

CONTROL BOX 3S io

FR Manuel d'installation

NL Installatiehandleiding

EN Installation instructions

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HOME MOTION by
somfy®

Translated version of the guide

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SAFETY INSTRUCTIONS



This symbol indicates a danger, the different degrees of which are described below.



DANGER

Indicates a danger which may result in immediate death or serious injury



WARNING

Indicates a danger which may result in death or serious injury



PRECAUTION

Indicates a danger which may result in minor or moderate injury

ATTENTION

Indicates a danger which may result in damage to or destruction of the product

Caution - Important safety instructions

For reasons of personal safety, it is important to follow all the instructions, as incorrect installation can lead to serious injury. Retain these instructions.

The motorisation must be installed and adjusted by a professional motorisation and home automation installer, in compliance with the regulations of the country in which it is to be used.

The user manual and installation manual must be given to the end user, explicitly stating that installation, adjustment and maintenance of the motorisation must be performed by a professional motorisation and home automation installer.

Introduction

> Important information

This product is a control cabinet for swing gates, for residential use. To ensure compliance with the standard EN 60335-2-103, this product must be installed with a Somfy motor. The assembly is together designated as a "motorisation". The main purpose of these instructions is to satisfy the requirements of the aforementioned standard and to ensure the safety of equipment and persons.



WARNING

Any use of this product outside the field of application described in these instructions is prohibited (see "Field of application" paragraph in the installation manual). Such use, and any failure to comply with the instructions given in this guide, absolves Somfy of any liability and invalidates the warranty.

The use of any safety accessories not validated by Somfy is prohibited.

In case of any doubts when installing the motorisation, or to obtain additional information, consult the website www.somfy.com. The instructions may be modified if and when there is a change to the standards or to the motorisation.

Preliminary checks

> Installation environment

ATTENTION

Do not spray water onto the motorisation.

Do not install the motorisation in an explosive environment.

> Condition of the gate to be motorised

See the safety instructions for the Somfy motor.

Electrical pre-equipment



DANGER

The installation of the power supply must comply with the standards in force in the country in which the motorisation is installed, and must be carried out by qualified personnel.

The electric line must be exclusively reserved for the motorisation and equipped with protection, comprising:

- a 10 A fuse or breaker,
- a differential type device (30 mA).

An all-pole supply cut-off device must be provided.

It is recommended that you fit a lightning conductor (maximum residual voltage 2 kV).

> Cable feed

Underground cables must be equipped with a protective sheath with a sufficient diameter to contain the motor cable and the accessories cables.

For overground cables, use a cable grommet that will withstand the weight of vehicles (ref. 2400484).

Safety instructions relating to installation



DANGER

Do not connect the motorisation to a power supply (mains, battery or solar) before installation is complete.



WARNING

Modifying one of the elements provided in this kit or using an additional element not recommended in this manual is strictly prohibited.

Monitor the gate as it moves and keep people away from it until installation is complete.

Do not use adhesive to secure the motorisation.

ATTENTION

Install any fixed control device at a height of at least 1.5 m and within sight of the gate, but away from moving parts.

After installation, ensure that:

- the mechanism is correctly adjusted
- the manual back release device is operating correctly
- the motorisation changes direction when the gate encounters an object 50 mm high positioned halfway up the leaf.

> Safety devices



WARNING

For operation in automatic mode or remote control, photoelectric cells must be installed.

For operation in automatic mode, or if the gate faces a public road, an orange light type signalling device may be required to comply with the regulations in the country in which the motorisation is installed.

> Clothing precautions

Take off any jewellery (bracelet, chain, etc.) during installation.

For manoeuvring, drilling and welding operations, wear appropriate protection (special glasses, gloves, ear protection, etc.).

Regulations

SOMFY declares that this product complies with the essential requirements of applicable European directives. A declaration of conformity is available at www.somfy.com/ce (CONTROL BOX 3S AXOVIA io/CONTROL BOX 3S IXENGO io).

Assistance

You may encounter difficulties or have questions when installing your motorisation.

Do not hesitate to contact us; our specialists are on hand to answer all your questions. Internet: www.somfy.com

PRODUCT DESCRIPTION

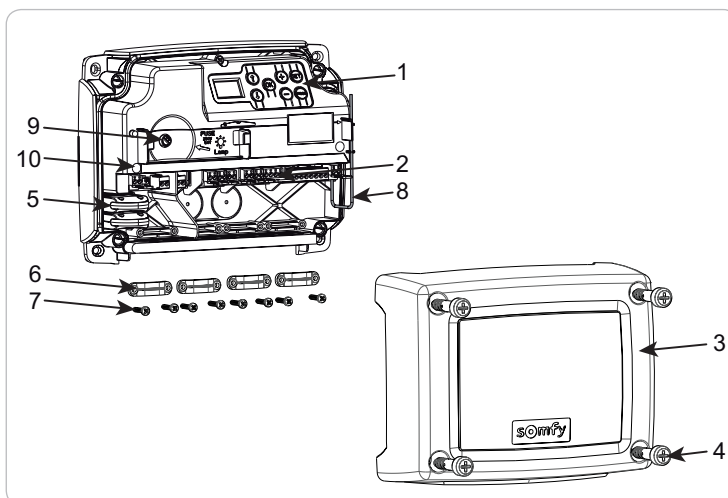
Area of application

The CONTROL BOX 3S is designed to control one or two Somfy 24V motors for opening and closing gates.

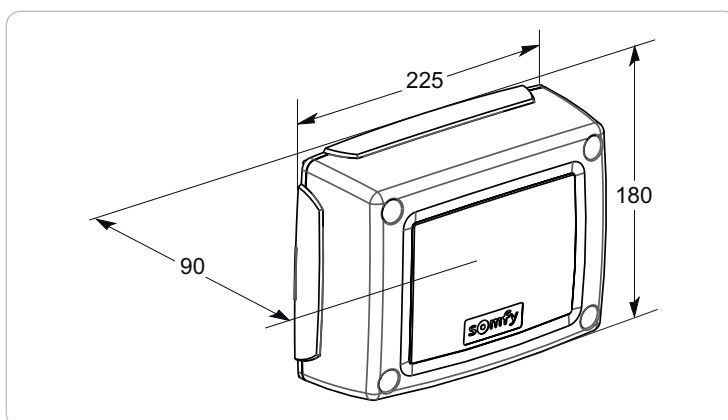
Number of cycles per hour: 20 cycles/hour spread evenly throughout the hour.

Composition of the kit

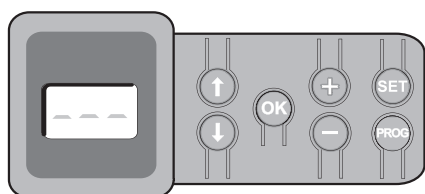
No.	Description
1	Programming interface
2	Plug-in terminals
3	Cover
4	Cover screw
5	Keygo io remote controls
6	Cable clip
7	Cable clamp bolt
8	Aerial
9	Fuse (250 V/5 A) for 230 V lighting output
10	Spare fuse (250 V/5 A)



Space requirements



Description of the interface



3-digit LCD screen

Display of parameters, codes (operation, programming, faults and breakdowns) and memorised data.

Parameter value display:

- . fixed = value selected/auto-adjusted
- . flashing = value selectable for parameter

Button	Function	Button	Function
↑ ↓	- navigate the parameters and codes list: . short press = scroll through individual parameters . press and hold = scroll rapidly through parameters	SET	- Press 0.5 s: access and exit the parameter setting menu - Press 2 s: trigger auto-programming - Press 7 s: clear auto-programming and parameters - interrupt auto-programming
OK	- start auto-programming cycle - confirm parameter selection - confirm parameter value	PROG	- Press 2 s: memorise the remote controls - Press 7 s: clear all remote controls
+ -	- modify a parameter value . short press = scroll through individual parameters . press and hold = scroll rapidly through parameters - use of forced operating mode		

INSTALLATION

Mounting the control box



The control box must be mounted horizontally. Do not change the position of the aerial.

- The maximum authorised length of the cables connecting the control box to the motors is 20 m.
- Install the control box at least 40 cm above the ground.
- Use suitable screws for the type of mounting support.

[1]. Use the base of the control box to trace the mounting points on the support.

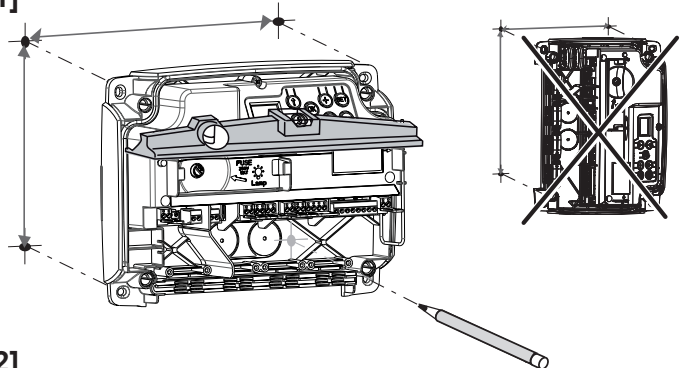
Note: Check that the control box is level.

[2]. Drill the support.

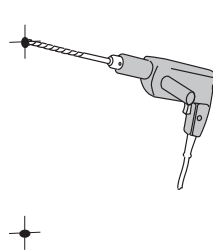
[3]. Mount the control box.

Before closing the control box, ensure that the seal is correctly fitted.

