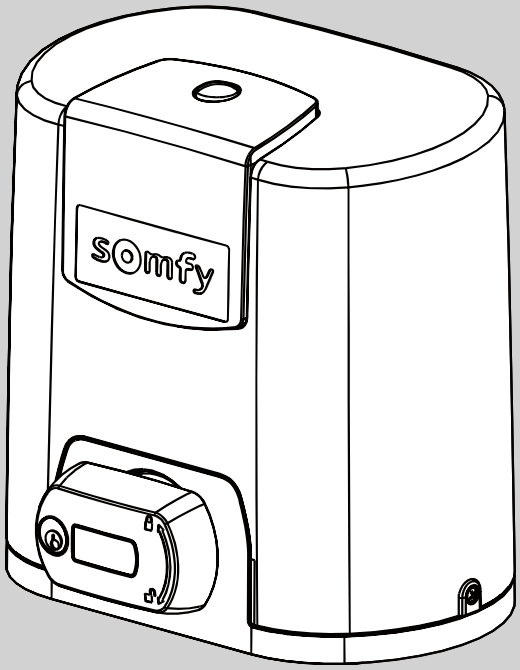


ELIXO 500 3S RTS

SL-PRO montage team

EN **Installation instructions**

TR **Montaj kılavuzu**

FA راهنمای نصب

AR دليل التركيب

D811950_02_02-10-2012

HOME MOTION by somfy

EN

CONTENTS

GENERAL INFORMATION 2

SAFETY INSTRUCTIONS 2
- Caution 2
- Safety instructions relating to installation 2
- Motorising an existing gate 3

PRODUCT DESCRIPTION 3
- Area of application 3
- Contents of the standard kit 3
- Description of the motorisation 4
- General motor size 4
- General view of a standard installation 4
- Description of the interface 4

INSTALLATION 5
- Assembling the manual release handle 5
- Unlocking the motor 5
- Installing the motorisation 5

QUICK COMMISSIONING 7
- Memorising the Keygo RTS remote controls for operation in complete opening mode 7
- Self-learning 7

OPERATING TEST 8
- Complete opening operation 8
- Obstacle detection operation 8
- Operation of the photoelectric cells 8
- Safety edge operation (closing only) 8
- Specific operation 8

GENERAL WIRING DIAGRAM 9

CONNECTING ADDITIONAL DEVICES 10
- Description of the various additional devices 10

ADVANCED PARAMETER SETTING 13
- Navigating the parameter list 13
- Parameter value display 13
- Meaning of the various parameters 13

PROGRAMMING THE REMOTE CONTROLS 16
- Memorising 2- or 4-button remote controls via the programming interface 16
- Memorising 3-button remote controls via the programming interface 16
- Memorising the remote controls 17

CLEARING THE REMOTE CONTROLS AND ALL SETTINGS 17
- Clearing the memorised remote controls 17
- Clearing all settings 17

LOCKING THE PROGRAMMING BUTTONS 17

DIAGNOSTIC 18
- Operating code display 18
- Programming code display 18
- Fault and breakdown code display 18
- Accessing memorised data 19

TECHNICAL DATA 19

EN

GENERAL INFORMATION

This product, installed in accordance with this guide, complies with standards EN 12453 and EN 13241-1.

The instructions referred to in the product's installation guide and instructions for use are designed to prevent damage to property and personal injury along with compliance with the above standards.

Somfy declares that this product complies with the essential requirements and other relevant provisions of Directive 1999/5/EC. A Declaration of Conformity is available at **www.somfy.com/ce** (ELIXO 500 3S RTS).

Product can be used in the European Union, Switzerland and Norway.

SAFETY INSTRUCTIONS

Caution

Always read this installation guide and the attached safety instructions before installing this Somfy product.

This guide describes how to install, commission and operate this product. Follow all the instructions as incorrect installation can lead to serious injury.

Any use outside the sphere of application specified by Somfy is forbidden. This invalidates the warranty and discharges Somfy of all liability, as does any failure to comply with the instructions given herein.

This Somfy product must be installed by a professional motorisation and home automation installer, for whom this guide is intended.

Moreover, the installer must comply with current standards and legislation in the country in which the product is being installed, and inform his customers of the conditions for use and maintenance for the product. It is the installer's responsibility to ensure that the automatic installation and its operation are compliant with the standards in force.

This device is not designed to be used by persons (including children) whose physical, sensory or mental capacity is impaired, or persons with little experience or knowledge, unless they are under supervision or have received instructions on using the device by a person responsible for their safety.

Safety instructions relating to installation

Somfy refuses to accept any responsibility as regards the safety and correct operation of the motorisation if non-Somfy components are used. No modifications may be made to the components of the motorisation system unless expressly authorised by Somfy. Inform the user about the operation of the control systems and the manual opening procedure in the event of an emergency. Installations which do not comply with the specifications in this manual or improper use of the product may cause injury or damage the equipment.

Installation area

- Before installation, ensure that the installation location complies with the provisions of the current standards. In particular, the position in which the motorisation mechanism will be fitted must allow for safe and easy manual release of the gate.
- Check that the temperature range marked on the motors is suited to the installation location.
- Ensure that there are no danger zones (risk of crushing, cutting, trapping) between the gate and the surrounding fixed elements caused by the opening movement of the gate.
- Do not install the product in an explosive environment.
- Maintain a clear area of 500 mm behind the gate when it is completely open.

Installation

- Before installation, ensure that the gate frame conforms to current standards, particularly:
  - The gate sliding rail must be straight and horizontal and the wheels must be able to support the weight of the gate.
  - The gate should be able to be moved easily, manually, over its entire travel and there should be no sign of excessive side sway.
  - The upper guide should allow the gate exact clearance to ensure regular, silent movement.
  - End stops must be installed on the ground at both the opening and closing ends.
- On a barred gate, if the bars are more than 40 mm apart, install an appropriate safety device to prevent cutting.
- Watch the gate while it is moving.
- Manual unlocking may result in uncontrolled movement of the gate leaf.
- Place the fixed control devices and remote controls out of the reach of children.
- Any switch without a locking device must be installed in direct view of the gate and away from any mobile parts. The minimum height at which it must be installed is 1.5 m. It must not be accessible to the public.
- Check that the motor cannot be used with a driven part incorporating a small gate (unless the motor is inhibited when the small gate is opened).

During installation of the motorisation

- Remove any jewellery (bracelets, chains, etc.).
- For drilling and welding operations, wear special glasses and sufficient protection.
- Use the appropriate tools.
- Do not connect to the mains or to a backup battery before installation is complete.
- Be careful when handling the motorisation system to prevent any risk of injury.

EN

Power supply

- In order to operate, the motor must be supplied with 230 V 50 Hz. The electric line should:
  - solely be used for the motor,
  - have a minimum cross section of 1.5 mm²,
  - be fitted with an approved all-pole switch with contact openings of at least 3.5 mm, fitted with a protection device (fuse or circuit breaker with a 16 A rating) and a differential device (30 mA),
  - be installed in accordance with the current electrical safety standards,
  - be fitted with a lightning conductor (in compliance with standard NF C 61740, maximum residual voltage 2 kV),
- Check whether the earthing system is performed correctly: connect all the metal parts of the assembly and all the components of the installation equipped with earth terminals.
- After installation, ensure that the mechanism is correctly adjusted and that the protection system and any manual release mechanism operate correctly.

