brahms

CE

SECURITY ALARM CONTROL UNIT

ProxiNET W

INSTALLATION MANUAL

English EN

ENGLISH

CONTENTS

1 Symbols and glossary

This symbol shows the parts which describe safety issues.

This symbol shows parts which must be read with care.

Permanently on warning light.

Warning light off.

Rapidly flashing warning light.

INSTALLER: any person or business responsible for planning, installing and programming the system.

USER: any person using the security alarm system.

2 Terms of use

2.1 Description of use

The security alarm control units of the PROXINETW series are designed to enhance security in both homes and service-sector businesses.

Any installation and use other than that specified in this manual is forbidden.

2.2 Warranty and limits of liability

Our product warranty refers to restoring compliance to the products through repairs or free replacement of any materials found to be non-compliant due to defects resulting from errors in the manufacturing process, including any expenses incurred due to products having to be replaced (job orders, shipping...).
Sellers of BPT S.p.A. a socio unico products are directly liable to consumers, and have the function of upholding this right of warranty on our products. Consumers must apply to the seller, and only the seller, who supplied the goods, when upholding this right, and must also report any faults and defects of the product to the seller within two months of noticing them.
The warranty is invalidated if the User fails to point out the fault within the times indicated above. A claim is never grounds for the final customer to cancel or reduce orders, nor for the payment of compensation of any kind on our part. Our warranty lapses if the parts returned as faulty have been tampered with or repaired in any way.

BPT S.p.A a socio unico cannot be considered liable in the event of damage caused by improper use of its products. In as much as it is the installer who designs and installs the security alarm system using both BPT S.p.A a socio unico parts and those of third parties, the company cannot vouch for the reliability of the security alarm system. BPT S.p.A a socio unico denies any liability for claims made by the User, Installer or third parties in connection with the use and installation of our products.

3 Important for SAFETY

If properly planned, the security system guarantees a high level of safety to the buildings where it is to be used and the Users who will use it. To ensure this, certain rules must be followed:

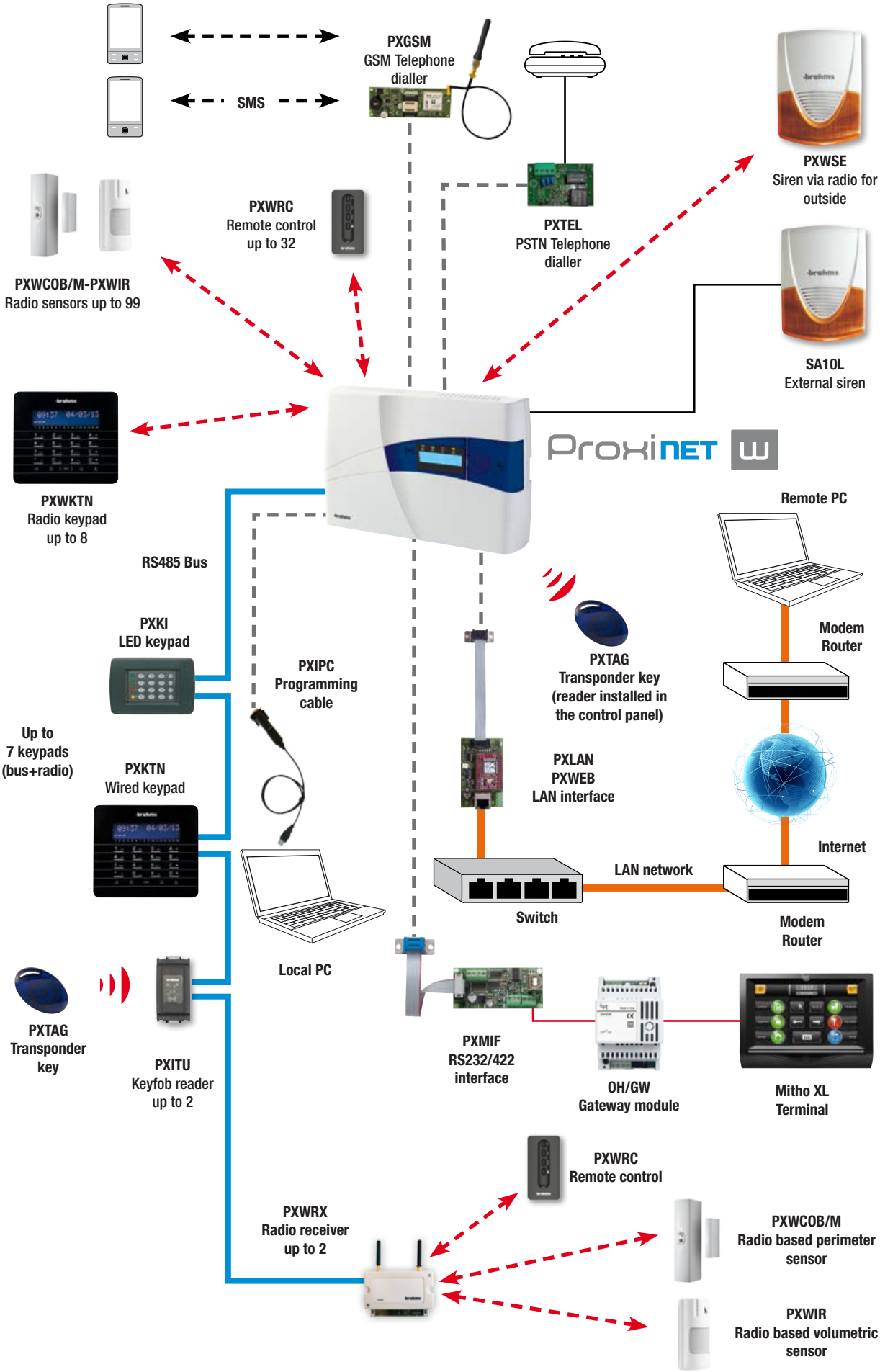
The installation must be carried out by qualified, expert staff and in full compliance with applicable laws.

Check main power source connections and relative ground connections.

Once the system is up and running, make sure users have changed the factory User Code (123456).

Maintenance on the system must only be carried out by qualified personnel; do not try to tamper with the system; you risk compromising its proper working order, and risk electrocution due to the voltage.

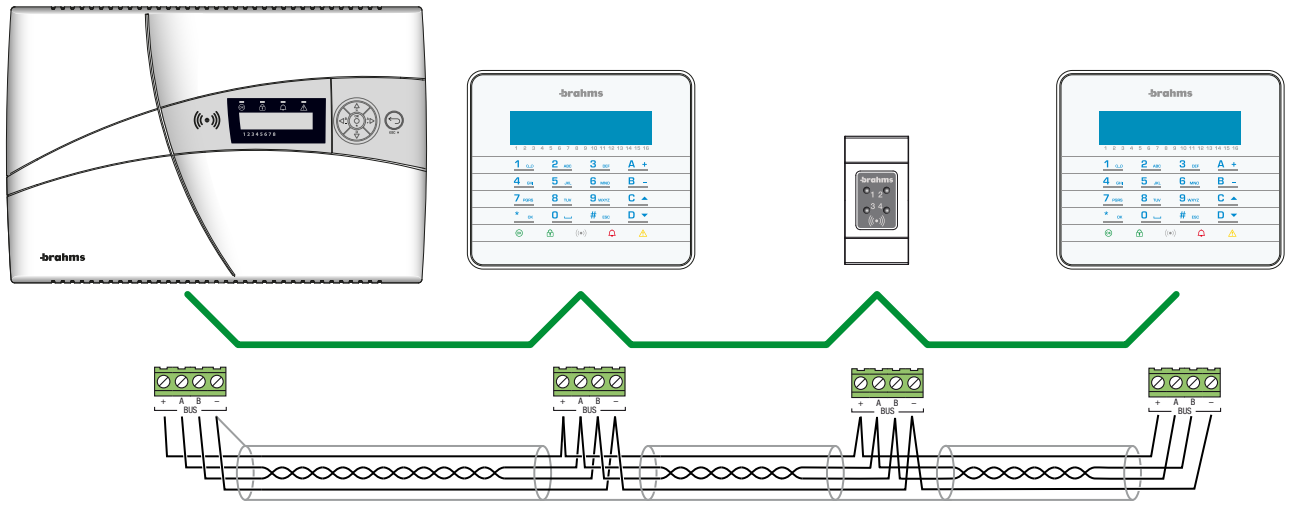
4.1 System cabling



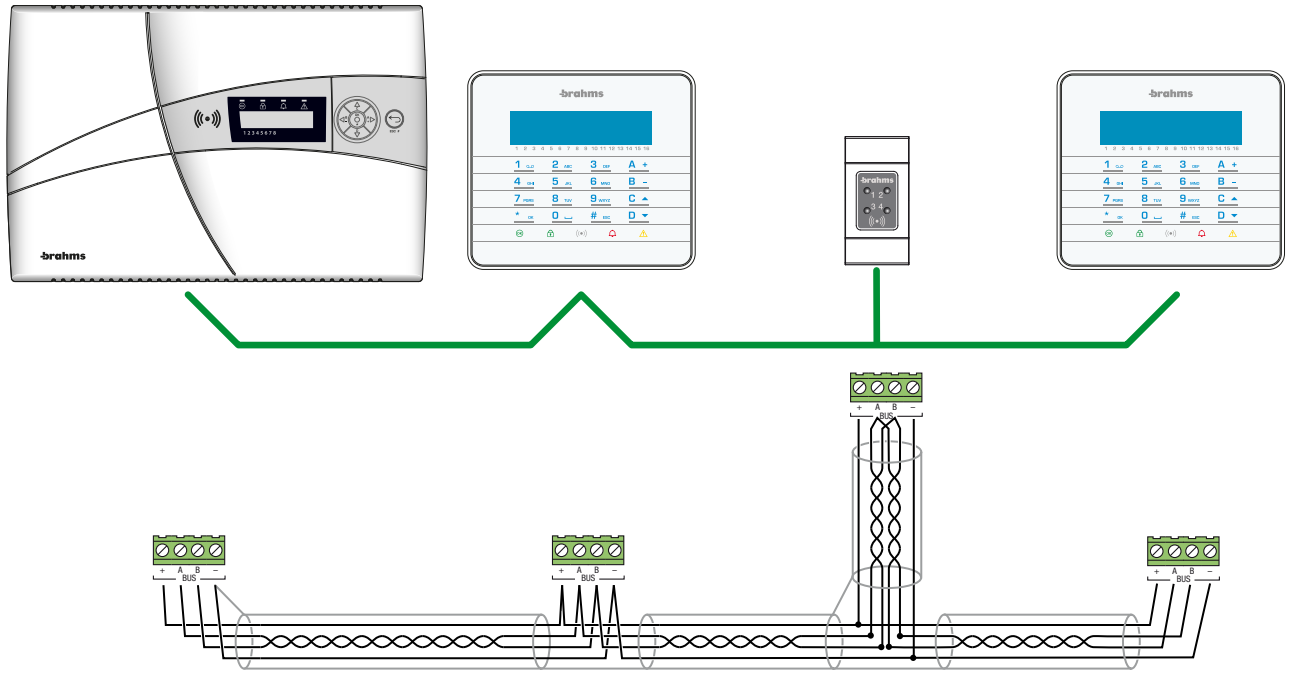
4.2 Cabling bus RS-485

If the remote devices are properly installed, all the bus communication LEDs featured on each device should flash. If any of them are not flashing it means that the device has not been correctly installed and programmed (check wiring, address and programming in control unit).

TRADITIONAL CABLING (entry - exit)

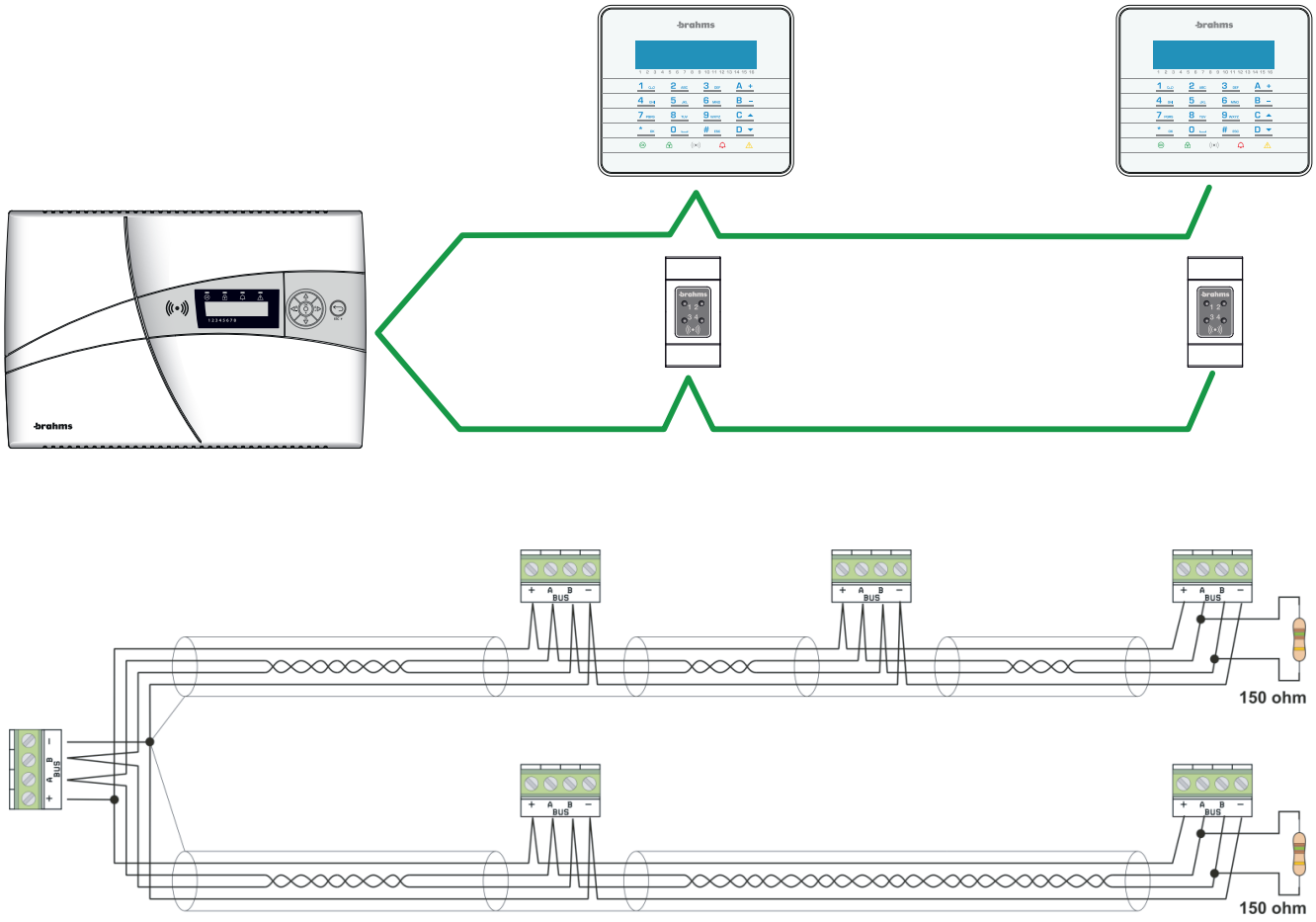


BRANCHED-OUT CABLING



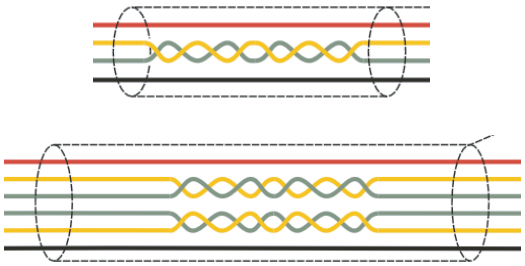
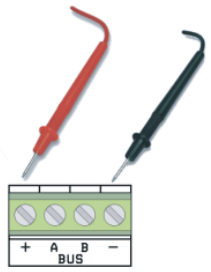
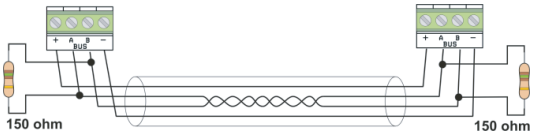
Branching out consists of a cable with three pairs, two of which are twisted (each pair is made up of conductors A and B). Analysis of this circuit shows that the structure of the RS-485 bus is still linear (entry-exit).

DOUBLE-BRANCH CABLING



APPLICATION NOTES ON BUS RS-485 CABLING

Cabling of the bus connecting the control unit to the plugs, bus amplifiers and keypads must follow the rules dictated by the RS-485.

Only use a screened and twisted cable with section of at least: • 2x0.5 mm² for power supply and twisted 2x0.22mm² for data. • 2x0.5 mm² for power supply and twisted 2x2x0.22 mm² for data (used to perform branching). The sleeve must always be continuous and connected to the control unit's negative (-) terminal.	
The maximum length of the cable (max stretches of 800m) and the section of the conductors depend on the number of modules and the overall draw on the different stretches of bus. When power draw increases the voltage drop on the cables increases and so reduces the power supply current to the devices on bus. The voltage at all + and - terminals of the devices on bus (keypads, plugs, modules, ...) must not fall below 12 V DC. If less, add an auxiliary power source and disconnect the positive while keeping the negative mutual.	 Greater than 12 Vdc
Where there are long stretches of bus always install 150 ohm resistors between terminals A and B at both ends of the bus.	
Always cable the bus in "entry-exit" mode. Do not cable the bus in star configuration. If you need this configuration follow the directions in this chapter.	 YES  NO

CHOOSING THE CABLE SECTION FOR THE RS-485 BUS

For the RS-485 bus we suggest using the following cable:

- Twisted and grade 4-screened cable (600/1000 V).
- A twisted pair for data with section 2x0.22 mm².
- A pair to power the 2x0.5 mm² or greater section depending on distances and voltages (check table below).

Below is the table for calculating the section of power cables with varying distances and power draws.

Any drops in power voltage must not exceed 1.4 V (voltage measured on terminals of the power supply and those of the device on the remotest bus).

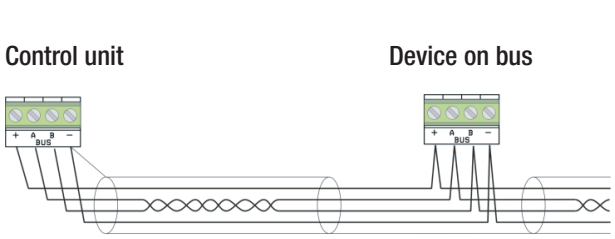
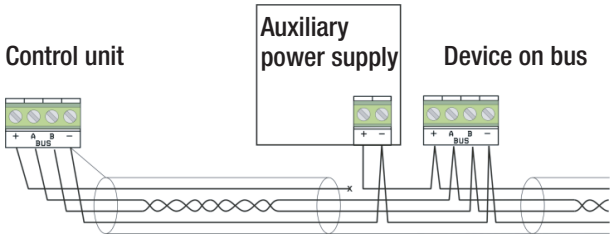
MAXIMUM CABLE LENGTH RS-485 BUS					
	POWER DRAW				
SECTION		0.1 A	0.25 A	0.5 A	1 A
	0.5 mm²	175 m	70 m	35 m	17 m
	0.75 mm²	262 m	105 m	52 m	26 m
	1 mm²	350 m	140 m	70 m	35 m
	1.5 mm²	525 m	210 m	105 m	52 m

If a cable does not have the proper section additional auxiliary power sources must be added.

Example:
Let's say we have:

- PROXINETW
- PXKTB-PXKTN (max consumption 85 mA)+PXITU (max consumption 100 mA)+PXKIB-PXKIN (maximum consumption 50 mA)
- Connection distance 200 m.

With maximum consumption of 235 mA in this case we can either use a 1.5 mm^2 section cable, or a 0.5 mm^2 section cable plus an auxiliary power supply connected at the end of the line as shown below:

RS-485 CABLE Screened 2x1.5mm^2 + twisted 2x0.22mm^2	RS-485 CABLE Screened 2x0.5mm^2 + twisted 2x0.22mm^2
	

Maximum communication performance is guaranteed by using the specified cable (PXC75). The maximum communication speed between the peripherals is 115,200 baud. If the cable specified is not used or if there are problems at installation, the control unit transfer speed can be decreased (38,400, 9,600, 4,800 and 2,400 baud). The speed of the peripherals is set automatically.

