

Outdoor multipurpose control panel

FA02380-EN



806RV-0060

806RV-0070

INSTALLATION MANUAL

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GENERAL PRECAUTIONS FOR USERS

Read the instructions carefully before beginning the installation and carry out the procedures as specified by the manufacturer. • Installation, programming, commissioning and maintenance must only be carried out by qualified, expert technicians and in full compliance with the applicable law. • Before carrying out any cleaning or maintenance, or replacing any parts, disconnect the device from the power supply. • Only use this product for its intended purpose. Any other use is hazardous. • The product, in its original packaging supplied by the manufacturer, must only be transported in a closed environment (railway carriage, containers, closed vehicles). • If the product malfunctions, stop using it and contact customer services at <https://www.came.com/global/en/contact-us> or via the telephone number on the website. • The manufacture date is provided in the production batch printed on the product label. If necessary, contact us at <https://www.came.com/global/en/contact-us>. • The general conditions of sale are given in the official CAME price lists.

DISMANTLING AND DISPOSAL

Control boards, like other components such as transmitter batteries, may contain pollutants. These must be removed and taken to a local collection centre or an authorised waste disposal and recycling firm. It is always advisable to check the specific laws that apply in your area. DISPOSE OF THE PRODUCT RESPONSIBLY.

THE DATA AND INFORMATION IN THIS MANUAL MAY BE CHANGED AT ANY TIME AND WITHOUT NOTICE.

MEASUREMENTS ARE IN MILLIMETRES, UNLESS STATED OTHERWISE.

PRODUCT DATA AND INFORMATION

Key

- This symbol shows which parts to read carefully.
- This symbol shows which parts describe safety issues.
- This symbol shows what to tell users.
- The measurements, unless otherwise stated, are in millimetres.

Description

- 806RV-0060**
Outdoor multipurpose control panel IP54, 24 V AC-DC for managing CXN BUS transmitters and accessories up to 5000 different users, with a 7-segment programming display, 4 relay outputs, 4 inputs and a Quick&Easy advanced function for managing occasional users.
- 806RV-0070**
Outdoor multipurpose control panel IP54, 120-230 V AC for managing CXN BUS transmitters and accessories up to 5000 different users, with a 7-segment programming display, 4 relay outputs, 4 inputs and a Quick&Easy advanced function for managing occasional users.

Technical data

MODELS	RBE PLUS 24	RBE PLUS 230
Power supply (V - 50/60 Hz)	24 - AC/DC	120 - 230 - AC
Power (W)	15	13.5
Number of input contacts	4	4
Number of output contacts	4	4
Relay contact rating with resistive load (A)	5	5
Relay contact rating with inductive load (A)	1.5	1.5
Incoming contact maximum voltage (V)	24	24
List of paired operators	4	4
CXN BUS	RCXN	RCXN
Relay contact maximum voltage (V)	230	230
Operating temperature (°C)	-20° ÷ +55°C	-20° ÷ +55°C
Storage temperature (°C)*	-25° ÷ +70°C	-25° ÷ +70°C
Protection rating (IP)	54	54
Insulation class	3	2
Type of installation	Outdoor / DIN rail	Outdoor / DIN rail
Average life (cycles)**	200000	200000

(*) Before installing the product, keep it at room temperature where it has previously been stored or transported at a very high or very low temperature.

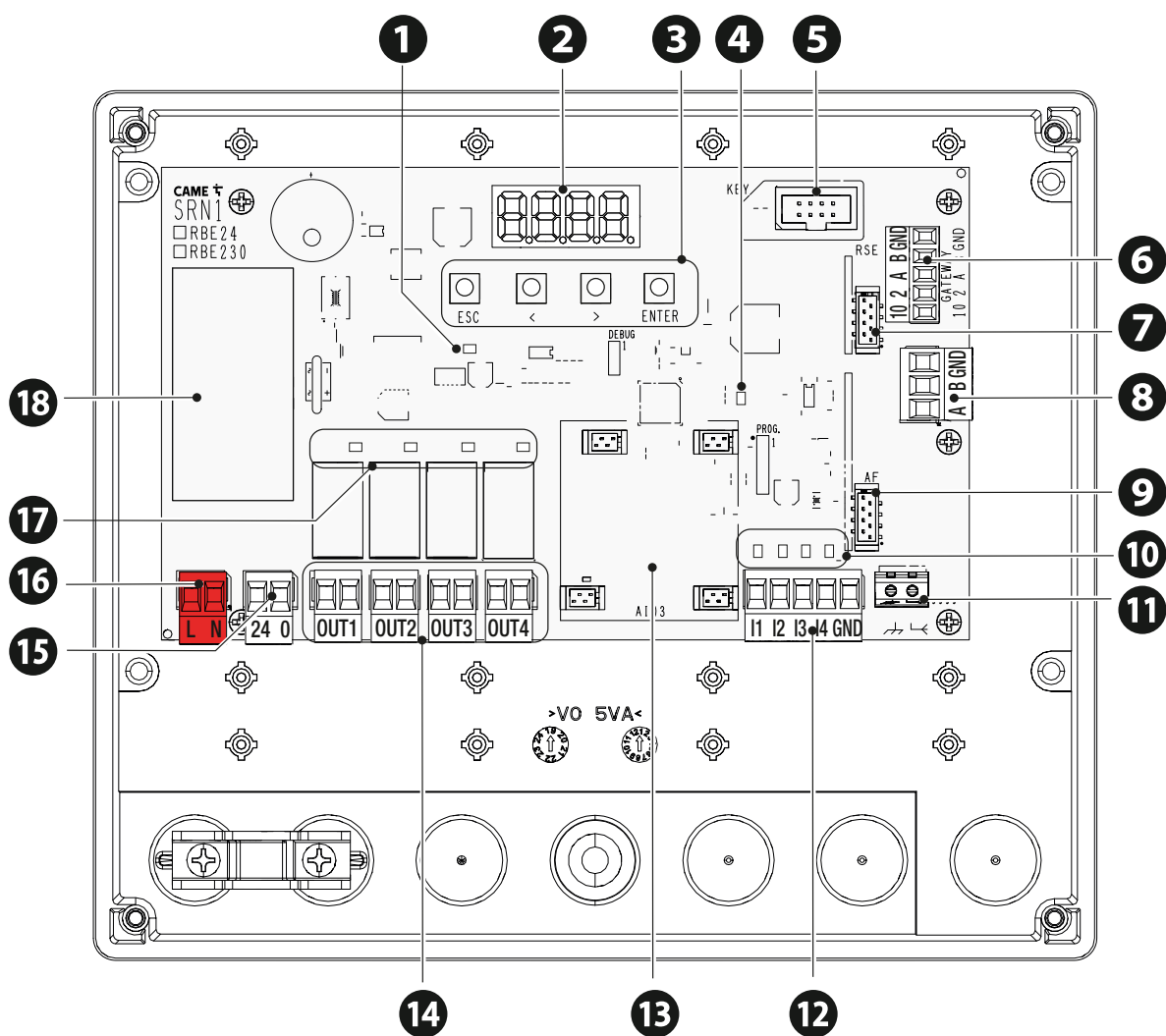
(**) The average product life is a purely indicative estimate. It applies to compliant usage, installation and maintenance conditions. It is also influenced by other factors, such as climatic and environmental conditions (where present, see the MCBF table).

Description of parts

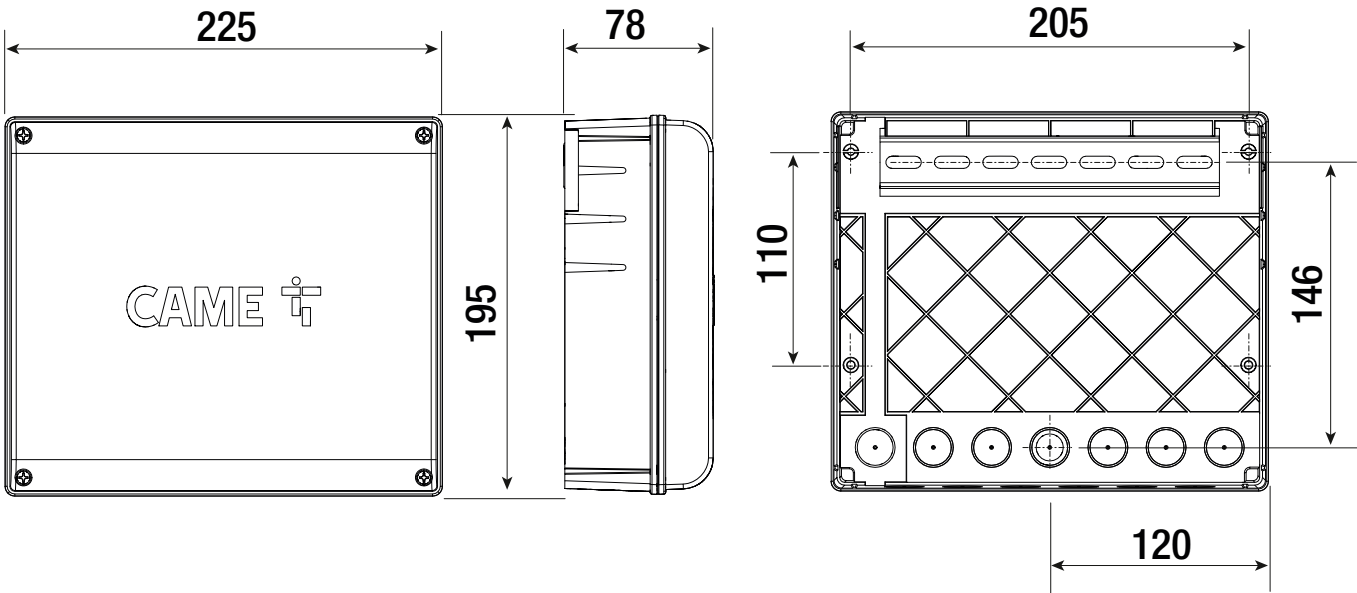
- | | |
|--|--|
| <ul style="list-style-type: none"> ❶ Power LED ❷ Display ❸ Programming buttons ❹ Operating status signalling LED ❺ Connector for CAME KEY, slave module and Wi-Fi Gateway ❻ Terminal board for connecting the slave module (RSLV) and 4G Gateway ❼ RSE card connector ❽ Terminal board for connecting operators ❾ Connector for plug-in radio frequency card (AF) | <ul style="list-style-type: none"> ❿ Input status signalling LEDs ⓫ Terminal board for connecting the antenna ⓬ Input terminals ⓬ Housing for RCXN module ⓬ Terminal board for output contacts ⓬ Terminal board for 24 V power supply * ⓬ Terminal board for 230 V power supply ** ⓬ Output status signalling LEDs ⓬ Auxiliary ** |
|--|--|

* RBE 24 model

** RBE 230 model



Size



Cable types and minimum thicknesses

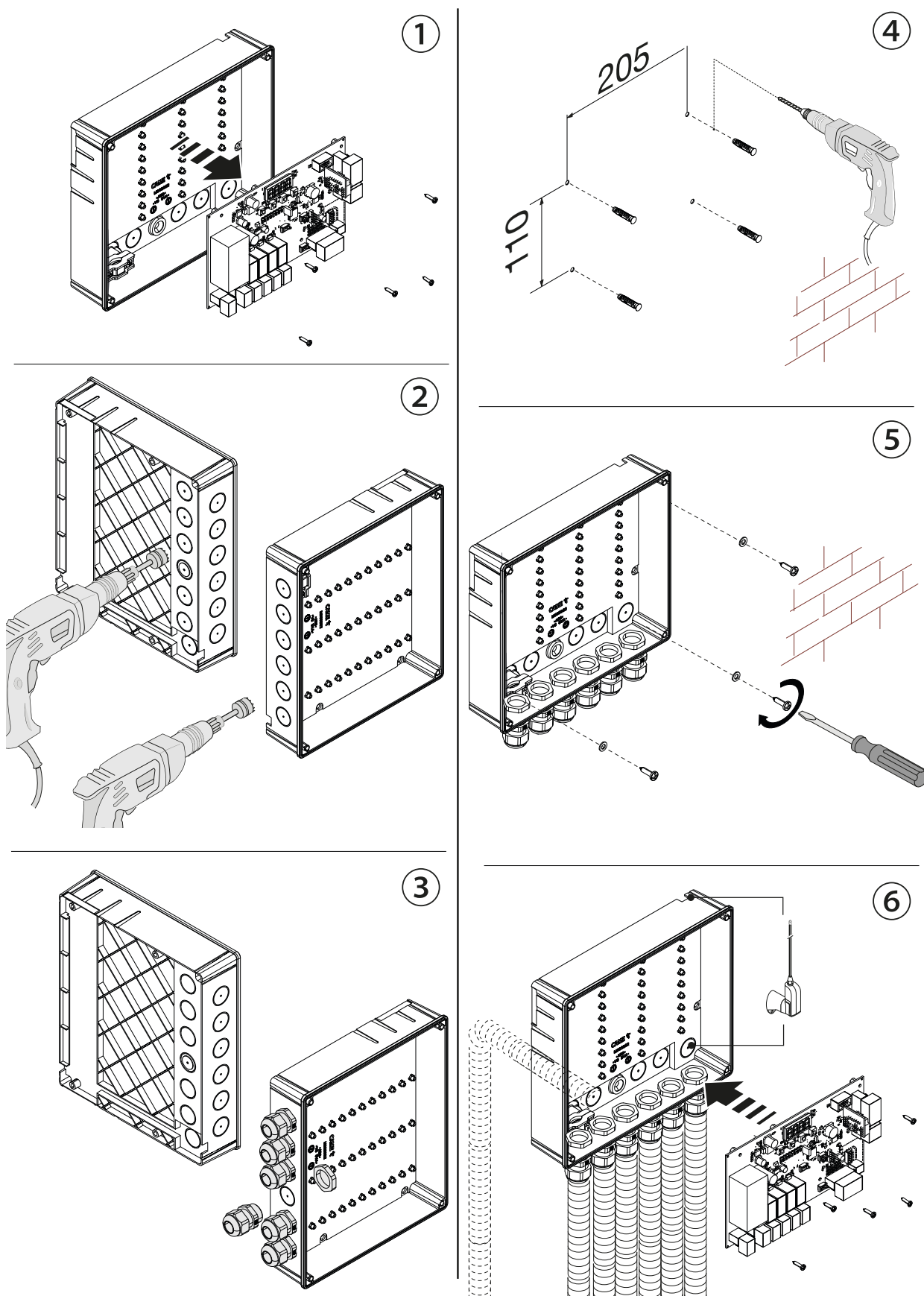
Cable length	up to 30 metres (max)
24V AC/DC power supply	2 x 1.5 mm ²
Power supply 120/230 V AC	2 x 1.5 mm ²
CXN BUS selectors	2 x 0.5 mm ²
Input cable (I1-I2-I3-I4)	2 x 0.5 mm ²
Output cable (OUT1-OUT2-OUT3-OUT4)	2 x 0.5 mm ²

- When operating at 120/230 V and outdoors, use H05RN-F cables that are IEC 60245 (IEC 57) compliant; when indoors, use H05VV-F cables that are IEC 60227 (IEC 53) compliant; For power supplies up to 48 V, use FROR 20-22 II cables compliant with standard EN 50267-2-1 (CEI).
- To connect the antenna, use RG58 cable (up to 5 m).
- To connect to the CRP, use a UTP CAT5 cable (up to 1,000 m long).
- If the cable lengths differ from those specified in the table, define the cable cross-sections according to the actual power draw of the connected devices and in line with regulation CEI EN 60204-1.
- For multiple, sequential loads along the same line, recalculate the values in the table according to the actual power draw and distances. For information on connecting products not covered in this manual, please see the documentation accompanying the products themselves.

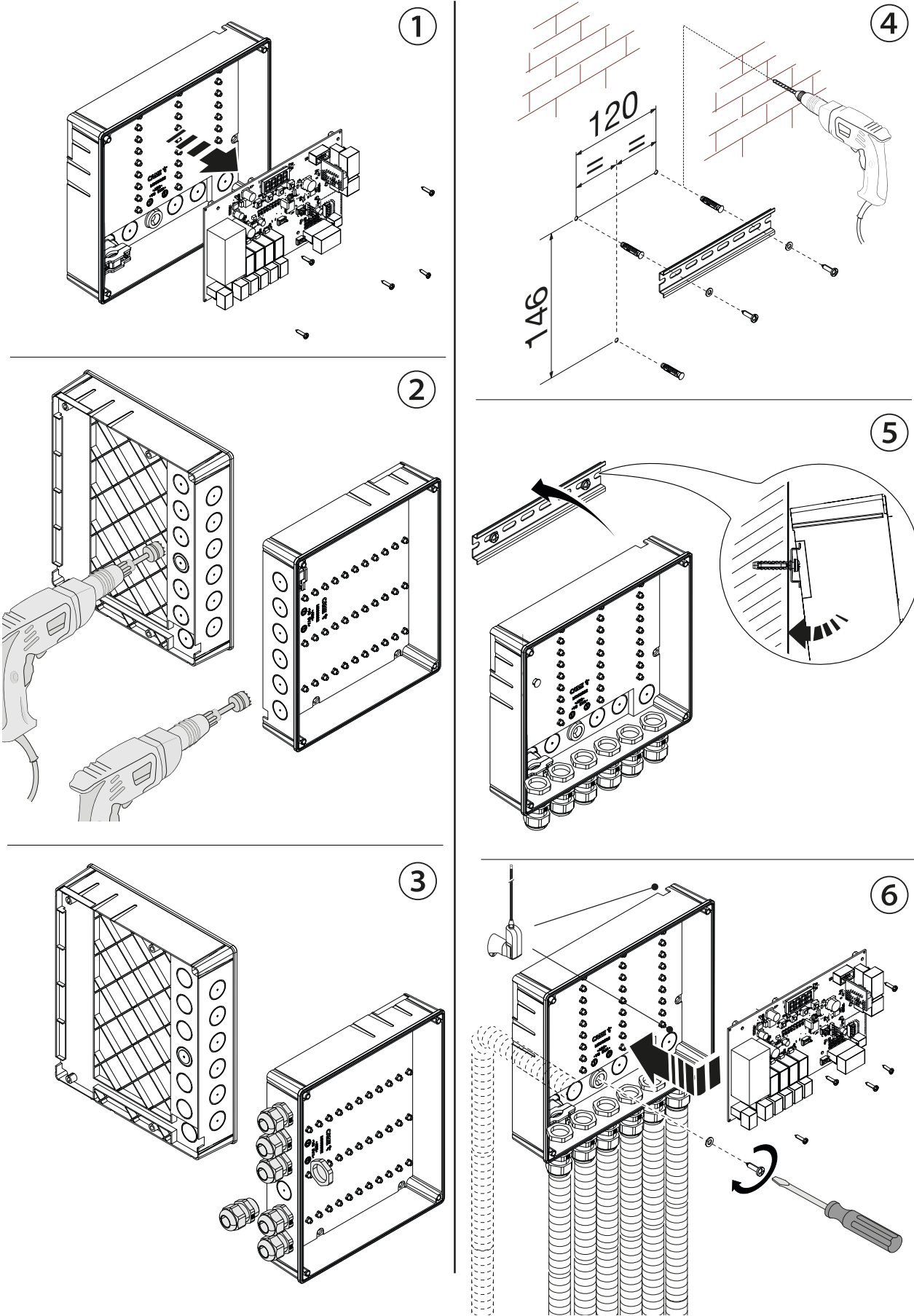
INSTALLATION

⚠ Before installing the control panel, remove the electronic board to avoid damage.

Standard



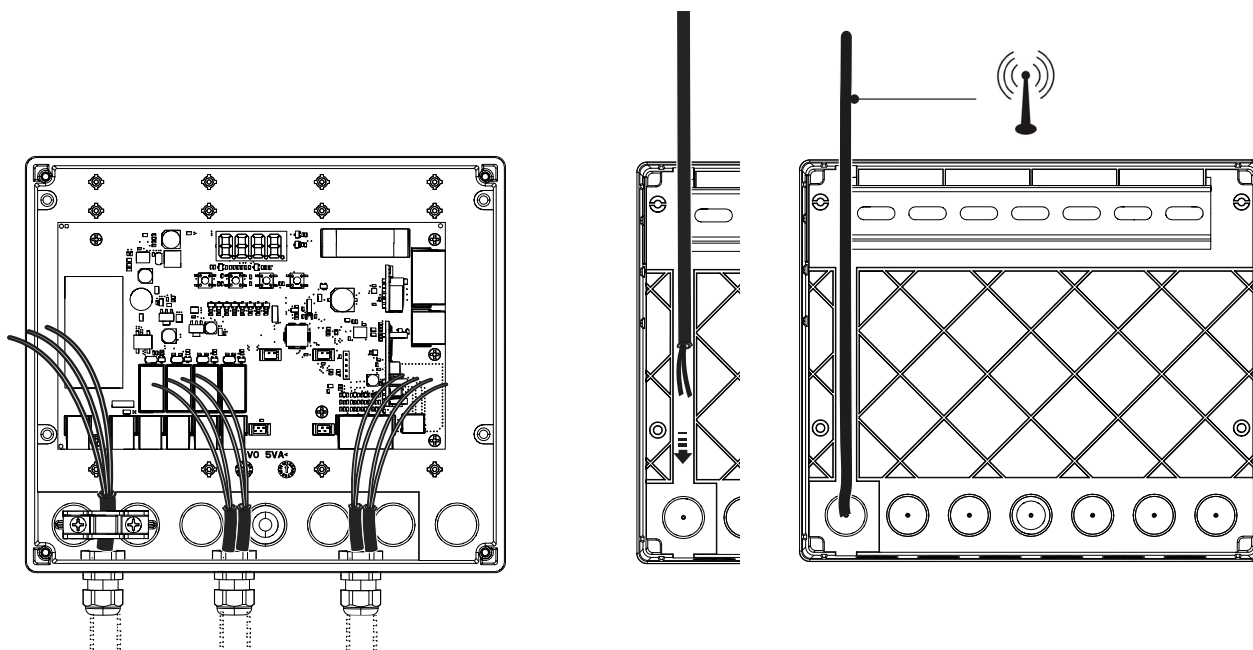
DIN rail



ELECTRICAL CONNECTIONS

Preparing the electrical cables

- 📖 Connect all wires and cables in compliance with the law.
- 📖 Use cable glands to connect the devices to the control panel. One of these must be used exclusively for the power supply cable.



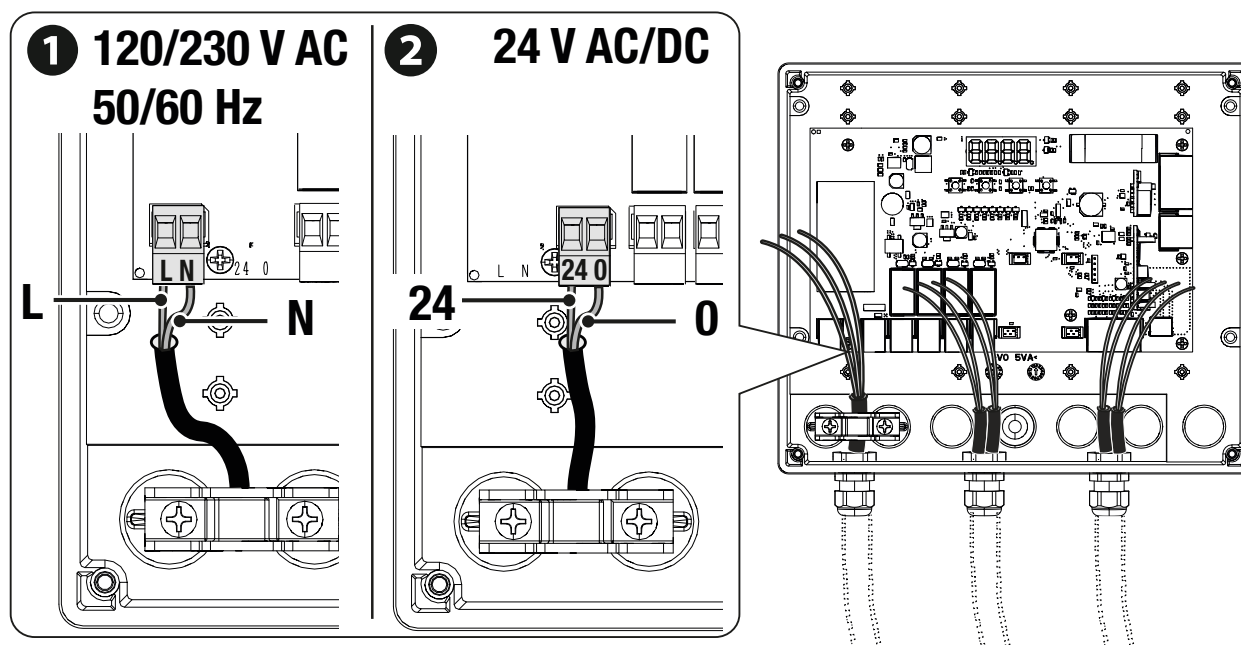
Power supply

❶ Connecting to the RBE 230 control panel (120/230V AC - 50/60 Hz)

L -Phase
N -Neutral

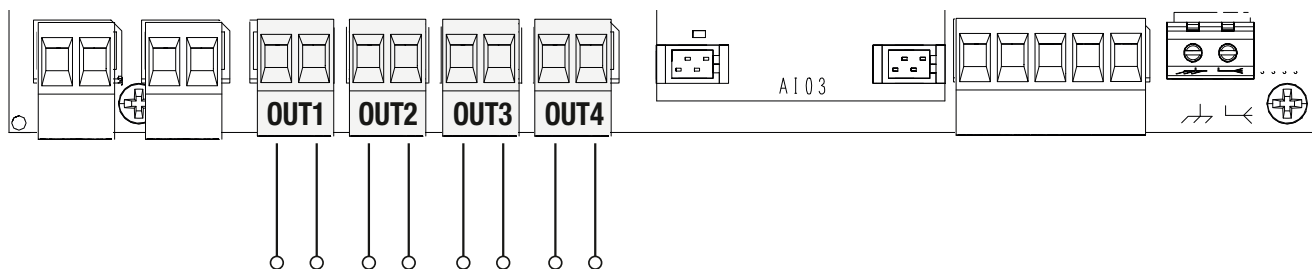
❷ Connecting to the RBE 24 control panel (24V AC/DC)

Terminal 24
Terminal 0



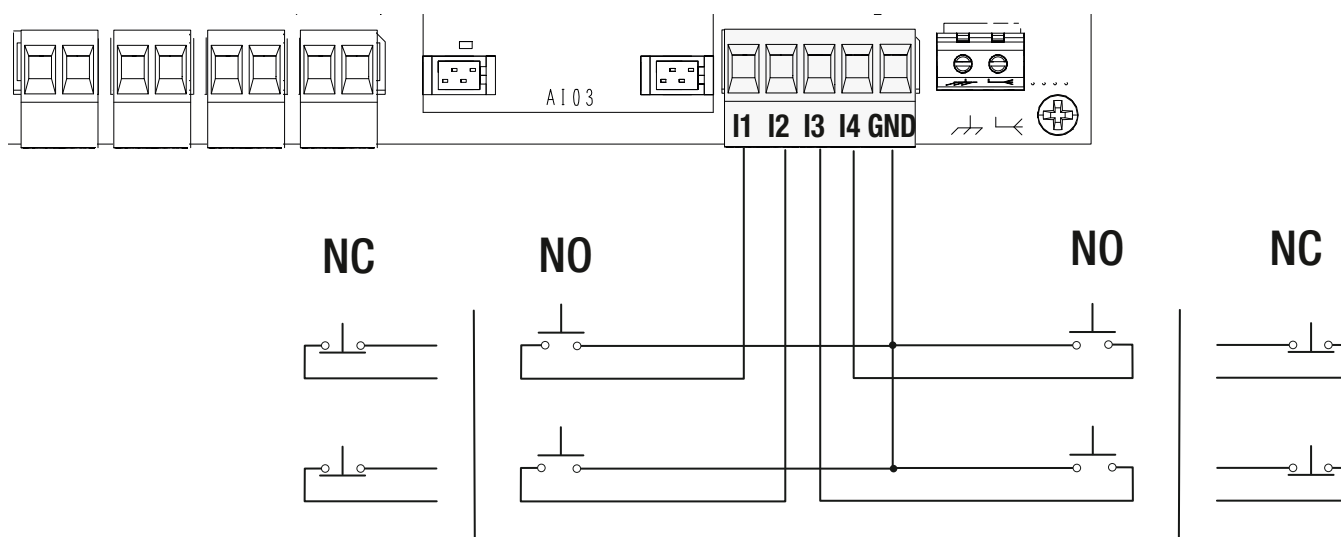
Output contact

The output contacts (OUT1, OUT2, OUT3 and OUT4) can be configured from the functions menu as open contacts (NO) or closed contacts (NC), or excluded.
Single contact current (5A - 230 V).



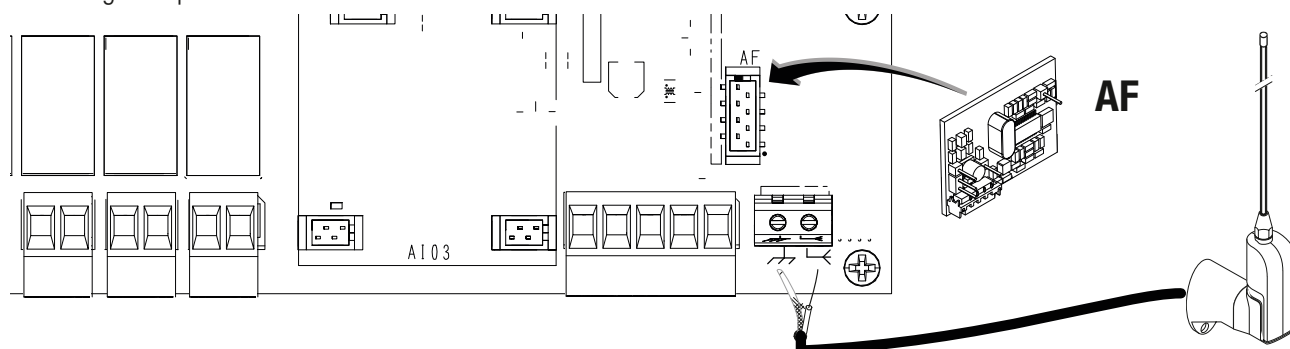
Input contact

Inputs can be used for reading statuses or controlling outputs (OUT1, OUT2, OUT3 and OUT4) and/or operators connected to (A-B-GND).
The input contacts (I1, I2, I3 and I4) can be configured from the functions menu as open contacts (NO) or closed contacts (NC), or disabled.



Connecting the antenna and AF card for remote control

Connect the antenna to the dedicated terminal using a coaxial cable (e.g. TOP-RG58) and insert the AF card into the connector for controlling the operator with one or more transmitters.



