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io-homecontrol® provides advanced and secure radio technology that is easy to install. io-homecontrol® labelled products communicate with each other, improving comfort, security and energy savings.

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GENERAL PRESENTATION

This product complies with the “safety, specific rules for powering vertically opening garage doors in residential use” requirements (standard EN 60335-2.95). When installed in line with these instructions and in compliance with the “Installation Checklist”, the product will be compliant with standards EN 13241-1 and EN 12453.

The instructions referred to in the installation manual and instructions for use of this product are designed to prevent damage to property and personal injury along with compliance with the above standards. Failure to comply with these instructions absolves Somfy from any liability resulting from damage that may be caused. Dexxo Pro is a product that must be installed inside the garage with an integrated back-up control system.

Somfy hereby declares that the device is compliant with the essential demands and other relevant requirements of directive 1999/5/CE. A declaration of compliance is available from the web site at www.somfy.com/ce (Dexxo Pro io). This product is suitable for use in the European Union and in Switzerland.

SAFETY INSTRUCTIONS

Caution

These are important safety instructions. Always follow the instructions, incorrect installation may lead to serious injury.

Safety instructions

Before installing the motor drive unit, remove all unessential lines or chains and switch off all equipment that is not essential for motorised door operation.

Before installing the motor drive unit, make sure that the door is in good mechanical condition, that it is properly balanced and that it opens and closes correctly.

Locate all control systems at least 1.5 metres above floor level, making sure that they are visible from the entrance to the garage but safe from moving parts.

Position the manual release cord no more than 1.8 metres above floor level.

Where a removable release mechanism is used, we recommend storing it close to the door.

Fix the label describing the manual release procedure close to the release mechanism.

Fix the warning labels describing the hazards of door motion close to any fixed control mechanisms installed and make sure that the labels are clearly visible to the user.

After installation, make sure that the mechanism is correctly adjusted and that the motor drive unit reverses its motion when the door encounters an obstacle that is at least 50 mm from floor level.

After installation, make sure that no part of the door overhangs an area accessible to the public.

After installation, make sure that the motor drive unit inhibits or stops the door opening motion when the door is loaded down with a 20 kg weight attached to a central position of the door's bottom edge.

In accordance with standard EN12453 concerning the safe use of motorised doors and gates, the remote control of an automatic garage door which is not visible to the user, particularly using the TAHOMA unit, always requires a photoelectric cell type safety device to be installed on this automatic function. Failure to comply with these instructions absolves SOMFY of any liability resulting from damage that may be caused.

PRODUCT DESCRIPTION

Product components Fig. 1

Key	Number	Description	Key	Number	Description
1	1	Motor head	16	2	Shaft
2	1	Motor cover	17	2	Circlips
3	1	Built-in light cover	19	4	Self-shaping Ø 4x8 screw
4	1	Lintel bracket	20	2	Special screw for plastic Ø 3.5x12
5	1	Door bracket	21a	1	Single part rail
6	2	Ceiling bracket	21b	1	Two part rail
7	2	Motor head bracket	21b1	1	Sleeve
8	1	Manual release cord	21b2	8	Self-shaping Ø 4x8 screw
9	1	Link arm	22	2	HM8 self-locking nut
10	1	Travel stop	23	2	Bracket
11	4	Chain retainer pad	24	1	Spacer
12	1	Power cable	25a	1	Keytis 4 io remote control
13	4	Hex. head M8x16 bolt	25b	2	Keygo io remote control
14	4	Hex. head M8x12 bolt & washer	26	1	230 V 40 W E14 socket light bulb
15	6	HU8 nut	27	1	Antenna

Area of application Fig. 2

Types of doors (Fig.2)

A: Projecting up and over door.

B: Sectional door:

- if the door's **upper profile** is a specific one, use the “sectional door mounting bracket” ref.: 9009390.
- if the door surface **exceeds 10 sq. metres**, use the “sectional door adapter” ref.: 2400873.

C: Sideways opening sliding door:

- for side wall mounting, use:
 - a belt transmission rail
 - an "adjustable cranked arm" ref.: 9014481.

- for ceiling mounting, use:

- an "articulated arm" ref.: 9014482.

D: Swinging door. Use the swinging door kit, ref.: 2400459.

E: Semi and non projecting door. Use:

- a high performance transmission rail
- "the semi and non projecting door kit" ref.: 2400458.

Some doors of this type may prove impossible to automate. Contact SOMFY's technical department.

