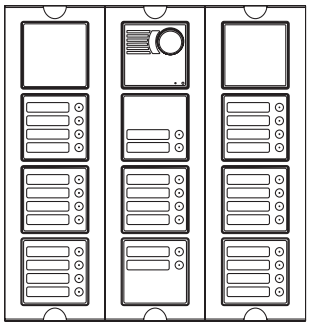
Sinthesi

PUSH BUTTON PANEL

SECTION CONTENTS

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

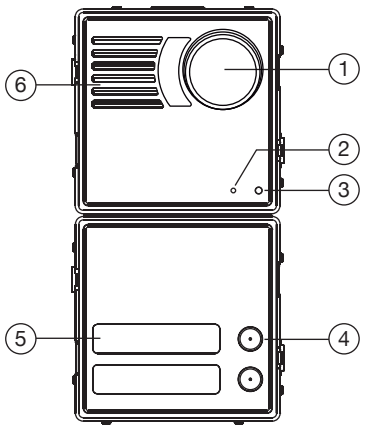
CAMERA MODULE AND DOOR UNIT WITH 2 BUTTONS Ref. 1083/72 AND Ref. 1083/71

FEATURES

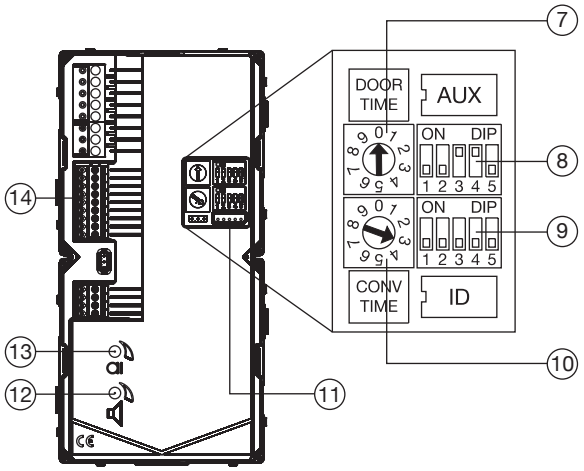
- Installation on Sinthesi module holder frames with 2 modules.
- Two pre-wired call buttons.
- 4 expansion modules (connected in series) can be connected, up to 64 user buttons max. for each door unit.
- Connection of 16-user expansion module Ref. 1038/17 or Ref. 1083/17 with connector.
- Up to 4 main call stations and up to two secondary call stations can be connected for each column.
- Fixed focus colour camera with embedded lens and shutter.
- Lens orientation can be adjusted.
- Embedded illuminator, that can be excluded under sufficient lighting conditions.
- Codes sequences can be assigned to call buttons with dip-switch.
- All the programming procedure can be performed with dip-switch.
- Off-hook waiting time: 60 seconds (system busy).
- The guaranteed communication time can be programmed with rotary-switch up to 70 seconds (system busy).
- Max. conversation time starting when the handset is picked up: 10 minutes.
- 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 sensor.
- Trimmer for adjusting loudspeaker and microphone audio level.
- Management of two external coax video inputs for surveillance cameras, if present (Ref. 1083/72 only).
- Relay box driving for cyclic control of several video surveillance cameras (Ref. 1083/72 only).
- Output for power supply of name holders lighting (up to 32 buttons with the power supply unit Ref. 1083/20).
- Audio repeater device for hard of hearing people (Ref. 1083/72 only).

STRUCTURE

FRONT VIEW



REAR VIEW



1. Camera
2. Signalling yellow led
3. Microphone
4. Pre-wired buttons
5. Name holders
6. Loudspeaker
7. Rotary-switch for pedestrian door lock release activation time
8. Auxiliary settings dip-switch
9. Identification code dip-switch
10. Busy time rotary-switch
11. Connector for expansion module
12. Loudspeaker volume adjustment
13. Microphone volume adjustment
14. Terminal blocks

TERMINAL PINS DESCRIPTION

LINE		Incoming Bus line	
SE+		Positive for pedestrian electric lock activation	
SE-		Negative for pedestrian electric lock activation	
A	V3	Surveillance camera 1 signal	Ref. 1083/72 only
	V5	Reference for surveillance camera 1 signal	
B	V3	Surveillance camera 2 signal / video switch	
	V5	Reference for surveillance camera 2 / video switch	
ILA		Hard of hearing device output	
SE2		Driveway electric lock activation	
T+		Command for video switch	Ref. 1083/72 only
T-		Reference for video switch	
CT		Reference for PA and SP	
PA		Entrance hall button	
SP		Open door sensor (*)	
ILL		Power supply for name holders lighting	
-		Do not use	
+			

(*) *the terminal pin SP is connected by default to the terminal pin CT; to connect the normally close door sensor (with closed door), remove the jumper.*

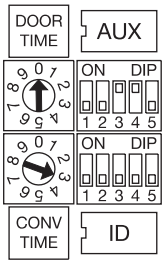
TECHNICAL CHARACTERISTICS

Power supply voltage (LINE):	**36 – 48Vdc**
Standby current consumption:	**45mA max**
Max. current consumption: (video call and name holders on)	**250mA max**
Name holders lighting ILL output:	**11 – 13,8Vdc max 200mA**
Lock output SE+ and SE-:	**22 – 24Vdc max 200mA**
SE2 switched load:	**300mA 125V Max**
Operating temperature range:	**-10°C ÷ + 50°C**
Compliant with:	**EN 61000-6-3, EN 61000-6-1**

DEFAULT PROGRAMMING

All cameras are configured in factory as follows:

Call station type:	**main**
Secondary number:	**0**
Door lock release:	**free**
Interruption:	**Not enabled**
Camera illuminators:	**on**
Guaranteed comunication time rotary:	**30 s (pos 3)**
Door lock release rotary:	**1 s (pos 0)**
Door unit number:	**0**
Power supply:	**from the line (LINE)**



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 ACTIVATION

Door units are provided with two terminal pins for pedestrian electric lock activation (SE-, SE+). The electric lock is activated in the following cases:

- Each time the entrance hall button is pressed (terminal pins PA, CT).
- After receiving a door lock release command from an apartment station, according to the configuration of the dip-switch used to configure the operating mode "free" or "secret" (see section "2VOICE system", paragraph "Call stations features").
- When the call is sent to an apartment station which is provided with "automatic door lock release" feature and this function is active.

If electric locks to be activated need special timing, the rotary switch "DOOR TIME" must be adjusted.

During electric lock activation, additional name holders, if powered by door unit terminal pins ILL, switch off.

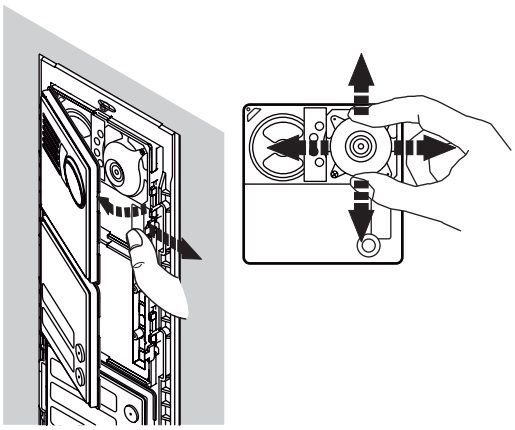
DRIVEWAY DOOR LOCK RELEASE MANAGEMENT

Door units are provided with two terminal pins (SE2) connected to the contacts of a normally open relay, that can be used to command a gate opening control panel. The relay is activated for 1 second after receiving a driveway door lock release command from an apartment station, according to the configured operation mode, "free" or "secret", as for the pedestrian electric lock.

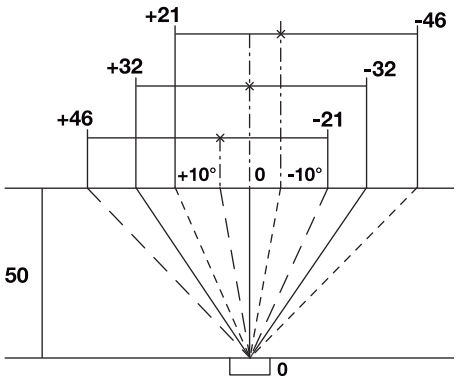
This relay is NOT suitable to manage directly power loads, but can only be used as command relay.

CAMERA LENS ORIENTATION ADJUSTING

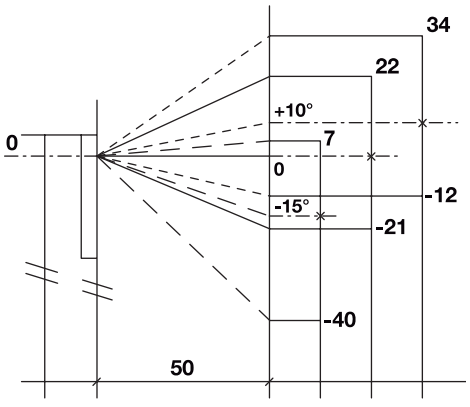
After installation, camera orientation can be adjusted according to the position of the camera and the captured subject. This operation can be performed manually, after removing the frame and the extractable front unit. Move the articulated stand on the front side. It is not necessary to fold down the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



VIEWING ANGLES
Camera moving angles regarding the centered position are the following:
VERTICAL +10 ÷-15° HORIZONTAL +10 ÷-10°



HORIZONTAL

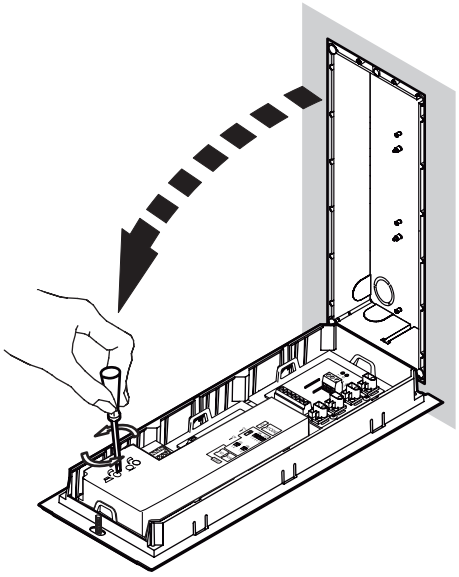


VERTICAL

Measures in cm

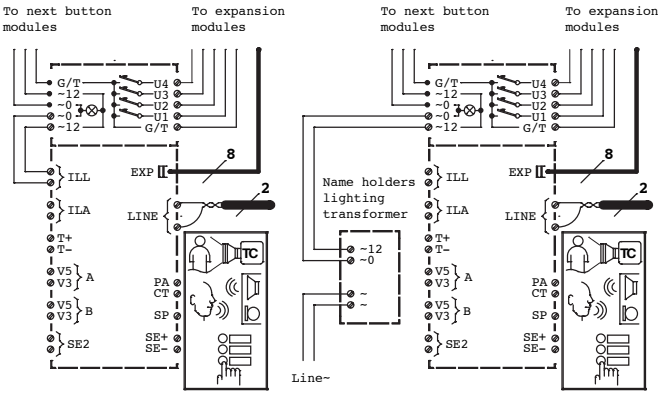
AUDIO ADJUSTMENT

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.



Call station with 32 name holders max.

Call station with more than 32 name holders

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.