CRP connection

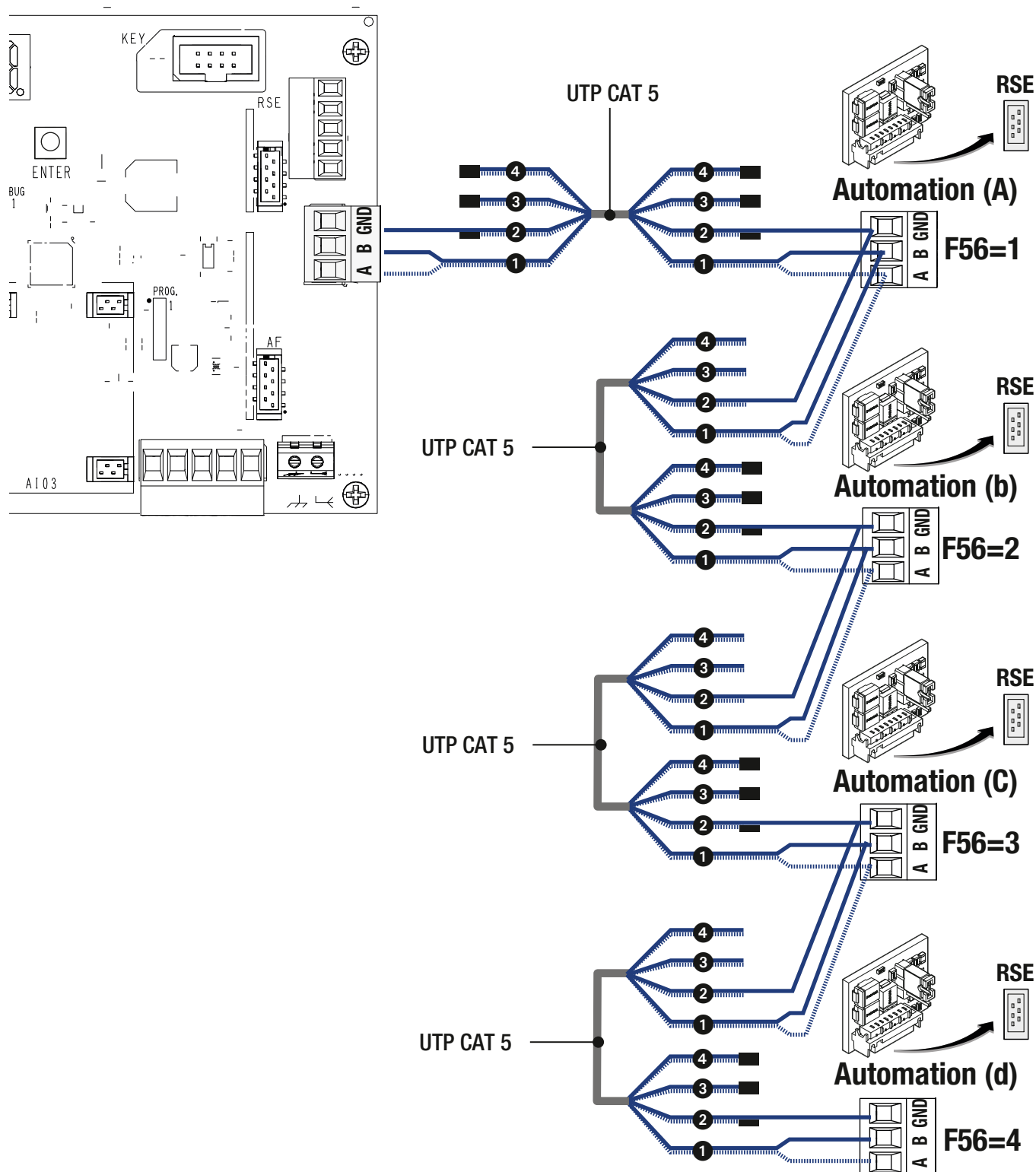
CRP connection for controlling up to 4 operators.
Set a CRP address from 1 to 4 for each operator.

📖 Use the [F56] or [CRP address] function on the operator control panel.

Insert an RSE card into all connected operators.

📖 Use a twisted UTP CAT 5 cable.

📖 For recognition of the connected operators, see the function [A3 – Scanning for new operators].



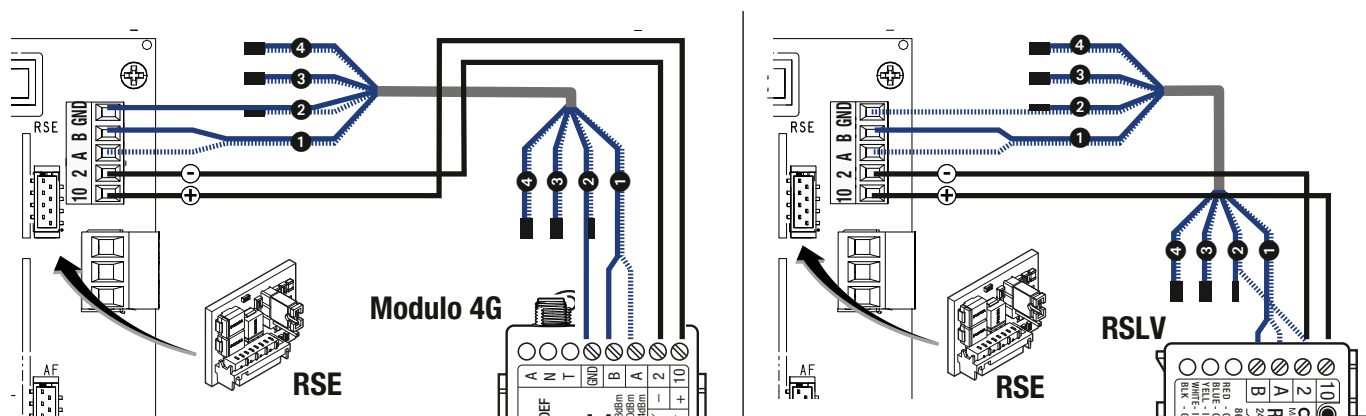
4G Gateway / RSLV / Wi-Fi Gateway / CAME KEY connection

Remote connection

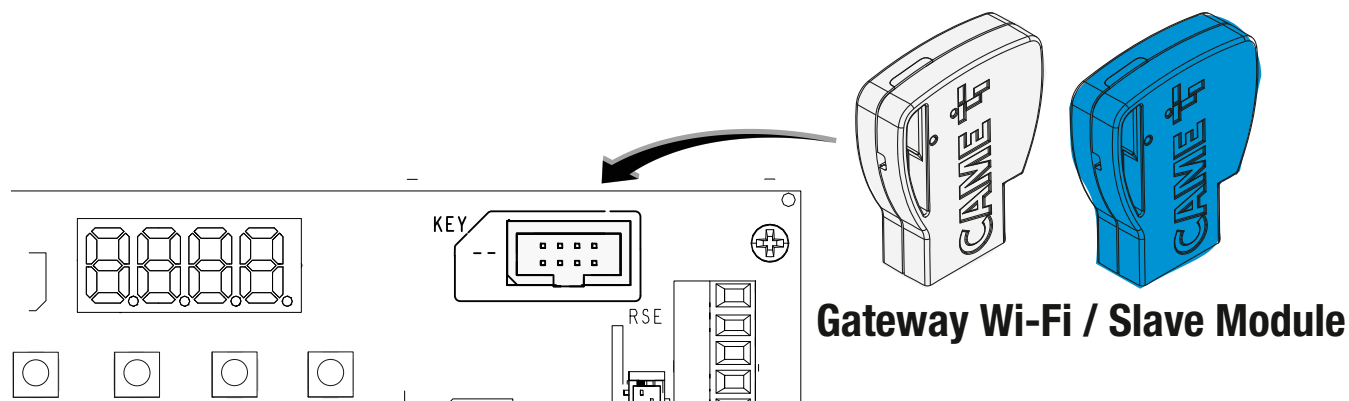
Connect with 4G Gateway module (806SA-210 / 806SA-0220 / 806SA-0230) for remote control of CAME accessories or operators with the CAMEConnect system. See the accessory instruction manual.

Insert the RSE board into the corresponding connector.

Use a twisted UTP CAT 5 cable.

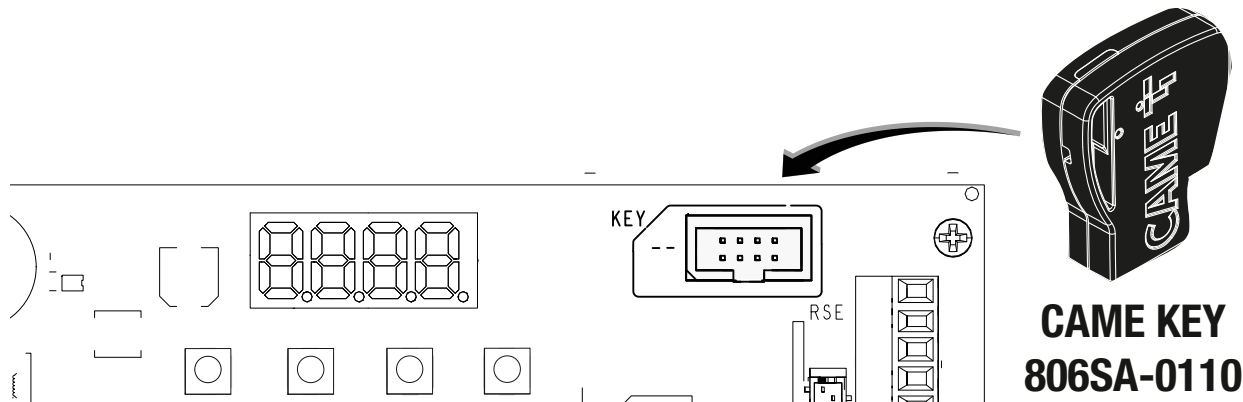


Connecting with Wi-Fi Gateway (806SA-0140) to connect the operator to the Cloud via Wi-Fi or Gateway AC Gateway (806SA-0200) for access control via the CAMEConnect system. See the instruction manual for the accessory.

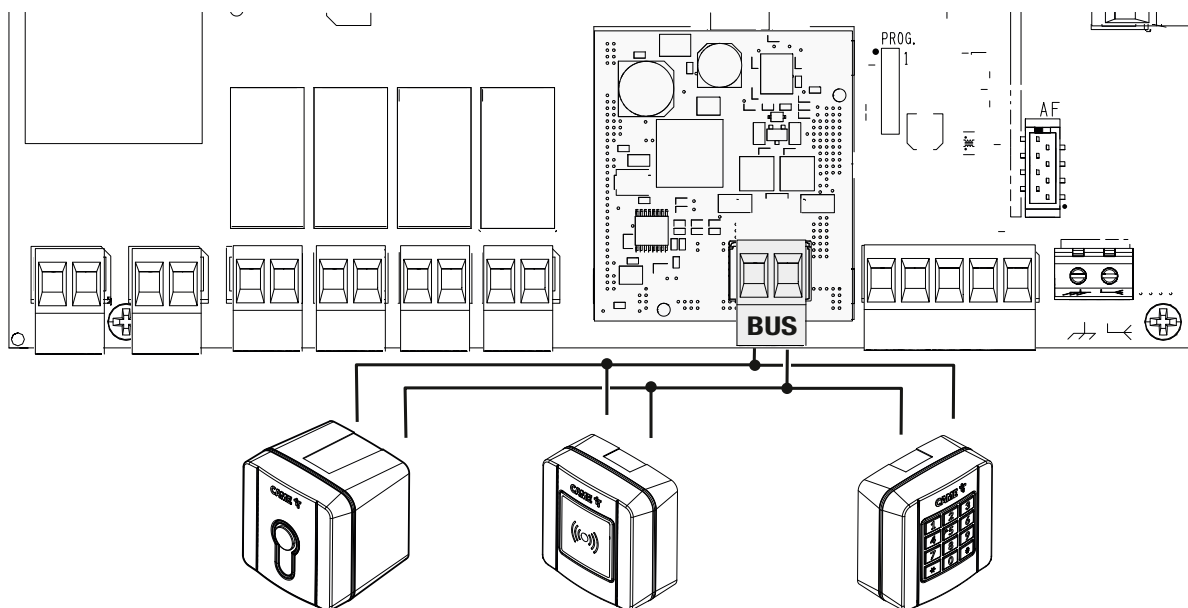


Local connection

Connecting with CAME KEY (806SA-0110) for configuring and controlling CAME operators compatible with the CRP protocol using a smartphone or tablet. See the accessory manual.



RCXN board (optional) for devices with BUS CXN system



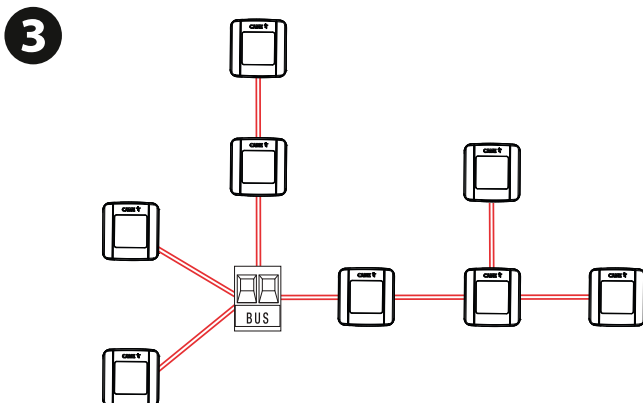
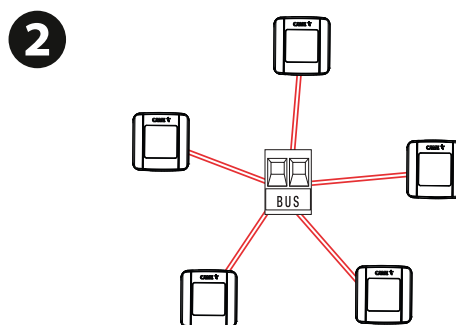
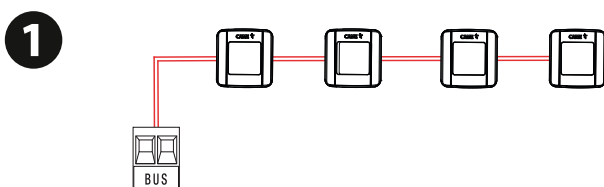
The CAME CXN system is a two-wire non-polarised communication BUS which allows you to connect CXN-compatible CAME devices.

Connection to the BUS can be in a chain, star or mixed formation.

Once the system has been wired, and after having set the address on each device, the function of each accessory can be configured on the control panel (RBE). This method allows you to configure the set-up immediately without having to work directly on the accessories and system wiring later.

Cabling

- ❶ Chain connection
- ❷ Star connection
- ❸ Mixed connection



Cable type

⚠ We recommend using a FROR 2x0.5mm² cable, maximum length from the control board: 50 m.

Single branch length (m)	max. 50 m
BUS cable	2 x 0.5 mm ²

📖 The total length of all branches can be a maximum of 150 m.

Maximum number of devices that can be connected, by type

Type of device	Maximum number of devices per type
Keypad selectors / RFID transponder selectors / Key selectors	8
MIFARE selectors	4
Photocells with RBE in parking mode (A1=1)	4 pairs
Photocells with RBE in traffic light mode (A1=2)	2 pairs

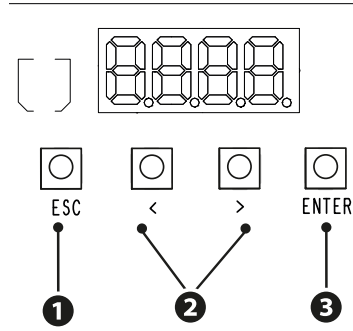
BUS CXN device consumption



Scan the QR code to access an interactive table showing consumption data, and calculate the maximum number of BUS devices you can connect to the control panel.

📖 BUS CXN device consumption is calculated in CXN units.

Programming button functions



1 ESC button

- The ESC button is used to perform the operations described below.
- Exit the menu
- Delete the changes
- Go back to the previous screen

2 < > buttons

- The <> buttons are used to perform the operations described below.
- Navigate the menu
- Increase or decrease values

3 ENTER button

- The ENTER button is used to perform the operations described below.
- Access menus
- Confirm a choice

RBE IN ACCESS CONTROL MODE (A1=0 - DEFAULT)

Functions menu

Key			
Function	Secondary menu	Parameters	Second level parameters

Setting the type of outgoing contact

Associate the type of output contact with OUT1, OUT2, OUT3 and OUT4

F1	Out.1 Out.2 Out.3 Out.4	no = Normally open contact (NO) Default nc = normally closed contact (NC) OFF = Deactivated	
----	----------------------------------	---	--

Output control mode

Associate an operating mode for the output contact with OUT1, OUT2, OUT3 and OUT4

F2	Out.1 Out.2 Out.3 Out.4	SEC = Timed in seconds (default) MIn = Timed in minutes bIS = Bistable The output changes status with each command and maintains this status until the next command. MAn = Hold-to-run Ser = Service Use this parameter to set the time before and after the output contact activates. The output activation time and the command type are managed by Quick&Easy Access on CAMEConnect.	From 1 to 180 seconds (only with SEC parameter selected) From 1 and 180 minutes (only with MIn or Ser parameters selected)
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Setting the type of incoming contact

Associate the type of input contact with I1, I2, I3 and I4

F3	In .1 In .2 In .3 In .4	no = Normally open contact (NO) Default nc = normally closed contact (NC) OFF = Deactivated	
----	----------------------------------	---	--

Associating an input with one or more outputs/operators

Associate one or more outputs and/or one or more operators with an input I1, I2, I3 or I4.

See the section <Example of a system with devices for controlling one or more outputs and/or operators>.

F4	In .1 In .2 In .3 In .4	1--- = Output 1 -2-- = Output 2 --3- = Output 3 ---4 = Output 4 12-- = Outputs 1 and 2 1-3- = Outputs 1 and 3 -23- = Outputs 2 and 3 123- = Outputs 1, 2 and 3 1--4 = Outputs 1 and 4 -2-4 = Outputs 2 and 4 12-4 = Outputs 1, 2 and 4 --34 = Outputs 3 and 4 1-34 = Outputs 1, 3 and 4 -234- = Outputs 2, 3 and 4 1234 = Outputs 1, 2, 3 and 4 ---- = No output	A--- = Operator A -b-- = Operator b --C- = Operator C ---d = Operator d Ab-- = Operators A and b A-C- = Operators A and C -bC- = Operators b and C AbC- = Operators A, b and C A--d = Operators A and d -b-d = Operators b and d Ab-d = Operators A, b and d --Cd = Operators C and d A-Cd = Operators A, C and d -bCd = Operators b, C and d AbCd = All operators ---- = No operator
----	----------------------------------	---	--

CRP address

Assign a unique identification code (CRP address) to the RBE control board.

The function is used where there are multiple RBEs connected to the same communication BUS via CRP.

F56		1 to 254 (Default 1)	
-----	--	----------------------	--

Serial communication speed on RSE / Aut

Set the communication speed.

RSE = Gateway connection

Aut = Operator communication

F63	rSE Aut	2 = 4800 bps 3 = 9600 bps 4 = 14400 bps 5 = 19200 bps 6 = 38400 bps (default) 7 = 57600 bps 8 = 115200 bps	
-----	------------	--	--

Associating a BUS selector (keypad or transponder) with one or more outputs/operators

Associate a selector (keypad/transponder) with one or more outputs and/or one or more operators.

 The function only appears if there are one or more BUS selectors connected to the RCXN board (not supplied).

 b21 = Selector 1, b22 = Selector 2,, b28 = Selector 8

 See the section <Example of a system with BUS selectors (keypad/transponder) for controlling one or more outputs and/or operators>.

b21	1234 = Outputs 1, 2, 3 and 4	AbCd = All operators
b22	---- = No output	---- = No operator
b23	1--- = Output 1	A--- = Operator A
b24	-2-- = Output 2	-b-- = Operator b
b25	12-- = Outputs 1 and 2	Ab-- = Operators A and b
b26	--3- = Output 3	--C- = Operator C
b27	1-3- = Outputs 1 and 3	A-C- = Operators A and C
b28	-23- = Outputs 2 and 3	-bC- = Operators b and C
	123- = Outputs 1, 2 and 3	AbC- = Operators A, b and C
	---4 = Output 4	---d = Operator d
	1--4 = Outputs 1 and 4	A--d = Operators A and d
	-2-4 = Outputs 2 and 4	-b-d = Operators b and d
	12-4 = Outputs 1, 2 and 4	Ab-d = Operators A, b and d
	--34 = Outputs 3 and 4	--Cd = Operators C and d
	1-34 = Outputs 1, 3 and 4	A-Cd = Operators A, C and d
	-234- = Outputs 2, 3 and 4	-bCd = Operators b, C and d

Associating BUS key selector on one or more outputs/operators

Associate a key selector with one or more outputs and/or one or more operators.

 The function only appears if there are one or more BUS selectors connected to the RCXN board (not supplied).

 The main difference between a key selector and the other selectors is that the commands associated with the outputs and operators are divided into right rotation (rIG) and left rotation (LEF).

 b21 = Selector 1, b22 = Selector 2,, b28 = Selector 8

 See the section <Example of a system with BUS key selectors for controlling one or more outputs and/or operators>.

b21	rIG	1234 = Outputs 1, 2, 3 and 4	AbCd = All operators
b22	LEF	---- = No output	---- = No operator
b23		1--- = Output 1	A--- = Operator A
b24		-2-- = Output 2	-b-- = Operator b
b25		12-- = Outputs 1 and 2	Ab-- = Operators A and b
b26		--3- = Output 3	--C- = Operator C
b27		1-3- = Outputs 1 and 3	A-C- = Operators A and C
b28		-23- = Outputs 2 and 3	-bC- = Operators b and C
		123- = Outputs 1, 2 and 3	AbC- = Operators A, b and C
		---4 = Output 4	---d = Operator d
		1--4 = Outputs 1 and 4	A--d = Operators A and d
		-2-4 = Outputs 2 and 4	-b-d = Operators b and d
		12-4 = Outputs 1, 2 and 4	Ab-d = Operators A, b and d
		--34 = Outputs 3 and 4	--Cd = Operators C and d
		1-34 = Outputs 1, 3 and 4	A-Cd = Operators A, C and d
		-234- = Outputs 2, 3 and 4	-bCd = Operators b, C and d

New user

Register up to a maximum of 5000 users and assign one or more outputs and/or one of more operators to each one

The parameters (AbCd) identifying the operators only appear if they are connected to the RBE control panel.

The AF card that manages the transmitters must be inserted into the connector.

See the section <New user> for information on how to insert it.

U1		1--- = Output 1 -2-- = Output 2 --3- = Output 3 ---4 = Output 4 12-- = Outputs 1 and 2 1-3- = Outputs 1 and 3 -23- = Outputs 2 and 3 123- = Outputs 1, 2 and 3 1--4 = Outputs 1 and 4 -2-4 = Outputs 2 and 4 12-4 = Outputs 1, 2 and 4 --34 = Outputs 3 and 4 1-34 = Outputs 1, 3 and 4 -234- = Outputs 2, 3 and 4 1234 = Outputs 1, 2, 3 and 4 ---- = No output	A--- = Operator A -b-- = Operator b --C- = Operator C ---d = Operator d Ab-- = Operators A and b A-C- = Operators A and C -bC- = Operators b and C AbC- = Operators A, b and C A--d = Operators A and d -b-d = Operators b and d Ab-d = Operators A, b and d --Cd = Operators C and d A-Cd = Operators A, C and d -bCd = Operators b, C and d AbCd = All operators ---- = No operator
----	--	---	--

Remove user

Remove one of the registered users.

See the section <Remove user> for information on how to remove it.

U2		OFF = Cancel On = Run	
----	--	--------------------------	--

Remove all

Remove all registered users.

Select On and press the ENTER button. All stored users will appear in quick succession on the screen and, at the end, the wording [CLr] will show to confirm that all users have been deleted.

U3		OFF = Cancel On = Run	
----	--	--------------------------	--

Radio decoding

Choose the type of radio coding for the transmitters enabled to control the outputs or operators.

Select the coding from those available and press ENTER to confirm.

If you choose [Rolling code] or [TW key block], any transmitters saved previously will be deleted.

U4		1 = All decoding (default) 2 = Rolling code 3 = TW key block	
----	--	--	--

Self-Learning Rolling

Save a new rolling code transmitter by activating acquisition from a rolling code transmitter that has already been saved. The saving and acquisition procedures are explained in the transmitter manual.

U8		OFF = Deactivated (Default) On = Activated	
----	--	---	--

Operating modes

This function allows you to change the device operating mode.

 Only available with firmware version 2.2.1 or later.

A1		0 = Access control mode (Default) 1 = Parking mode 2 = Traffic light mode	
----	--	---	--

Acquire new operators

Scan the terminals (A-B-GND) for newly connected operators.

 During scanning, the red LED remains on. Once the operation is complete, the LED switches off and starts flashing to indicate it is communicating with the operators. If an operator is not responding or is disconnected, the wording [OFF A/b/C/d] will appear on the display, according to the operator that has been disconnected.

A3		OFF = Cancel On = Run	
----	--	--------------------------	--

Parameter reset

Restore factory settings except for users, operating mode [A1] and the settings relating to operator connection via CRP.

A4		OFF = Cancel On = Run	
----	--	--------------------------	--

FW version

The function is used to display the firmware version.

Press ENTER to confirm.

H1	---		
----	-----	--	--

Enable password

Set a 4-digit password. The password will be requested to anyone who wants to access the main menu.

 See the section <Enable password> for information on how to do it.

H3		OFF = Cancel On = Run	
----	--	--------------------------	--

BUS device status

The function shows the status of all devices that can be connected to the BUS and managed by the firmware in use.

Select the device from those available and press ENTER to view the status (x).

Device status <x>

ll = Conflicting address

o = Working

c = Working with alarm signal

F = Device fault

- = No communication or not present

H4	b = BUS photocells b(1 - 8).<x> d = BUS selector d(1 - 8).<x>		
----	--	--	--

Setting the clock

Set the date and time.

When the date and time have been set, it shows for 5 seconds every time you exit the main menu.

See the "Setting the clock" section.

H5		OFF (Cancel operation) On (Run operation)	
----	--	--	--

Access log

Enable the access logs visible on CAMEConnect.

H6		OFF = Deactivated (Default) On = Activated	
----	--	---	--

Factory reset

To restore the electronic board data to factory settings:
Disconnect the control board from the power supply and wait for it to switch off.
Press and hold the < and > buttons, then reconnect the control board to the power supply.
Continue to press and hold the < > buttons until **[ON/OFF]** is displayed.
Select **[ON]**.
Press **ENTER** to confirm.

When you reset the control board, all saved users, set times, manoeuvre configurations and calibration operations are deleted.

New user

The user can be associated with one or more outputs (OUT1, OUT2, OUT3 and/or OUT4) and one or more operators (A-b-C-d), where connected to the RBE control panel.

- 1 Press the ENTER key to enter programming.
- 2 Select the function U1 and press ENTER to confirm.
- 3 Choose one or more outputs from 1 = OUT1, 2 = OUT2, 3= OUT3 and 4 = OUT4 to associate with the user. Press Enter to confirm.

If there are one or more operators connected to the control panel (RBE) on A-B-GND, associate the operators and confirm with Enter.

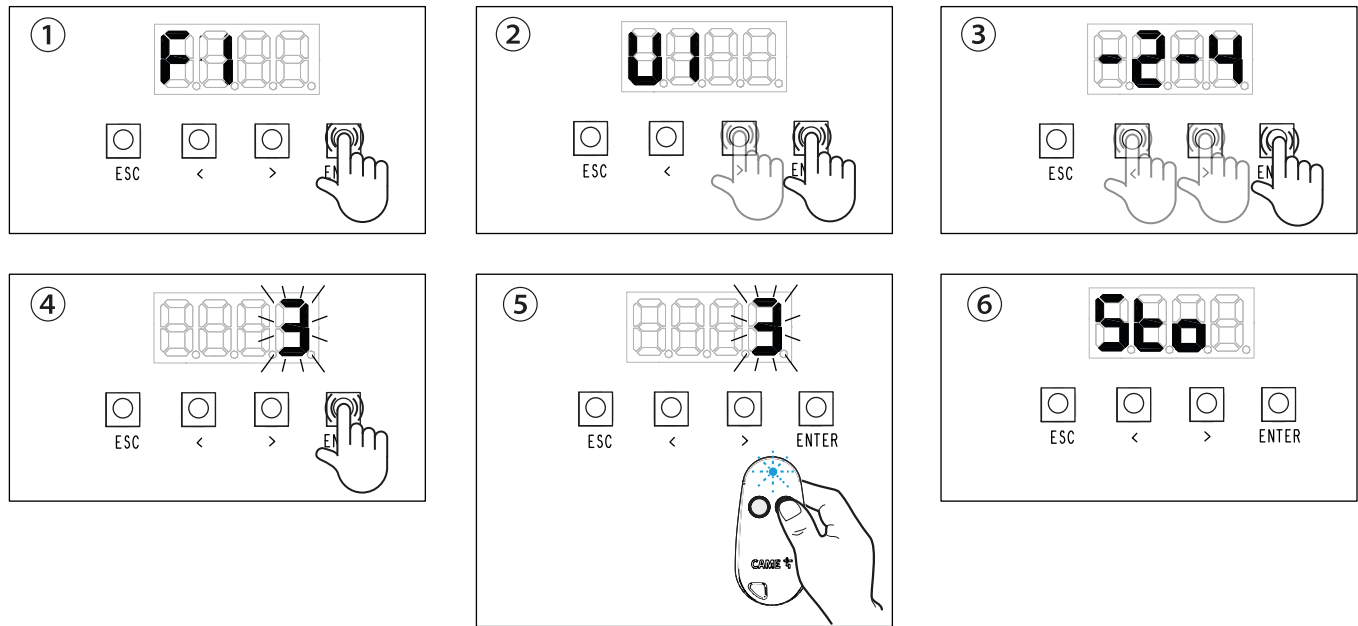
The operators are controlled by the [Open] command only. If you want to use a different command, use CAMEConnect for advanced configuration.

- 4 The first available position for storing will appear on the screen.

The available positions are the ones with flashing numbers.

- 5 Within 10 seconds, send the code from the selector (transponder or keypad) or the transmitter.
- 6 [Sto] will appear on the screen for a few seconds to confirm the data has been stored.

Repeat the procedure to add other users.



Remove user

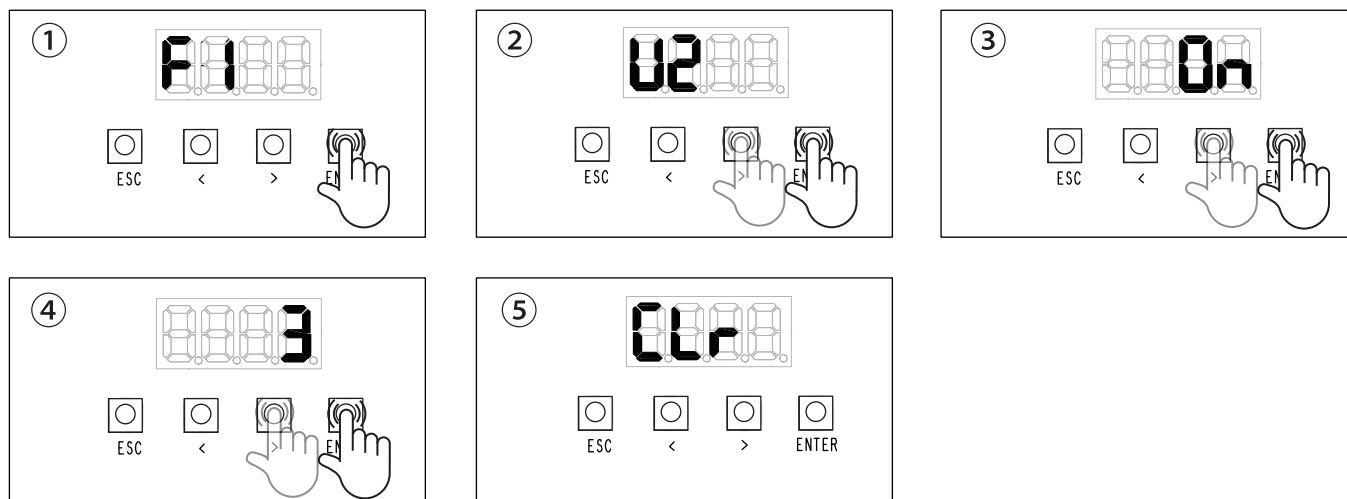
- ① Press the ENTER key to enter programming.
- ② Select the function U2 and press ENTER to confirm.
- ③ Select On and press the ENTER button again.
- ④ Select the user to be deleted and press ENTER

📖 Alternatively, you can select a user by sending a command from the associated device or transmitter.

- ⑤ [CLr] will appear on the screen for a few seconds to confirm the selected user has been deleted.

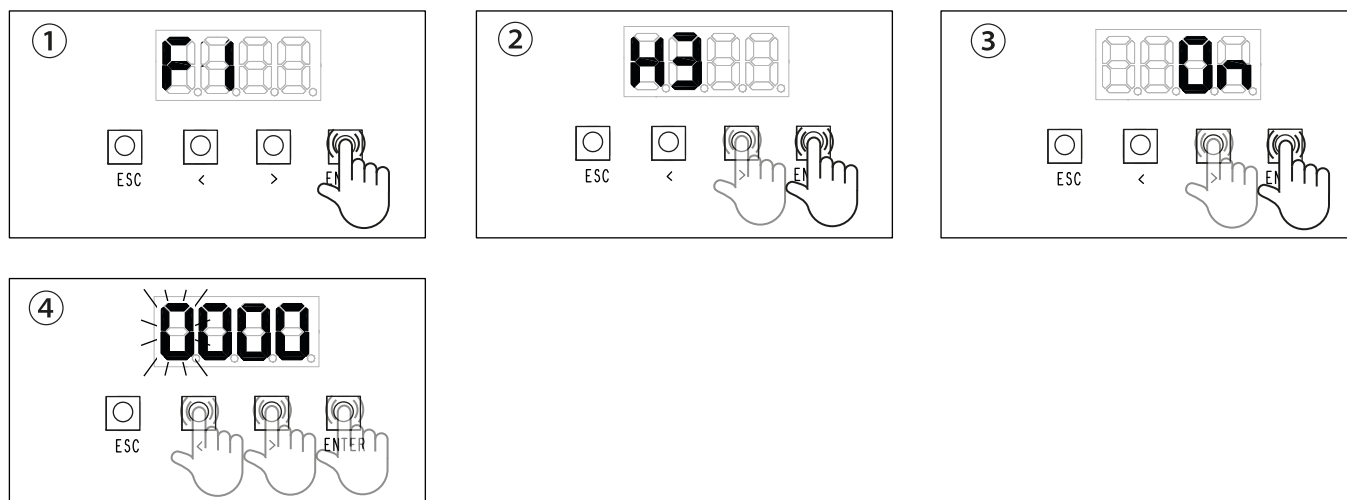
📖 The number associated with the deleted user will start flashing to indicate the position is available.

