



**synthesi**  
S2

**PUSH BUTTON PANEL**

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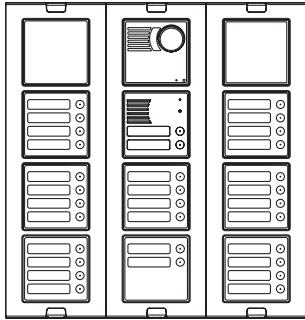
## SINTHESI S2 PUSH BUTTON PANEL

AUDIO DOOR UNIT WITH 2 BUTTON

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SINTHESI S2 PUSH BUTTON PANEL


### SINTHESI S2 PUSH BUTTON PANEL



The system consists of anodized aluminium profile modular elements and is composed by modules which can be fitted in specific module holder frames.

Using suitable spacers, flush mounting boxes can be combined to realize any type of push button panels, reducing the number of components and cards managed in stocks. This is to wholesaler's and installer's advantage.

Module installation is easy, thanks to pre-wired connections on modules and to rising clamp removable terminal blocks.

 The device shown in the figure is made using audio door unit Ref. 1083/74 and camera Ref. 1748/83.

All Sinthesi S2 products, their characteristics and installation modes are described in "Products Technical Manual – Door Phone and Video Door Phone systems" in the section "Sinthesi S2 Push Button Panel".

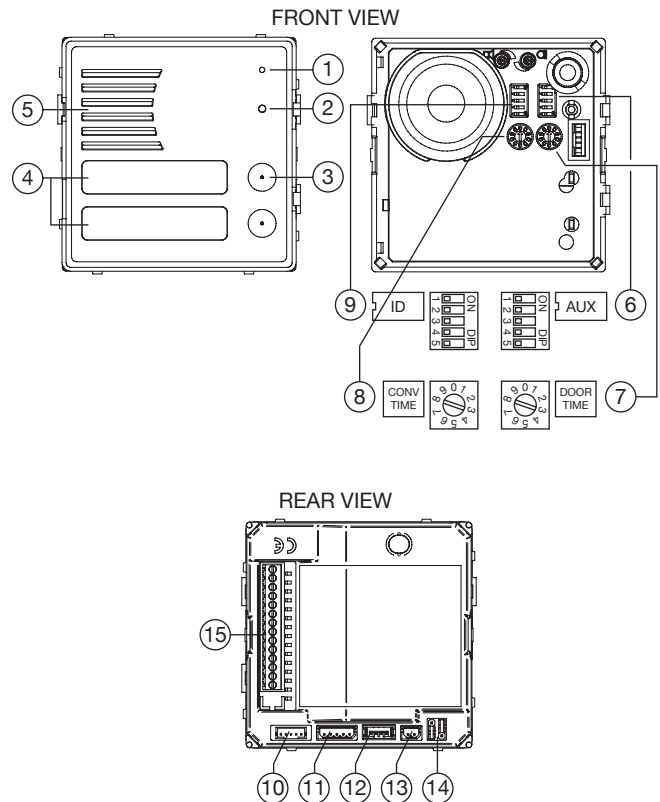
### DOOR UNITS

#### AUDIO DOOR UNIT WITH 2 BUTTON Ref.1083/74 (1 MODULE)

##### FEATURES

- Installation on Sinthesi S2 module holder frames.
- Two pre-wired call buttons.
- 4 expansion modules (connected in series) can be connected, up to 64 user buttons max. for each door unit.
- Connection of 16-user expansion module Ref. 1083/17 with connector.
- By means of dip-switches it is possible to program and associate code sequences with the call buttons.
- Tone for confirming call sending and conversation end.
- Video-audio signals of system busy.
- Pedestrian electric lock command actuator. Programmable timing with rotary-switch from 1 to 90 seconds.
- Driveway electric lock command actuator with clean contact.
- Electric lock management: Free or Secret.
- Circuitry for electric lock activation with entrance hall button.
- Input for open door detector.
- Trimmer for adjusting loudspeaker and microphone audio level.
- Output for power supply of name holders lighting (up to 32 buttons with the power supply unit Ref. 1083/20A).
- Audio repeater device for hard of hearing people.

### STRUCTURE



1. Microphone
2. Signalling yellow led
3. Pre-wired buttons
4. Name holders
5. Loudspeaker
6. Auxiliary settings dip-switch
7. Rotary-switch for pedestrian door lock release activation time
8. Busy time rotary-switch
9. Identification code dip-switch
10. Video IN: Connector for camera module Ref. 1748/83
11. EXP: Connector for expansion buttons module Ref. 1083/17
12. I2C: Connector for module with voice messages and led Ref. 1148/47
13. ILA: Connector for hearing impaired people module Ref. 1148/48
14. Jumper JP1: not used, **do not remove**  
JP2: enables the video output if the camera unit Ref. 1748/83 (ON by default, shift to off in case of audio only system without camera)
15. Terminal blocks

### DESCRIPTION OF TERMINALS

- ⊗ ] SE2 Driveway electric lock activation
- ⊗ PA ] Hall button
- ⊗ PA ] Hall button
- ⊗ SP ] Open door detector
- ⊗ SP ] Open door detector
- ⊗ - Not used
- ⊗ + Not used
- ⊗ ] ILL Power supply for name tags lighting
- ⊗ ] LINE Bus line in
- ⊗ SE- Negative for pedestrian crossing electric lock
- ⊗ SE+ Positive for pedestrian crossing electric lock

PUSH BUTTON PANEL

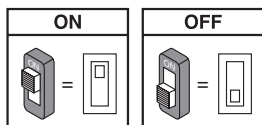


### TECHNICAL SPECIFICATIONS

Power voltage (LINE):	<b>36 – 48 Vdc</b>
Stand-by consumption:	<b>45 mA max</b>
Max. consumption (call in progress and name tags on):	<b>250 mA max</b>
Name holders lighting ILL output:	<b>11– 13,8 Vdc max 200 mA</b>
Name tag light:	<b>32 max</b>
Lock output SE+ and SE-:	<b>22 – 24 Vdc max 240 mA</b>
SE2 switched load:	<b>200 mA 30 V Max</b>
Operating temperature range:	<b>- 10°C ÷ + 50°C</b>

### DEFAULT CONFIGURATION

Function	Default	Corresponding Dip-switch
PE type:	Main (OFF)	Dip-switch 1 of AUX
Secondary number:	0 (OFF)	Dip-switch 2 of AUX
Door opener:	Free (OFF)	Dip-switch 3 of AUX
Interruption:	Not assured (ON)	Dip-switch 4 of AUX
Camera LED on:	Enabled (ON)	Dip-switch 5 of AUX
Guaranteed conversation time:	30 s (pos 3)	Rotary switch - CONV TIME
Door lock release time:	1 s (pos 0)	Rotary switch - DOOR TIME
Door unit number:	0 (OFF)	Dip-switch 1÷5 of ID



### OPERATION

#### CALLS

Up to 64 users max. can be called by pressing the respective buttons of the push button panel associated to the camera. After pressing the call button, the two following cases can occur:

- The line is free: the door unit emits a confirmation tone and the call is sent to the selected user.
- The line is busy: the door unit emits an alert tone and the yellow led on the front blinks (when the busy time is elapsed, the call must be sent again).

*If in the system there is a concierge switchboard in "Day" mode, all the calls performed from the main call stations are intercepted and managed by the switchboard.*

#### PEDESTRIAN ELECTRIC LOCK MANAGEMENT

The door units have two terminals for managing the capacitance discharge and hold of the door electric lock (SE-, SE+). The electric lock is operated in the following cases:

- Whenever the hall button is pressed (terminals PA).
- When is received a pedestrian crossing door lock release command coming from an apartment station, according to the configuration of the dip-switch AUX used to select operating mode "free" or "privacy" (see "Configuration" section).

The electric lock activation time can be programmed by rotary switch.

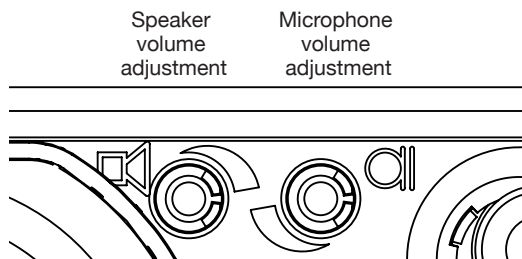
#### DRIVEWAY DOOR LOCK MANAGEMENT

The doors have two terminals connected to the contacts of a normally open relay which can be used to control a gate opening control unit (1). The relay is operated for 1 second after receiving the garage door opening command according to the operating mode ("free" or "privacy") as the door lock.

- (1) *The relay is not suitable to control direct power loads and can only be used as command relay.*

### AUDIO ADJUSTING

The audio levels are trimmed in factory, so they don't need to be changed in most installations. If it is necessary to change them, use a screwdriver on the suitable adjusting points.



### NAME HOLDERS LIGHTING

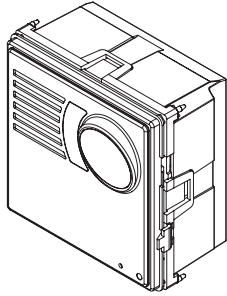
If the call station has more than 32 name holders, an additional transformer must be used for button modules lighting. In this case, the terminal pins "ILL" of the call station must not be connected to the button modules.

The transformer Ref. 9000/230 can provide 11.2 W power that is up to 64 name holders max.

*The number of name holders could be reduced according to distance and section of the used cable.*



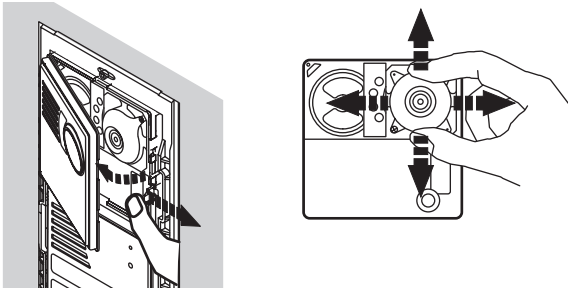
### CAMERA MODULE Ref.1748/83 (1 Module)



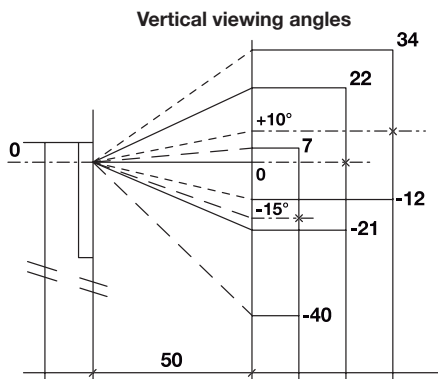
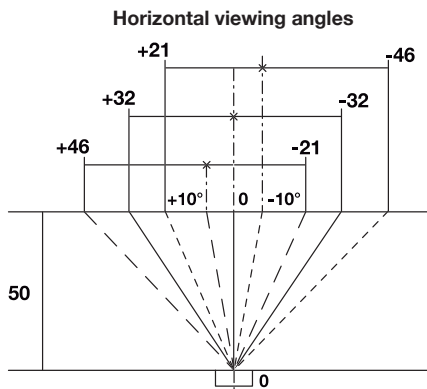
The camera unit module fits a 50Hz-60Hz colour camera and white lighting LEDs.  
To be connected to the door phone door unit Ref. 1083/74 using a wire provided with the product.

### CAMERA LENS ORIENTATION ADJUSTING

After installation, camera orientation can be adjusted according to the position of the camera and the captured subject. This operation can be performed manually, after removing the frame and the extractable front unit. Move the articulated stand on the front side. It is not necessary to fold down the frame or use special tools.

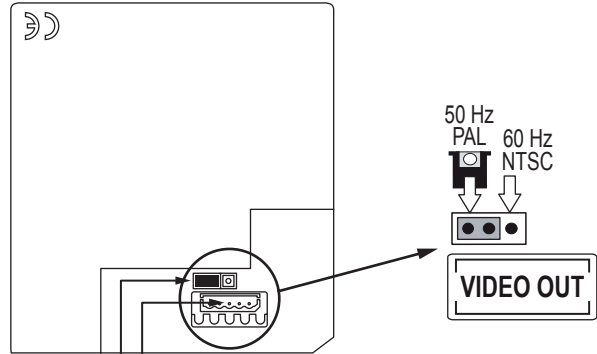


### VIEWING ANGLES



The measures are in centimeters.

### VIDEO OUT



#### VIDEO OUT

Connect the wire provided with the product to the VIDEO-IN port of the audio door unit 1083/74.

#### JP

Jumper for selecting the video standard:  
PAL (50 Hz) [default] / NTSC (60 Hz).