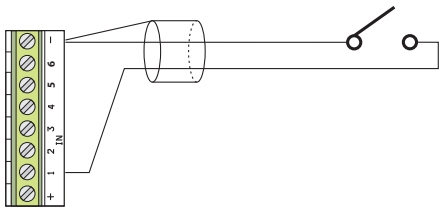
4.3 Inputs cabling

Balancing is done with 4.7 kohm resistors.

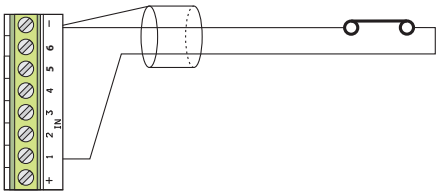
4.7 kohm 5% resistor

CONNECTING INPUTS

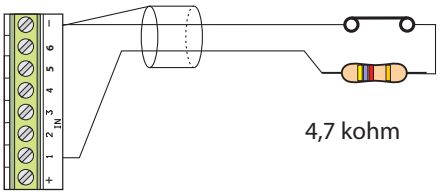
(NO) NORMALLY OPEN



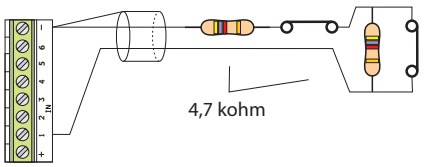
(NC) NORMALLY CLOSED



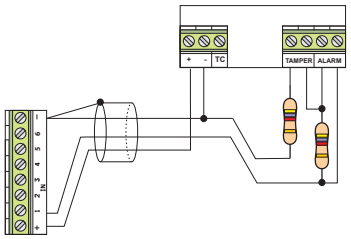
SINGLE BALANCING (SB)



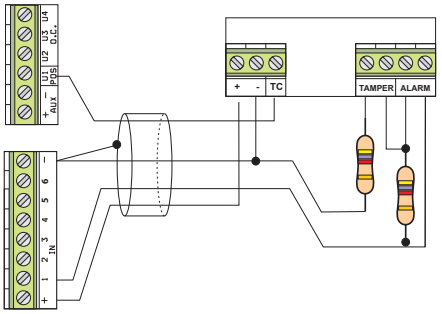
DOUBLE BALANCING (DB)



DOUBLE BALANCING SENSOR (DB)



DOUBLE BALANCING SENSOR (DB) WITH MICROWAVE BLOCK WHEN CONTROL UNIT IS OFF (TC)



The U1 output gives a positive when the output is active (ON=13.8 V DC). The U1 output is factory-programmed as TC (active output with system shut down, disabled during output time and when at least one area is turned on).

5 Control unit installation

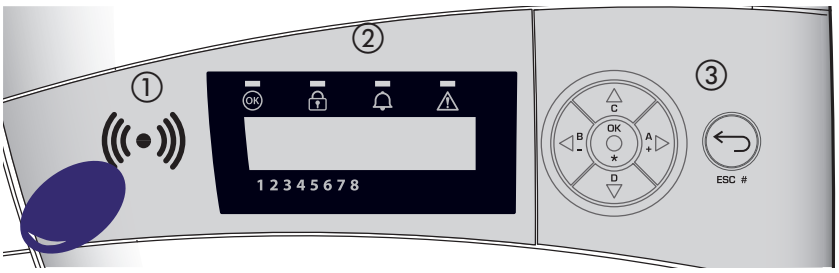
5.1 Features

GENERAL FEATURES	
Power supply	230 Vac - 15% + 10% 50/60 Hz
Power consumption (excluding battery charger)	70 mA
Power supply	800 mA
Transformer	25 VA
Battery	7.2 Ah
Protection rating	IP30
Dimensions	350 x 230 x 85 mm
Weight (without battery)	1.8 Kg
Case material	ABS
Operating temperature	from -10°C to +40°C
Storage temperature	from -10°C to +50°C
Operating relative humidity	75% R.H. No condensation
Storage relative humidity	75% R.H. No condensation
Max safety rating	2
Conformance with applicable laws	EN 50131-6; EN 50131-3; EN 5013-4; EN 50131-5-3 Grade 2 environmental class II, EC directive R&TTE 99/05

Below are the technical features of the control units (optional component means one that can be purchased separately).

OPERATING FEATURES	
Inputs via radio	99
Inputs via wire	6
Alarm outputs	1
Control panel programmable outputs (O.C.)	4
Zones	8
Scenarios	16
Keypad supplied	Yes
Transponder keyfob reader supplied	Yes
Indoor siren	Built in (100 dB at 1 m)
Transmission	Dual Band 868.65 MHz and 433.92 MHz two-way
Type of modulation	GFSK
Bus	1 RS485
Plugs (connectible through bus)	2
Wired keypads	2
Additional radio receivers (connectible through bus)	2
Keys	20
User code	20
Remote controls	32
Radio keypads	8
Radio siren	4
Radio scheduler	Daily On/Off control panel and outputs
Events	999
PSTN Telephone dialler	PSTN PXTEL board can be installed internally
GSM Telephone dialler	GSM PXGSM board can be installed internally
SMS control	Using GSM PXGSM board
Remote control with voice message menu	With GSM PXGSM or PSTN PXTEL board
Communications port	RS232
LAN network connection	Using a LAN PXLAN or PXWEB board
Local PC programming	Yes
Remote programming via the internet	Using a LAN PXLAN or PXWEB board
Connection to building automation system	Using a RS232/RS422 PXMIF interface board

5.2 Control Unit Panel



①	Proximity reader for TAG
②	Display
③	Control keypad

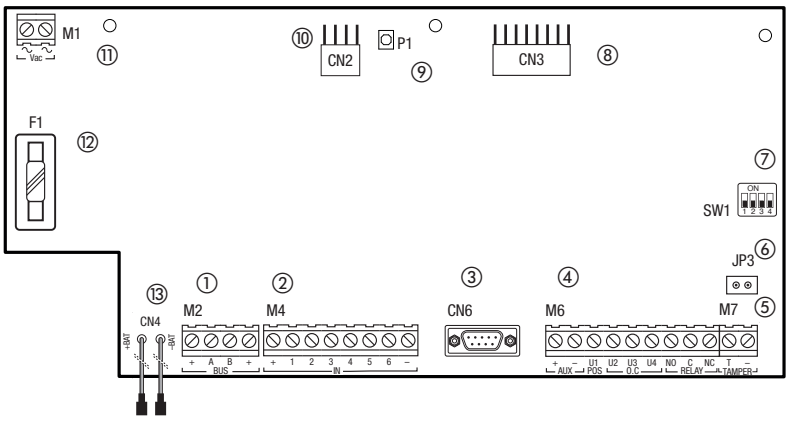
Visual signals on Control Unit display ②

Description	Symbol	LED Colour	Status	Meaning
System ready	OK	Green	On	NO inputs open
			Flashing	- - - - - - - - - - - - - - -
			Off	Inputs open. If a scenario is started up an alarm could be generated.
System Status		Green	On	Indicates that all the associated areas are on (system fully on).
			Flashing	Indicates that at least one associated area is on (system partly on).
			Off	The areas are off (system off).
Alarm		Red	On	Indicates at least one area is in alarm mode (system in state of alarm).
			Flashing	Indicates that the system has detected an alarm and that it has been silenced. See the events list for the list of alarms. To remove the signal see the chapter on system management.
			Off	NO areas in state of alarm.
Failure	⚠	Yellow	On	Indicates that there is a failure. When the "Conceal status" function is on, it indicates the presence of an event to view.
			Flashing	Failure in control unit battery. Contact local installer in the event of failures. Danger high voltage in parts of control unit.
			Off	Indicates that there are no failures on the system.

Description of control keypad ③

KEY	MEANING OF KEYS
*, #, ▲, ▼, C, D	Keys to navigate menu and make selections.
+, –	Keys to change parameters.
*	After entering the code you can access the menu or confirm a selection.
A, B, C	Keys to start up scenarios.
D	Key to turn off system.

5.3 Board description



	Meaning	
①	M2	RS-485 bus terminals for connecting keypads and plugs. [+,-] power supply to bus. [A,B] data.

②	M4	Control unit input terminals, can be types NC, NA, SB, DB [+,-] power supply [1, 2, 3, 4, 5, 6] inputs. Negative reference.			
③	CN6	RS-232 socket for connecting to PC (via RS-232 straight male/female cable) or to Ethernet interface.			
④	M6	Control unit output terminals [+. -. AUX] power supply available via self-restoring fuse protected output F5. [U1, POS] positive programmable output protected by 100 ohm resistor (ON=13.8 Vdc, OFF=NA). [U2, U3, U4, O.C.] open collector outputs which are negative programmable and protected by 100 ohm resistor (ON=0 Vdc, OFF=NA). [NO, C, NC, RELAY] general alarm relay with clean contacts			
⑤ ⑥	M7 JP3	[T, –. TAMPER] terminals for connecting the control unit tamper. [JP3] bridge to enable/disable the tamper (position C disables the control unit tamper, and position O enables it).			
⑦	SW1		Used to switch the Control Unit from Service to Maintenance mode (ON = Maintenance, OFF = Service).		Used to restore factory codes.
			Not used		Programming control unit firmware
⑧	CN3	Connector for PXTEL module (optional)			
⑨	P1	Button to restart control unit (the control unit's parameters and configurations are NOT reset)			
⑩	CN2	Connector for PXGSM module			
⑪	M1	Terminal board to connect transformer			
⑫	F1	Glass AC input fuse: 3.15A 250Vac 5x20mm with delay			
⑬	CN4	Connector for battery connection			

5.4 Assembly

The control unit must be assembled in an area that is easily accessible at least during maintenance operations.
To meet this need, a free area of about 500 mm must be left around the perimeter of the case so as to enable easy assembly and disassembly of the cover, allow easy access for maintenance engineers and facilitate network cable routing and connection to other devices.

Position the control unit in a clean dry place that is not subject to vibrations or knocks of any kind.
Installation of the Control Unit must be carried out as follows:

- open the cover by undoing the screw on the back of the Control Unit (fig. 1).
- release the cover from the case by exerting slight pressure near the side tabs as shown in the figure (fig. 1).
- lift the Control Unit cover (fig. 2).
- using the back of the control unit as a template, mark the position of the fixing holes shown in figure 3, making sure that the wall is even at the point selected;
- drill holes into the wall that will hold the case and put in the wall plugs required to secure the case;
- securely fix the back of the case to the wall, making sure that the tamper-proof switch (shown in fig. 4) moves freely.

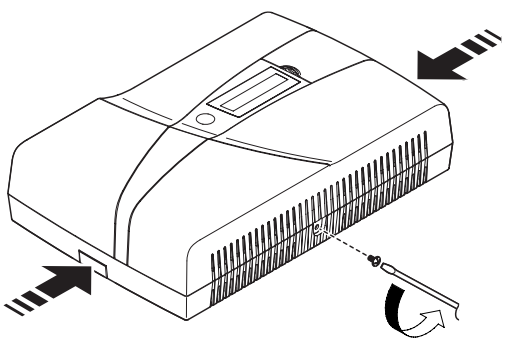


fig. 1

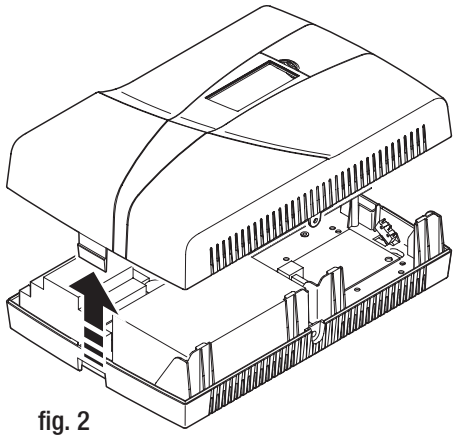


fig. 2

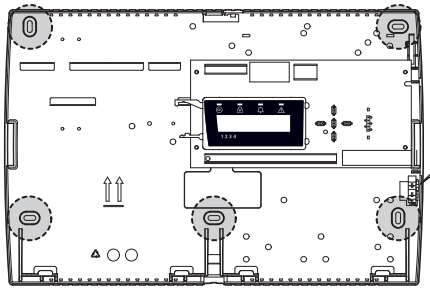


fig. 3

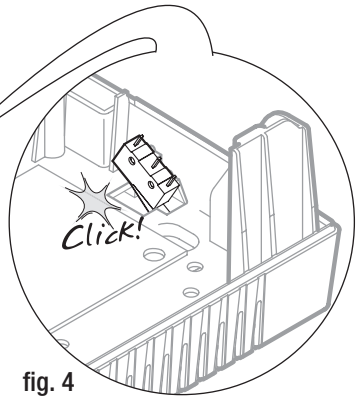


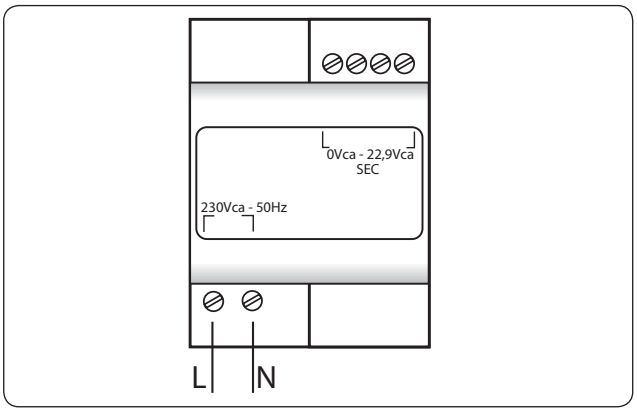
fig. 4

• Cables can be routed through the special holes located on the bottom of the case or you can open up (using a hacksaw) the pre-moulded slot on the top of the case.
• Put the battery into its housing and route the cables.

Install the control unit far from access points and somewhere it is hard to identify.
Secure onto a suitable wall that can permanently support the control unit.
Set up the holes and channels for the cables to pass through before installation.
Use the four special holes to fix it to the wall.

5.5 Cabling

230 Vac



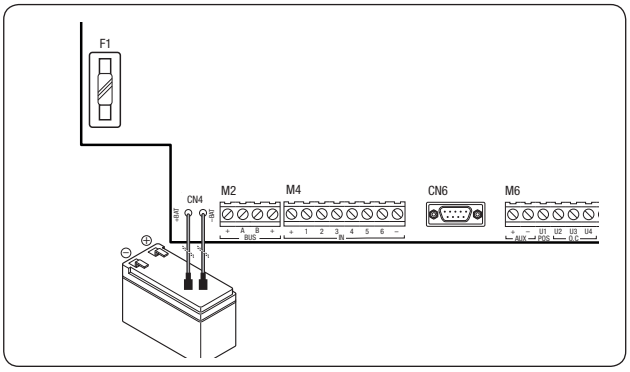
Disconnect the magnetothermic switch associated with the control unit before carrying out the 230 Vac network cabling and for the whole time that the control unit is open.

Connect the Line cable and the Neutral of the 230 Vac to the transformer terminals.

Block the 230 Vac power supply cable so that it cannot move even if the terminals are disconnected.

Before closing the control unit always check that all of the metal parts are connected to the ground.

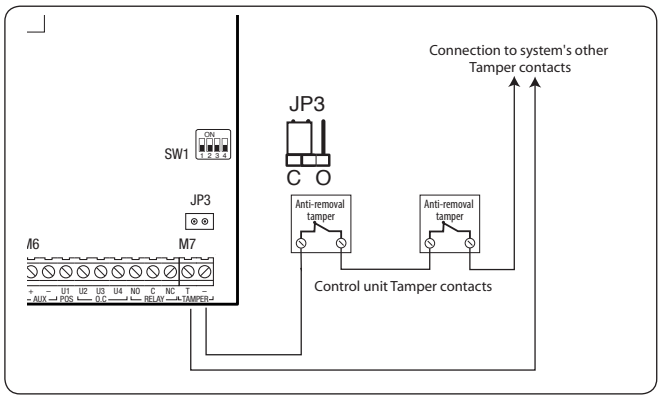
BATTERY



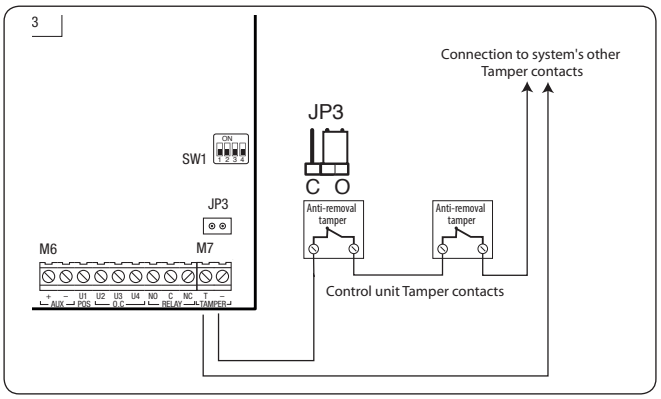
The battery is a secondary power source for the security control unit. Respect the polarity of the battery when connecting it.

TAMPER

TAMPER DISABLED: JP3 IN POSITION C



TAMPER ENABLED: JP3 IN POSITION O



⚠ Not using the control unit tamper nullifies the safety level of the system.

RS-485 BUS

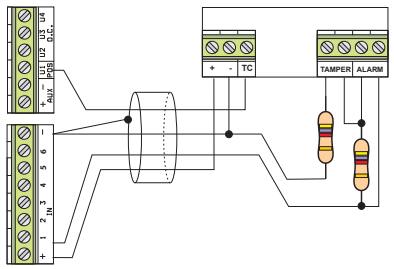
For cabling to the RS-485 bus see chapter 4.2.

INPUTS

For output cabling see chapter 4.3.

U1 PROGRAMMABLE OUTPUT (positive)

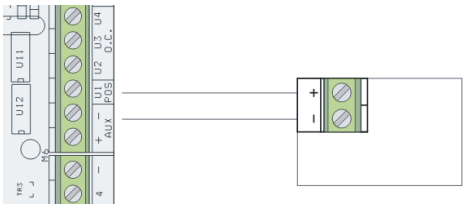
⚠ A short circuit to GND with active output for an extended time may lead to the protective resistor breaking.



U1 is a (freely programmable) output that provides a positive when activated:

- U1 ON = 13.8 Vdc
- U1 OFF = not connected

It is factory-programmed as a TC to inhibit microwaves when system is switched off (U1 = OFF if at least one area is on during out times; U1= ON if the system is switched off completely).

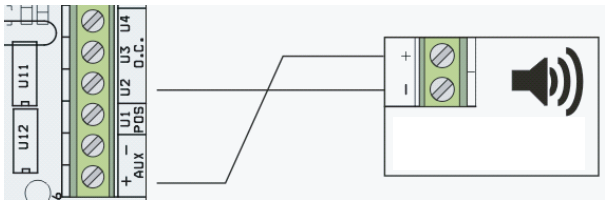


The output is protected by a 100 ohm resistor.

It may also be used to command sirens or other loads.

U2, U3, U4 (Open Collector) PROGRAMMABLE OUTPUTS

⚠ A short circuit to 12 Vdc with active output for an extended time may lead to the protective resistor breaking.

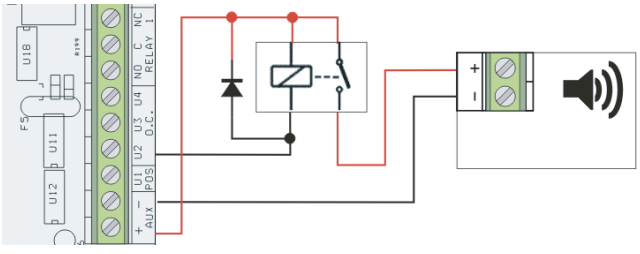


Siren requiring power supply

U2, U3, U4 are freely-programmable Open Collector outputs that provide a negative when activated:

- U2, U3, U4 ON = 0 Vdc
- U2, U3, U4 OFF = not connected

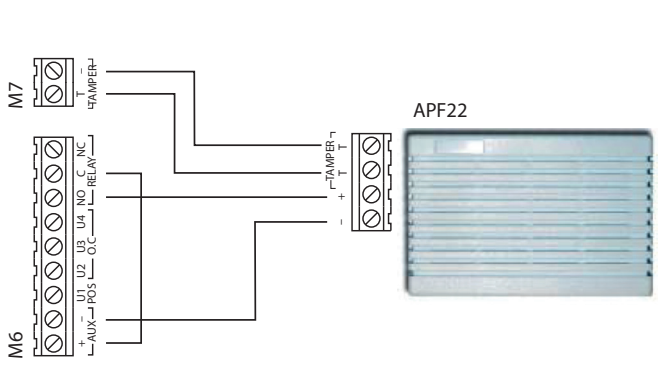
The outputs are protected by 100 ohm resistors.