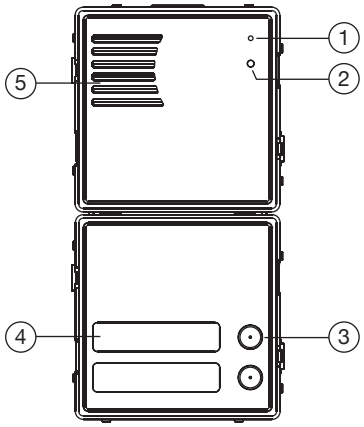
DOOR UNIT MODULE WITH 2 BUTTONS Ref. 1083/7 AND Ref. 1083/5

FEATURES

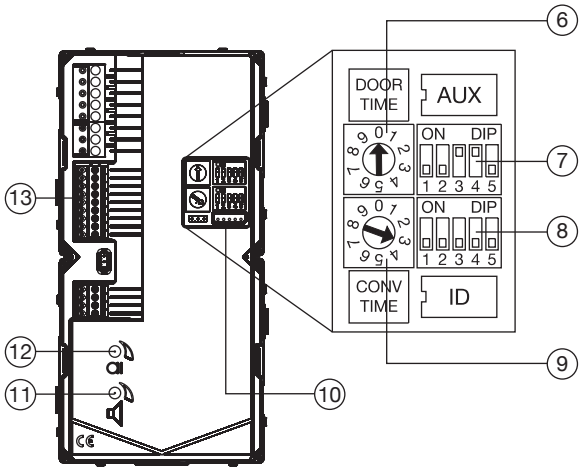
- Installation on 2-module Sinthesi module holder frames.
- Two pre-wired call buttons.
- 4 expansion modules can be installed (connected in series), up to 64 user buttons max. for each door unit.
- Connection of 16-user expansion module Ref. 1038/17 or Ref. 1083/17 with connector.
- Up to 4 main call stations and up to 2 secondary call stations can be connected for each column.
- Code sequences can be assigned to call buttons with the dip-switch.
- All the programming procedure can be performed with dip-switch.
- Off-hook waiting time: 60 seconds (system busy).
- Guaranteed communication time can be programmed with rotary-switch up to 70 seconds (system busy).
- Max. conversation time starting when the handset is picked up: 10 minutes.
- 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 sensor.
- Trimmer for adjusting loudspeaker and microphone audio level.
- Management of two external coax video inputs for surveillance cameras, if present (Ref. 1083/7 only).
- Relay box driving for cyclic control of several video surveillance cameras (Ref. 1083/7 only).
- Output for power supply of name holders lighting (up to 32 buttons with the power supply unit Ref. 1083/20).
- Audio repeater device for hard of hearing people (Ref. 1083/7 only).

STRUCTURE

FRONT VIEW



REAR VIEW



1. Signalling yellow led
2. Microphone
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

TERMINAL PINS DESCRIPTION

⊘ ⊘	LINE		Incoming Bus line
⊘	SE+		Positive for pedestrian electric lock activation
⊘	SE-		Negative for pedestrian electric lock activation
⊘ ⊘	A	V3	Surveillance camera 1 signal
		V5	Reference for surveillance camera 1 signal
⊘ ⊘	B	V3	Surveillance camera 2 signal / video switch
		V5	Reference for surveillance camera 2 / video switch
⊘ ⊘	ILA		Hard of hearing device output
⊘ ⊘	SE2		Driveway electric lock activation
⊘	T+		Command for video switch
⊘	T-		Reference for video switch
⊘	CT		Reference for PA and SP
⊘	PA		Entrance hall button
⊘	SP		Open door sensor (*)
⊘ ⊘	ILL		Power supply for name holders lighting
⊘	-		Do not use
⊘	+		Do not use

Ref. 1083/7 only

Ref. 1083/7 only

(*) *the terminal pin SP is connected by default to the terminal pin CT; to connect the normally closed door sensor (with closed door), remove the jumper.*

If a camera is connected to Ref. 1083/7 terminal pins V3A and V5A, the same features as those of a camera module with a door unit will be available. These features will not be available if no cameras are connected to terminal pins V3B and V5B.

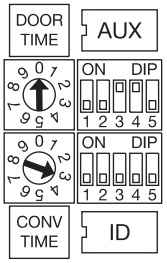
TECHNICAL CHARACTERISTICS

Power supply voltage (LINE):	**36 – 48Vdc**
Standby current consumption:	**45mA max**
Max. current consumption:	**220mA max**
(video call and name holders on)	
Name holders lighting ILL output:	**11 – 13,8Vdc max 200mA**
Lock output SE+ and SE-:	**22 – 24Vdc max 200mA**
SE2 switched load:	**300mA 125V Max**
Operating temperature range:	**-10°C ÷ + 50°C**
Compliant with:	**EN 61000-6-3, EN 61000-6-1**

DEFAULT PROGRAMMING

All door unit modules are configured in factory as follows:

Call station type:	**main**
Secondary number:	**0**
Door lock release:	**free**
Interruption:	**Not enabled**
Guaranteed comunication time rotary:	**30 s (pos 3)**
Door lock release rotary:	**1 s (pos 0)**
Door unit number:	**0**
Power supply:	**from the line (LINE)**



OPERATION

CALLS

Up to 64 users max. can be called by pressing the respective buttons of the push button panel associated to the door unit module.
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 ACTIVATION

Door units are provided with two terminal pins for pedestrian electric lock activation (SE-, SE+). The electric lock is activated in the following cases:

- Each time the entrance hall button is pressed (terminal pins PA, CT).
- After receiving a door lock release command from an apartment station, according to the configuration of the dip-switch used to configure the operating mode "free" or "secret" (see section "2VOICE system", paragraph "Call stations features").
- When the call is sent to an apartment station which is provided with "automatic door lock release" feature and this function is active.

If electric locks to be activated need special timing, the rotary switch "DOOR TIME" must be adjusted.

During electric lock activation, additional name holders, if powered by door unit terminal pins ILL, switch off.

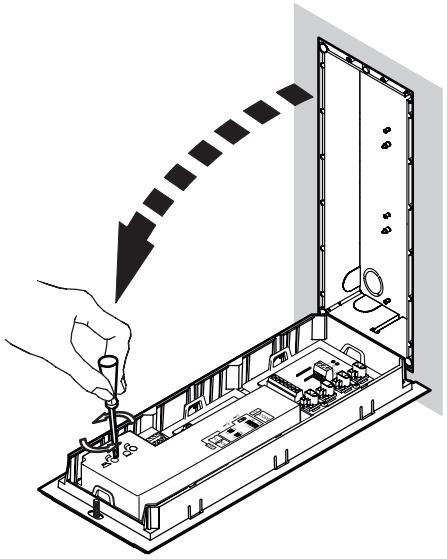
DRIVEWAY DOOR LOCK RELEASE MANAGEMENT

Door units are provided with two terminal pins (SE2) connected to the contacts of a normally open relay, that can be used to command a gate opening control panel. The relay is activated for 1 second after receiving a driveway door lock release command from an apartment station, according to the configured operation mode, "free" or "secret", as for the pedestrian electric lock.

This relay is NOT suitable to manage directly power loads, but can only be used as command relay.

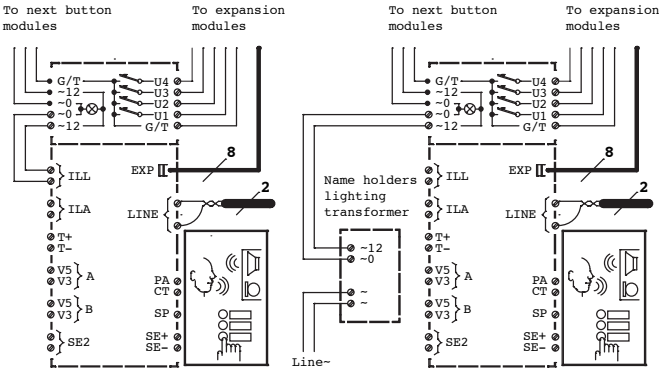
AUDIO ADJUSTMENT

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.



Call station with 32 name holders max.

Call station with more than 32 name holders

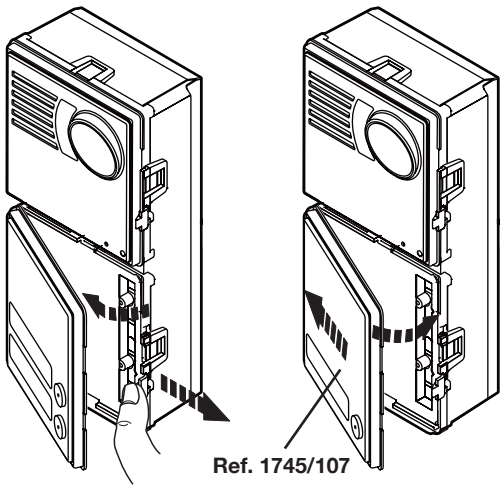
The transformer Ref. 9000/230 can provide 11,2 W power, that is up to 64 name holders max.

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

1-BUTTON FRONT UNIT

For call station with 1 button, the front unit Ref. 1745/107 must be bought and installed as follows:

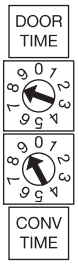
Installation modes are the same as for modules with camera and door unit modules.



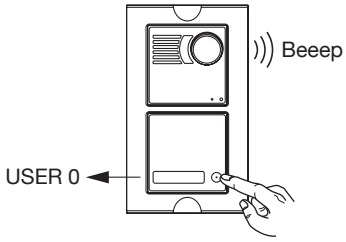
In this case, if the button is pressed, the apartment station with user code CODE=1 will be called.
If the module is provided with firmware version 3.1 or higher, perform the following programming procedure to call the apartment station with code 0.

ASSIGNING CODE 0 TO THE BUTTON

1. Enter in programming mode by setting the rotary switch DOOR TIME to position 8 and the rotary switch CONV TIME to position 9. The call station will emit 2 beeps each second to indicate the programming state.



2. Press the call station button. The module will emit a long beep to indicate that programming has been successful.

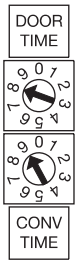


3. Restore the rotary switches original position to exit from the programming mode.

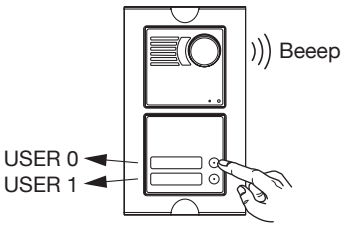
FACTORY CODES RESTORE

To restore the user code assigned to the button, follow the procedure below:

1. Enter in programming mode by setting the rotary switch DOOR TIME to position 8 and the rotary switch CONV TIME to position 9. The call station will emit 2 beeps each second to indicate the programming state.

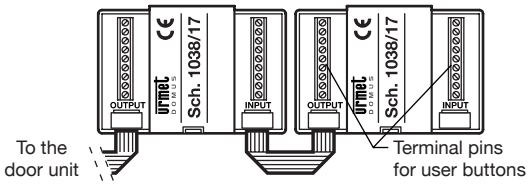


2. Press the button in the upper side of the call station. The module will emit a long beep to indicate that programming has been successful.

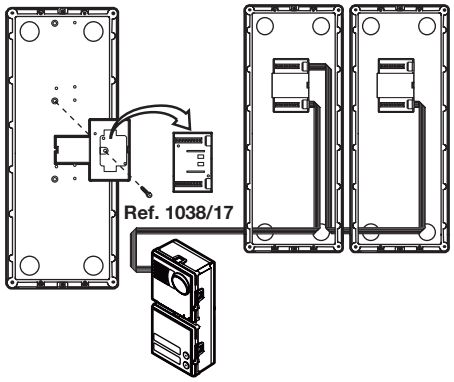


3. Set the rotary switches to the correct position to exit from the programming mode.

16-USER EXPANSION MODULE Ref. 1038/17

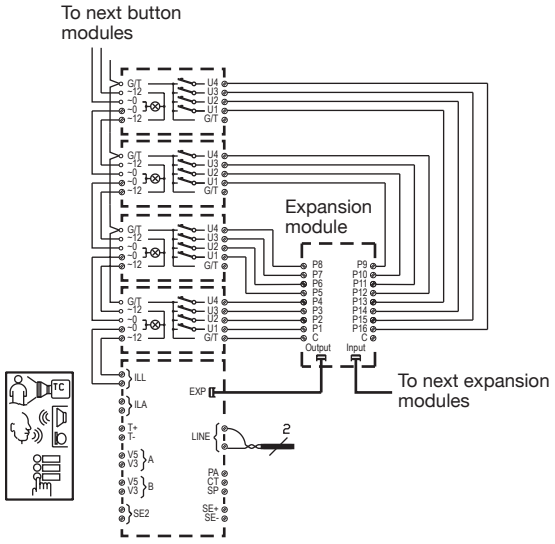


The expansion module allows to add 16 user buttons to the door unit.
Place the device in the push button panel as shown in the following figures.
Connect the user buttons and connect the device to the door unit or to other expansion modules, if present, with the suitable cable, respecting connection direction and passages in flush mounting boxes.