Safety devices

- The selected safety accessories for the installation must comply with the current standards and regulations in force in the country in which the product is being installed. The use of any safety components not approved by Somfy remains the sole responsibility of the installer.
- Install all the safety devices (photoelectric cells, safety edges, etc.) required to protect the zone from the danger of crushing, movement force and cutting according to the applicable directives and technical standards.
- In accordance with standard EN 12453 governing the safe use of motorised gates and doors, the use of the TAHOMA control box to automatically control a garage door or gate not visible to the user requires the installation of a photoelectric cell type safety device with autotest on the automatic control system.

Maintenance

- Regularly check the condition of the gate. Gates in poor condition must be repaired, reinforced or even replaced. Check that the various motorisation component's screws and fittings are correctly tightened.
- Before carrying out work on the installation, switch off the power supply.
- Use only original parts for any maintenance or repair work.

Motorising an existing gate

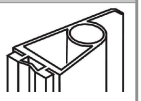
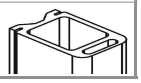
Carry out a stress test with a measuring device which conforms to the requirements set out on in clause 5.1.1 of standard EN 12445.

PRODUCT DESCRIPTION

Area of application

Sliding gates up to 500 kg and carrying out 30 manoeuvres per day.

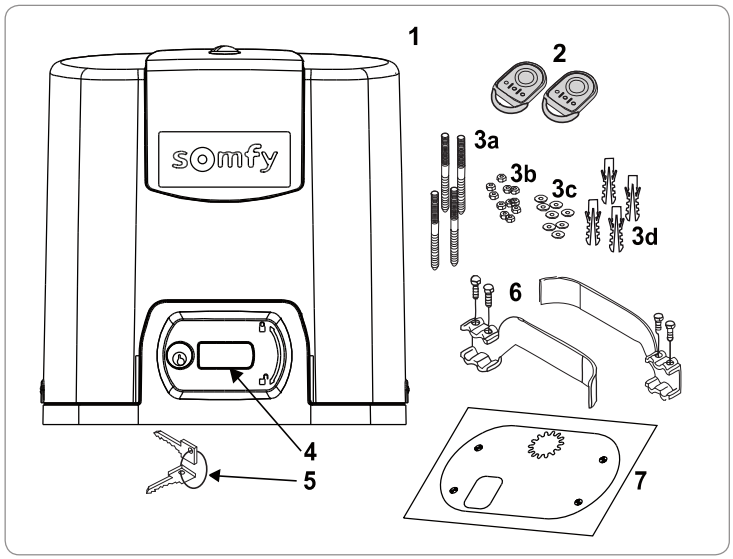
To ensure the safety of all equipment and persons, respect the information given in the table:

For a gate weighing ...	use ...	Ref.
0 to 300 kg	a passive rubber block on the end of the gate	9014597 
300 to 500 kg	a passive rubber block on the end of the gate	9014598 

If using a different rubber block to those listed above, ensure that the installation conforms with current regulations.

Contents of the standard kit

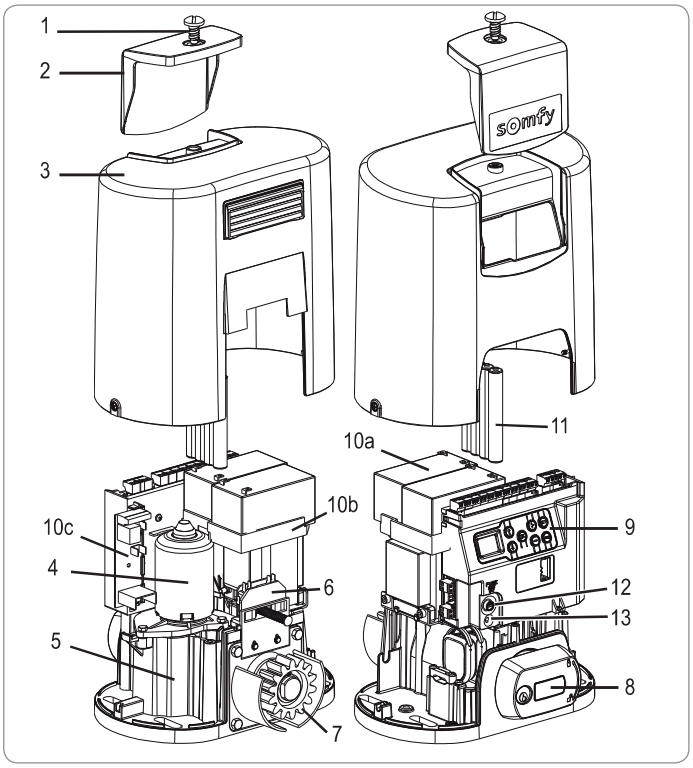
1	Elixo 24 V Motor	x 1
2	Keygo RTS remote control	x 2
Ground mounting kit:		
3a	Lag screws	x 4
3b	Nut	x 8
3c	Washer	x 8
3d	Plug	x 4
4	Manual release handle assembly	x 1
5	Handle locking key	x 2
6	End limit brackets	x 2
7	Drilling template	x 1



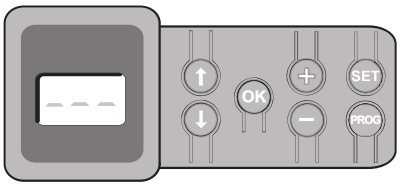
EN

Description of the motorisation

1	Upper cover screw	
2	Upper cover	
3	Cover	
4	24V motor	
5	Reduction unit	
6	Electro-mechanical end limit unit	
7	Pinion	
8	Manual release mechanism	
9	Control unit	
10	Battery pack (optional, ref. 9016732):	
	a	2 backup batteries
	b	Battery holder tray
	c	Battery power supply management card
11	Battery (option, ref. 9001001)	
12	Fuse (250 V/5 A) for 230 V lighting output	
13	Spare fuse (250 V/5 A)	



Description of the interface



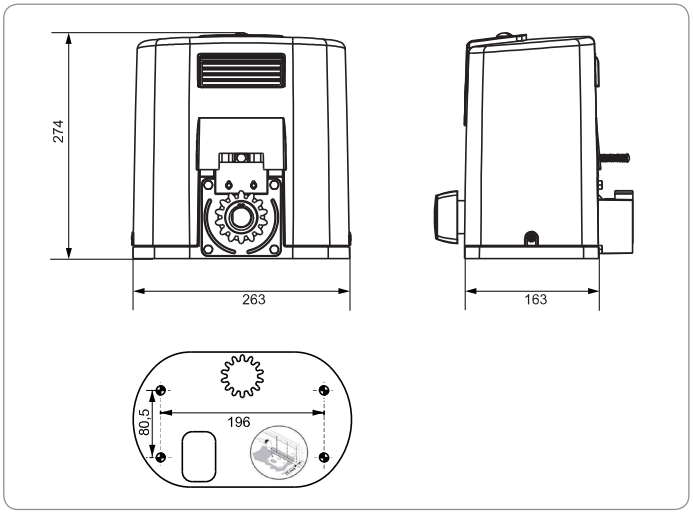
3-digit LCD screen

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 self-learning - Press 7 s: clear self-learning and parameters - interrupt self-learning
OK	- start self-learning cycle - confirm parameter selection - confirm parameter value	PROG	- Press 2 s: memorise the remote controls - Press 7 s: Clearing the remote controls
+ −	- modify a parameter value . short press = scroll through individual parameters . press and hold = scroll rapidly through parameters - use of forced operating mode by pressing and holding		

