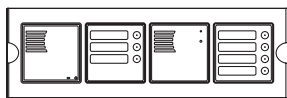
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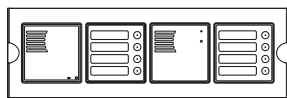
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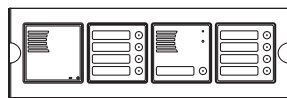
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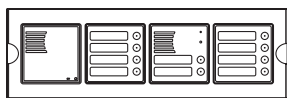
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8



9



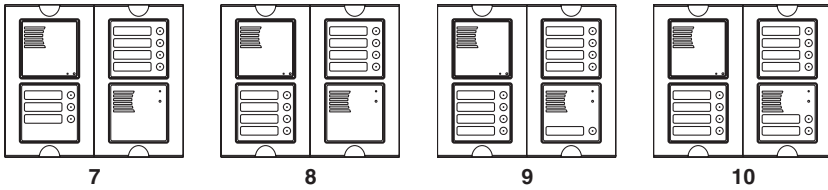
10



EXAMPLES OF MODULAR CONSTRUCTIONS FOR Mod. KOMBI PANELS RETROFIT

DUO			BUTTONS NUMBER			
			7	8	9	10
COMMON PRODUCTS	Button and repertory modules	1145/13	1			
		1145/14	1	2	2	2
	Microphone module	1145/70	1	1		
		1145/71			1	
		1145/72				1
Loudspeaker module	1145/75	1	1	1	1	
FLUSH MOUNTED (#)	Flush-mounting box	1145/52	2	2	2	2
	Module holders and frames	1145/62	2	2	2	2
	Wall cover frame (°)	1145/724	1	1	1	1
	Rain hood with wall cover frame (°)	1145/624	1	1	1	1
WALL MOUNTED (#)	Case with hood frame and module holders	1145/324	1	1	1	1
			7	8	9	10
			BUTTONS NUMBER			

(°) optional, alternatives
 (#) alternatives



The previously indicated configurations must be used when replacing the old push button panels Mod. Kombi with 7, 8, 9 and 10 buttons.

DIAGRAM NOTES

**C4.001 - MINIMUM WIRE
CROSS-SECTION AREAS**

Distance	m	50	100	200	300
Voice and call circuit	mm ²	0,5	0,5	0,8	1
Door opening circuit	mm ²	0,5	0,8	1	1,6

- The indicated distance is between door unit and most distant door phone.
 - Lay the wires at a suitable distance from power lines (as far away as possible).

If not present in diagram, plan 2 conductors for entrance panel name tag lighting. Use a suitable power transformer. Up to 15W it is suggested to use Ref. 9000/230 transformer. Up to 6W it is sufficient to use installation power supply unit.

C4.007 - Synthesi models only:
 See instruction booklet provided with product for connecting terminals G/T, -0 and -12 between modules.

C4.009 - IMPORTANT Use cord pairs.

C4.016 - Synthesi models only: The call forwarded LEDs on all panels light up when a call is in progress from any station.

C4.022 - Synthesi models only: For modules arrangement on push button panel frames, strictly follow the instructions provided with product.

VD.007 = Floor call button.

VX.006 - See the instruction book provided with the product for fitting the accessory in the device.

VX.014 - Dusk switch or similar device for switching lights on, where relevant.

VX.015 - The power unit ref. 8500 can power up to 20 devices. Use another power unit for each group of 20 devices if the system exceed this capacity.




FUNCTION

Pushing one of the buttons on the push button panel, outside the building, the bitonal call sound is sent to the corresponding indoor set loudspeaker.
 When on the called indoor set the conversation button is pressed, contact is made between inside and outside and conversation may start.
 The indoor set conversation button must be kept pressed during all the conversation.
 To operate the electric lock it is sufficient to briefly press the corresponding button.