Door dimensions (Fig. 3)

For maximum door heights, the motor travel can be optimised:

- By installing the motor head at a 90° angle (Fig. 7- .
- By fixing the lintel bracket to the ceiling, behind the lintel itself by up to 200 mm (Fig. 5- .
- By cutting the link arm to size.

POINTS TO CHECK PRIOR TO INSTALLATION

Preliminary checks

Check the garage door can be operated manually and runs smoothly. Ensure the door is in good mechanical condition (pulleys, mounts...) and is correctly balanced (spring tension).



Remember that any work performed on door springs may be dangerous.

The structure of your garage (walls, lintel, inside surfaces, cross members, door rails...) are used to mount the Dexxo Pro system. Reinforce them where necessary.

Never splash water onto the system. Never install Dexxo Pro in a location where water may cause damage.

The bottom edge of the door should be fitted with a rubber strip to avoid hard contact and enhance the contact surface.

If the garage door is the only entry point into the garage, fit an external release (external release keylock (ref. 9012961) or an external release (ref. 9012962) and include a back-up battery (ref. 9001001).

If the garage door includes a separate pedestrian door, the door must be fitted with an interlock to prevent garage door movement when the pedestrian door is open (pedestrian door safety kit ref. 2400657).

If the garage door opens on to a public road, install an indicator light, such as a flashing orange light (ref. 9015171).

If the garage door operates in automatic mode, install a photoelectric cell type safety system (ref. 9014994 or ref. 9013647) and a flashing orange light type indicator.

Make sure that the door does not comprise any accessible parts.



Unlocking the door may trigger uncontrolled door movement if the door is not balanced correctly.

Safety instructions

Safety instructions must be complied with throughout the installation process:

- Take off any personal jewellery (bracelet, chain or others) during installation work.
- During drilling and welding work, always wear safety glasses and suitable protection.
- Always use suitable tools.
- Take care when handling the motor drive system.
- Never connect the mains power supply or the battery back-up system before completing the installation process.
- Never use high pressure water systems for cleaning purposes.

INSTALLATION

Installation height Fig. 4

Measure the distance "D" between the door's highest point and the ceiling.

If "D" is between 35 and 200 mm, mount the complete system straight onto the ceiling.

If "D" exceeds 200 mm, mount the complete assembly so that the height "H" falls between 10 and 200 mm.

Detailed description of installation steps Fig. 5 to 15

Mounting the lintel bracket and the door bracket (Fig. 5)

When installing the system directly onto the ceiling (flush with the ceiling), the lintel bracket can be mounted on the ceiling, if necessary recessed from the lintel by up to 200 mm max. (Fig. 5- .

Assembling the two part rail (Fig. 6)

[1] [2] [3]. Unfold the two parts of the rail.



Ensure that the chain or belt is not twisted.

[4]. Assemble the two parts of the rail using the sleeve.

[5]. Mount the complete assembly using the eight mounting screws.

[6]. Tighten the nut to tension the chain or belt. The compressed rubber must measure 18 and 20 mm.

The mounting screws must not penetrate the rail (do not drill).

When installing the system directly onto the ceiling, do not use the sleeve mounting screws.

Fitting the rail onto the motor head (Fig. 7)

Fitting the complete assembly onto the garage ceiling (Fig. 8 to 10)

Fitting to the lintel bracket (Fig. 8)

Ceiling mounting

- Flush with the ceiling: mount the system directly onto the ceiling using the rail (Fig. 9).

It is possible to add mounting points at the motor head level (Fig. 9- **i**).

- Hung from the ceiling: two options:

- mount the system at the motor head (Fig. 10- **a**).

- mount the system at the rail (Fig. 10- **b**).

To add an adjustable intermediate mounting along the rail, or a mounting at a dimension h between 250 mm and 550 mm, use the ceiling mounting kit ref.: 9014462 (Fig. 10- **i**).

Fitting the arm onto the door and the trolley (Fig. 11)

[1]. Release the trolley using the manual release cord.

[2]. Bring the trolley up to the door.

[3]. Attach the arm to the door bracket and the trolley.

Adjusting and fastening the opening travel stop (Fig. 12)

[1]. Release the trolley from the runner using the manual release mechanism and bring the door to the open position.

Do not open the door fully, but position it so that it does not reach its own travel stop.

[2]. Slot the travel stop (10) into the rail then turn it by 90°.

[3]. Position the travel stop against the trolley.

[4]. Moderately tighten down the mounting screw.