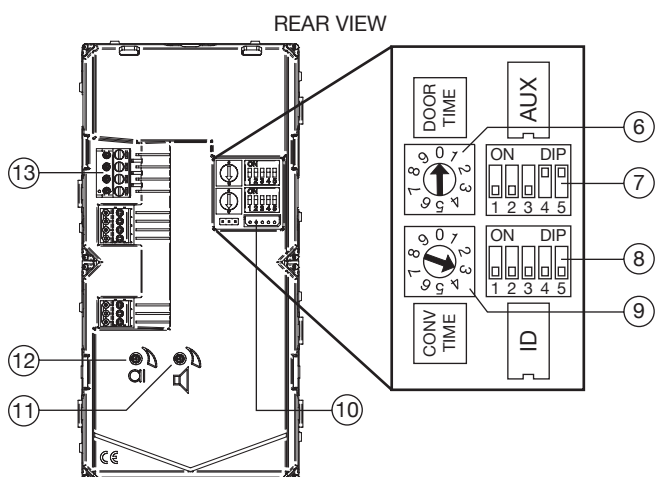
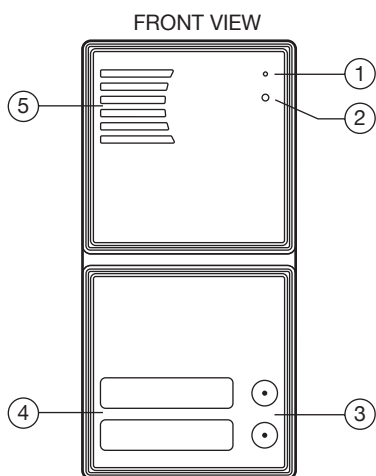


**AUDIO DOOR UNIT WITH 2 BUTTONS**  
**Ref. 1083/9 (2 MODULES)**

**FEATURES**

- Installation on Sinthesi S2 module holder frames.
- Two pre-wired call buttons.
- 4 expansion modules (connected in series) can be connected, up to 64 user buttons max. for each door unit.
- Connection of 16-user expansion module Ref. 1083/17 with connector.
- By means of dip-switches it is possible to program and associate code sequences with the call buttons.
- Tone for confirming call sending and conversation end.
- Video-audio signals of system busy.
- Pedestrian electric lock command actuator. Programmable timing with rotary-switch from 1 to 90 seconds.
- Driveway electric lock command actuator with clean contact.
- Electric lock management: Free or Secret.
- Circuitry for electric lock activation with entrance hall button.
- Input for open door detector.
- Trimmer for adjusting loudspeaker and microphone audio level.
- Management of two external coax video inputs for surveillance cameras, if present.
- Relay box driving for cyclic control of several video surveillance cameras.
- Output for power supply of name holders lighting (up to 32 buttons with the power supply unit Ref. 1083/20A).
- Audio repeater device for hard of hearing people.

**STRUCTURE**



1. Microphone
2. Signalling yellow led
3. Pre-wired buttons
4. Name holders

5. Loudspeaker
6. Rotary-switch for pedestrian door lock release activation time
7. Auxiliary settings dip-switch
8. Identification code dip-switch
9. Busy time rotary-switch
10. Connector for expansion module Ref. 1083/17
11. Speaker volume adjustment
12. Microphone volume adjustment
13. Terminal blocks

**DESCRIPTION OF TERMINALS**

- ⊙ ] LINE Bus line in
- ⊙ SE+ Positive for pedestrian crossing electric lock
- ⊙ SE- Negative for pedestrian crossing electric lock
- ⊙ A [ V3 Control camera signal
- ⊙ A [ V5 Reference for control camera signal
- ⊙ A [ V3 Control camera signal 2/ video switch
- ⊙ A [ V5 Reference for control camera signal 2/ video switch
- ⊙ ] ILA Output of device for deaf people
- ⊙ ] SE2 Driveway electric lock activation
- ⊙ T+ Command for video switch
- ⊙ T- Reference for video switch
- ⊙ CT Reference for PA and SP
- ⊙ PA Hall button
- ⊙ SP Open door detector
- ⊙ ] ILL Power supply for name tags lighting
- ⊙ - Local power supply negative
- ⊙ + Local power supply positive

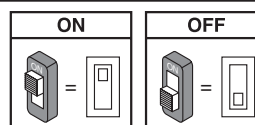
- EXP Connector for expansion modules
- I2C Connector for module with voice messages and led Ref. 1158/47

**TECHNICAL SPECIFICATIONS**

- Power voltage (LINE): **36 – 48 Vdc**
- Power voltage (+ -): **36 – 48 Vdc**
- Stand-by consumption: **45 mA max**
- Max. consumption (call in progress and name tags on): **250 mA max**
- Name holders lighting ILL output: **11– 13,8 Vdc max 200 mA**
- Name holder light: **32 max**
- Lock output SE+ and SE-: **22 – 24 Vdc max 200 mA**
- Operating temperature range: **-10°C ÷ + 50°C**

**DEFAULT CONFIGURATION**

Function	Default	Corresponding Dip-switch
PE type:	Main (OFF)	Dip-switch 1 of AUX
Secondary number:	0 (OFF)	Dip-switch 2 of AUX
Door opener:	Free (OFF)	Dip-switch 3 of AUX
Interruption:	Not assured (ON)	Dip-switch 4 of AUX
Guaranteed conversation time:	30 s (pos 3)	Rotary switch - CONV TIME
Door lock release time:	1 s (pos 0)	Rotary switch - DOOR TIME
Door unit number:	0 (OFF)	Dip-switch 1÷5 of ID





## SINTHESI S2 PUSH BUTTON PANEL

AUDIO DOOR UNIT WITH 2 BUTTONS

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SINTHESI S2 PUSH BUTTON PANEL

### OPERATION

#### CALLS

Up to 64 users max. can be called by pressing the respective buttons of the push button panel associated to the camera. After pressing the call button, the two following cases can occur:

- The line is free: the door unit emits a confirmation tone and the call is sent to the selected user.
- The line is busy: the door unit emits an alert tone and the yellow led on the front blinks (when the busy time is elapsed, the call must be sent again).



*If in the system there is a concierge switchboard in "Day" mode, all the calls performed from the main call stations are intercepted and managed by the switchboard.*

#### PEDESTRIAN ELECTRIC LOCK MANAGEMENT

The door units have two terminals for managing the capacitance discharge and hold of the door electric lock (SE-, SE+). The electric lock is operated in the following cases:

- Whenever the hall button is pressed (terminals PA).
- When is received a pedestrian crossing door lock release command coming from an apartment station, according to the configuration of the dip-switch AUX used to select operating mode "free" or "privacy" (see "Configuration" section).

The electric lock activation time can be programmed by rotary switch.

#### DRIVEWAY DOOR LOCK MANAGEMENT

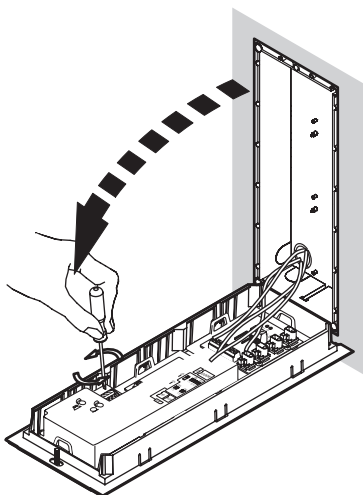
The doors have two terminals connected to the contacts of a normally open relay which can be used to control a gate opening control unit <sup>(1)</sup>. The relay is operated for 1 second after receiving the garage door opening command according to the operating mode ("free" or "privacy") as the door lock.

(1) *The relay is not suitable to control direct power loads and can only be used as command relay.*

#### AUDIO ADJUSTING

The audio levels are trimmed in factory, so they don't need to be changed in most installations.

If it is necessary to change them, use a screwdriver on the suitable adjusting points.



#### NAME HOLDERS LIGHTING

If the door unit has more than 32 name holders, an additional transformer must be used for button modules lighting.

In this case, the terminal pins "ILL" of the door unit must not be connected to the button modules.

The transformer Ref. 9000/230 can provide 11.2 W power that is up to 64 name holders max.



*The number of name holders could be reduced according to distance and section of the used cable.*

PUSH BUTTON PANEL



**VIDEO DOOR UNIT WITH 2 BUTTONS**

Ref.1083/78 (50 Hz) - 1083/79 (60 Hz)

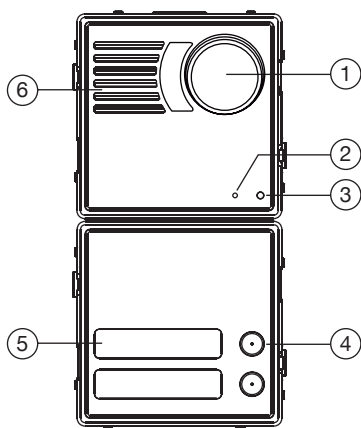
(2 Modules)

**FEATURES**

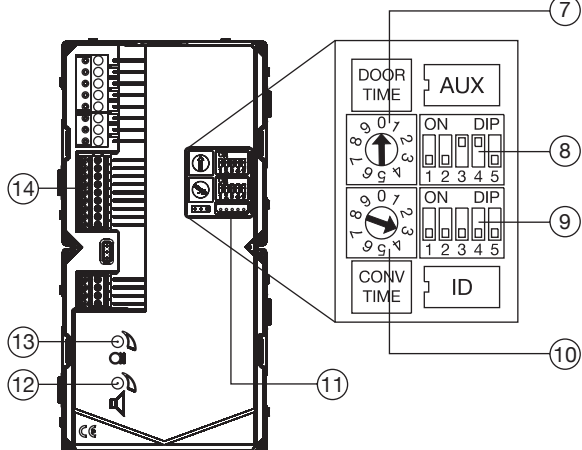
- Installation on Sinthesi S2 module holder frames.
- Two pre-wired call buttons.
- 4 expansion modules (connected in series) can be connected, up to 64 user buttons max. for each door unit.
- Connection of 16-user expansion module Ref. 1083/17 with connector.
- By means of dip-switches it is possible to program and associate code sequences with the call buttons.
- Tone for confirming call sending and conversation end.
- Video-audio signals of system busy.
- Pedestrian electric lock command actuator. Programmable timing with rotary-switch from 1 to 90 seconds.
- Driveway electric lock command actuator with clean contact.
- Electric lock management: Free or Secret.
- Circuitry for electric lock activation with entrance hall button.
- Input for open door detector.
- Trimmer for adjusting loudspeaker and microphone audio level.
- Management of two external coax video inputs for surveillance cameras, if present.
- Relay box driving for cyclic control of several video surveillance cameras.
- Output for power supply of name holders lighting (up to 32 buttons with the power supply unit Ref. 1083/20A).
- Audio repeater device for hard of hearing people.

**STRUCTURE**

FRONT VIEW



REAR VIEW



1. Camera Microphone
2. Signalling yellow led
3. Pre-wired buttons

4. Name holders
5. Loudspeaker
6. Rotary-switch for pedestrian door lock release activation time
7. Auxiliary settings dip-switch
8. Identification code dip-switch
9. Busy time rotary-switch
10. Connector for expansion module
11. Loudspeaker volume adjustment
12. Microphone volume adjustment
13. Terminal blocks

**DESCRIPTION OF TERMINALS**

- ⊗ ] LINE Bus line in
- ⊗ SE+ Positive for pedestrian crossing electric lock
- ⊗ SE- Negative for pedestrian crossing electric lock
- ⊗ A [ V3 Surveillance camera signal
- ⊗ A [ V5 Reference for surveillance camera signal
- ⊗ A [ V3 Control camera signal 2/ video switch
- ⊗ A [ V5 Reference for control camera signal 2/ video switch
- ⊗ ] ILA Output of device for deaf people Ref. 1148/48
- ⊗ ] SE2 Driveway electric lock activation
- ⊗ T+ Command for video switch
- ⊗ T- Reference for video switch
- ⊗ CT Reference for PA and SP
- ⊗ PA Hall button
- ⊗ SP Open door detector
- ⊗ ] ILL Power supply for name tags lighting
- ⊗ - Local power supply negative
- ⊗ + Local power supply positive

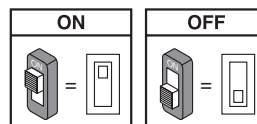
EXP Connector for expansion buttons modules Ref. 1083/17  
 I2C Connector for module with voice messages and led Ref. 1148/47

**TECHNICAL SPECIFICATIONS**

Power voltage (LINE): **36 – 48 Vdc**  
 Power voltage (+ -): **36 – 48 Vdc**  
 Stand-by consumption: **Max 45 mA**  
 Max. consumption (call in progress and name tags on): **Max 250 mA**  
 Name holders lighting ILL output: **11– 13,8 Vdc max 200 mA**  
 Name holder light: **Max 32**  
 Lock output SE+ and SE-: **22 – 24 Vdc max 200 mA**  
 Operating temperature range: **-10°C ÷ + 50°C**

**DEFAULT CONFIGURATION**

Function	Default	Corresponding Dip-switch
PE type:	Main (OFF)	Dip-switch 1 of AUX
Secondary number:	0 (OFF)	Dip-switch 2 of AUX
Door opener:	Free (OFF)	Dip-switch 3 of AUX
Interruption:	Not assured (ON)	Dip-switch 4 of AUX
Camera LED on:	Enabled (ON)	Dip-switch 5 of AUX
Guaranteed conversation time:	30 s (pos 3)	Rotary switch - CONV TIME
Door lock release time:	1 s (pos 0)	Rotary switch - DOOR TIME
Door unit number:	0 (OFF)	Dip-switch 1÷5 of ID





## SINTHESI S2 PUSH BUTTON PANEL

DDA MODULE WITH VOICE MESSAGES



### OPERATION

#### CALLS

Up to 64 users max. can be called by pressing the respective buttons of the push button panel associated to the camera. After pressing the call button, the two following cases can occur:

- The line is free: the door unit emits a confirmation tone and the call is sent to the selected user.
- The line is busy: the door unit emits an alert tone and the yellow led on the front blinks (when the busy time is elapsed, the call must be sent again).