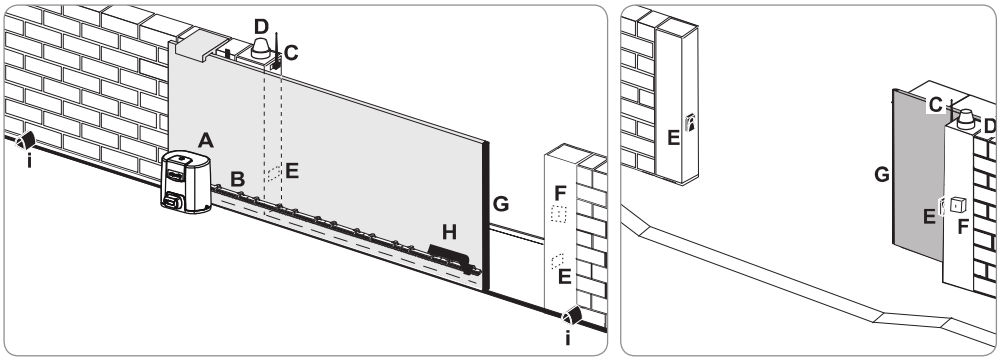
General motor size



EN

General view of a standard installation

A	Motor
B	Rack
C	Aerial
D	Orange light
E	Set of photoelectric cells
F	Key lock
G	Passive rubber block
H	End limit brackets
i	End stops in the ground



INSTALLATION

The motorisation must be disengaged during installation.

Assembling the manual release handle

[1]. Insert the release handle into the specific housing on the motor.

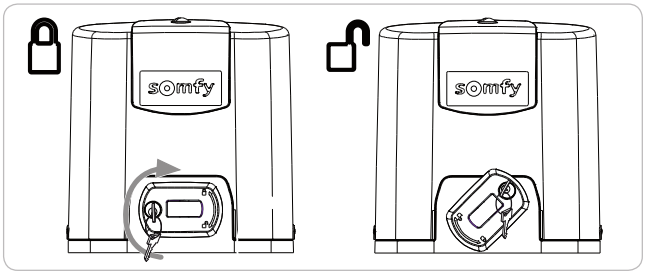
[2]. Tighten the release handle.

[3]. Fit the screw cover.

Unlocking the motor

[1]. Turn the key a quarter of a turn to the left.

[2]. Turn the release handle to the right.



Do not forcibly push the gate. Hold the gate over its entire travel during manual manoeuvres.

Installing the motorisation

Fitting the mounting system

The motor mounting kit provided is to be used on a concrete base. For all other types of mounting, use the appropriate fittings.

[1]. Position the template:
- parallel to the gate,
- with the symbol on the pinion pointing towards the gate,
- by moving it by 25 mm in relation to the front line of the rack (if the rack is fitted with a cover, measure from the line on the rack, not on the cover),
- so that it does not obstruct movement and to ensure the gate is able to open and close completely.

[2]. Mark the location for the ground mountings.

[3]. Drill to a depth of 85 mm.

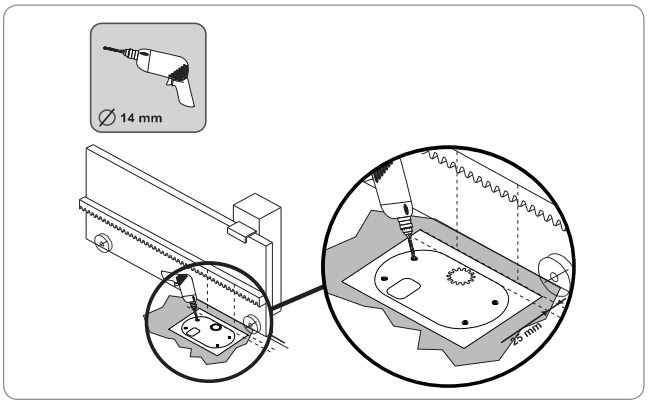
[4]. Insert the plugs.

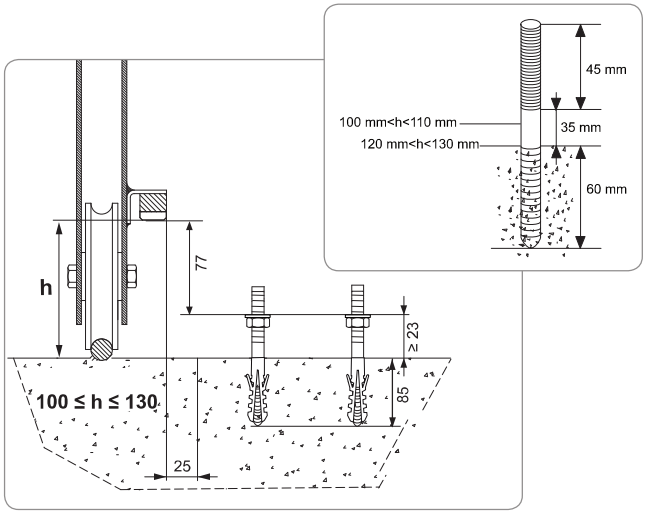
[5]. Tighten the lag screws on:
- the threaded section for a rack height of between 120 and 130 mm,
- the threaded section + the unthreaded section for a rack height of between 100 and 110 mm.
- 85 mm for mounting on the ground* on a flat concrete surface.

To facilitate tightening of the lag screws, use 2 nuts to form a "double nut".

[6]. Screw a nut and a washer onto each lag screw.

* When mounting on the ground, after securing the motor, fit a rack with oblong mounting holes to allow the clearance between the rack and pinion to be adjusted.





EN

Mounting the motor

[1]. Position the motor on the lag screws, insert it and push it towards the gate.

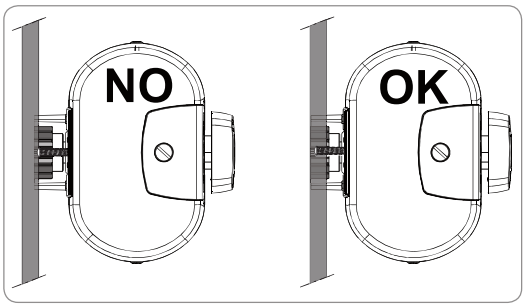
[2]. Ensure the pinion is correctly positioned under the rack.

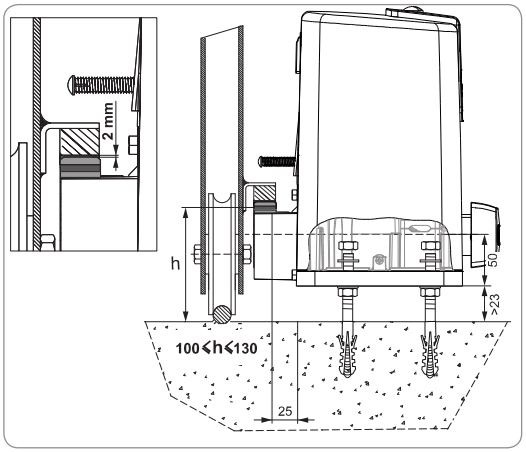
[3]. Set the height of the motor and/or the rack to ensure a clearance of approximately 2 mm between the rack and the pinion. This setting is important to prevent premature wear of the pinion and rack; the pinion must not be supporting the weight of the gate.

[4]. Check:

- that the setting nuts all come into contact with the base of the motor,
- the motor is level,
- the gate runs correctly,
- the clearance between the rack and pinion does not vary significantly over the gate's travel.

[5]. Fit a washer and nut onto each lag screw in order to fit the motor.