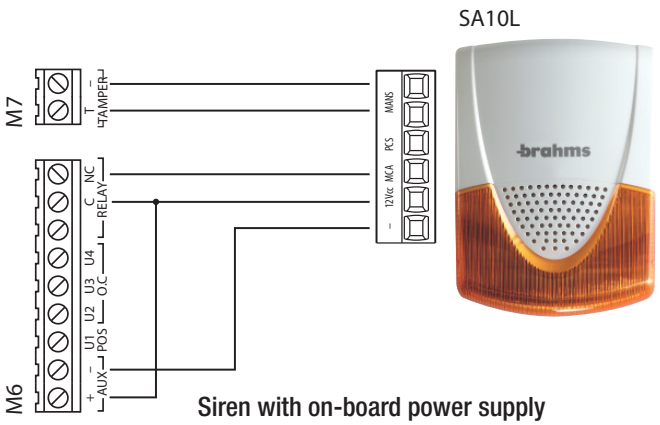
If you want to control a relay via an Open Collector output (or relay output) you will need to add a diode (1N4007) parallel to the relay coil.

GENERAL ALARM RELAY OUTPUTS RELAY 1

These relay outputs are for general alarms and cannot be programmed. They follow the state of general alarm and sabotage and remain active for the time programmed.



Siren requiring power supply



Siren with on-board power supply

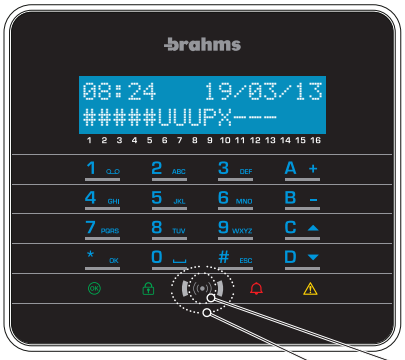
PSTN TELEPHONE LINE WITH PXTEL BOARD

The PSTN phone line needs to be connected to terminals [L, L] and at output to terminals [T, T] for switchboards or phones.

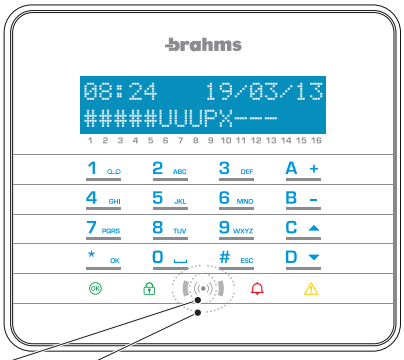
"Simulated" phone lines (lines output from ADSL routers) can cause interference on CONTACT-ID digital communications with security firms.

6 PXWKTN-PXWKTB Keypad

PXWKTN



PXWKTB

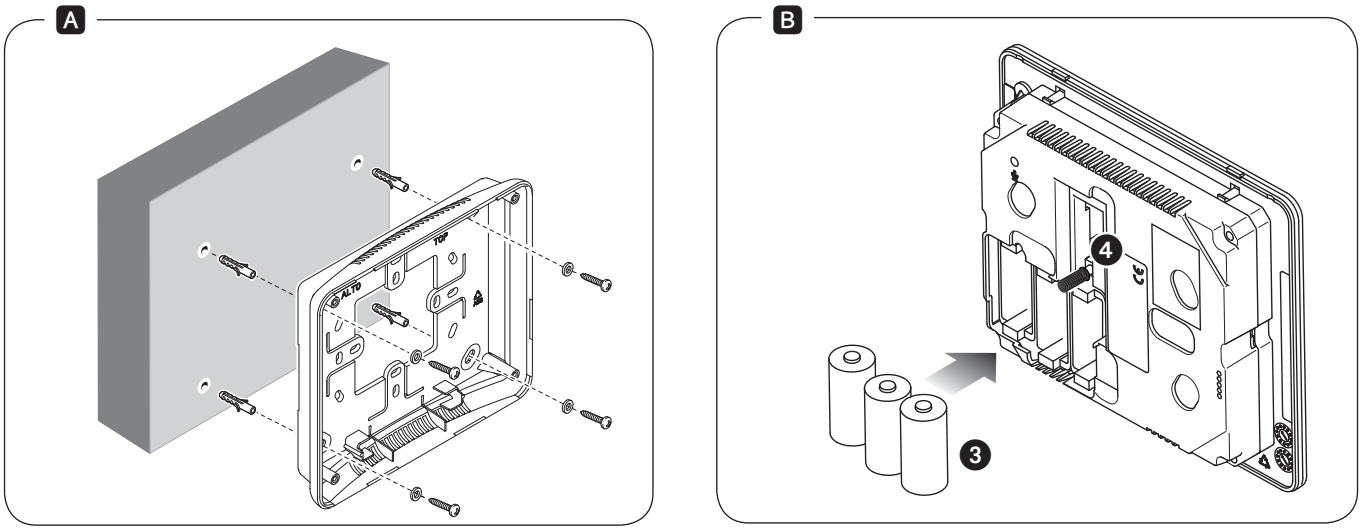


❶ Transponder plug
❷ Proximity sensor

6.1 Features

GENERAL FEATURES	
Power supply	3 x CR123A 3 VDC batteries
Maximum consumption	600 mA
Consumption in stand-by mode	20 µA
Frequency	Dual Band 868.65 MHz/433.92 MHz
Battery life	2 years for 1 minute of use per day
Operating temperature	0° - 40° C
Relative humidity	25% - 75% without condensation
Dimensions (HxLxD)	158x138 x 31 mm
Protection rating	IP30

6.2 Assembly



Attach the bracket with the screws provided, making sure that the tear-resistant device ❹ rests on the wall, and respecting the UP instruction.
Put in the batteries ❸ and click the keyboard lock onto the bracket. Continue with the auto-recognition of the keyboard by the control unit.

6.3 User interface

KEYPAD DISPLAY

The display is made up of 2 rows of 16 characters each. The keyboard, normally in stand-by mode, is activated by bringing your hand up to the proximity sensor ❷. Under the display there are 16 numbers which make it easier to interpret the second row of the display.

in the illustration	MEANING
	Areas on.
	Areas in switch-on phase (output time) without open inputs.
	Area partly on (there is at least one input associated to the area temporarily disabled).
	Area in switch-on phase (output time) but not ready for arming because of there being open inputs.
	Areas off.
	Areas not managed by keyboard.

LED (colour)	STATUS	INFORMATION DISPLAYED
(green)	○	Indicates that there are open inputs associated to the keyboard. If a scenario is started up an alarm could be generated. Check the open inputs in the scenario's start-up phase.
	●	Indicates that there are NO open inputs associated to the keyboard. The system can be turned on without any problems.
(green)	○	Indicates that the associated areas are turned off (system off).
	●	Indicates that all the associated areas are on (system fully on).
	◉	Indicates that at least one associated area is on (system partly on).
(red)	○	Indicates that the associated areas are NOT in alarm mode.
	●	Indicates that at least one associated area is in alarm mode (system in state of alarm).
	◉	Indicates that the associated system has detected an alarm and that it has been silenced. See the events list for the list of alarms. To remove the signal consult the control unit's USER MANUAL.
(yellow)	○	Indicates that there are no failures on the system.
	●	Indicates that there is a failure. When the "Conceal status" function is on, it indicates the presence of an event to view.
	◉	Indicates that the control unit battery should be replaced

○ = Off | ● = On | ◉ = Flashing

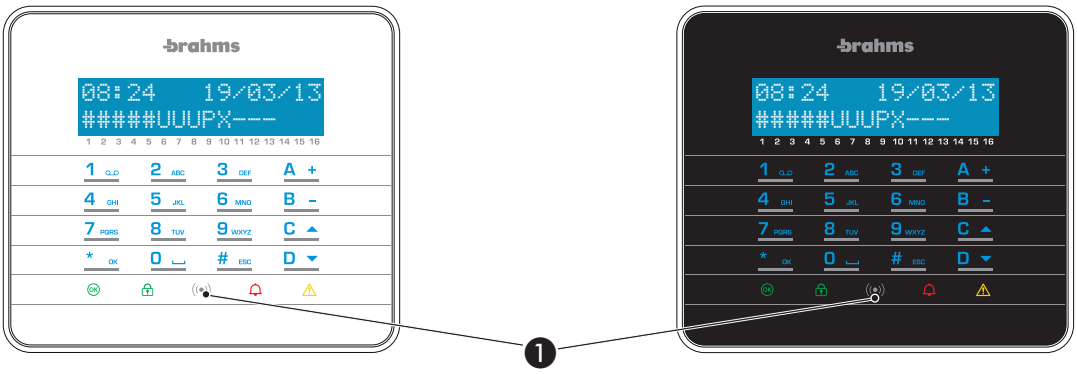
ALPHANUMERIC KEYPAD

KEYS	FUNCTIONS
1 0,Q 2 ABC 3 DEF 4 GHI 5 JKL 6 MNO 7 PQRS 8 TUV 9 WXYZ 0 ␣	The alphanumeric keys make it possible to enter access codes, select the areas in switch-on phase, change parameters.
* OK # ESC C ▲ D ▼	Keys to navigate menu and make selections.
A + B −	Keys to change parameters.
* OK	After inserting the code you can access the User Menu. Press for more than 5 seconds to access the keypad menu (see control unit manual).
A + B − C ▲	Keys to start up scenarios.
D ▼	Key to turn off system.

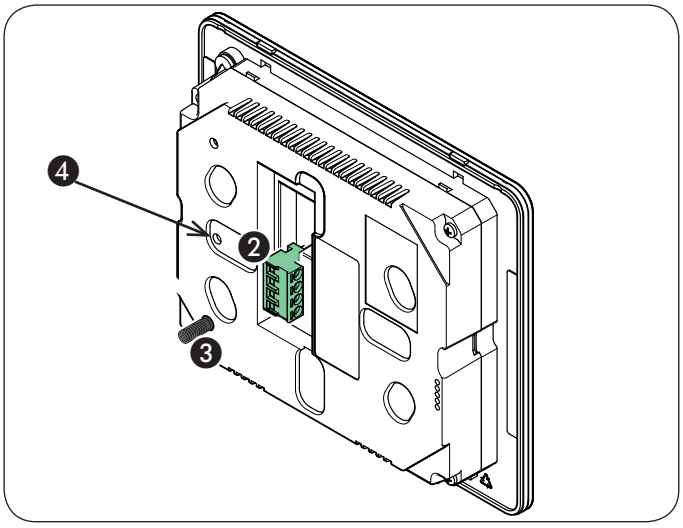
6.4 Keypad Menu

The Keypad Menu is independent from the control unit menu. Please consult the keypad instructions for further details on functions.

7 PXKTB-PXKTN Keypad

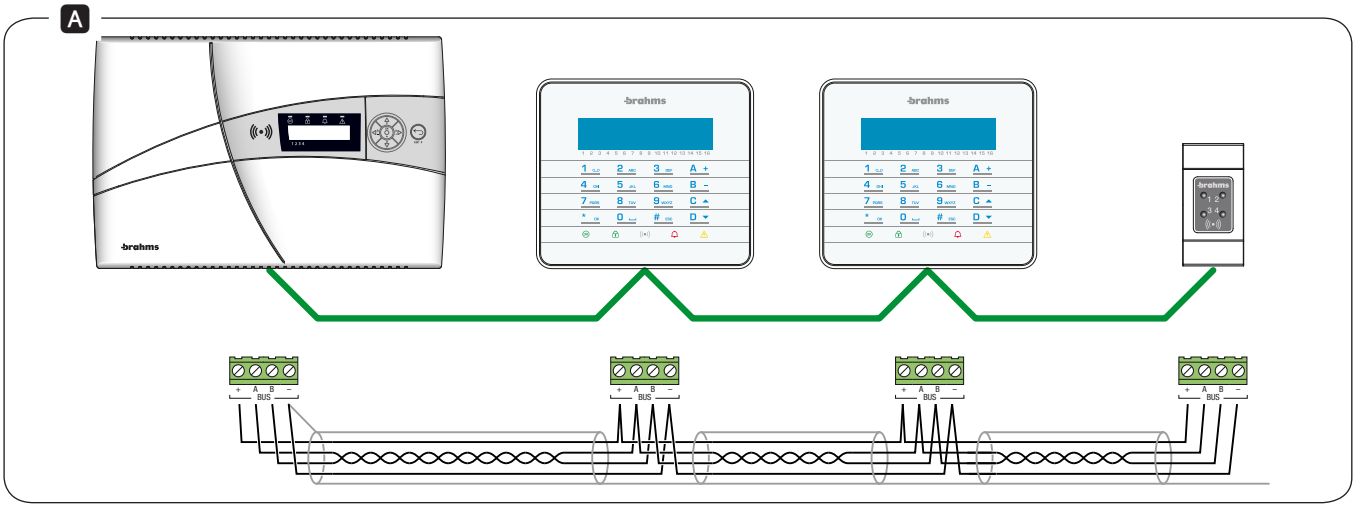


7.1 Board description



① Proximity reader
② RS-485 bus terminals for connection to control unit
③ Anti-tampering device (Tamper)
④ BUS communication LED

7.2 Connection



See connection diagram A.

NB: when it is installed correctly, the red LED should flash, if not check the keypad is connected and assigned correctly, including the programming in the PROXINET control unit.

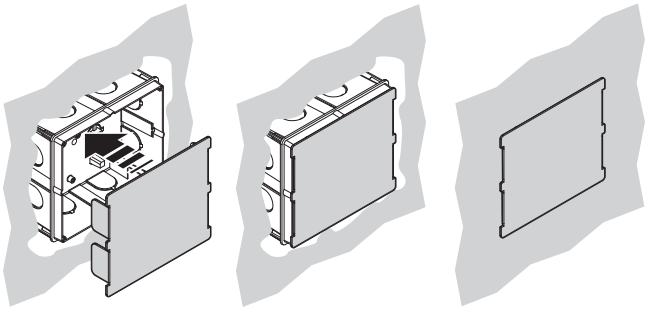
7.3 Features

GENERAL FEATURES	PXKTB-PXKTN
Power supply voltage	12 VDC - 15 VDC
Maximum consumption	85 mA
Operating temperature	0° - 40° C
Relative humidity	25% - 75% without condensation
Dimensions (HxLxD)	138x158 x 31 (on wall) - 138x158 x 9 (embedded)
Protection rating	IP40

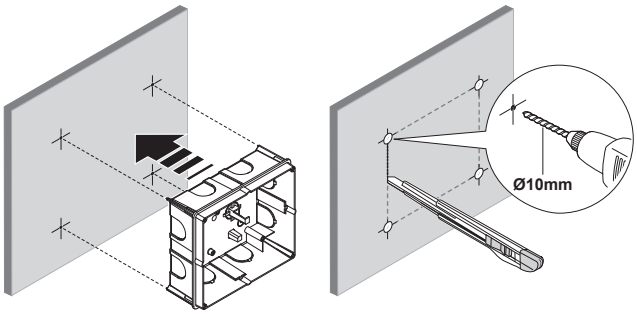
7.4 Assembly

B

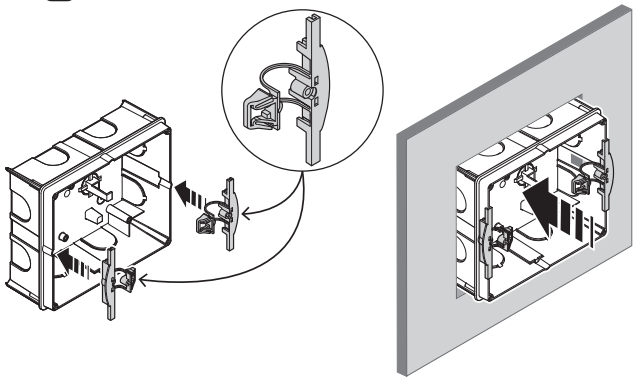
C



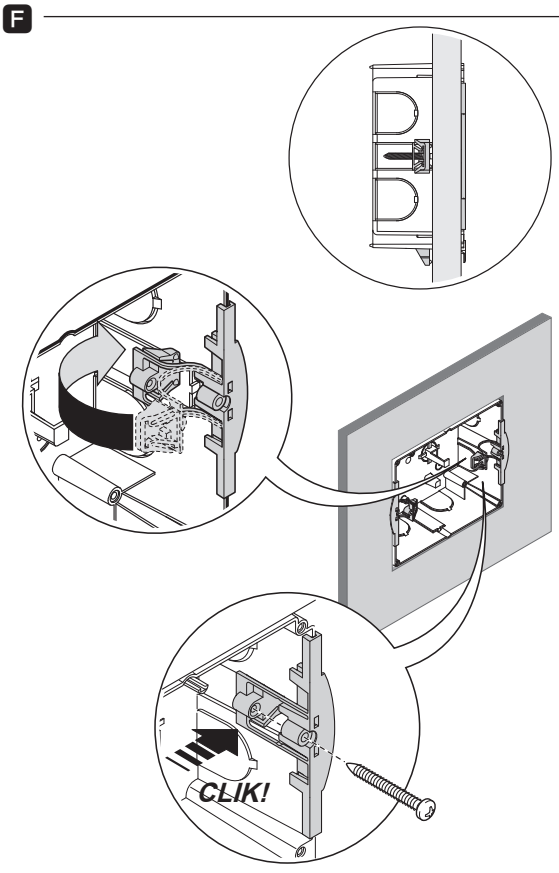
D



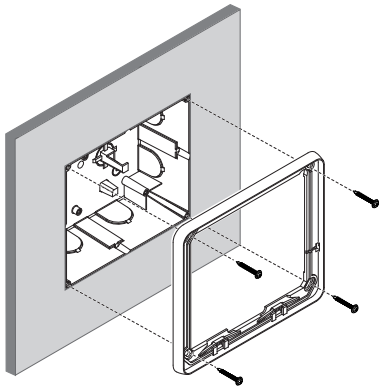
E



F



G



For wall mounting see picture B.

For embedded assembly the optional OPALESI box is required.

See the pictures C G for assembly on cement walls.

See the pictures D E F G for assembly on plasterboard walls

7.5 User interface

KEYPAD DISPLAY

The display is made up of 2 rows of 16 characters each. When at rest the keypad dims the brightness after a preset time. Under the display there are 16 numbers which make it easier to interpret the second row of the display.

NOTE. Pressing any key awakens the keypad from stand-by mode.

in the illustration	MEANING
	Areas on.
	Areas in switch-on phase (output time) without open inputs.
	Area partly on (there is at least one input associated to the area temporarily disabled).
	Area in switch-on phase (output time) but not ready for arming because of there being open inputs.
	Areas off.
	Areas not managed by keyboard.

LIGHT SIGNALS

LED (colour)	STATUS	INFORMATION DISPLAYED
(green)	○	Indicates that there are open inputs associated to the keyboard. If a scenario is started up an alarm could be generated. Check the open inputs in the scenario's start-up phase.
	●	Indicates that there are NO open inputs associated to the keyboard. The system can be turned on without any problems.
(green)	○	Indicates that the associated areas are turned off (system off).
	●	Indicates that all the associated areas are on (system fully on).
	◉	Indicates that at least one associated area is on (system partly on).
(red)	○	Indicates that the associated areas are NOT in alarm mode.
	●	Indicates that at least one associated area is in alarm mode (system in state of alarm).
	◉	Indicates that the associated system has detected an alarm and that it has been silenced. See the events list for the list of alarms. To remove the signal see the chapter on system management.
(yellow)	○	Indicates that there are no failures on the system.
	●	Indicates that there is a failure. When the "Conceal status" function is on, it indicates the presence of an event to view.
	◉	Indicates a failure in the control unit battery.

○ = Off | ● = On | ◉ = Flashing

ALPHANUMERIC KEYPAD

KEYS	FUNCTIONS
1 2 3 4 5 6 7 8 9 0	The alphanumeric keys make it possible to enter access codes, select the areas in switch-on phase, change parameters.
* # C D	Keys to navigate menu and make selections.
A B	Keys to change parameters.
*	After inserting the code you can access the User Menu. Press for more than 5 seconds to access the keypad menu (see control unit manual).
A B C	Keys to start up scenarios.
D	Key to turn off system.