EQUIPMENT

For said installation (Scheme SC101-0209E) the following items are required:


APARTMENT STATION REFERENCES

- N. X Indoor sets 
Ref. 752/33
- For wall embedding, add:*
- N. X Embedding boxes Ref. 752/60

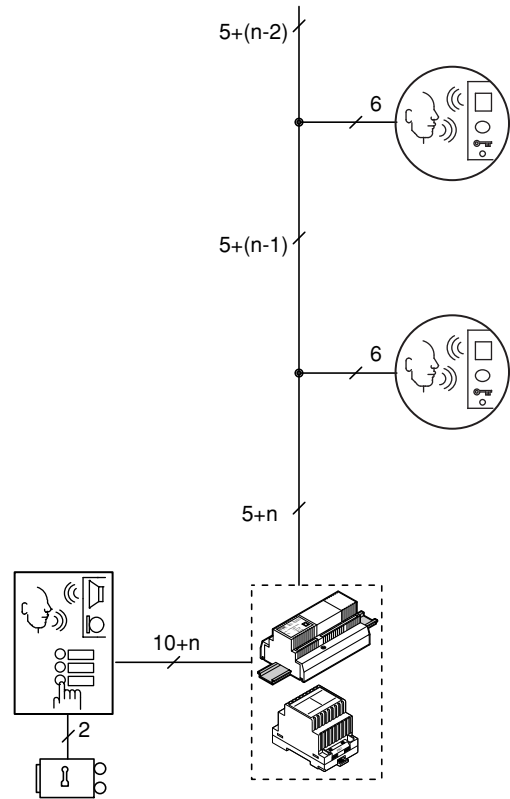
MISCELLANEOUS

- N. 1 Power supply Ref. 752/20

OUTDOOR STATION REFERENCES

- N. 1 Loudspeaker module 
Ref. 1145/75
- N. 1 Microphone module Ref. 1145/70-71-72
- N. X Push button modules Ref. 1145/11-12-13-14
- N. X Repertory module Ref. 1145/50-59

The panels must be installed in flush-mounting boxes with module holder frames or in cases with hood for wall-mounted versions. Refer to "Sinthesi panel" section.



WIRES

As indicated in the Scheme SC101-0209E.

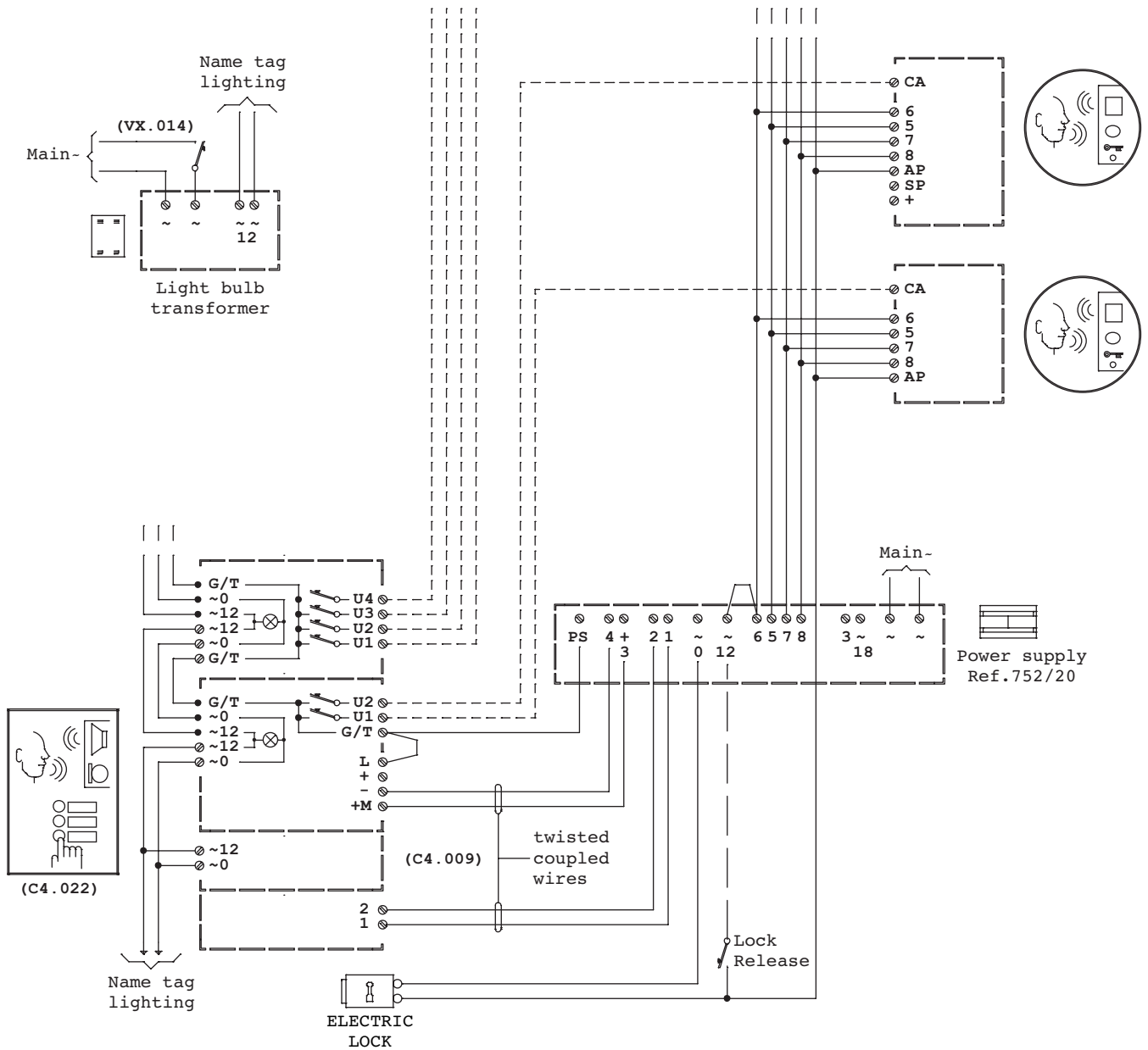
- N. 4 Wires from power supply to push button panel towards the outdoor set (2 twisted coupled wires);
- N. 2 Wires from power supply to electric lock;
- N. 1 Wire from power supply to push button panel common;
- N. 4 Common wires from power supply to indoor sets;
- N. 1 Common wire from electric lock to indoor sets;
- N. 1 Single wire from push button panel to each indoor set.