*If in the system there is a concierge switchboard in "Day" mode, all the calls performed from the main call stations are intercepted and managed by the switchboard.*

#### PEDESTRIAN ELECTRIC LOCK MANAGEMENT

The door units have two terminals for managing the capacitance discharge and hold of the door electric lock (SE-, SE+). The electric lock is operated in the following cases:

- Whenever the hall button is pressed (terminals PA).
- When is received a pedestrian crossing door lock release command coming from an apartment station, according to the configuration of the dip-switch AUX used to select operating mode "free" or "privacy" (see "Configuration" section).

The electric lock activation time can be programmed by rotary switch.

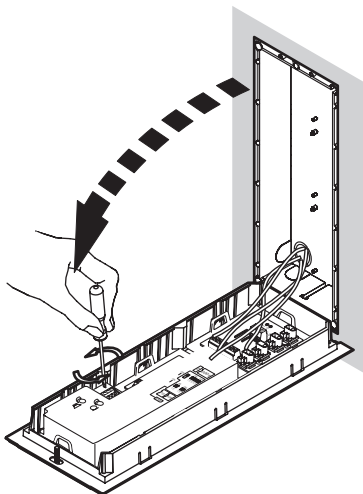
#### DRIVEWAY DOOR LOCK MANAGEMENT

The doors have two terminals connected to the contacts of a normally open relay which can be used to control a gate opening control unit (1). The relay is operated for 1 second after receiving the garage door opening command according to the operating mode ("free" or "privacy") as the door lock.

(1) *The relay is not suitable to control direct power loads and can only be used as command relay.*

#### AUDIO ADJUSTMENT

The audio levels are trimmed in factory, so they don't need to be changed in most installations. If it is necessary to change them, use a screwdriver on the suitable adjusting points.



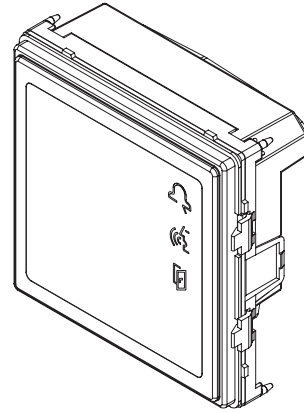
#### NAME HOLDERS LIGHTING

If the call station has more than 32 name holders, an additional transformer must be used for button modules lighting. In this case, the terminal pins "ILL" of the door unit must not be connected to the button modules.

The transformer Ref. 9000/230 can provide 11.2 W power that is up to 64 name holders max.

*The number of name holders could be reduced according to distance and section of the used cable.*

### DDA MODULE WITH VOICE MESSAGES Ref. 1148/47



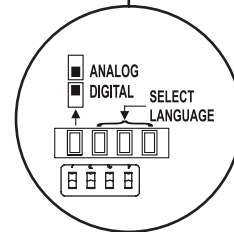
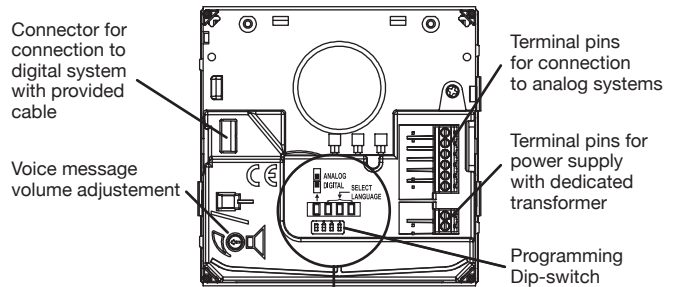
The voice messages synthesis module with led Ref. 1148/47 allows the user to know the system status by means of video and audio signals.

This module allows to hard of hearing and partially sighted people to access basic functions using the push button panel.

The system status is shown by the following indications:

- call in progress: with icon with RED light and voice message "CALL IN PROGRESS".
- conversation in progress: with yellow light.
- the door is open: with GREEN light and voice message "DOOR OPEN".

### PROGRAMMING AND ADJUSTMENTS



System type setting:

	Analog system
	2Voice digital system







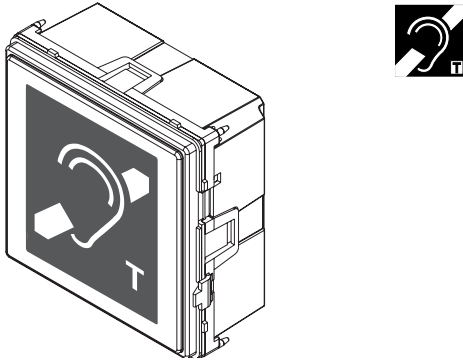
# SINTHESI S2 PUSH BUTTON PANEL

HEARING IMPAIRED PEOPLE MODULE Ref. 1148/48

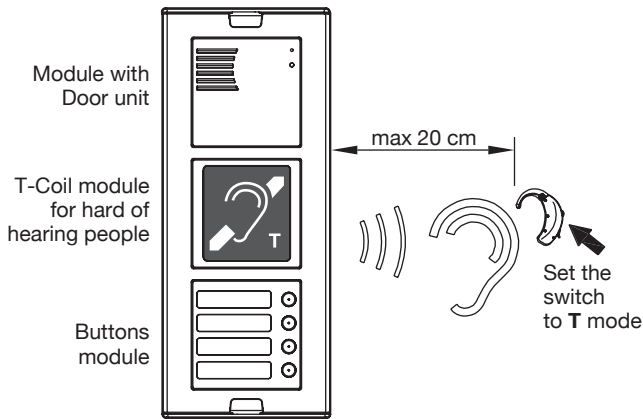


SINTHESI S2 PUSH BUTTON PANEL

## HEARING IMPAIRED PEOPLE MODULE Ref. 1148/48



ILA (Induction Loop Antenna) T-coil module Ref.1148/48 allows hard of hearing to hear door unit audio conversations with the hearing aid. The hearing aid must be equipped with a T-magnetic interface.



## DESCRIPTION OF TERMINALS

- ILA see dedicated drawings in the "Installation" paragraph
- ~12 12Vac or 12Vdc power supply
- ~0 power supply ground

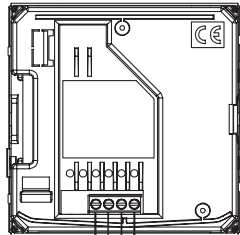
A power supply device dedicated to Ref. 1148/48 module is needed.

## TECHNICAL SPECIFICATIONS

Power voltage.....	12 Vac or dc
Max. current consumption .....	100 mA @ 12 Vdc
	200 mA @ 12 Vac
Operating temperature range.....	-5 ÷ +45 °C

## INSTALLATION

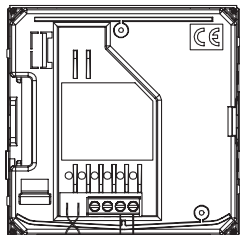
1083/9 and 1083/78-/79



To ILA terminal pins of the 2Voice module

~12 12Vdc or Vac Power supply  
~0

1083/74



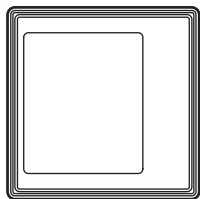
~0 ~12  
12Vdc or Vac Power supply  
~0

To ILA terminal pin Ref. 1083/74 module

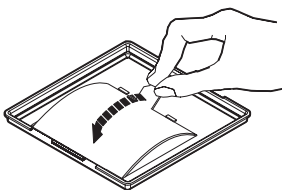
PUSH BUTTON PANEL



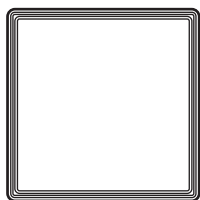
**REPERTORY MODULE Ref. 1148/50**



Repertory modules are normally used to indicate the house number or contain other information.  
Power terminals ~0 and ~12 to light the unit via LEDs.  
The procedure for fitting repertory tags is the same as that for the name tags.

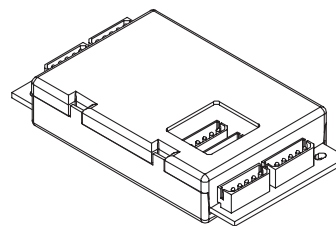


**BLANK MODULE Ref. 1148/59**



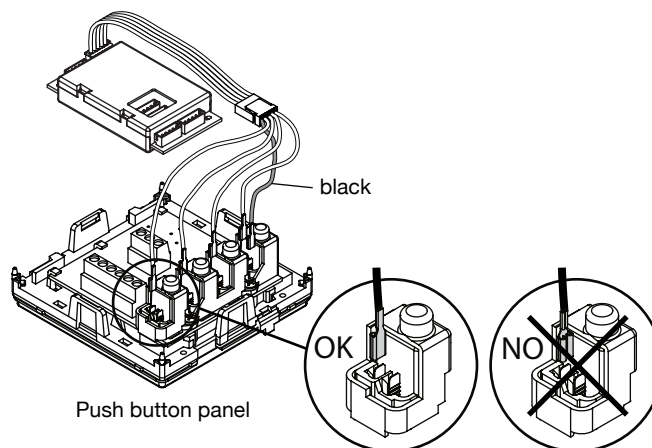
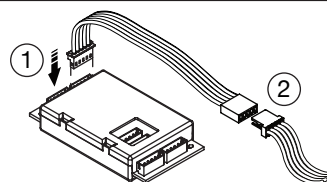
This module is used to fill in spaces which are not used in modular applications as required.  
The same module can be used for other applications, e.g. burglar alarms and automatic gates.

**16-USER EXPANSION MODULE Ref. 1083/17**



The expansion module allows you to add 16 user keys on push-button panels with an door unit and digitizer. It is possible to install up to 4 expansion modules for push-button panel on 2Voice system.

**INSTALLATION ON MODULES WITH 1 AND 2 BUTTONS**



**WIRES / TERMINAL PINS TABLE**

Colour	Terminal pin
Yellow	U1
Blue	U2
Brown	U3
Red	U4
Black	G/T

**TECHNICAL SPECIFICATIONS**

Current consumption: **1 mA Max**  
 Current in user button: **~ 1 mA**  
 Operating temperature range: **+0°C ÷ +50°C**  
 Humidity: **90% UR @ 30°C**



**COMPLEMENTARY PRODUCTS LIST**

All Sinthesi S2 products, their characteristics and installation modes are described in "Products Technical Manual - Door Phone and Video Door Phone system" in the section "Sinthesi Push Button Panel".

**BUTTONS MODULES AND REPERTORY**

With 1 button	<b>Ref. 1148/11</b>
With 2 buttons	<b>Ref. 1148/12</b>
With 3 buttons	<b>Ref. 1148/13</b>
With 4 buttons	<b>Ref. 1148/14</b>
Repertory module	<b>Ref. 1148/50</b>
Blank module	<b>Ref. 1148/59</b>

**FLUSH-MOUNTING BOXES**

For 1 module	<b>Ref. 1145/51</b>
For 2 modules	<b>Ref. 1145/52</b>
For 3 modules	<b>Ref. 1145/53</b>
For 4 modules	<b>Ref. 1145/54</b>

**FRAMES AND MODULE HOLDERS**

For 1 module	<b>Ref. 1148/61</b>
For 2 modules	<b>Ref. 1148/62</b>
For 3 modules	<b>Ref. 1148/63</b>
For 4 modules	<b>Ref. 1148/64</b>

**HOODED HOUSINGS**

For 1 module	<b>Ref. 1148/311</b>
For 2 modules	<b>Ref. 1148/312</b>
For 3 modules	<b>Ref. 1148/313</b>
For 4 modules	<b>Ref. 1148/314</b>
For 4 modules (2 module holders with 2 modules)	<b>Ref. 1148/324</b>
For 6 modules (2 module holders with 3 modules)	<b>Ref. 1148/326</b>
For 9 modules (3 module holders with 3 modules)	<b>Ref. 1148/339</b>

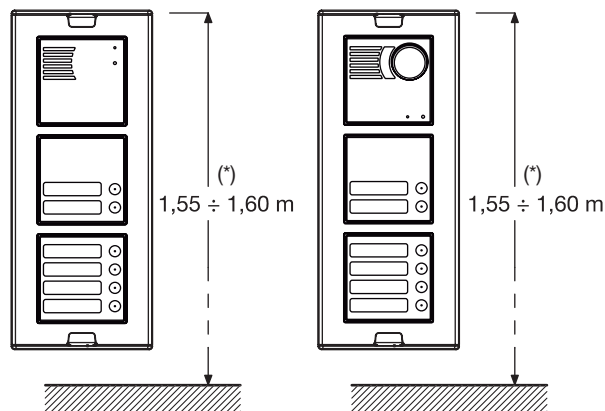
**RAIN HOODS (\*)**

For 1 module	<b>Ref. 1158/611</b>
For 2 modules	<b>Ref. 1158/612</b>
For 3 modules	<b>Ref. 1158/613</b>
For 4 modules	<b>Ref. 1158/614</b>
For 4 modules (2 module holders with 2 modules)	<b>Ref. 1158/624</b>
For 6 modules (2 module holders with 3 modules)	<b>Ref. 1158/626</b>
For 9 modules (3 module holders with 3 modules)	<b>Ref. 1158/639</b>

(\*) For these devices, follow the instructions provided in the *Product Technical Manual – Door Phone/Video door Phone system* in the section 21 - Sinthesi Steel push-button panel.

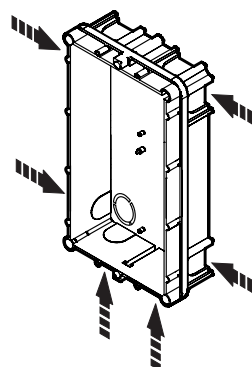
**INSTALLATION**

It is suggested to install the modules at the height shown below, according to the system to be realized.