7.6 Keypad Menu

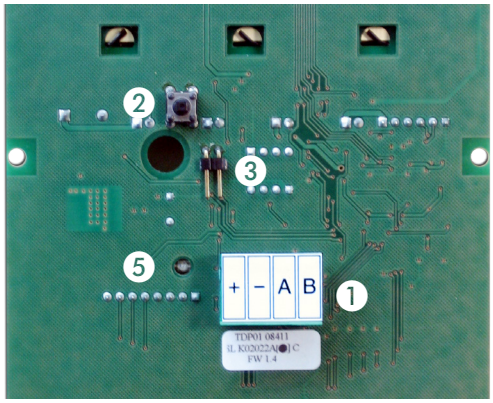
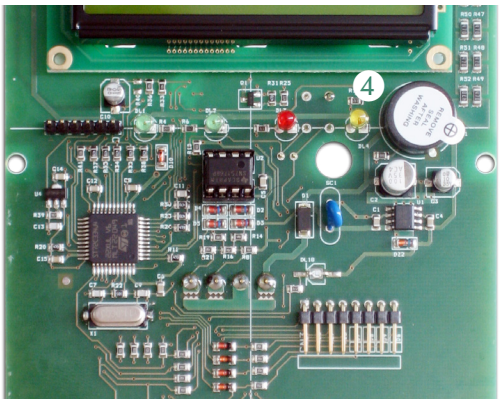
The Keypad Menu is independent from the control unit menu. Please consult the keypad instructions for further details on functions.

8 PXKWD keypad

8.1 Features

GENERAL FEATURES	PXKWD
Power supply voltage	12 VDC - 15 VDC
Maximum consumption	60 mA
Operating temperature	0° - 40° C
Relative humidity	25% - 75% without condensation
Dimensions (HxLxD)	180x120 x 28 (on wall)
Protection rating	IP40

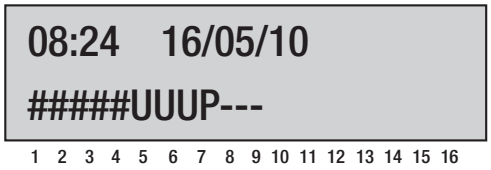
8.2 Board description

PXKWD	
	

	PXKWD DESCRIPTION
1	RS-485 bus terminals for connecting keypads, remote modules and plugs. [+,-] power supply to bus. [A,B] data.
2	[SW1] Anti-opening / tearing tamper.
3	[JP1] Jumper to disable / enable the tamper (Jumper armed = Tamper disabled).
4	BUZZER Keypad buzzer
5	DL18 BUS communication.

8.3 User interface

KEYPAD DISPLAY



The display is made up of 2 rows of 16 characters. When at rest the keypad goes into "Energy-saving mode", dimming the brightness after a preset time.

Under the display there are 16 numbers which make it easier to interpret the second row of the display.

= area on.

U = area in switch-on phase (output time) without open inputs.

X = area in switch-on phase (output time) but not ready for arming because of there being open inputs.

P = area partly on (there is at least one input associated to the area temporarily disabled).

- = area off.

□ = area not managed by the keypad.

Example:
Referring to the above display there are:

- Managed areas: 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12
- Unmanaged areas: 13, 14, 15, 16
- Areas on: 1, 2, 3, 4, 5, 9
- Areas in switching on phase: 6, 7, 8
- Areas off: 10, 11, 12

LIGHT SIGNALS

LED (colour)	STATUS	INFORMATION DISPLAYED
(green)	○	Indicates that there are open inputs associated to the keyboard. If a scenario is started up an alarm could be generated. Check the open inputs in the scenario's start-up phase.
	●	Indicates that there are NO open inputs associated to the keyboard. The system can be turned on without any problems.
(green)	○	Indicates that the associated areas are turned off (system off).
	●	Indicates that all the associated areas are on (system fully on).
	◉	Indicates that at least one associated area is on (system partly on).
(red)	○	Indicates that the associated areas are NOT in alarm mode.
	●	Indicates that at least one associated area is in alarm mode (system in state of alarm).
	◉	Indicates that the associated system has detected an alarm and that it has been silenced. See the events list for the list of alarms. To remove the signal see the chapter on system management.
(yellow)	○	Indicates that there are no failures on the system.
	●	Indicates that there is a failure. When the "Conceal status" function is on, it indicates the presence of an event to view.
	◉	Indicates a failure in the control unit battery.

○ = Off | ● = On | ◉ = Flashing

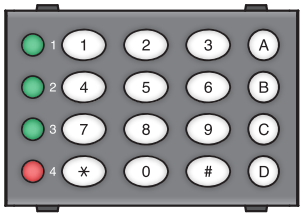
ALPHANUMERIC KEYPAD

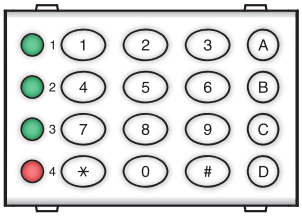
KEY	MEANING OF KEYS
1, 2, 3 4, 5, 6 7, 8, 9 0	The alphanumeric keys make it possible to enter access codes, select the areas in switch-on phase, change parameters.
*, #, ▲, ▼	Keys to navigate menu and make selections.
+, –	Keys to change parameters.
*	After inserting the code you can access the User Menu. Press for more than 5 seconds to access the keypad menu.
A, B, C	Keys to start up scenarios.
D	Key to turn off system.

8.4 Keypad Menu

The Keypad Menu is independent from the control unit menu. Please consult the keypad instructions for further details on functions.

9 PXKIN-PXKIB keypad



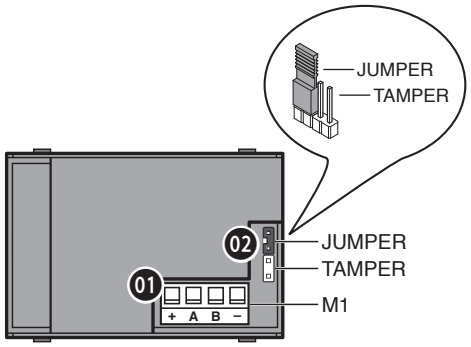


9.1 Features

GENERAL FEATURES	PXKIN-PXKIB
Power supply voltage	12 VDC - 15 VDC
Maximum consumption	50 mA
Operating temperature	-25 +55 °C
Relative humidity	25% - 93% without condensation
Dimensions (HxLxD)	45 x 66 x 50 mm
IP Protection rating:	IP30

9.2 Description

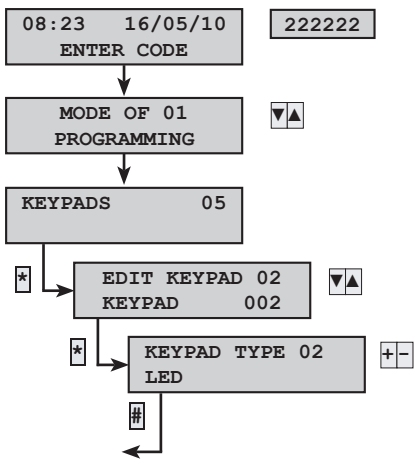
PXKIN - PXKIB



	PXKIN - PXKIB DESCRIPTION
1	[+ –] 12÷15 VDC power supply [A B] BUS line
2	TAMPER Contact Should it be necessary to equip the device with any tamper-proof and anti-opening tampers, connect a switch for this function to the “TAMPER” contacts and remove the “JUMPER” link to enable the switch.

9.3 Programming/Enabling

⚠ **Requirements to be met: Proxinet control panels with firmware 1.0.18 and later versions.**



To specify the type of keypad associated with an address:

1. On an LCD keypad, enter the technical code (if less than 6 digits, confirm with [*]).
2. With [▲] [▼] select KEYPADS and press [*].
3. With [▲] [▼] select EDIT KEYPAD 02 and press [*]. Keypad number 01 is by default an LCD keypad and cannot be edited.
4. With [+] [–] set the keypad type LED.
5. Press [#] to quit and return to the previous menus.

9.4 Keyboard IP address assignment and local buzzer enabling/disabling

- Press button ⊛ and hold it down for more than 5 seconds until a beep confirms that the keyboard has entered the local menu. The IP address of the keyboard is displayed by the combination of LEDs according to the following table:

Colour and LED number	Address															
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Green ● 1	Unassignable	○	●	○	●	○	●	○	●	○	●	○	●	○	●	○
Green ● 2		●	●	○	○	●	●	○	○	●	●	○	○	●	●	○
Green ● 3		○	○	●	●	●	●	○	○	○	○	●	●	●	●	○
Red ● 4		○	○	○	○	○	○	●	●	●	●	●	●	●	●	○

default address

○ = OFF | ● = ON

ADDRESS MODIFICATION

The address modification is only enabled for the first 4 minutes after the keyboard has been turned on. After this time, the address is still displayed but the keyboard will signal any attempt to change the address with an error beep.

To modify the address, type in the new address number and press button ⊛ to confirm.

Example: for address 3 press: 3 ⊛ *or press:* 0 3 ⊛

A confirmation beep will sound and the 4 LEDs will display the new combination. If an incorrect address was typed in, an error beep will sound.

LOCAL BUZZER ENABLING/DISABLING

LOCAL BUZZER ENABLING/DISABLING

- Press button ⊛ and hold it down for more than 5 seconds until a beep confirms that the keyboard has entered the local menu.

To enable/disable the local buzzer, simply press button Ⓓ. If it is enabled, this will disable it and vice-versa, if it is disabled, this will enable it.

Every time you enter the address/buzzer menu, the buzzer is automatically reset, to allow any OK or error signals.

To quit the local menu quickly, simply press button #.

If you do not operate the keyboard for more than 20 seconds, the keyboard automatically quits the menu.

DISARMED

To disarm the system, type in the user code; after you hear the confirmation beep that the code is correct, press button Ⓓ.

ARMED

If rapid-ON has not been enabled on the control panel, first type in the code. Press button Ⓐ and LED 1 will turn ON and the device will prepare to start up scenario 1 associated with the keyboard. Press button Ⓑ and LED 2 will turn on and the device will prepare to start up scenario 2 associated with the keyboard.

Press button Ⓒ and LED 3 will turn on and the device will prepare to start up scenario 3 associated with the keyboard.

After selecting the scenario to start up, simply press button Ⓐ.

The control panel will start the output time. If the inputs are not open, simply press button Ⓐ again to force the output time to zero.

SILENCING THE ALARM

Type in the user code. A confirmation beep will indicate that the code is correct.

LIGHT SIGNALS

LED (colour)	STATUS	INFORMATION DISPLAYED
1 (green)	●	The corresponding associated scenario is already armed or being armed.
2 (green)	○	The corresponding associated scenario is not armed.
3 (green)	◉	During the arming phase or with the system armed, one or more inputs belonging to this scenario are found to be open.

LED (colour)	STATUS	INFORMATION DISPLAYED
4 (red)	●	At least one area associated with one of the three scenarios is armed.
	○	All the areas associated with the 3 scenarios are disarmed.
	◉	The control panel is in alarm or alarm memory.

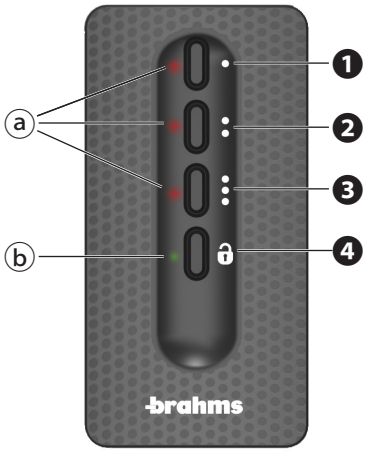
○ = OFF | ● = ON | ◉ = Flashing

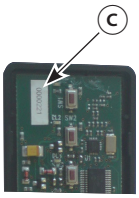
With the system disarmed, if inputs of areas associated with the keyboard are open, the three green LEDs will flash

10 PXWRC Remote control

10.1 Recognition

There are two remote control recognition methods:
- by registering the serial number ⓒ featured on the board using the PxManager software;
- by autorecognition, via the control unit's on-board keypad (holding key ● down for at least 5 seconds, when requested by the Control Unit).





10.2 Features

GENERAL FEATURES	
Frequency	868.65 MHz
Power supply	CR2032 / 3 V Lithium Battery
Consumption	25 mA MAX
Relative humidity	25% - 75% without condensation
Battery life	2 years for 10 operations/day (at 20°C)
Dimensions	77x39x10 mm
Range:	100m in free space.

10.2 Operation

The system can be armed by launching the 3 customised scenarios associated with keys 1/2/3 on the remote control.
By default the key/scenario associations are the following:
key 1 = scenario 1
key 2 = scenario 2
key 3 = scenario 3
If the chosen scenario envisages the enabling of one or more areas with an output time other than zero, the timings can be reset by pressing the ● key for at least 5 seconds, after the scenario itself has been launched.

Disabling the system. Press the 🔓 key to disable the areas associated with the remote control (LED 4 will flash green for 2 seconds).

The keys must normally be pressed for at least 1 second.

The system status is displayed by pressing key 🔓 for at least 5 seconds. The LEDs signal one of the following situations:

LED	status / colour	meaning
❶+❹	On/red	Scenario 1 active
❷+❹	On/red	Scenario 2 active
❸+❹	On/red	Scenario 3 active
❹	On/green	System completely disarmed
❹	On/red	System armed in a different mode from the scenarios associated with the remote control
❹	Flashing/red and green	the transmitter is not receiving

NB: for details of scenarios and relative areas associated to the transmitter, consult the control unit manual.
As confirmation from the control panel that the command has been received, the LED corresponding to the key will be permanently on after the key is held down for approximately 2 seconds.

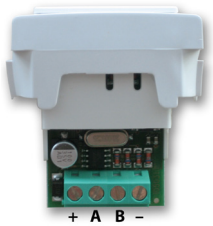
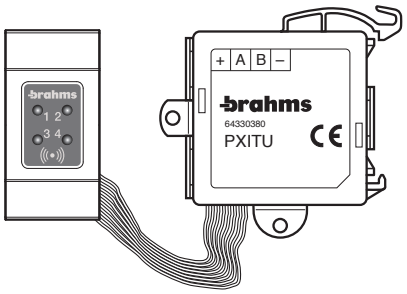
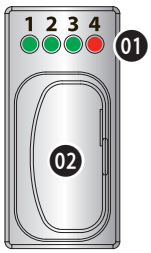
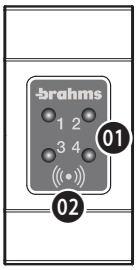
11 PXITxxxx and PXITU Plugs

⚠ The plugs must be mounted where they are protected from any break-ins or in an area monitored by the system, otherwise the reference standard lapses.

10.1 Features

GENERAL FEATURES	PXITxxxx	PXITU
Power supply voltage	12 VDC - 15 VDC	12 VDC - 15 VDC
Consumption	40 mA (min) - 70 mA (max)	40 mA (min) - 100 mA (max)
Operating temperature	0° - 40° C	0° - 40° C
Relative humidity	25% - 75% without condensation	25% - 75% without condensation
Dimensions	Positioned on a wall plug for an embedded box	Positioned on a wall plug for an embedded box + module to go inside the box itself
IP	IP40	IP40

11.2 Description

PXITxxxx	PXITU	
		RS-485 bus terminals for connecting keypads, remote modules and plugs. [+,-] power supply to bus. [A,B] data.
		1. System status light signals 2. Sensitive area for transponder key (see chapter on managing system)

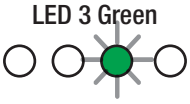
11.3 User interface

The transponder plug makes it possible to:

- Start up switching on and off scenarios.
- Switch system off.
- Display the status of alarm and operation of the system.

⚠ Each key is unambiguously recognised in the control unit and event history.

LIGHT SIGNALS

LED	STATUS	MEANING OF LIGHT SIGNALS
LED 1 Green 	●	When off it means that scenario 1 is not active (the switching on / switching off status of the areas does not correspond with that of scenario 1).
	●	When permanently on it means that scenario 1 is active (the switching on / switching off status of the areas exactly corresponds to that of scenario 1).
	◐	When flashing it means: - in the event of alarms there is at least one area of scenario 1 which is in alarm mode. - during output time it means that at least one input associated to scenario 1 is open.
LED 2 Green 	●	When off it means that scenario 2 is not active (the switching on / switching off status of the areas does not correspond with that of scenario 2).
	●	When permanently on it means that scenario 2 is active (the switching on / switching off status of the areas exactly corresponds to that of scenario 2).
	◐	When flashing it means: - in the event of alarms there is at least one area of scenario 2 which is in alarm mode. - during output time it means that at least one input associated to scenario 2 is open.
LED 3 Green 	●	When off it means that scenario 3 is not active (the switching on / switching off status of the areas does not correspond with that of scenario 3).
	●	When permanently on it means that scenario 3 is active (the switching on / switching off status of the areas exactly corresponds to that of scenario 3).
	◐	When flashing it means: - in the event of alarms there is at least one area of scenario 3 which is in alarm mode. - during output time it means that at least one input associated to scenario 3 is open.
LED 4 Red 	●	When off it indicates that the associated areas are switched off (system off).
	●	When constantly on it indicates that at least one associated area is on (system on or partly on).
	◐	When rapidly flashing it means that the associated system has detected an alarm. See the events list for the list of alarms. To remove the signal see the chapter on system management.
	◐	When slowly flashing it means that the system is in alarm memory. See the events list for the list of alarms. To remove the signal see the chapter on system management.

11.4 Address assignment

The address of the plug is assigned by the control unit in the address assignment phase. For address assignment see chapter 10.4.

11.5 PXTAG Key

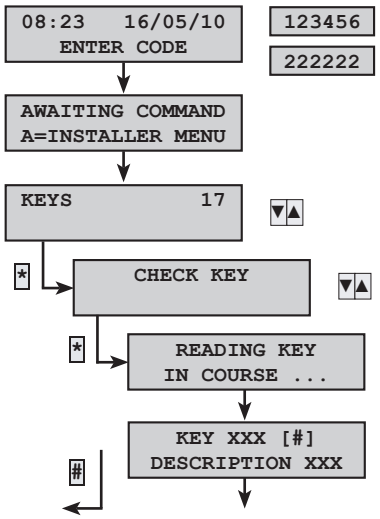
All the transponder keys are manufactured with a unique security code. To manage switching on and off the key must be accepted by the control unit in the system start-up phase or during subsequent modification.

ACCEPTANCE

For key acceptance see chapter 10.11.

CHECK KEY

If you are not sure who a key belongs to, you can check this in the User Menu.



To identify a key you need to:

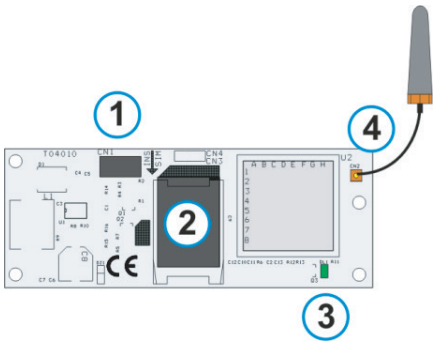
1. Access the User menu by pressing the control unit's ⮌/ESC # key for at least 5 secs.
2. Press key [A] to enter the installer menu.
3. With [▲] [▼] select `KEYS` and press [*].
4. With [▲] [▼] select `CHECK KEY` and press [*].
5. The plugs' LEDs begin to flash.
6. Approach the key until the flashing stops.
7. The index and description of the key appears on the display. If it doesn't belong to the system the words `KEY NOT VALID` appear.
8. Press [#] to quit and return to the previous menus.