Also provide wires for switching on of the bulbs of the push button panel powered by separate appropriately rated power transformer.

IMPORTANT: Use twisted wires for the connection towards the outdoor station, one for microphone and one for loudspeaker receiver. Transmission and reception levels are calibrated, during production, on optimum values. It is possible to adjust the outwards amplification by acting on the potentiometer inserted in the loudspeaker module Ref. 1145/75. The inwards amplification cannot be adjusted.

DIAGRAM NOTES

- (see page 13)
- C4.001
- C4.009
- C4.022
- VX.014



FUNCTION

This type of installation allows connection of a series of indoor sets to two push button panels in a building with two entrances. With the proposed solution, by simply pushing a button on one of the two panels, the called indoor set, pushing the conversation button, is automatically connected with the calling panel. However, this type of installation does not allow the two outdoor stations simultaneously, since they work alternatively. Indoor set conversation button must be kept pressed during all the conversation. To operate the electric lock it is sufficient to briefly press the corresponding button: in this way, the electric lock corresponding to the push button panel from which the call has been made is energized.

EQUIPMENT

For said installation (Scheme SC101-0210G) the following items are required:

APARTMENT STATION REFERENCES

- N. X Indoor sets Ref. 752/33
- For wall embedding, add:*
- N. X Embedding boxes Ref. 752/60