Once the operation is complete, repeat the procedure for another user or press the ESC button to exit the procedure.



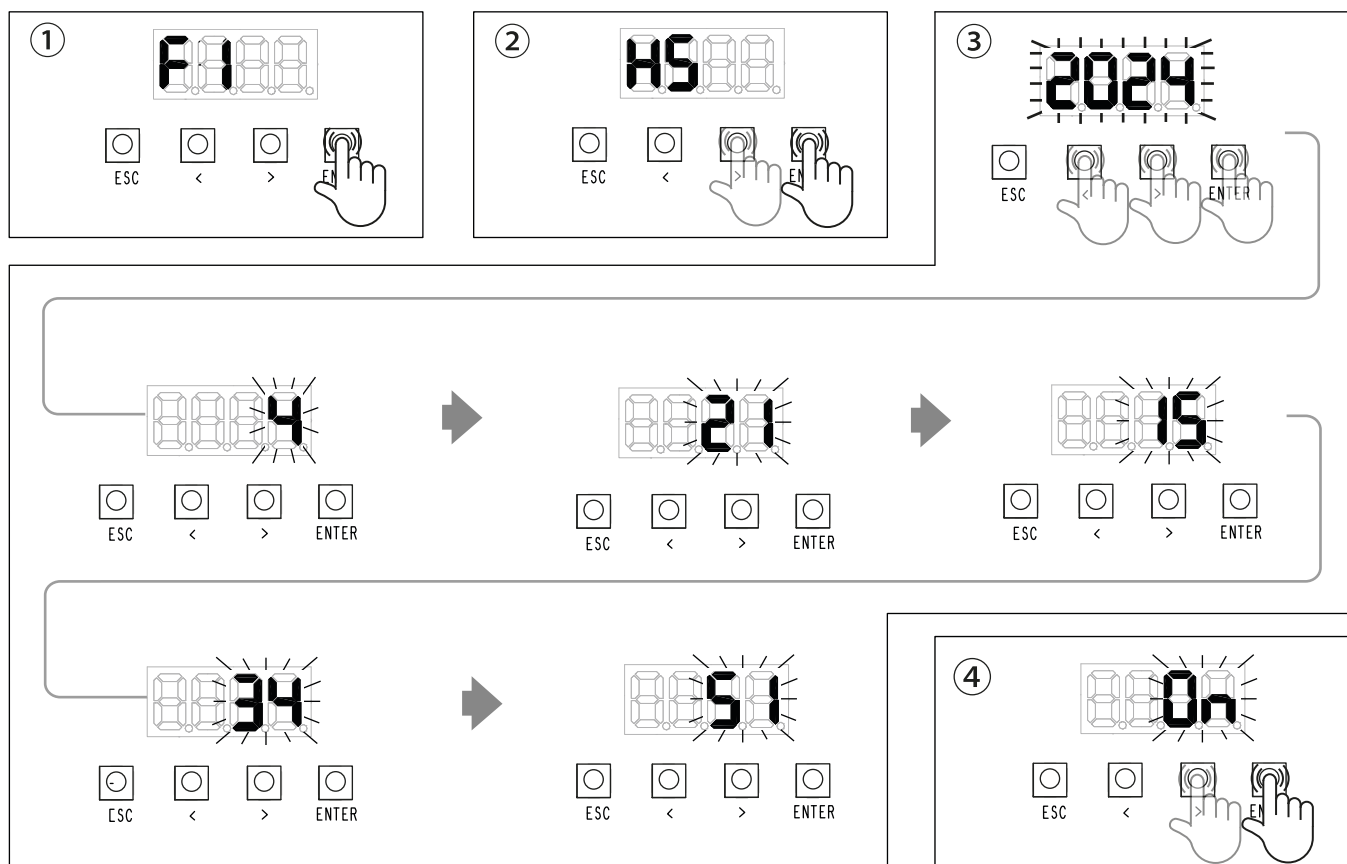
Setting the password

- ① Press the ENTER key to enter programming
- ② Select the function H3 and press ENTER to confirm.
- ③ Select On and press the ENTER button again.
- ④ Use the arrows and Enter to enter the password. Use the arrows to increase or decrease the number and Enter to confirm. Repeat the enter password procedure.



Setting the clock

- ① Press the ENTER key to enter programming
- ② Select the function H5 and press ENTER to confirm.
- ③ Use the arrows and Enter to set the date (year, month and day) and then the time (hours, minutes and seconds).
- ④ OFF will appear on the display. Use the arrow buttons, select On and press ENTER to enable automatic DST (daylight saving time setting).



If the device is connected to CAMEConnect, the date and time are configured automatically every 24 hours set following installation.

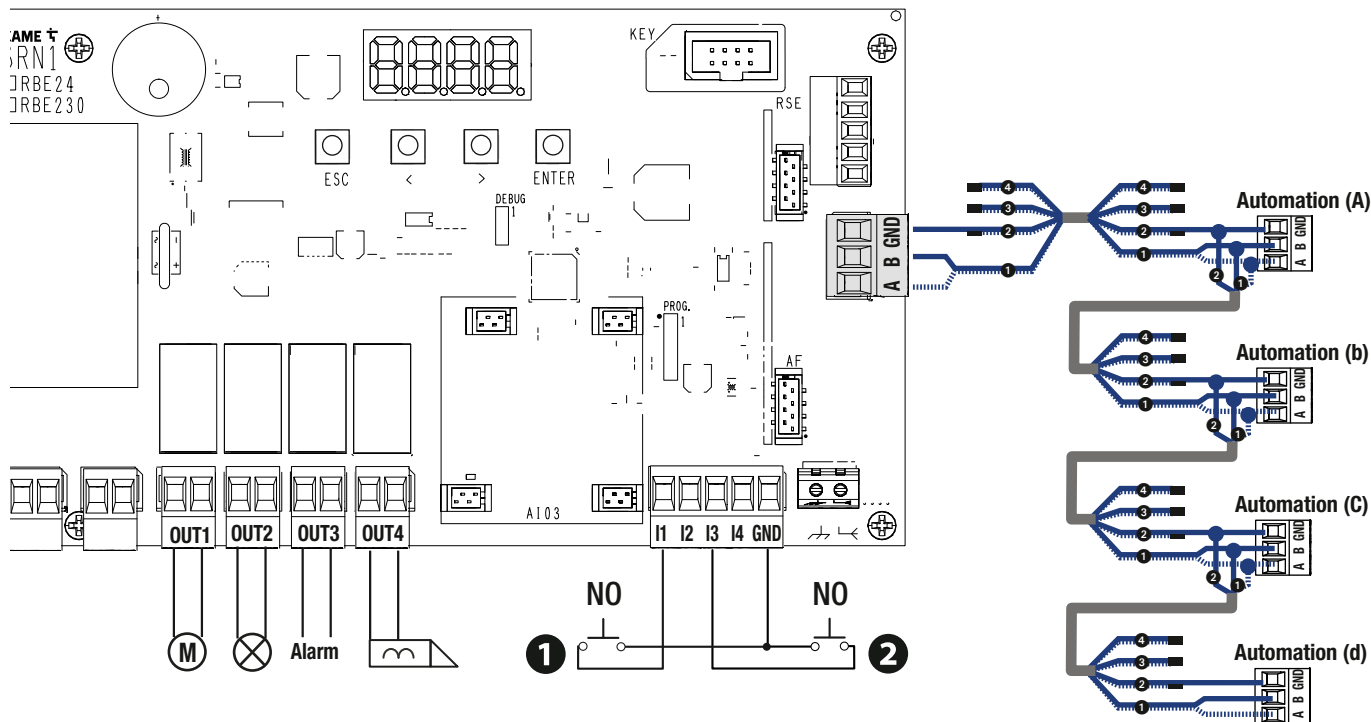
Example of a system with devices for controlling one or more outputs and/or operators

Connections

Connect the control devices to the inputs (I1 and I3), the devices to be controlled to the outputs (OUT1, OUT2, OUT3 and OUT4) and the operators to the terminals A-B-GND.

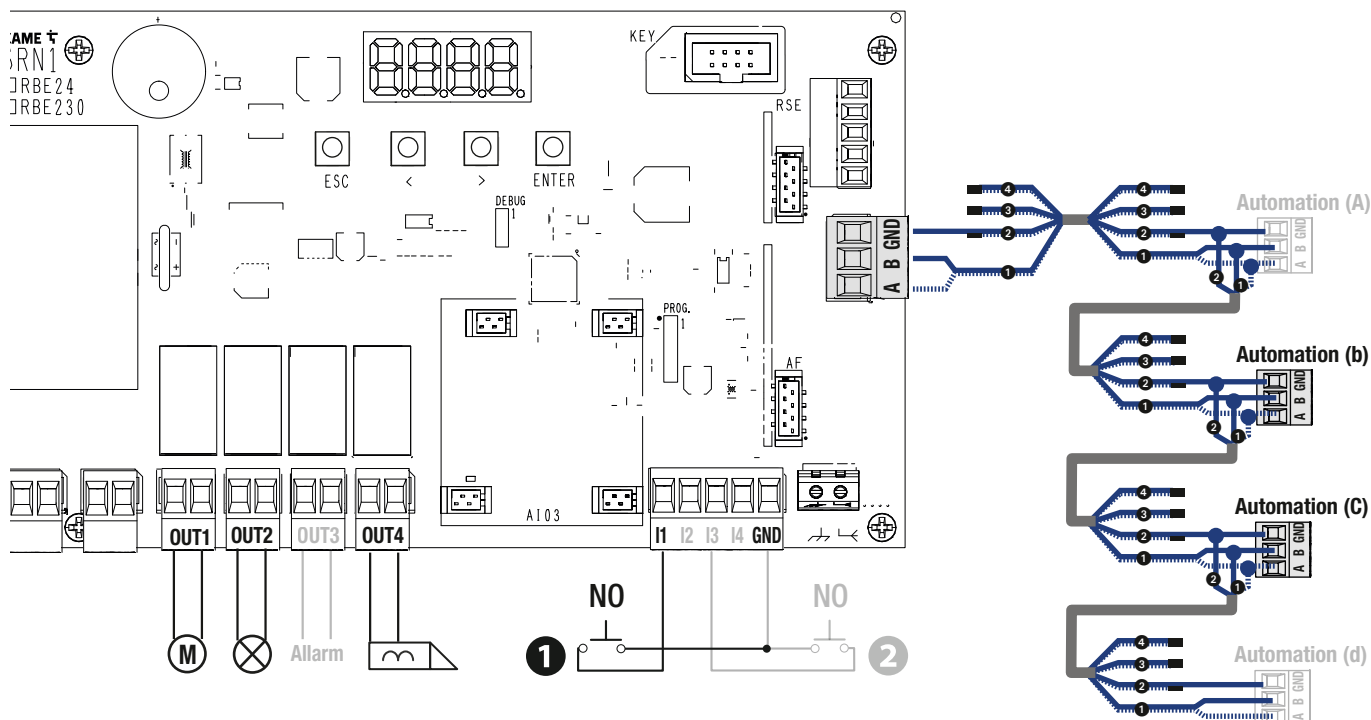
📖 All operators require a 002RSE card to be controlled.

📖 The inputs can be polarised as normally open contacts (NO) or normally closed contacts (NC). See function F3.

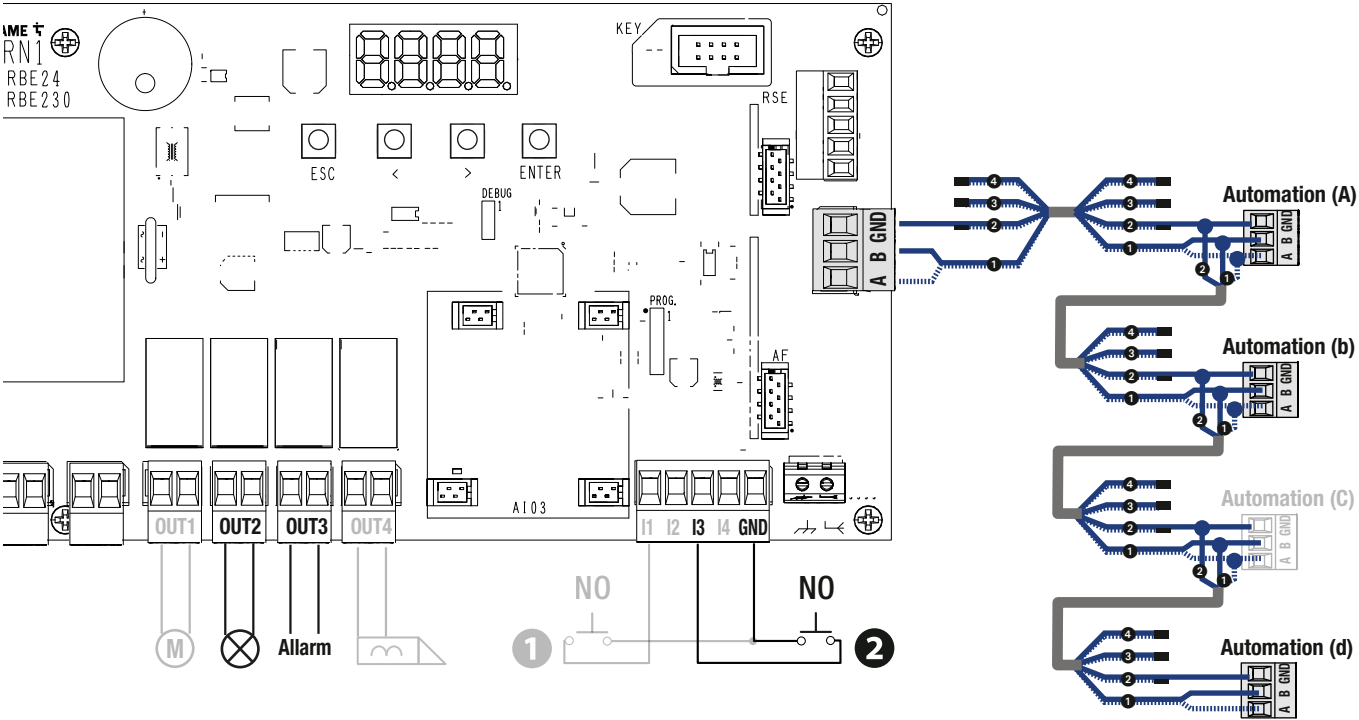


Operation

Imagine the ❶ device connected to input I1 commands the outputs OUT1, OUT2 and OUT4 and the operators b and C.



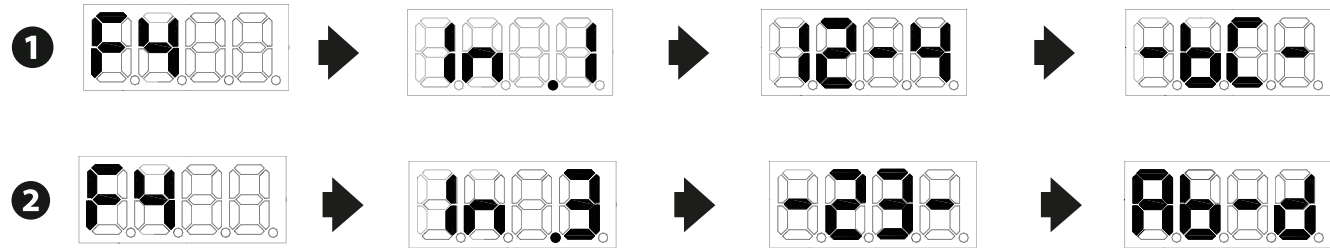
Also imagine that the ❷ device connected to input I3 commands the outputs OUT2 and OUT3 and the operators A, b and d.



Configuration

From the RBE control panel, use the programming buttons to associate the outputs and the operators with the devices connected to the inputs.

Each output and operator can be managed by multiple inputs.



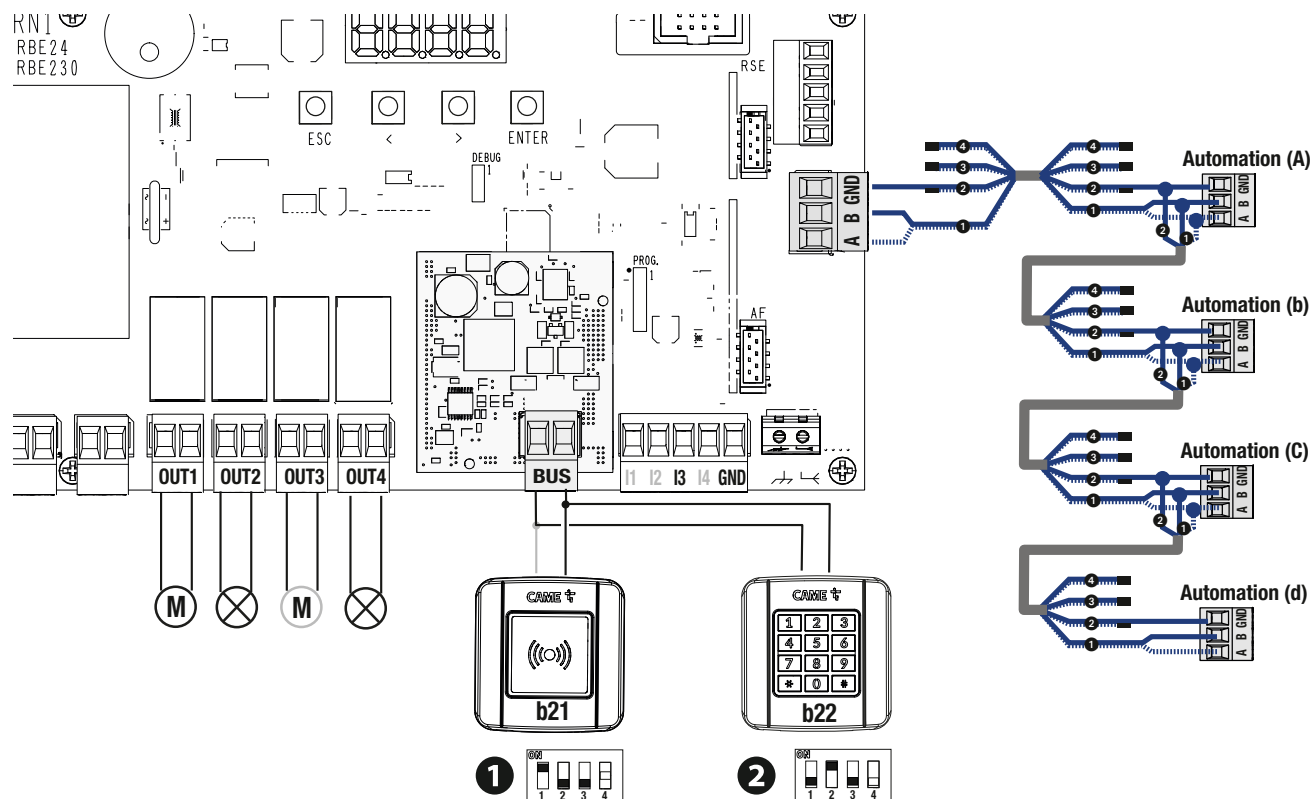
Example of a system with BUS selectors for controlling one or more outputs and/or operators

Connections

Insert the RCXN board (not supplied) into the corresponding connector on the receiving module.

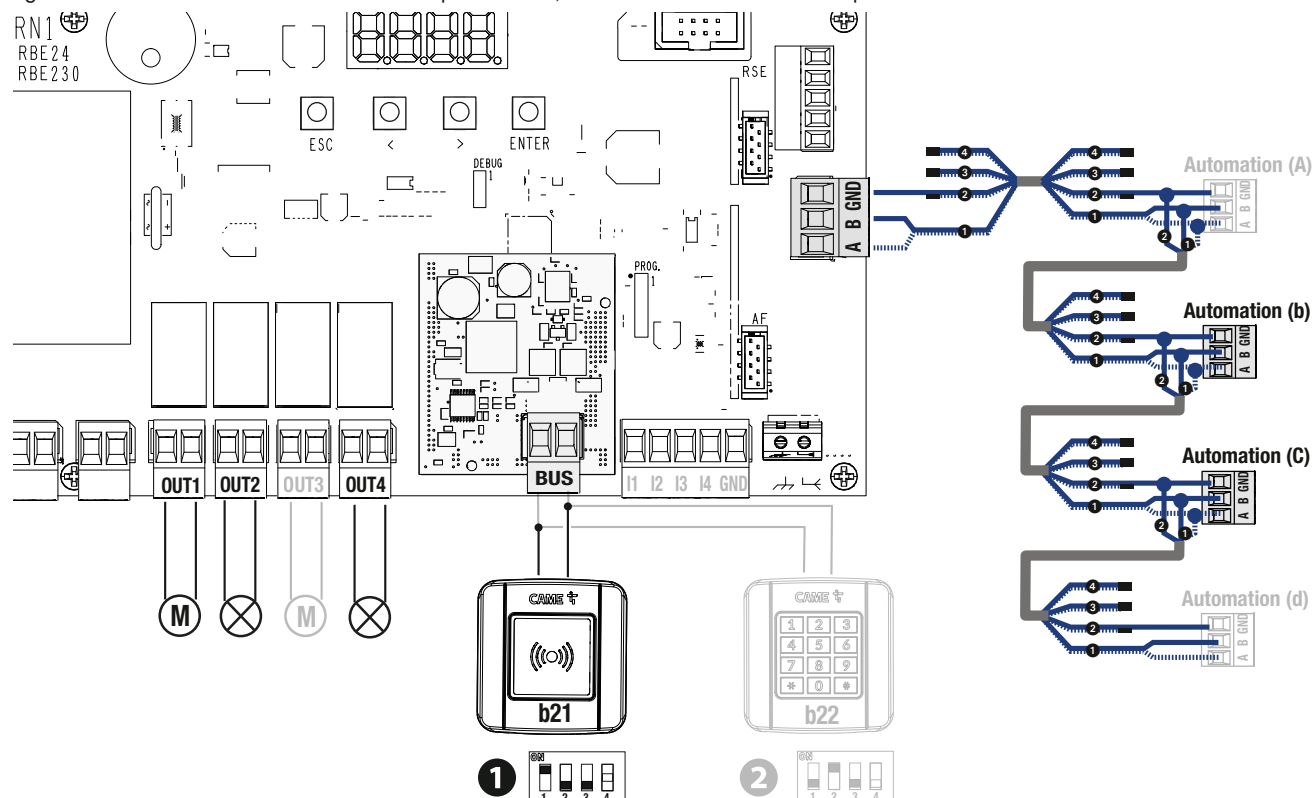
Connect the selectors (keypad and/or transponder) to the BUS terminal on the RCXN board (maximum 8 selectors).

📖 Set a different address for each selector using DIP switches 1, 2 and 3. Please see the selector manual for more information.

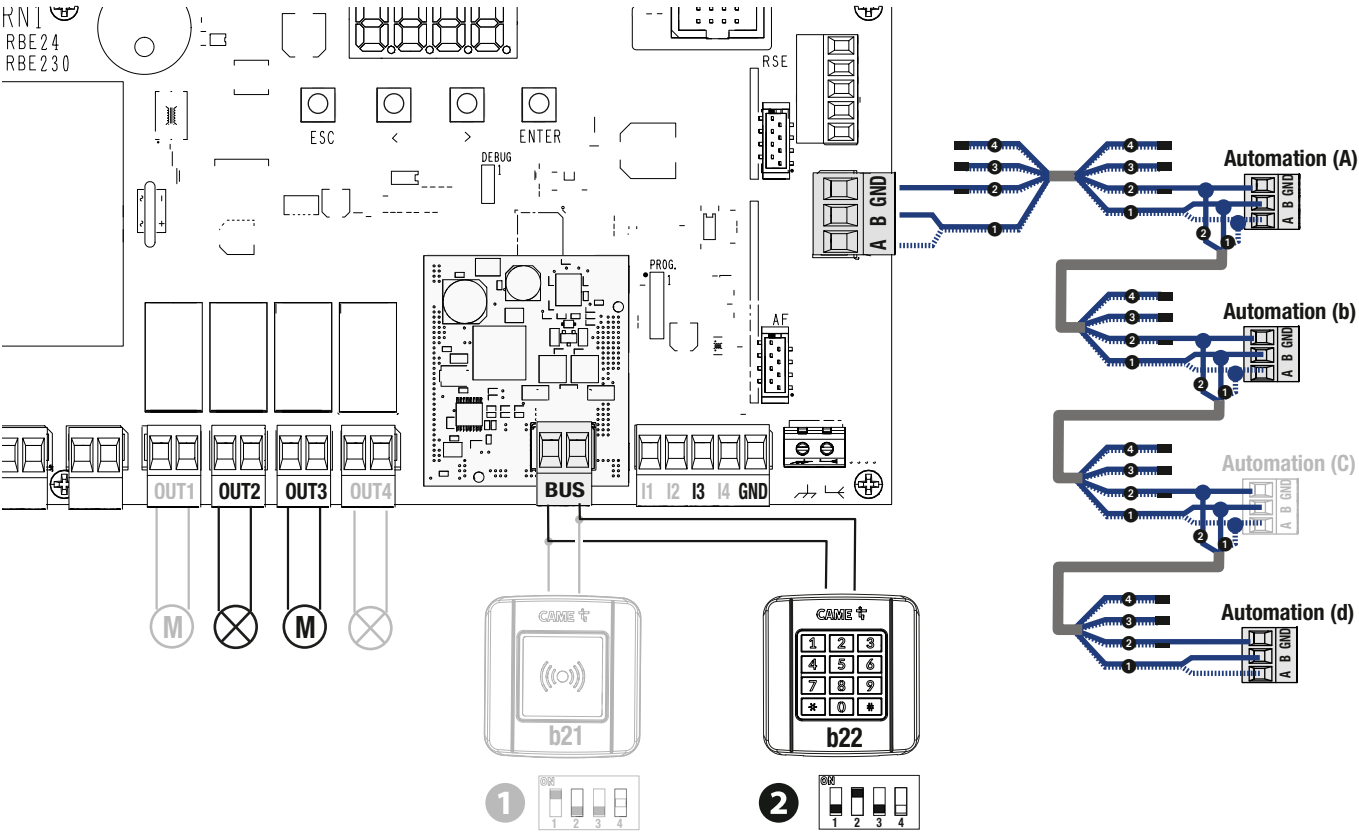


Operation

Imagine the ❶ selector commands the outputs OUT1, OUT2 and OUT4 and the operators b and C.

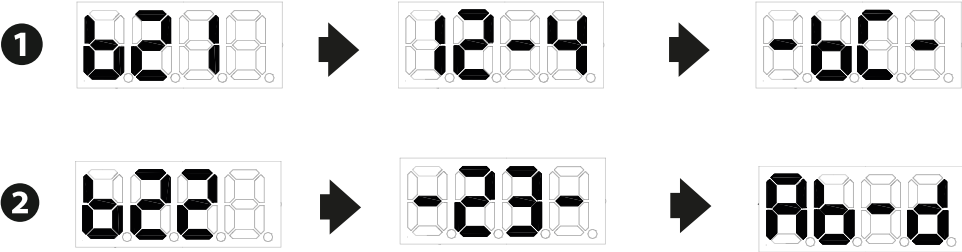


Also imagine the **2** selector commands the outputs OUT2 and OUT3 and the operators A, b and d.



Configuration

From the RBE control panel, use the programming buttons to associate the outputs and the operators with the selectors.
Each output and operator can be managed by multiple inputs.



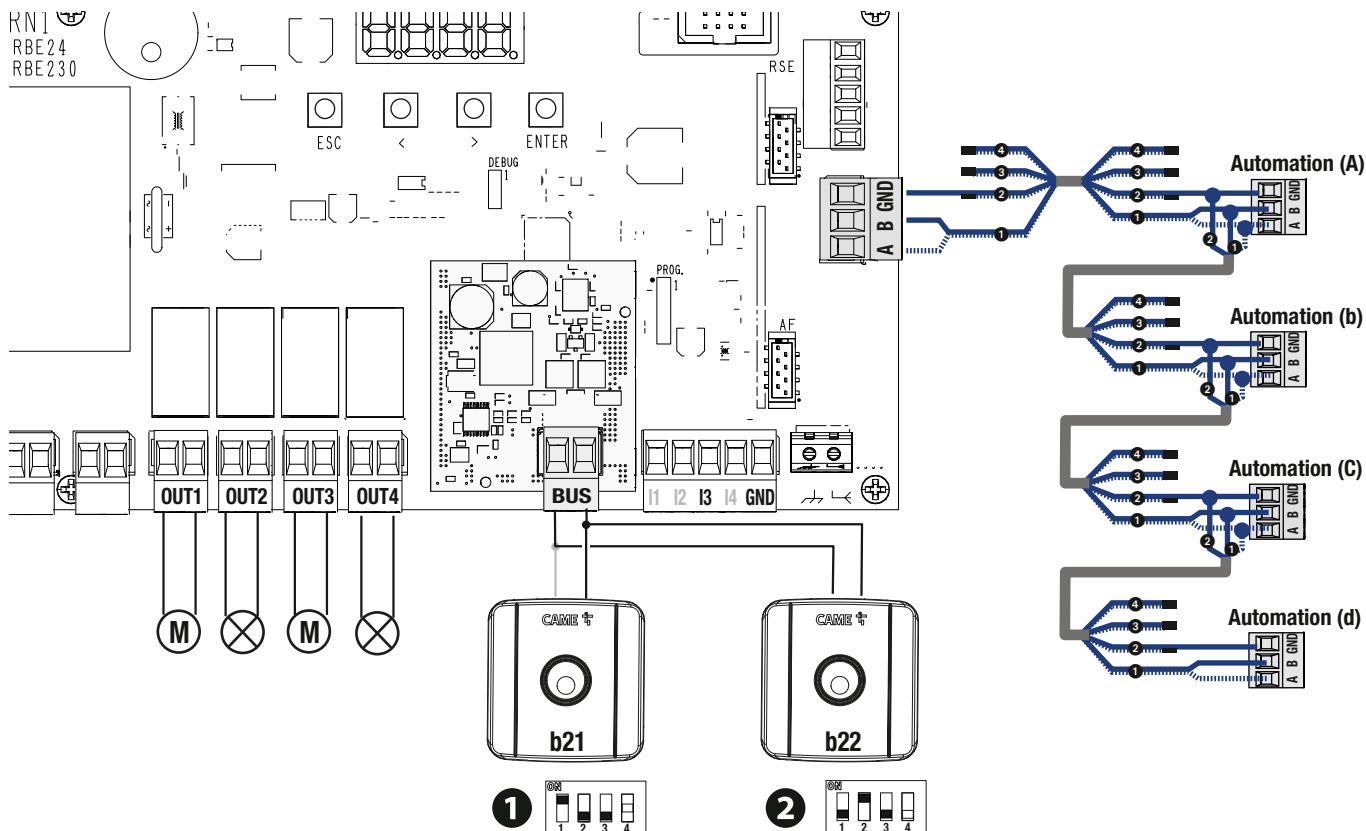
Example of a system with BUS key selectors for controlling one or more outputs and/or operators

Connections

Insert the RCXN board (not supplied) into the corresponding connector on the receiving module.

Connect the key selectors to the BUS terminal on the RCXN board (maximum 8 selectors).