12 Accessories

12.1 PXGSM

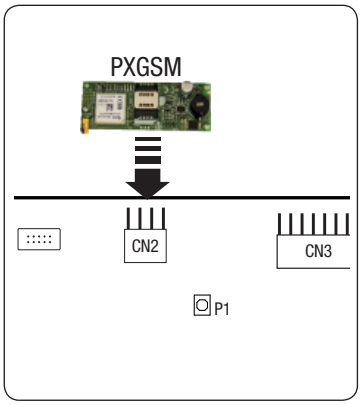
GENERAL FEATURES	
Power supply voltage	12Vdc
Maximum consumption	100 mA
Operating temperature	0° - 40° C
Relative humidity	25% - 75% without condensation

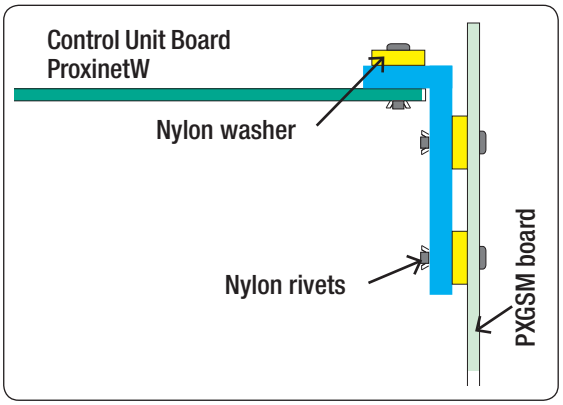
CARD DESCRIPTION



	DESCRIPTION	
1	Connector for connecting to control unit board.	
2	Slot for SIM. ⚠ All SIM card insertion and removal operations must be done after cutting off the main power supply.	
3	[DL1] Green LED light signalling that GSM is working.	
	●	GSM module off or not present.
	●	Active GSM call (incoming or outgoing).
	◔ 0.5 s ON / 0.5 s OFF	GSM telephone dialler is not registered with GSM network.
	◔ 0.3 s ON / 2.7 s OFF	GSM telephone dialler is correctly registered with GSM network.
4	Connector for GSM aerial.	

INSTALLATION





⚠ All interface insertion and removal operations must be made when main power supply is cut off to control unit.

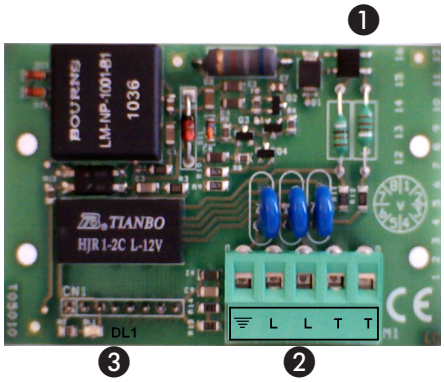
⚠ Only after connecting the aerial and inserting the SIM power up the control unit.

After powering up the control unit, let at least one minute elapse, then check that the GSM's green DL1 LED signals correct SIM registration. (◔ **0.3 s ON / 2.7 s OFF).**

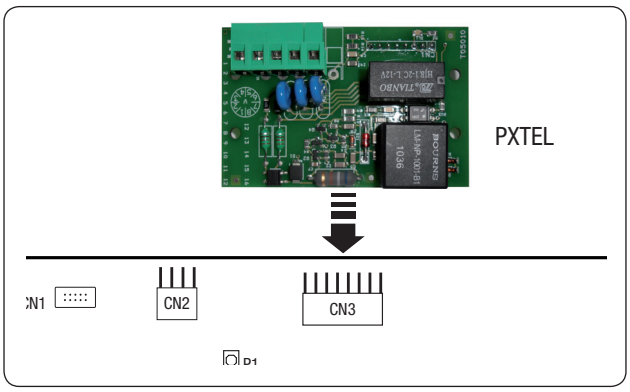
⚠ All interface insertion and removal operations must be made when main power supply is cut off to control unit.

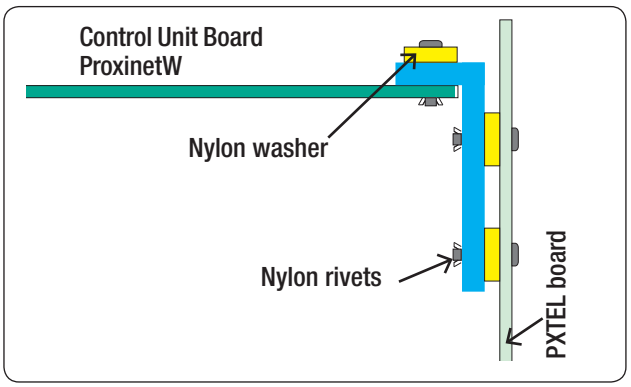
12.2 PXTEL

GENERAL FEATURES	
Power supply	12Vdc
Consumption	20 mA
Operating temperature	0° - 40° C
Relative humidity	25% - 75% without condensation

	DESCRIPTION		
	1	Connector for connecting the board to the control unit.	
	2	Terminal board for connection to the phone line.	
	3	Red LED indicating PSTN line on.	
	○	Off	Communication NOT activated
	●	Access	Communication activated

INSTALLATION





⚠ All interface insertion and removal operations must be made when main power supply is cut off to control unit.

13 System start-up

This chapter aims to describe how to start up a "simple" system without any special configurations. It shows how to install all the components and programme the basic functions (areas, scenarios, inputs, outputs, telephone signals).
Before starting up the system, do the following:

- Laying of RS485 control unit bus.
- Cabling inputs.
- Cabling outputs.
- Cabling the control unit.
- Cabling keypads, plugs, accessories, …

Below is an explanation of how to start up the system.

13.1 First start-up

PRELIMINARY CHECKS

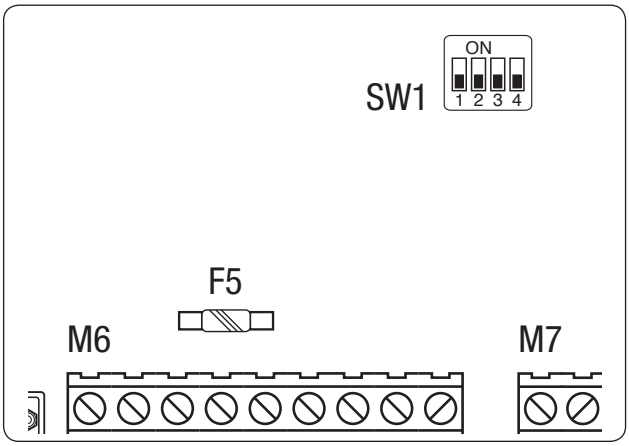
Check connections to ground and 230 Vac main power supply.

SYSTEM MAINTENANCE/SERVICE

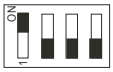
To prevent accidental calls or sirens when system undergoes maintenance jobs, setting the system to MAINTENANCE mode will disable said warning functions.
The deactivated control unit in maintenance:

- Telephone calls and SMS text messages.
- Activating the alarm outputs.

The User Menu can be used to test any disabled functions.



To change the maintenance/service status change the position of the switch [SW1]



in maintenance

up and operational

⚠ The maintenance status is displayed on the control unit screen and the LCD keypads.

After displaying the product name and firmware version on the screen, the control unit will automatically start up a voice guide that will ask the installer whether to proceed with recognition of the new radio devices and new keys, or with normal start-up (this is also true when the reset button P1 is pressed): *'PROXINET W control unit, if you wish to store new radio devices or new keys, press star* [*] *, otherwise press hash* [#] *to start up normal operation'*

By pressing [A] the control unit will normally start up with the installer menu, whereas by pressing [B] the voice guide will invite the installer to associate the radio devices or keys. *'To store the radio contacts or sensors, open the device and press button SW2, to store remote controls hold down button* ● *, to store the key approach it to the reader'.*

Until the choice of device to be associated is made, you will be repeatedly asked to do this: '*Press the button of the radio device or approach the key to the reader.'*
Once the key is passed, or the radio device button pressed, the voice guide will confirm that registration has taken place: *'Key stored, key no.XXX'.*

After that the voice message associated to the key will be reproduced, and it will be possible:

- to confirm by pressing key [A] then go on with the recognition of new devices/keys;
- edit the description displayed on the screen by pressing key [B].
- change the voice recording with the control unit's microphone by pressing key [C].

Once the association of the different devices and keys is completed, press [#] to exit, and then press [*] to confirm the exit: '*All the stored radio contacts belong to the first area, all the sensors to the second. On the remote control, hold down button* [A] *to fully arm the system, button* [B] *to arm the perimeter. To disarm, hold down the fourth button'.*

If at 'Power On Central' no operation is carried out, after 2 minutes the control unit will automatically exit from autorecognition. If at 'Power On Central' the system is armed, the control unit will not start up autorecognition mode.

AUTORECOGNITION MENU

Autorecognition of devices as described in "POWER ON CENTRAL" can be carried out at any time, simply by accessing the Technical Menu and pressing key [B] after entering the Technical Code.

SYSTEM IN MAINTENANCE		SYSTEM UP AND OPERATIONAL	
IN MAINTENANCE ENTER CODE	First line of display with message "in maintenance"	08:23 16/05/10 ENTER CODE	First line of display with time and date of control unit

CHANGE CONTROL UNIT LANGUAGE

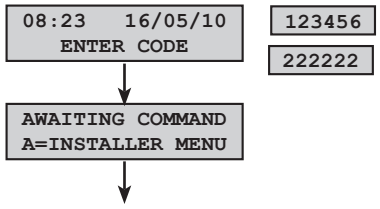
The language update also allows the update of the firmware, and this can be done using the PX MANAGER programming software or the FW UPDATER tool

POWER ON CENTRAL

- Power up the control unit with 230 Vac and connect the battery.
- When first switched on the control unit follows the configuration of the parameter `POWER ON CENTRAL` which is normally set to `TOTAL SWITCH ON`.
- Switch off the system by keying in the user code `123456` then pressing the off button [D].

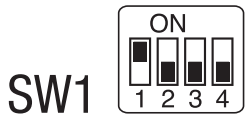
OPENING/CLOSING THE CONTROL UNIT

If the control unit tamper is correctly installed, opening the control unit cover will set off the sabotage alarm immediately.
To avoid generating the alarm access the technical menu from the keypad.



STEP 1: Opening control unit

1. Enter the user code (if less than 6 digits confirm with [*]).
2. Enter the technical code.
3. Press key [A] to enter the installer menu.
4. Open the control unit by undoing the relevant screw.



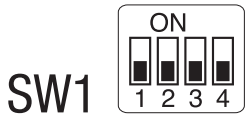
STEP 2: Putting the control unit in maintenance

To prevent alarms being raised at the end of programming because of the control unit tamper or possible programming errors, we suggest putting the control unit into maintenance mode.

1. Put the control unit into maintenance mode  by lifting microswitch 1.

STEP 3: Maintenance

This setting lets the user perform operations without the risk of unwanted sirens or telephone calls being activated.



STEP 4: Making operational and shutting down the control unit

Once the maintenance is completed, restore the system to operational mode.

1. Put the control unit into operational mode  by lowering microswitch 1.
2. Close the control unit within 30" before its tamper alarm is activated.

13.2 Use of control unit's control keypad

KEY	MEANING OF KEYS
[*], [#], [▲], [▼], [C], [D]	Keys to navigate menu and make selections.
[+], [-]	Keys to change parameters.
[*]	After entering the code you can access the menu or confirm a selection.
[A], [B], [C]	Keys to start up scenarios.
[D]	Key to turn off system.

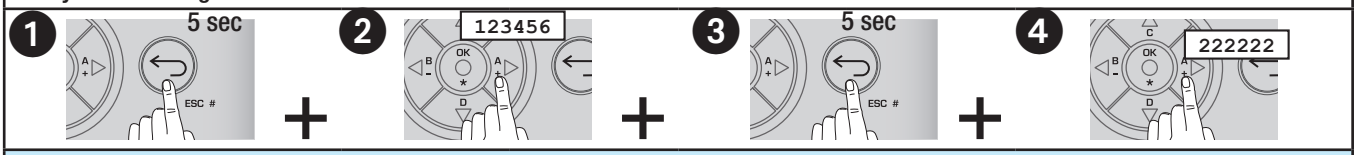
ACCESSING TECHNICAL MENU FROM THE CONTROL UNIT

Using the parameter TEC MENU ACCESS (CODES -> INSTALLER'S TECHNICAL CODE), access to the technical menu may or may not be preceded by the User code.

Simultaneously accessing the technical menu or user menu from multiple keypads is not allowed.

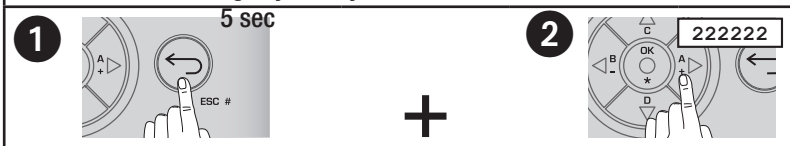
INDIRECT ACCESS

To access the Technical Menu hold down the ⮌/ESC # for 5 secs, enter the user code 123456, hold down the ⮌/ESC # key again for 5 secs and enter the technical code 222222. Using keys + - you can move from character to character, while with keys ▲ ▼ you can change the text.



DIRECT ACCESS

With the system completely disarmed hold down key ⮌/ESC # for 5 secs and enter the technical code 222222 to go into the Technical Menu. Using keys + - you can move from character to character, while with keys ▲ ▼ you can change the text.



In the manual all the different submenus of the technical menu will be shown with access via the control unit.
After the technical code with keys A and B you can choose whether to go into the installer menu (key A) or the autorecognition menu (key B). The choice of the two menus is available by going into the technical menu from the control unit only, and not from a remote keypad.
All the configurations in the technical submenus relating to "voice recordings" can only be seen on the technical menu via the control unit keypad.

ACCESS TO TECHNICAL MENU FROM PXKTX or PXWKD KEYPAD

Indirect Access

1. Enter the user code 123456 (if less than 6 digits confirm with *).
2. Enter the technical code 222222 (between the user code and the installer code do not press the ⮌/ESC # key or the operation is cancelled).

Direct Access

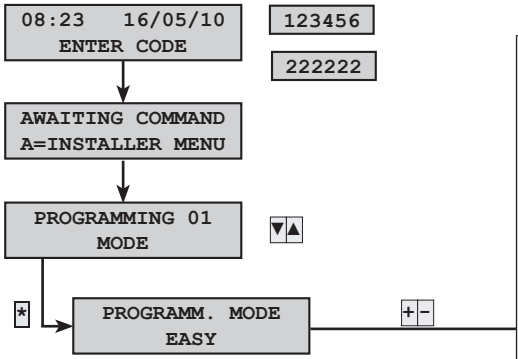
3. Enter the technical code 222222 directly (if less than 6 digits confirm with *).

ACCESSING THE TECHNICAL MENU FROM THE PXWKTX KEYPAD

The PXWKTX radio keypad does not support the technical menu.

13.3 Programming mode (EASY, STANDARD)

To simplify system programming where installers are not highly skilled or where simple systems need to be created, parameter PROGRAMMING MODE has been provided. This parameter simplifies (reducing or presetting) the parameters to be used for simple systems, or enables more thorough control for more demanding installers.



Programming mode: (Default EASY) F S A

EASY only basic parameters for simple systems are available.

STANDARD ADVANCED parameters for simple STANDARD and ADVANCED systems are available (programming mode only available from PXManager).

In the manual the menus available only in STANDARD and ADVANCED mode will be marked with icon .

Moving from Standard to Easy means automatic reconfiguring of the parameters which will be hidden.

Below are the main differences between the three types:

EASY MODE

The EASY programming mode lets you quickly and simply start up low-complexity systems or is used by installation engineers who are not highly skilled. The pre-configured settings are the following:

INDEX	AREA DESCRIPTION	INDEX	AREA DESCRIPTION
1	DAYTIME AREA	3	PERIMETER AREA
2	NIGHT-TIME AREA		

INDEX	SCENARIO DESCRIPTION	ASSOCIATED AREAS	PROPERTIES
1	GOING OUT	1, 2, 3	TURN ON+OFF EXACT
2	GOING TO BED	1, 3	TURN ON+OFF EXACT
3	STAYING HOME	3	TURN ON+OFF EXACT

KEYPADS	ASSOCIATED SCENARIOS		PLUGS	ASSOCIATED SCENARIOS	
ALL KEYPADS	A	GOING OUT	ALL PLUGS	L1	GOING OUT
	B	GOING TO BED		L2	GOING TO BED
	C	STAYING HOME		L3	STAYING HOME

INDEX	OUTPUT DESCRIPTION	INDEX	OUTPUT DESCRIPTION
U1	**TC output** to disinhibit the detectors' microwave when system is off (associated to the NIGHT-TIME area). From a positive with NIGHT-TIME area switched off.	U3	**Out of order**, yields a negative when something is out of order.
U2	**System status**, yields a negative if at least one area is on.	U4	**Technical**, yields a negative when there is at least one technical alarm.
RELAY	**Relay 1**, is activated during the alarm time.		

CODES	CODE PROPERTIES	KEYS	DESCRIPTION OF PROPERTIES
all	TURNING ON + TURNING OFF of all areas.	all	TURNING ON + TURNING OFF of all areas.

TELEPHONE NUMBER	DESCRIPTION	TYPE	ATTEMPTS	ALARM	SABOTAGE	TECHNICAL	BURGLARY	SWITCHING ON SWITCHING OFF	OUT OF ORDER	CODE ENTERING	KEY ENTERING	HELP	AUTO TEST	RESIDUAL CREDIT
1..7	Telephone 1..7	VOICE	2	x	x	x	x					x		
8	Technical	SMS	1	x	x	x	x		x			x		x

STANDARD MODE

(available only from PXManager)

Same settings as the EASY mode plus:

- Customise scenarios.
- Customise Keypads, plugs, codes, keys, ...
- Customised telephone calls.
- Restore default parameters and codes separately.

ADVANCED MODE

(available only from PXManager)

Same settings as the EASY mode and STANDARD, plus:

- Customise keypad-specific voice messages.
- Advanced programming of inputs, codes, keys, telephones, telephone options, special functions.
- Advanced programming of telephone signals.
- Time, calendar scheduler.
- Past events print-out.

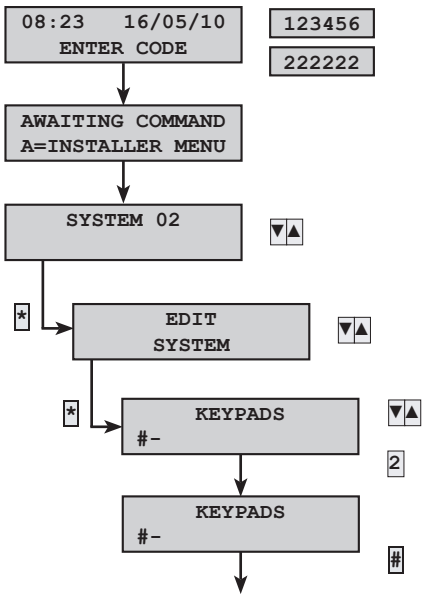
13.4 Acquiring addresses and recognition of peripherals

ENABLING KEYPADS

The system cannot have keypads with identical addresses.

All keypads are manufactured with address 1 and the control units have keypad 1 enabled by default.

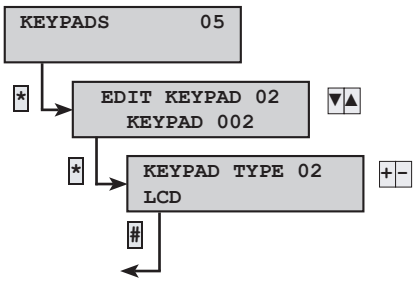
To acquire a new keypad from the control unit (for instance, add keypad 2):



STEP 1: Keypad enabling in control unit

From the control unit keypad:

1. Enter the user code (if less than 6 digits confirm with *).
2. Enter the technical code.
3. Press key A to enter the installer menu.
4. With ▲ ▼ select SYSTEM and press *.
5. With ▲ ▼ select EDIT SYSTEM and press *.
6. With ▲ ▼ select KEYPADS.
7. Use the numerical keys to select the keypad for enabling (# = enabled, - disabled).
8. Press # to go back to the previous menu.



STEP 2: Setting the keypad type

From the control unit keypad:

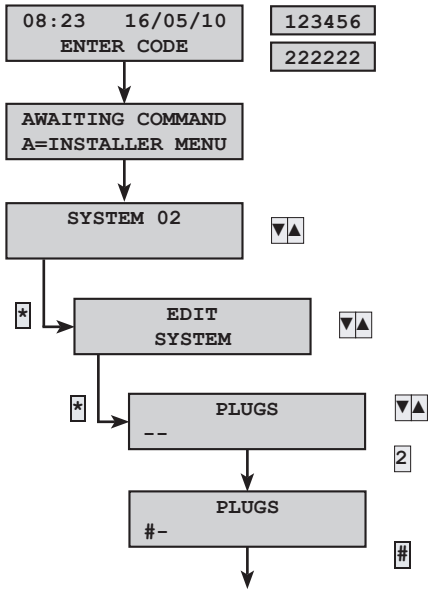
1. Enter the user code (if less than 6 digits confirm with *).
2. Enter the technical code.
3. Press key A to enter the installer menu.
4. With ▲ ▼ select KEYPADS and press *.
5. With ▲ ▼ select EDIT KEYP.XX and press *. Keypad number 01 is by default an LCD keypad and cannot be edited.
6. With + - set the keypad type LED, LCD or RADIO.
7. Press # to quit and return to the previous menus.