Screw the device on the flush mounting box bottom, near buttons modules or blind modules or directory.

CONNECTION EXAMPLE



TERMINAL PINS DESCRIPTION

C Reference ground
P1÷P16 User buttons

TECHNICAL CHARACTERISTICS

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

PRODUCT LISTS

All Sinthesi 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 DIRECTORY

With 1 button	**Ref. 1145/11**
With 2 buttons	**Ref. 1145/12**
With 3 buttons	**Ref. 1145/13**
With 4 buttons	**Ref. 1145/14**
With 4 Double buttons	**Ref. 1145/18**
Directory module	**Ref. 1145/50**
Blind module	**Ref. 1145/59**

FLUSH MOUNTING BOXES

For 2 modules	**Ref. 1145/52**
For 3 modules	**Ref. 1145/53**
For 4 modules	**Ref. 1145/54**

FRAMES AND MODULE HOLDERS

For 2 modules	**Ref. 1145/62**
For 3 modules	**Ref. 1145/63**
For 4 modules	**Ref. 1145/64**

EMBEDDING FRAMES

For 2 modules	**Ref. 1145/712**
For 3 modules	**Ref. 1145/713**
For 4 modules	**Ref. 1145/714**
For 4 modules (2 module holders with 2 modules)	**Ref. 1145/724**
For 6 modules (2 module holders with 3 modules)	**Ref. 1145/726**
For 8 modules (2 module holders with 4 modules)	**Ref. 1145/728**
For 9 modules (3 module holders with 3 modules)	**Ref. 1145/739**
For 12 modules (3 module holders with 4 modules)	**Ref. 1145/732**

RAIN HOODS

For 2 modules	**Ref. 1145/612**
For 3 modules	**Ref. 1145/613**
For 4 modules	**Ref. 1145/614**
For 4 modules (2 module holders with 2 modules)	**Ref. 1145/624**
For 6 modules (2 module holders with 3 modules)	**Ref. 1145/626**
For 8 modules (2 module holders with 4 modules)	**Ref. 1145/628**
For 9 modules (3 module holders with 3 modules)	**Ref. 1145/639**
For 12 modules (3 module holders with 4 modules)	**Ref. 1145/632**

HOODED HOUSINGS

For 2 modules	**Ref. 1145/312**
For 3 modules	**Ref. 1145/313**
For 4 modules	**Ref. 1145/314**
For 4 modules (2 module holders with 2 modules)	**Ref. 1145/324**
For 6 modules (2 module holders with 3 modules)	**Ref. 1145/326**
For 8 modules (2 module holders with 4 modules)	**Ref. 1145/328**
For 9 modules (3 module holders with 3 modules)	**Ref. 1145/339**
For 12 modules (3 module holders with 4 modules)	**Ref. 1145/332**

HOODED HOUSINGS FOR SEMI-FLUSH MOUNTING IN GATE PILLAR

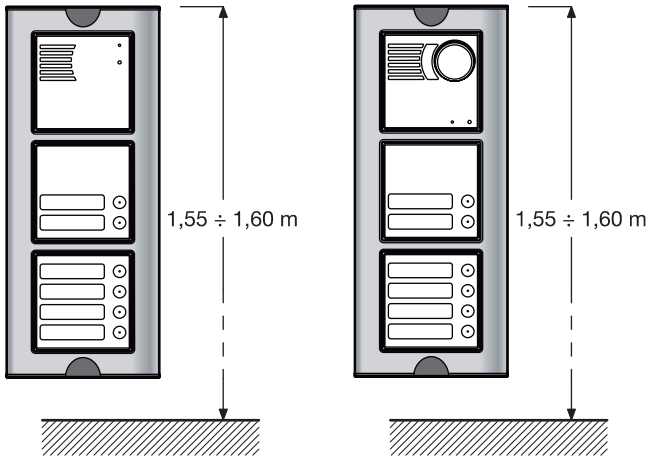
For 2 modules	**Ref. 1145/342**

POSTALBOXES

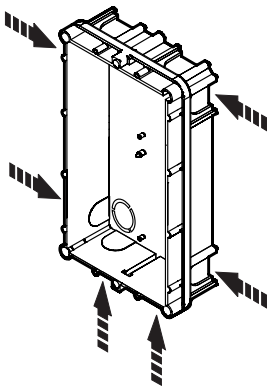
For 2 vertical modules	**Ref. 1145/42**

INSTALLATION

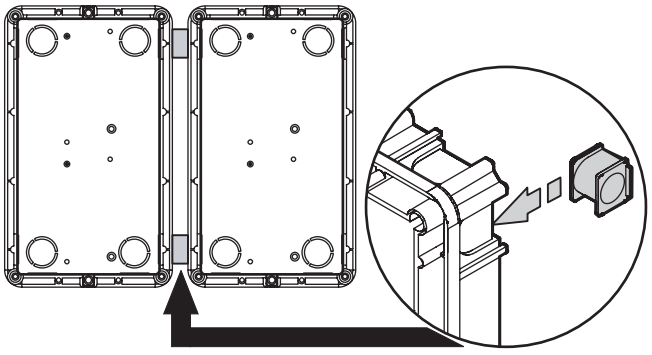
It is suggested to install the modules at the height shown below, according to the system to be realized.



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.

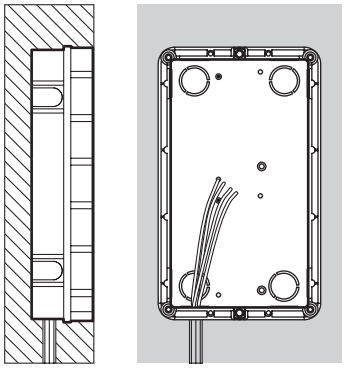


Flush mounting boxes can be assembled with suitable spacers, also used as wire hole.
If no accessories are included in flush mounting version, an unlimited number of flush mounting boxes can be combined. In case of systems also composed by embedding frames or rain hoods, the max. number of boxes to be 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.

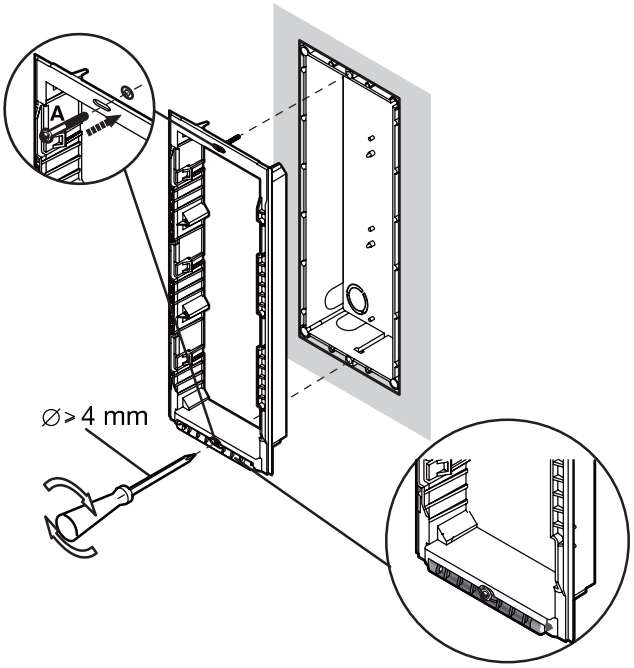


Arrange the flush mounting boxes and follow the instructions below:

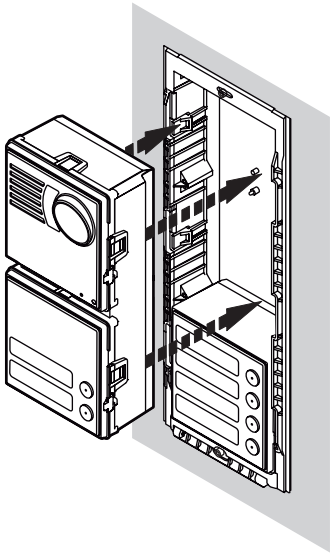
- Install the flush mounting box: it must not jut out of the wall.



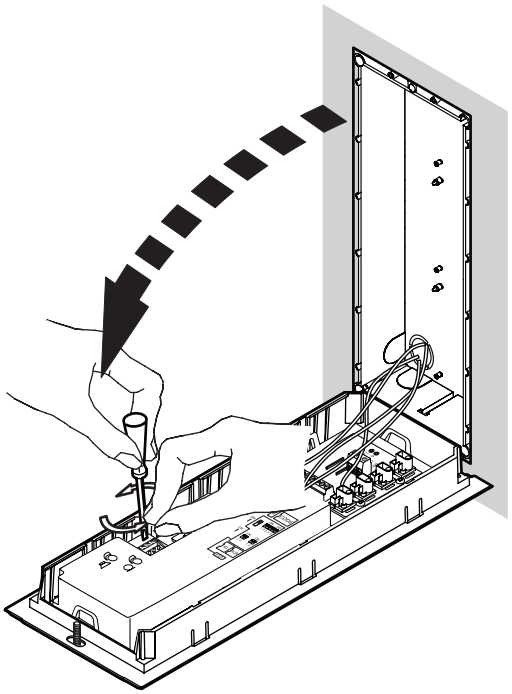
- Mount the module holder.



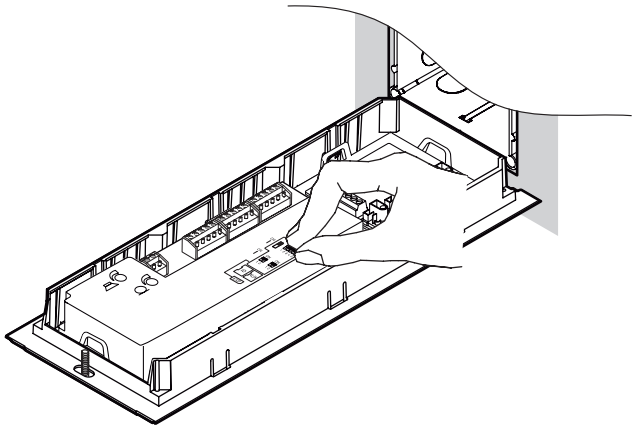
- Mount the modules on the module holder.



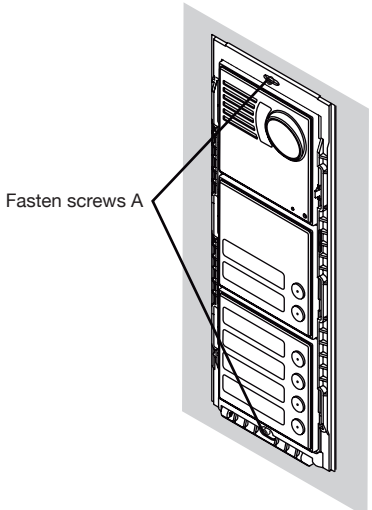
- Fold down the module holder and connect wires.



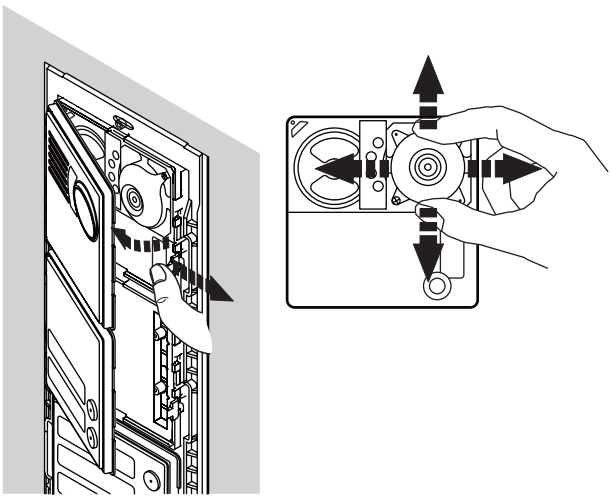
- Set the dip-switches according to instructions in the section “System installation and activation”.