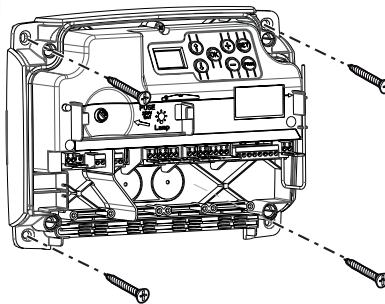
[1]



[2]



[3]



Wiring the motors

i M1 is the motor installed on the gate leaf which opens first and closes last.

[1]. Wire the motor of the gate leaf that must open first and close last to connector M1 (terminals 11 and 12).

[2]. Wire the second motor to connector M2 (terminals 14 and 15).

Note: for Ixengo motors, wire the end limit for M1 (white cable) to terminal 13 and the end limit for M2 (white cable) to terminal 16.

i A stage for verifying the motor wiring and the gate leaf opening direction is included at the start of the motor commissioning procedure on page 6.

Connecting to the mains power supply

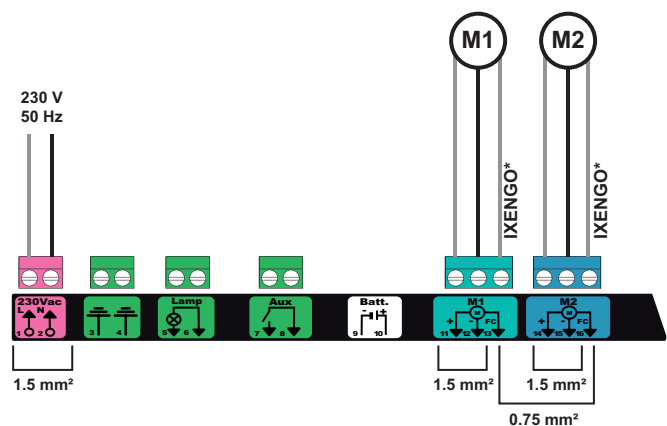


- The 230V power supply cable must be secured using the cable clamps supplied.
- The fuse only protects the 230V area lighting.

Connect terminals 1 and 2 of the control box to the 230V mains power supply.

Note: - The earth wire must always be longer than the live and neutral wires in case of detachment.

- If class 1 area lighting is to be connected, earth the control box (terminal 3 or 4).



* terminals reserved for wiring for Ixengo motor end limits.

QUICK COMMISSIONING

Check the motor wiring and the opening direction of the gate leaves



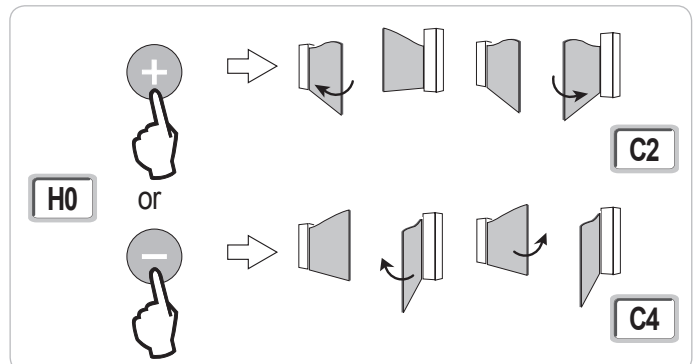
During this operation, secure the area and prevent anyone from entering it.

Manually place the gate leaves in the intermediate position and lock the motors.

Actuate the motors by pressing and holding the "+" or "-" button.

- "+" opens the gate leaf controlled by M1 then the gate leaf controlled by M2.
- "-" closes the gate leaf controlled by M2 then the gate leaf controlled by M1.

If the gate leaf movement controlled by M1 and/or M2 is not correct, reverse the M1 wires on terminals 11 and 12 and/or the M2 wires on terminals 14 and 15.

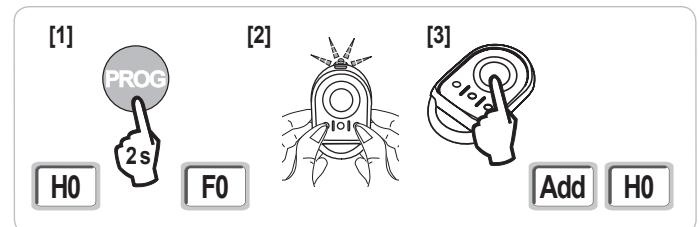


Memorising the Keygo io remote controls for operation in complete opening mode

i To memorise Keytis io type bidirectional remote controls, see pages 16 and 17.

If this procedure is carried out using a channel which has already been memorised, this channel will be cleared.

- [1]. Press and hold the "PROG" button (2 s) on the programming interface. The screen displays "F0".
- [2]. Press the outer left and right buttons on the remote control together. The remote control indicator light flashes.
- [3]. Press the button of the remote control that will open the gate fully. The screen displays "Add".

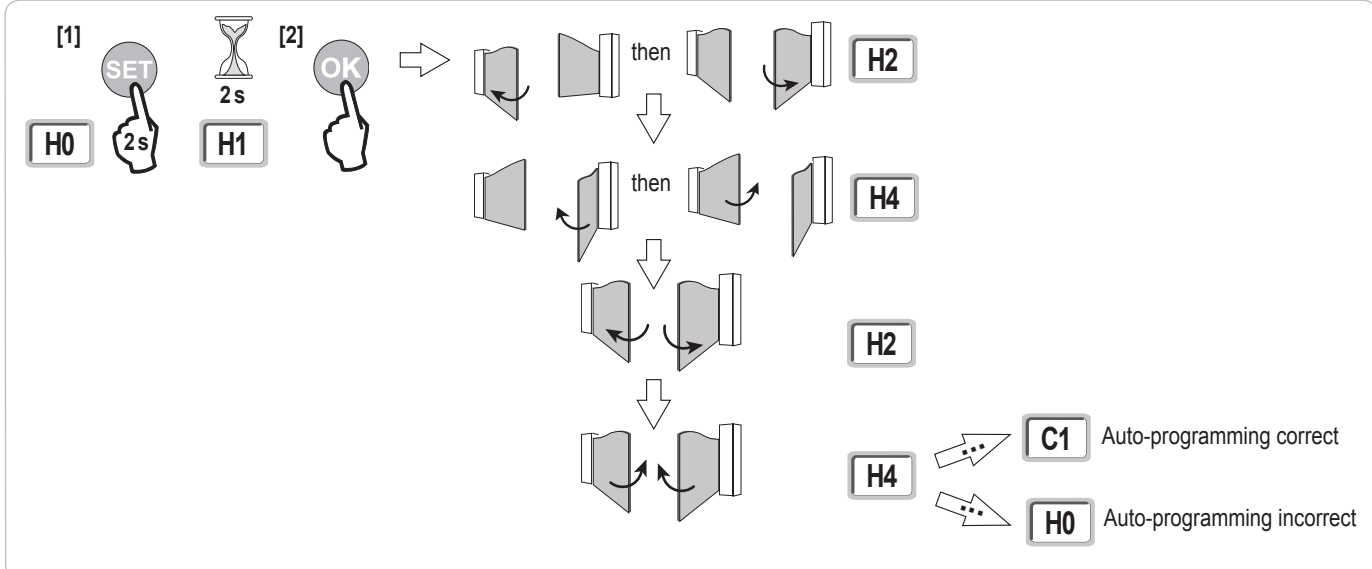


Auto-programming

Auto-programming enables the travel, motor torques and gate leaf closing shift to be adjusted.

i Place the gate leaves in the intermediate position.

- [1]. Press and hold the "SET" button (2 s). release the button when the screen displays "H1".
- [2]. Press "OK" to start auto-programming. The gate performs two complete Opening and Closing cycles.
 - If auto-programming is correct, the display indicates "C1".
 - If auto-programming has not completed correctly, the display indicates "H0".



i It is possible to access auto-programming mode at any time including when the auto-programming cycle has already been completed and the display indicates "C1".

Auto-programming can be interrupted by:

- activating a safety input (photoelectric cells, etc.)
- the appearance of a technical fault (thermal protection, etc.)
- pressing a control button (control box interface, memorised remote control, wired control point, etc.).

In case of interruption, the display indicates "H0" and the control box returns to "Awaiting setting" mode.

In "Awaiting setting" mode, the radio controls operate and the gate moves very slowly. This mode must only be used during installation. Auto-programming must be successfully performed before the gate can be used normally.

During auto-programming, if the gate is stationary, pressing "SET" will exit auto-programming mode.

Compliance with standards

In normal installations, auto-programming ensures compliance with standard EN 12453 - appendix A without additional adjustments.

For heavy gate leaves or if specific installation measurements apply, the impact force must be measured once auto-programming has been successfully completed.

If the dynamic time T_d is too great, reduce the motor torque (parameters P25 to P32).

If the dynamic force F_d is too great, reduce the speed (parameters P19 and P20).