Do not tighten the mounting screw all the way down. Excessive tightening can damage the screw and cause the travel stop not to remain in place.

Fitting the chain retainer pads (Fig. 13)

For chain rails only.

These pads are used to limit spurious noise linked to chain friction within the rail. Position each of the pads in the first hole in the rail after the travel stop.

Make sure that the pad is pressed in all the way so that its positioning pin is accessible outside of the rail.

Checking the chain or belt tension (Fig. 14)

The rails are supplied ready tensioned and inspected. If necessary, adjust the tensioning.



The rubber or tension spring must never be fully compressed during operation.

Connecting the mains power supply (Fig. 15)

[1]. Remove the motor cover and the protective sheet.

[2]. Fit the light bulb.

[3]. Connect to the antenna.

[4]. Connect to the mains supply.



Plug the power cable into a suitable power outlet that complies with electric power requirements. The electric supply must be suitably protected (a fuse or circuit breaker with a 5 A rating) and a residual current device (30 mA). An omnipolar disconnection mechanism must be provided for the power supply:

. by using a power cord with a mains plug that can be disconnected, or

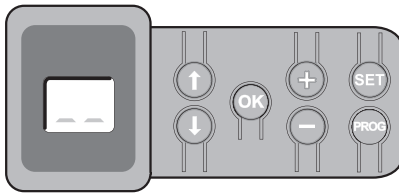
. by fitting a switch that ensures a contact separation distance of at least 3 mm for each pole (refer to standard EN60335-1).

Make sure that the manual release cord is located at a maximum height of 1.80 metres off the ground.

If necessary, extend the cord.

PROGRAMMING

Programming button description



- . Press for 2 s: memorise remote controls
- . Press for 7 s: delete remote controls



- . Press for 0.5 s: call up and exit the setup menu
- . Press for 2 s: start learning
- . Press for 7 s: clear learning and settings
- . Stop learning



- . Selecting a setting



- . Modifying a setting value
- . Using the forced mode



- . Start the learning cycle
- . Confirm setting selection
- . Confirm setting value

End limit setting and self-learning **Fig. 16**



For swinging doors, change the P9 setting before starting self-learning.

- Press the **"SET"** button until the light comes on (2 s).
The display shows **"S2"**
- Control the motor using the **"+"** or **"-"** buttons so that the transmission system runner moves to link up with the trolley and closes the door.
 - Pressing and holding the **"-"** button **closes** the door.
Release the **"-" button before the motor has time to force against the door.**
 - Pressing and holding the **"+"** button **opens** the door.
- Adjust the closed position using the **"+"** or **"-"** buttons.
Release the **"-" button before the motor has time to force against the door.**
- Press **"OK"** to validate the closed end limit position and start the self-learning cycle.
The door runs through a complete Open Close cycle.
 - If learning was correct, the display will show **"C1"**.
 - If the learning cycle was not completed correctly, the display will show **"S1"**.

During the learning cycle:

- If the door is moving, pressing any button will stop the movement and interrupt the learning mode.
- If the door is stopped, pressing **"SET"** once will exit the learning mode.

You can call up the learning mode at any time, even when the learning cycle has already been executed and the display shows **"C1"**.

Keytis remote control description **Fig. 17a**

1 Individual control buttons

2 General **STOP** button

3 General **CLOSE** button (Keytis 4 home io only)

4 Operation indicator light



On



Intermittent



Blinking

5 Low battery indicator light

6 Closing clip

7 **PROG** button: programming the transmitter

8 **KEY** button: memorising the system key

Keygo remote control description **Fig. 17b**

1 Individual control buttons

2 Operation indicator light



On



Intermittent



Blinking

Fitting the battery for Keytis remote controls **Fig. 18**

Programming Keytis remote controls **Fig. 19 to 23**



- . If the installation already comprises other io-homecontrol® products with at least one programmed remote control then you must perform the **Memorising the system key** step before programming the remote controls (Fig. 20).
- . If the Keytis io remote control to be programmed is the system's first remote control, then go straight to **Programming the Keytis remote control** step (Fig. 21 to 23).



The operations for memorising the system key and to program a remote control by copying another Keytis remote control are only possible at the installation location. To gain authorisation to transfer its system key or its programming, the previously programmed remote control must be able to establish radio communication with an installation receiver.

Memorising the system key (Fig. 20).