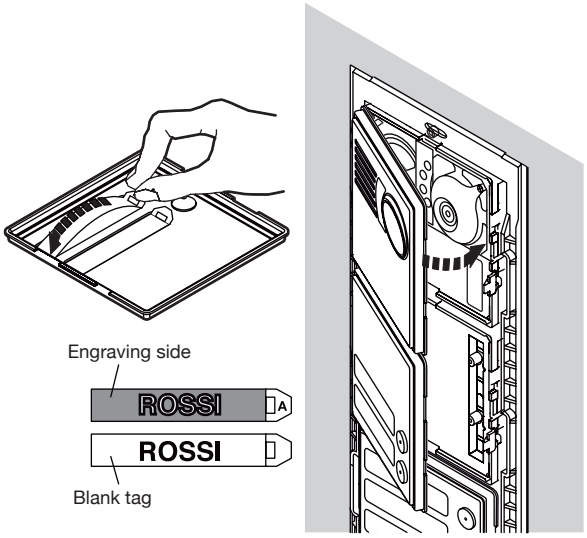
- Adjust the correct perpendicularity of the push button panel.
- Close the module holder by fastening screws A.



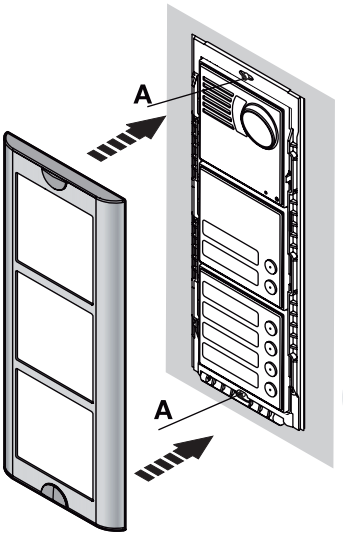
- Adjust camera orientation.

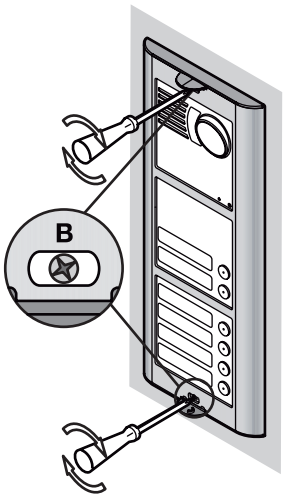


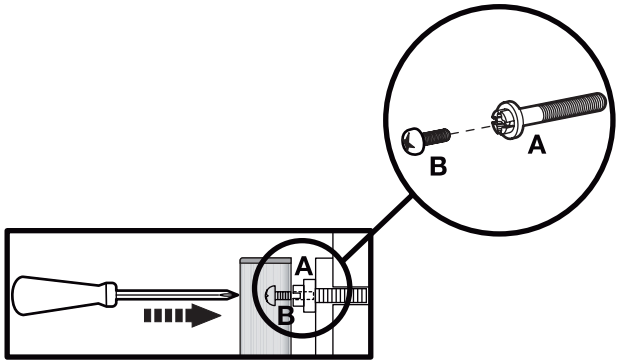
- Fit the name holders.



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

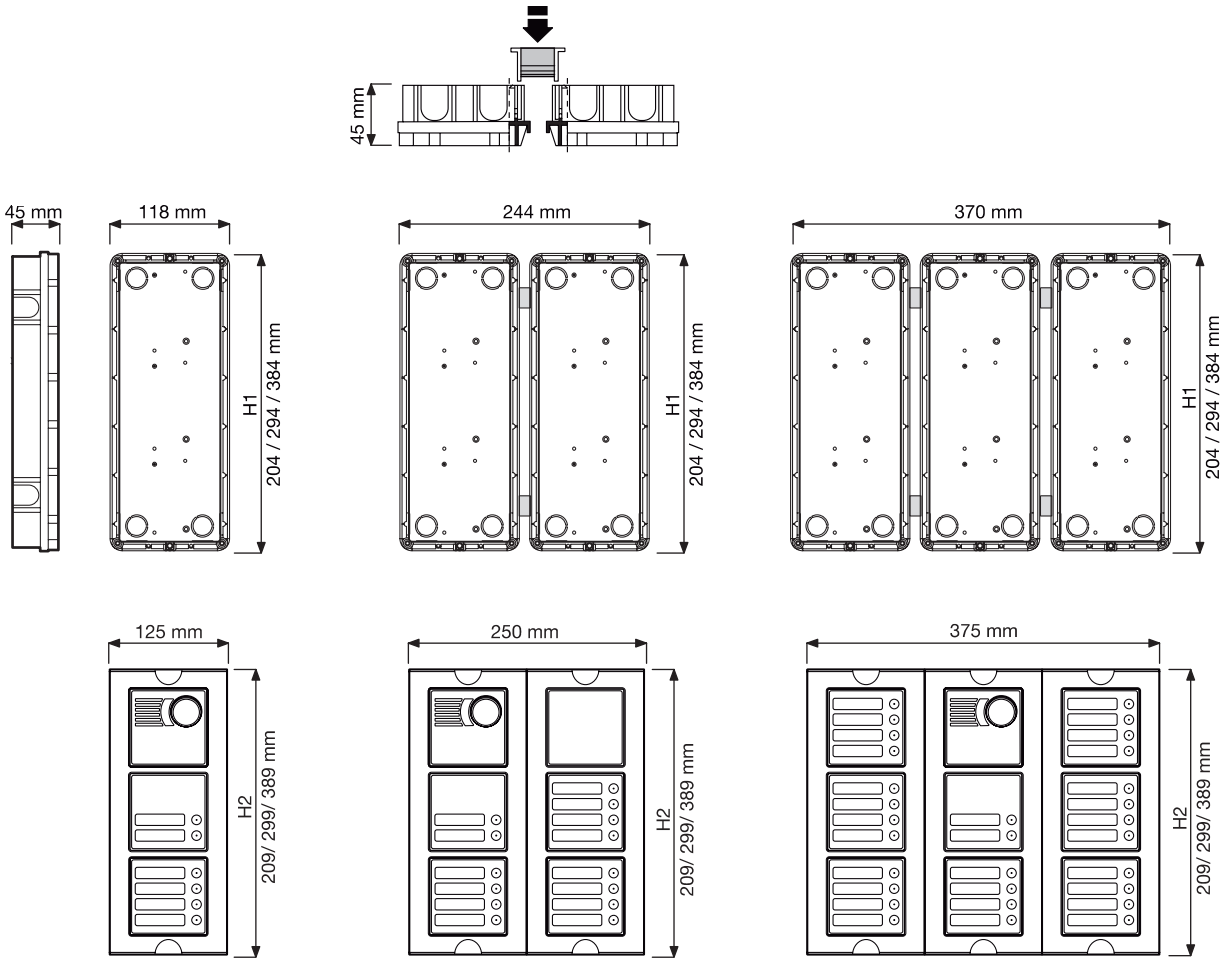






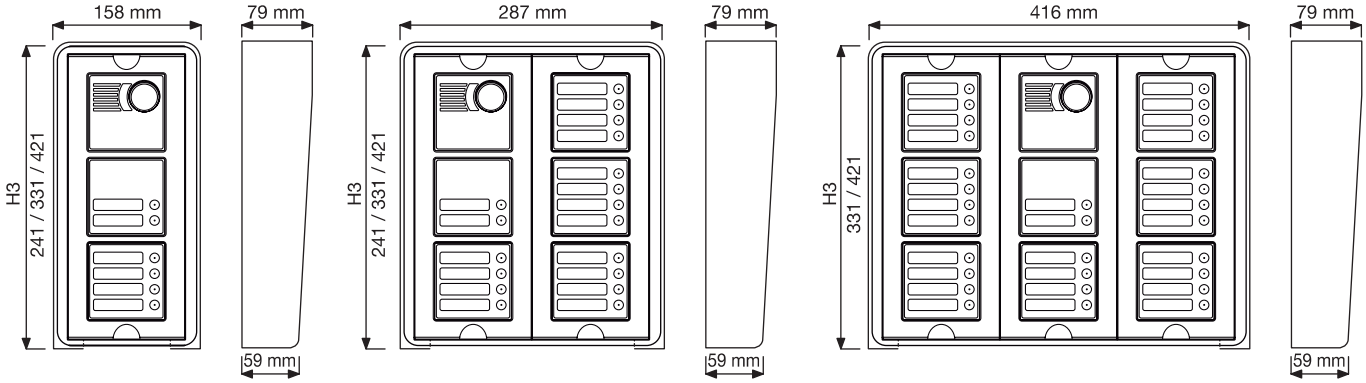
The blue headers Ref. 1145/65 may be used to customise the panel (the kit also comprises blue name tags).

FLUSH MOUNTING VERSION



Values H1= 204, 294, 384 concerning flush mounting box height and values H2= 209, 299, 389 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.

Video door phone			NUMBER OF BUTTONS																																
			1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32
Common products	Button modules and directory	1145/11			1				1				1				1				1				1				1				1	
		1145/12				1				1				1				1				1				1				1				1
		1145/13					1				1				1				1				1				1				1			
		1145/14						1	1	1	1	2	2	2	2	3	3	3	3	4	4	4	4	5	5	5	5	6	6	6	6	7	7	7
		1145/59											1	1	1	1					1	1	1	1									2	2
	Camera modules with door unit	1083/72 or 1083/71	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
	Expansion module	1038/17			1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	2	2	2	2	2	2	2	2	2	2	2	2	2	2
	1-button front unit	1745/107	1																															
Flush mounting (#)	Flush mounting box	1145/52	1	1																														
		1145/53			1	1	1	1					2	2	2	2	2	2	2	2									3	3	3	3		
		1145/54							1	1	1	1									2	2	2	2	2	2	2	2					3	3
	Module holders and frames	1145/62	1	1																														
		1145/63			1	1	1	1					2	2	2	2	2	2	2	2									3	3	3	3		
		1145/64							1	1	1	1									2	2	2	2	2	2	2	2					3	3
	Embedding frame (°)	1145/712	1	1																														
		1145/713			1	1	1	1																										
		1145/714							1	1	1	1																						
		1145/726											1	1	1	1	1	1	1	1														
		1145/728																			1	1	1	1	1	1	1	1						
		1145/739																											1	1	1	1		
		1145/732																															1	1
	Rain hood (°)	1145/612	1	1																														
		1145/613			1	1	1	1																										
		1145/614							1	1	1	1																						
		1145/626											1	1	1	1	1	1	1	1														
		1145/628																			1	1	1	1	1	1	1	1						
		1145/639																											1	1	1	1		
		1145/632																															1	1
Wall mounting (#)	Hooded housing (§)	1145/312	1	1																														
		1145/313			1	1	1	1																										
		1145/314							1	1	1	1																						
		1145/326											1	1	1	1	1	1	1	1														
		1145/328																			1	1	1	1	1	1	1	1						
		1145/339																											1	1	1	1		
		1145/332																															1	1
	Postalbox (§)	1145/42	1	1																														
Semi-flush mounting pillar (#)	Housing	1145/342	1	1																														
			1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32
			NUMBER OF BUTTONS																															