(\*) For disabled or special needs users of the D1 type (elderly) and D2 type (lower limb motor difficulties), **the centre of the device must be arranged at a height comprised between 75 cm and 140 cm with respect to the floor.** For more details, see technical standard CEI 64-21:2016-12 – Residential environments. Systems suited for use by people with disabilities or special needs.

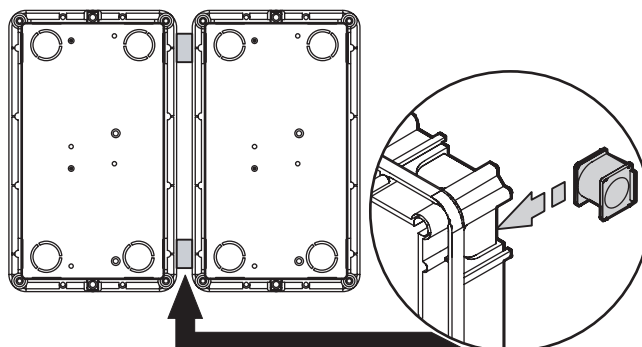
However, for complex systems with several modules, for a correct installation consider the height shown in the figure to fix the camera. If the system is a door phone, height refers to the door unit. Before installing the flush mounting box (single or coupled with other ones), prepare the hole (at the bottom or at the sides) for the passage of connection wires.



Flush mounting boxes can be assembled with suitable spacers, also used as wire hole.

If no accessories are included in flush mounting version, an unlimited number of flush mounting boxes can be combined. In case of systems also composed by embedding frames or rain hoods, the max. number of boxes to be combined is 3; the boxes are joined on the longest side.

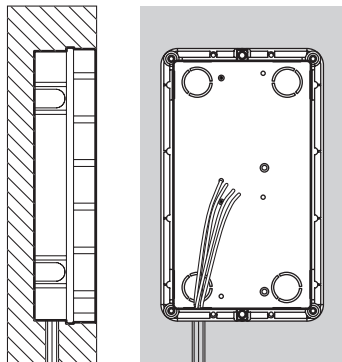
All spacers are empty, to allow the passage of wires from a box to another one.



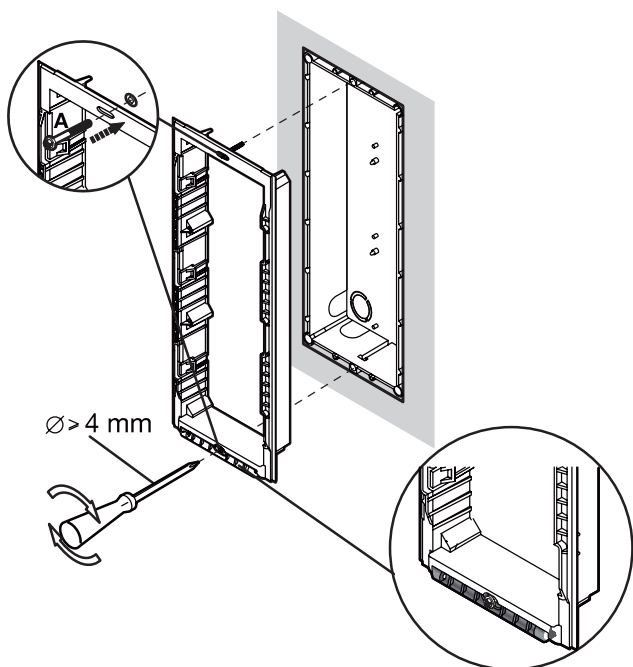


Arrange the flush mounting boxes and follow the instructions below:

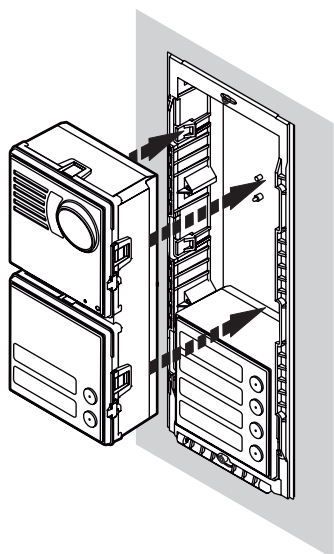
- Install the flush mounting box: it must not jut out of the wall.



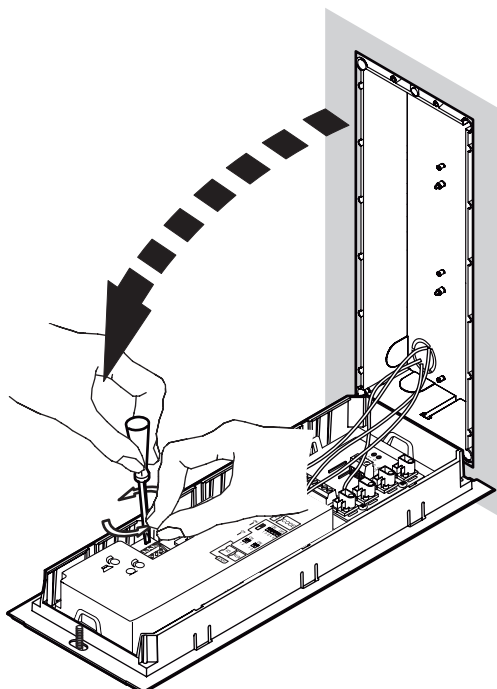
- Mount the module holder.



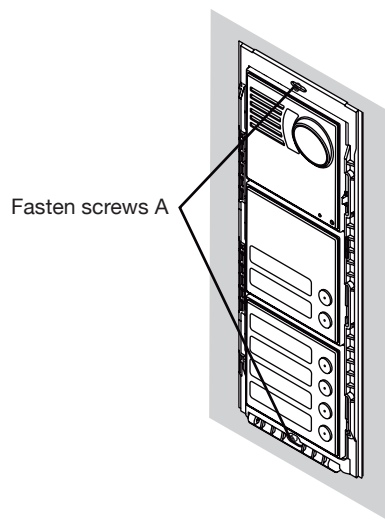
- Mount the modules on the module holder.



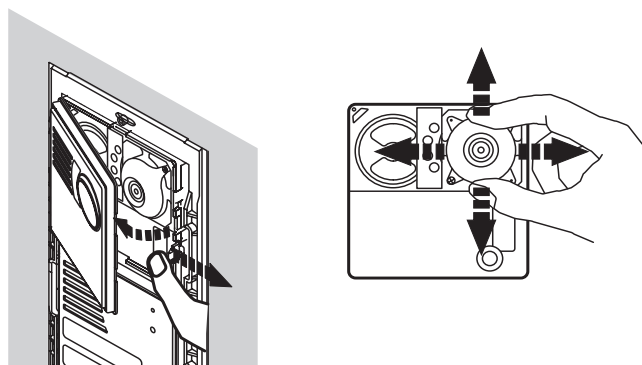
- Fold down the module holder and connect wires.



- Adjust the correct perpendicularity of the push button panel.
- Close the module holder by fastening screws A.



- Adjust camera orientation.





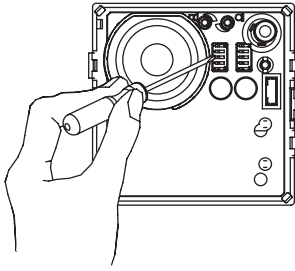
# SINTHESI S2 PUSH BUTTON PANEL

## INSTALLATION

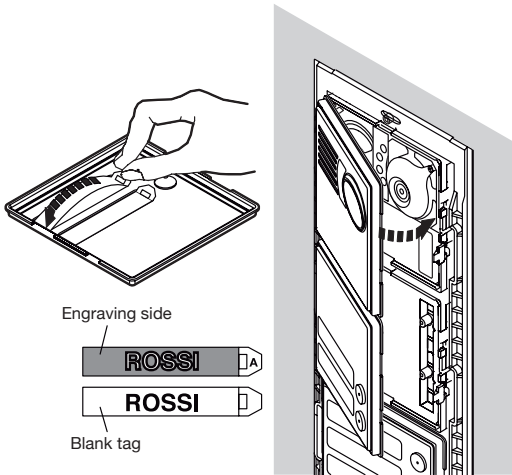
urmet

SINTHESI S2 PUSH BUTTON PANEL

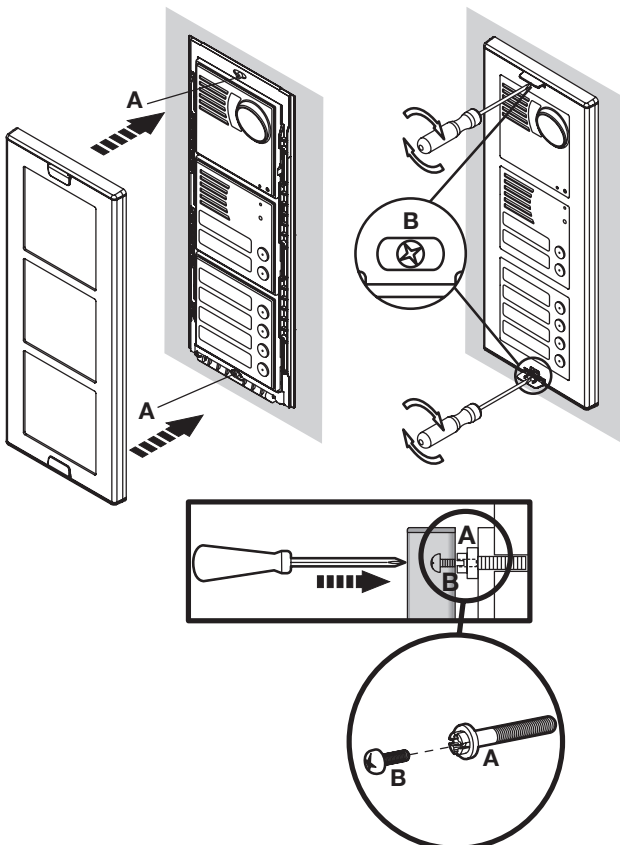
- Set the dip-switches according to instructions in the section “configuration”.



- Fit the name holders.



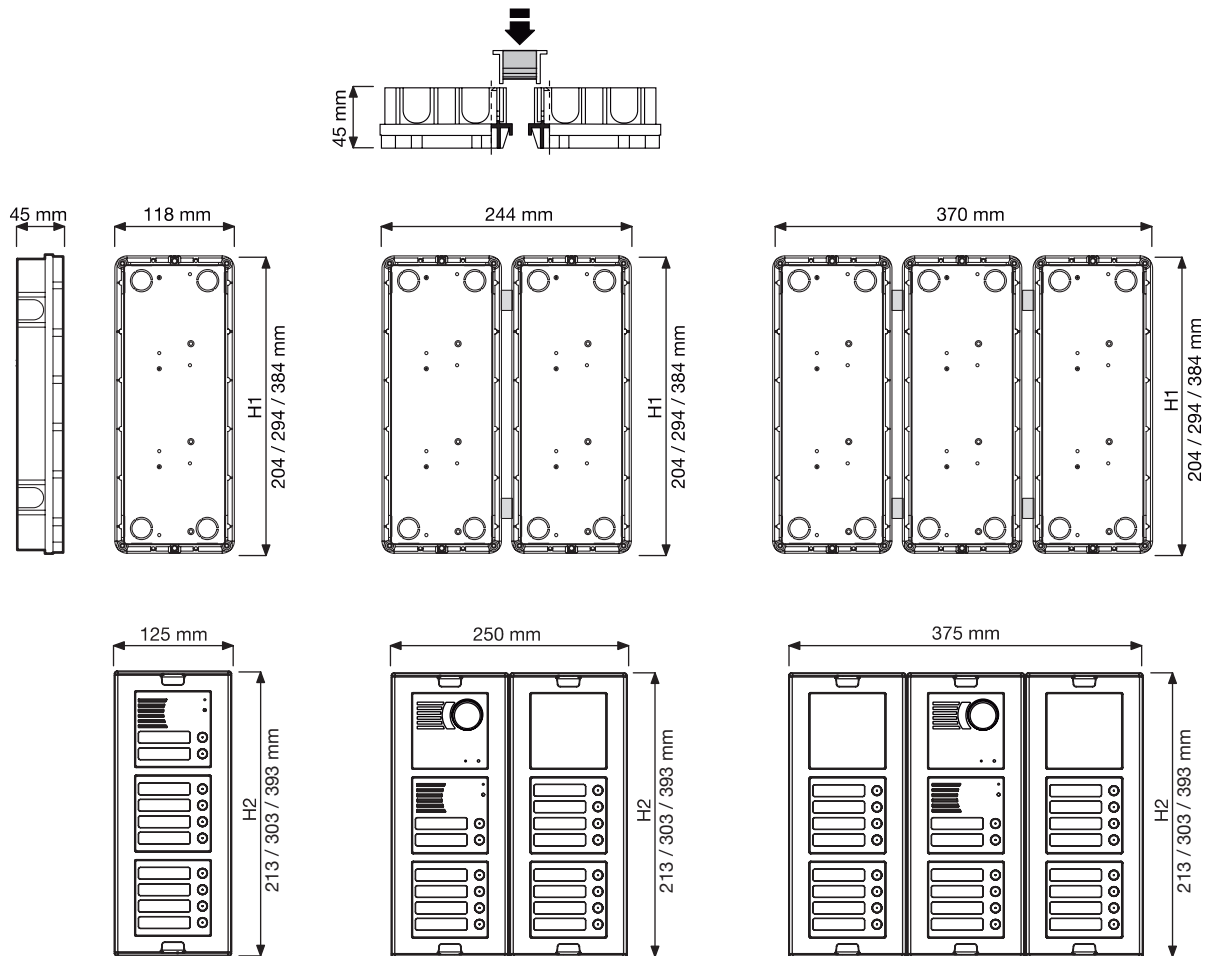
- Place the frame on the module holder.
- Fasten screws B on screws A.