[1]. Set existing remote control no. 1 to the key transfer mode:

- With a **Keytis, Telis, Impresario, Composio** remote control: press the "KEY" button until the green indicator comes on (two seconds).
- With another remote control: refer to its documentation.

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

Programming the Keytis remote control (Fig. 21 to 23)

Before programming the remote control, make sure that it has already memorised the system key.

Each control button is programmed individually.

A button that is already programmed cannot be programmed on a second receiver. To see if a button is already programmed, press it:

- button programmed → green indicator comes on.
- button not programmed → orange indicator comes on.

To clear a previously programmed button, refer to the section on **Clearing Keytis remote controls**.

There are two ways to program the remote control:

- **Programming from a Dexxo Pro motor.**
- **Programming by copying a previously programmed Keytis remote control.**

Programming from a Dexxo Pro motor (Fig. 21)

[1]. Press the "PROG" button on the Dexxo Pro until the light comes on (two seconds).

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

Wait for the second beep and for the green indicator to start blinking quickly.

This may take from a few seconds to around a minute depending on the number of products connected to the system.

[3]. Briefly press the button chosen to control the Dexxo Pro motor.

The remote control sounds a confirmation beep and the Dexxo Pro motor's light blinks for five seconds.

Programming by copying a previously programmed Keytis remote control

• **Completely copy the programming of a Keytis remote control (Fig. 22)**

This operation is used to copy all of the buttons programmed from an already programmed remote control.

[1]. Press the "PROG" button on the previously programmed remote control until the green indicator comes on (two seconds).

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

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

• **Individually copy the programming of a Keytis remote control button (Fig. 23)**

This operation is used to copy the programming of a single button from an already programmed remote control.

[1]. Press the "PROG" button on the previously programmed remote control until the green indicator comes on (two seconds).

[2]. Briefly press the button to copy on the previously programmed remote control.

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

Wait for the confirmation beep (after a few seconds).

[4]. Briefly press the button chosen to control Dexxo Pro on the new remote control.



It is impossible to program Keytis remote controls in the following cases:

- . The remote control has not memorised the system key.
- . A number of installation receivers are in programming mode.
- . A number of remote controls are in key transfer or programming modes.

Any incorrect programming is indicated by a series of fast beeps together with the orange indicator blinking on the Keytis remote control.

At this stage in the installation process, the Dexxo Pro motor drive unit is ready to run.

Programming Keygo remote controls **Fig. 24 and 25**

Each control button is programmed individually.

To clear a previously programmed button, refer to the section entitled "Clearing Keygo remote controls".

There are two ways to program the remote control:

- **Programming from a Dexxo Pro motor.**
- **Programming by copying a previously programmed Keygo io remote control.**

Programming from a Dexxo Pro motor (Fig. 24)

- [1]. Press the "PROG" button on the Dexxo Pro until the light comes on (2 seconds).
- [2]. Simultaneously press the outer right and outer left buttons on the remote control.
The remote control indicator light flashes.
- [3]. Briefly press the selected button to actuate the Dexxo Pro motor.
The light of the Dexxo Pro motor flashes for 5 seconds.

Programming by copying a previously programmed Keygo io remote control (Fig. 25)

This operation is used to copy the programming of a previously programmed remote control button.

- [1]. Simultaneously press the outer right and outer left buttons on the previously programmed remote control (A) until the green indicator light comes on (2 seconds).
- [2]. Press the button for 2 seconds to copy the previously programmed remote control (A).
- [3]. Simultaneously briefly press the outer right and outer left buttons on the new remote control (B).
- [4]. Briefly press the selected button to actuate the Dexxo Pro on the new remote control (B).

At this stage in the installation process, the Dexxo Pro motor drive unit is ready to run.

OPERATING TEST

Using Keytis remote controls **Fig. 26**

Using Keygo remote controls **Fig. 27**

Obstacle detection function **Fig. 28 and 29**

The detection of an obstacle during door opening will stop the door (**Fig. 28**).

The detection of an obstacle during door closure will reopen the door (**Fig. 29**).

Make sure that obstacle detection works when the door encounters an obstacle 50 mm from the ground.

Built in lighting operation

The light will come on every time the motor drive unit is operated. It will go out automatically after one minute once the door stops. This time delay is adjustable (refer to the Setup chapter). Repetitive use which causes the light to stay on continually may result in an automatic cut-off condition triggered by the thermal cut out protection mechanism.