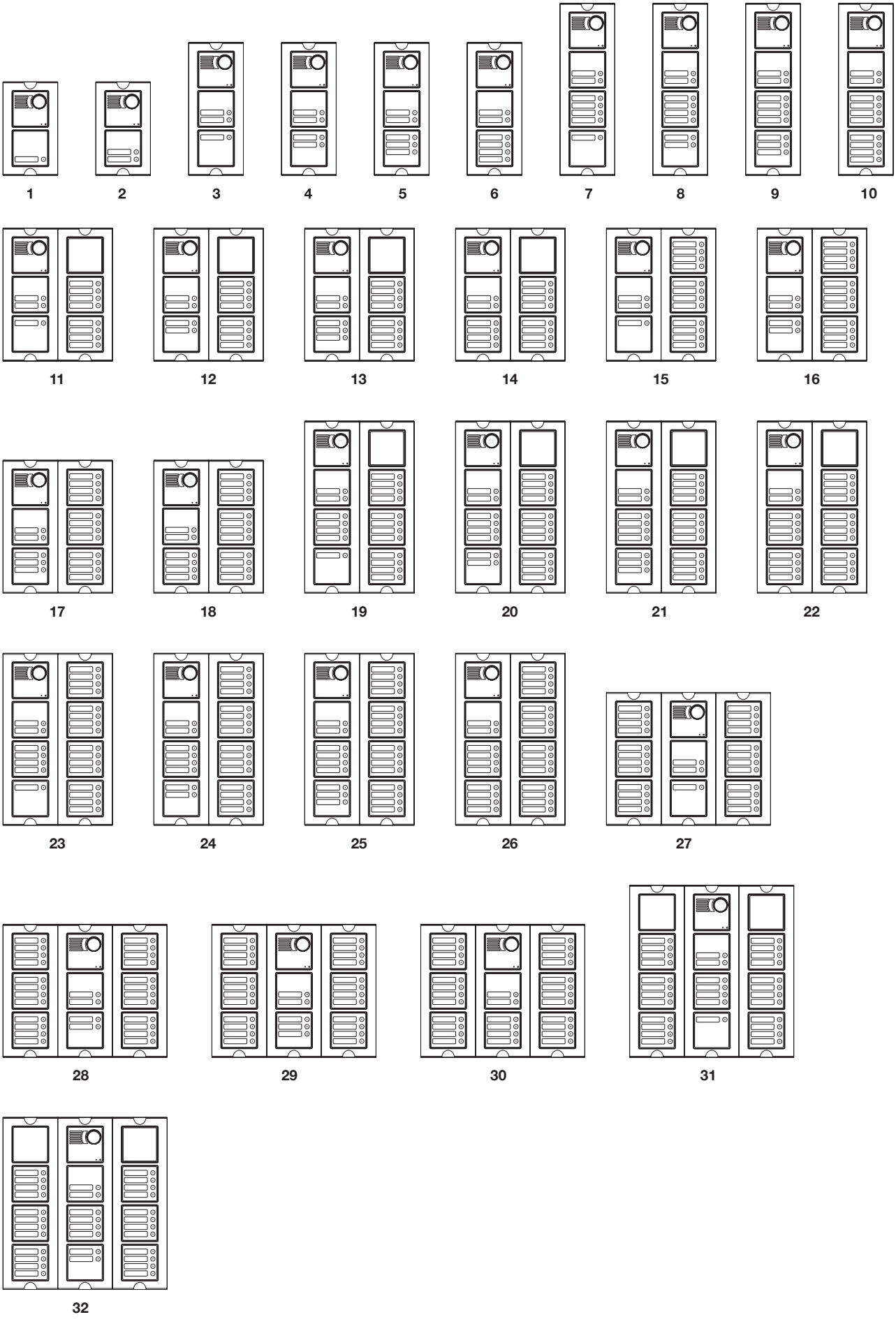
(#); (§) alternative
(°) optional, alternative

Video door phone			NUMBER OF BUTTONS																																					
			33	34	35	36	37	38	39	40	41	42	43	44	45	46	47	48	49	50	51	52	53	54	55	56	57	58	59	60	61	62	63	64
Common products	Button modules and directory	1145/11			1				1				1				1				1				1				1				1	
		1145/12				1				1				1				1				1				1				1				1
		1145/13	1				1				1				1				1				1				1			1				
		1145/14	7	8	8	8	8	9	9	9	9	10	10	10	10	11	11	11	11	12	12	12	12	13	13	13	13	14	14	14	14	15	15	15
		1145/59	1	1	1	1	1	1					1	1	1	1	1	1	1	1									1	1	1	1		
		1145/50	1	1									1	1	1	1																		
	Camera modules with door unit	1083/72 or 1083/71	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
	Expansion module	1038/17	2	2	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	4	4	4	4	4	4	4	4	4	4	4	4	4	4
Flush mounting (#)	Flush mounting box	1145/52																																
		1145/53											5	5	5	5	5	5	5	5	5	5	5	5					6	6	6	6	6	6
		1145/54	3	3	3	3	3	3	3	3	3	3													4	4	4	4						
	Module holders and frames	1145/62																																
		1145/63											5	5	5	5	5	5	5	5	5	5	5	5					6	6	6	6	6	6
		1145/64	3	3	3	3	3	3	3	3	3	3													4	4	4	4						
	Embedding frame (°)	1145/732	1	1	1	1	1	1	1	1	1	1																						
	Rain hood (°)	1145/632	1	1	1	1	1	1	1	1	1	1																						
Wall mounting (#)	Hooded housing	1145/332	1	1	1	1	1	1	1	1	1	1																						
Name holders lighting transformer			✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
			33	34	35	36	37	38	39	40	41	42	43	44	45	46	47	48	49	50	51	52	53	54	55	56	57	58	59	60	61	62	63	64
			NUMBER OF BUTTONS																															

(#) alternative
(°) optional, alternative

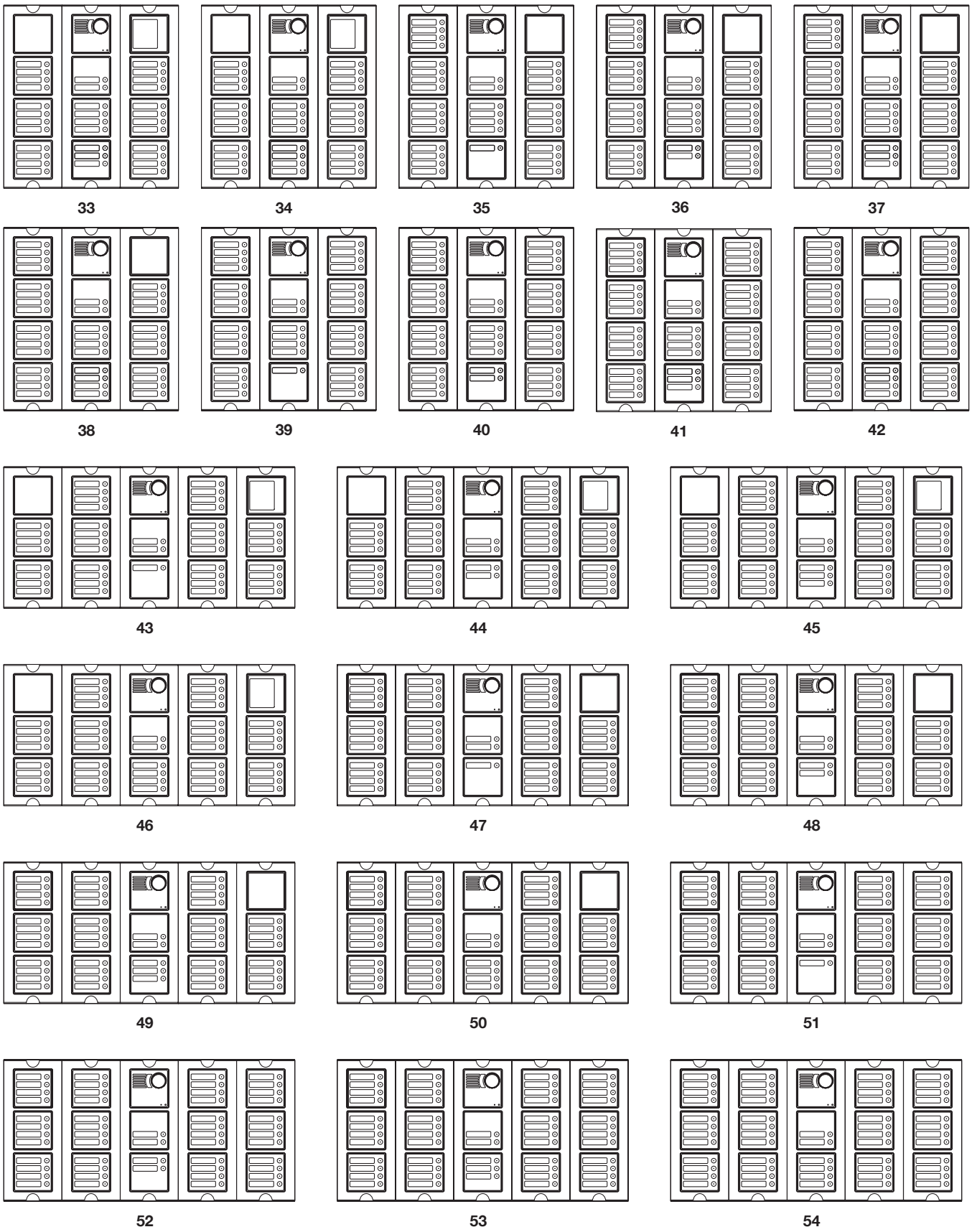
SINTHESI PUSH BUTTON PANEL

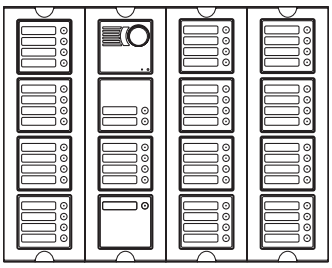
MODULARITY EXAMPLES FOR DIFFERENT SYSTEM DIMENSIONS (VIDEO DOOR PHONE SYSTEMS)