The table below indicates the limits with which the installation complies once auto-programming has been successfully completed*:

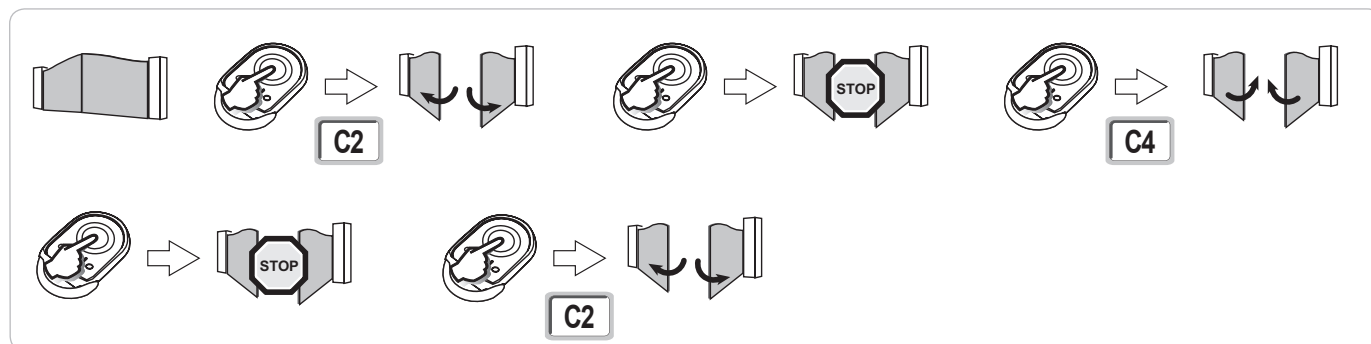
Motorisation	Gate leaf length	Gate leaf weight	Standard EN 12453 compliance (appendix A)
Axovia MultiPro	1 m to 2.5 m	< 150 kg	Compliant*
		150 kg to 300 kg	To be confirmed
Axovia 220B	1 m to 2 m	< 200 kg	Compliant*
Axovia 180B	1 m to 1.8 m	< 200 kg	To be confirmed
Ixengo	1 m to 2 m	< 100 kg	Compliant*
	2 m to 4 m	100 kg to 400 kg	To be confirmed

* for normal installation measurements; in case of doubt, Somfy recommends measuring the impact force once auto-programming has been successfully performed.

OPERATING TEST

Using Keygo io remote controls

Default sequential operating mode (P01=0)



Obstacle detection operation

Obstacle detection when opening = stop + partial reversal.

Obstacle detection when closing = stop + complete reopening.

Operation of the photoelectric cells

With the photoelectric cells connected to the dry/Cell contact (terminals 23-24) and Cell safety input parameter P07 = 1.

Cells obscured with gate open = the gate cannot be moved until the operating mode changes to deadman operation (after 3 minutes).

Cells obscured when opening = the state of the cells is not taken into account and the gate continues to move.

Cells obscured when closing = the gate stops and reopens fully.

Anti-intrusion operation, wind resistance

(on Control Box 3S Axovia io models)

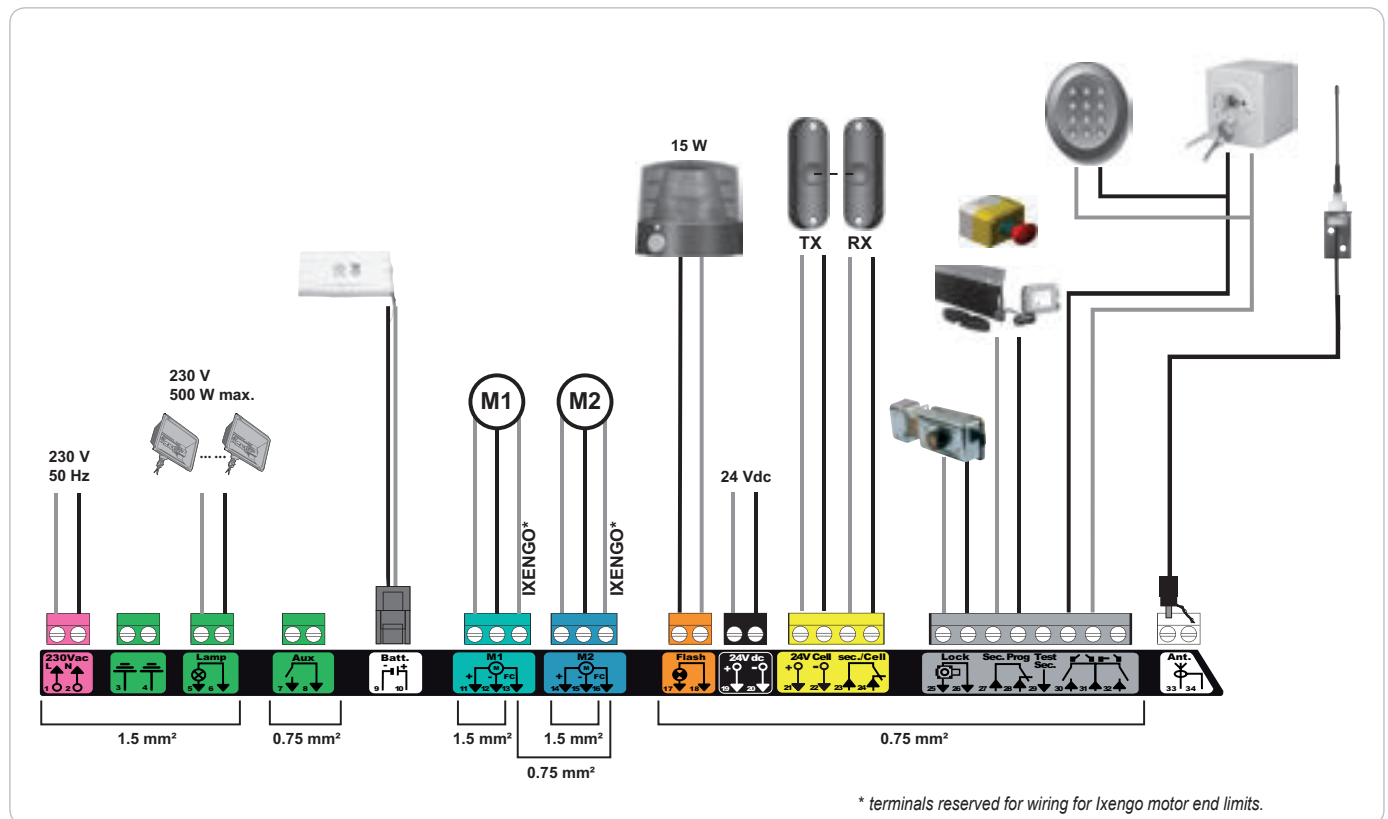
Maintains the gate in the closed or open position by reinjecting current in case of attempted intrusion or strong wind.

Specific operation

See the user booklet.

CONNECTING ADDITIONAL DEVICES

General wiring diagram



Terminals	Terminal indication	Connection	Comments
1 2	L N	230 V power supply	
3 4		Earth	
5 6	N L	230 V lighting output	Max. power 500 W Protected by 5A time-delay fuse
7 8	Contact Shared	Auxiliary contact output	Dry contact for 24V, 2A max, Safety Extra Low Voltage (SELV)
9 10	0 V 9 V - 24 V	9 V / 24 V low voltage power supply input	At 9 V, degraded operation At 24 V, normal operation
11 12 13	+ - End limit	Motor 1 Ixengo only	
14 15 16	+ - End limit	Motor 2 Ixengo only	
17 18	24 V - 15 W 0 V	24 V - 15 W orange light output	
19 20	24 V 0 V	24 V accessories power supply	1.2 A max for all accessories on all outputs
21 22 23 24	24 V 0 V Shared Contact	Safety device power supply Safety input 1 - Cells	Permanent if autotest not selected, controlled if autotest selected Used to connect RX receiver cell BUS compatible (see parameter table)
25 26	+ -	24 V lock or 12 V lock output	Programmable (parameter P17)
27 28	Shared Contact	Safety input 2 - programmable	
29	Contact	Safety test output	
30 31 32	Contact Shared Contact	COMPLETE/OPENING control input PEDESTRIAN/CLOSING control input	COMPLETE/OPENING cycle programmable PEDESTRIAN/CLOSING cycle programmable
33 34	Conductor Braid	Aerial	Do not change the position of the aerial.

Description of the various additional devices



The peripheral cables must be secured using the cable clamps supplied.

Photoelectric cells (Fig. 1)

Three types of connection are possible:

A: Without autotest: programme parameter "P07" = 1.

B: With autotest: programme parameter "P07" = 3.

Allows an automatic test to be carried out to check the operation of the photoelectric cells each time the gate moves.

If the operating test result is negative, the gate cannot be moved until the operating mode changes to deadman operation (after 3 minutes).

C: BUS: programme parameter "P07" = 4. Auto-programming must be repeated after the cell BUS has been connected.



If cells are removed, it is essential to create the bridge between terminals 23 and 24.

It is compulsory to install photoelectric cells if:

- the automatic control device is being controlled remotely (user unable to see it),
- automatic closing is activated (P01 = 1, 3 or 4).

It is compulsory to install photoelectric cells WITH AUTOTEST (P07 = 3 or 4) if the automatic control device is being controlled by a Tahoma control box.

Reflex photoelectric cell (Fig. 2)

Without autotest: programme parameter "P07" = 1.

With autotest: programme parameter "P07" = 2.

Allows an automatic test to be carried out to check the operation of the photoelectric cell each time the gate moves.

If the operating test result is negative, the gate cannot be moved until the operating mode changes to deadman operation (after 3 minutes).



It is compulsory to install photoelectric cells WITH AUTOTEST (P07 = 2) if the automatic control device is being controlled by a Tahoma control box.

Orange light (Fig. 3)

Programme parameter "P12" according to the required operating mode:

- No warning prior to gate movement: "P12" = 0.
- With 2 s warning prior to gate movement: "P12" = 1.

Connect the aerial cable to terminals 33 (conductor) and 34 (braid).

Wired code keypad (Fig. 4)

Aerial (Fig. 5)

Safety edge (Fig. 6)

With autotest: programme parameter "P09" = 2.

Allows an automatic test to be carried out to check the operation of the safety edge each time the gate moves.