PUSH BUTTON PANEL

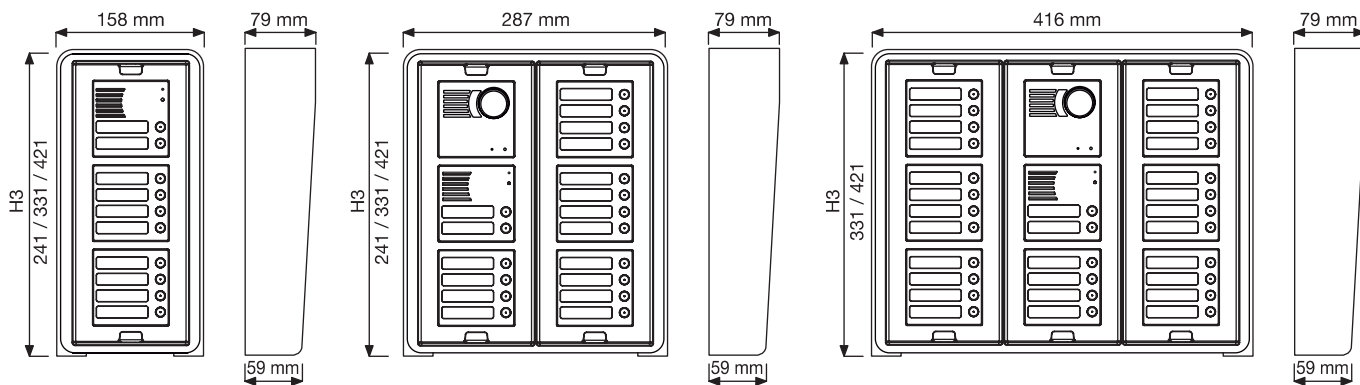


FLUSH MOUNTING VERSION



Values H1= 204, 294, 384 concerning flush mounting box height and values H2= 213, 303, 393 concerning the total height, are referred to versions composed by 2, 3, 4 modules.

WALL MOUNTING VERSION



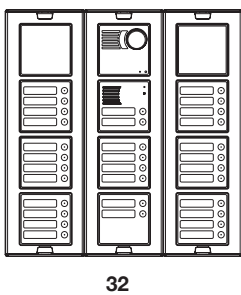
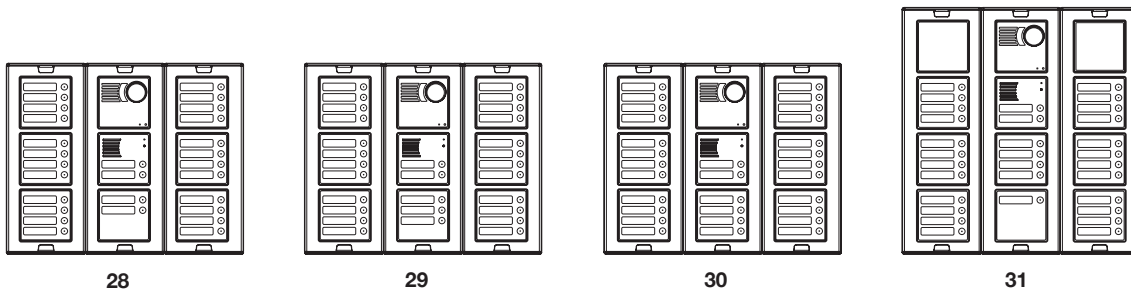
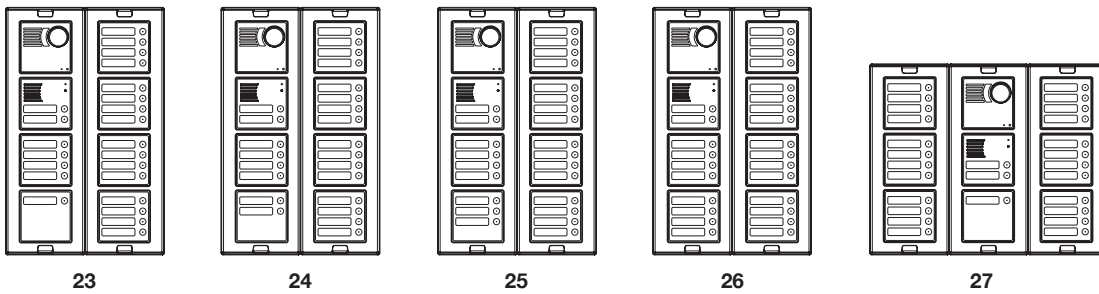
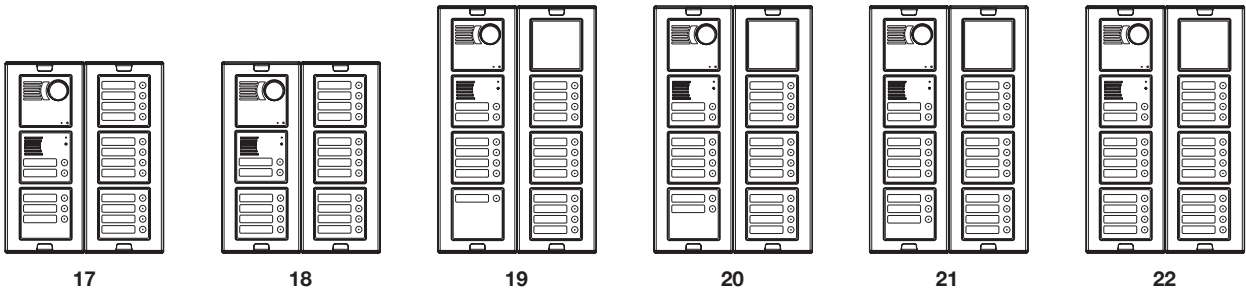
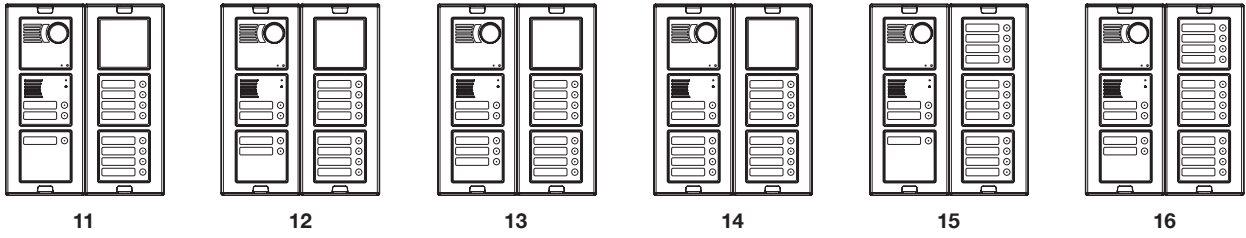
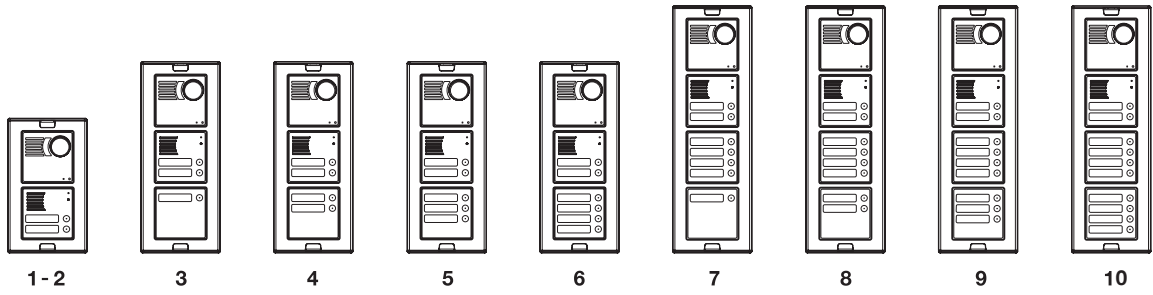
Values H3 concerning the total height can change according to the number of modules that can be included in the housing.

SINTHESI S2 PUSH BUTTON PANEL - OVERALL DIMENSIONS

PUSH BUTTON PANEL









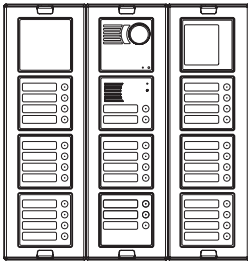
# SINTHESI S2 PUSH BUTTON PANEL

MODULARITY EXAMPLES FOR DIFFERENT SYSTEM DIMENSIONS  
(VIDEO DOOR PHONE SYSTEMS)