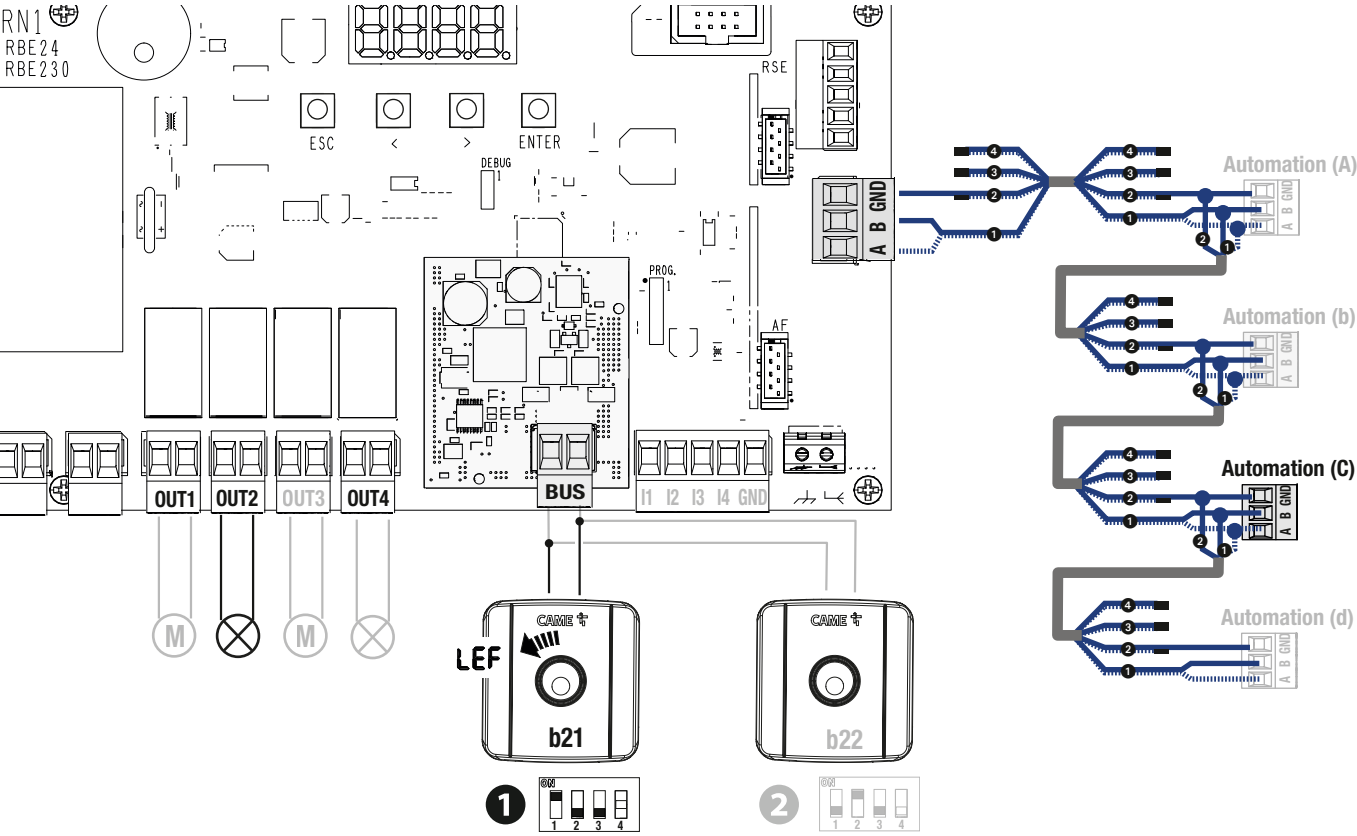
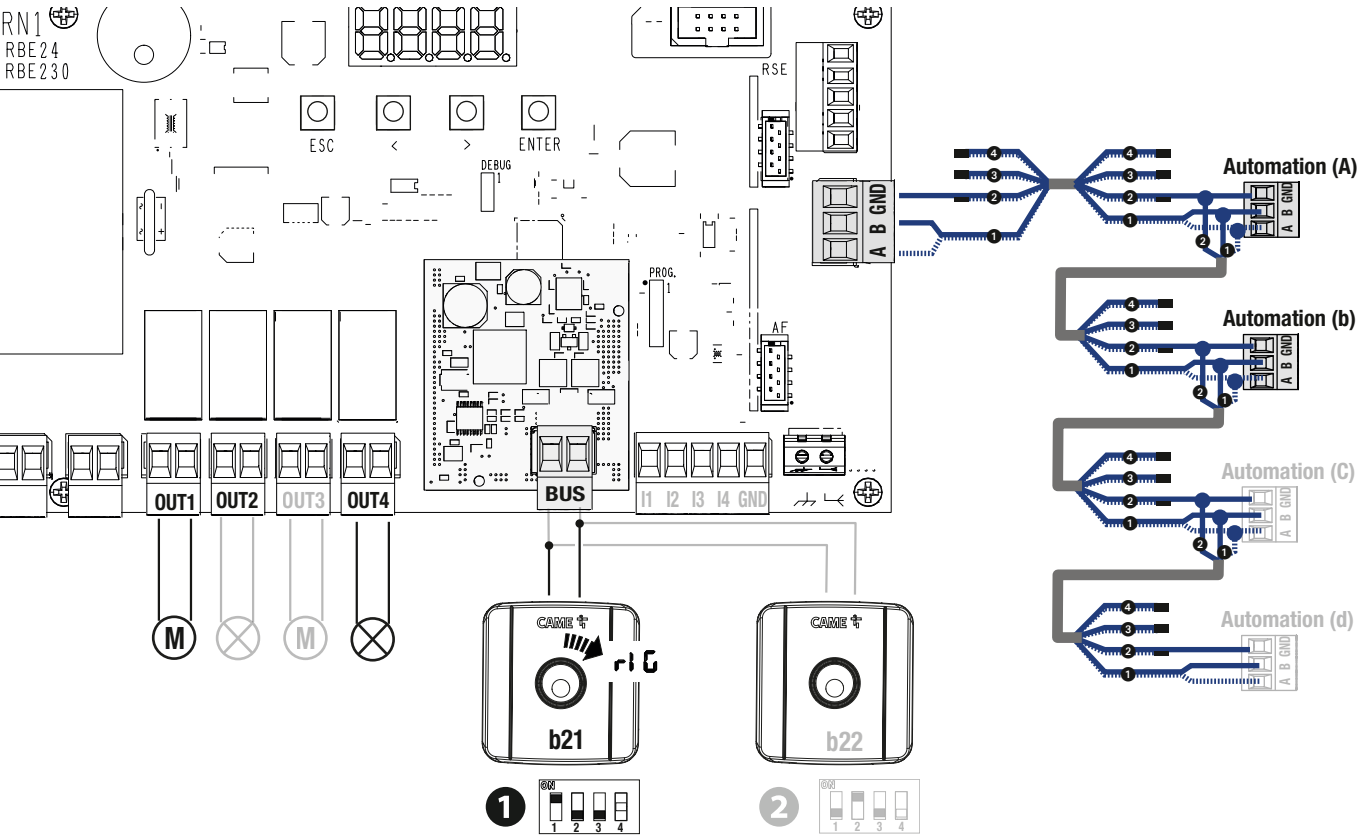
 Set a different address for each selector using DIP switches 1, 2 and 3. Please see the selector manual for more information.



Operation

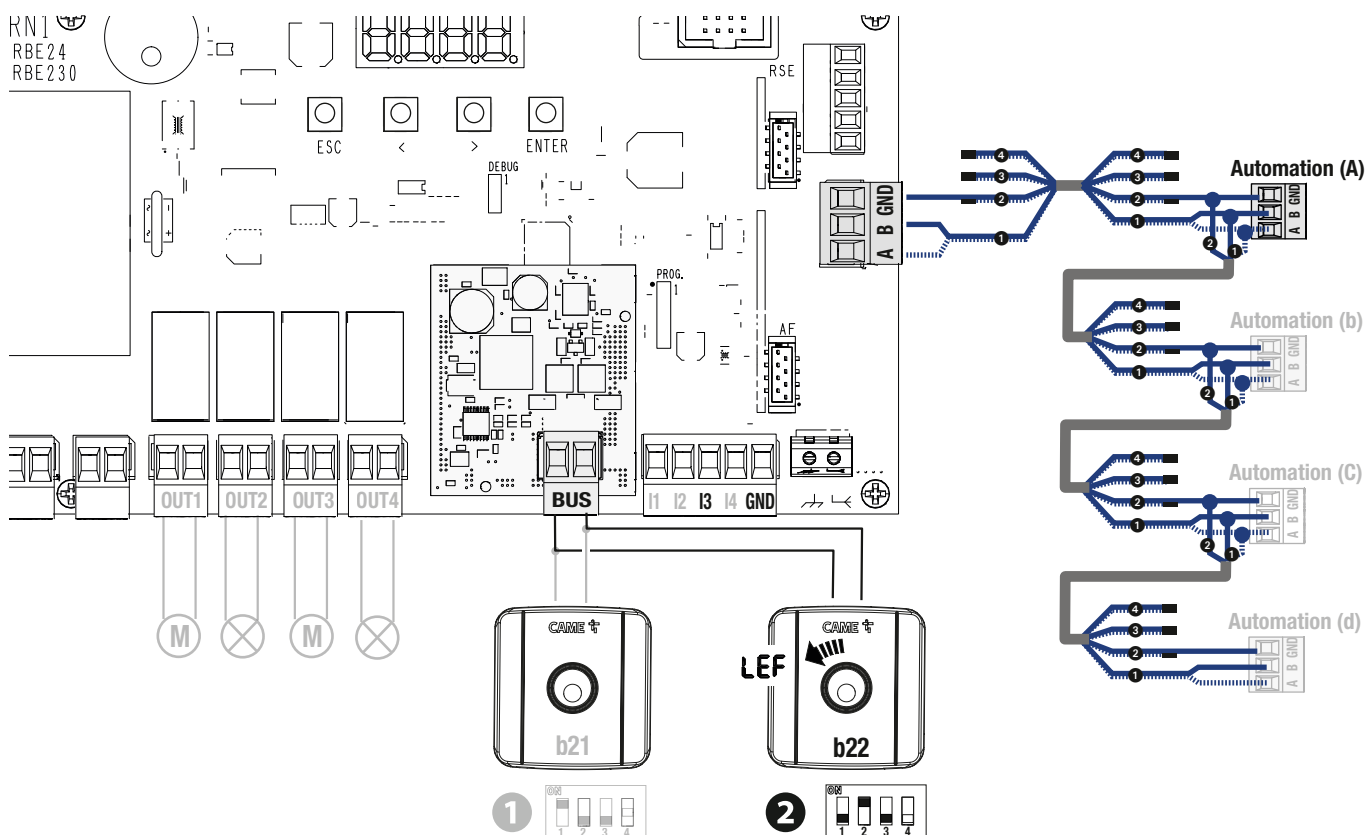
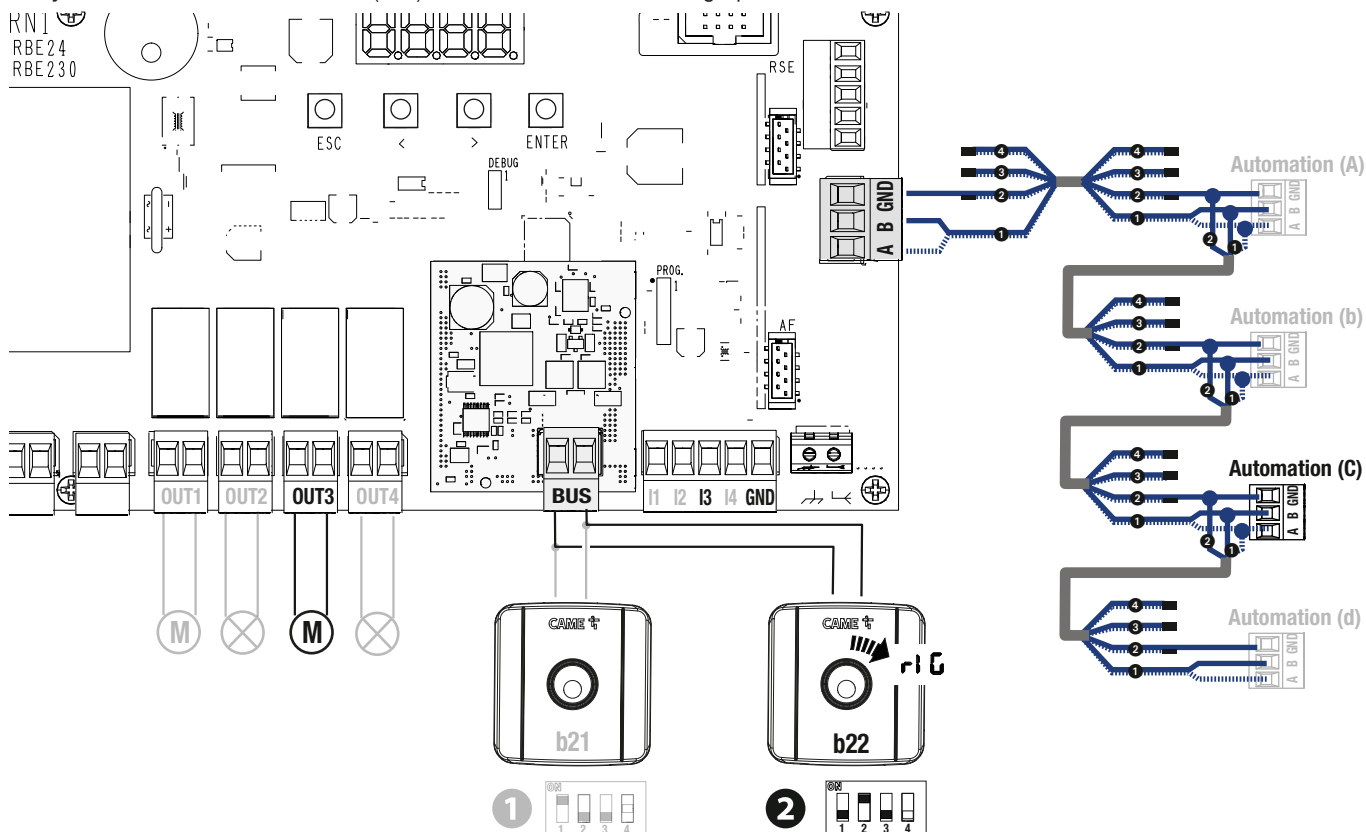
Imagine the ❶ selector is configured as follows:

- key with clockwise rotation (rIG) associated with controlling the outputs OUT1 and OUT4 and the operators A and b;
- key with anti-clockwise rotation (LEF) associated with controlling the output OUT2 and operator C.



Imagine the **2** selector is configured as:

- key with clockwise rotation (rIG) associated with controlling the output OUT3 and operator C;
- key with anti-clockwise rotation (LEF) associated with controlling operator A.

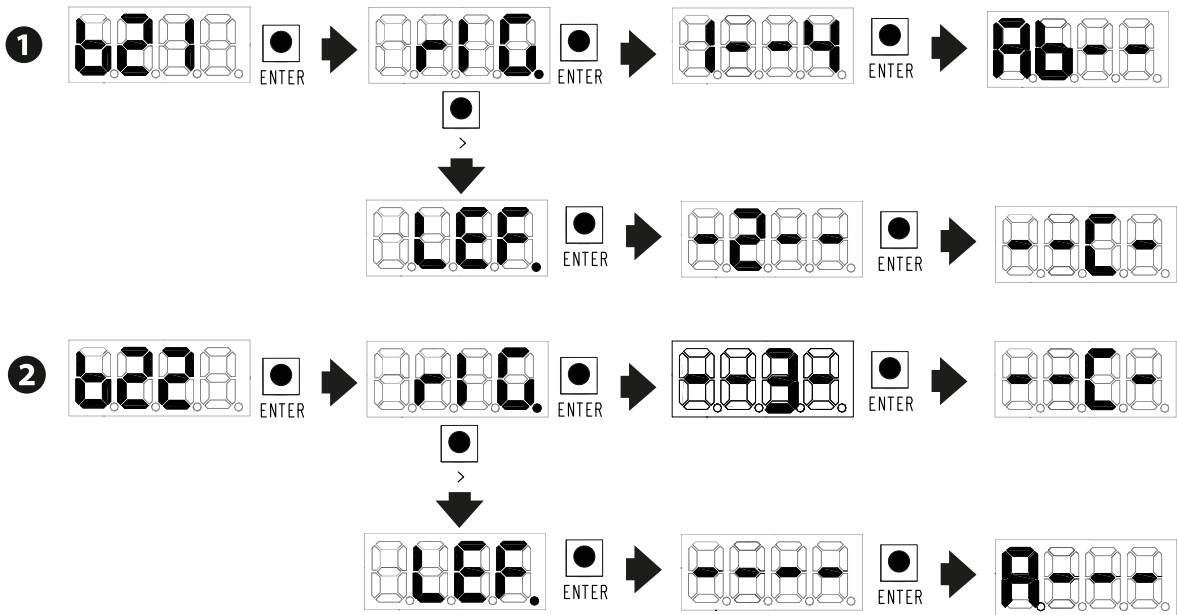


Configuration

From the RBE control panel, use the programming buttons to associate the outputs and the operators with the selectors.

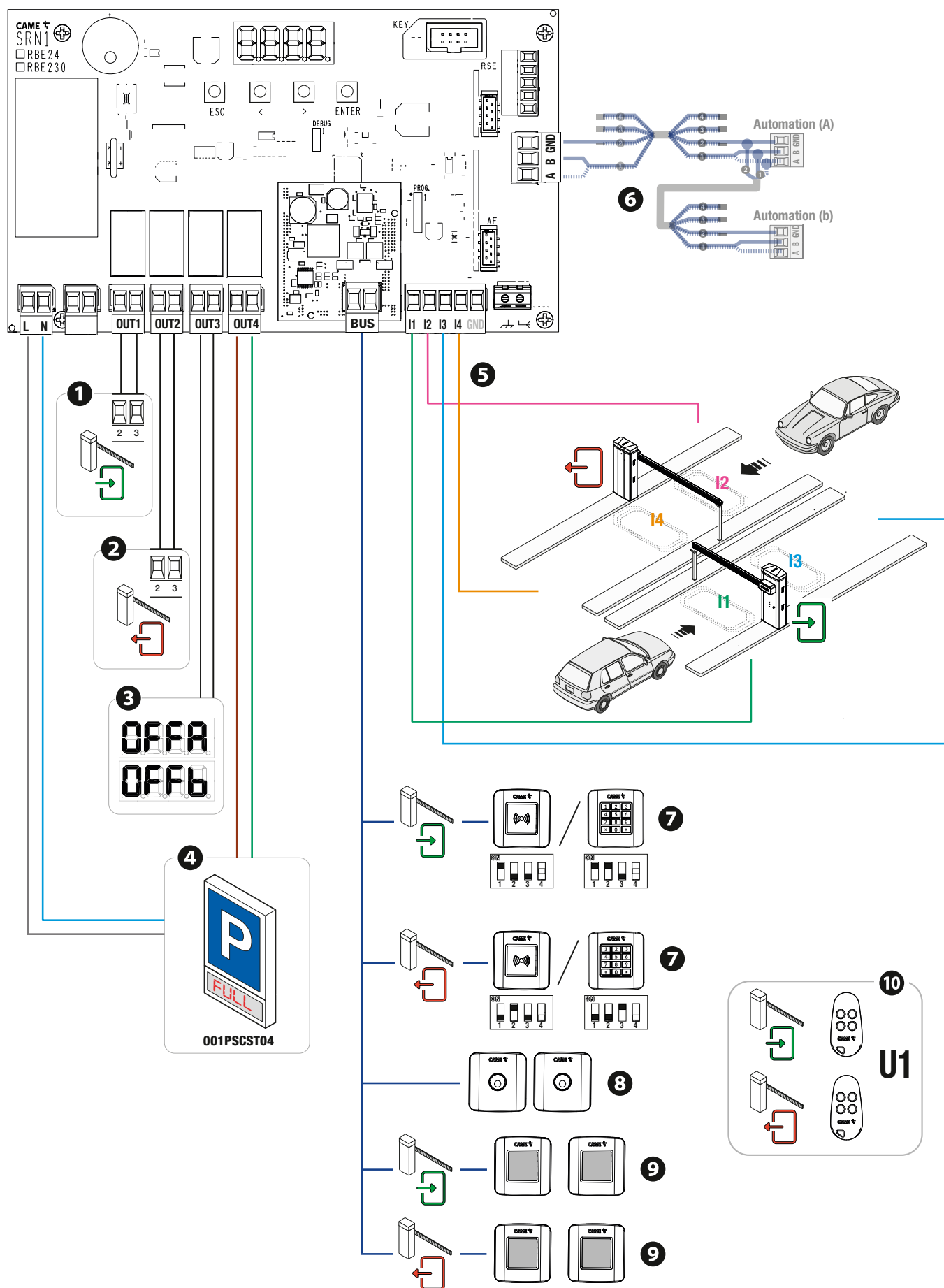
📖 Outputs/operators can be assigned according to the key turning direction.

📖 Each output and operator can be managed by multiple inputs.



RBE IN PARKING MODE (A1=1)

Select 1 in the [A1 - Operating mode] function to activate the RBE parking mode preset value. Some functions will not be available.



Key

Car park entry barrier



Car park exit barrier

Output contact**1 OUT1** - Connection to contact 2-3 (Open command) on the car park ENTRY barrier.**2 OUT2** - Connection to contact 2-3 (Open command) on the car park EXIT barrier.

Alternatively, connect the operators via CRP.

3 OUT3 - FAULT signalling output. The output activates when there is at least one operator configured. When the output is active, an error message appears on the screen for one of the following reasons:

- » If there is a fault on one of the operators or one of them is not working;
- » If the car park has been set to closed using a key selector. See point **8**.

4 OUT4 - Car park full signalling output. The output activates in one of the following cases:

- » If the value set under [F10 - Maximum number of car parking spaces] is reached;
- » If the car park has been set to closed using a key selector. See point **8**.

5 Input contact**I1** - Connection to a loop or sensor linked to the ENTRY operator ➡ Control opening of the ENTRY passage to the car park (OUT 1 or Operator A).**I2** - Connection to a loop or sensor linked to the EXIT operator ➡ Control opening of the EXIT passage from the car park (OUT 2 or Operator b).**I3** - Connection to a loop or sensor linked to the ENTRY operator ➡ Count the vehicles on ENTRY (OUT 1 or Operator A).**I4** - Connection to a loop or sensor linked to the EXIT operator ➡ Count the vehicles on EXIT (OUT 2 or Operator b).

I3 and I4 run the vehicle count only AFTER the input command has been released (for example after the vehicle has passed over the loop) and only with the barrier open.

6 CRP connection

See the [CRP connection] section about general RBE operation.

Set a CRP address from 1 to 2 for each operator.

 Alternatively, connect the operators via the OUT 1 and OUT 2 outputs as indicated in points **1** **2**.**CXN BUS connection**

See the [RCXN board (optional) for devices with BUS CXN system] section about general RBE operation.

7 Transponder/keypad selector switches

Connect one or more selector switches (transponder/keypad) for authentication at the passageways. The odd-number selector switches (DIP switch address 1, 3, 5, 7) open the car park ENTRY barrier. The even-number selector switches (DIP switch address 2, 4, 6, 8) open the car park EXIT barrier.

The selector switches can be configured with functions [b21-b28].

8 Key selectors

One or more key selectors can be connected.

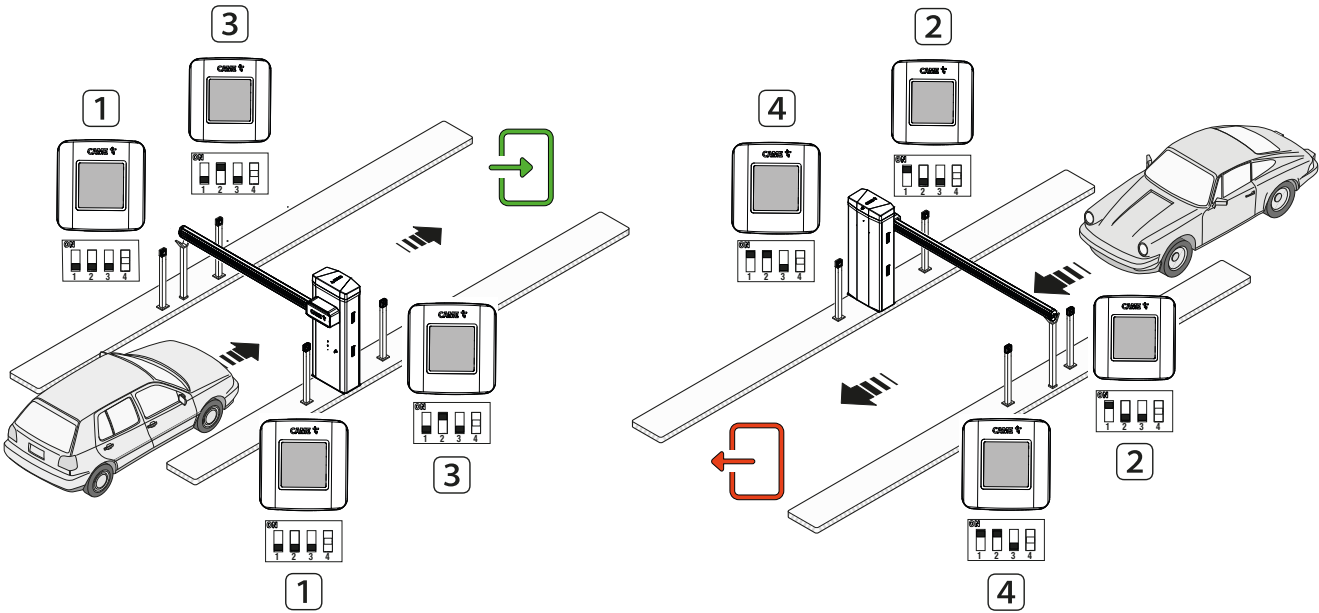
- » Key to the left = resets the car count in the car park.
- » Key to the right = closes the car park.

Closing the car park entails:

- » Closing the entry barrier;
- » Activating the OUT2 output (opening the exit barrier);
- » Activating the OUT3 output (fault) and the OUT4 output (car park full).

9 Photocells

You can connect four pairs of BUS photocells in parking mode (two on the ENTRY barrier and 2 on the EXIT barrier). The photocells will have the same function as the devices connected to the input contacts.



Photocell function	DIP switch 1	DIP switch 2	DIP switch 3
① Opening the ENTRY passage to the car park (equivalent to I1)	OFF	OFF	OFF
② Opening the EXIT passage from the car park (equivalent to I2)	ON	OFF	OFF
③ Vehicle count on ENTRY (equivalent to I3)	OFF	ON	OFF
④ Vehicle count on EXIT (equivalent to I4)	ON	ON	OFF

Transmitters

- » The remote controls associated with output 1 allow authentication and opening of the car park ENTRY barrier.
- » The remote controls associated with output 2 allow authentication and opening of the car park EXIT barrier.
- 📖 The remote controls can be configured using the [U1] function.
- 📖 The AF card that manages the transmitters must be inserted into the connector.

Select parking mode

 Only available with firmware version 2.2.1 or later.

A1	0 = Access control mode (Default) <u>1 = Parking mode</u> 2 = Traffic light mode
----	--

Functions menu

Key			
Function	Secondary menu	Parameters	Second level parameters

Setting the type of outgoing contact

Associate the type of output contact with OUT1, OUT2, OUT3 and OUT4

F1	Out.1 Out.2 Out.3 Out.4	no = Normally open contact (NO) Default nc = normally closed contact (NC) OFF = Deactivated	
----	----------------------------------	---	--

Setting the type of incoming contact

Associate the type of input contact with I1, I2, I3 and I4

F3	In .1 In .2 In .3 In .4	no = Normally open contact (NO) Default nc = normally closed contact (NC) OFF = Deactivated	
----	----------------------------------	---	--

Parking function

This function allows you to indicate the car park operating mode.

F9	0 = Car park without controlled access (Default) » The ENTRY barrier opens when a vehicle is detected (input I1 or photocell b1). » The EXIT barrier opens when a vehicle is detected (input I2 or photocell b2). 1 = Car park with controlled ENTRY » The ENTRY barrier opens only after authentication (odd-number selectors with DIP switch address 1, 3, 5, 7 or remote controls associated with output 1). » The EXIT barrier opens when a vehicle is detected (input I2 or photocell b2). 2 = Car park with controlled ENTRY with vehicle detection » The ENTRY barrier only opens after authentication (odd-number selectors with DIP switch address 1, 3, 5, 7 or remote controls associated with output 1) and after a vehicle has been detected (loop / sensor connected to input I1 or photocell b1). » The EXIT barrier opens when a vehicle is detected (input I2 or photocell b2). 3 = Car park with controlled ENTRY and EXIT » The ENTRY barrier opens only after authentication (odd-number selectors with DIP switch address 1, 3, 5, 7 or remote controls associated with output 1). » The EXIT barrier opens only after authentication (even-number selectors with DIP switch address 2, 4, 6, 8 or remote controls associated with output 2). 4 = Car park with controlled ENTRY and EXIT with vehicle detection » The ENTRY barrier only opens after authentication (odd-number selectors with DIP switch address 1, 3, 5, 7 or remote controls associated with output 1) and after a vehicle has been detected (loop / sensor connected to input I1 or photocell b1). » The EXIT barrier only opens after authentication (odd-number selectors with DIP switch address 2, 4, 6, 8 or remote controls associated with output 2) and after a vehicle has been detected (loop / sensor connected to input I2 or photocell b2).
----	--

Maximum number of car parking spaces

This function allows you to select the maximum number of car parking spaces. Once the maximum capacity has been reached, entry to the car park is no longer allowed and the illuminated sign (if connected to OUT 4) will show the car park as FULL.

F10		0 to 9999 (Default 10)	
-----	--	------------------------	--

Anti-passback

When the function is active, the barrier runs an open/close command only if the user has not already run authentication for the same command.

📖 The function can be activated only for car parks with controlled entry and exit [F9 = 3 / F9 = 4].

📖 When the anti-passback function is active, the remote controls cannot be used.

F11		OFF (Default) On	
-----	--	---------------------	--

Entry barrier always open

When the function is active, the car park entry barrier remains open when the car park has available spaces.

📖 The function can be activated only for car parks without controlled entry and exit [F9 = 0].

F12		OFF (Default) On	
-----	--	---------------------	--

CRP address

Assign a unique identification code (CRP address) to the RBE control board.

📖 The function is used where there are multiple RBEs connected to the same communication BUS via CRP.

F56		1 to 254 (Default 1)	
-----	--	----------------------	--

Serial communication speed on RSE / Aut

Set the communication speed.

RSE = Gateway connection

Aut = Operator communication

F63	rSE Aut	2 = 4800 bps 3 = 9600 bps 4 = 14400 bps 5 = 19200 bps 6 = 38400 bps (default) 7 = 57600 bps 8 = 115200 bps	
-----	------------	--	--

New user

Register up to 5,000 users, to associate with one of the outputs.

📖 The AF card that manages the transmitters must be inserted into the connector.

📖 See the section <New user> for information on how to insert it.

U1		1--- = Output 1 Transmitters for authentication on ENTERING the car park. -2-- = Output 2 Transmitters for authentication on EXITING the car park.	
----	--	---	--

Remove user

Remove one of the registered users.

 See the section <Remove user> for information on how to remove it.

U2		OFF = Cancel On = Run	
----	--	--------------------------	--

Remove all

Remove all registered users.

Select On and press the ENTER button. All stored users will appear in quick succession on the screen and, at the end, the wording [CLr] will show to confirm that all users have been deleted.

U3		OFF = Cancel On = Run	
----	--	--------------------------	--

Radio decoding

Choose the type of radio coding for the transmitters enabled to control the outputs or operators.

Select the coding from those available and press ENTER to confirm.

 If you choose [Rolling code] or [TW key block], any transmitters saved previously will be deleted.

U4		1 = All decoding (default) 2 = Rolling code 3 = TW key block	
----	--	--	--

Self-Learning Rolling

Save a new rolling code transmitter by activating acquisition from a rolling code transmitter that has already been saved. The saving and acquisition procedures are explained in the transmitter manual.

U8		OFF = Deactivated (Default) On = Activated	
----	--	---	--

Operating modes

This function allows you to change the device operating mode.

 Only available with firmware version 2.2.1 or later.

A1		0 = Access control mode (Default) 1 = Parking mode 2 = Traffic light mode	
----	--	---	--

Acquire new operators

Scan the terminals (A-B-GND) for newly connected operators.

 During scanning, the red LED remains on. Once the operation is complete, the LED switches off and starts flashing to indicate it is communicating with the operators. If an operator is not responding or is disconnected, the wording [OFF A/b/C/d] will appear on the display, according to the operator that has been disconnected.