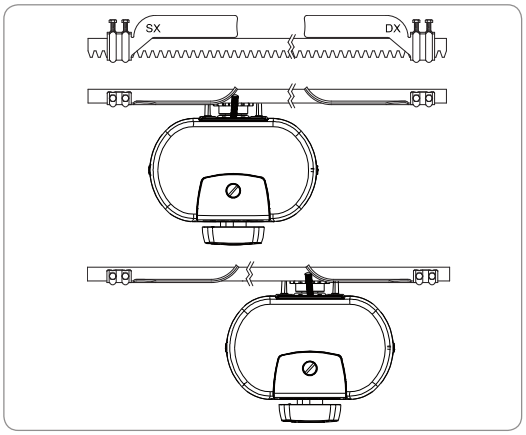
Fitting the end limit brackets

[1]. Manually move the gate to the open position.

[2]. Position a bracket onto the rack so that it activates the motor end limit contact.

[3]. Screw the bracket onto the rack.

[4]. Manually move the gate to the closed position then repeat steps 2 and 3 to fit the second bracket to the rack.



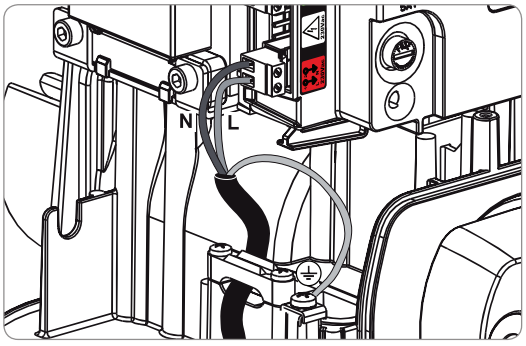
Connection to the power supply

Connect the live (L) to terminal 1 on the motor.

Connect the neutral (N) to terminal 2 of the motor.

Connect the earth wire to the earth terminal on the base of the motor.

The earth wire must always be longer than the live and neutral to ensure that it is the last to be disconnected if the connector is pulled out. The transformer is wired to terminals 3 and 4. Do not alter the connections.



Switch on the power to the installation before commissioning.

Before quick commissioning

[1]. Ensure the rail is clean.

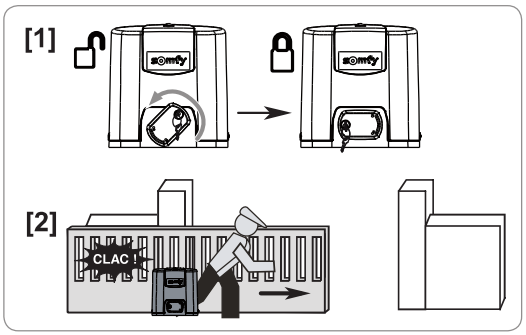
[2]. Manually move the gate to the intermediate position.

Re-engage the motorisation

[1]. Turn the release handle to the left.

[2]. Move the gate manually until the drive mechanism re-locks.

[3]. Turn the key a quarter of a turn to the right.



EN

QUICK COMMISSIONING

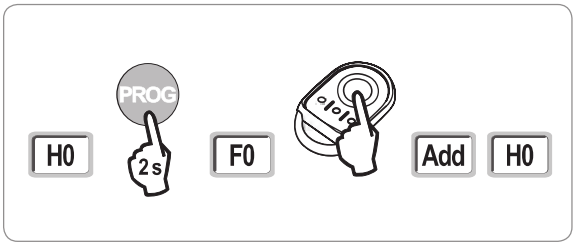
Memorising the Keygo RTS remote controls for operation in complete opening mode

It is possible to store up to 40 command channels.

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).
The screen displays "**F0**".

[2]. Press the button of the remote control that will open the gate fully.
The screen displays "**Add**".



Self-learning

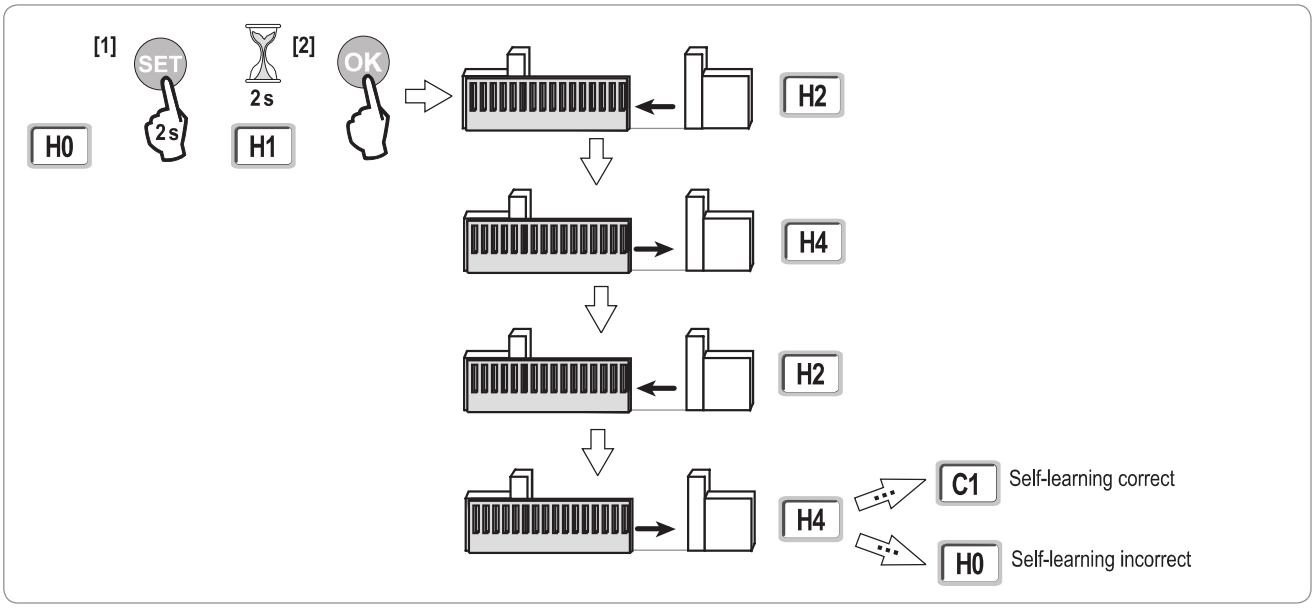
Self-learning allows the gate's speed, max. torque and slowdown zones to be adjusted.

- Self-learning the gate's travel is essential when commissioning the motor.
- The gate must be in the intermediate position before self-learning starts.
- During self-learning, the obstacle detection function is not active. Remove any objects or obstacles and do not allow any persons near or inside the operating range of the motorisation.
- To carry out an emergency stop during self-learning, use a stored remote control or press one of the interface buttons.

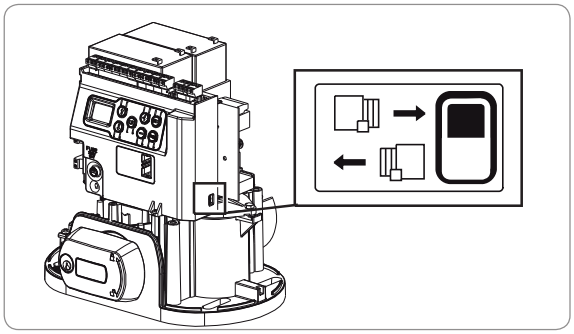
Start self-learning

[1]. Press and hold the "**SET**" button (2 s).
Release the button when the screen displays "**H1**".

[2]. Press "**OK**" to start self-learning.
Self-learning must start with the gate being opened.
The gate performs two complete Opening and Closing cycles.



- If self-learning starts when the gate is closed, stop the self-learning in progress (press a control button: motor electronics, memorised remote control, wired control point, etc.), move the slide as shown opposite, then restart self-learning.