If the operating test result is negative, the gate cannot be moved until the operating mode changes to deadman operation (after 3 minutes).

Lock (Fig. 7)

Not operational using backup battery power.

Battery (Fig. 8)

Degraded operation: speed reduced and constant (no slowdown at end limit), 24 V accessories inactive (including cells), electric door-opener incompatible.

Life: 3 cycles/24 hrs

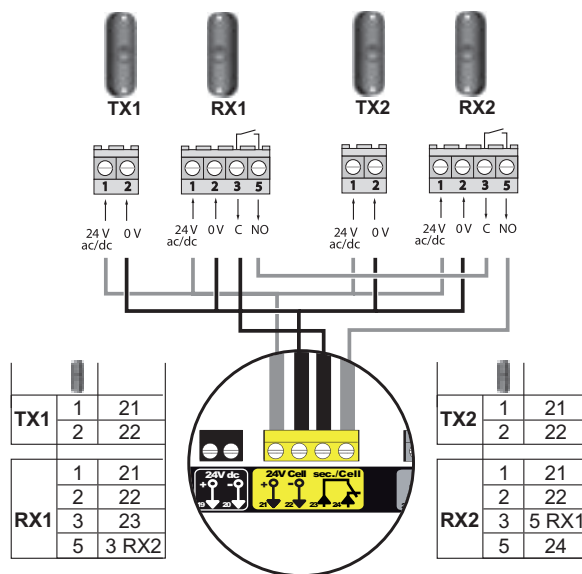
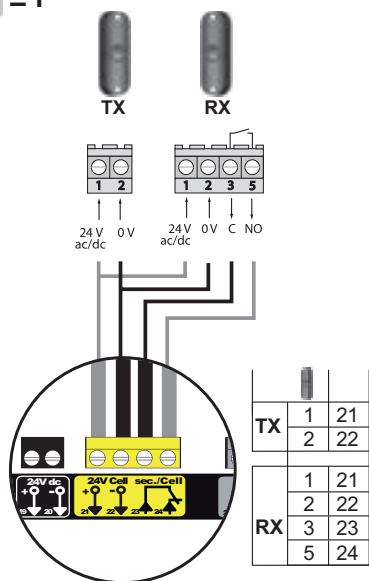
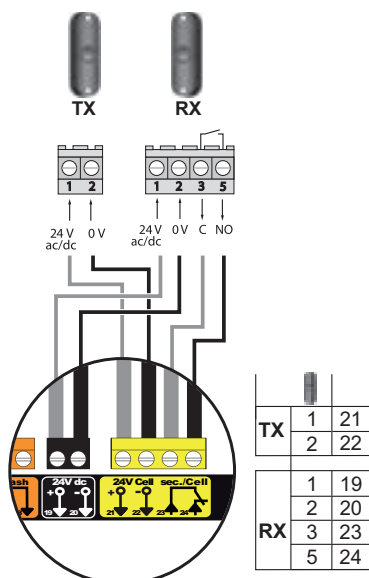
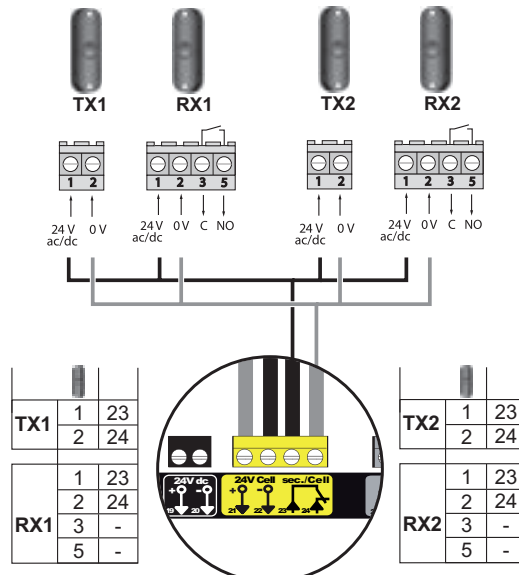
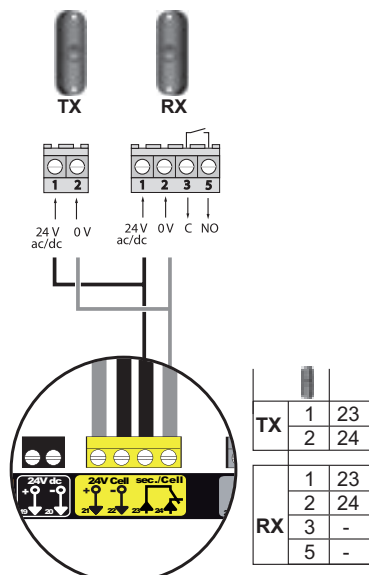
Area lighting (Fig. 9)

For class I lighting, connect the earth wire to terminal 3 or 4.

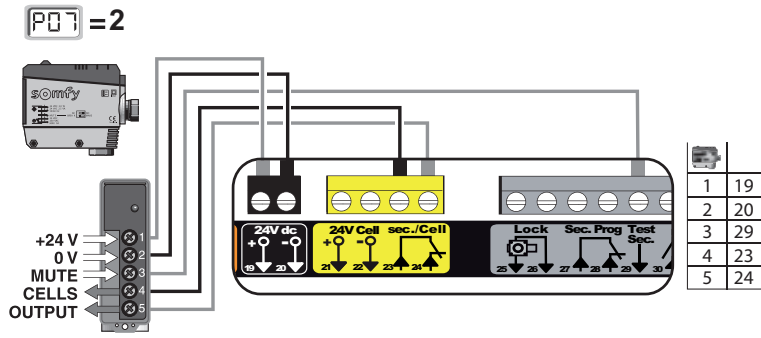
Note: The earth wire must always be longer than the live and neutral wires in case of detachment.

Several lights may be connected provided the total power does not exceed 500 W.

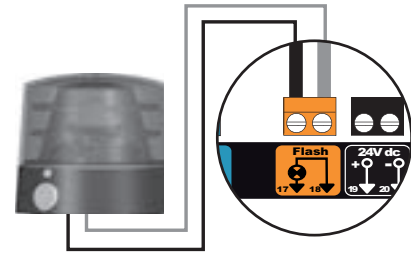
1

A $P07 = 1$ B $P07 = 3$ C $P07 = 4$ 

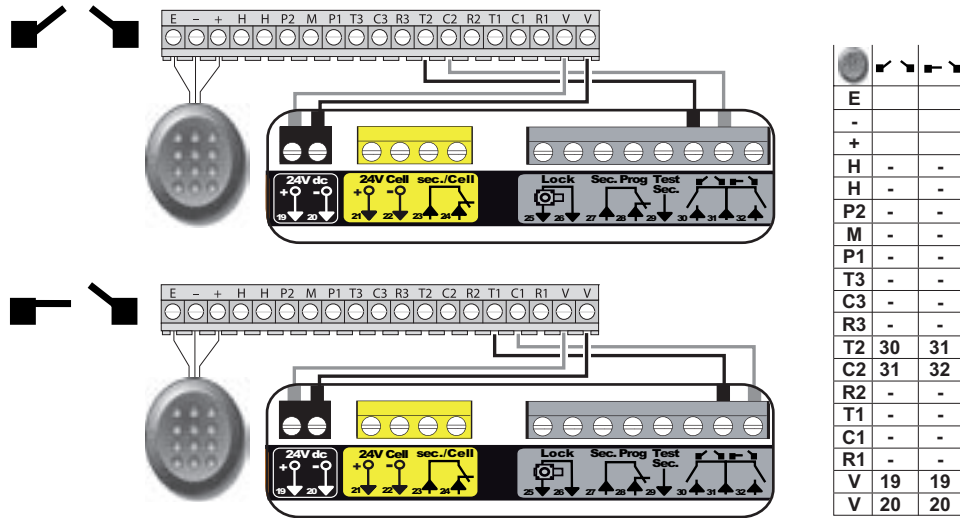
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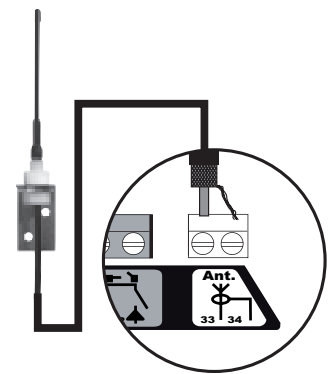
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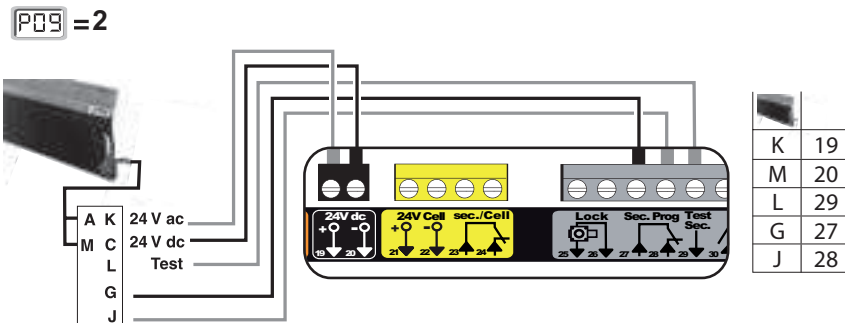
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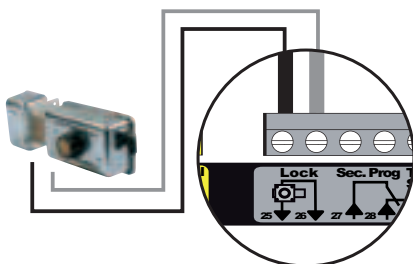
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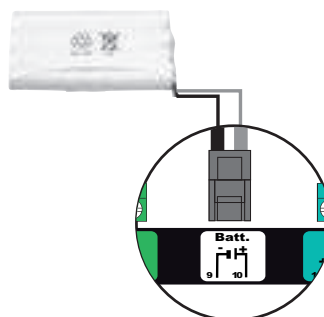
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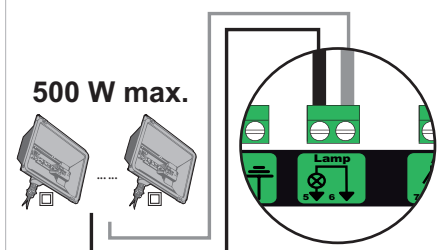
7



8



9



ADVANCED PARAMETER SETTING

Navigating the parameter list

Press ...	to...
	Access and exit the parameter setting menu
	Navigate the parameters and codes list: . short press = normal scrolling through individual parameters . press and hold = rapid scrolling through parameters
	Confirm: . the parameter selection . the parameter value
	Increase/decrease the value of a parameter . short press = normal scrolling through individual parameters . press and hold = rapid scrolling through parameters



Press SET to exit the parameter setting menu.