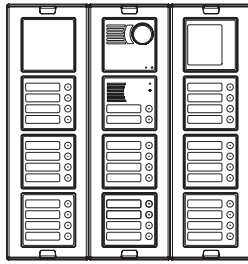


SINTHESI S2 PUSH BUTTON PANEL - VIDEO DOOR PHONE SYSTEMS

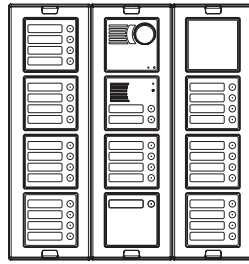
PUSH BUTTON PANEL



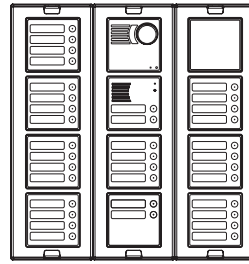
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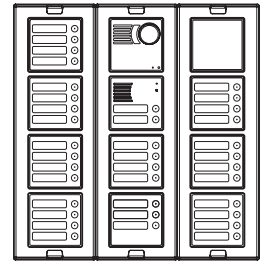
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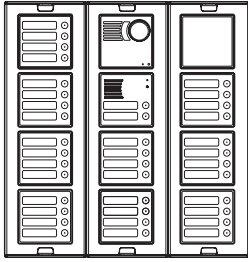
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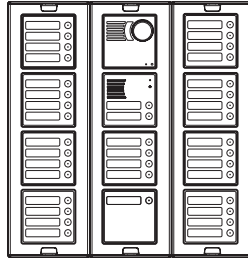
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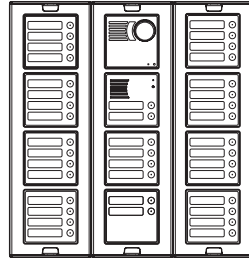
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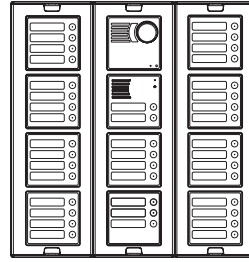
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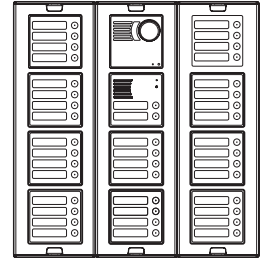
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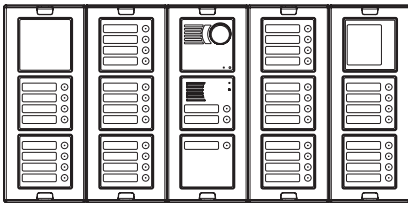
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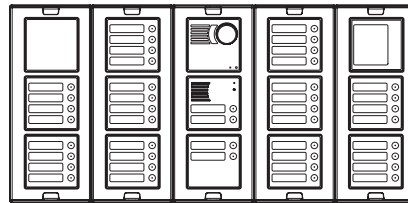
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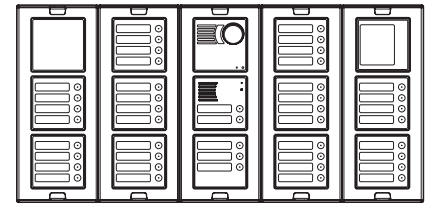
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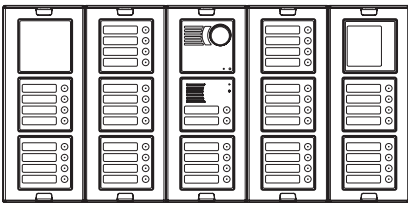
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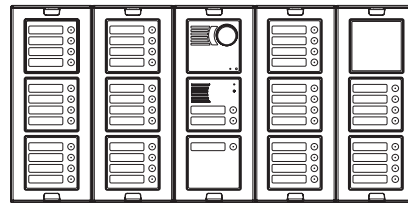
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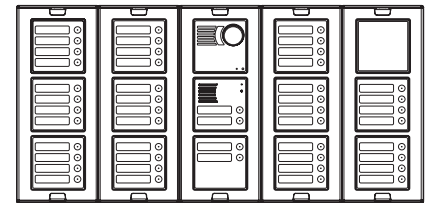
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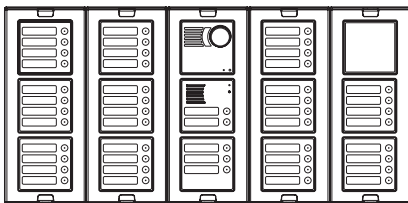
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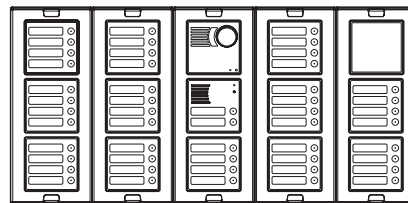
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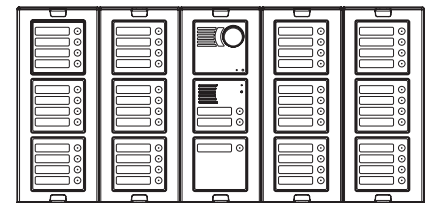
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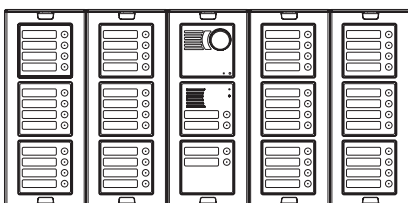
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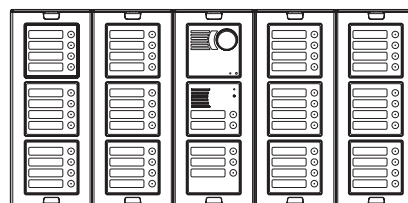
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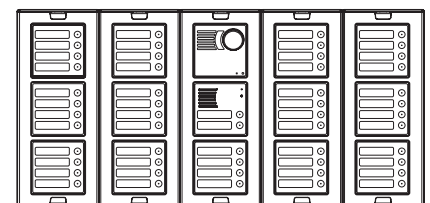
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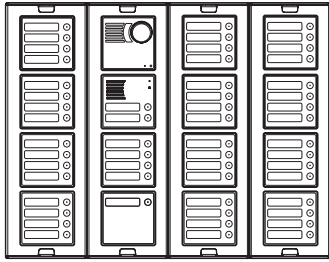
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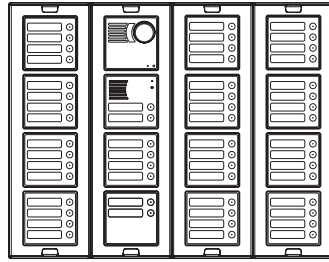
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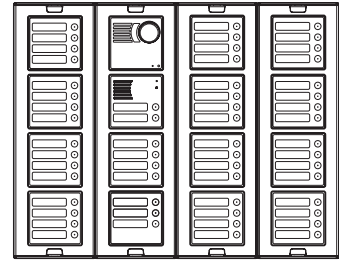
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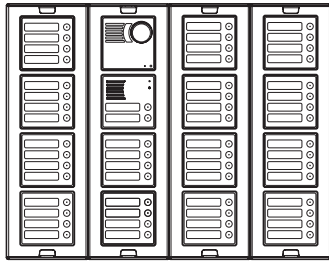
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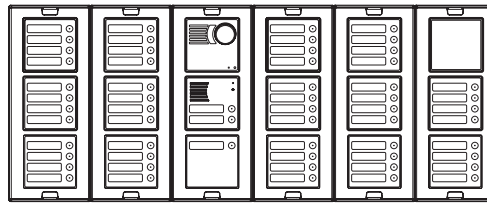
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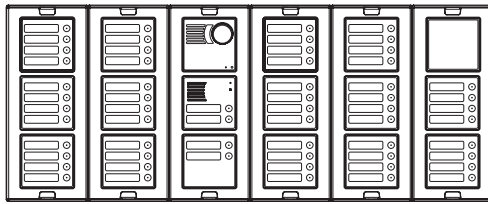
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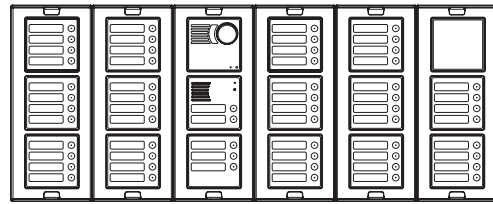
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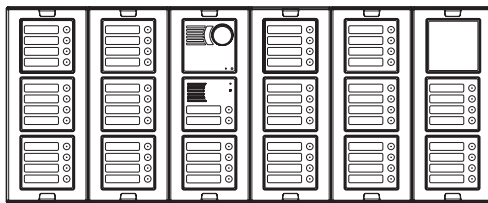
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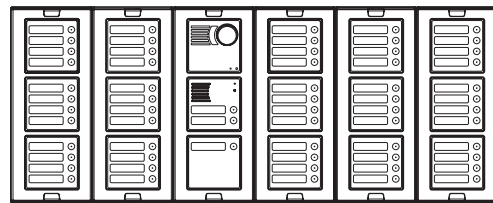
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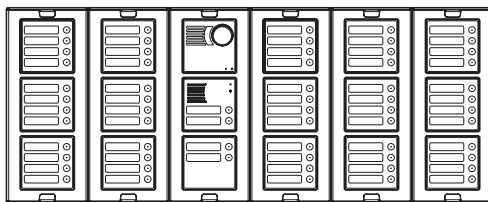
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62

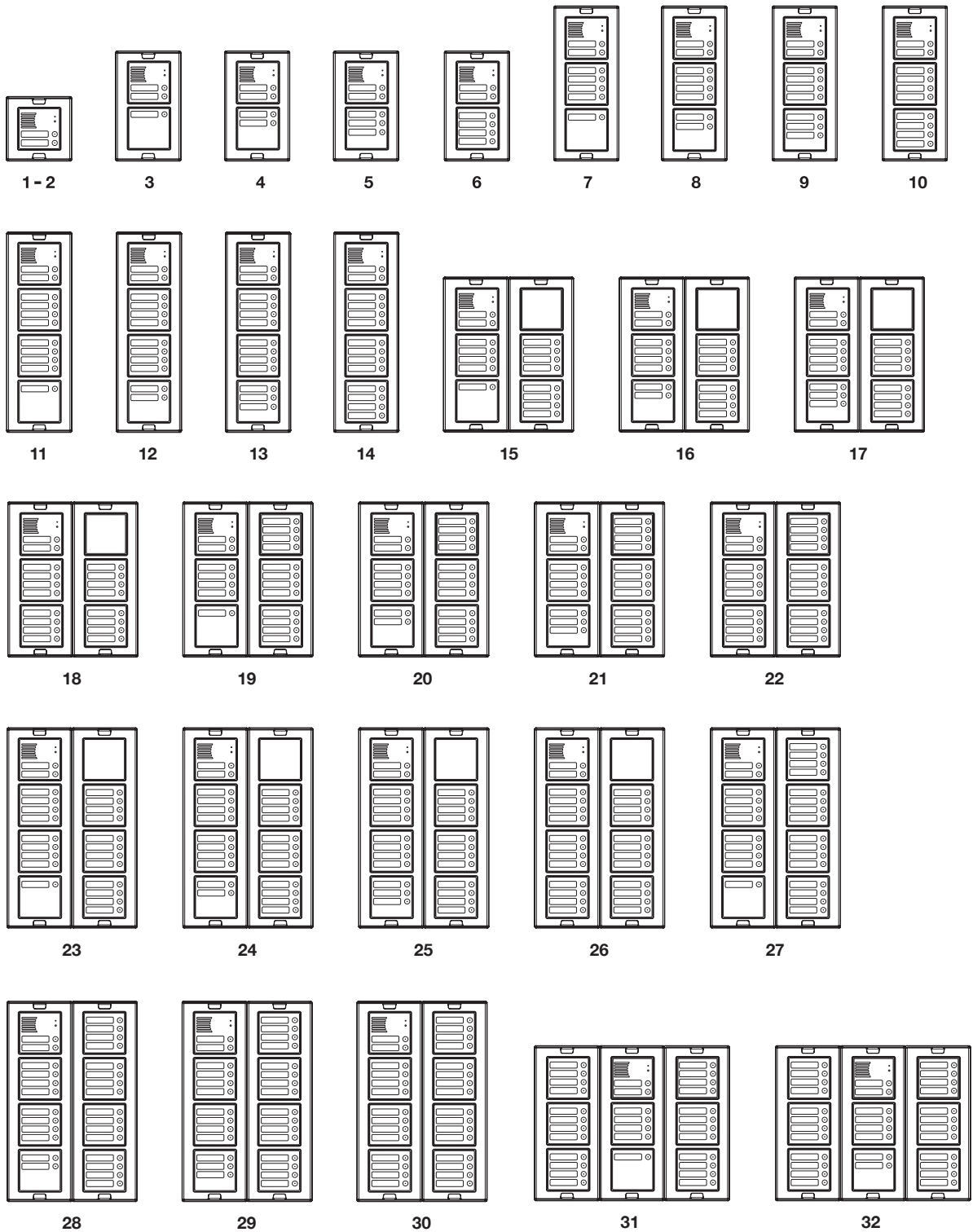


63



64





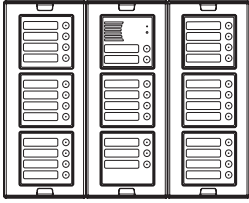


# SINTHESI S2 PUSH BUTTON PANEL

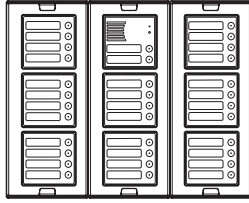
MODULARITY EXAMPLES FOR DIFFERENT SYSTEM DIMENSIONS  
(DOOR PHONE SYSTEMS)



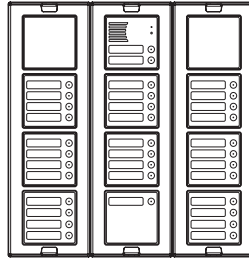
SINTHESI S2 PUSH BUTTON PANEL - DOOR PHONE SYSTEMS



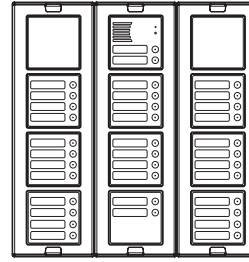
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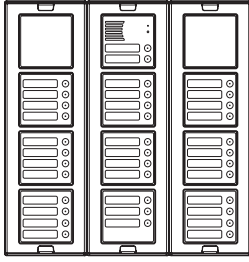
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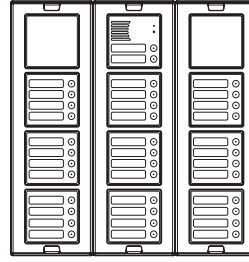
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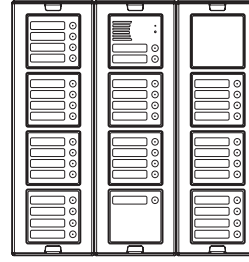
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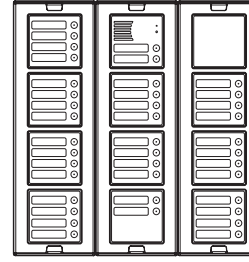
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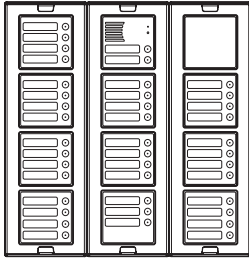
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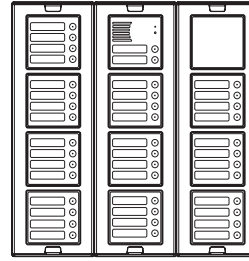
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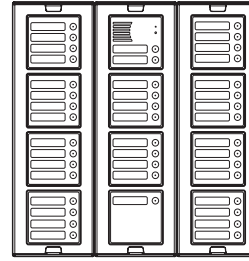
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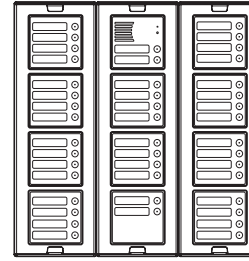
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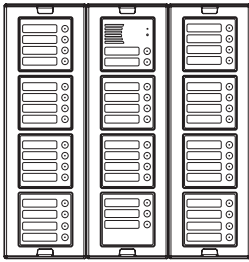
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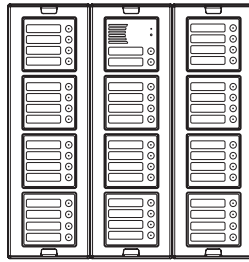
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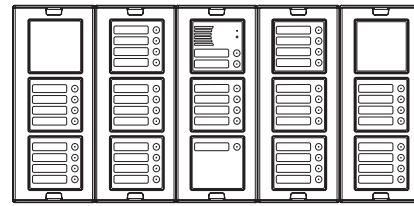
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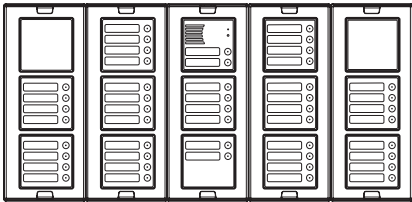
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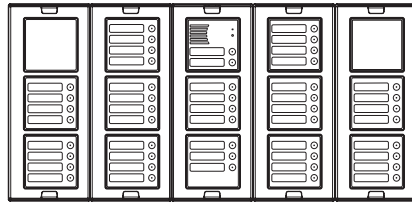
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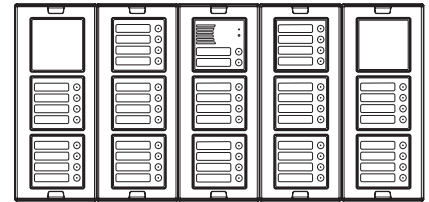
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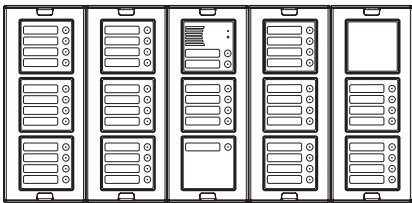
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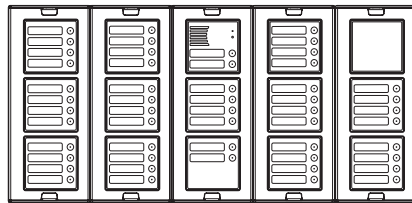
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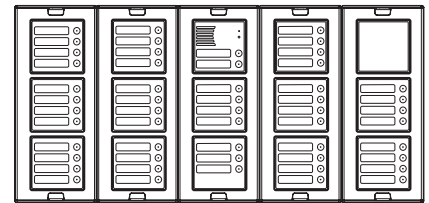
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51