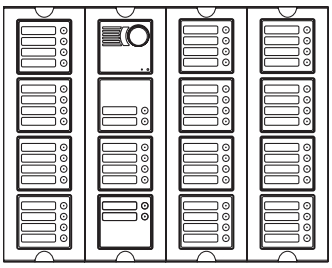
SINTHESI PUSH BUTTON PANEL

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

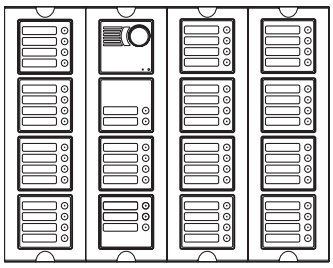




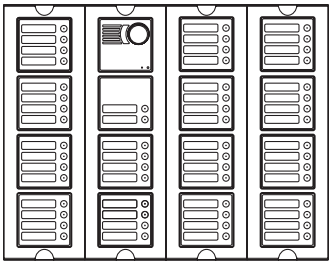
55



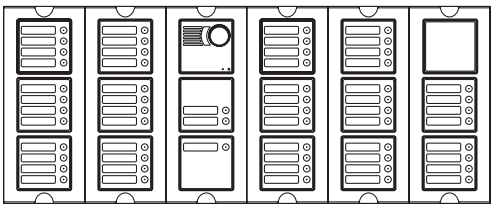
56



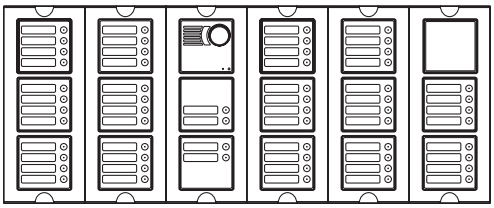
57



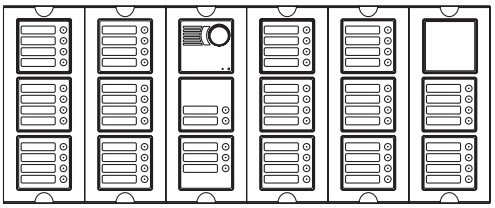
58



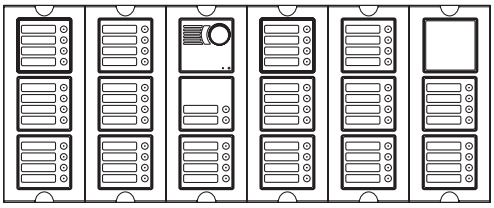
59



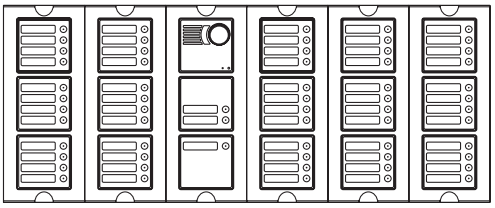
60



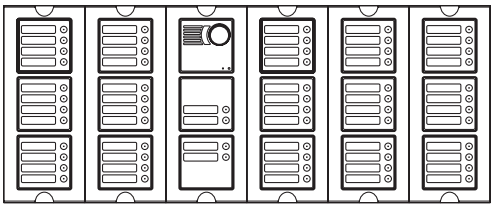
61



62



63



64

Door phone			NUMBER OF BUTTONS																														
			1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32
Common products	Button modules and directory	1145/11			1				1				1				1				1				1				1				1	
		1145/12				1				1				1				1				1				1				1			1
		1145/13					1				1				1				1				1				1				1			
		1145/14						1	1	1	1	2	2	2	2	3	3	3	3	4	4	4	4	5	5	5	5	6	6	6	6	7	7	7
		1145/59											1	1	1	1					1	1	1	1									2	2
	Modules with door unit	1083/7 or 1083/5	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
	Expansion module	1038/17			1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	2	2	2	2	2	2	2	2	2	2	2	2	2	2
	1-button front unit	1745/107	1																															
Flush mounting (#)	Flush mounting box	1145/52	1	1																														
		1145/53			1	1	1	1					2	2	2	2	2	2	2	2									3	3	3	3		
		1145/54							1	1	1	1									2	2	2	2	2	2	2	2					3	3
	Module holders and frames	1145/62	1	1																														
		1145/63			1	1	1	1					2	2	2	2	2	2	2	2									3	3	3	3		
		1145/64							1	1	1	1									2	2	2	2	2	2	2	2					3	3
	Embedding frame (°)	1145/712	1	1																														
		1145/713			1	1	1	1																										
		1145/714							1	1	1	1																						
		1145/726											1	1	1	1	1	1	1	1														
		1145/728																			1	1	1	1	1	1	1	1						
		1145/739																											1	1	1	1		
		1145/732																															1	1
	Rain hood (°)	1145/612	1	1																														
		1145/613			1	1	1	1																										
		1145/614							1	1	1	1																						
		1145/626											1	1	1	1	1	1	1	1														
		1145/628																			1	1	1	1	1	1	1	1						
		1145/639																											1	1	1	1		
		1145/632																															1	1
Wall mounting (#)	Hooded housing (§)	1145/312	1	1																														
		1145/313			1	1	1	1																										
		1145/314							1	1	1	1																						
		1145/326											1	1	1	1	1	1	1	1														
		1145/328																			1	1	1	1	1	1	1	1						
		1145/339																											1	1	1	1		
		1145/332																															1	1
	Postalbox (§)	1145/42	1	1																														
Semi-flush mounting pillar (#)	Housing	1145/342	1	1																														
			1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32
			NUMBER OF BUTTONS																															

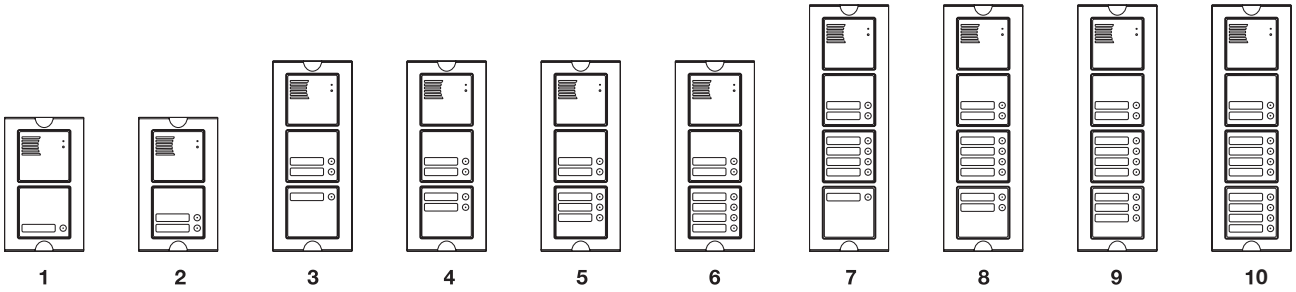
(#); (§) alternative
(°) optional, alternative

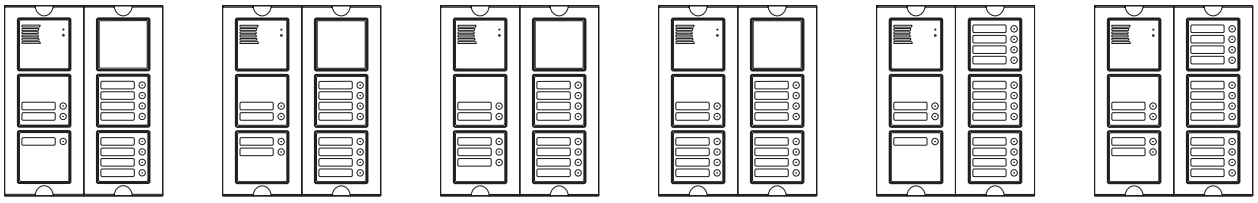
Door phone			NUMBER OF BUTTONS																																		
			33	34	35	36	37	38	39	40	41	42	43	44	45	46	47	48	49	50	51	52	53	54	55	56	57	58	59	60	61	62	63	64
Common products	Button modules and directory	1145/11			1				1				1				1				1				1				1				1	
		1145/12				1				1				1				1				1				1				1				1
		1145/13	1				1				1				1				1				1				1				1			
		1145/14	7	8	8	8	8	9	9	9	9	10	10	10	10	11	11	11	11	12	12	12	12	13	13	13	13	14	14	14	14	15	15	15
		1145/59	1	1	1	1	1	1					1	1	1	1	1	1	1	1									1	1	1	1		
		1145/50	1	1									1	1	1	1																		
	Modules with door unit	1083/7 or 1083/5	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
	Expansion module	1038/17	2	2	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	4	4	4	4	4	4	4	4	4	4	4	4	4	4
Flush mounting (#)	Flush mounting box	1145/52																																
		1145/53											5	5	5	5	5	5	5	5	5	5	5	5					6	6	6	6	6	6
		1145/54	3	3	3	3	3	3	3	3	3	3													4	4	4	4						
	Module holders and frames	1145/62																																
		1145/63											5	5	5	5	5	5	5	5	5	5	5	5					6	6	6	6	6	6
		1145/64	3	3	3	3	3	3	3	3	3	3													4	4	4	4						
	Embedding frame (°)	1145/732	1	1	1	1	1	1	1	1	1	1																						
	Rain hood (°)	1145/632	1	1	1	1	1	1	1	1	1	1																						
Wall mounting (#)	Hooded housing	1145/332	1	1	1	1	1	1	1	1	1	1																						
Name holders lighting transformer			✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
			33	34	35	36	37	38	39	40	41	42	43	44	45	46	47	48	49	50	51	52	53	54	55	56	57	58	59	60	61	62	63	64
			NUMBER OF BUTTONS																															

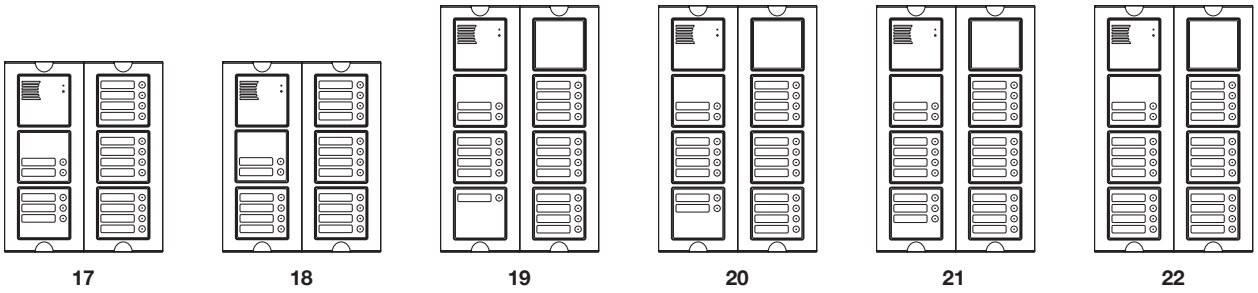
(#) alternative
(°) optional, alternative

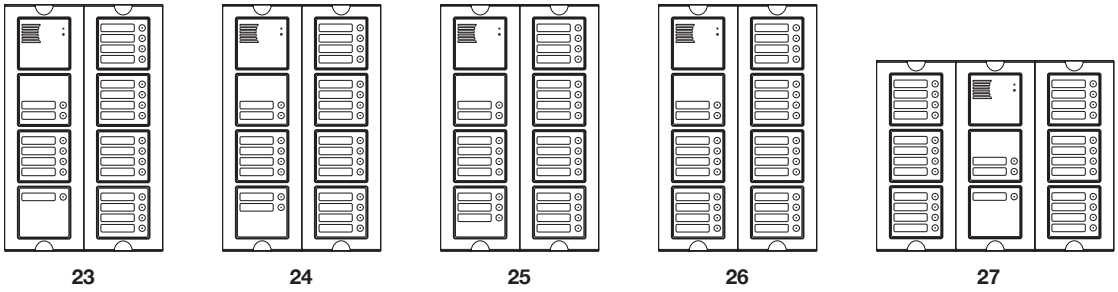
SINTHESI PUSH BUTTON PANEL

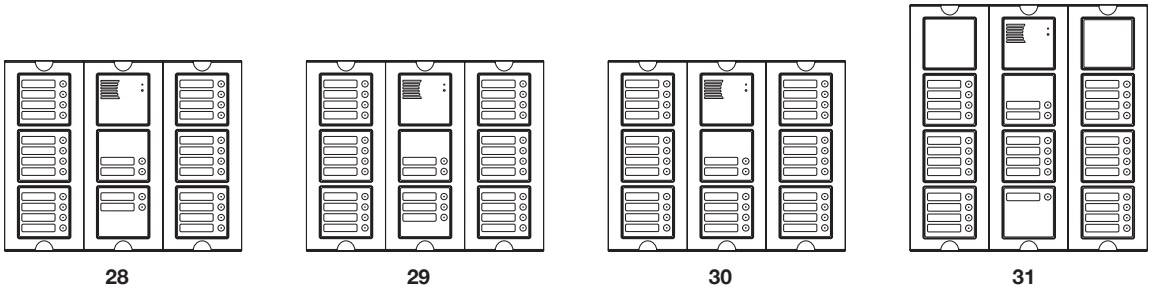
MODULARITY EXAMPLES FOR DIFFERENT SYSTEM DIMENSIONS (DOOR PHONE SYSTEMS)

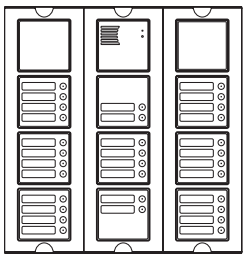






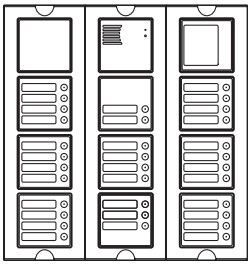






SINTHESI PUSH BUTTON PANEL

MODULARITY EXAMPLES FOR DIFFERENT SYSTEM DIMENSIONS (DOOR PHONE SYSTEMS)



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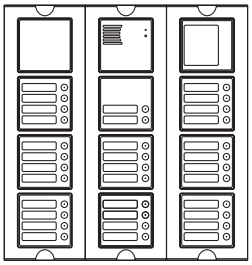

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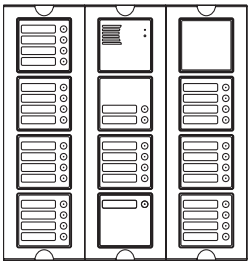

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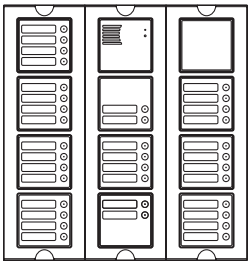

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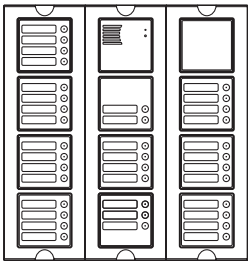

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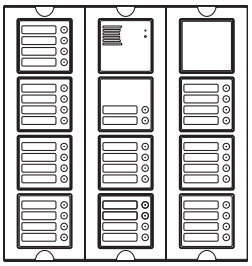

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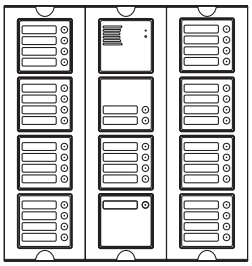