Parameter value display

If the display is **fixed**, the displayed value is the **value selected** for this parameter.

If the display is **flashing**, the displayed value is the **value selectable** for this parameter.

Meaning of different parameters

Code	Description	Values (bold = default)	Setting completed	Comments
P01	Complete cycle operating mode	0: sequential		Each press on the remote control causes the motor to move (initial position: gate closed) as per the following cycle: open, stop, close, stop, open, etc.
		1: sequential + timed close		Operation in automatic closing mode is only authorised if the photoelectric cells are fitted and P07=1 to 4. In sequential mode with automatic timed close: - the gate closes automatically after the time delay programmed in parameter " P02 "; - pressing a button on the remote control interrupts the movement taking place and the timed close (the gate remains open).
		2: semiautomatic		In semiautomatic mode: - pressing a button on the remote control during opening has no effect, - pressing a button on the remote control during closing causes it to reopen.
		3: automatic		In automatic closure mode: - the gate closes automatically after the time delay programmed in parameter " P02 "; - pressing a button on the remote control during opening has no effect, - pressing a button on the remote control during closing causes it to reopen, - pressing a button on the remote control during the closing time delay restarts the time delay (the gate will close when the new time delay has elapsed). If there is an obstacle in the cells' detection zone, the gate will not close. It will close once the obstacle is removed.
		4: automatic + cell blocked		Operation in automatic closing mode is only authorised if the photoelectric cells are fitted and P07=1 to 4. These operating modes are not compatible with remote control using a TaHoma unit After the gate is opened, movement in front of the cells (safe closure) will close the gate after a short time delay (fixed at 2 seconds). If there is no movement in front of the cells, the gate will close automatically after the timed close programmed in parameter " P02 ". If there is an obstacle in the cells' detection zone, the gate will not close. It will close once the obstacle is removed.
		5: deadman's control (wire)		In wired deadman mode* - the gate can only be controlled by continuous action on a wired control, - the radio controls are inactive.
P02	Complete operating mode automatic timed closing	0 to 30 (time delay value = value x 10 s) 2: 20 s		If value 0 is selected, the gate immediately closes automatically.
P03	Pedestrian cycle operating mode	0: identical to complete cycle operating mode		Pedestrian cycle operating mode is identical to the complete cycle operating mode selected.
		1: without automatic closing		If P01=1, the gate does not close automatically following a pedestrian opening command.
		2: with automatic closing		Operation in automatic closing mode is only authorised if the photoelectric cells are fitted. i.e. P07=1 to 4. Irrespective of the value of P01, the gate does not close automatically following a pedestrian opening command. The automatic closing time delay can be programmed in parameter " P04 " (short time delay) or parameter " P05 " (long time delay).
P04	Short automatic closing time delay in pedestrian cycle	0 to 30 (time delay value = value x 10 s) 2: 20 s		If value 0 is selected, the gate immediately closes automatically.

Code	Description	Values (bold = default)	Setting completed	Comments
P05	Long automatic closing time delay in pedestrian cycle	0 to 99 (time delay value = value x 5 min) 0: 0 s		Value 0 must be selected if the short automatic closing time delay in pedestrian cycle is active.
P07	Cell safety input	0: inactive 1: active 2: active with autotest via test output 3: active with autotest via power supply switching 4: bus cells		0: the safety input is not taken into account. 1: safety device without autotest; it is essential to check that it is operating correctly every 6 months. 2: the autotest is run on the device for each operating cycle via the test output, reflex cell application with autotest. 3: the autotest is run on the device for each operating cycle via power supply switching of the cell power supply output (terminals 21 and 22). 4: bus cells application.
P09	Programmable safety input	0: inactive 1: active 2: active with autotest via test output 3: active with autotest via power supply switching		0: the safety input is not taken into account. 1: safety device without auto-test. 2: the autotest is run on the device for each operating cycle via the test output 3: the autotest is run on the device for each operating cycle via power supply switching of the cell power supply output (terminals 21 and 22).
P10	Programmable safety input - function	0: active closing 1: active opening 2: active closing + ADMAP 3: all movement disabled		0: the programmable safety input is only active when closing. 1: the programmable safety input is only active when opening. 2: the programmable safety input is only active when closing and, when activated, the gate cannot be opened. 3: emergency stop application; if the programmable safety input is activated, the gate cannot be moved.
P11	Programmable safety input - action	0: stop 1: stop + partial reversal 2: stop + complete reversal		0: emergency stop application, compulsory if P10=3 disabled if a safety edge is connected to the programmable safety input 1: recommended for safety edge application 2: recommended for cell application
P12	Orange warning light	0: no warning 1: with 2 s warning prior to movement		If the gate opens onto a public path, the "with warning" configuration must be selected: P12=1.
P13	Area lighting output	0: inactive 1: controlled operation 2: automatic + controlled operation		0: the area lighting output is not taken into account. 1: the area lighting is remotely controlled. 2: the area lighting is remotely controlled when the gate is stationary + the area lighting comes on automatically when the gate is moving, and remains on when it stops moving for the duration of the time delay programmed in parameter "P14". P13=2 is compulsory for operation in automatic mode.
P14	Area lighting time delay	0 to 60 (time delay value = value x 10 s) 6: 60 s		If value 0 is selected, the area lighting goes out as soon as the gate stops moving.
P15	Auxiliary output	0: inactive 1: automatic: gate open indicator light 2: automatic: timed bistable 3: automatic: one-touch 4: controlled: bistable (ON-OFF) 5: controlled: one-touch 6: controlled: timed bistable		0: the auxiliary output is not taken into account. 1: the gate indicator light is off when the gate is closed, flashing when the gate is moving and on when the gate is open. 2: output activated when movement starts, during movement then deactivated at the end of the time delay programmed in parameter "P16". 3: one-touch at contact when movement starts. 4: operation changes as follows each time the memorised button on the radio control point is pressed: ON, OFF, ON, OFF... 5: one-touch at contact by pressing the memorised button on the radio control point. 6: output activated by pressing the memorised button on the radio control point then deactivated at the end of the time delay programmed in parameter "P16".
P16	Auxiliary output time delay	0 to 60 (time delay value = value x 10 s) 6: 60 s		The auxiliary output time delay is only active if the value selected for P15 is 2 or 6.
P17	Lock output	0: active 24V one-touch 1: active 12V one-touch		The lock is released at the start of opening.
P18	Lock release	0: inactive 1: active		0: the lock release is inactive. 1: recommended for use with an electric lock. This parameter is only available on Control Box 3S Axovia io models.
P19	Closing speed	1: slowest speed at 10: fastest speed Default value:		If this parameter is modified, the installer must check that the limitation of forces complies with appendix A of the standard EN12 453 or install a safety edge.
P20	Opening speed	- Control Box 3s Axovia io: 5 - Control Box 3s Ixengo io: 6		
P21	Closing slowdown zone	0: shortest slowdown zone at 5: longest slowdown zone Default value: 1		
P22	Opening slowdown zone	0: shortest slowdown zone at 5: longest slowdown zone Default value: 1		

Code	Description	Values (bold = default)	Setting completed	Comments
P23	M1/M2 shift when closing	1: minimum shift at 10: maximum shift Adjusted at the end of auto- programming		1: Minimum shift ensuring the leaves do not cross. Disabled if hinged gate with 1 "covering" leaf. 10: maximum shift corresponding to the complete movement of one leaf then the other
P24	M1/M2 shift when opening	1: minimum shift at 10: maximum shift Adjusted at the end of auto- programming		
P25	M1 closing torque limitation	1: minimum torque at 10 (Axovia) or 20 (Ixengo): maximum torque Adjusted at the end of auto- programming		If this parameter is modified, the installer must check that the limitation of forces complies with appendix A of the standard EN12 453 or install a safety edge. If the torque is too low, there may be erratic obstacle detection. If the torque is too high, the installation may not comply with the standard.
P26	M1 opening torque limitation			
P27	M1 closing slowdown torque limitation			
P28	M1 opening slowdown torque limitation			
P29	M2 closing torque limitation			
P30	M2 opening torque limitation			
P31	M2 closing slowdown torque limitation			
P32	M2 opening slowdown torque limitation			
P37	Wired control inputs	0: complete cycle mode - pedestrian cycle 1: opening mode - closing		0: terminal 30 input = complete cycle, terminal 32 input = pedestrian cycle 1: terminal 30 input = opening only, terminal 32 input = closing only
P39	Limit position maintaining time delay	0: no time delay 1: with time delay		This parameter is only available on Control Box 3S Ixengo io models.
P40	Coupling speed when closing	1: slowest speed at 4: fastest speed Default value: 2		If this parameter is modified, the installer must check that the limitation of forces complies with appendix A of the standard EN12 453 or install a safety edge.
P41	Coupling speed when opening	1: slowest speed at 4: fastest speed Default value: 2		

MEMORISING THE REMOTE CONTROLS

General information

Remote control types

There are two types of remote control:

- monodirectional: Keygo io, Situo io, Smoove io
- bidirectional with information feedback function (remote controls indicate the movement in progress and issue confirmation of correct operation): Keytis io, Telis 1 io, Telis Composio io, Impresario Chronis io

Memorising the remote controls

There are two ways to memorise a remote control:

- **Memorising via the programming interface.**
- **Memorising by copying a previously memorised remote control.**

Each control button is memorised individually.