- If self-learning is correct, the display indicates "**C1**".
- If self-learning has not completed correctly, the display indicates "**H0**".

EN

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

Self-learning can be interrupted by:

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

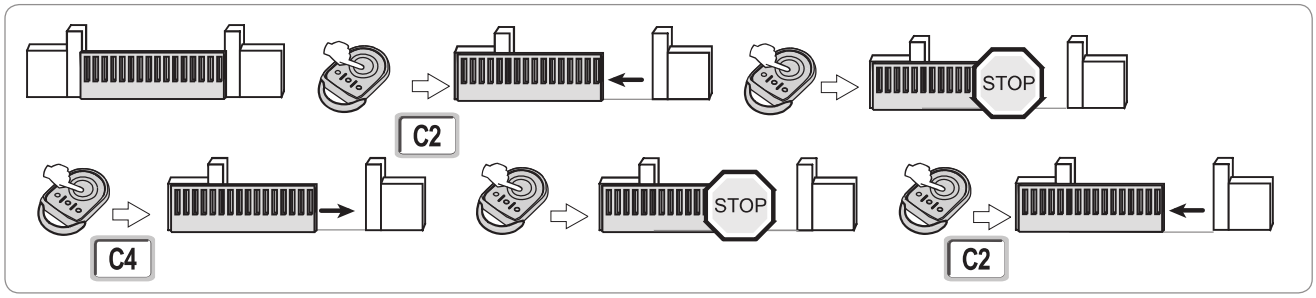
In case of interruption, the display indicates "**H0**" and the motor returns to "**Awaiting setting**" mode.

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

During self-learning, if the gate is stationary, pressing "**SET**" will exit self-learning mode.

OPERATING TEST

Complete opening operation



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 19-20) and Cell safety input parameter P07 = 1.

Cells obscured with gate closed/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 = stop + complete reopening.

Safety edge operation (closing only)

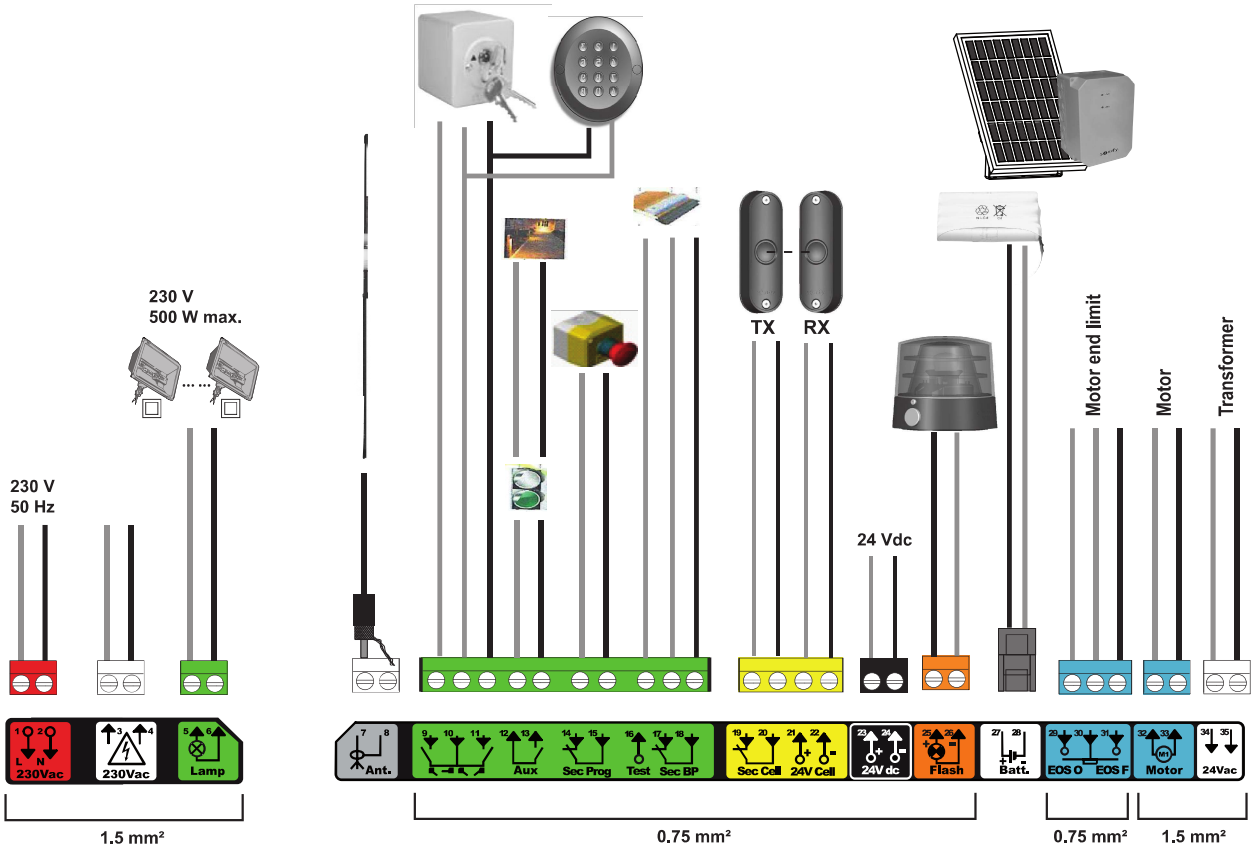
Activation of the safety edge when closing = stop + complete reopening.

Specific operation

See the user booklet.

EN

GENERAL WIRING DIAGRAM



Terminals	Terminal indications	Connection	Comments
1 2	L N	230 V power supply	Note: Earth connection available on the motor body
3 4	L N	Transformer primary supply output	
5 6	N L	230 V lighting output	Max. power 500 W Protected by 5A time-delay fuse
7 8	Conductor Braid	Aerial	
9 10 11	Contact Shared Contact	PEDESTRIAN/CLOSING control input COMPLETE/CLOSING control input	PEDESTRIAN/OPENING cycle programmable (parameter P37) COMPLETE/CLOSING cycle programmable (parameter P37)
12 13	Shared Contact	Auxiliary contact output	24 V, 1.2 A outage Safety Extra Low Voltage (SELV)
14 15	Contact Shared	Safety input 3 - programmable	
16	Contact	Safety test output	
17 18	Contact Shared	Safety input 2 - safety edge	Only compatible with a dry contact safety edge
19 20 21 22	Contact Shared 24 V 0 V	Safety input 1 - Cells Safety device power supply	BUS compatible (see parameter table) Used to connect RX cell Permanent if autotest not selected, controlled if autotest selected
23 24	24 V 0 V	24 V accessories power supply	1.2 A max for all accessories on all outputs
25 26	24 V - 15 W 0 V	24 V - 15 W orange light output	
27 28	9 V - 24 V 0 V	9 V or 24 V low voltage supply input	Compatible with 9.6V and 24V batteries or solar supply At 9 V, degraded operation At 24 V, normal operation
29 30 31	EOS O Shared EOS F	Motor end limit	
32 33	1 2	Motor	
34 35	24VAC	Transformer	

EN

CONNECTING ADDITIONAL DEVICES

Description of the various additional devices

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. Self-learning must be repeated after the cell BUS has been connected.

If cells are removed, it is essential to create the bridge between terminals 19 and 20.
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 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 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 7 (conductor) and 8 (braid).

Wired code keypad (Fig. 4)
Not operational using solar power.