A3		OFF = Cancel On = Run	
----	--	--------------------------	--

Parameter reset

Restore factory settings except for users, operating mode [A1] and the settings relating to operator connection via CRP.

A4		OFF = Cancel On = Run	
----	--	--------------------------	--

FW version

The function is used to display the firmware version.

Press ENTER to confirm.

H1	---		
----	-----	--	--

Enable password

Set a 4-digit password. The password will be requested to anyone who wants to access the main menu.

 See the section <Enable password> for information on how to do it.

H3		OFF = Cancel On = Run	
----	--	--------------------------	--

BUS device status

The function shows the status of all devices that can be connected to the BUS and managed by the firmware in use.
Select the device from those available and press ENTER to view the status (x).

Device status <x>

- ll = Conflicting address
- o = Working
- c = Working with alarm signal
- F = Device fault
- = No communication or not present

H4	b = BUS photocells b(1 - 8).<x> d = BUS selector d(1 - 8).<x>		
----	--	--	--

Setting the clock

Set the date and time.
When the date and time have been set, it shows for 5 seconds every time you exit the main menu.
See the “Setting the clock” section.

H5		OFF (Cancel operation) On (Run operation)	
----	--	--	--

Access log

Enable the access logs visible on CAMEConnect.

H6		OFF = Deactivated (Default) On = Activated	
----	--	---	--

No. of vehicles

Show the number of vehicles in the car park on the board display and on CAMEConnect. The number of vehicles can be changed.

H7	----		
----	------	--	--

Factory reset

To restore the electronic board data to factory settings:

Disconnect the control board from the power supply and wait for it to switch off.

Press and hold the < and > buttons, then reconnect the control board to the power supply.

Continue to press and hold the < > buttons until **[ON/OFF]** is displayed.

Select **[ON]**.

Press **ENTER** to confirm.

 When you reset the control board, all saved users, set times, manoeuvre configurations and calibration operations are deleted.

New user

① Press the ENTER key to enter programming.

② Select the function U1 and press ENTER to confirm.

③ Choose an output to associate with the user: 1 = OUT1 or 2 = OUT2. Press Enter to confirm.

 Choose the OUT1 output to associate a selector switch (transponder or keypad); choose OUT1 or OUT2 to associate the transmitter button.

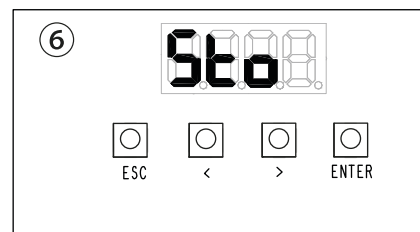
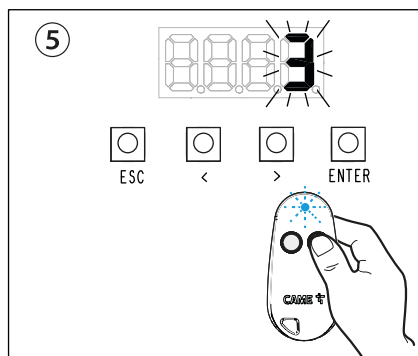
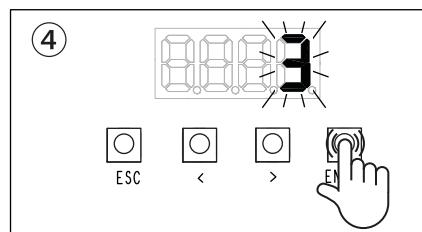
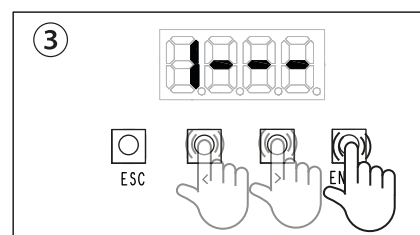
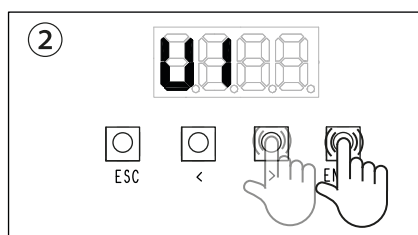
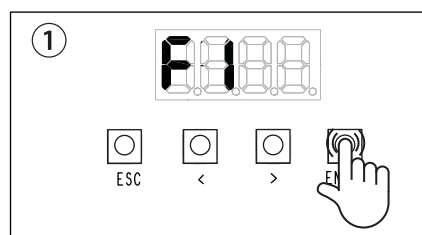
④ The first available position for storing will appear on the screen.

 The available positions are the ones with flashing numbers.

⑤ Within 10 seconds, send the code from the selector (transponder or keypad) or the transmitter.

⑥ [Sto] will appear on the screen for a few seconds to confirm the data has been stored.

Repeat the procedure to add other users.



Remove user

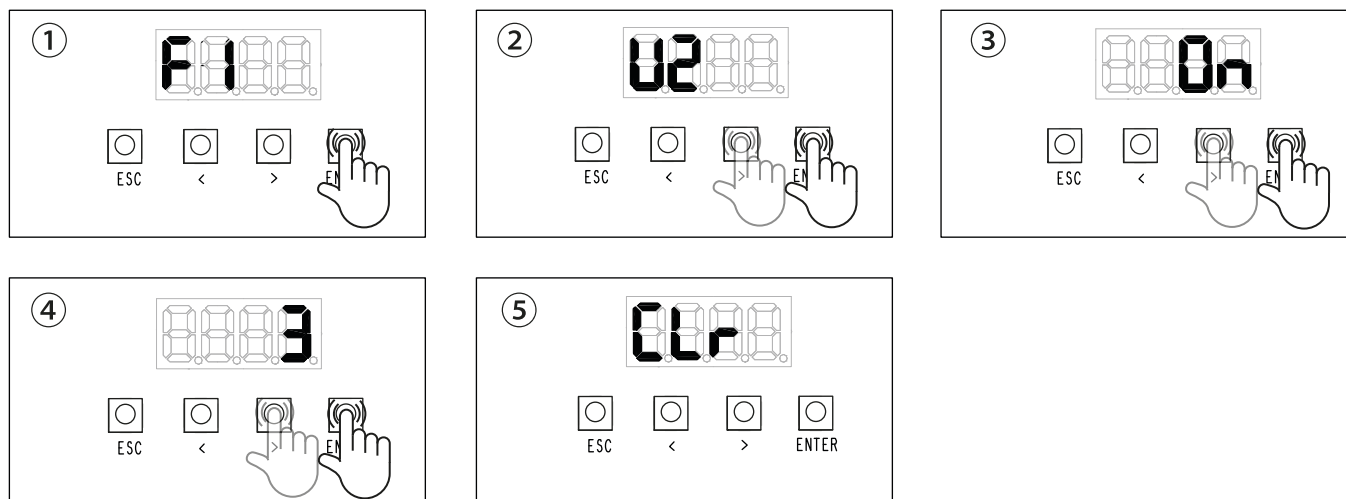
- ① Press the ENTER key to enter programming.
- ② Select the function U2 and press ENTER to confirm.
- ③ Select On and press the ENTER button again.
- ④ Select the user to be deleted and press ENTER

📖 Alternatively, you can select a user by sending a command from the associated device or transmitter.

- ⑤ [CLr] will appear on the screen for a few seconds to confirm the selected user has been deleted.

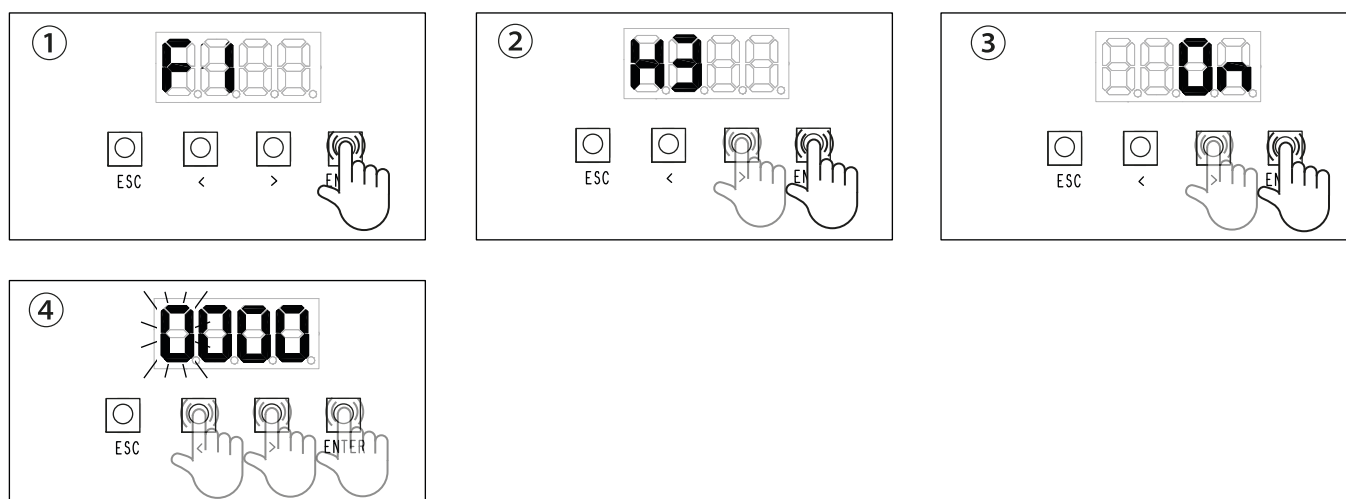
📖 The number associated with the deleted user will start flashing to indicate the position is available.

Once the operation is complete, repeat the procedure for another user or press the ESC button to exit the procedure.



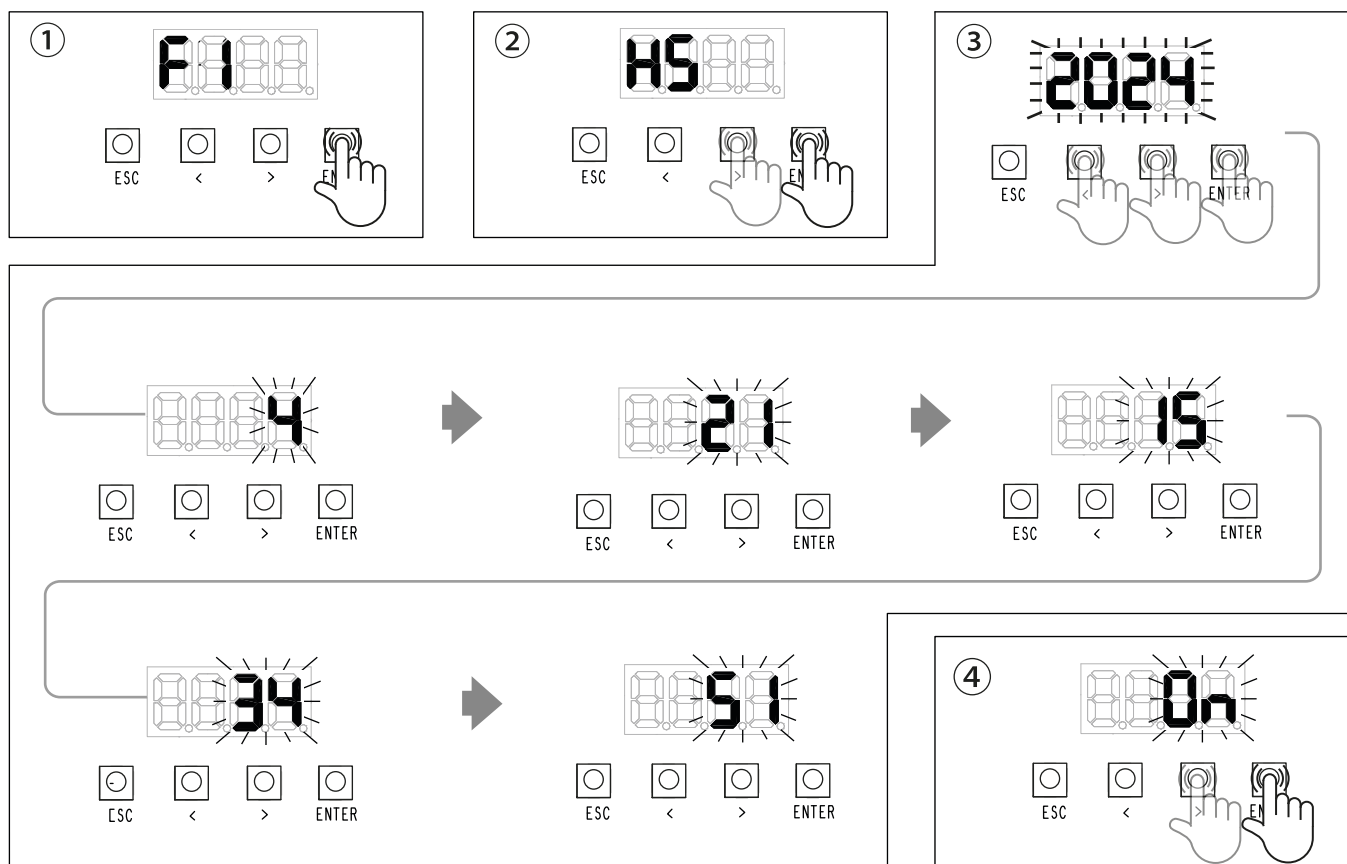
Setting the password

- ① Press the ENTER key to enter programming
- ② Select the function H3 and press ENTER to confirm.
- ③ Select On and press the ENTER button again.
- ④ Use the arrows and Enter to enter the password. Use the arrows to increase or decrease the number and Enter to confirm. Repeat the enter password procedure.



Setting the clock

- ① Press the ENTER key to enter programming
- ② Select the function H5 and press ENTER to confirm.
- ③ Use the arrows and Enter to set the date (year, month and day) and then the time (hours, minutes and seconds).
- ④ OFF will appear on the display. Use the arrow buttons, select On and press ENTER to enable automatic DST (daylight saving time setting).



If the device is connected to CAMEConnect, the date and time are configured automatically every 24 hours set following installation.

Configuration examples

Key

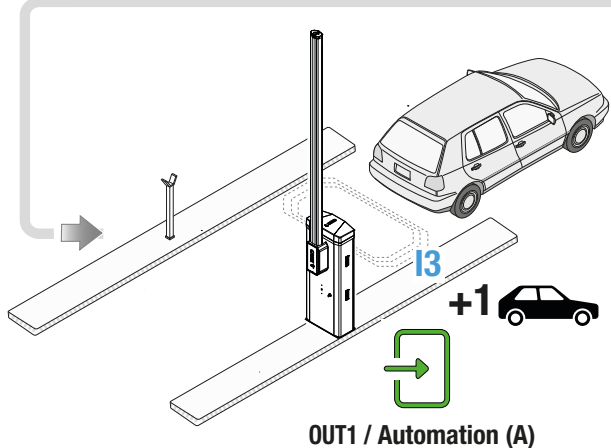
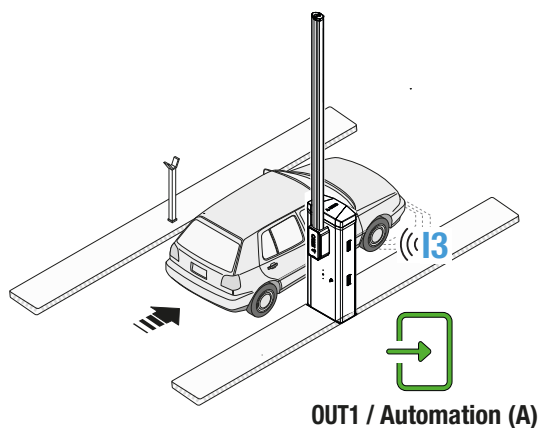
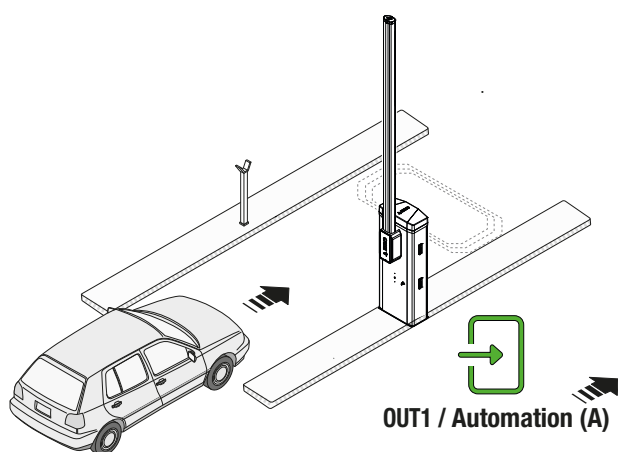


Car park entry barrier

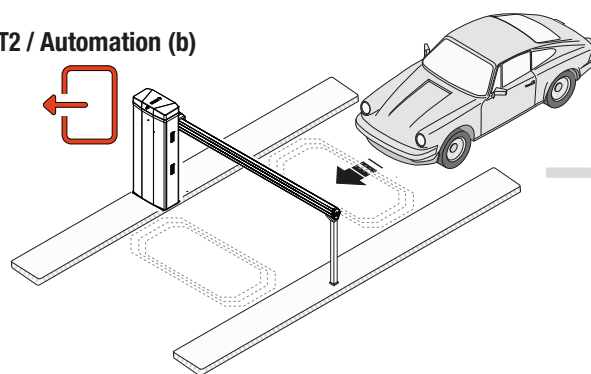


Car park exit barrier

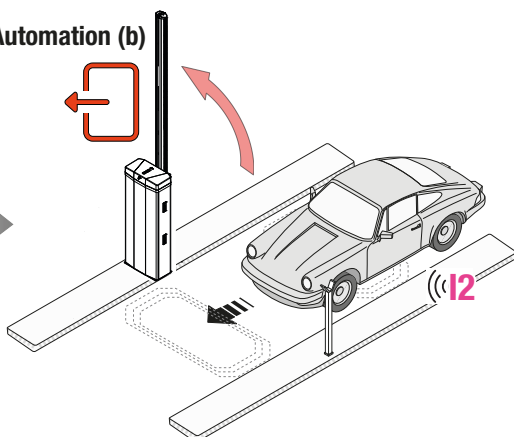
F9 = 0 (Car park without controlled access) / F12 = 0N



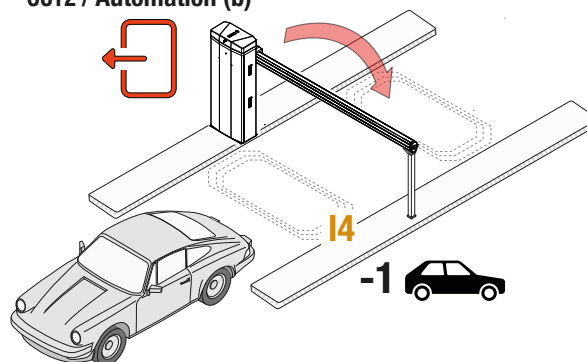
OUT2 / Automation (b)



OUT2 / Automation (b)

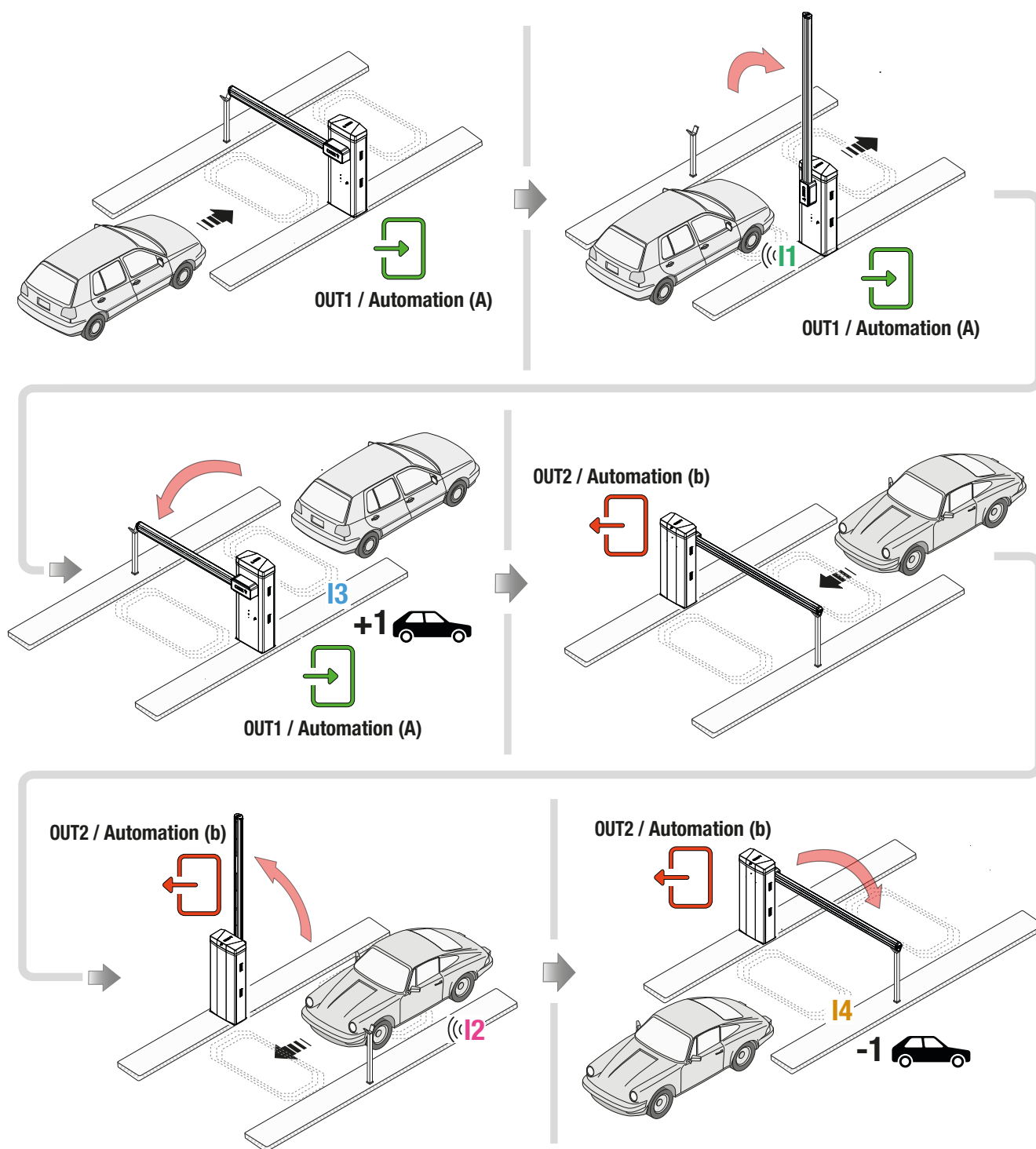


OUT2 / Automation (b)



- » If the car park is not full, the ENTRY barrier is always open.
- » When the command on input I3 is released, the vehicle count in the car park increases.
- » When the loop or sensor sends a command to input I2, the car park EXIT barrier opens.
- » When the command on input I4 is released, the EXIT barrier closes and the vehicle count in the car park decreases.

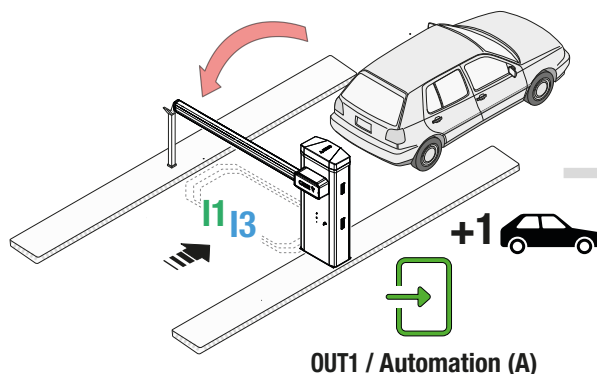
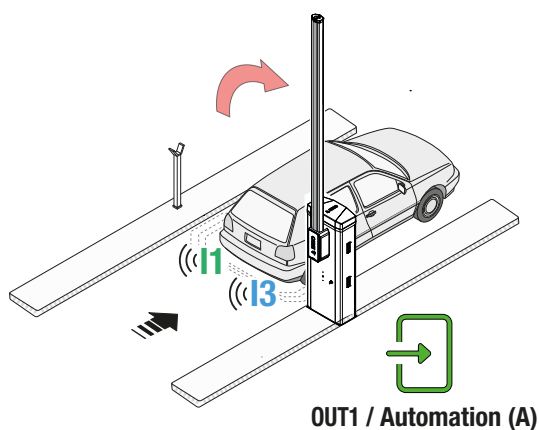
F9 = 0 (Car park without controlled access) / F12 = OFF



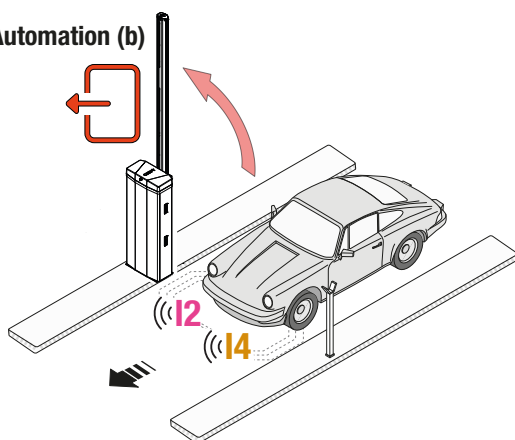
- » When the loop or sensor sends the command to input I1, the car park ENTRY barrier opens (if the car park is not full).
- » When the command on input I3 is released, the ENTRY barrier closes and the vehicle count in the car park increases.
- » When the loop or sensor sends a command to input I2, the car park EXIT barrier opens.
- » When the command on input I4 is released, the EXIT barrier closes and the vehicle count in the car park decreases.

F9 = 0 (Car park without controlled access) with one loop/sensor on entry and exit

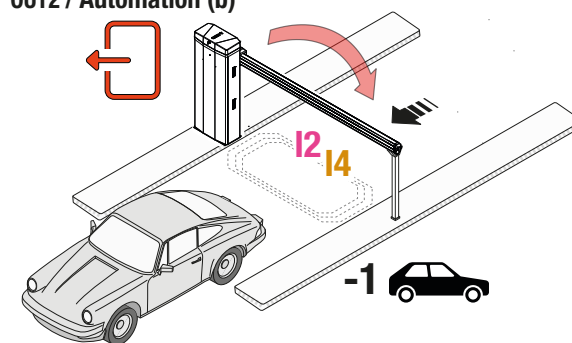
 In this configuration example, F12 is set to OFF.



OUT2 / Automation (b)



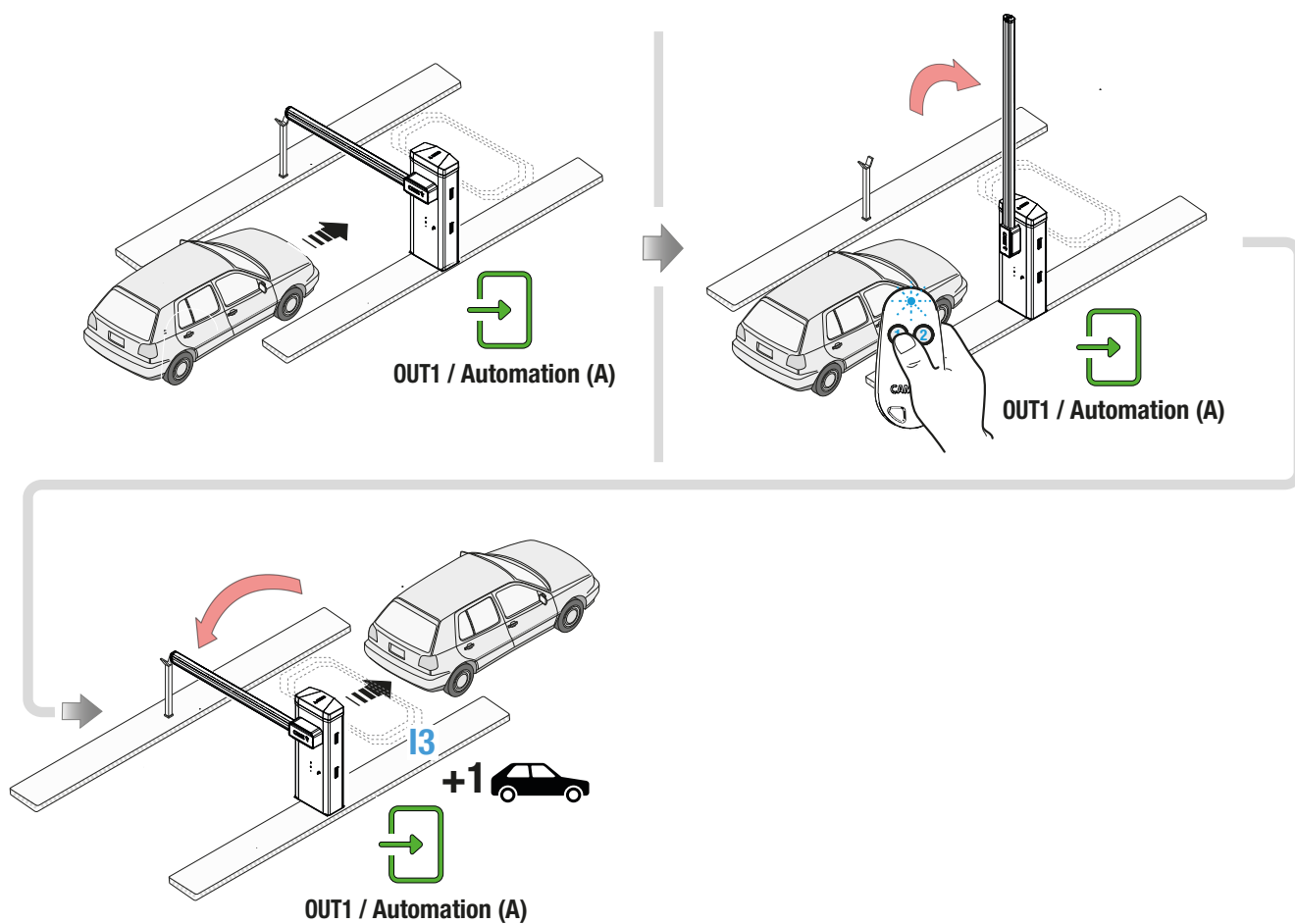
OUT2 / Automation (b)



You can only use one ENTRY loop/sensor (inputs I1-I3) and one EXIT loop (input I2-I4) for the car park. Short-circuit the two inputs (I1 with I3 and I2 with I4).