Memorising a button which has already been memorised will clear this button's function.

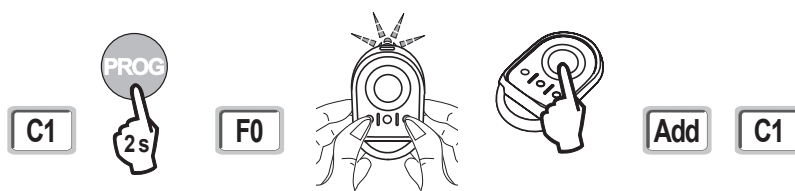
Meaning of displayed codes

Code	Description
Add	Successful memorisation of a monodirectional remote control
---	Successful memorisation of a bidirectional remote control
dEL	Delete a previously memorised button
rEF	Unsuccessful memorisation of a bidirectional remote control
FuL	Memory full (only for monodirectional remote controls)

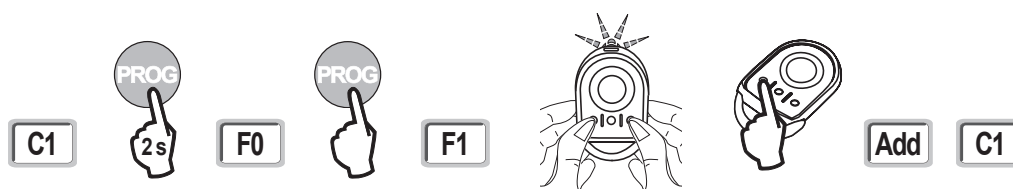
Memorising the Keygo io remote controls

Memorising via the programming interface

- COMPLETE opening control



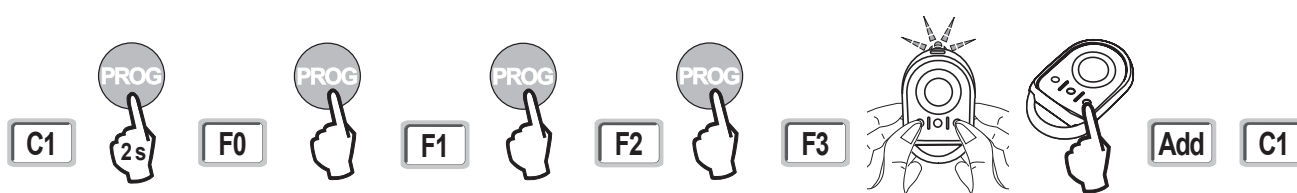
- PEDESTRIAN opening control



- LIGHTING control



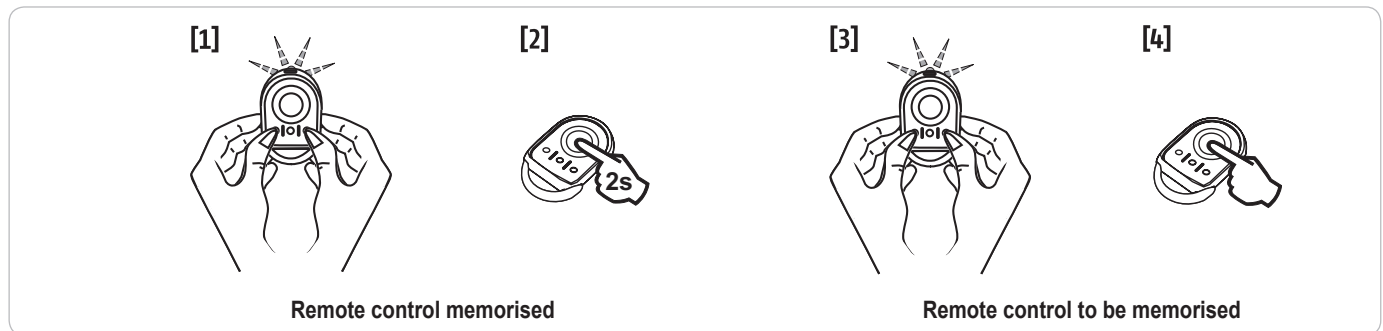
- AUXILIARY OUTPUT control (P15 = 4.5 or 6)



Memorising by copying a previously memorised Keygo io remote control

This operation is used to copy the programming from a previously memorised remote control button.

- [1]. Press the outer left and right buttons on the previously memorised remote control together until the green indicator light flashes (2 s).
- [2]. Press and hold the button to be copied on the previously memorised remote control for 2 seconds.
- [3]. Briefly press the outer left and right buttons on the new remote control together.
- [4]. Briefly press the selected button to actuate the motorisation on the new remote control.



Memorising the Keytis io remote controls

The Keytis io remote control system key memorising and copy memorising operations can only be carried out at the installation site. To obtain authorisation to transfer its system key or programming, the previously memorised remote control must be able to establish radio communication with a receiver on the installation.



If the installation already includes other io-homecontrol® products with at least one memorised bidirectional remote control, the Keytis io remote control must first memorise the system key (see below).

A previously memorised button cannot be memorised on a second receiver. To find out whether a button has already been memorised, press it:

- button already memorised → green indicator light comes on.
- button not memorised → orange indicator light comes on.

To clear a previously memorised button, refer to the section entitled **Clearing individual buttons on the Keytis io remote control**.

Memorising the system key



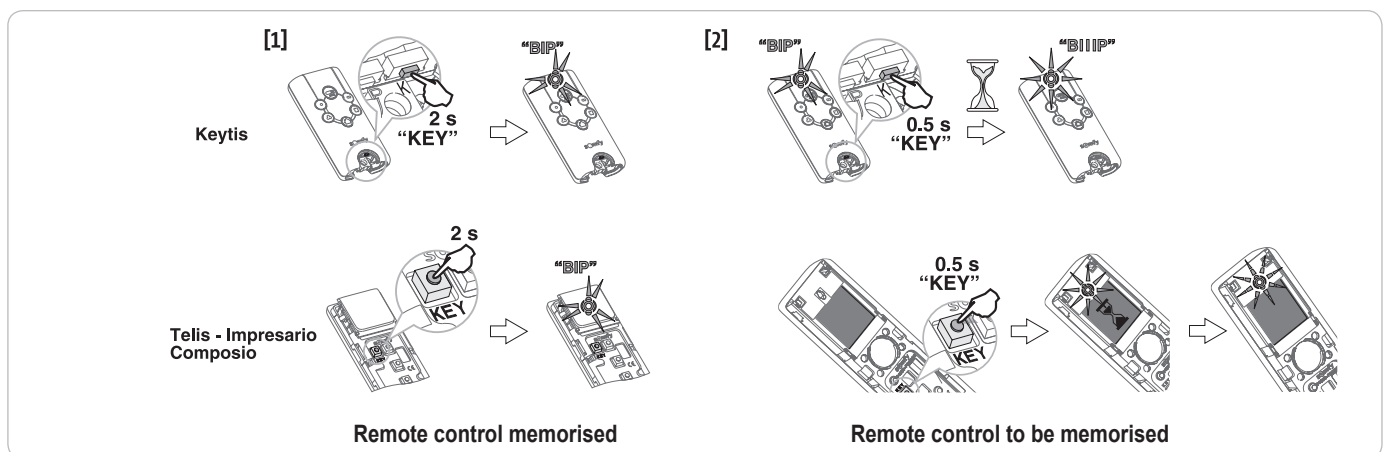
This step must be performed if the installation already includes other io-homecontrol® products with at least one memorised bidirectional remote control.

If the Keytis io remote control to be memorised is the first remote control on the system, go directly to the step "Memorising the Keytis io remote control".

- [1]. Setting the memorised remote control to key transfer mode:

- Keytis io, Telis io, Impresario io, Composio io remote controls: press the "KEY" button until the green indicator light comes on (2 s).
- Other remote control: refer to the instructions.

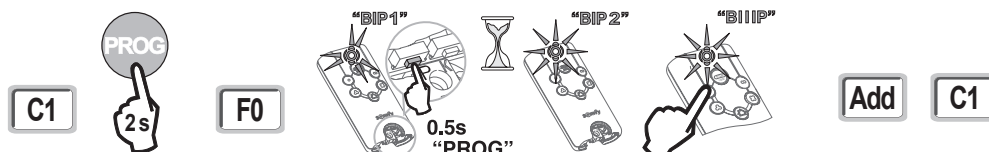
- [2]. Briefly press the "KEY" button on the new remote control. Wait for the confirmation beep (a few seconds).