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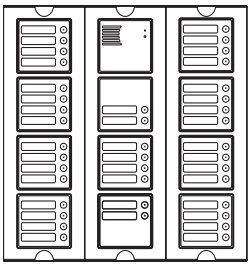

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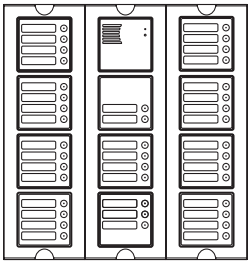

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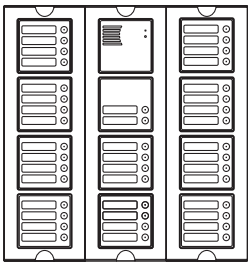

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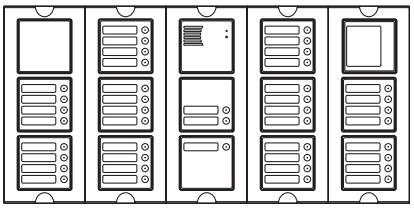

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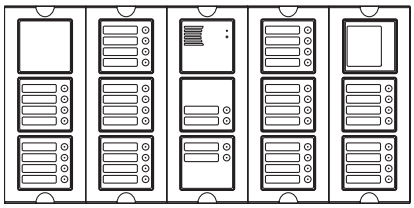

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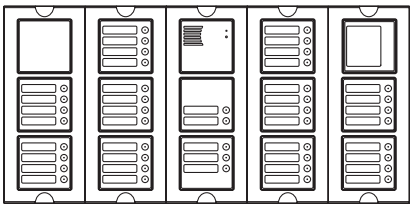

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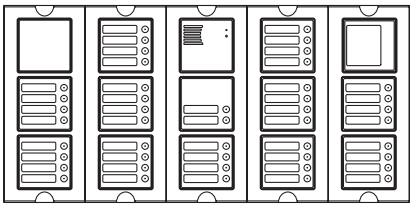

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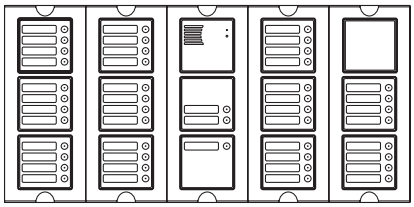

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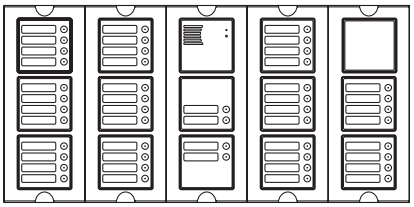

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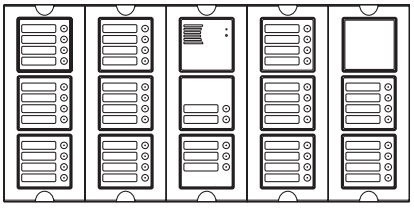

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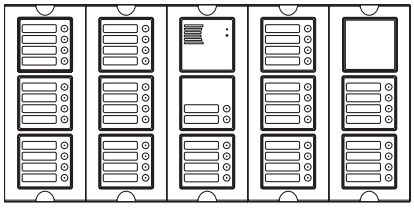

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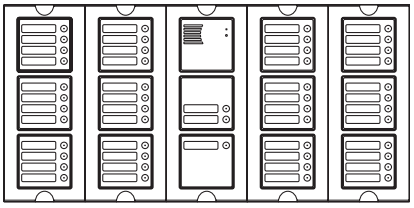

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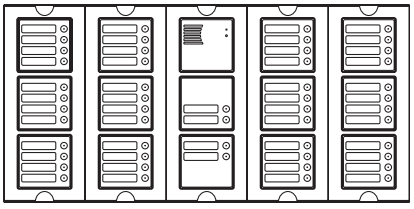

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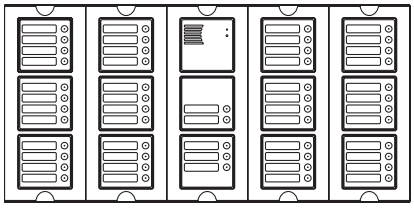

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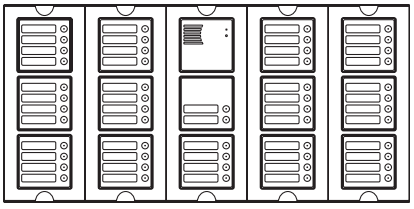

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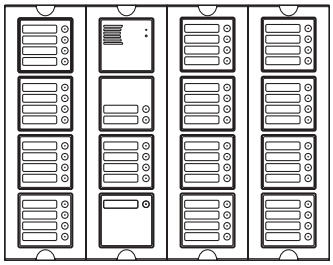
SINTHESI PUSH BUTTON PANEL

MODULARITY EXAMPLES FOR DIFFERENT SYSTEM DIMENSIONS (DOOR PHONE SYSTEMS)



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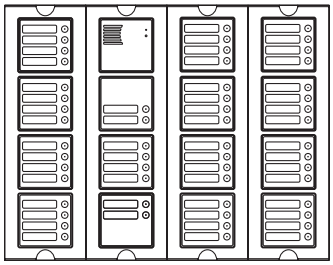

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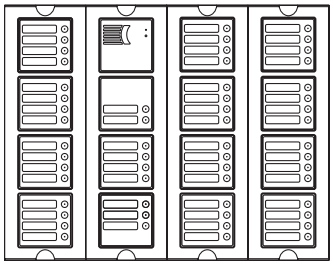

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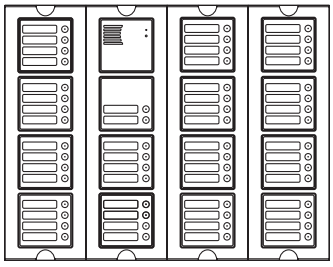

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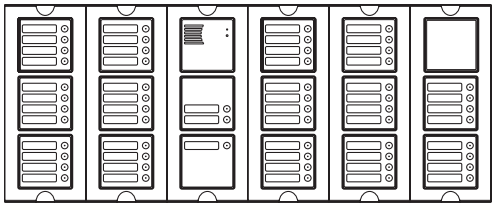

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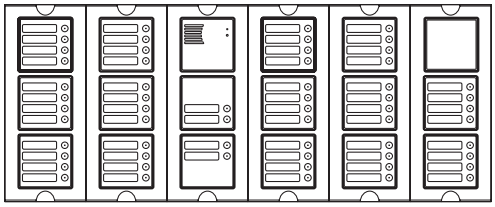

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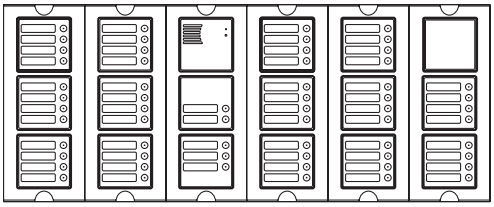

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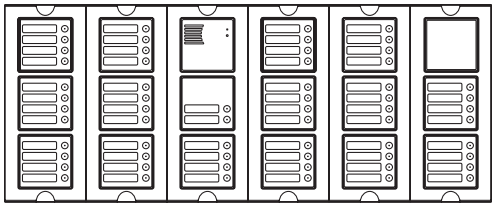

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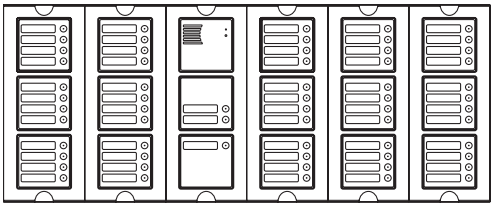

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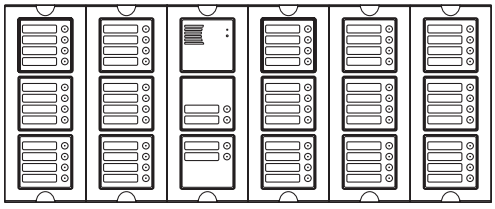

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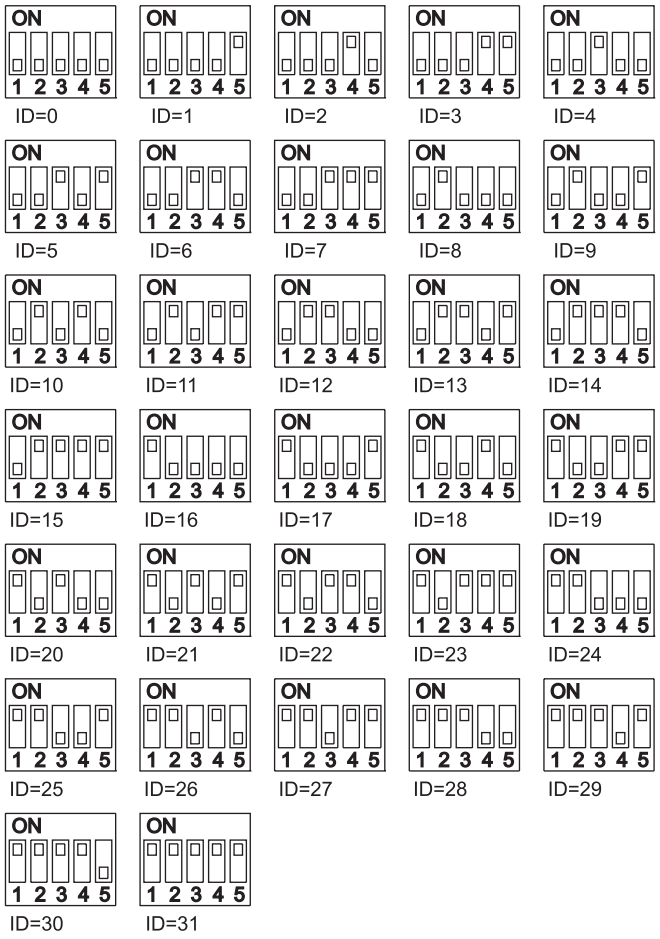
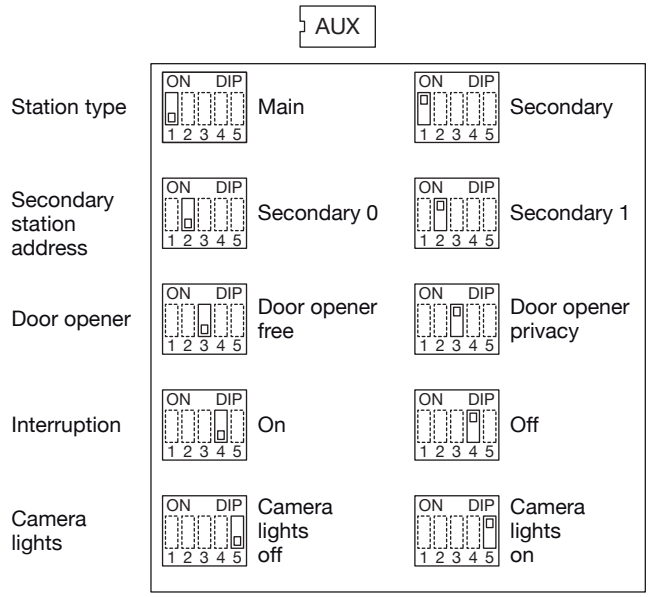
CONFIGURATION

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.

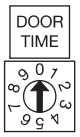
DIP4 - Interruption: where is in progress an auto-on or an intercom conversation or the video door phone answering machine browsing, the respective column or the whole system is in busy mode, which, according to the configuration of this switch, can be interrupted or not by a call from the door unit.

The parameter “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.

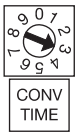
On the door unit module Ref. 1083/7 and Ref. 1083/5 the position of this dip is irrelevant.

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.