Aerial (Fig. 5)

Safety edge (Fig. 6)
Not operational using solar power.
Only active when closing (for a safety edge active when opening, use the programmable safety input and programme parameter "P10" = 1).
With autotest: programme parameter "P08" = 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).

If the safety edge is removed, it is essential to create the bridge between terminals 17 and 18.

24 V battery (Fig. 7)
[1]. Position and tighten the battery power supply management card.
[2]. Position the batteries.
[3]. Make the connections.
For more details, refer to the 24V battery instructions.
Normal operation: nominal speed, accessories functional.
Life: 5 cycles/24 hrs

9.6 V battery (Fig. 8)
Degraded operation: speed reduced and constant (no slowdown at end limit), 24 V accessories inactive (including cells).
Life: 5 cycles/24 hrs

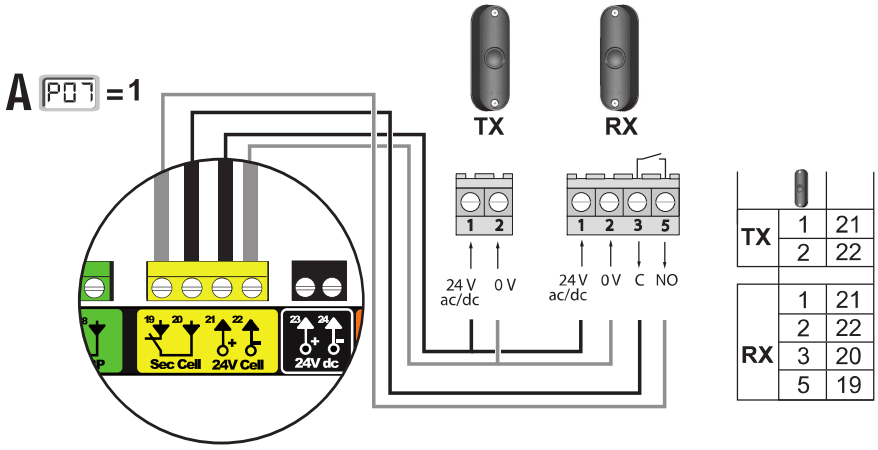
Solar kit (Fig. 9)
Adjust the length of the cable connecting the motor to the battery housing. It should be as short as possible to prevent voltage drops.
5m cable provided with the solar kit.
Note: Join wires of the same colour to prevent polarity reversal.

Area lighting (Fig. 10)
For class I lighting, connect the earth wire to the earth terminal on the base of the motor.
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.