Memorising via the programming interface

If the installation already includes other io-homecontrol® products with at least one memorised bidirectional remote control, the Keytis io remote control must first memorise the system key (see page 16).

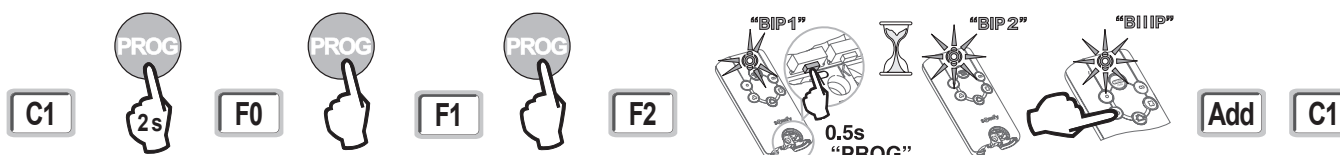
• COMPLETE opening control



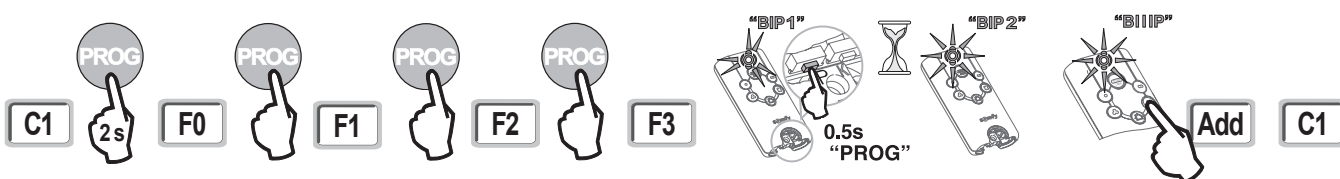
• PEDESTRIAN opening control



• LIGHTING control



• AUXILIARY OUTPUT control (P15 = 4.5 or 6)



Memorising by copying a previously memorised Keytis io remote control

• Complete copying of a Keytis io remote control

This operation is used to copy all the buttons on a previously memorised remote control.

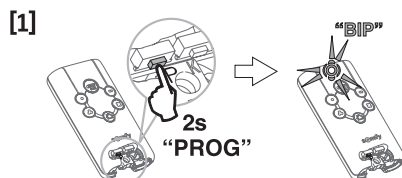
The new remote control must not be memorised for another automatic control system.

Ensure that the new remote control has memorised the system key.

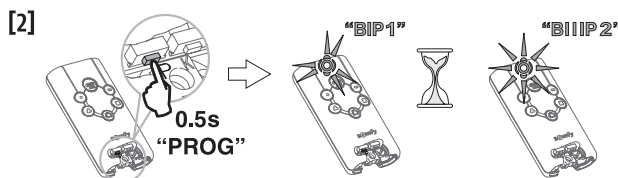
[1]. Press the "PROG" button on the memorised remote control until the green indicator light comes on (2 s).

[2]. Briefly press the "PROG" button on the new remote control.

Wait for the second beep and the green indicator light to start flashing rapidly (a few seconds).



Remote control memorised



Remote control to be memorised

• Copying individual buttons on the Keytis io remote control

This operation is used to copy the memorisation of a single button on a previously memorised remote control to a blank button on a new remote control. Ensure that the new remote control has memorised the system key.

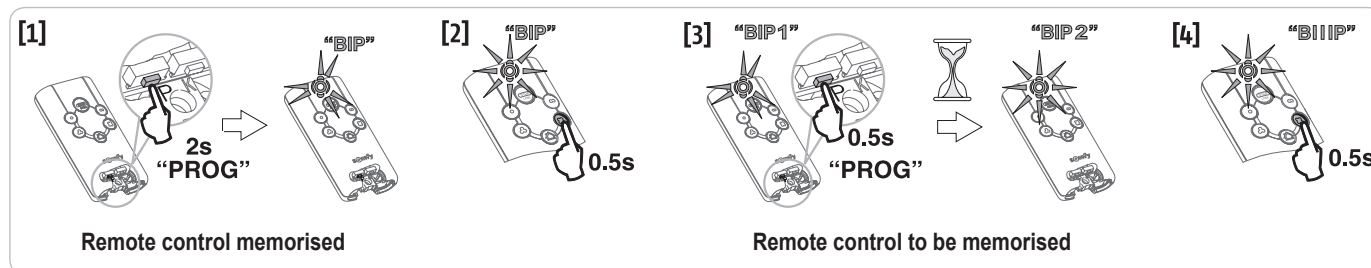
[1]. Press the "PROG" button on the memorised remote control until the green indicator light comes on (2 s).

[2]. Briefly press the button to be copied on the previously memorised remote control.

[3]. Briefly press the "PROG" button on the new remote control.

Wait for the confirmation beep (a few seconds).

[4]. Briefly press the selected button to actuate the motor on the new remote control.



It is not possible to memorise Keytis io remote controls in the following cases:

- . The remote control has not memorised the system key.
- . Several of the installation's receivers are in programming mode.
- . Several remote controls are in key transfer or memorisation mode.

Incorrect memorisation is indicated by a rapid series of beeps accompanied by a flashing orange indicator light on the Keytis remote control.

Memorising 3-button remote controls (Telis io, Telis Composio io, etc.)

Button functions on a 3-button remote control

	^	my	v
F0	Complete opening	Stop	Complete closing
F1	Complete opening	Stop	Complete closing
F2	Lighting ON		Lighting OFF
F3	Aux. output ON		Aux. output OFF

Memorising via the programming interface

To memorise a 3-button io bidirectional remote control (Telis io, Impresario Chronis io, etc.), ensure that the remote control has memorised the system key (see page 16).

[1]. Press and hold the "PROG" button (2 s) on the programming interface.

The screen displays "F0".

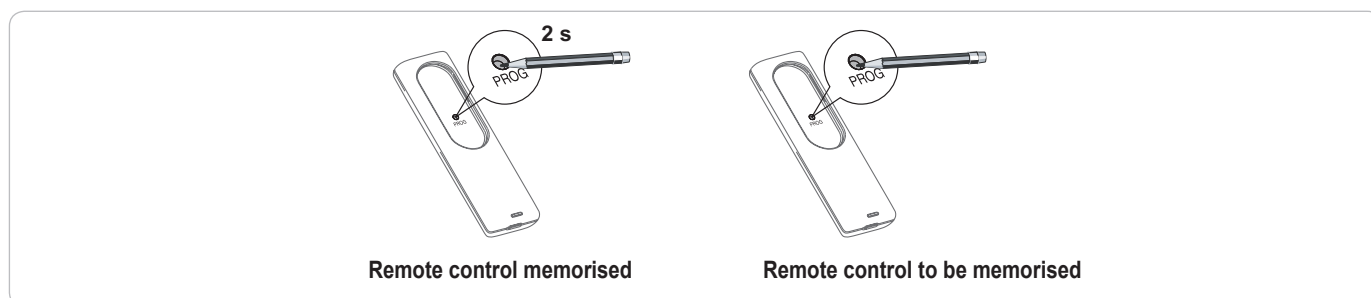
Note: pressing "PROG" again allows the next function to be memorised.

[2]. Press "PROG" at the rear of the 3-button remote control to memorise the function.

The screen displays "Add".



Memorising by copying a previously memorised 3-button io remote control

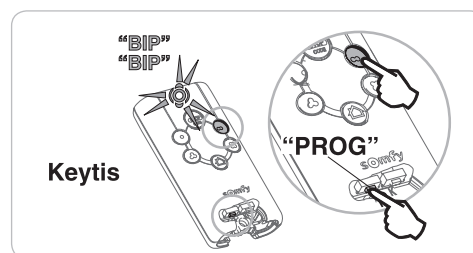


CLEARING THE REMOTE CONTROLS AND ALL SETTINGS

Clearing individual buttons on the Keytis io or Keygo io remote controls

This can be done:

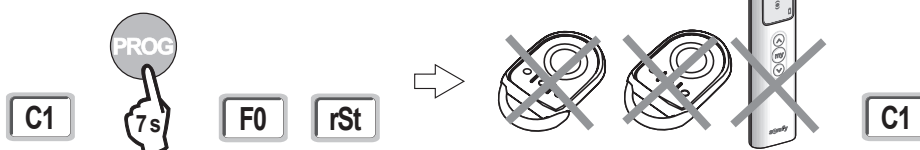
- by **memorising via the programming interface**.
Memorising a button which has already been memorised will clear this button's function.
- by **clearing directly on the remote control** (only on Keytis io remote controls).
Press the **"PROG"** button and the **BUTTON** to be cleared on the remote control together.



Clearing the memorised remote controls

Causes all memorised remote controls and the memorised system key to be cleared.

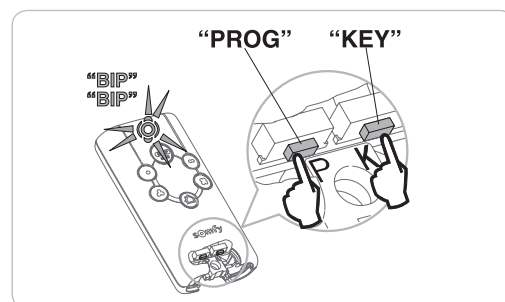
Note: On Keytis io remote controls, repeat the direct clearing procedure described above for all of the memorised remote control buttons.