The address of the keypad must also be changed via the internal menu of the keypad itself.

ACCEPTING REMOTE PLUGS

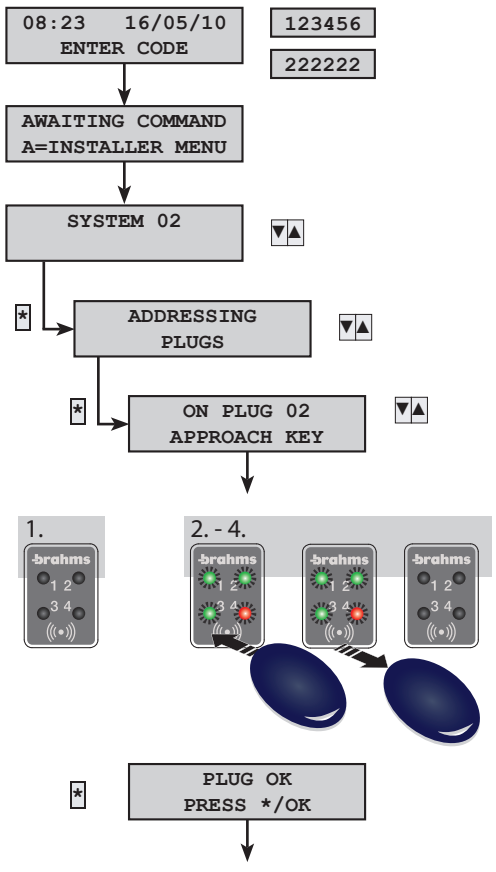
The system cannot have plugs with the same address.
All the plugs are manufactured with address 1 and the control units have a built-in plug 1 that is factory enabled.

For a new plug to acquire its address and be accepted by the control unit you must (example of added plug 2):



STEP 1: Plug enabling in control unit

1. To access the Technical menu hold down key ⮌/ESC # for 5 secs followed by the User code (if less than 6 digits confirm with *).
2. Hold down key ⮌/ESC # for 5 secs and enter the Technical code.
3. Press key A to enter the installer menu.
4. With ▲ ▼ select SYSTEM and press *.
5. With ▲ ▼ select EDIT SYSTEM and press *.
6. With ▲ ▼ select PLUGS.
7. Use the numerical keys to select the plug for enabling (# = enabled, - disabled).
8. Press # to go back to the previous menu.



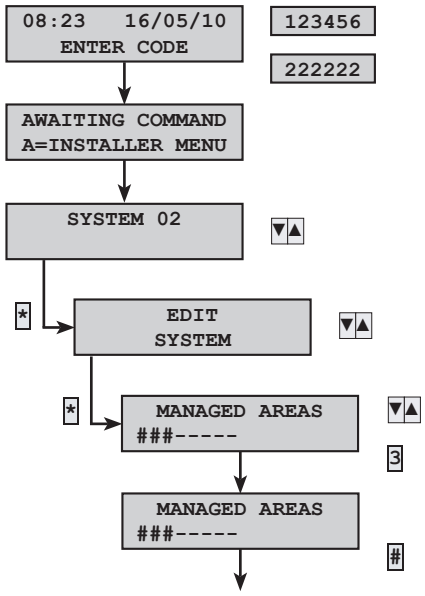
STEP 2: Assigning address to plug

To assign an address to a plug:

1. Staying in the menu SYSTEM.
2. With ▲ ▼ select ADDRESSING PLUGS and press *.
3. The address of the plug not found on the bus, which needs to be addressed, appears on the display.
4. Move a key (even one that hasn't been accepted) up to the plug you want to assign the address shown on the screen to, and wait until the buzzer sounds.
5. On the keypad appears PLUG 02 OK. Press * to continue.
6. If there are other plugs to have addresses assigned repeat the procedure from the beginning.
7. Press # to quit and return to the previous menus.

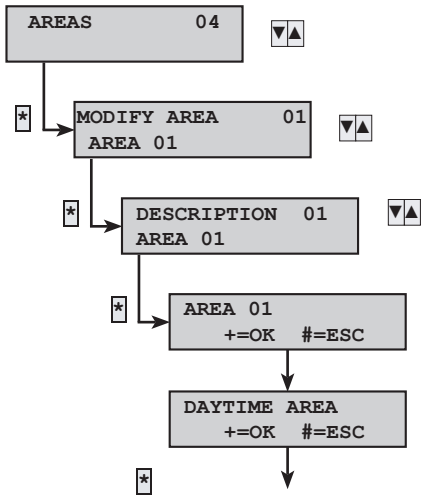
13.5 Definition of system areas

The areas are integral parts of the system and for that reason they must be defined when programming.
Defining the areas is useful for managing the "total switch on" state even using only three areas.



STEP 1: Enabling areas

1. To access the Technical menu hold down key ⮌/ESC # for 5 secs followed by the User code (if less than 6 digits confirm with *).
2. Hold down key ⮌/ESC # for 5 secs and enter the Technical code.
3. Press key A to enter the installer menu.
4. With ▲ ▼ select SYSTEM and press *.
5. With ▲ ▼ select EDIT SYSTEM and press *.
6. With ▲ ▼ select MANAGED AREAS .
7. Press the number key relating to the expansion address to be enabled by adding # (# = enabled, - disabled).
8. Press # to exit and go back to the previous menus.



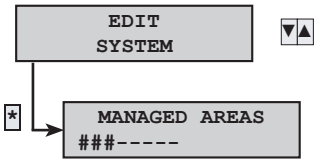
STEP 2: Edit area description

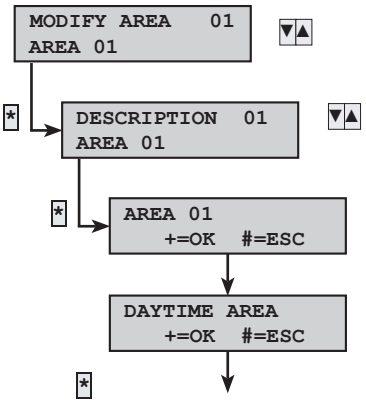
1. Staying in the Technical Menu.
2. With ▲ ▼ select AREAS and press *.
3. With ▲ ▼ select the area EDIT AREA 01 and press *.
4. With ▲ ▼ select DESCRIPTION.
5. With keys ▲ ▼ you can edit the text.
6. With keys + - you can move from character to character.
7. Press * to confirm and go back to the previous menus. Press # to cancel the edit.

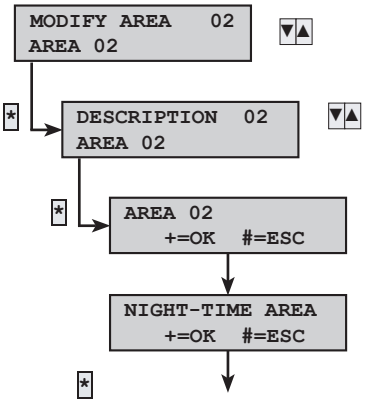
Example:
If you want to set up a system with two areas:

- Area 1 = DAYTIME AREA
- Area 2 = NIGHT-TIME AREA

You need:







13.6 Programming Scenarios

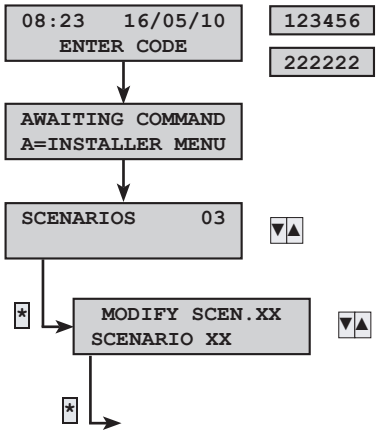
Scenarios are collections of actions set by the installer which let Users, via the control unit, keypad, plug or telephone:

- switch on/off areas
- activate / deactivate outputs

There are factory-set preconfigured scenarios.

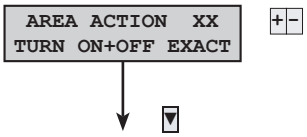
CREATING SCENARIOS

The same scenario does not have to be created for every keypad or every plug. It is enough to create a single scenario and then associate it to the different control devices.



STEP 1: Selecting scenario

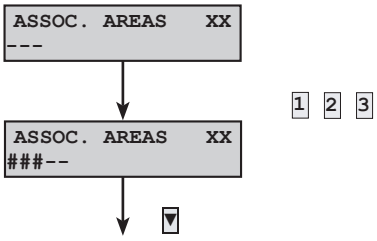
1. To access the Technical menu hold down key ⮌/ESC # for 5 secs followed by the User code (if less than 6 digits confirm with *).
2. Hold down key ⮌/ESC # for 5 secs and enter the Technical code.
3. Press key A to enter the installer menu.
4. With ▲ ▼ select SCENARIOS and press *.
5. With ▲ ▼ select the scenario to create/modify MODIFY SCEN.XX (XX means the scenario index) and press *.



STEP 2: Area action (not available in EASY mode)

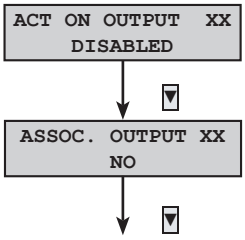
Defines the action to be carried out on areas (switching on / switching off).

1. Staying in the Scenario Menu.
2. With ▲ ▼ select AREA ACTION.
3. With + - set the parameter on TURN ON+OFF EXACT. We will use the classic scenario; it lets you set the switching on status of the control unit "exactly" as described by ASSOCIATED AREAS. The areas selected will switch on and those deselected will switch off.



STEP 3: Associated areas

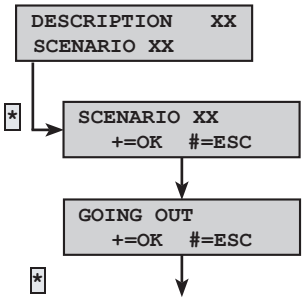
1. With ▲ ▼ select ASSOCIATED AREAS.
2. Press the number key relating to the address of the area you wish to set, then adding # (# = enabled, - disabled).



STEP 4: Act on outputs (not available in EASY mode)

It defines the action to be done on an output (on / off) when the scenario is started up.

1. Staying in the Scenario Menu.
2. With ▲ ▼ select ACT ON OUTPUT.
3. With + - set the parameter on DISABLED. Normally the scenarios concern only the areas, if you need to activate an output do the following:
   a. Set ACT ON OUTPUT to ON.
   b. With ▲ ▼ select ASSOCIATED OUTPUT.
   c. With + - set the output you want to activate.



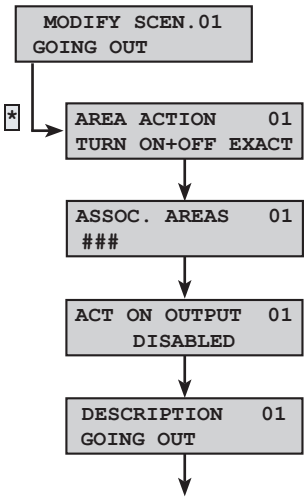
STEP 5: Scenario description

1. Staying in the Scenario Menu.
2. With ▲ ▼ select DESCRIPTION and press *.
3. With keys ▲ ▼ you can edit the text.
4. With keys + - you can move from character to character.
5. Press * to confirm and go back to the previous menus. Press # to cancel the edit.

To create the scenario GOING OUT which then arms all of the areas:

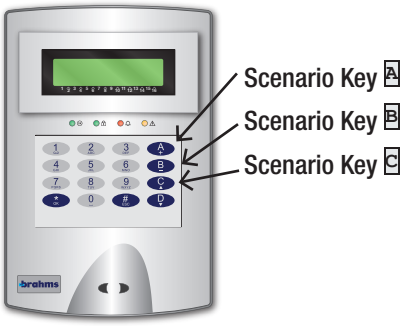
- Area 1 = DAYTIME AREA
- Area 2 = NIGHT-TIME AREA
- Area 3 = PERIMETER

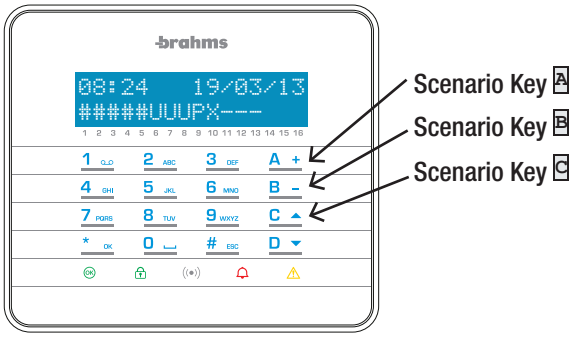
You need:



ASSOCIATING SCENARIOS BY KEYPAD

Each keypad can handle up to a maximum of 6 scenarios by using the A, B, C keys (see user manual). To scroll through the scenarios from 4 to 16 use keys C and D.

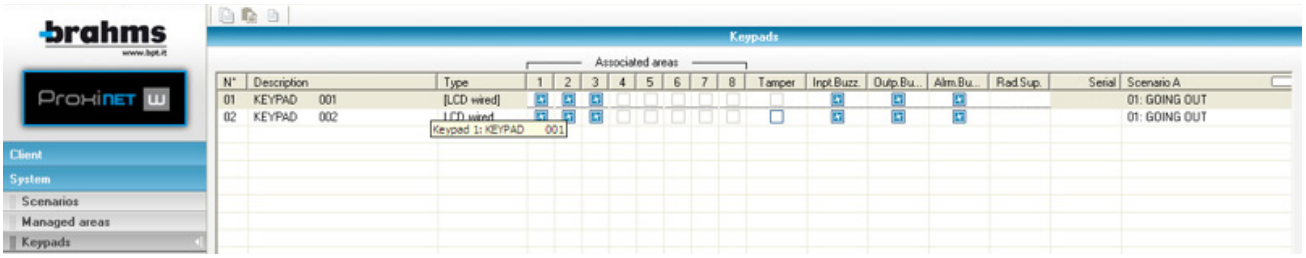




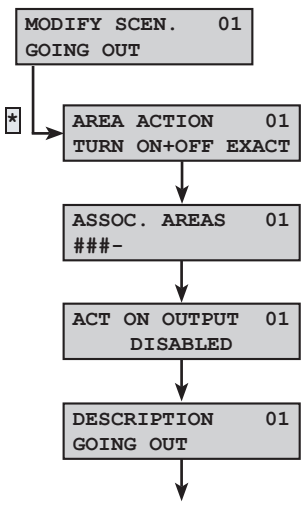
Example:
If you wish to set the following scenarios on keypad 1:

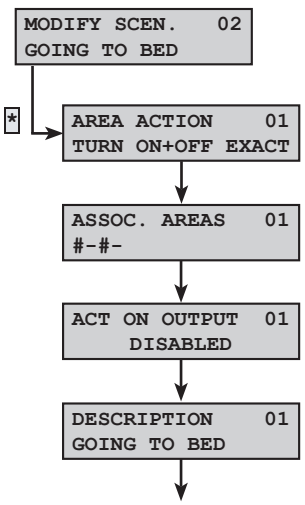
- Key A = Scenario `GOING OUT` (Area 1, Area 2 and Area 3)
- Key B = Scenario `GOING TO BED` (Area 1 and Area 3)
- Key C = No scenario

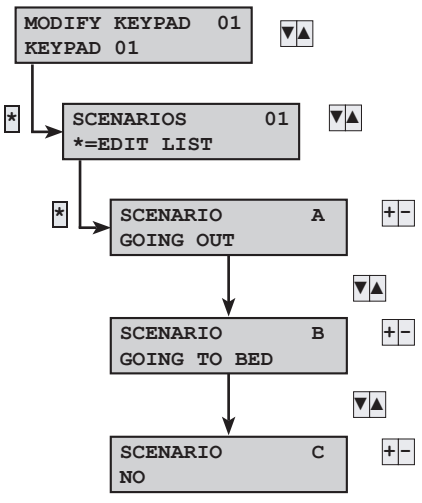
You need to initially set the two scenarios `GOING OUT` and `GOING TO BED`; then you need to associate the two scenarios to the keypad:



Associating a scenario to a keypad (not available in EASY mode)
This enables a scenario to be associated to the keypad (maximum 16 scenarios).

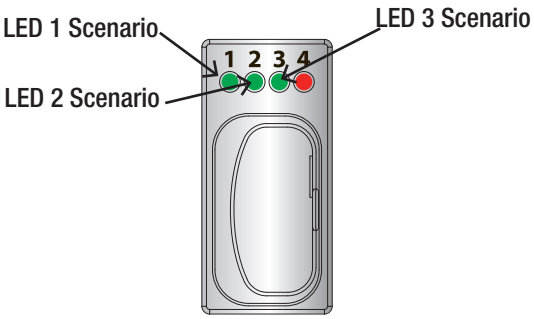


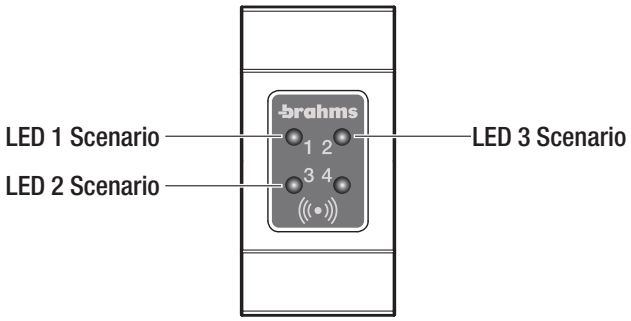


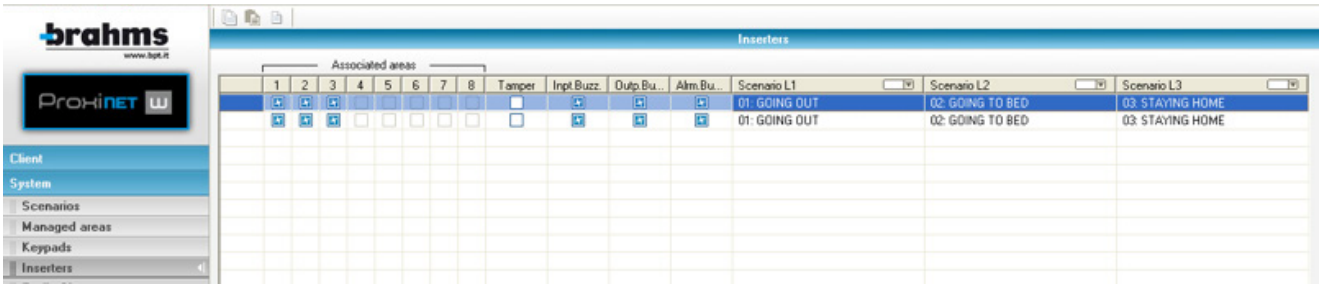


ASSOCIATING SCENARIOS AND PLUGS

Each plug can handle up to a maximum of 3 scenarios - it selects, while switching on, one of the three LEDs (see user manual).





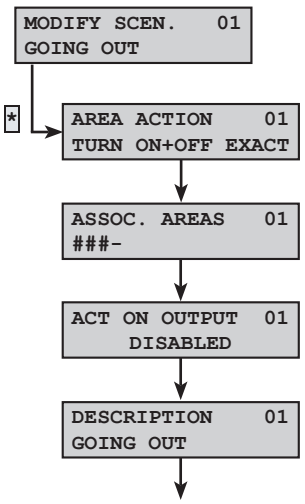


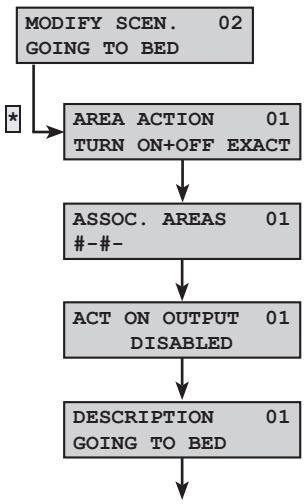
Associating a scenario to a plug (not available in EASY mode)
This enables a scenario to be associated to a plug (maximum 3 scenarios).