EN

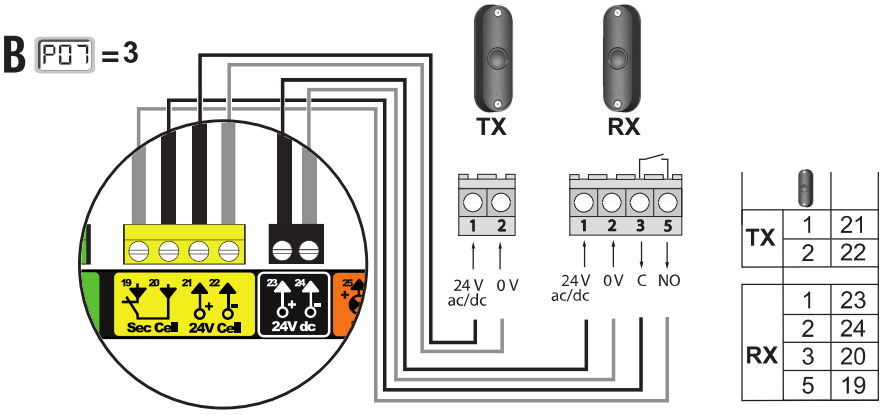
1

A P07 =1



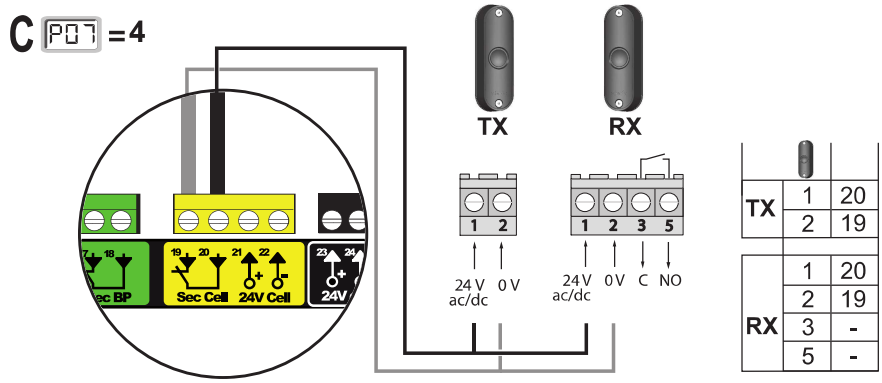
TX	1	21
	2	22
RX	1	21
	2	22
	3	20
	5	19

B P07 =3



TX	1	21
	2	22
RX	1	23
	2	24
	3	20
	5	19

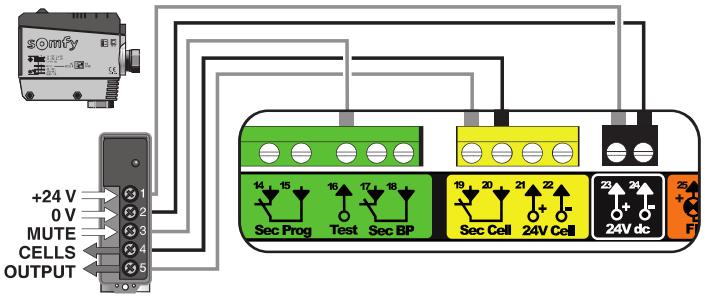
C P07 =4



TX	1	20
	2	19
RX	1	20
	2	19
	3	-
	5	-

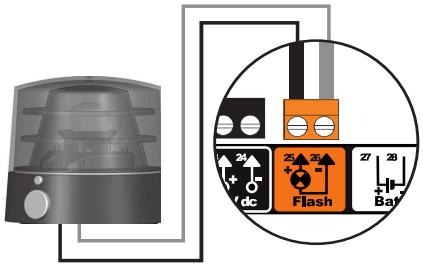
2

P07 =2 or 3



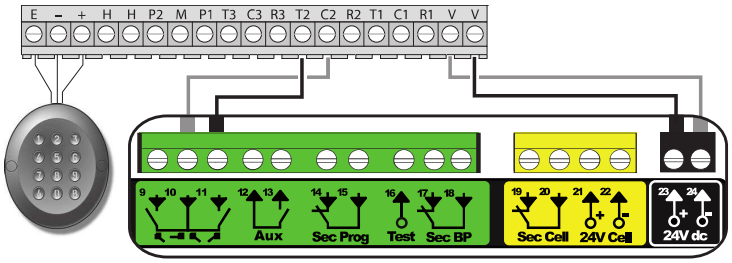
1	23
2	24
3	16
4	20
5	19

3



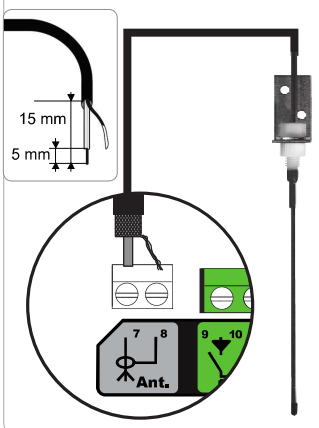
EN

4

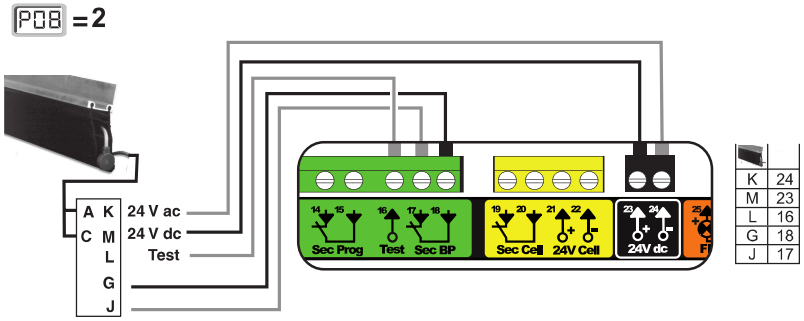


E	
-	
+	
H	-
H	-
P2	-
M	-
P1	-
T3	-
C3	-
R3	-
T2	11
C2	10
R2	-
T1	-
C1	-
R1	-
V	24
V	23

5

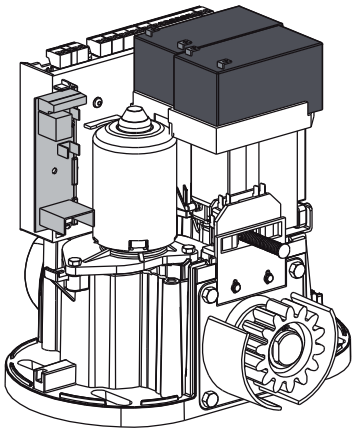


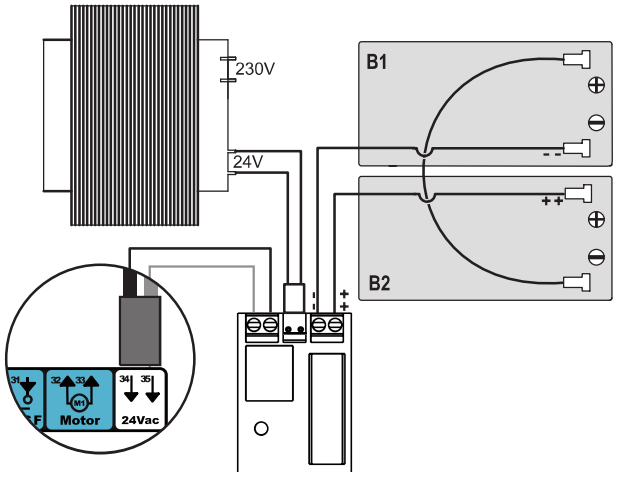
6



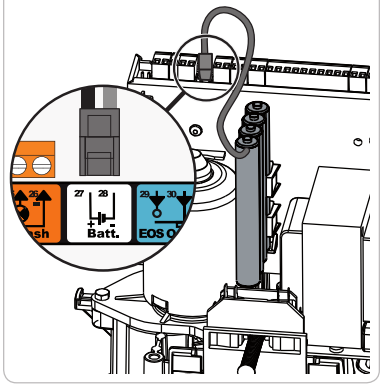
K	24
M	23
L	16
G	18
J	17

7

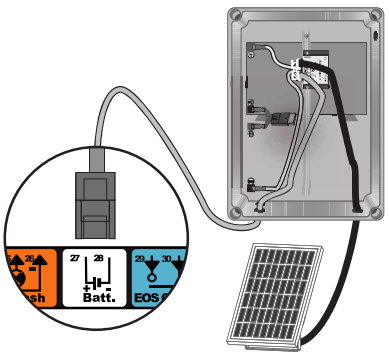




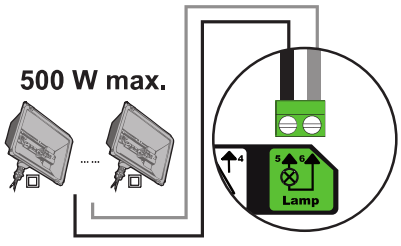
8



9



10



EN

ADVANCED PARAMETER SETTING

Navigating the parameter list

Press ...	to...
SET	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
OK	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

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. i.e. 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		Operation in automatic closing mode is only authorised if the photoelectric cells are fitted. i.e. P07=1 to 4.	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 blocking			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 (value x 10 s = time delay value) **2: 20 s**		If value 0 is selected, the gate immediately closes automatically.	

EN

Code	Description	Values (bold = default)	Setting completed	Comments	
P03	Pedestrian cycle operating mode	**0: identical to complete cycle operating mode**		The pedestrian cycle operating mode parameters can only be set if P01 = 0 to 2	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 (value x 10 s = time delay value) **2: 20 s**		If value 0 is selected, the gate immediately closes automatically.	
P05	Long automatic closing time delay in pedestrian cycle	0 to 50 (value x 5 min = time delay value) **0: 0**		Value 0 must be selected if the short automatic closing time delay in pedestrian cycle is active.	
P06	Pedestrian opening amplitude	1 to 9 **1: 80 cm**		1: minimum pedestrian opening ... 9: maximum pedestrian opening (approximately 80% of the gate's total travel)	
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 photocell 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.	
P08	Safety edge safety input	0: inactive **1: active** 2: active with auto-test		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.	
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 a safety edge application. 2: recommended for a 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 (value x 10 s = time delay value) **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 (value x 10 s = time delay value) **6: 60 s**		The auxiliary output time delay is only active if the value selected for P15 is 2 or 6.	

EN

Code	Description	Values (bold = default)	Setting completed	Comments
P19	Closing speed	1: slowest speed at 10: fastest speed **Default value: 5**		If this parameter is modified, it is essential to perform the force measuring procedure at the end of the installation operation or to install a safety edge.
P20	Opening speed	1: slowest speed at 10: fastest speed **Default value: 5**		
P21	Closing slowdown zone	1: shortest slowdown zone at 5: longest slowdown zone **Default value: 1**		
P22	Opening slowdown zone	1: shortest slowdown zone at 5: longest slowdown zone **Default value: 1**		
P25	Closing torque limitation	1: minimum torque at 10: maximum torque **Adjusted at the end of self-learning**		If this parameter is modified, it is essential to perform the force measuring procedure at the end of the installation operation or to 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	Opening torque limitation	1: minimum torque at 10: maximum torque **Adjusted at the end of self-learning**		
P27	Closing slowdown torque limitation	1: minimum torque at 10: maximum torque **Adjusted at the end of self-learning**		
P28	Opening slowdown torque limitation	1: minimum torque at 10: maximum torque **Adjusted at the end of self-learning**		
P33	Obstacle detection sensitivity	0: very low sensitivity 1: slightly sensitive **2: standard** 3: very sensitive		If this parameter is modified, it is essential to perform the force measuring procedure at the end of the installation operation or to install a safety edge.
P37	Wired control inputs	**0: complete cycle mode - pedestrian cycle** 1: opening mode - closing		0: terminal 9 input = pedestrian cycle, terminal 11 input = complete cycle 1: terminal 9 input = opening only, terminal 11 input = closing only
P40	Coupling speed when closing	1: slowest speed at 4: fastest speed **Default value: 2**		If this parameter is modified, it is essential to perform the force measuring procedure at the end of the installation operation or to install a safety edge.
P41	Coupling speed when opening	1: slowest speed at 4: fastest speed **Default value: 2**		