 The car park will operate as in the example: [F9 = 0 (Car park without controlled access) / F12 = OFF]

F9 = 1 (Car park with controlled ENTRY)

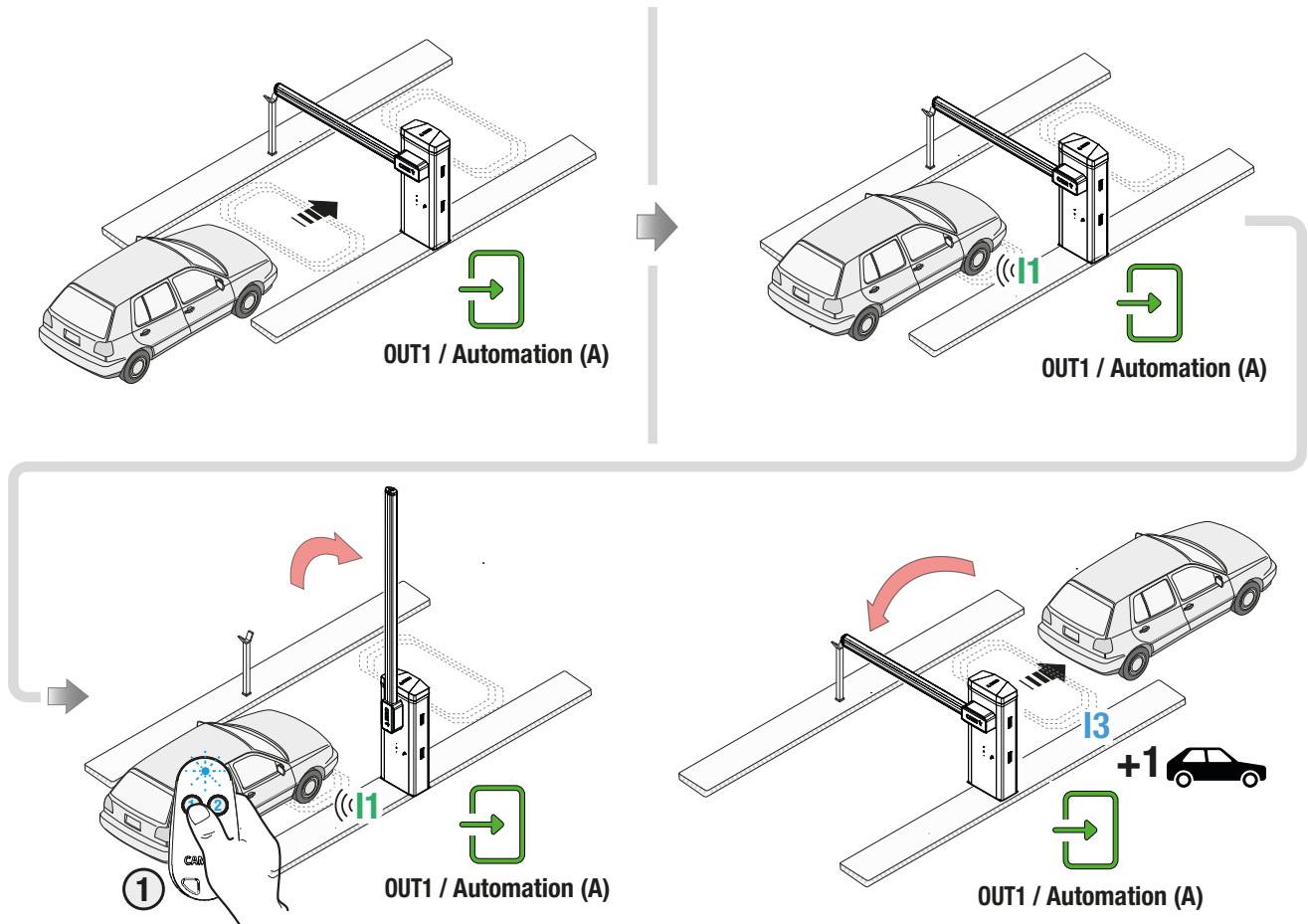


The ENTRY barrier only opens when one of the following conditions is met:

- » a 1 command is sent via a registered transmitter. The remote control must be configured with Output 1.
- » a valid code is entered on a keypad selector configured with an odd-number DIP switch address.
- » a valid ID card is presented on a transponder selector switch configured with an odd-number DIP switch address.

The EXIT barrier operates in the same way as in the example [F9 = 0 (Car park without controlled access) / F12 = OFF].

F9 = 2 (Car park with controlled ENTRY with vehicle detection)

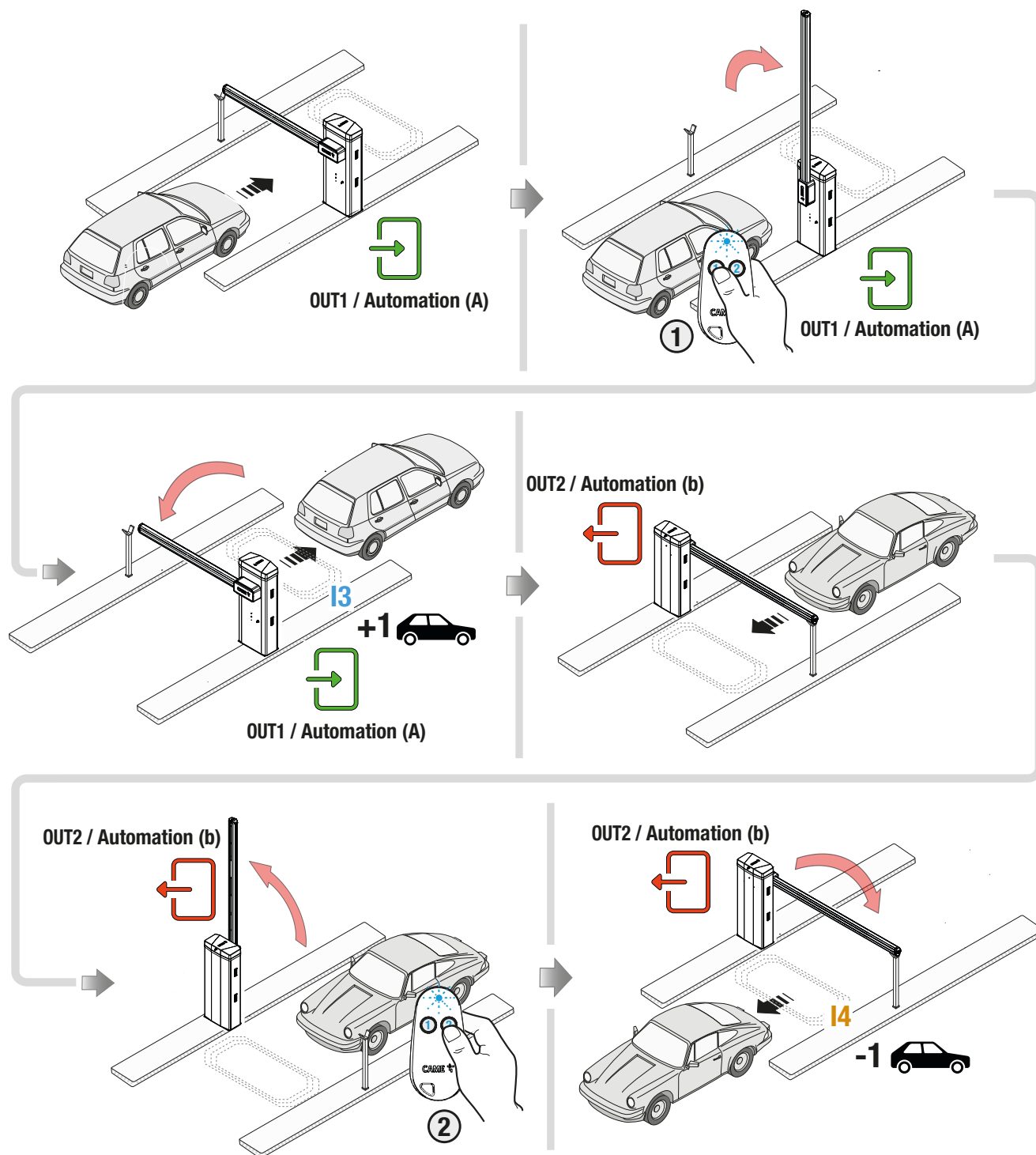


The ENTRY barrier only opens when a vehicle is detected via input I1 and when one of the following conditions is met:

- » a 1 command is sent via a registered transmitter. The remote control must be configured with Output 1.
- » a valid code is entered on a keypad selector configured with an odd-number DIP switch address.
- » a valid ID card is presented on a transponder selector switch configured with an odd-number DIP switch address.

The EXIT barrier operates in the same way as in the example [F9 = 0 (Car park without controlled access) / F12 = OFF].

F9 = 3 (Car park with controlled ENTRY and EXIT)



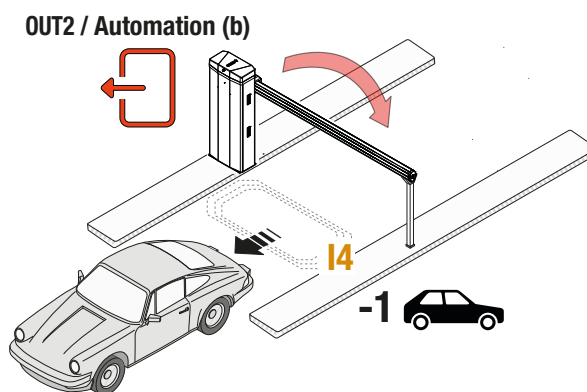
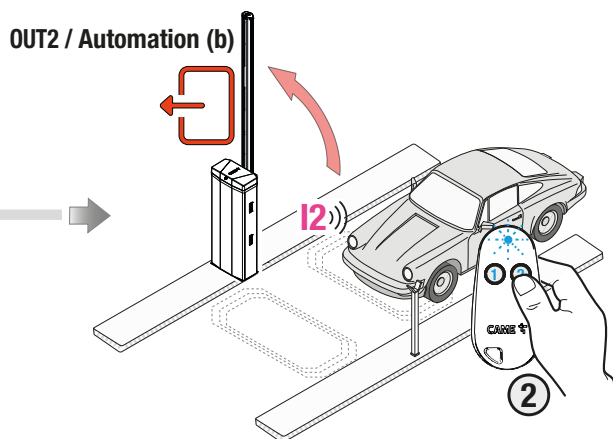
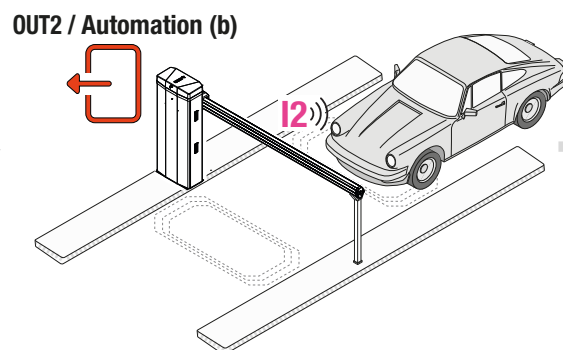
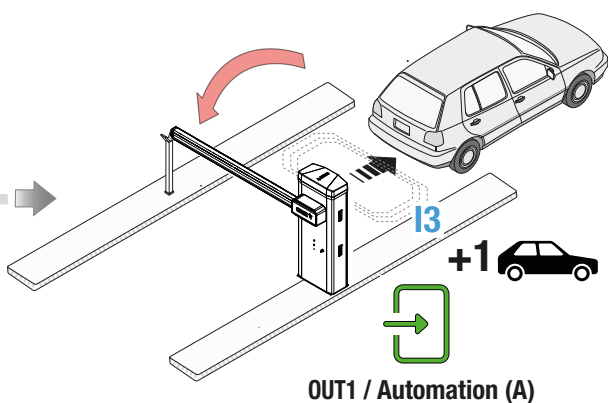
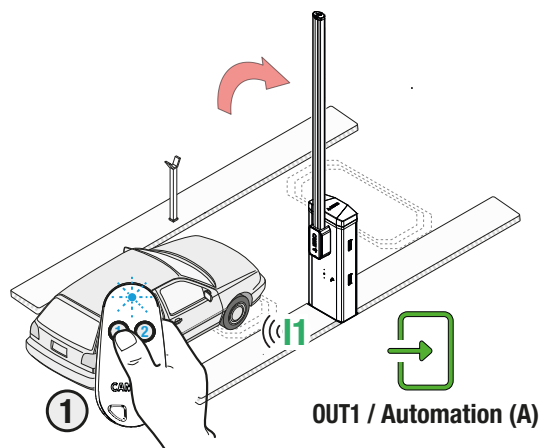
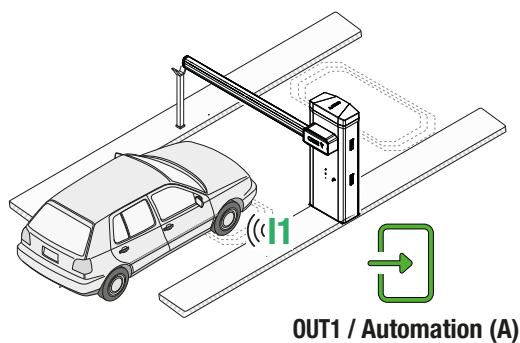
The ENTRY barrier only opens when one of the following conditions is met:

- » a 1 command is sent via a registered transmitter. The remote control must be configured with Output 1.
- » a valid code is entered on a keypad selector configured with an odd-number DIP switch address.
- » a valid ID card is presented on a transponder selector switch configured with an odd-number DIP switch address.

The EXIT barrier only opens when one of the following conditions is met:

- » a 2 command is sent via a registered transmitter. The remote control must be configured with Output 2.
- » a valid code is entered on a keypad selector configured with an even-number DIP switch address.
- » a valid ID card is presented on a transponder selector switch configured with an even-number DIP switch address.

F9 = 4 (Car park with controlled ENTRY and EXIT with vehicle detection)



The ENTRY barrier only opens when a vehicle is detected via input I1 and when one of the following conditions is met:

- » a 1 command is sent via a registered transmitter. The remote control must be configured with Output 1.
- » a valid code is entered on a keypad selector configured with an odd-number DIP switch address.
- » a valid ID card is presented on a transponder selector switch configured with an odd-number DIP switch address.

The EXIT barrier only opens when a vehicle is detected via input I2 and when one of the following conditions is met:

- » a 2 command is sent via a registered transmitter. The remote control must be configured with Output 2.
- » a valid code is entered on a keypad selector configured with an even-number DIP switch address.
- » a valid ID card is presented on a transponder selector switch configured with an even-number DIP switch address.

Output contact

Use the OUT output contacts to connect the two-light traffic lights (max. 2 devices).

- » Traffic light 1 connected to OUT1 (green) - OUT2 (red)
- » Traffic light 2 connected to OUT3 (green) - OUT4 (red)

Input contact

- » Connect a loop or sensor to I1 for vehicle detection. ➡ Passage reserved on traffic light 1.
- » Connect a loop or sensor to I2 for vehicle detection. ➡ Passage reserved on traffic light 2.
- » Connect a loop or sensor to I3 for vehicle detection. ➡ Passage verification confirmation for passage 1 (optional).
- » Connect a loop or sensor to I4 for vehicle detection. ➡ Passage verification confirmation for passage 2 (optional).

CRP connection

Set a CRP address from 1 to 4 for each operator.

📖 See the [CRP connection] section about general RBE operation.

CXN BUS connection

📖 See the [RCXN board (optional) for devices with BUS CXN system] section about general RBE operation.

You can use auxiliary safety devices (photocells), command devices (selector switches) or remote controls to reserve the passage (green light). Command devices and remote controls can also manage all programmed access control functions.

Connectable devices:

- » A pair of photocells for 1 and a pair for 2.
- » One or more selector switches for each passage. The odd-number selector switches (DIP switch address 1, 3, 5, 7) reserve passage 1. The even-number selector switches (DIP switch address 2, 4, 6, 8) reserve passage 2.

📖 The selector switches can be configured with functions [b21-b28].

Transmitters

- » The remote controls associated with outputs 1-2 allow you to reserve passage 1.
- » The remote controls associated with outputs 3-4 allow you to reserve passage 2.

📖 The remote controls can be configured using the [U1] function.

📖 The AF card that manages the transmitters must be inserted into the connector.

Select traffic light mode

 Only available with firmware version 2.2.1 or later.

A1	0 = Access control mode (Default) 1 = Parking mode <u>2 = Traffic light mode</u>
----	--

Functions menu

Key			
Function	Secondary menu	Parameters	Second level parameters

Setting the type of outgoing contact

Associate the type of output contact with OUT1, OUT2, OUT3 and OUT4

F1	Out.1 Out.2 Out.3 Out.4	no = Normally open contact (NO) Default nc = normally closed contact (NC) OFF = Deactivated	
----	----------------------------------	---	--

Setting the type of incoming contact

Associate the type of input contact with I1, I2, I3 and I4

F3	In .1 In .2 In .3 In .4	no = Normally open contact (NO) Default nc = normally closed contact (NC) OFF = Deactivated	
----	----------------------------------	---	--

Traffic light operation

This function allows you to indicate the traffic light operating mode.

F5	0 = Green can be reserved in direction  1 (red by default); traffic light  2 always green. If a reservation request is made on  1, after a hardwired time of 2 seconds,  2 switches to red. After the time set on [F8],  1 switches to green. 1 = Green can be reserved in both directions (traffic lights  1 and  2 red by default). 2 = Fixed time. Red and green alternate cyclically in both directions according to the time set on [F6] and [F7]. 3 = Fixed time with reservation in both directions. Red and green alternate cyclically in both directions according to the time set on [F6] and [F7]. If a reservation request is made, after 2 seconds the opposite direction to the request switches to red. If the reservation request is made in the direction where the traffic light is green, the green cycle time count restarts.	
----	---	--

Traffic light green cycle time 1

Use the function to set the duration of the green light on traffic light 1.

 The remaining cycle time is shown on the display.

F6		10 to 240 seconds (default 30 seconds)	
----	--	--	--

Traffic light green cycle time 2

Use the function to set the duration of the green light on traffic light 2.

The remaining cycle time is shown on the display.

F7		10 to 240 seconds (default 30 seconds)	
----	--	--	--

Time to free up manoeuvring zone

Set the time to free up the manoeuvring zone (both traffic lights show red at the same time).

F8		0 to 60 seconds (default 3 seconds)	
----	--	-------------------------------------	--

CRP address

Assign a unique identification code (CRP address) to the RBE control board.

The function is used where there are multiple RBEs connected to the same communication BUS via CRP.

F56		1 to 254 (Default 1)	
-----	--	----------------------	--

Serial communication speed on RSE / Aut

Set the communication speed.

RSE = Gateway connection

Aut = Operator communication

F63	rSE	2 = 4800 bps	
	Aut	3 = 9600 bps	
		4 = 14400 bps	
		5 = 19200 bps	
		6 = 38400 bps (default)	
		7 = 57600 bps	
		8 = 115200 bps	

Associating a BUS selector (keypad or transponder) with one or more operators

Use a selector switch (keypad or transponder) to reserve the passage (green light) and/or to control one or more operators.

The function only appears if there are one or more BUS selectors connected to the RCXN board (not supplied).

b21 = Selector 1, b22 = Selector 2,, b28 = Selector 8

b21		1234 = Outputs 1, 2, 3 and 4	AbCd = All operators
b22		---- = No output	---- = No operator
b23		1--- = Output 1	A--- = Operator A
b24		-2-- = Output 2	-b-- = Operator b
b25		12-- = Outputs 1 and 2	Ab-- = Operators A and b
b26		--3- = Output 3	--C- = Operator C
b27		1-3- = Outputs 1 and 3	A-C- = Operators A and C
b28		-23- = Outputs 2 and 3	-bC- = Operators b and C
		123- = Outputs 1, 2 and 3	AbC- = Operators A, b and C
		---4 = Output 4	---d = Operator d
		1--4 = Outputs 1 and 4	A--d = Operators A and d
		-2-4 = Outputs 2 and 4	-b-d = Operators b and d
		12-4 = Outputs 1, 2 and 4	Ab-d = Operators A, b and d
		--34 = Outputs 3 and 4	--Cd = Operators C and d
		1-34 = Outputs 1, 3 and 4	A-Cd = Operators A, C and d
		-234- = Outputs 2, 3 and 4	-bCd = Operators b, C and d

New user

You can register up to 5,000 users, to associate with the outputs and operators for passage 1 or 2.

 The parameters (AbCd) identifying the operators only appear if they are connected to the RBE control panel.

 The AF card that manages the transmitters must be inserted into the connector.

 See the section <New user> for information on how to insert it.

U1

12-- = Outputs 1 and 2
For remote controls that allow reservation requests for passage 1.
--34 = Outputs 3 and 4
For remote controls that allow reservation requests for passage 2.
1234 = Outputs 1, 2, 3 and 4
For selector switches (keypads/transponders) that allow reservation requests for passages 1 2.
---- = No output

A--- = Operator A
-b-- = Operator b
--C- = Operator C
---d = Operator d
Ab-- = Operators A and b
A-C- = Operators A and C
-bC- = Operators b and C
AbC- = Operators A, b and C
A--d = Operators A and d
-b-d = Operators b and d
Ab-d = Operators A, b and d
--Cd = Operators C and d
A-Cd = Operators A, C and d
-bCd = Operators b, C and d
AbCd = All operators
---- = No operator

Remove user

Remove one of the registered users.

 See the section <Remove user> for information on how to remove it.

U2

OFF = Cancel
On = Run

Remove all

Remove all registered users.

Select On and press the ENTER button. All stored users will appear in quick succession on the screen and, at the end, the wording [CLr] will show to confirm that all users have been deleted.

U3

OFF = Cancel
On = Run

Radio decoding

Choose the type of radio coding for the transmitters enabled to control the outputs or operators.

Select the coding from those available and press ENTER to confirm.

 If you choose [Rolling code] or [TW key block], any transmitters saved previously will be deleted.

U4

1 = All decoding (default)
2 = Rolling code
3 = TW key block

Self-Learning Rolling

Save a new rolling code transmitter by activating acquisition from a rolling code transmitter that has already been saved. The saving and acquisition procedures are explained in the transmitter manual.

U8

OFF = Deactivated (Default)
On = Activated

Operating modes

This function allows you to change the device operating mode.

📖 Only available with firmware version 2.2.1 or later.

A1		0 = Access control mode (Default) 1 = Parking mode 2 = Traffic light mode	
----	--	---	--

Acquire new operators

Scan the terminals (A-B-GND) for newly connected operators.

📖 During scanning, the red LED remains on. Once the operation is complete, the LED switches off and starts flashing to indicate it is communicating with the operators. If an operator is not responding or is disconnected, the wording [OFF A/b/C/d] will appear on the display, according to the operator that has been disconnected.

A3		OFF = Cancel On = Run	
----	--	--------------------------	--

Parameter reset

Restore factory settings except for users, operating mode [A1] and the settings relating to operator connection via CRP.

A4		OFF = Cancel On = Run	
----	--	--------------------------	--

FW version

The function is used to display the firmware version.

Press ENTER to confirm.

H1	---		
----	-----	--	--

Enable password

Set a 4-digit password. The password will be requested to anyone who wants to access the main menu.

📖 See the section <Enable password> for information on how to do it.

H3		OFF = Cancel On = Run	
----	--	--------------------------	--

BUS device status

The function shows the status of all devices that can be connected to the BUS and managed by the firmware in use.

Select the device from those available and press ENTER to view the status (x).

Device status <x>

ll = Conflicting address

o = Working

c = Working with alarm signal

F = Device fault

- = No communication or not present

H4	b = BUS photocells b(1 - 8).<x> d = BUS selector d(1 - 8).<x>		
----	--	--	--

Setting the clock

Set the date and time.
When the date and time have been set, it shows for 5 seconds every time you exit the main menu.
See the “Setting the clock” section.

H5		OFF (Cancel operation) On (Run operation)	
----	--	--	--

Access log

Enable the access logs visible on CAMEConnect.

H6		OFF = Deactivated (Default) On = Activated	
----	--	---	--

Factory reset

To restore the electronic board data to factory settings:

Disconnect the control board from the power supply and wait for it to switch off.

Press and hold the < and > buttons, then reconnect the control board to the power supply.

Continue to press and hold the < > buttons until **[ON/OFF]** is displayed.

Select **[ON]**.

Press **ENTER** to confirm.

 When you reset the control board, all saved users, set times, manoeuvre configurations and calibration operations are deleted.

New user

 The user can be associated with the outputs (OUT1+OUT2 and/or OUT3+OUT4) and with one or more operators (if connected to the RBE control panel).

① Press the ENTER key to enter programming.

② Select the function U1 and press ENTER to confirm.

③ Choose the outputs to associate with the user. Press Enter to confirm.

 If there are one or more operators connected to the control panel (RBE) on A-B-GND, associate the operators and confirm with Enter.

 The operators are controlled by the [Open] command only. If you want to use a different command, use CAMEConnect for advanced configuration.

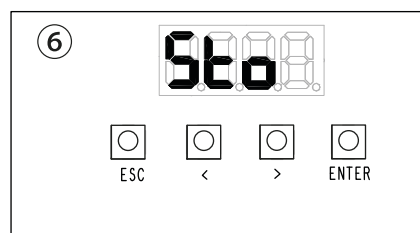
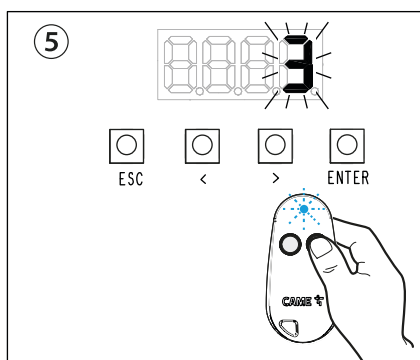
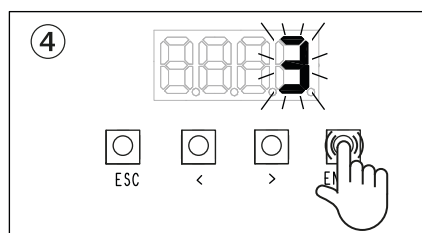
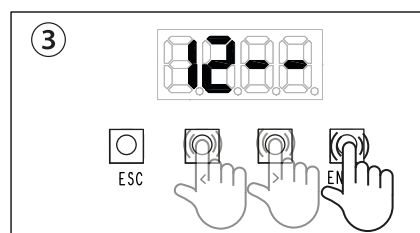
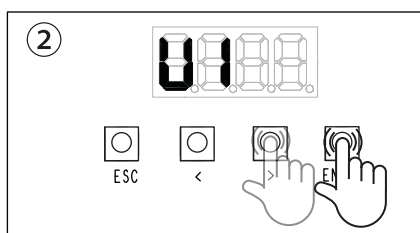
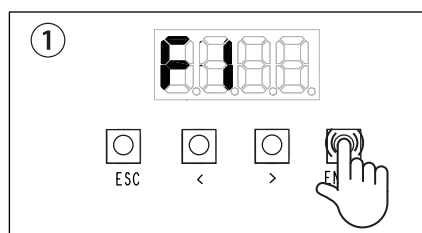
④ The first available position for storing will appear on the screen.

 The available positions are the ones with flashing numbers.

⑤ Within 10 seconds, send the code from the selector (transponder or keypad) or the transmitter.

⑥ [Sto] will appear on the screen for a few seconds to confirm the data has been stored.

Repeat the procedure to add other users.



Remove user

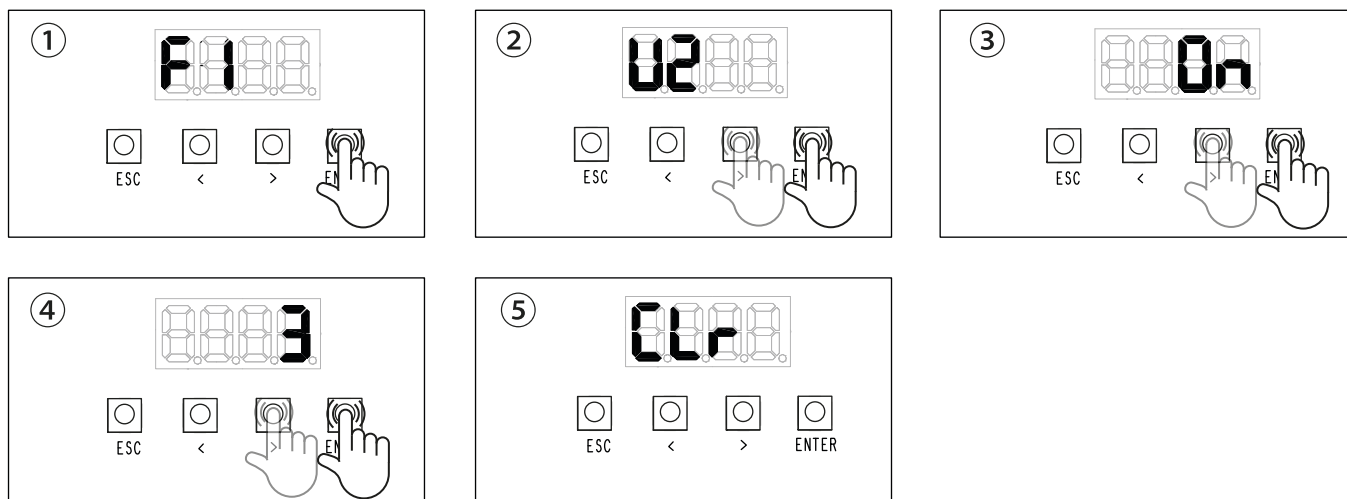
- ① Press the ENTER key to enter programming.
- ② Select the function U2 and press ENTER to confirm.
- ③ Select On and press the ENTER button again.
- ④ Select the user to be deleted and press ENTER

Alternatively, you can select a user by sending a command from the associated device or transmitter.

- ⑤ [CLr] will appear on the screen for a few seconds to confirm the selected user has been deleted.

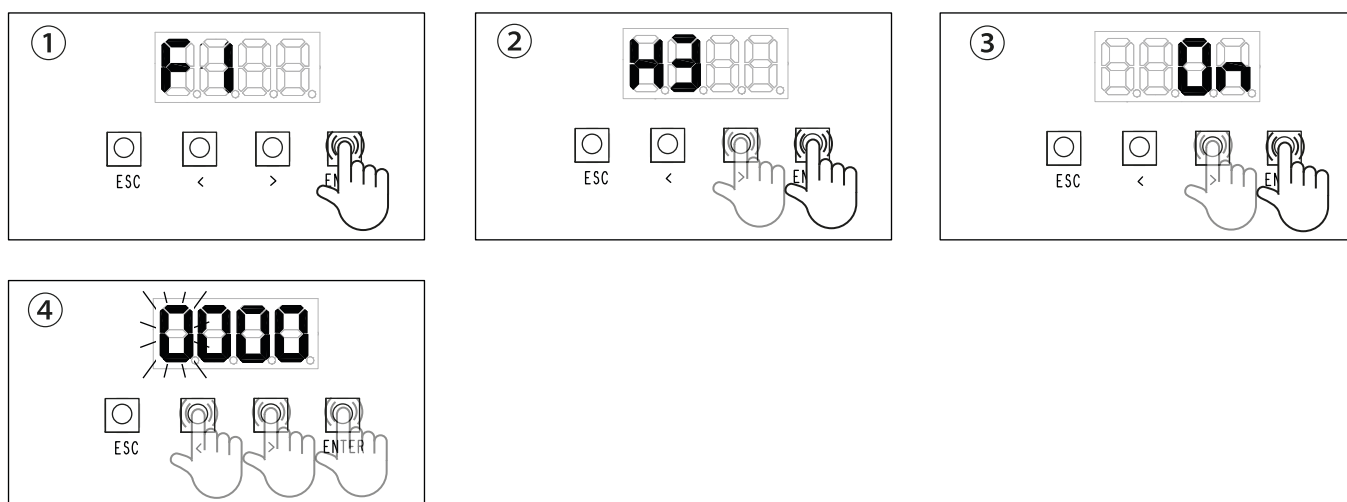
The number associated with the deleted user will start flashing to indicate the position is available.

Once the operation is complete, repeat the procedure for another user or press the ESC button to exit the procedure.



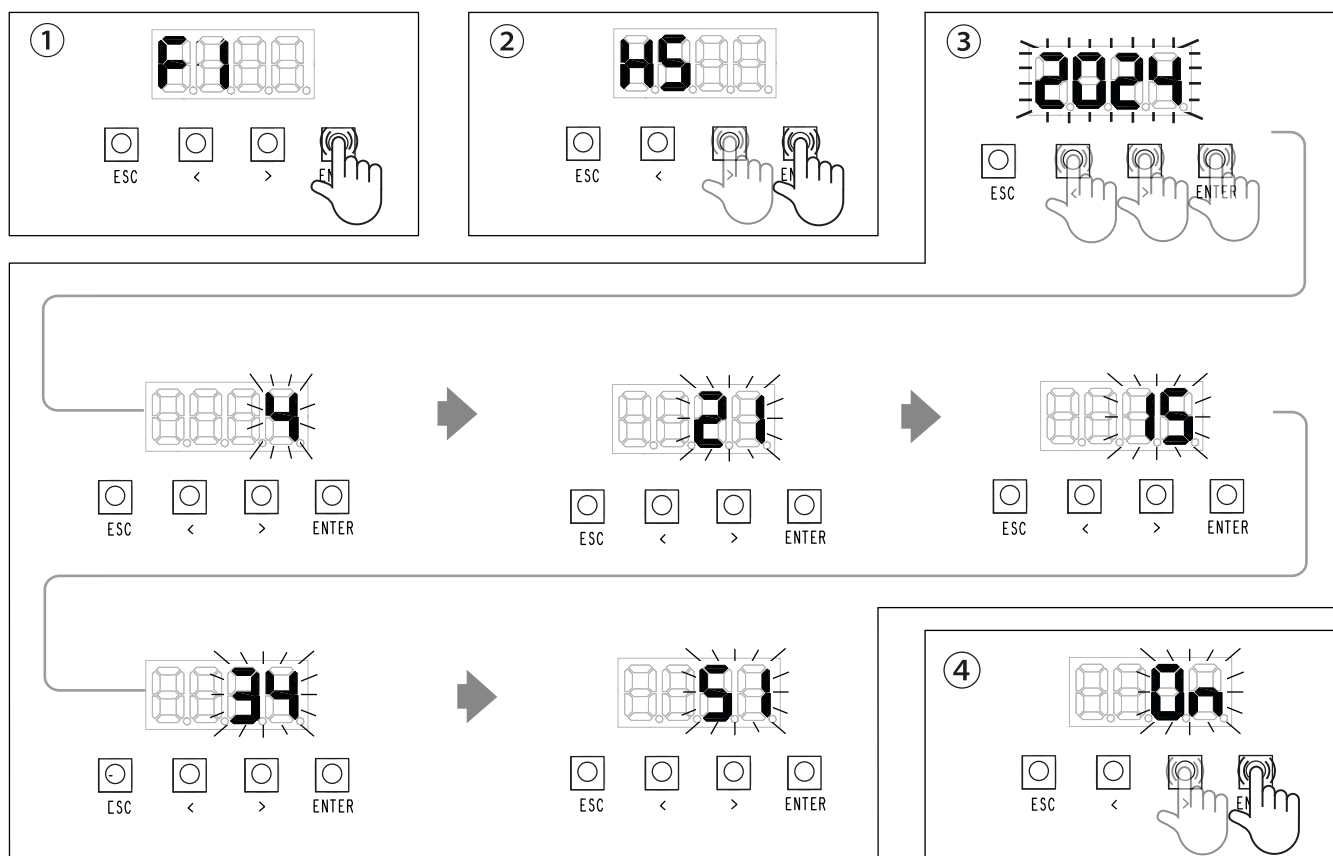
Setting the password

- ① Press the ENTER key to enter programming
- ② Select the function H3 and press ENTER to confirm.
- ③ Select On and press the ENTER button again.
- ④ Use the arrows and Enter to enter the password. Use the arrows to increase or decrease the number and Enter to confirm. Repeat the enter password procedure.