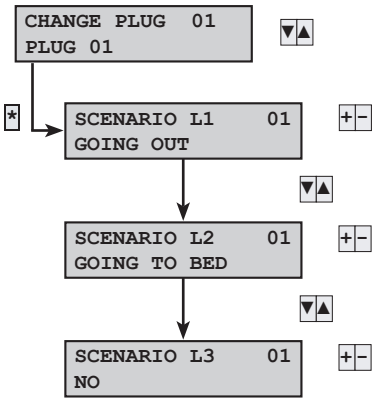
Example:
If you wish to set the following scenarios on plug 1:

- LED 1 = Scenario **GOING OUT** (Area 1, Area 2 and Area 3)
- LED 2 = Scenario **GOING TO BED** (Area 1 and Area 2)
- LED 3 = Scenario **STAYING HOME** (Area 3)

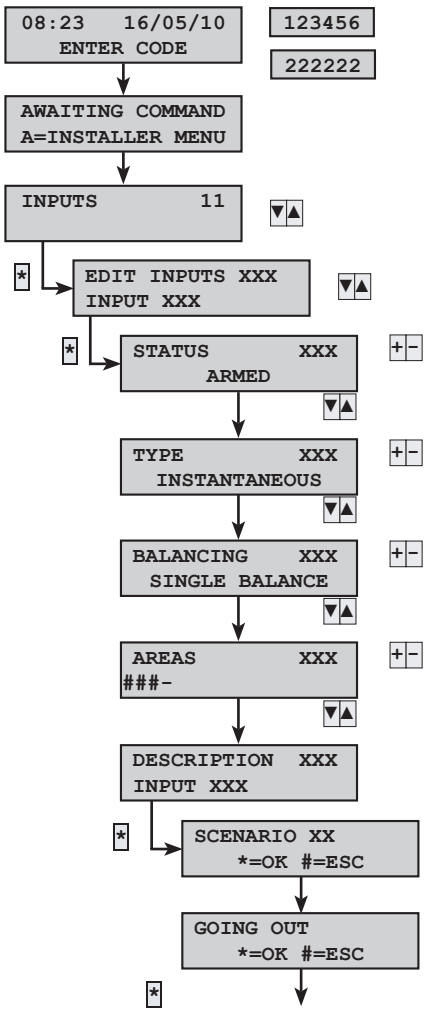
You have to first set the two scenarios **GOING OUT** and **GOING TO BED**; then you have to associate the two scenarios to the plug:







13.7 Programming Inputs



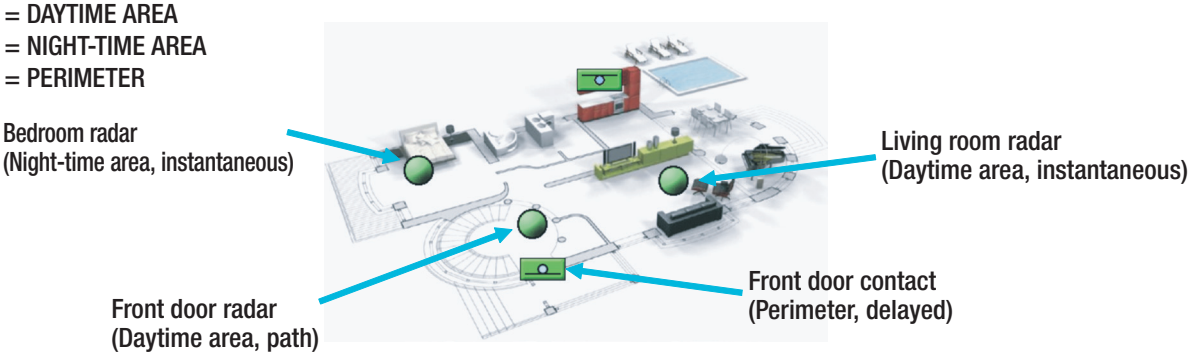
Basic parameters of an input

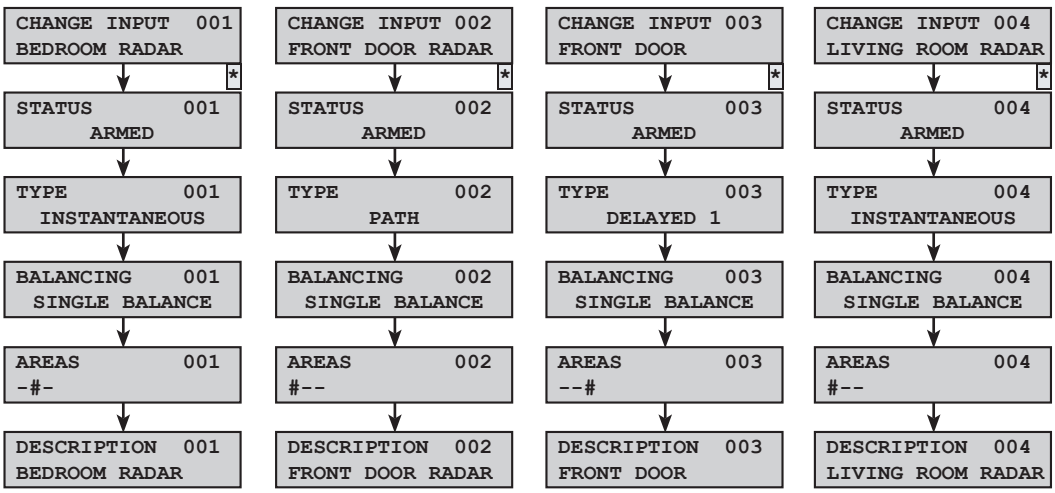
1. To access the Technical menu hold down key ⮌/ESC # for 5 secs followed by the User code (if less than 6 digits confirm with *).
2. Hold down key ⮌/ESC # for 5 secs and enter the Technical code.
3. Press key A to enter the installer menu.
4. With ▲ ▼ select INPUTS and press *.
5. With ▲ ▼ select the input to set and press *.
6. With ▲ ▼ select STATUS to set with + - the use of the input ARMED (or: excluded in text,...).
7. With ▲ ▼ select TYPE to set with + - the type of input INSTANTANEOUS (or: delayed, …)
8. With ▲ ▼ select BALANCING to set with + - the type of balancing SINGLE BALANCE (or: NA, NC, …). Valid ONLY for the first 6 inputs (in a row).
9. With ▲ ▼ select AREAS to set the areas associated to the input (use number keys to select the areas; # = enabled, - disabled).
10. With ▲ ▼ select DESCRIPTION and press *.
11. With keys ▲ ▼ you can edit the text.
12. With keys + - you can move from character to character.
13. Press * to confirm and go back to the previous menus. Press # to cancel the change.
14. Press # to exit and go back to the previous menus.

Example:

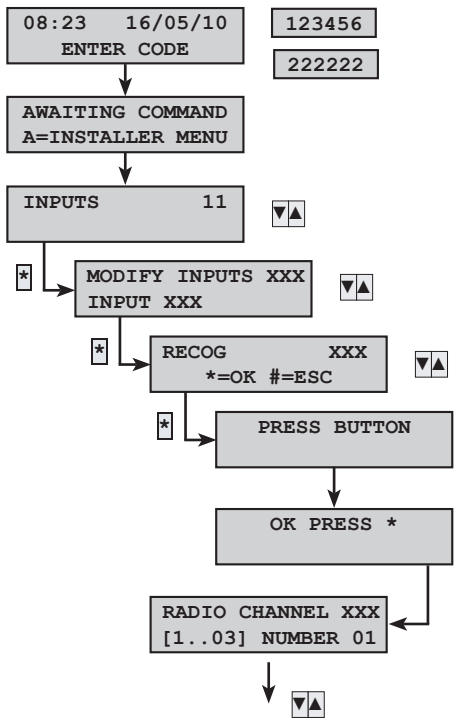
Let's imagine we have the following system with 4 inputs. In particular we want to have the front door of the house delayed and the front door radar instantaneous and delayed only when the front door is opened.

Area 1 = DAYTIME AREA
Area 2 = NIGHT-TIME AREA
Area 3 = PERIMETER





13.8 Radio inputs recognition via Installer Menu



STEP 1: Accepting new radio input

1. Enter the user code (if less than 6 digits confirm with *).
2. Enter the technical code.
3. Press key A to enter the installer menu.
4. With ▲ ▼ select INPUTS and press *.
5. With ▲ ▼ select the radio input to access and press *.
6. With ▲ ▼ select RECOG. and press *.
7. With the device to be recognised powered by the battery press the recognition button (see device manual).
8. The control unit stores the new radio device (if one had been accepted previously, the new one overwrites the old one).
9. If it is a radio device with several channels, you have to set the radio channel to associate to the input (for example, the radio contact has 3 channels: input 1, input 2 and magnetic contact). See the available channels in the device manual.

Example:
Installing a magnetic radio contact onto a window.
In sequence:

- Install a radio receiver module.
- Install the radio device (the intensity of the field is only seen if it has been autorecognised).
- Access: technical menu -> INPUTS.
- Select which radio input to accept (the order is first the wire inputs and then the radio inputs).
- Select the title RECOG. and, by pressing the recognition button, complete the acceptance. If the receiver had already been accepted, pressing the key activates verification of the intensity of the field (on the receiver's LED).
- If you wish to assign the magnetic contact's radio channel to the radio input, select 3 on RADIO CHANNEL.
- Proceed to set the subsequent general parameters of the input.

13.9 Programming Outputs

The four control unit factory-set outputs are already programmed as follows:

INDEX	OUTPUT DESCRIPTION	INDEX	OUTPUT DESCRIPTION
U1	**TC output** to disinhibit the detectors' microwave when system is off (associated to the NIGHT-TIME area). From a positive with NIGHT-TIME area switched off.	U3	**Out of order**, yields a negative when something is out of order.
U2	**System status**, yields a negative if at least one area is on.	U4	**Technical**, yields a negative when there is at least one technical alarm.
RELAY	**Relay 1** is activated during the alarm time.		

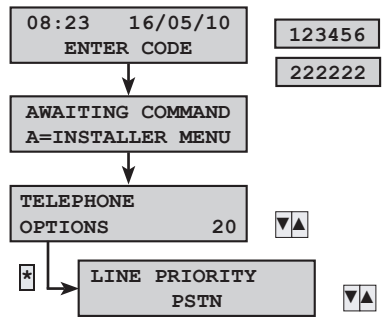
If you need to change settings see output parameters in the technical menu.

13.10 Programming Telephone calls and SMS text messages (PSTN/GSM)

To set up the telephone calls, you need to:

- Programme call priority.
- Programme the numbers to call.
- Set the common message and then the one for areas and inputs.

PROGRAMMING THE PSTN - GSM PRIORITY



To set whether, in the event of voice calls, PSTN or GSM is chosen, do the following:

1. To access the Technical menu hold down key ⮌/ESC # for 5 secs followed by the User code (if less than 6 digits confirm with *).
2. Hold down key ⮌/ESC # for 5 secs and enter the Technical code.
3. Press key A to enter the installer menu.
4. With ▲ ▼ select TELEPHONE OPTIONS and press *.
5. With ▲ ▼ select LINE PRIORITY.
6. With ▲ ▼ select GSM or PSTN to show the priority chosen.
7. Press # to exit and go back to the previous menus.

PROGRAMMING THE TELEPHONE NUMBERS

The following is the factory-setting for telephone numbers; simply programme the telephone number to activate outgoing voice calls, SMSs or calls to security.

Below, the main factory settings (may be modified).

TELEPHONE NUMBER	TYPE	REPETITIONS	ALARM	SABOTAGE	TECHNICAL	BURGLARY	SWITCHING ON SWITCHING OFF	OUT OF ORDER	CODE ENTERING	KEY ENTERING	VARIOUS	COMMON MESSAGE
1..7	VOICE	2	x	x	x	x						1
8	SMS	1						x			x	1

TYPE: means whether the associated number will be reached by VOICE call, SMS text or it is the security firm.

REPETITIONS: means the number of VOICE call attempts (press 5 on phone to interrupt or 0 to access the voice guide).

ALARM: security alarm events.

SABOTAGE: sabotage attempts (tampering, break-ins, ...).

TECHNICAL: technical alarm events.

BURGLARY: burglary alarm events.

ON /OFF: system switching on/off events.

OUT OF ORDER: malfunction events.

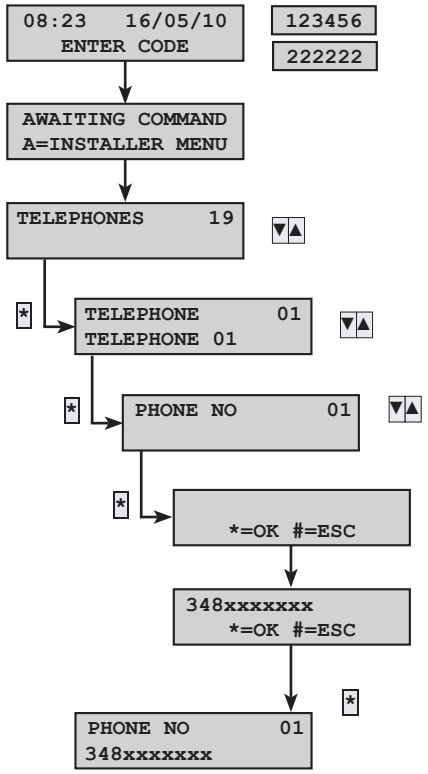
CODES: code entering events.

KEY: key entering events.

VARIOUS: generic events (see Technical Menu).

COMMON MESSAGE: each voice phone call can be associated to one of the common messages available (for example: Rossi family via Nazionale 21 Milan).

To change the telephone number see the Technical Menu.



To programme telephone numbers:

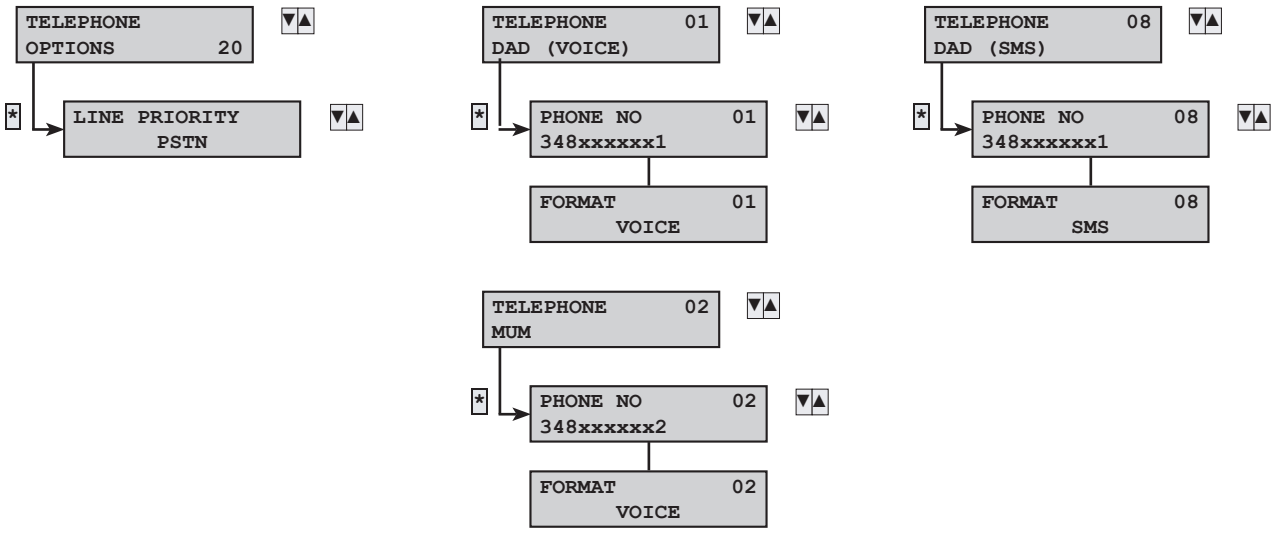
1. To access the Technical menu hold down key ⮌/ESC # for 5 secs followed by the User code (if less than 6 digits confirm with *).
2. Hold down key ⮌/ESC # for 5 secs and enter the Technical code.
3. Press key A to enter the installer menu.
4. With ▲ ▼ select TELEPHONES and press *.
5. With ▲ ▼ select the phone to set and press *.
6. With ▲ ▼ select PHONE NO and press *.
7. Using the ▲ ▼ + − keys you can change the telephone number (# to delete it in reverse).
8. Press * to confirm and go back to the previous menus.
9. Press # to exit and go back to the previous menus.

Example:

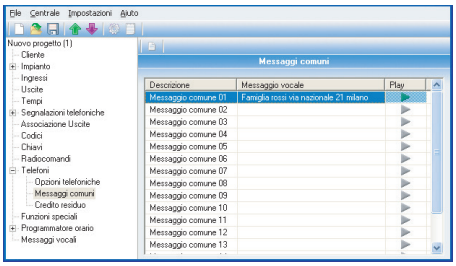
With the GSM interface and the PSTN line you want to set the telephone calls in the following way with PSTN priority (with PXTEL board installed):

- Dad 348xxxxxx1: send a VOICE call for alarm, sabotage events; send an SMS for breakdowns
- Mum 348xxxxxx2: send a VOICE call for alarm, sabotage events.
- Security 049xxxxxxx3 Security firm

If the factory settings are sufficient all you need to do is set:



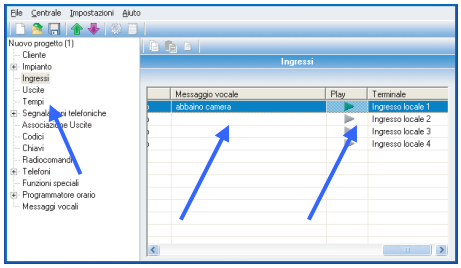
RECORD COMMON VOICE MESSAGE FROM PC



To create a common message from the PC you have to:

1. Select "Common messages".
2. Write the text of the common message. If the playing time of the written text is longer than the limit allowed, an error message is shown and the text is coloured red.
3. Play the text to check how it sounds; some words may not convert correctly and may have to be adjusted with accented vowels (for example, if the play out of the word "resumé" is wrong, it should be rewritten as "resume" without the accent.

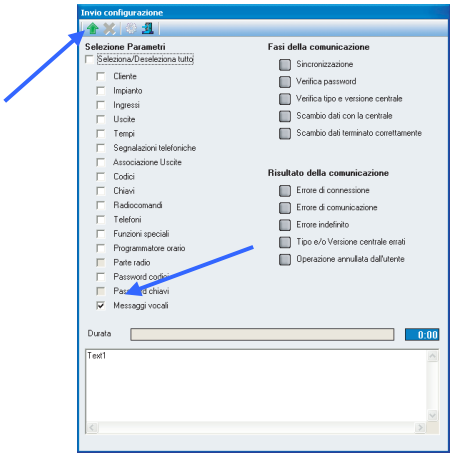
RECORD VOICE MESSAGES ASSOCIATED WITH INPUTS, AREAS, OUTPUTS AND SCENARIOS FROM PC



To create a voice message associated with an input (similar process for areas, outputs and scenarios) from a PC you have to:

1. Select "Inputs".
2. Write the text of the common message. If the playing time of the written text is longer than the limit allowed, an error message is shown and the text is coloured red.
3. Play the text to check how it sounds; some words may not convert correctly and may have to be adjusted with accented vowels (for example, if the play out of the word "resumé" is wrong, it should be rewritten as "resume" without the accent.

SEND VOICE MESSAGES



To send modified voice messages to the control unit:

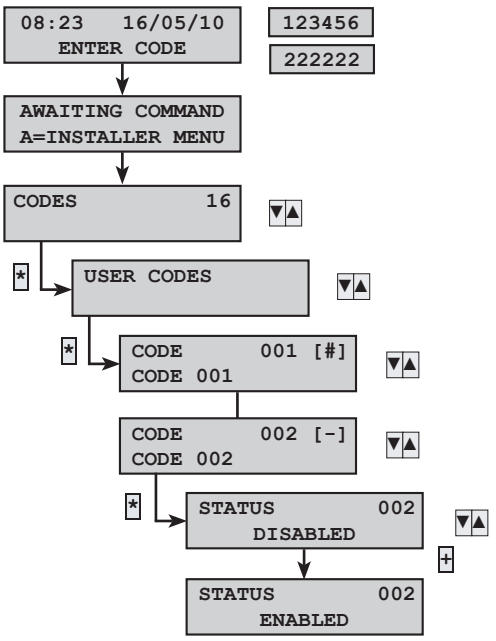
1. The control unit must be completely off.
2. Open the programming window to the control unit.
3. Tick the heading "Voice Messages".
4. Launch programming.
5. If the PROGRAM parameter FROM THE PC is:
   - WITH CONTROL UNIT OFF, launch programming.
   - AFTER USER CODE, before starting programming you need to enter the user code.