MISCELLANEOUS

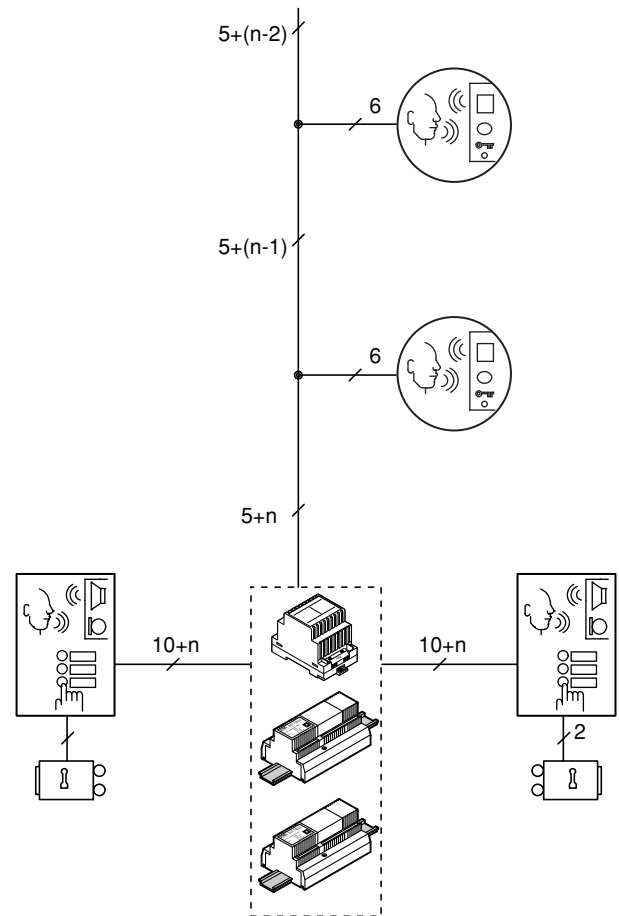
- N. 1 Power supply Ref. 752/20
- N. 1 Relay box Ref. 788/51

OUTDOOR STATION REFERENCES

- N. 1 Loudspeaker module Ref. 1145/75
- N. 1 Microphone module Ref. 1145/70-71-72
- N. X Push button modules Ref. 1145/11-12-13-14
- N. X Repertory module Ref. 1145/50-59



The panels must be installed in flush-mounting boxes with module holder frames or in cases with hood for wall-mounted versions. Refer to "Sinthesi panel" section.



WIRES

As indicated in the Scheme SC101-0210G.

- N. 5 Wires from power supply to relay box;
- N. 8 Wires from relay box to each panel. 4 of these ones, that is the ones to the outdoor station, must be connected with twisted coupled wires, one for microphone M and one for receiver R;
- N. X Wires from push button panels to indoor sets;
- N. 5 Common wires from power supply and relay box group to the indoor sets.

Also foresee wires for push button panels lamps lighting fed by a separate transformer of adequate power

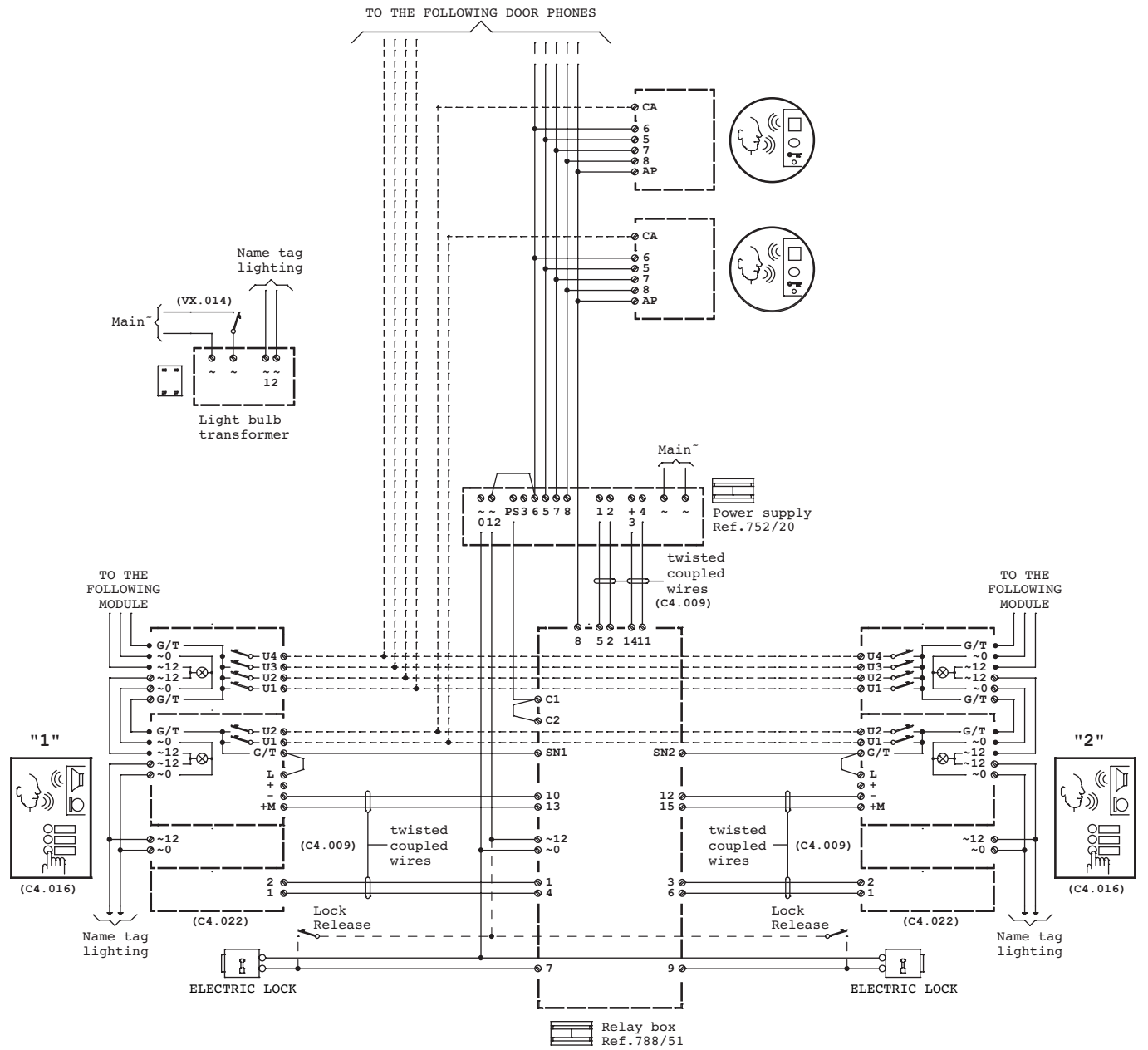
IMPORTANT: Use twisted coupled wires for the connections towards the outdoor station one for microphone and one for loudspeaker receiver.