EN

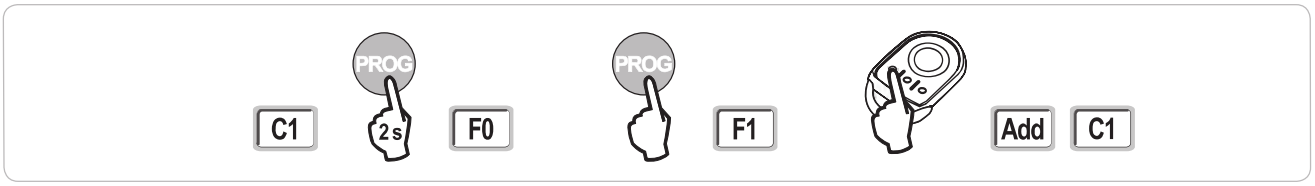
PROGRAMMING THE REMOTE CONTROLS

Memorising 2- or 4-button remote controls via the programming interface

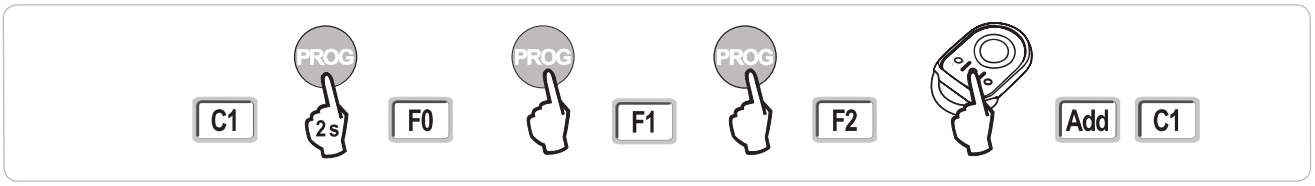
Up to 40 command channels can be memorised and assigned as desired among the commands listed below. If the memory is full, the screen displays "**FuL**". If this procedure is carried out using a channel which has already been memorised, this channel will be cleared. The screen displays "**dEL**".

COMPLETE opening control

PEDESTRIAN opening control



LIGHTING control



AUXILIARY OUTPUT control (P15 = 4.5 or 6)

Memorising 3-button remote controls via the programming interface

[1]. Press and hold the "**PROG**" button on the control box (2 s).
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**".

Button functions on a 3-button remote control

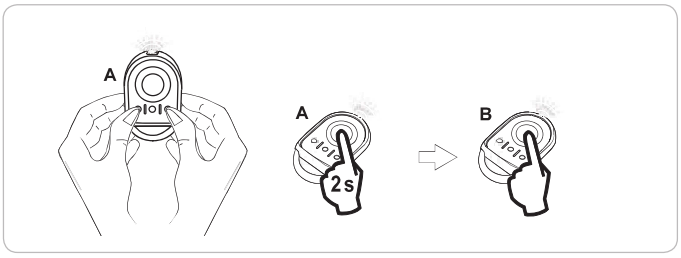
	^	my	v
F0	Complete opening	Stop	Complete closing
F1	Complete opening	If gate is closed → pedestrian opening	Complete closing
		Otherwise → stop	
F2	Lighting ON		Lighting OFF
F3	Aux. output ON		Aux. output OFF

EN

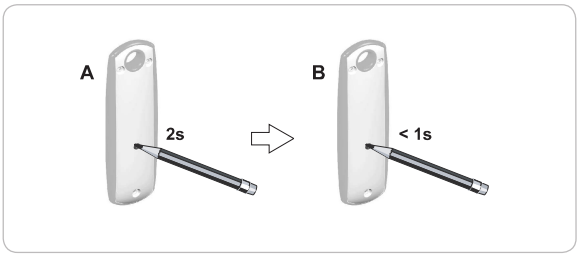
Memorising remote controls with no access to the programming interface

This operation must be carried out close to the motor.

Copying the function from a Keygo RTS remote control button to a button on a new 2- or 4-button remote control:



Copying the function from a 3-button remote control to a new 3-button remote control:

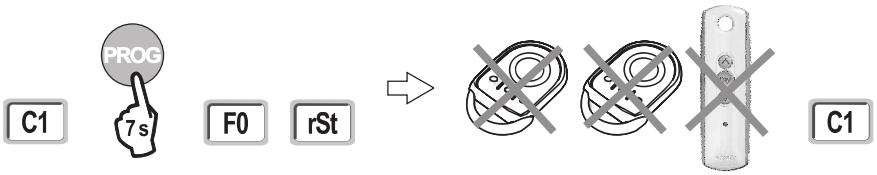


A = "source" remote control already memorised
B = "target" remote control to be memorised

CLEARING THE REMOTE CONTROLS AND ALL SETTINGS

Clearing the memorised remote controls

Causes all memorised remote controls to be cleared.



Clearing all settings

Clears the self-learning and resets the default values for all parameters.

LOCKING THE PROGRAMMING BUTTONS

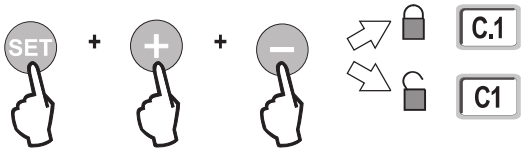
Locks the programming (end limits, self-learning, parameter settings).

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

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

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

To access the programming again, repeat this procedure.



EN

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	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.
C7	Detection in progress for safety edge safety	
C8	Detection in progress for programmable safety	
C9	Detection in progress for emergency stop safety	
C12	Reinjecting current	
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 or solar supply

Programming code display

Code	Description	Comments
H0	Awaiting setting	Pressing and holding the "**SET**" button for 2 seconds starts self-learning 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 or solar supply
H1	Awaiting start of self-learning	Pressing the "**OK**" button starts the self-learning cycle. Pressing the "**+**" or "**-**" button allows the motor to be controlled in forced operation mode.
H2	Self-learning mode - opening	
H4	Self-learning 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. 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 remote lighting 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.
E3	Defective safety edge autotest	The safety edge autotest is not satisfactory.	Check that "P08" is correctly configured. Check the safety edge 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", "P08" 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.
E7	Safety edge safety fault		
E8	Programmable safety fault		
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, safety edge) not operating	Check the wiring, then disconnect the power supply for 10 seconds. N.B.: maximum accessories consumption = 1.2 A
E12	Hardware fault		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 fault		
E15	Fault when the motor supplied by the backup battery is first switched on		Disconnect the backup battery and connect the motor to the mains to switch it on for the first time.

EN

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 self-learning [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 self-learning [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	
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	Standby operation	7.5 W - 600 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		RTS 433.42 MHz
Number of memorisable channels		40
CONNECTIONS		
Programmable safety input	Type Compatibility	Dry contact: NC TX/RX photoelectric cells - Bus cells - Reflex photocell - Dry contact output safety edge
Wired control input		Dry contact: NO
Remote lighting output		230 V - 500 W
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 photocell or safety edge
Accessories supply output		24 V - 1.2 A max
Offset aerial input		Yes: RTS antenna compatible (part no.: 2400472)
Backup battery input	Life	Yes: compatible with 9.6V battery packs (Ref. 9001001) and 24V (Ref. 9014609) 24 hours; 5 to 10 cycles depending on the gate Charge time: 48 hours
OPERATION		
Forced operating mode		By pressing and holding the motor control button
Independent remote lighting control		Yes
Timed lighting (after movement)		Programmable: 60 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)	Programmable: stop - partial reopening - complete reopening Programmable: no effect or movement refused
Partial opening control		Yes
Gradual starting		Yes
Opening speed		Programmable: 10 possible values
Closing speed		Programmable: 10 possible values
Coupling speed when closing		Programmable: 5 possible values
Diagnostics		Saving and consulting data: cycle counter, cycle counter with obstacle detection, number of memorised radio channels, log of the last 10 stored faults