13.11 Creating User Codes

The factory set **User Code 001** is enabled and the **password** is **123456**.

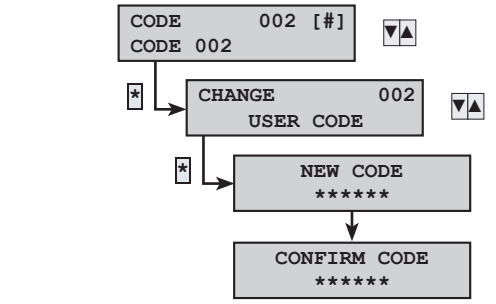
Below, the main factory settings (may be modified).

CODES	STATUS	ASSOCIATED AREAS	AUTHORISATION	REMOTE CONTROL	ACCESS TO USER MENU
1	ENABLED	ALL	SWITCHING ON + SWITCHING OFF	ENABLED	ENABLED
≥ 2	DISABLED	ALL	SWITCHING ON + SWITCHING OFF	ENABLED	ENABLED



STEP 1: Enable the new code

1. To access the Technical menu hold down key ⮌/ESC # for 5 secs followed by the User code (if less than 6 digits confirm with *).
2. Hold down key ⮌/ESC # for 5 secs and enter the Technical code.
3. Press key A to enter the installer menu.
4. With ▲ ▼ select CODES and press *.
5. With ▲ ▼ select USER CODES and press *.
6. With ▲ ▼ select the USER CODE to be set and press *; [#] =enabled, [-] =disabled.
7. With ▲ ▼ select STATUS.
8. With + it is enabled and with − it is disabled.



STEP 2: Set password

1. Staying in the Code menu.
2. With ▲ ▼ select CHANGE USER CODE and press *.
3. Enter the NEW CODE using keys ▲ ▼ + − (the code must be at least 4 digits) and press * to confirm.
4. If the code already exists a CODE UNACCEPTED message is shown.
5. Repeat the password for CONFIRM CODE using keys ▲ ▼ + − (the code must be at least 4 digits) and press * to confirm.

Example:
Below there is an example of programming depending on the type of User.

Application example	ASSOCIATED AREAS	AUTHORISATION	REMOTE CONTROL	ACCESS TO USER MENU
Owners	ALL	SWITCHING ON + SWITCHING OFF	ENABLED	ENABLED
Employees	ALL	SWITCHING ON + SWITCHING OFF	NO	ENABLED
Cleaning firm	ALL	SWITCHING ON ONLY	NO	NO
Access control	NO	SWITCHING ON ONLY	NO	NO

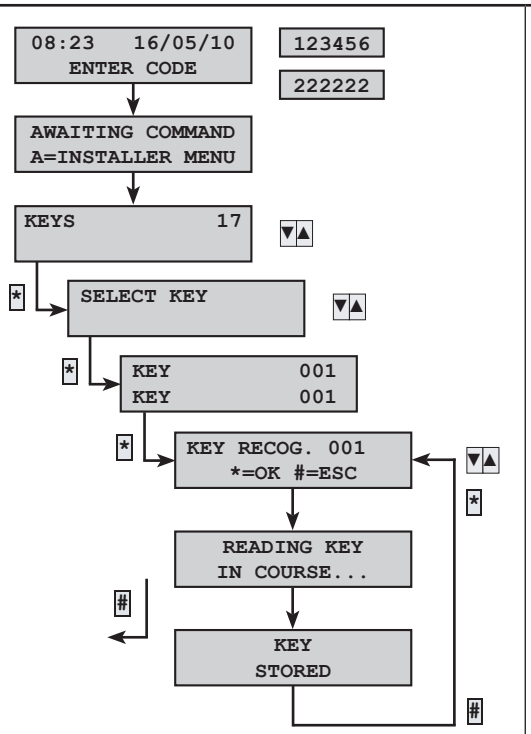
Passwords with all the digits the same are not accepted. For example 111111, 333333,....

13.12 Acquiring Keys

Because the keys are unique, ex-factory there are no activated keys in the control unit.

Below, the main factory settings (may be modified).

KEYS	STATUS	ASSOCIATED AREAS	AUTHORISATION
1 ... *n*	DISABLED	ALL	SWITCHING ON + SWITCHING OFF



STEP 1: New key acceptance

1. Hold down key ⮌/ESC # for 5 secs and enter the User code.
2. Press key A to enter the installer menu.
3. With ▲ ▼ select KEYS and press *.
4. With ▲ ▼ select the SELECT KEY and press *.
5. With ▲ ▼ select the key to be recognised and press *.
6. With ▲ ▼ select RECOGNISE KEY and press *.
7. Put the key to be read on plug 1 and wait for the LEDs to start to flash to confirm acceptance has taken place.
8. On the display the words KEY STORED appear with the buzzer sounding. Press # to continue.
9. Press # to exit and go back to the previous menus.

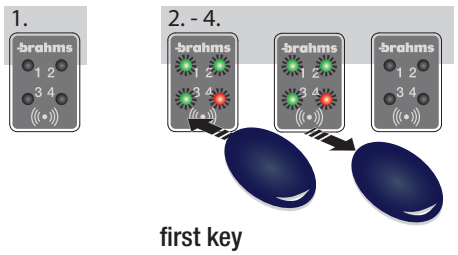
Example:

Below is shown the recognition of two keys:

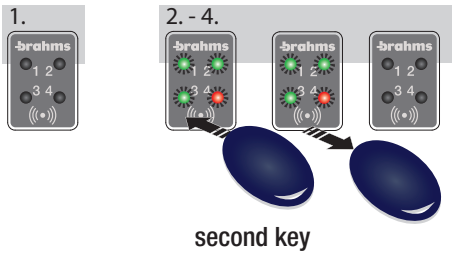
- key 001 with description KEY 001
- key 002 with description KEY 002

Once in the INSTALLER MENU go to KEYS, in KEY RECOGNITION and then select KEY 001.

Go to the plug and start acquiring one at a time beginning from key 001 and waiting for the sound of the buzzer:



first key



second key

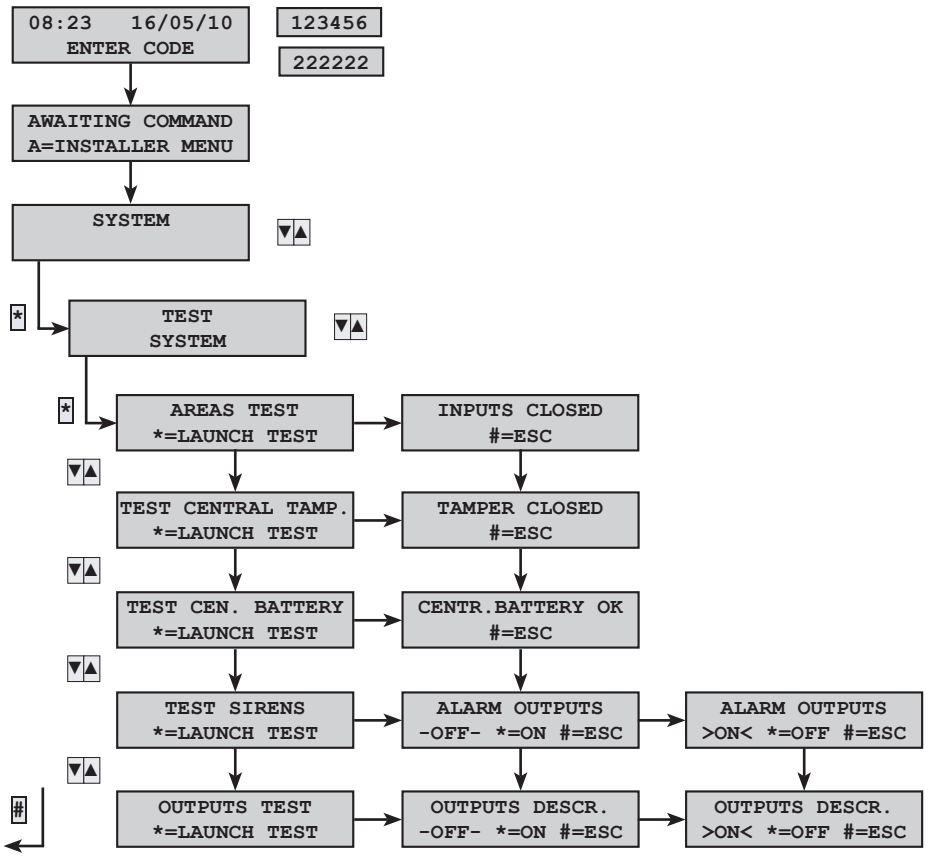
Below there is an example of programming depending on the type of User.

Application example	ASSOCIATED AREAS	AUTHORISATION
Owners/employees	ALL	SWITCHING ON + SWITCHING OFF
Cleaning firm	ALL	SWITCHING ON ONLY
Access control	NO	SWITCHING ON ONLY

13.13 System test

FROM THE CONTROL UNIT KEYPAD

It is important to test the system to prevent false alarms or unwanted malfunctions.



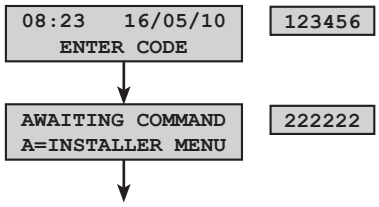
System Test

1. To access the Technical menu hold down key ⮌/ESC # for 5 secs followed by the User code (if less than 6 digits confirm with *).
2. Hold down key ⮌/ESC # for 5 secs and enter the Technical code.
3. Press key A to enter the installer menu.
4. With ▲ ▼ select SYSTEM and press *.
5. With ▲ ▼ select TEST SYSTEM and press *.
6. With ▲ ▼ select the parts of the system that you want to check and press *.
7. Press # to exit and go back to the previous menus.

14 PC – Control unit connection

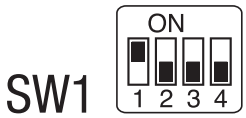
Once finished with the part relating to defining system components (previous chapters) you can move on to programming the control unit from either a keypad or the PC via direct or remote connection.

14.1 Locally programming RS-232



STEP 1: Opening control unit

1. To access the Technical menu hold down key ⮌/ESC # for 5 secs followed by the User code (if less than 6 digits confirm with *).
2. Hold down key ⮌/ESC # for 5 secs and enter the Technical code.
3. Press key A to enter the installer menu.
4. Open the control unit by undoing the relevant screws.



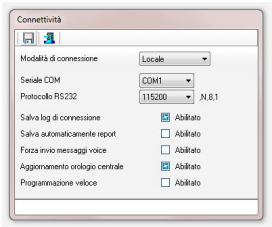
STEP 2: Putting the control unit in maintenance

To prevent alarms being raised at the end of programming because of the control unit tamper or possible programming errors, we suggest putting the control unit into maintenance mode.

1. Put the control unit into maintenance mode  by lifting microswitch 1.

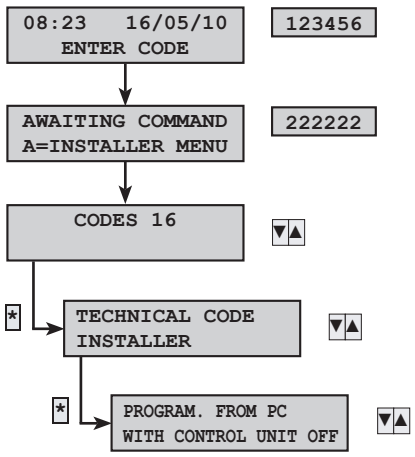
STEP 3: Connecting PC to control unit

1. Install the control unit programming software on your own PC.
2. Connect the control unit to the PC via a standard RS-232 cable (male-female direct) or via a USB-RS232 cable.



STEP 4: Settings on PC (to be done only once)

1. Set the mode of connection to the control unit on the PC (LOCAL).
2. Set the serial communication COM.



STEP 5: Settings on Control Unit (to be done only once)

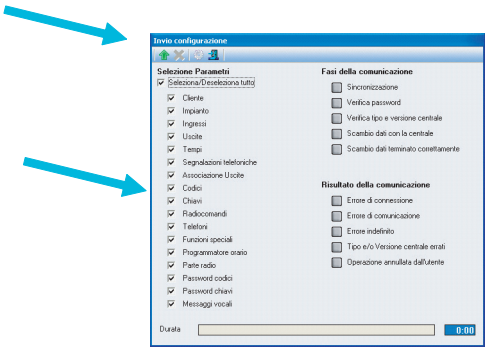
There are two ways to programme the control unit:

- With control unit shut down.
- With control unit shut down after entering user code.

To set one of the two modes you need to:

1. To access the Technical menu hold down key ⮌/ESC # for 5 secs followed by the User code (if less than 6 digits confirm with *).
2. Hold down key ⮌/ESC # for 5 secs and enter the Technical code.
3. Press key A to enter the installer menu.
4. With ▲ ▼ select `CODES` and press *.
5. With ▲ ▼ select `TECHNICAL CODE INSTALLER` and press *.
6. With ▲ ▼ select `PROGRAM. FROM PC`.
7. With + and − edit the parameter:
   - `WITH CONTROL UNIT OFF`, direct programming without entering user code with control unit off.
   - `AFTER USER CODE`, programming only after entering user code with control unit off.
8. Press # to exit and go back to the previous menus.

ENGLISH

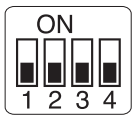


STEP 6: Start up programming

1. The control unit must be completely off.
2. If the parameter `PROGRAM. FROM PC` is:
   - `WITH CONTROL UNIT OFF`, start up programming.
   - `AFTER USER CODE`, before starting up programming enter the user code.
3. Open the programming window, select the parameters to start up and press start writing.

Warning: the control unit is Autobauding and could require several seconds to synchronise.

SW1



STEP 7: Making operational and shutting down the control unit

Once the maintenance is completed, restore the system to operational mode.

1. Go into the technical menu.
2. Put the control unit into operational mode by putting microswitch 1 down.
3. Shut down the control unit.
4. Exit the technical menu.

15 Restore system

⚠ Restoring parameters is irreversible and cancels the entire programming.

⚠ Restoring parameters does not erase events from memory.

☞ To restore the control unit completely you need to do both factory settings as well as restore the codes.

15.1 Restoring codes and keys

Factory settings for codes and keys are:

CODES	STATUS	PASSWORD	ASSOCIATED AREAS	AUTHORISATION	REMOTE CONTROL	ACCESS TO USER MENU
1	ENABLED	123456	ALL	SWITCHING ON + SWITCHING OFF	ENABLED	ENABLED
2 ... *n*	DISABLED	Undefined	ALL	SWITCHING ON + SWITCHING OFF	ENABLED	ENABLED

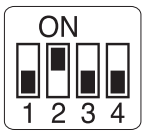
☞ All the codes are restored; code 1 is set at: 123456

KEYS	STATUS	ASSOCIATED AREAS	AUTHORISATION
1 ... *n*	DISABLED	ALL	SWITCHING ON + SWITCHING OFF

☞ All the keys are restored.

To restore factory settings for codes, you have to:

SW1



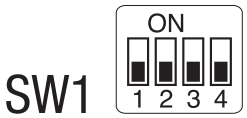
STEP 1: Setting microswitches

1. Put microswitch 2 in the ON position.

INITIALISATION

STEP 2: Restart the control unit

1. Press button P1 to make the control unit restart.
2. The words INITIALISATION appear on the keypad (this stays on display for 10").

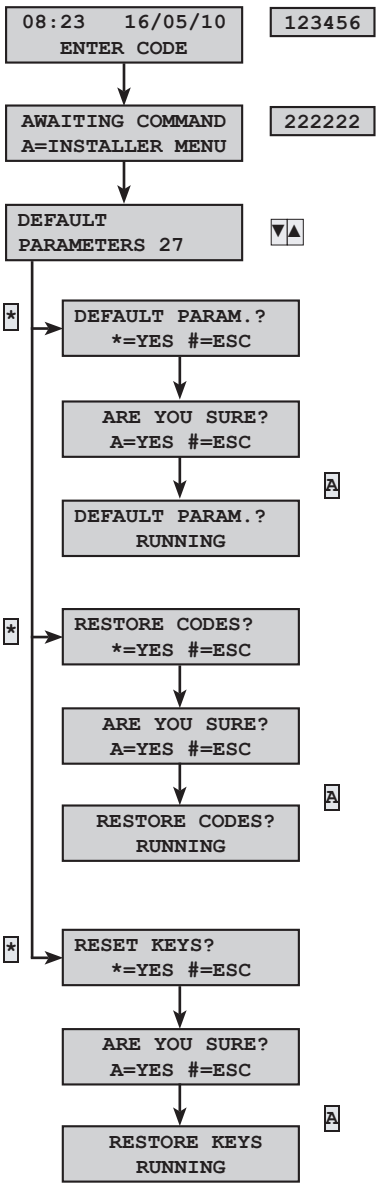


INITIALISATION
RUNNING

STEP 3: Reset microswitch

1. Put microswitch 2 in the OFF position.
2. The words INITIALISATION RUNNING appear on the keypad.
3. At the end of initialisation the keypad returns to displaying the system status.

15.2 Factory parameters



The default parameters do no delete the acquired codes and keys. To do that you have to go into the dedicated headings.

To set all the devices to the default parameters do as follow:

1. To access the Technical menu hold down key ⮌/ESC # for 5 secs followed by the User code (if less than 6 digits confirm with *).
2. Hold down key ⮌/ESC # for 5 secs and enter the Technical code.
3. Press key A to enter the installer menu.
4. With ▲ ▼ select DEFAULT PARAMETERS and press *.
5. With A confirm or # to cancel.

16 Declaration

BPT S.p.A. a Socio Unic
Via Cornia, 1/b
33079 Sesto al Reghena
Pordenone - Italy
info@bpt.it - www.bpt.it

Bpt is a company of CAMEGROUP

Declares under its own responsibility that the following products for security alarm units:

PROXINETW

… comply with essential requisites and relative regulations, set by the following Directives and the applicable sections of the Standards listed below.

--- DIRECTIVES---	
2006/95/EC	*Low Voltage Directive*
2004/108/EC	*Electromagnetic Compatibility Directive*
1999/05/EC	*Directive Concerning Radio and Telecommunications Terminal Equipment and the Reciprocal Recognition of their Compliance*
EN 50130-4 + A1 + A2	*Alarm systems.* *Part 4: Electromagnetic compatibility.*
EN 60950-1	*Information technology equipment – Safety.* *Part 1: General requirements.*
EN 61000-6-3	*Electromagnetic Compatibility (EMC).* *Part 6-3: General standards - Emission standard for residential, commercial and light industrial environments.*
ETSI ES 203 021-1	*Terminal Equipment (Te); Attachment Requirements For Pan-European Approval For Connection To The Analogue Public Switched Telephone Networks (Pstns) Of Te (Excluding Te Supporting The Voice Telephony Service) In Which Network Addressing, If Provided, Is By Means Of Dual Tone Multi Frequency (Dtmf) Signalling.*
EN 300 220-3	*Electromagnetic Compatibility And Radio Spectrum Matters (Erm); Short Range Devices (Srd); Radio Equipment To Be Used In The 25 Mhz To 1 000 Mhz Frequency Range With Power Levels Ranging Up To 500 Mw;* *Part 3: Harmonized En Covering Essential Requirements Under Article 3.2 Of The R&Tte Directive.*
EN 301 489-3	*Electromagnetic Compatibility And Radio Spectrum Matters (Erm); Electromagnetic Compatibility (Emc) Standard For Radio Equipment And Services;* *Part 3: Specific Conditions For Short-Range Devices (Srd) Operating On Frequencies Between 9 Khz And 40 Ghz.*
EN 50130-5	*Alarm Systems* *Part 5: Methods for Environmental Tests.*
EN 50131-1	*Intrusion and security alarm systems.* *General Requirements*
EN 50131-6	*Intrusion and burglary alarm systems.* *Part 6: Power supplies.*
	Complies with Product Standard CEI 79-2 Second Level.