Transmission and reception levels are calibrated, during production, on optimum values. It is possible to adjust the outwards amplification by acting on the potentiometer inserted in the loudspeaker module Ref. 1145/75.

The inwards amplification cannot be adjusted.

DIAGRAM NOTES

- (see page 13)
- C4.001
- C4.007
- C4.009
- C4.016
- C4.022
- VX.014





EXAMPLES OF CONNECTION OF THE DIFFERENT PARTS (INDOOR SET, OUTDOOR SET, POWER SUPPLY) OF THE NEW SYSTEM DUPLEX Mod. 752 WHEN USED AS SPARE PARTS IN THE PREVIOUS SUPERJOLLY TWO-CHANNEL SYSTEMS 2ND SERIES



DIAGRAMS SYSTEMS

INDOOR SET Ref. 752/23

To replace the indoor set Ref. 4340/23 by the new type Ref. 752/23 or Ref. 752/33, connect wires to the same terminals. If in the existing system the buzzer RZ has been used for the floor calls, since in the Duo indoor set this buzzer and the relevant terminal RZ are not foreseen, it is necessary to use the additional buzzer Ref. 9854/52, that can be inserted inside the same indoor set, or any other 12V a.c. 10VA max. buzzer or ringer to be installed outside the indoor set.

POWER SUPPLY Ref. 752/20

To replace the power supply Ref. 4340/20 by the Duo power supply Ref. 752/20 connect wires to the same terminals. Only take care to connect the relevant wire to terminal 3 and not to terminal +3 (to be used in Duo system Mod. 752).

SINTHESI FREE-HANDS PANEL AND DOOR UNIT

The Sinthesi free-hands panel and door unit can be used to replace old Kombi models or 4340/27 panels with door unit. The Sinthesi free-hands door unit consists of:

Loudspeaker module:	Ref. 1145/75	
Microphone module:	Ref. 1145/70	without buttons
	or	Ref. 1145/71
		with 1 button
	or	Ref. 1145/72
		with 2 buttons

Separate the two modules by arranging a button or repertory module in between to avoid "Larsen" feedback.

The outwards amplification can be adjusted by means of the potentiometer fitted in the speaker module Ref. 1145/75.

The potentiometer fitted in the microphone module acts on the apartment station transmission level only when used as a spare in old Superjolly systems where the + terminal is connected instead of the +M terminal.