Setting the clock

- ① Press the ENTER key to enter programming
- ② Select the function H5 and press ENTER to confirm.
- ③ Use the arrows and Enter to set the date (year, month and day) and then the time (hours, minutes and seconds).
- ④ OFF will appear on the display. Use the arrow buttons, select On and press ENTER to enable automatic DST (daylight saving time setting).

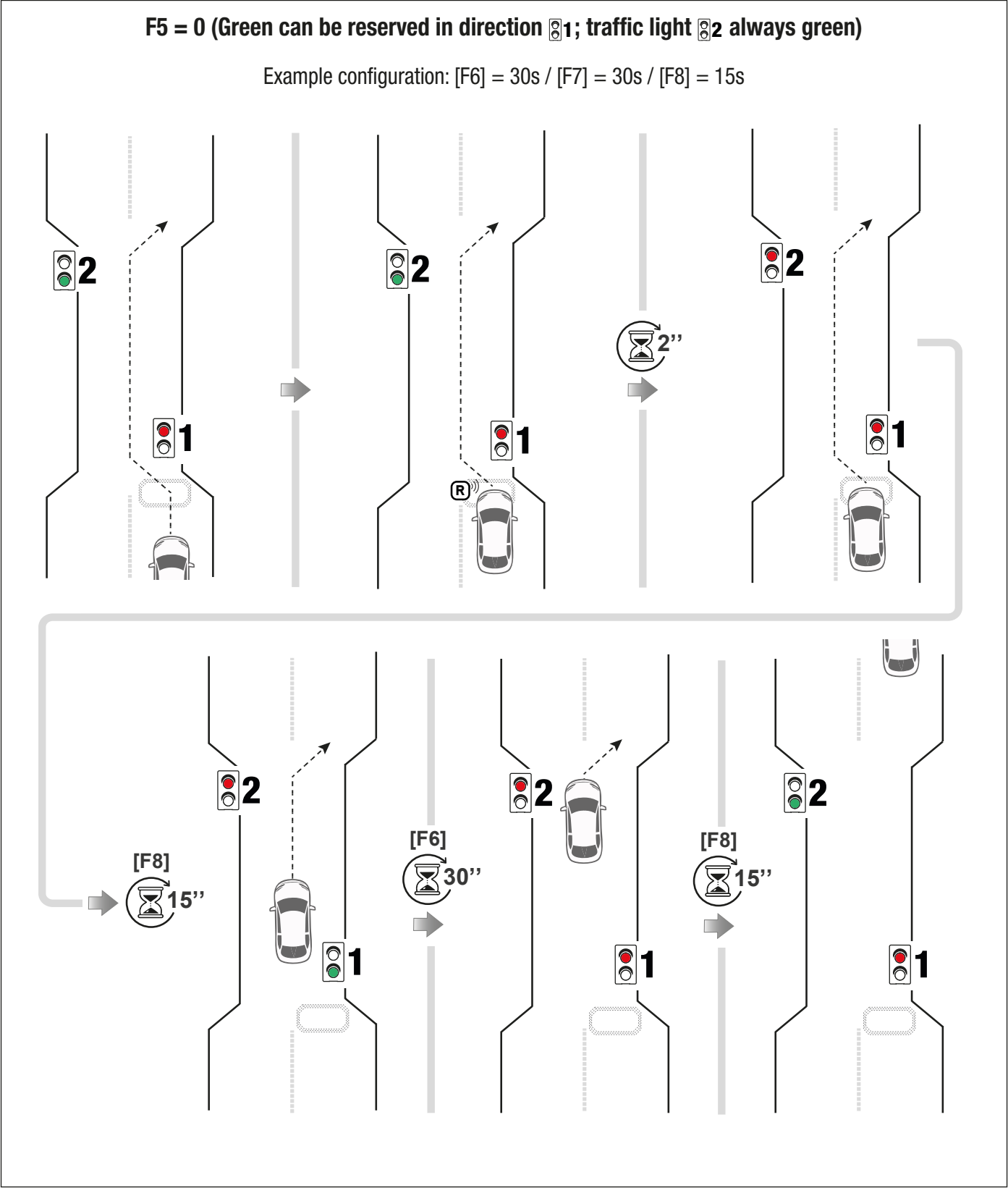


 If the device is connected to CAMEConnect, the date and time are configured automatically every 24 hours set following installation.

Configuration examples

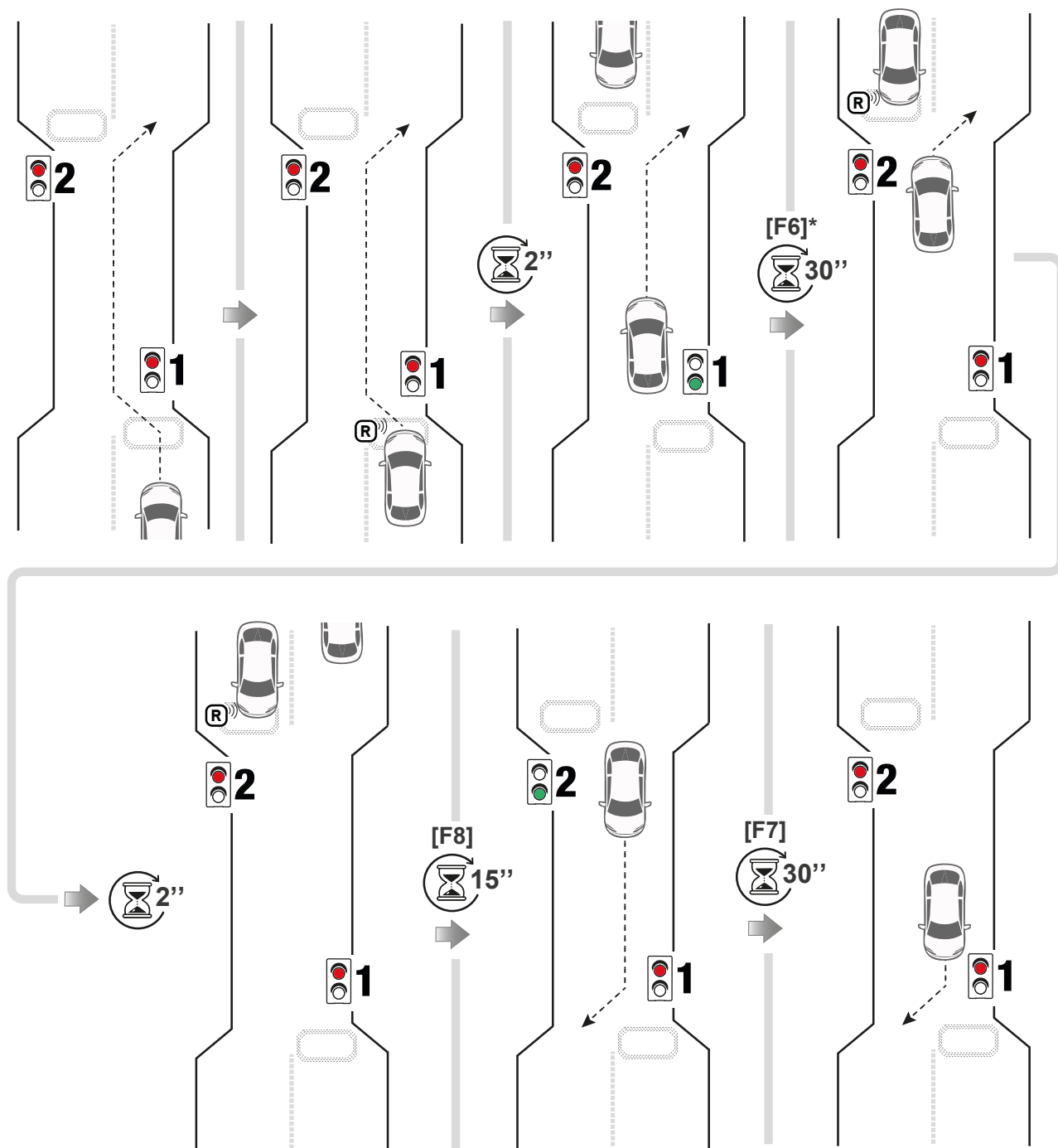
Key

 Passage reservation request



F5 = 1 (Green can be reserved in both directions. Traffic lights 1 and 2; red by default)

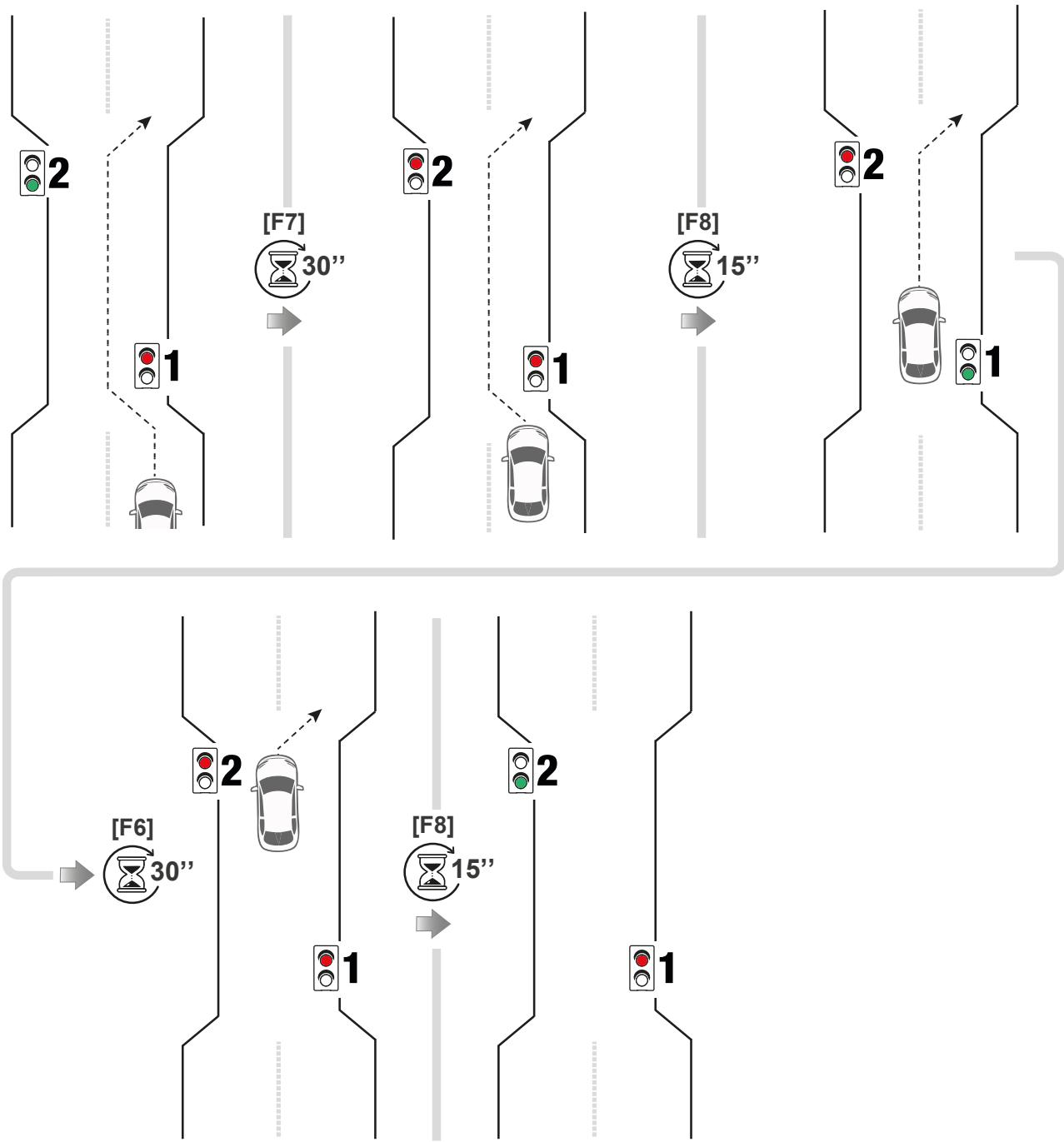
Example configuration: [F6] = 30s / [F7] = 30s / [F8] = 15s



*With a passage verification confirmation sensor connected to I3 or I4, the [F6] or [F7] time stops.

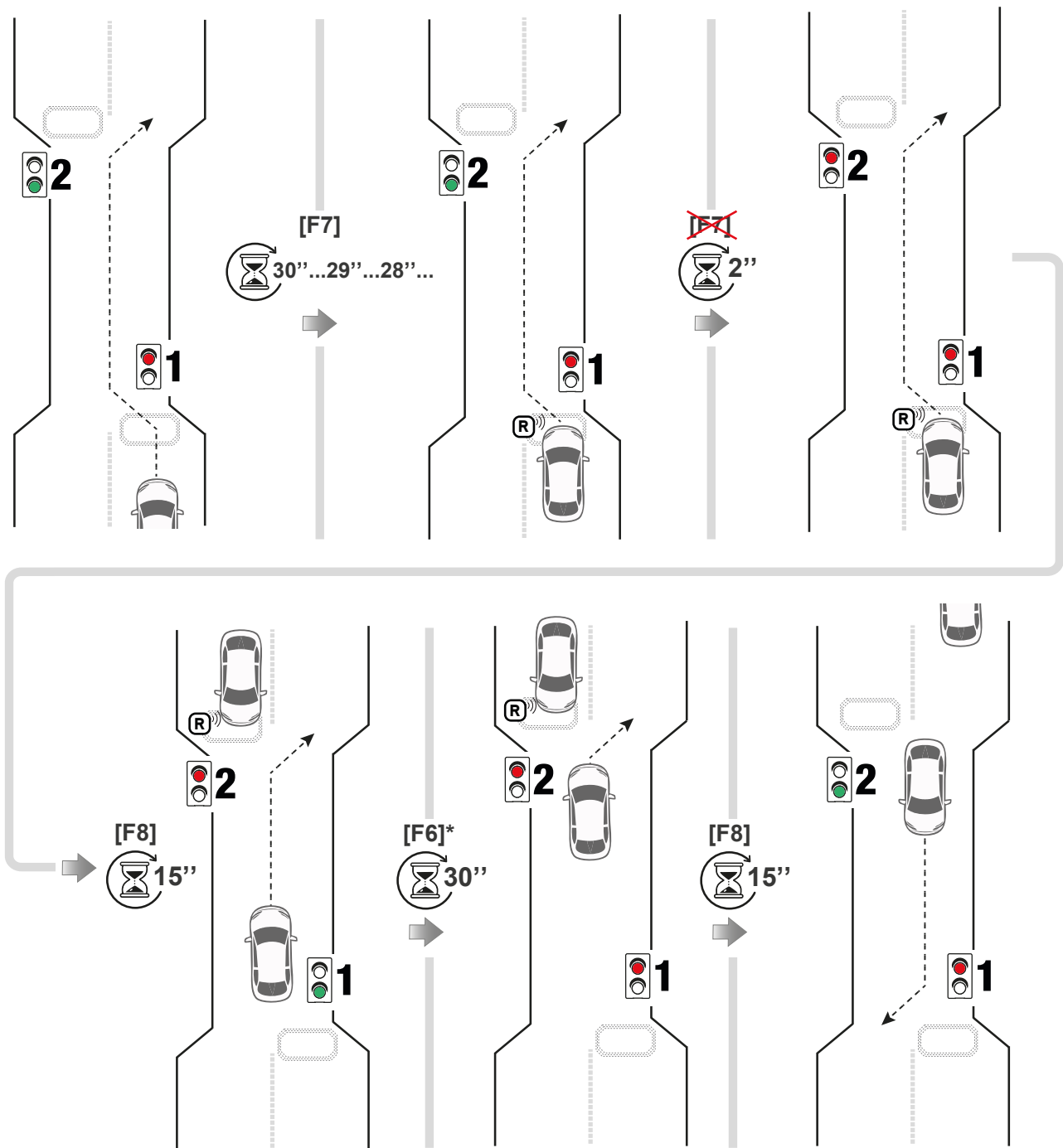
F5 = 2 (Fixed time)

Example configuration: [F6] = 30s / [F7] = 30s / [F8] = 15s



F5 = 3 (Fixed time with reservation in both directions)

Example configuration: [F6] = 30s / [F7] = 30s / [F8] = 15s



*With a passage verification confirmation sensor connected to I3 or I4, the [F6] or [F7] time stops.

Configuration example with passage verification confirmation

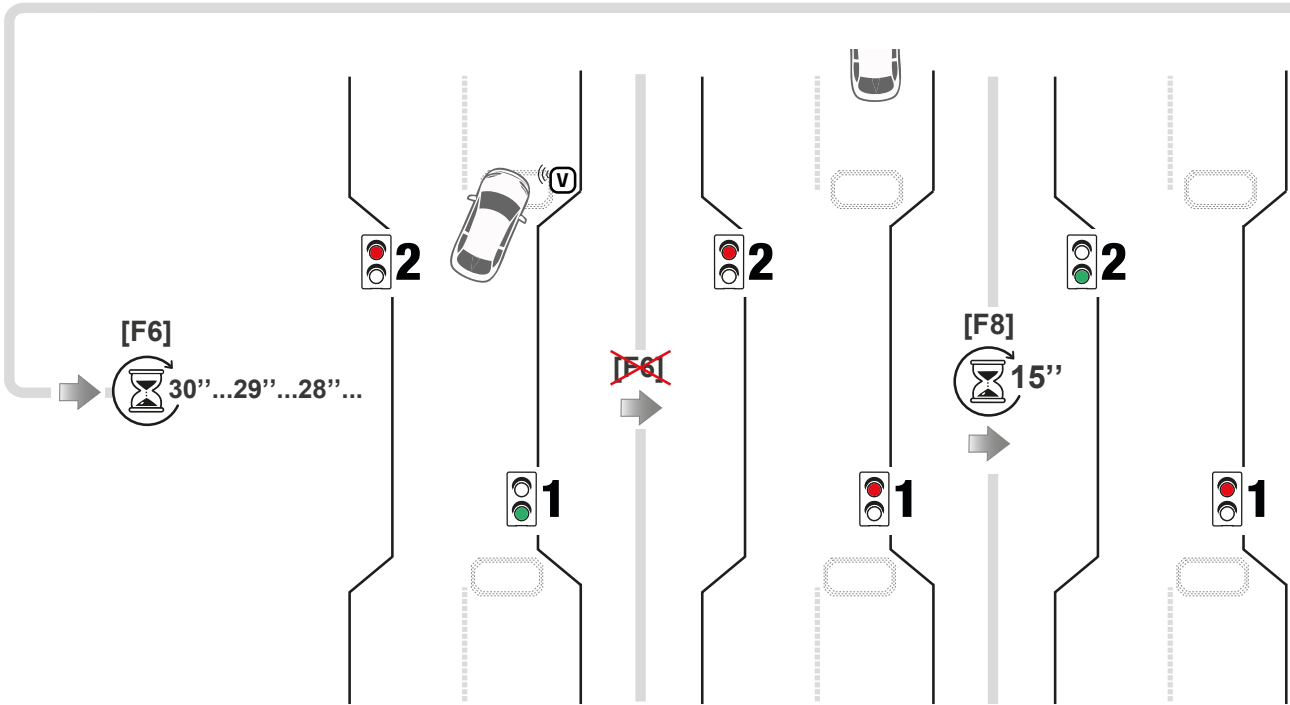
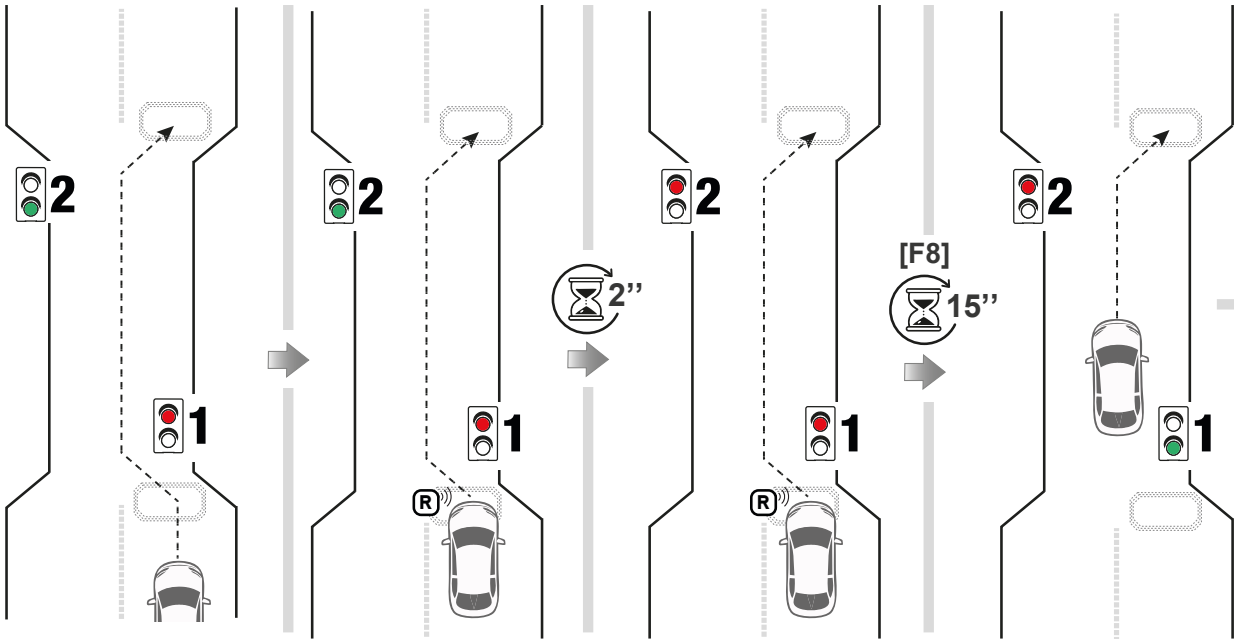
Example configuration: [F5] = 0 / [F6] = 30s / [F7] = 30s / [F8] = 15s



Passage reservation request



Passage verification confirmation



📖 Function not available with RBE in traffic light mode (A1=2).

📖 In parking mode (A1=1), you can set a car park closed time slot. During this time slot, the ENTRY barrier remains closed and no vehicles can access the car park.

Timers use local programming to time one or more outputs.

You can create up to 8 timers and 16 special days. Special days are exceptions to the weekly schedule. They refer to a specific day (e.g. a bank holiday).

📖 **Warning!** Timers and special days can only be set from the CAME apps [CONNECT SetUp] and [SetUp Pro] or from [CAMEConnect].

📖 If an output has been activated by a timer, it can only be deactivated using the key selector or from a wired command connected to the input.

Example

A status change command sent from the transmitter of a registered user is not performed by the RBE PLUS control panel if the timer is set to [Active].

A wired command connected to the input (I1, I2, I3 or I4) changes the output status, even if the output is associated with the timer set under [Active].

Create a new timer from CAMEConnect

Enter your login details on cameconnect.net.

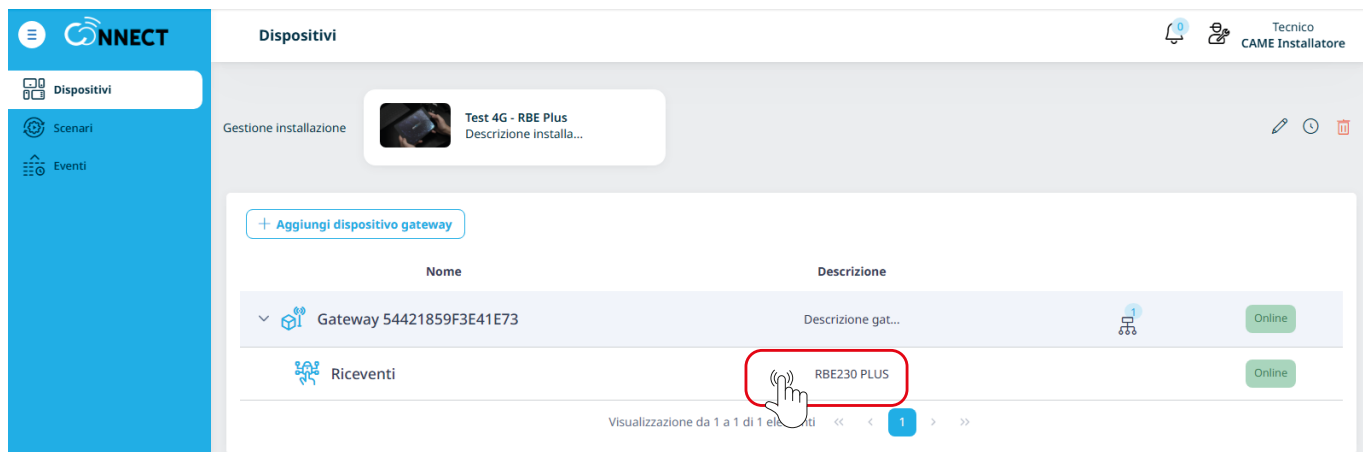
From the start screen, select [Site list] and press [Manage site] for the relevant device.

The screenshot shows the CAMEConnect web interface. On the left, a blue sidebar contains navigation links: 'Richieste di supporto', 'Clienti', 'Mappa installazioni', 'Lista delle installazioni' (highlighted with a red box and a hand icon), 'Gestione dispositivi', 'Storico trasferimenti', and 'Strumenti'. The main area is titled 'Lista delle installazioni' and features a '+ Nuova installazione' button and a search bar. Below is a table with the following data:

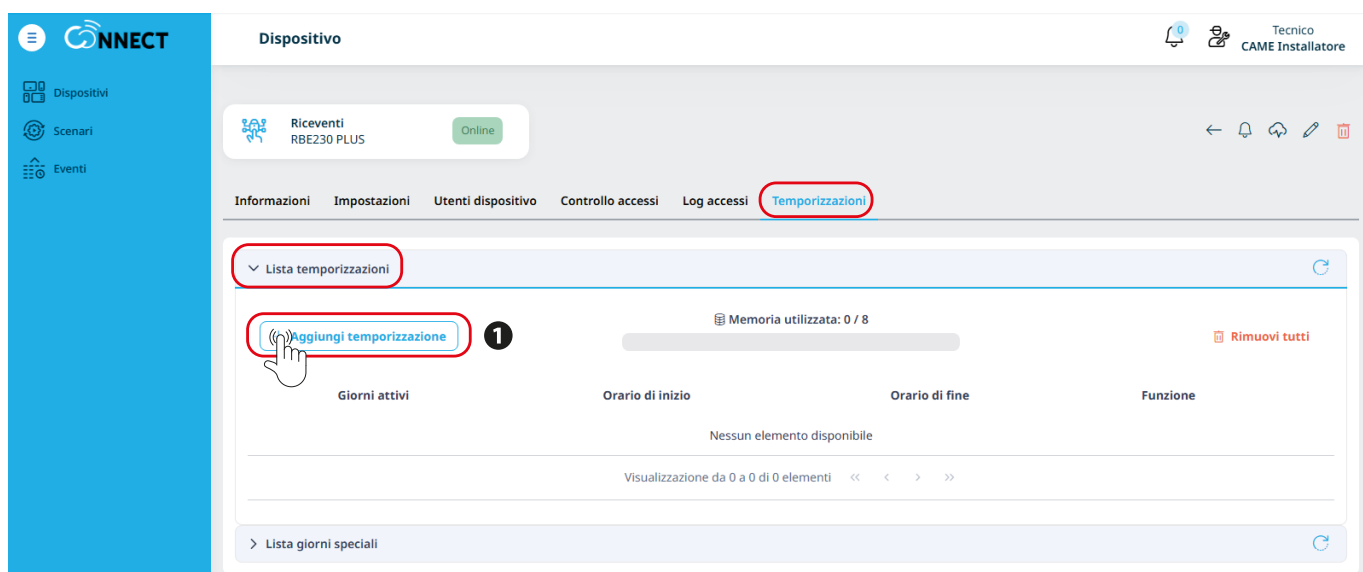
Nome	Descrizione	Proprietario	Dispositivi	
Test Lab.	Test new device	CAME Installatore	0	Gestisci installazione ⇌ 📄 ✎ 🗑️ ✕
CAME IT gate	CAME IT gate	CAME Installatore	2	Gestisci installazione ⇌ 📄 ✎ 🗑️ ✕
Nuova installazione connessa 0...	Descrizione installazione	CAME Installatore	1	Gestisci installazione ⇌ 📄 ✎ 🗑️ ✕
Nuova installazione connessa 0...	Descrizione installazione	CAME Installatore	1	Gestisci installazione ⇌ 📄 ✎ 🗑️ ✕
Test 4G - RBE Plus	Descrizione installazione	CAME Installatore	2	Gestisci installazione ⇌ 📄 ✎ 🗑️ ✕ (highlighted with a red box and a hand icon)
Test RBE con 4G StandAlone	Descrizione installazione	CAME Utente	2	Gestisci installazione ⇌ 📄 ✎ 🗑️ ✕

At the bottom, it says 'Visualizzazione da 1 a 6 di 6 elementi' with pagination controls showing page 1 of 1.

Select the device to configure programming.