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 e 8 = 70 s
Pos. 9 = advanced programming

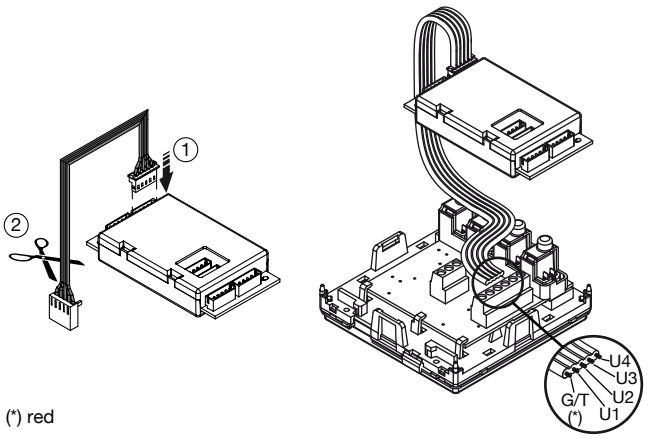
The guaranteed conversation time must be programmed in the same way for all system call station.

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

ASSOCIATION OF DOOR UNITS BUTTONS TO USERS

Up to 62 buttons (besides the two buttons on the door unit station) can be connected to the door unit, using 4 add-on buttons units 1038/17 or 1083/17 max.

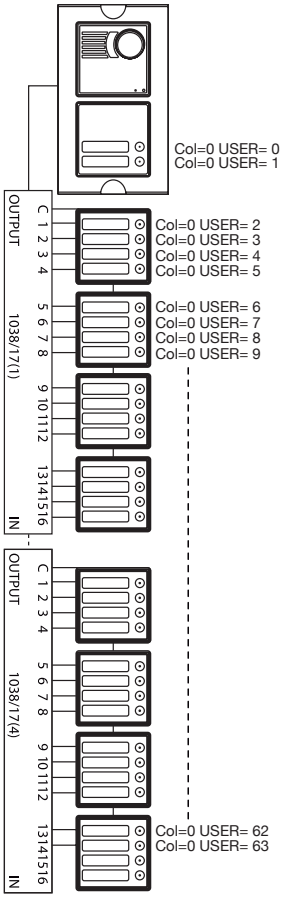
In order to use the expansion module Ref. 1083/17, cut the connector.



(*) red

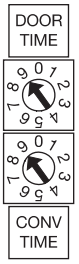
MAIN DOOR UNITS

If the door unit is configured as main, buttons are automatically associated to column 0; this makes installation of main call stations easier in one-column systems.



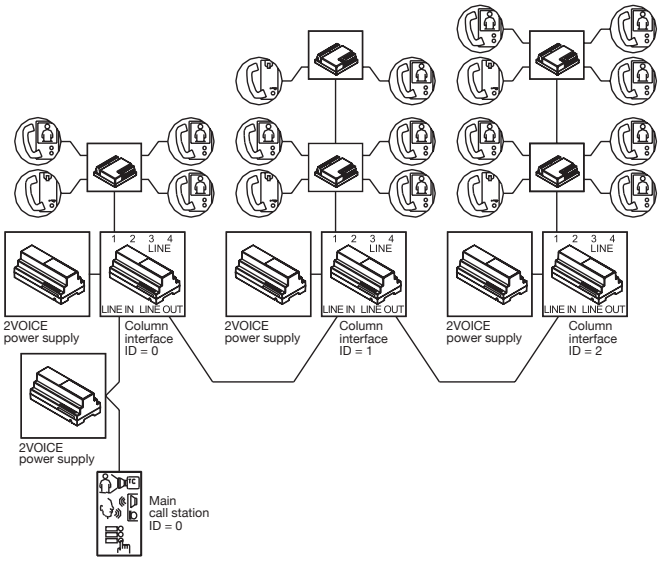
If the door unit is configured as main and in the system there are several columns, an association between buttons and users of the different columns is needed. Follow the instructions below:

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



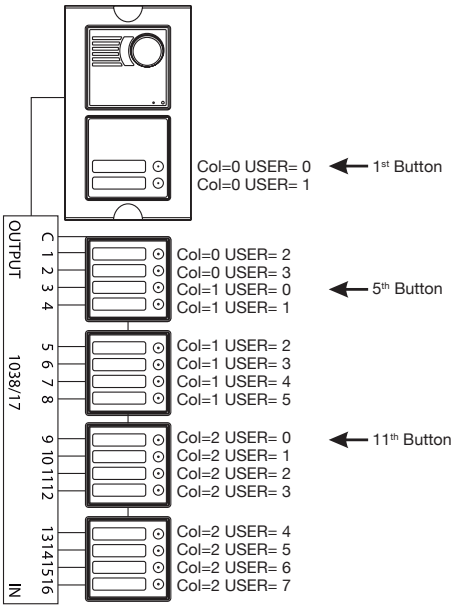
2 - Set the call station ID dip-switch to the code of the column to which the buttons must be associated.
3 - Press the button associated to the user 0 of the selected column. All next buttons are automatically associated to the users of that column, in sequence.
4 - Repeat steps 2 and 3 for all the columns.
5 - Put again the ID dip-switches in their original position.
6 - 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.
7 - Repeat these operations for all main call stations.

Example:
System with 3 columns, the first one with 4 users, the second with 6 users, the third with 8 users.



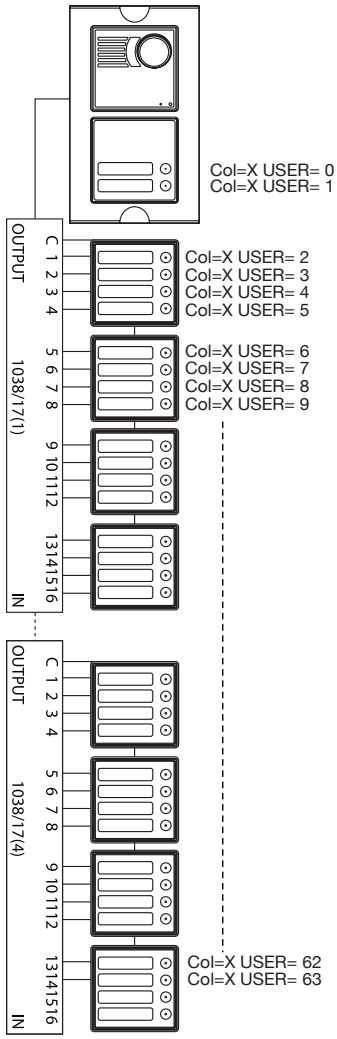
- Gain access to advanced configuration.
- Set the call station ID dip-switch to 0.
- Press the door unit upper button (the first button).
- Set the call station ID dip-switch to 1.
- Press the button 3 of the first buttons module (the fifth button), which is associated to the user 0 of the column 1.
- Set the call station ID dip-switch to 2.
- Press the first button of the third buttons module (the eleventh button) which is associated to the user 0 of the column 2.
- Put again the ID dip-switches in their original position.
- Quit the advanced configuration.

The final configuration is the following:



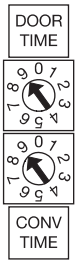
SECONDARY DOOR UNITS

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



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

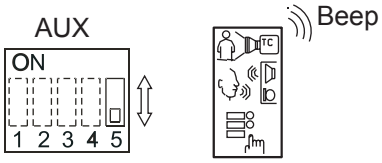
- Gain access to advanced configuration by rotating both the dip-switches in position 9 (the yellow led turns on).



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

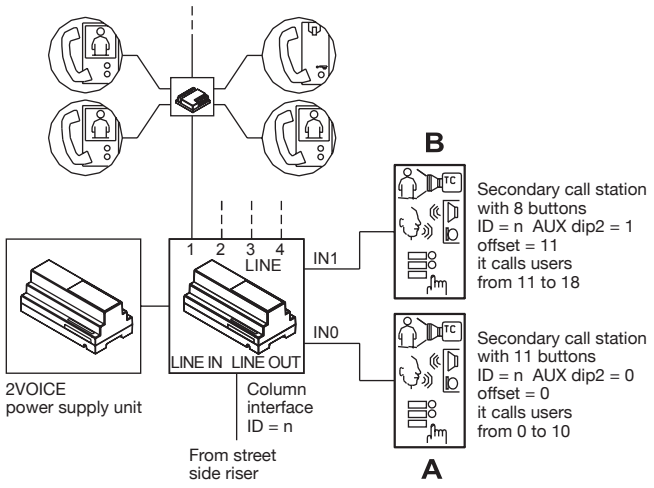
The offset code must only be included between 0 and 31.

- 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.

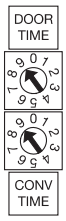
OPTIONAL PROGRAMMING

AUTO-ON FUNCTION ON SURVEILLANCE CAMERAS

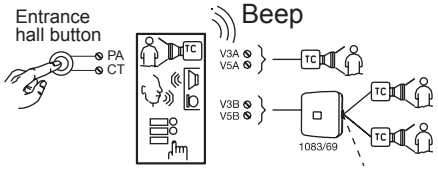
This function is available only on door units provided with terminal pins V3 and V5.

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

1. 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.



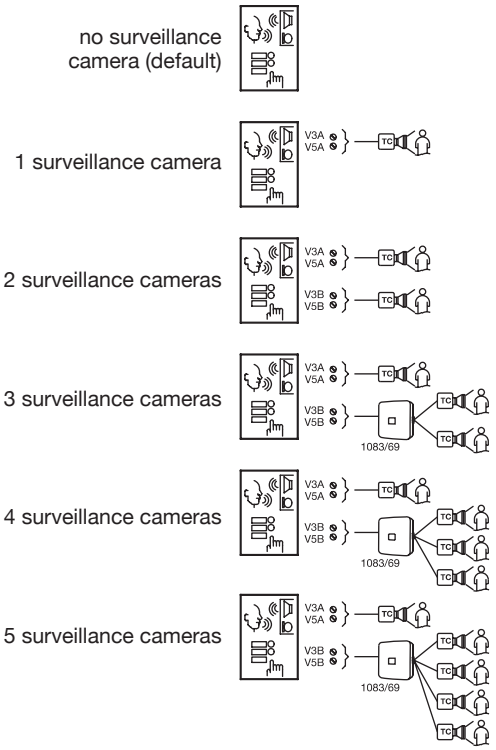
2. Press the entrance hall button (PA – CT) for many times as the number of installed surveillance cameras. Each time the button is pressed, the door unit emits a number of beeps equal to the number of programmed cameras (5 max.). By pressing again the buttons after the 5 beeps, the door unit emits a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



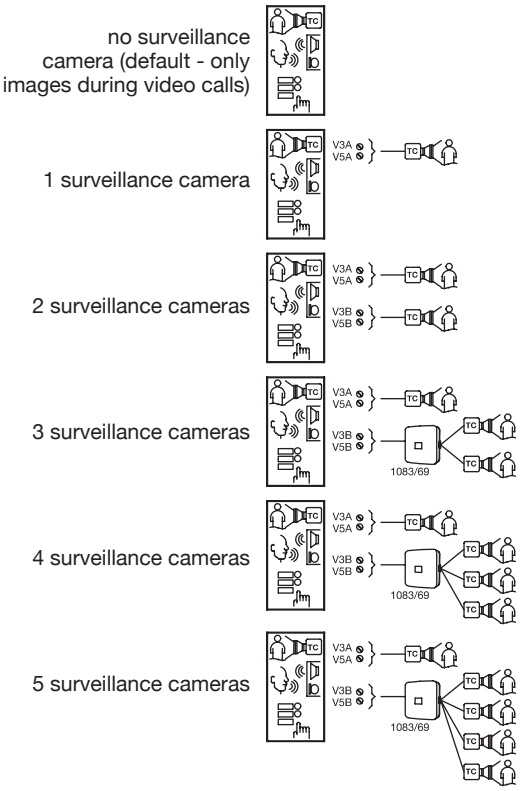
3. Put again the rotary switches in the correct position to quit the advanced configuration.
4. Repeat the programming procedure for all call stations with surveillance cameras.

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

DOOR PHONE CALL STATION



VIDEO DOOR PHONE CALL STATION

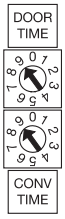


If the call comes from a video door phone call station, the push button panel camera will be activated. In case of call coming from a door phone call station with surveillance camera, the camera connected to terminal pins V3A and V5A will be activated.

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.

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.