The panels must be installed in flush-mounting boxes with module holder frames or in cases with hood for wall-mounted versions. Refer to "Sinthesi panel" section of Doorphone and Videodoorphone system - product technical manual.

DIAGRAM NOTES

(see page 13)

C4.001

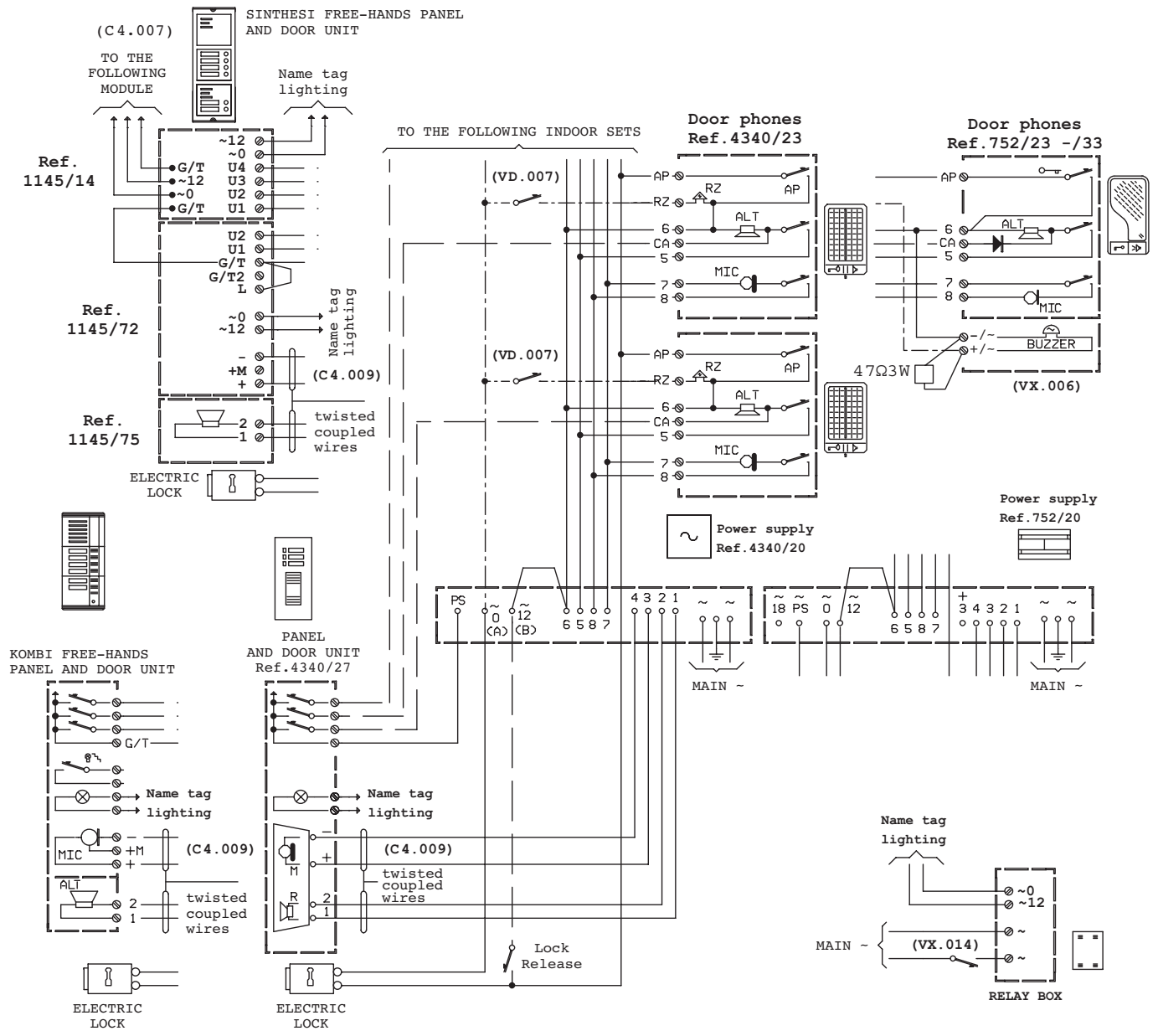
C4.007

C4.009

VD.007

VX.006

FREE-HANDS SYSTEMS





FUNCTION

Pushing one of the buttons on the push button panel, outside the building, the bitonal call sound is sent to the corresponding indoor set loudspeaker.