Keytis io remote control general reset

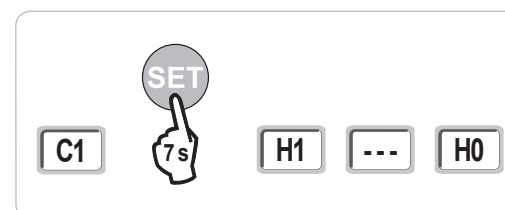
Press the **"PROG"** and **"KEY"** buttons together. This causes:

- the programming to be completely cleared (all buttons),
- all the settings on the remote control to be cleared (refer to the instructions for the Keytis io remote control),
- the system key memorised by the remote control to be modified.



Clearing all settings

Clears the auto-programming and resets the default values for all parameters.



LOCKING THE PROGRAMMING BUTTONS

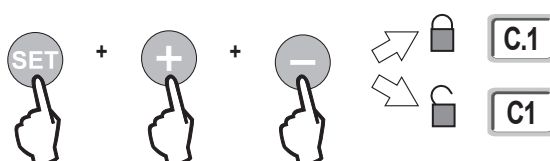
The programming buttons must be locked to ensure the safety of the users.

When the programming buttons are locked, a dot appears after the 1st digit.

Press the **"SET"**, **"+"** and **"-"** buttons.

- the **"SET"** button must be pressed first.
- the **"+"** and **"-"** buttons must be pressed simultaneously within 2 seconds.

To access the programming again, repeat this procedure.



DIAGNOSTICS

Operating code display

Code	Description	Comments
C1	Awaiting command	
C2	Gate opening	
C3	Awaiting gate closure	Automatic closing time delay P02, P04 or P05 in progress.
C4	Gate closing	
C6	Detection in progress for cell safety	
C8	Detection in progress for programmable safety	Displayed during a movement request or during movement when detection is in progress on the safety input. The display appears for as long as detection is in progress on the safety input.
C9	Detection in progress for emergency stop safety	
C12	Reinjecting current	This display is only available on Control Box 3S Axovia io models.
C13	Safety device autotest in progress	Displayed while the autotest is running on the safety devices.
C14	Permanent complete opening wire control input	Indicates that the complete opening wire control input is permanently activated (contact closed). Commands coming from the radio remote controls are then disabled.
C15	Permanent pedestrian opening wire control input	Indicates that the pedestrian opening wire control input is permanently activated (contact closed). Commands coming from the radio remote controls are then disabled.
C16	BUS cell programming refused	Check that the BUS cells (wiring, alignment, etc.) are operating correctly
Cc1	9.6 V power supply	Displayed during operation with 9.6 V backup battery
Cu1	24 V power supply	Displayed during operation with 24 V backup battery

Programming code display

Code	Description	Comments
H0	Awaiting setting	Pressing and holding the "SET" button for 2 seconds starts auto-programming mode.
Hc1	Awaiting setting + 9.6 V power supply	Displayed during operation with 9.6 V backup battery
Hu1	Awaiting setting + 24 V power supply	Displayed during operation with 24 V backup battery
H1	Awaiting start of auto-programming	Pressing the "OK" button starts the auto-programming cycle. Pressing the "+" or "-" button allows the motor to be controlled in forced operation mode.
H2	Auto-programming mode - opening	
H4	Auto-programming mode - closing	
F0	Awaiting remote control memorisation for operation in complete opening mode	Pressing a button on the remote control allocates this button to the motor complete opening control. Pressing "PROG" once more switches to "awaiting remote control memorisation for operation in pedestrian opening mode: F1 ".
F1	Awaiting remote control memorisation for operation in pedestrian opening mode	Pressing a button on the remote control allocates this button to the motor pedestrian opening control. Note: Dedicated operation in pedestrian opening mode one a single button is only possible on Keygo io models. Pressing "PROG" once more switches to "awaiting remote lighting control memorisation: F2 ".
F2	Awaiting remote control memorisation for remote lighting control	Pressing a button on the remote control allocates this button to the remote lighting control. Pressing "PROG" once more switches to "awaiting auxiliary output control memorisation: F3 ".
F3	Awaiting remote control memorisation for auxiliary output control	Pressing a button on the remote control allocates this button to the auxiliary output control. Pressing "PROG" once more switches to "awaiting remote control memorisation for operation in complete opening mode: F0 ".

Fault and breakdown code display

Code	Description	Comments	Solution?
E1	Cell safety autotest fault	The cell autotest is not satisfactory.	Check that "P07" is correctly configured. Check the wiring of the cells.
E2	Programmable safety autotest fault	The programmable safety input autotest is not satisfactory.	Check that "P09" is correctly configured. Check the programmable safety input wiring.
E4	Obstacle detection when opening		
E5	Obstacle detection when closing		
E6	Cell safety fault	Detection in progress on safety input for longer than 3 minutes.	Check that no obstacles are causing the cells or safety edge to detect. Check that "P07 or P09" is correctly configured in relation to the device connected to the safety input. Check the safety device wiring. Check that the photoelectric cells are correctly aligned.
E8	Programmable safety fault		
E9	Thermal protection	Thermal protection is correct	
E10	Motor short circuit protection		Check the motor wiring.
E11	24V power supply short protection	Short circuit protection for input/outputs: product and additional devices connected to terminals 21 to 26 (orange light, photoelectric cells (except BUS), code keypad) not operating	Check the wiring, then disconnect the power supply for 10 seconds. N.B.: maximum accessories consumption = 1.2 A
E12	Hardware fault	The hardware auto tests are not satisfactory	Repeat an order. If the fault persists, contact Somfy.
E13	Accessories power supply fault	The accessories power supply cuts out following an overload (excessive consumption)	N.B.: maximum accessories consumption = 1.2 A Check the consumption of the connected accessories.
E14	Intrusion detection	Current reinjection function	Normal operation (attempted intrusion, current reinjection activated, etc.)
E15	Fault when the control box supplied by the backup battery is first switched on		Disconnect the backup battery and connect the control box to the mains to switch it on for the first time.

For all other error codes or faults, please contact Somfy.

Accessing memorised data

To access memorised data, select parameter "Ud" then press "OK".

Data	Description
U0 to U1	Complete opening cycle counter global [Hundred thousands - ten thousands - thousands] [hundreds - tens - units]
U2 to U3	since last auto-programming [Hundred thousands - ten thousands - thousands] [hundreds - tens - units]
U6 to U7	Cycle counter with obstacle detection global [Hundred thousands - ten thousands - thousands] [hundreds - tens - units]
U8 to U9	since last auto-programming [Hundred thousands - ten thousands - thousands] [hundreds - tens - units]
U12 to U13	Pedestrian opening cycle counter
U14 to U15	Reset movement counter
U20	Number of monodirectional remote controls memorised for complete opening control
U21	Number of monodirectional remote controls memorised for pedestrian opening control
U22	Number of monodirectional remote controls memorised for remote lighting control
U23	Number of monodirectional remote controls memorised for auxiliary output control
U24	0 = no system key present, 1 = system key present
d0 to d9	Log of the last 10 faults (d0 most recent - d9 oldest)
dd	To clear the fault log: press and hold "OK" for 7 s.

TECHNICAL DATA

GENERAL SPECIFICATIONS

Power supply	230 V - 50 Hz
Max. power consumption	800 W (with 500 W remote lighting)
Programming interface	7 buttons - 3-character LCD screen
Climatic operating conditions	- 20°C/+ 60°C - IP 44
Somfy radio frequency	868 - 870 MHz
Number of memorisable channels	Monodirectional controls (Keygo io, Situo io, etc.)
	Bidirectional controls (Keytis io, Telis io, Composio io, etc.)
	Complete/pedestrian opening control: 30 Lighting control: 4 Auxiliary output control: 4 Unlimited

CONNECTIONS

Programmable safety input	Type Compatibility	Dry contact: NC TX/RX photoelectric cells - Bus cells - Reflex cell - Dry contact output safety edge
Wired control input		Dry contact: NO
Remote lighting output		230 V - 500 W Halogen or incandescent only
Orange light output		24 V - 15 W with integrated flashing management
24 V controlled power supply output		Yes: for possible autotest on TX/RX photoelectric cells
Safety input test output		Yes: for possible autotest on reflex cell or safety edge
Accessories supply output		24 V - 1.2 A max
Offset aerial input		Yes: compatible with io aerial (Ref. 9013953)
Backup battery input	Life	Yes: compatible with battery pack (Ref. 9001001) 24 hours; 3 cycles Charge time: 48 hours

OPERATION

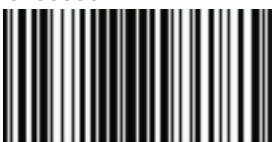
Forced operating mode	By pressing the motor control button
Independent remote lighting control	Yes
Timed lighting (after movement)	Programmable: 0 to 600 s
Automatic closing mode	Yes: programmable reclosing time delay from 0 to 255 min
Orange light warning	Programmable: without or with warning (fixed at 2 s)
Security entry operation	When closing Before opening (ADMAP)
Partial opening control	Programmable : stop - partial reopening - complete reopening Programmable: no effect or movement refused Yes: complete opening of motorised gate leaf by M1
Gradual starting	Yes
Opening speed	Programmable: 10 possible values
Closing speed	Programmable: 10 possible values
Coupling speed when closing	Programmable: 5 possible values
Lock release - electric door-opener release	Programmable: active - inactive
Holding gate in open/closed position	By current reinjection in case of detection when opening/closing (only on Control Box 3S Axovia io models)
Gate leaf shift	Programmable
Diagnostics	Saving and consulting data: cycle counter, cycle counter with obstacle detection, number of memorised radio channels, log of the last 10 stored faults

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