Under [Timers], select [List of timers] and press [Add timer]. ❶



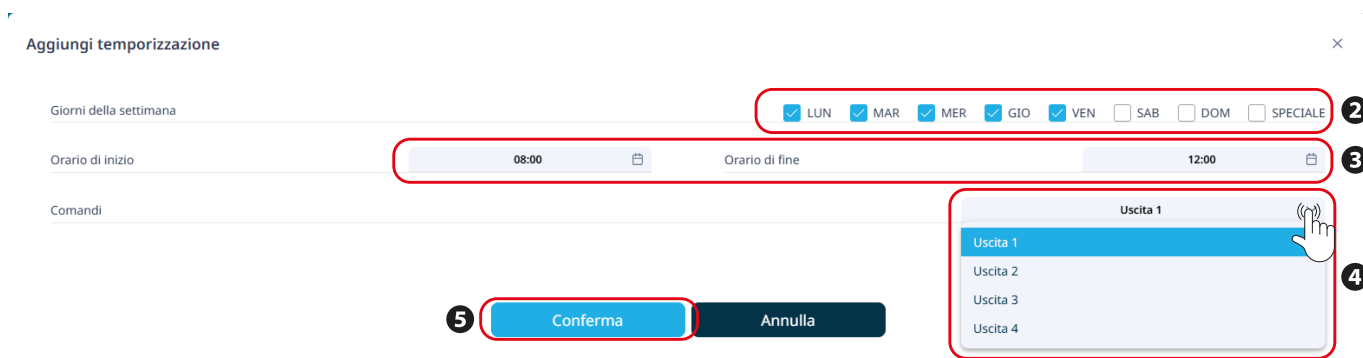
Select the days of the week. ❷

Set the start and end time. * ❸

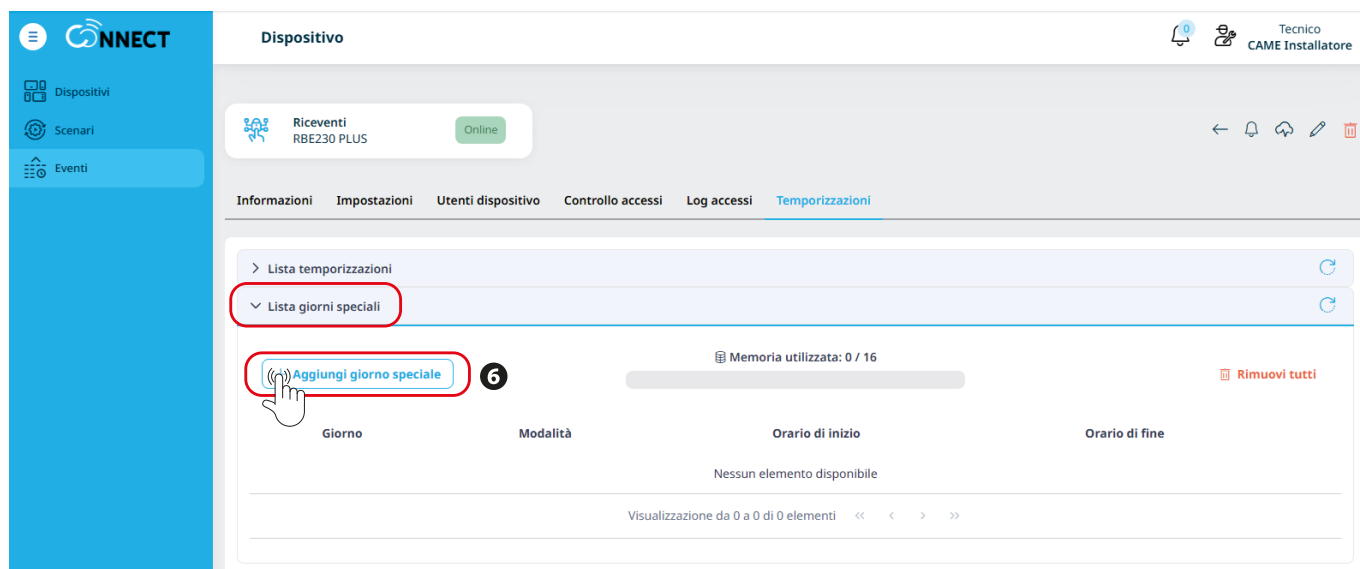
Select an output command to associate with one of the available timers. ❹

Lastly, press confirm. ❺

* The end time includes the 59 seconds after the specified minute. Example: if the end time is set to 12:00, it remains active until 12 hours 00 minutes and 59 seconds.



Create a timer associated with a non-working day: select [List of special days] and press [Add special days]. ⑥



Select the day. ⑦

Set the mode:

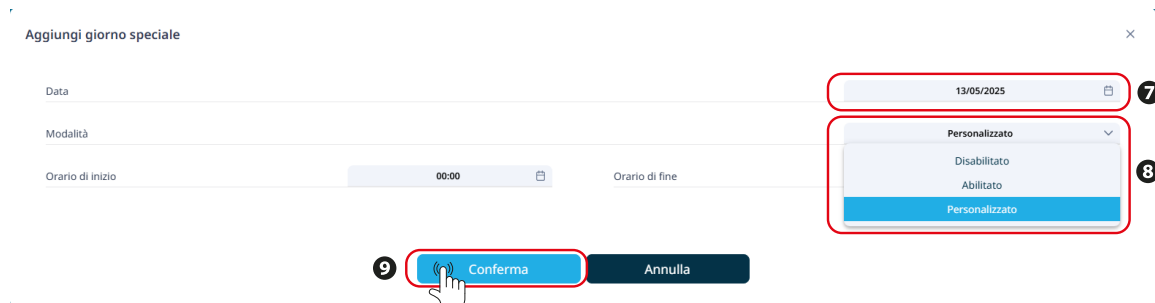
- Disabled;
- Enabled;
- Custom. ⑨

📖 [Custom] mode refers to the [Enabled] mode set for a specific time slot. Set the start and end time. *

Lastly, press confirm. ⑨

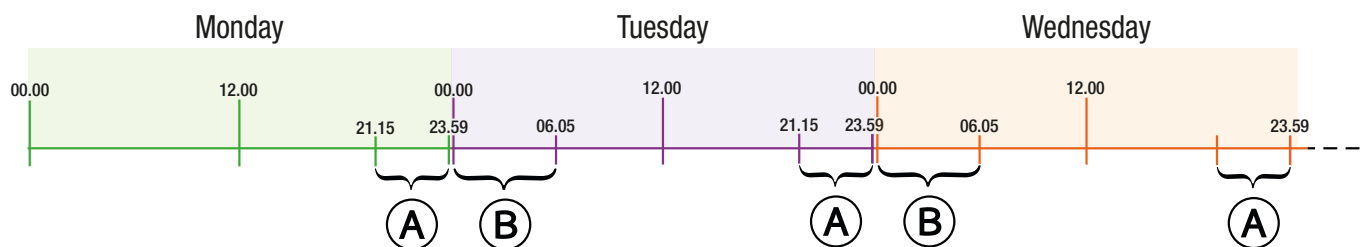
* The end time includes the 59 seconds after the specified minute. Example: if the end time is set to 23:59, it remains active until 23 hours 59 minutes and 59 seconds.

📖 Repeat the procedure to select another non-working day.



How to add a timer over two days

Create two single timers as specified in the above procedure.



A = First timer

B = Second timer

ACCESS CONTROL

📖 Function not available with RBE in traffic light mode (A1=2).

📖 In parking mode (A1=1), you can set weekly schedules for users entering and exiting the car park.

Use this function to create groups containing enabled/disabled time slots. Each device user can be associated with a group.

Warning! You can create up to 16 groups, 16 weekly programmes and 16 special programmes from the CAMEConnect portal only.

Groups can contain up to 8 weekly programmes and 8 special programmes.

Each user can be associated with a group with its given programming along with a validity period, i.e. enabled from <date> to <date>.

Weekly programming includes:

- the days of the week for access;
- the enabled time slot.

Special programming includes:

- access granted/denied function;
- start and end date;
- start and end time.

Example

The group “Employees” contains two weekly programmes and one special programme.

Weekly programming 1 (morning) -> Monday, Tuesday, Wednesday, Thursday, Friday from 8:00 to 12:00.

Weekly programming 2 (afternoon) -> Monday, Tuesday, Wednesday, Thursday, Friday from 13:00 to 18:00.

Special programming (Christmas holiday) -> from 24-12-25 to 06-01-26 access denied.

Create new programming

Enter your login details on cameconnect.net.

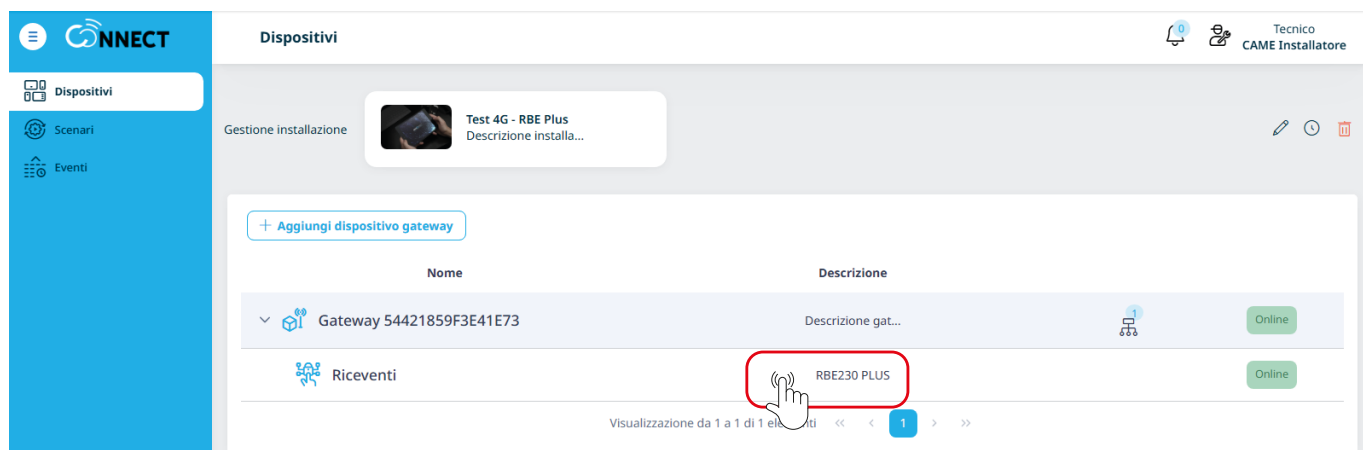
From the start screen, select [Site list] and press [Manage site] for the relevant device.

The screenshot shows the CAMEConnect web interface. The left sidebar contains a menu with items: Richieste di supporto, Clienti, Mappa installazioni, **Lista delle installazioni** (highlighted with a red box and a hand icon), Gestione dispositivi, Storico trasferimenti, and Strumenti. The main area is titled 'Lista delle installazioni' and features a '+ Nuova installazione' button and a search bar. Below is a table with the following data:

Nome	Descrizione	Proprietario	Dispositivi	Actions
Test Lab.	Test new device	CAME Installatore	0	Gestisci installazione, ⇌, 📄, ✎, 🗑️, ✕
CAME IT gate	CAME IT gate	CAME Installatore	2	Gestisci installazione, ⇌, 📄, ✎, 🗑️, ✕
Nuova installazione connessa 0...	Descrizione installazione	CAME Installatore	1	Gestisci installazione, ⇌, 📄, ✎, 🗑️, ✕
Nuova installazione connessa 0...	Descrizione installazione	CAME Installatore	1	Gestisci installazione, ⇌, 📄, ✎, 🗑️, ✕
Test 4G - RBE Plus	Descrizione installazione	CAME Installatore	2	Gestisci installazione, ⇌, 📄, ✎, 🗑️, ✕ (highlighted with a red box and a hand icon)
Test RBE con 4G StandAlone	Descrizione installazione	CAME Utente	2	Gestisci installazione, ⇌, 📄, ✎, 🗑️, ✕

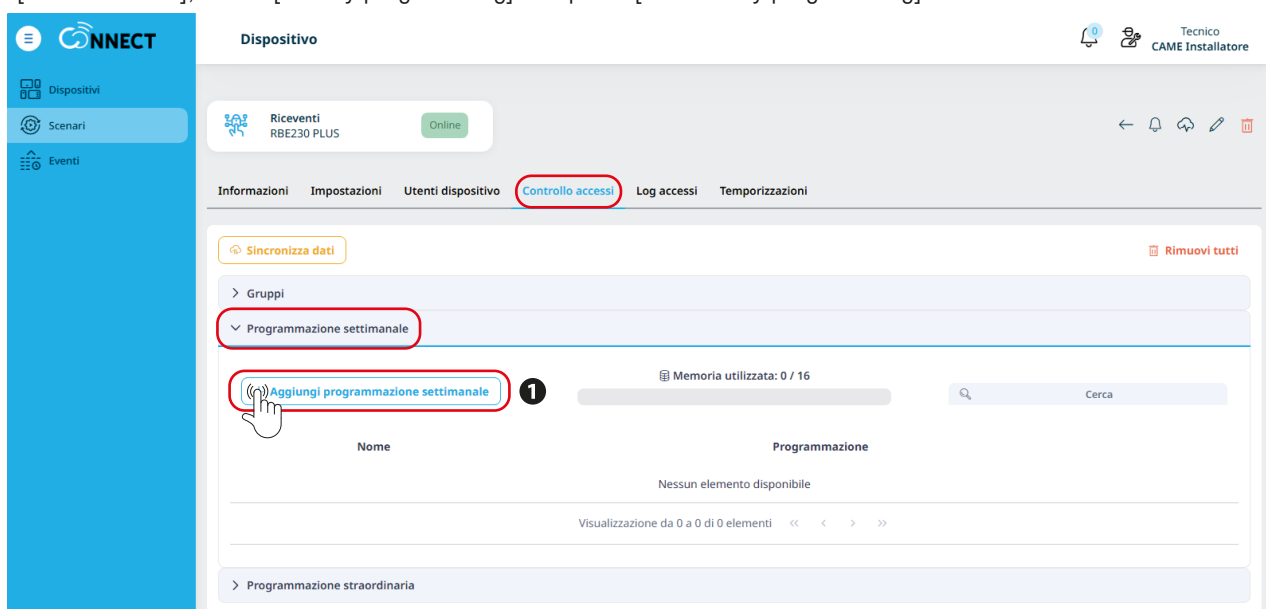
At the bottom, it says 'Visualizzazione da 1 a 6 di 6 elementi' with pagination controls.

Select the device for programming.



Configure programming as shown in the example.

Under [Access control], select [Weekly programming] and press [Add weekly programming]. ❶



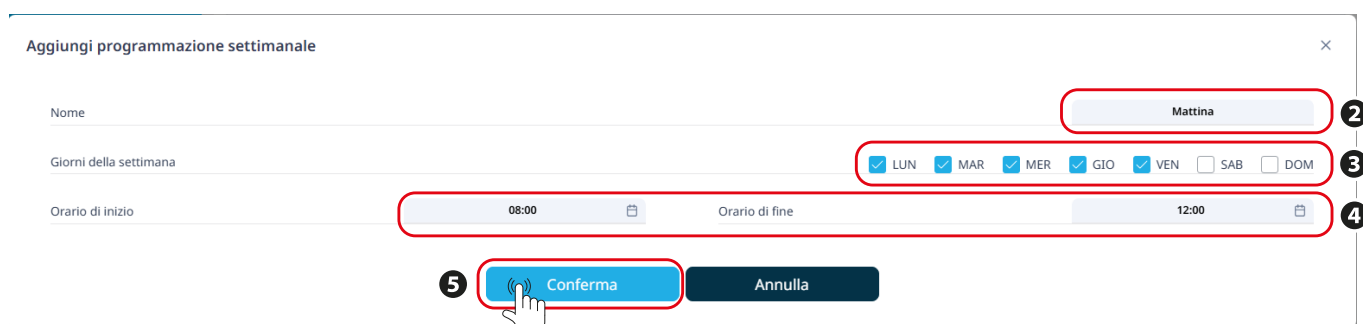
Enter a name for the first weekly programming (morning). ❷

Select the days of the week. ❸

Set the start and end time. * ❹

Lastly, press [Confirm]. ❺

* The end time includes the 59 seconds after the specified minute. Example: if the end time is set to 12:00, it remains active until 12 hours 00 minutes and 59 seconds.



Repeat the procedure for the second weekly programming (afternoon), changing the time slot. **6**
 Lastly, press [Confirm]. **7**

Create non-standard programming for bank holidays.
 Under [Non-standard programming], press [Add non-standard programming]. **8**

Enter a name for the non-standard programme (Christmas holiday). **9**

Set access permission using the function [Allow] or [Deny]. **10**

Set the start and end date. **11**

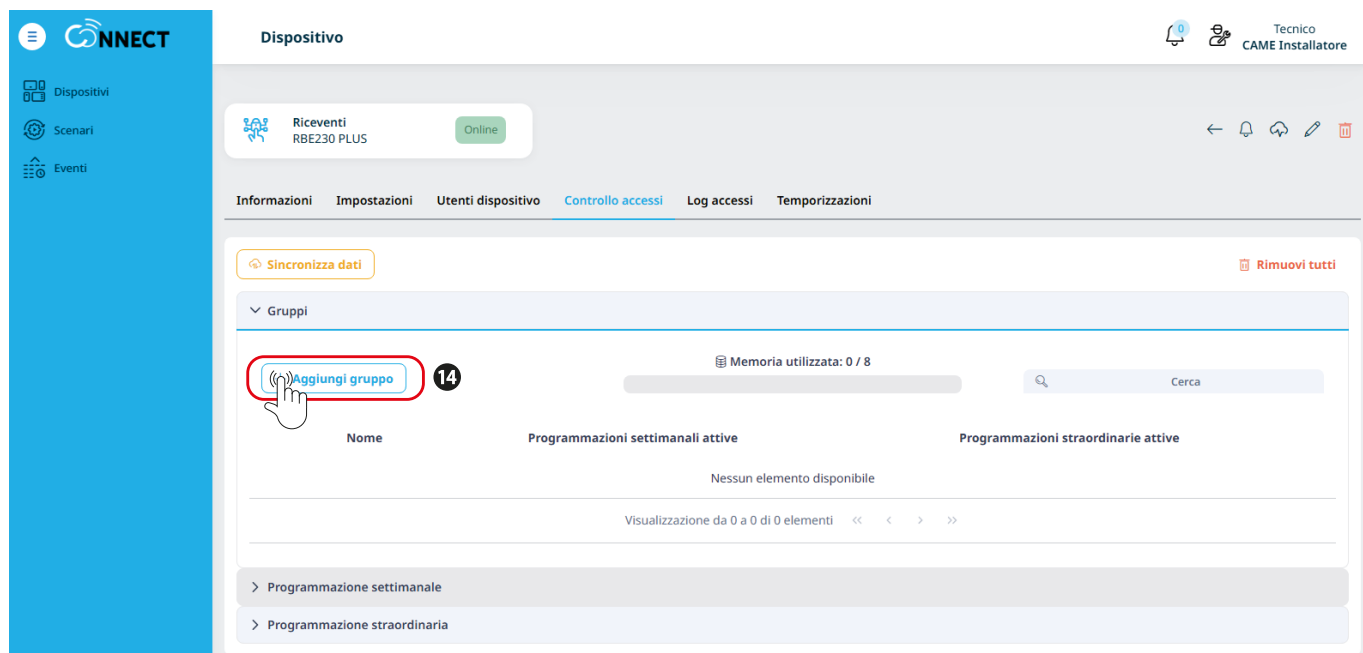
Set the start and end time.* **12**

Lastly, press [Confirm]. **13**

* The end time includes the 59 seconds after the specified minute. Example: if the end time is set to 23:59, it remains active until 23 hours 59 minutes and 59 seconds.

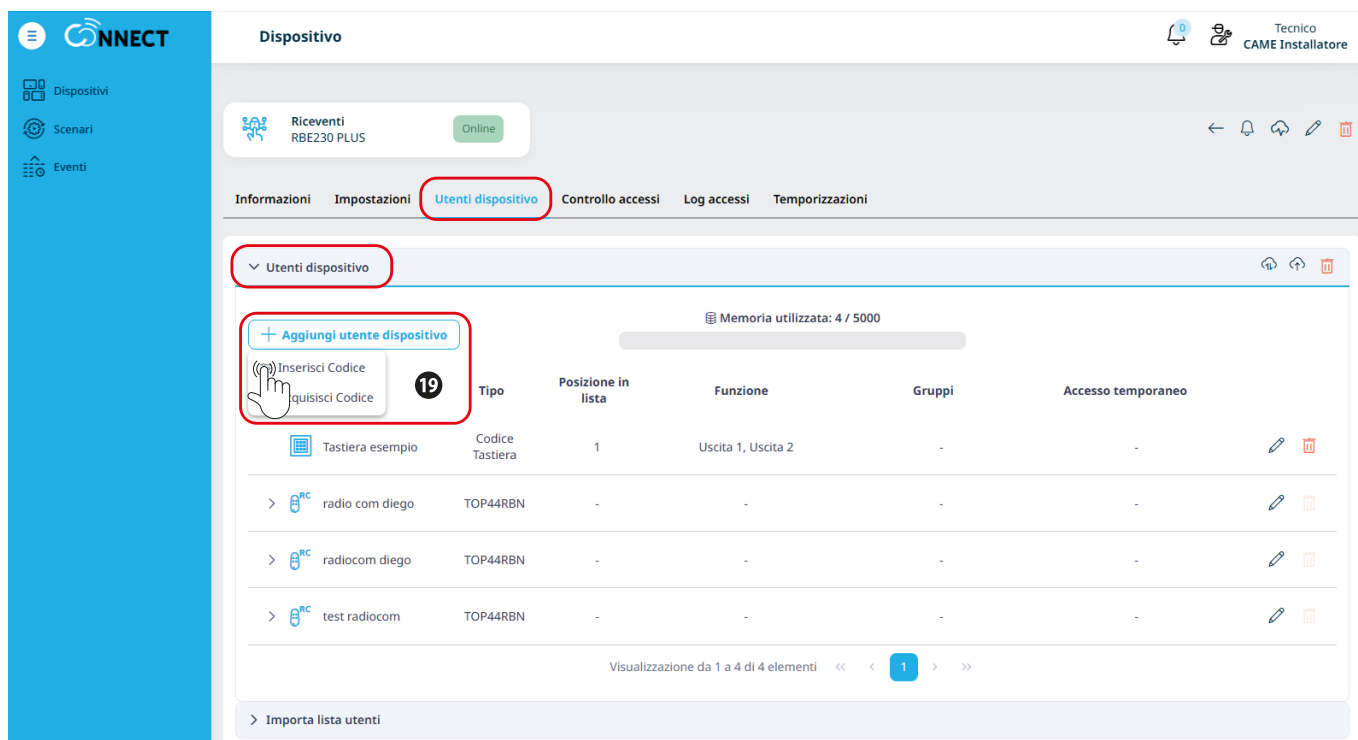
Repeat the procedure to add more non-standard programming.

Associate weekly and non-standard programming with a group.
Under Groups, press [Add group]. 14

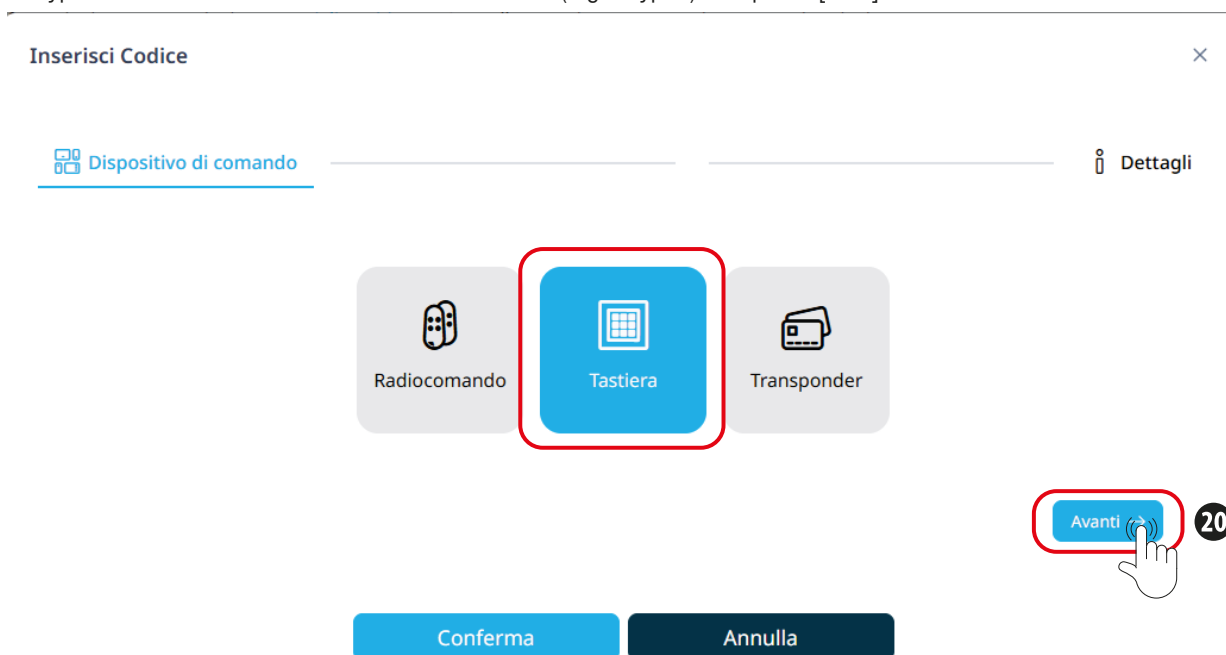


From the [Add group] window, enter a group name (Employees). 15
Select the name of the weekly programming (morning and afternoon) 16 and the non-standard programming (Christmas holiday) to associate with the group. 17
Lastly, press [Confirm]. 18

After creating the group associated with the programming, add users to the group.
Under [Device users], select [Device users] and press [Add device user] and then [Enter code]. 19



Select the type of control device to associate with the user (e.g. keypad) and press [Next]. 20



Enter the username ²¹ and pair it with:

- an output; ²²
- a code for the keypad; ²³
- one of the groups. ²⁴

Inserisci Codice

×

Dispositivo di comando

Dettagli

Nome

Mario

21

Funzione

Uscita 1,

22

Modello

Modello

▼

Codice

1234

23

Gruppi

Gruppi

▼

Dipendenti

24

Accesso

Accesso temporaneo disabilitato

← Indietro

Conferma

Annulla

If access for the entered user should only be granted for a temporary period, press [Temporary access disabled]. This function can only be used if the device is up to date (version 2.1.6 or more recent). ²⁵

Inserisci Codice

×

Dispositivo di comando

Dettagli

Nome

Mario

Funzione

▼

Modello

TST01

▼

Codice

AAAABBBBCCCC000011

Gruppi

Dipendenti

×

▼

Accesso

Accesso temporaneo disabilitato

25

← Indietro

Conferma

Annulla

Set the start and end date. 26
Lastly, press [Confirm].

Inserisci Codice

×

Dispositivo di comando

Dettagli

Nome

Mario

Funzione

Modello

TST01

Codice

AAAABBBBCCCC000011

Gruppi

Gruppi

Accesso

Accesso temporaneo abilitato

Accesso temporaneo

Data inizio

23/05/2025

Data fine

23/05/2025

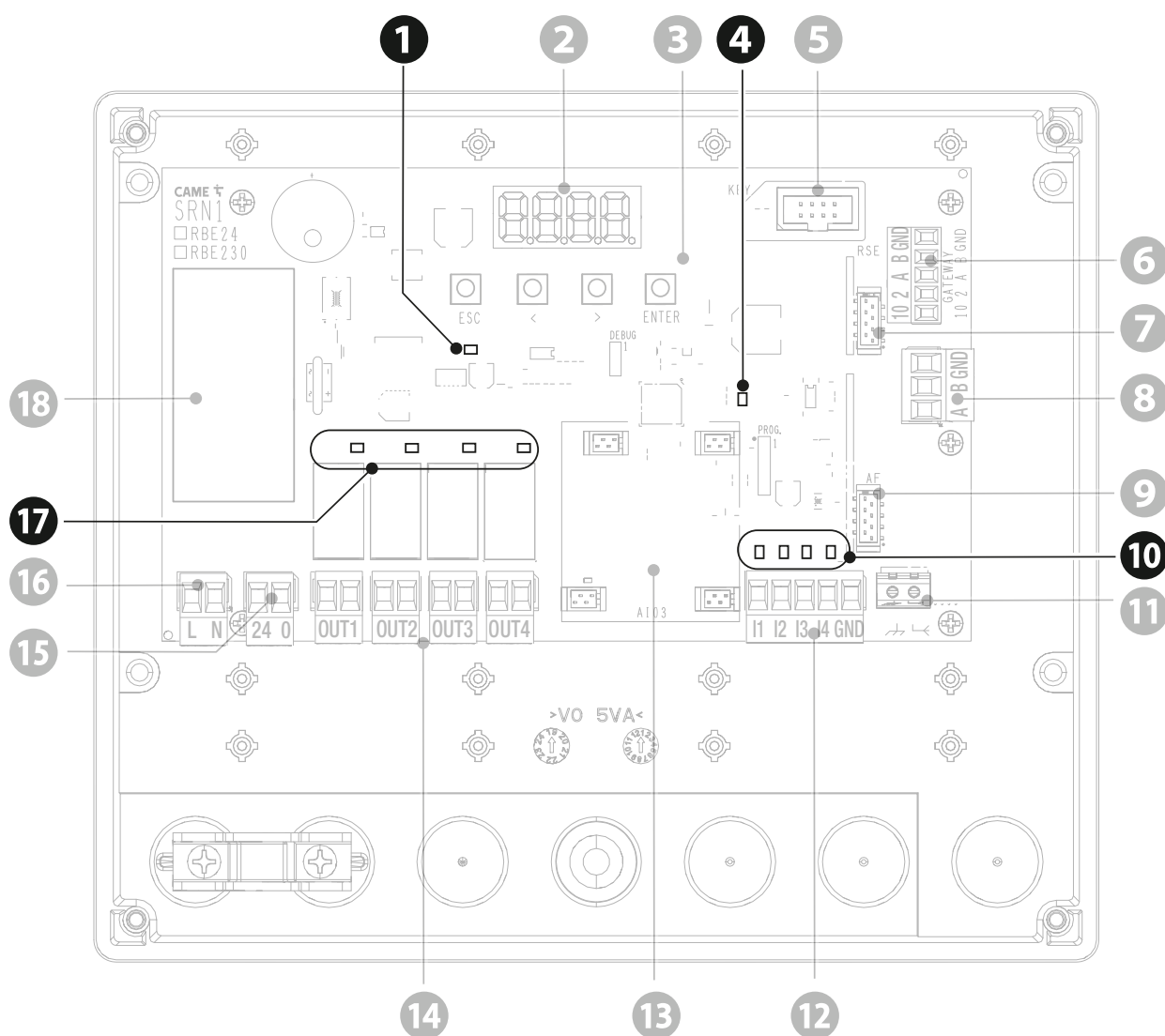
← Indietro

Conferma

Annulla

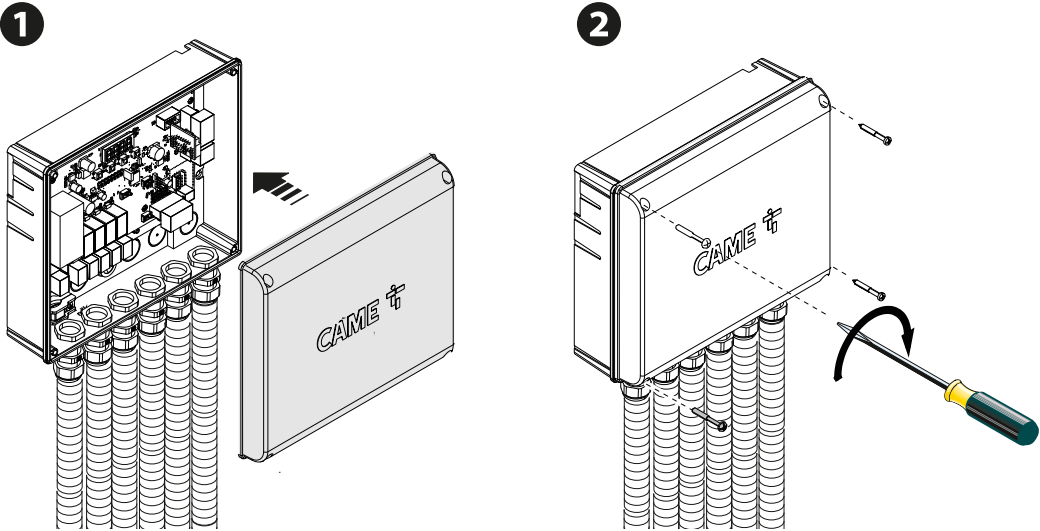
LED STATUS KEY

Key	Type	Colour	Status
❶	Voltage present signalling LED	Green on	Control board powered up
		Green off	Control board not powered up
❹	Communication status signalling LED	Red on	Scanning for operators connected to terminal A-B-GND
		Red flashing	Communicating with operators connected to terminal A-B-GND
		Green on (1 sec.)	User recognised
		Flashing blue	Communicating with the Gateway
❿	Input status signalling LEDs	Green on	Input closed
		Green off	Input open
❼	Outputs status signalling LEDs	Green on	Output closed
		Green off	Output open



FINAL OPERATIONS

📖 Before closing up the casing, check that the cable inlets are sealed to stop insects getting in and to prevent damp.



ERROR AND WARNING MESSAGES

ERROR MESSAGES

E15	Incompatible transmitter error
E25	Address settings error on BUS devices

ERROR AND WARNING MESSAGES

OffA	Error communicating with operator A
Offb	Error communicating with operator b
OffC	Error communicating with operator C
Offd	Error communicating with operator d
12.34.	The dot after the number indicates that a timer is active for the output. Example: (12.34.) outputs 2 and 4 have been activated by a timer.
1	After each command from a device (transmitter, keypad or transponder), the number associated with the registered user shows on the display for a few seconds.
12:00	In RBE access control mode (A1=0): After each appearance of the number associated with the user sent from a command, or after exiting the main menu, the time shows on the display for 5 seconds.
0000	In RBE parking mode (A1=1): The number of cars in the car park is shown.
. (flashing)	Traffic light mode active.



CAME 

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