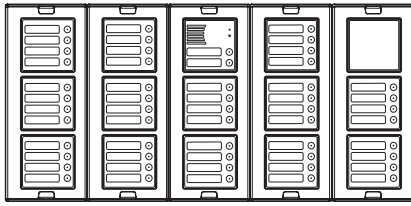


52

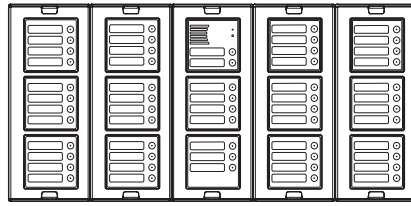


53

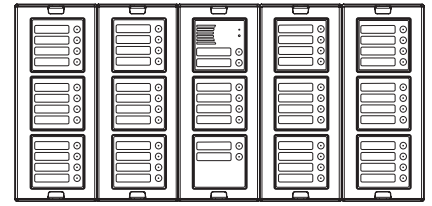
PUSH BUTTON PANEL



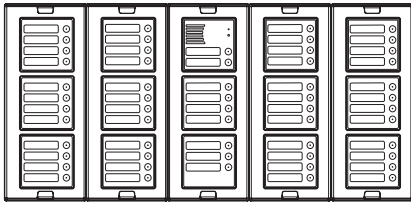
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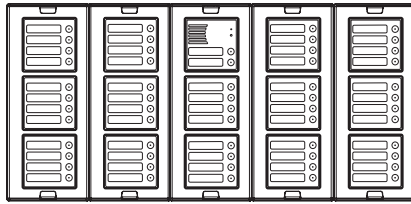
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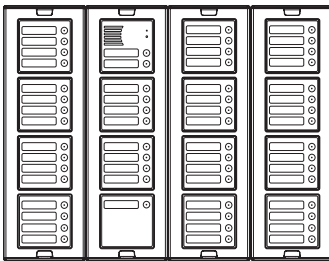
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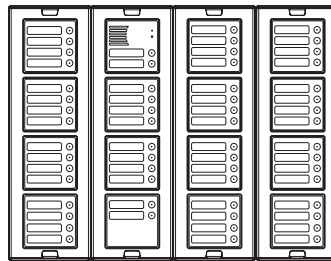
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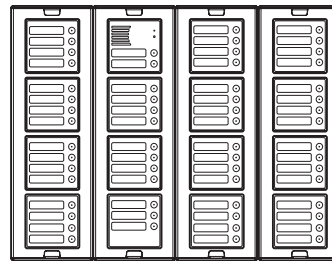
58



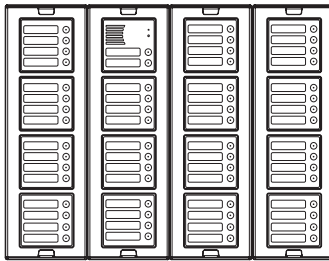
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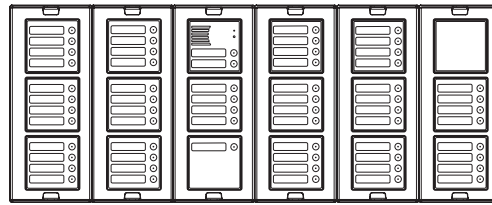
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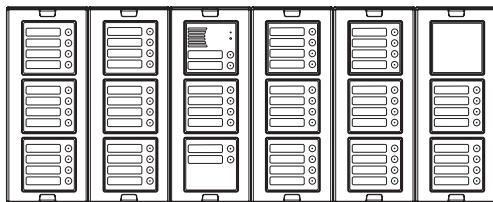
61



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63



64



# SINTHESI S2 PUSH BUTTON PANEL



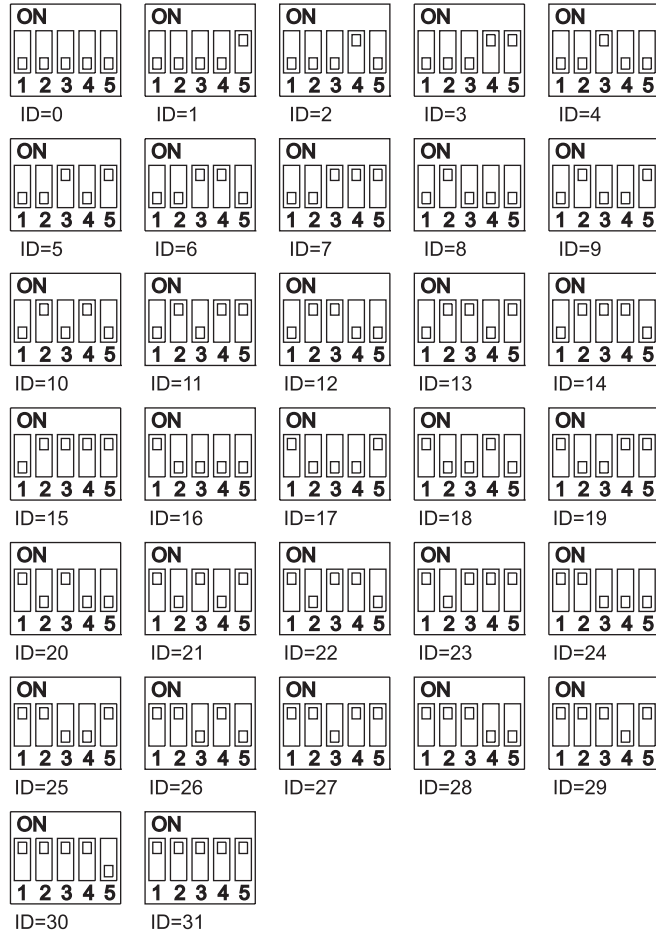
## CONFIGURATION

SINTHESI S2 PUSH BUTTON PANEL

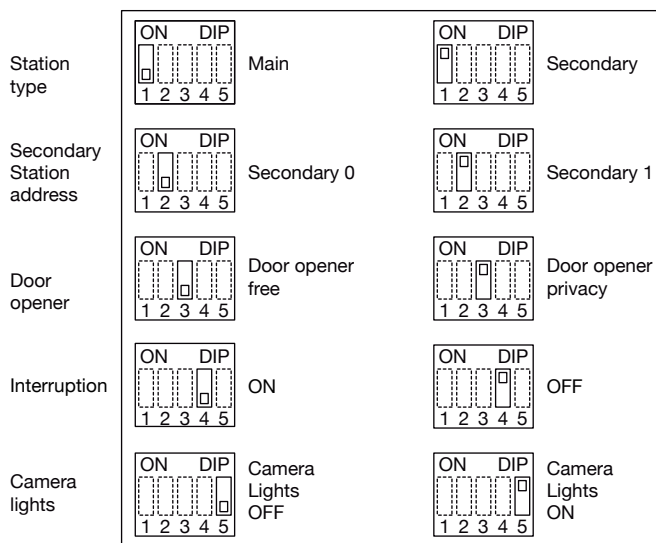
### CONFIGURATION

#### ID: door unit identifier

- Each main call station must have a unique code (call ID, i.e. Identifier) that can be set with dip-switch with values 0÷3;
- In case of secondary call station, the ID must be the same as the column ID configured on the column interface.



#### AUX: auxiliary settings



#### DIP1 – Station type

The door unit can be configured either as a main or a secondary device. All the users in the system may be called from the main door

unit. A secondary door unit may only call the users of the column to which it belongs. Users can identify the source of the call by the ring tone.

#### DIP2 – Secondary station address

Two secondary calling stations may be present in a column and must have a different address (0 or 1).

#### DIP3 – Door opener

The electric lock can be managed in “privacy” or “free” mode. The door unit works as follows in the two cases:

- “Privacy”: the electric lock may only be activated by pressing the door opening button on the calling station when an audio conversation has been established or when after having received a call or auto-on function either a video connection has been established.
- “Free”: when pressing the door lock release button of an apartment station, the door unit electric lock can be activated only if the door unit is configured as main or the user belongs to the column of the same secondary door unit. This column is defined by the ID setting of the secondary door unit. This function is typically used for secondary stations.

#### DIP4 – Interruption:

Where is in progress an auto-on or an intercom conversation or the video door phone answering machine browsing, the respective column or the whole system is in busy mode, which, according to the configuration of this switch, can be interrupted or not by a call from the door unit.



*The dip4 “interruption” must be programmed in the same way for all system call station.*

#### DIP5 – Camera lights

The camera lights may be turned off if illumination in the surrounding environment is sufficient at night.

**DOOR OPENING TIME.** The position of the rotary switch (DOOR TIME) determines the activation time of the door lock.



- Pos. 0 = 1 s
- Pos. 1 = 10 s
- Pos. 2 = 20 s
- Pos. 3 = 30 s
- Pos. 4 = 40 s
- Pos. 5 = 50 s
- Pos. 6 = 60 s
- Pos. 7 = 70 s
- Pos. 8 = 80 s
- Pos. 9 = 90 s/advanced programming

**GUARANTEED CONVERSATION TIME.** The position of the rotary switch (CONV TIME) determines a guaranteed time, i.e. extends the busy time from the answer onwards. The busy time is equal to the reply time (max 60 s) added to the guaranteed conversation time.



*The guaranteed conversation time must be programmed in the same way for all system call station.*



- Pos. 0 = 1 s
- Pos. 1 = 10 s
- Pos. 2 = 20 s
- Pos. 3 = 30 s
- Pos. 4 = 40 s
- Pos. 5 = 50 s
- Pos. 6 = 60 s
- Pos. 7 and 8 = 70 s
- Pos. 9 = advanced programming



*Gain access to the advanced configuration by rotating both rotary switches to position 9.*

PUSH BUTTON PANEL







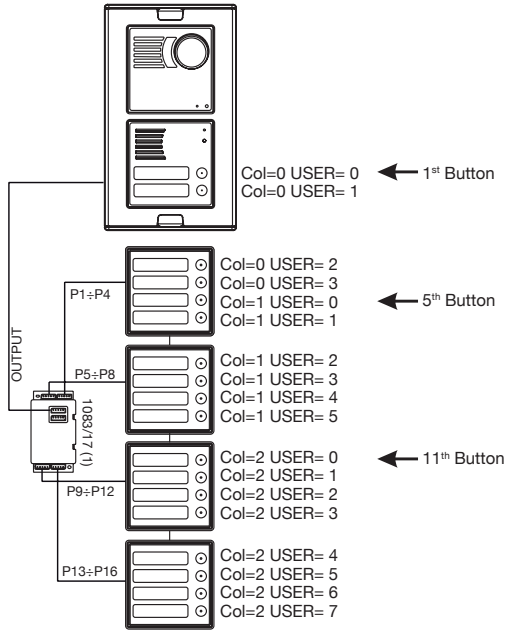
# SINTHESI S2 PUSH BUTTON PANEL

## ASSOCIATION OF DOOR UNITS BUTTONS TO USERS



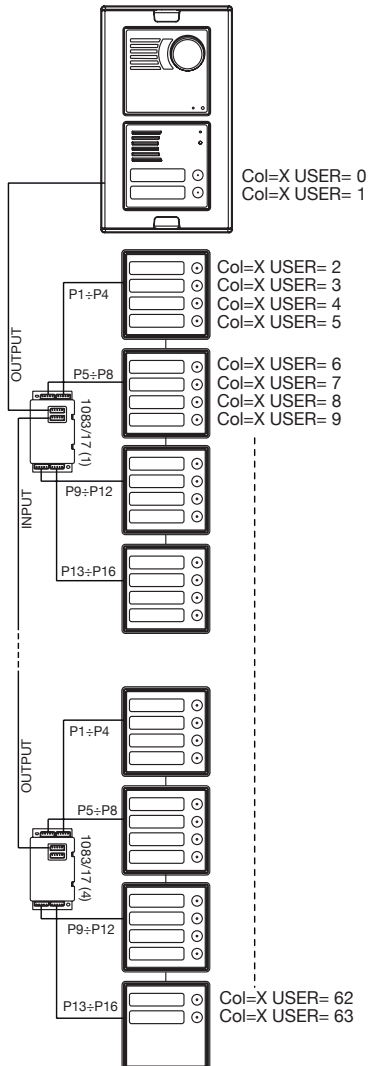
SINTHESI S2 PUSH BUTTON PANEL

The final configuration is the following:



### SECONDARY DOOR UNITS

In door units configured as secondary, buttons are associated by default to the users from 0 to 63 of their column.