When on the called indoor set the conversation button is pressed, contact is made between inside and outside and conversation may start.

The indoor set conversation button must be kept pressed during all the conversation.


To operate the electric lock it is sufficient to briefly press the corresponding button.

When the door is open, on the door phone the open door indicator led is on.

EQUIPMENT

For said installation (Scheme SC101-1462) the following items are required:

APARTMENT STATION REFERENCES

- | | | | |
|------|---------------------------------|---|--------------------|
| N. X | Indoor sets |  | Ref. 752/33 |
| | <i>For wall embedding, add:</i> | | |
| N. X | Embedding boxes | | Ref. 752/60 |

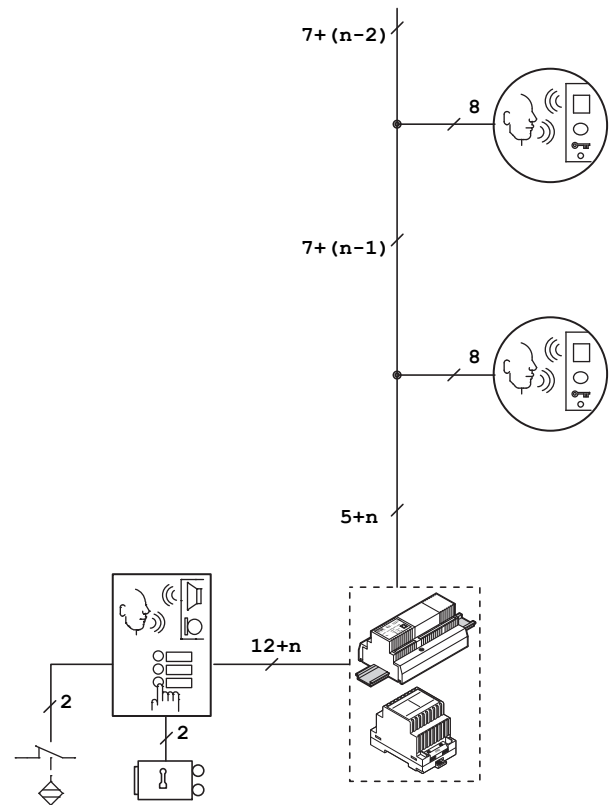
MISCELLANEOUS

- | | | |
|------|--------------|--------------------|
| N. 1 | Power supply | Ref. 752/20 |
|------|--------------|--------------------|

OUTDOOR STATION REFERENCES

- | | | | |
|------|---------------------|---|------------------------------|
| N. 1 | Loudspeaker module |  | Ref. 1145/75 |
| N. 1 | Microphone module | | Ref. 1145/70-71-72 |
| N. X | Push button modules | | Ref. 1145/11-12-13-14 |
| N. X | Repertory module | | Ref. 1145/50-59 |

The panels must be installed in flush-mounting boxes with module holder frames or in cases with hood for wall-mounted versions. Refer to "Sinthesi panel" section.



WIRES

As indicated in the Scheme SC101-1462.

- N. 4 Wires from power supply to push button panel towards the outdoor set (2 twisted coupled wires);
- N. 2 Wires from power supply to electric lock;
- N. 1 Wire from power supply to push button panel common;
- N. 4 Common wires from power supply to indoor sets;
- N. 1 Common wire from electric lock to indoor sets;
- N. 1 Single wire from push button panel to each indoor set.
- N. 2 Wires for open door indicator.

Also provide wires for switching on of the bulbs of the push button panel powered by separate appropriately rated power transformer.

IMPORTANT: Use twisted wires for the connection towards the outdoor station, one for microphone and one for loudspeaker receiver. Transmission and reception levels are calibrated, during production, on optimum values. It is possible to adjust the outwards amplification by acting on the potentiometer inserted in the loudspeaker module Ref. 1145/75.

The inwards amplification cannot be adjusted.

DIAGRAM NOTES

- (see page 13)
- C4.001
 - C4.009
 - C4.022
 - VX.014
 - VX.015