PUSH BUTTON PANEL

If the door units are configured as secondary, but each one must call a different group of users, follow the instructions below:

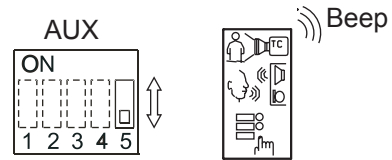
- Gain access to advanced configuration by rotating both the dip-switches in position 9 (the yellow led turns on).



- Set the call station ID dip-switch to the code of the apartment station which will be associated to the first button (offset);

*The offset code must only be included between 0 and 31.*

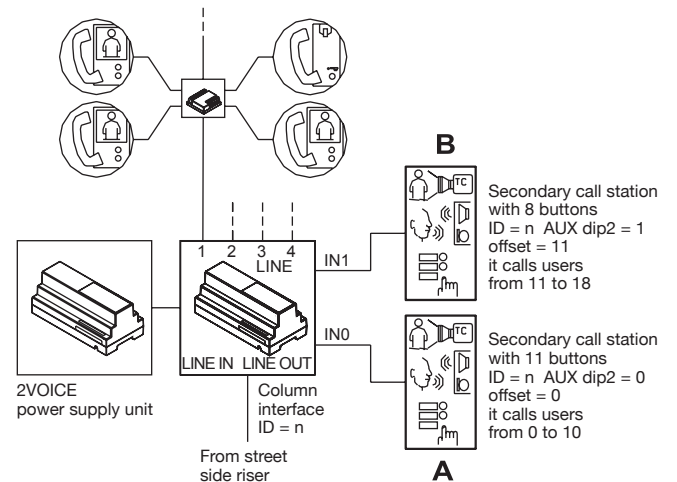
- Change AUX dip switch n. 5 position (the call station emits a confirmation tone);
- Put again the AUX dip switch n. 5 in its original position (the call station emits a confirmation tone);



- Put again the ID dip-switches in their original position;
- Quit the advanced configuration, by putting again the two rotary switches in the positions used to set door lock release time and guaranteed communication time: the yellow led switches off.

Example:

The secondary call station "A" calls only users from 0 to 10, the call station "B" only users from 11 to 18.



- On the call station "B", gain access to advanced configuration;
- Set ID dip-switch to 11;
- Move AUX dip switch n. 5;
- Put again all dip-switches in their original position;
- Quit the advanced configuration.



OPTIONAL PROGRAMMING

AUTO-ON FUNCTION ON SURVEILLANCE CAMERAS

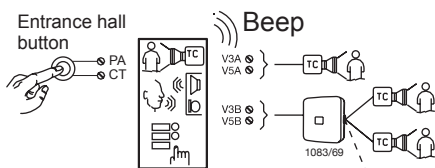
*This function is available only on door units provided with terminal pins V3 and V5 (Ref. 1083/78 -/79 and Ref. 1083/9).*

If in a call station there are surveillance cameras, this function must be programmed.

- Gain access to the advanced configuration by rotating both rotary switches to position 9; the door unit emits a beep to indicate programming status and the yellow led turns on.



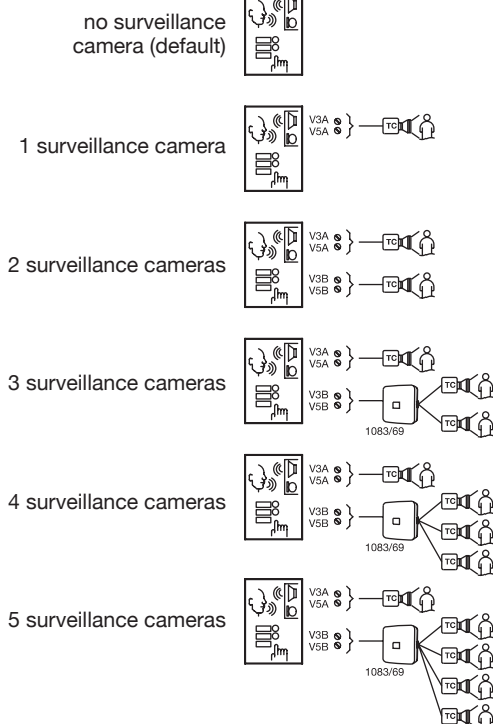
- Press the entrance hall button (PA – CT) for many times as the number of installed surveillance cameras. Each time the button is pressed, the door unit emits a number of beeps equal to the number of programmed cameras (5 max.). By pressing again the buttons after the 5 beeps, the door unit emits a long beep, indicating that there are no cameras connected (default).



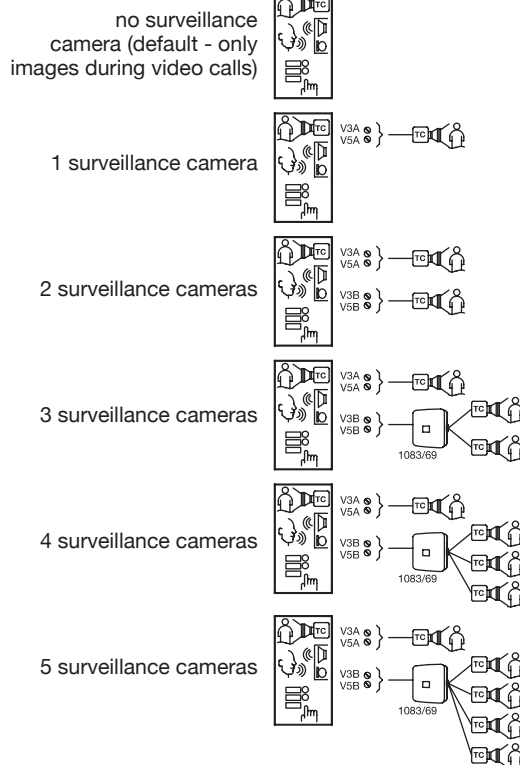
- Put again the rotary switches in the correct position to quit the advanced configuration.
- Repeat the programming procedure for all call stations with surveillance cameras.

According to the programmed number of cameras, the following configurations are available:

DOOR PHONE CALL STATION



VIDEO DOOR PHONE CALL STATION



*If the call comes from a video door phone call station, the push button panel camera will be activated. In case of call coming from a door phone call station with surveillance camera, the camera connected to terminal pins V3A and V5A will be activated.*

BUTTON CONFIGURATION FOR SPECIAL FUNCTION

It is possible to configure a button for a special function, for example to turn the stairs lights on.

To configure the button, perform as follows:

- Go to advanced configuration



- Keep the selected button pressed for 3 seconds, the door unit emits an acoustic signal to confirm that the acquisition has been successfully performed.

*The function can be activated only if a suitably programmed special decoder is installed.*



## SINTHESI S2 PUSH BUTTON PANEL

### OPTIONAL PROGRAMMING



### PROGRAMMING DATA DELETING

1. Gain access to advanced programming by putting both the rotary switches in position 9.
2. Keep any call button pressed for at least 5 seconds (after the second beep), then release it.
3. Put again the rotary switches in their operating position.

In this way, buttons/users association, special function button association and surveillance cameras number are deleted.

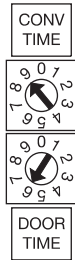
### CODE ALLOCATION ON DOOR UNIT FOR DIRECT CALL TO SWITCHBOARD (FUNCTION 96 - Ref. 1083/74)

The function is used to configure the two buttons of the door unit for fixed calls to switchboard. In this manner, fitting the single button front panel is optional but not indispensable.

The function works only when the door unit (audio or video) is configured as main (secondary units cannot call the switchboard).

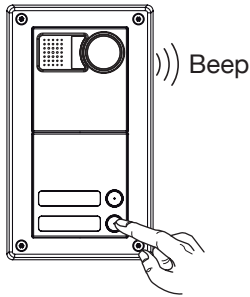
#### HOW TO PROGRAM

1. Enter programming mode by setting the CONV. TIME rotary switch to position 9 and the DOOR TIME rotary switch to position 6.



The door unit will beep twice every second and the yellow LED will light up to indicate the programming status.

2. To activate the function, hold the single button shown on the drawing pressed for longer than 5 seconds.



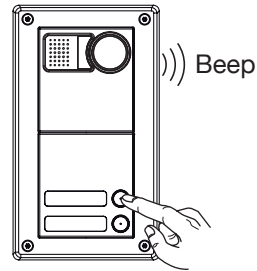
3. When the door unit recognises a long press on the button it will generate a long beep (approximately 1s) to indicate that it was programmed.
4. After the long confirmation beep, the door unit will go back to generating two beeps a second to indicate programming state.
5. Restore the rotary switches to the initial position to quit programming mode.

### DEACTIVATING THE FUNCTION

1. Enter programming mode by setting the CONV. TIME rotary switch to position 9 and the DOOR TIME rotary switch to position 6. The door unit will beep twice every second and the yellow LED will light up to indicate the programming status.



2. To deactivate the function, hold the single button shown on the drawing pressed for longer than 5 seconds.



3. When the door unit recognises a long press on the button it will generate a long beep (approximately 1s) to indicate that it was deactivated.
4. After the long confirmation beep, the door unit will go back to generating two beeps a second to indicate programming state.
5. Restore the rotary switches to the initial position to quit programming mode.

The function can also be deactivated by performing the general PROGRAMMING DATA DELETION procedure.

### SELECTIVE AUTO-ON IN ODD AND EVEN GROUPS (FUNCTION 97 - Ref. 1083/74 - 1083/9 - 1083/78-79)

#### HOW IT WORKS

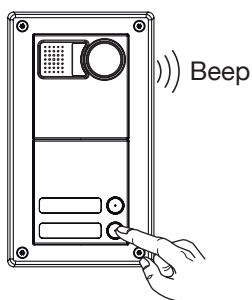
The user group with even ID code can engage in audio and video mode the door units with address equal to ID=0 (if secondary) or ID=2; on the other hand, the users with odd ID code can engage in audio and video mode the door units with odd address ID=1 (both main and secondary) or ID=3. During selected door unit auto-on function, picking up the handset will establish the audio line and the door opening function.

#### HOW TO PROGRAM

1. Enter programming mode by setting the CONV. TIME rotary switch to position 9 and the DOOR TIME rotary switch to position 7. The door unit will beep twice every second and the yellow LED will light up to indicate the programming status.



2. To activate the function, hold the single button shown on the drawing pressed for longer than 5 seconds.



- When the door unit recognises a long press on the button it will generate a long beep (approximately 1s) to indicate that it was programmed.
- After the long confirmation beep, the door unit will go back to generating two beeps a second to indicate programming state.
- Restore the rotary switches to the initial position to quit programming mode.

**NOTE:**

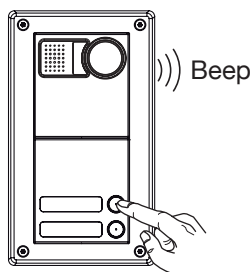
- The function works with main and secondary video door units, except for the MAIN door unit with ID=0, on which all users must be able to activate the auto-on function.
- The described filter only works when the selective auto-on function is activated on the installed door units. When it is not programmed, the odd and even user codes are not differentiated. For example, with function active on MAIN door unit 1 (odd) and deactivated on MAIN door unit 3 (also odd), the user with ID 16 (even) cannot engage VP1 but will be able to engage VP3.
- A video door unit (VPE) means a Push button panel with integrated camera or audio-only door unit with set-up for connecting an external camera.

**DEACTIVATING THE FUNCTION**

- Enter programming mode by setting the CONV. TIME rotary switch to position 9 and the DOOR TIME rotary switch to position 7. The door unit will beep twice every second and the yellow LED will light up to indicate the programming status.



- To deactivate the function, hold the single button shown on the drawing pressed for longer than 5 seconds.



- When the door unit recognises a long press on the button it will generate a long beep (approximately 1s) to indicate that it was deactivated.
- After the long confirmation beep, the door unit will go back to generating two beeps a second to indicate programming state.
- Restore the rotary switches to the initial position to quit programming mode.

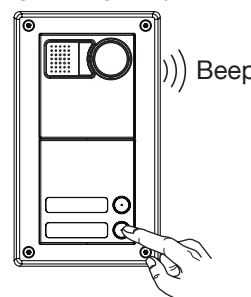
The function can also be deactivated by performing the general PROGRAMMING DATA DELETION procedure.

**CODE 0 ALLOCATION TO BUTTON (FUNCTION 98 - Ref. 1083/74 - 1083/9 - 1083/78-/79)**

- Enter programming mode by setting the CONV. TIME rotary switch to position 9 and the DOOR TIME rotary switch to position 8. The door unit will beep twice every second and the yellow LED will light up to indicate the programming status.



- To activate the function, hold the single button shown on the drawing pressed for longer than 5 seconds. A long beep will sound to indicate that programming was performed.



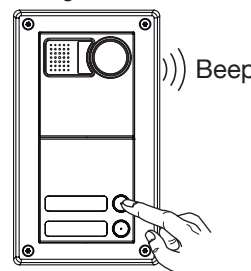
- Restore the rotary switches to the initial position to quit programming mode.

**DEACTIVATING THE FUNCTION**

- Enter programming mode by setting the CONV. TIME rotary switch to position 9 and the DOOR TIME rotary switch to position 8. The door unit will beep twice every second and the yellow LED will light up to indicate the programming status.



- To deactivate the function, hold the single button shown on the drawing pressed for longer than 5 seconds.



- Restore the rotary switches to the initial position to quit programming mode.

The function can also be deactivated by performing the general PROGRAMMING DATA DELETION procedure.