CONNECTING PERIPHERALS

Description of the various peripherals **Fig. 30**

Key	Description	Key	Description
1	Orange light	6	Battery
2	Remote lighting	7	Pedestrian door safety kit
3	Code keypad	8	Photoelectric cells
4	Keyswitch	9	Reflex type cells
5	Aerial	10	Sensor bar

Electrical connections for the various peripherals **Fig. 30 to 39**

Cut the electric power supply to the motor before performing any work on peripherals. If the display remains off after working on the system, check the wiring (for possible short circuits or polarity reversals).

General electrical diagram (Fig. 30)

Photoelectric cells (Fig. 31)



It is compulsory to install photoelectric cells:
- If automatic closing is activated (P0=1)
- If the automatic function is controlled remotely (not visible to the user)

Two types of connections can be made:

A: Standard (without self test): program the setting “P2” = 2.

B: With self test: program the setting “P2” = 1.

This means that an automatic test is conducted to check photoelectric cell operation every time the door operates.

If the test fails, no door movement is possible.

Reflex photoelectric cell (Fig. 32)

With self test: program the setting “P2” = 1.

This means that an automatic test is conducted to check photoelectric cell operation every time the door moves.

If the test fails, no door movement is possible.

Sensor bar (Fig. 33)

With self test: program the setting “P2” = 1.

This is used to perform an automatic test of sensor bar operation every time the door moves.

If the test result is negative, no door movement is possible.



Make sure you have correctly configured parameter “P2” taking into account the photoelectric cells or the sensor bar.

Orange light (Fig. 34)

Program the setting “P1” depending on the required operating mode:

- Without warning before door movement: “P1” = 0.
- With a 2 s warning before door movement: “P1” = 1.

Code keypad (Fig. 35)

Pedestrian door safety kit (Fig. 36)

When the pedestrian door contact is fitted, it must be connected in place of the jumper normally fitted between terminals 5 and 6.



If the pedestrian door contact is removed, the jumper between terminals 5 and 6.

Battery (Fig. 37)

Aerial (Fig. 38)

Remote lighting (Fig. 39)

Class 2 (double insulation) light units that are connected do not require an earth connection.

Various types of lighting can be connected without exceeding a total power consumption of 500 W.

SETUP

General setup diagram Fig. 40

Meanings of the various parameters

Code	Description	Values	Comments
P0	Operating mode	0: sequential 1: automatic closure	Automatic closure mode operation is only possible if photoelectric cells are fitted, i.e. P2=1 or P2=2. In automatic closure mode, the door is automatically closed after the end of the time delay set with setting "t0".
P1	Orange warning light	0: without advance warning 1: with 2 s advance warning	If the garage opens onto a public road, always select with advance warning: P1=1.
P2	Safety input	0: no safety mechanism 1: safety mechanism with self test 2: safety mechanism without self test	If value 0 is selected, the safety input is not taken into account. If value 1 is selected, the system's self test is run at the start of every operating cycle. If value 2 is selected, the safety system runs without a self test: it is essential to test its proper operation every six months.
P3	Obstacle detection sensitivity	0: low sensitivity 1: low sensitivity 2: standard 3: high sensitivity	If this setting is changed, it is essential to run the force measurement sequence at the end of the installation procedure or install a sensor bar.
P4	Partial opening cycle	0: not valid 1: valid	If the partial opening cycle is validated: <i>For Keytis remote controls</i> · a short press on the remote control button causes partial opening. · a long press on the remote control button causes full opening. <i>For Keygo remote controls</i> Pressing the button programmed for partial opening causes partial opening; pressing the button programmed for full opening causes full opening.  When this parameter is activated, pressing a previously programmed remote control button will partially open the gate; an additional command must then be performed so that the button fully opens the gate again (refer to "Programming Keygo io remote controls for full and partial opening operation").
P5	Closing speed	0: slowest speed: approx. 3.5 cm/s to 9: fastest speed: approx. 18 cm/s By default, 6: approx. 12 cm/s	If this setting is changed, it is essential to run the force measurement sequence at the end of the installation procedure or install a sensor bar. If spurious detection of obstacles occurs when this parameter is modified, end limit setting and auto-programming will have to be carried out again.
P6	Partially open position	Storing the position as illustrated in Fig. 42.	
P7	Closure approach speed	0: no slowdown 1: short soft stop 2: long soft stop	P7=0: the door does not slow before closure. P7=1: the door speed slows 20 centimetres before closure. P7=2: the door speed slows 50 centimetres before closure. If this setting is changed, it is essential to run the force measurement sequence at the end of the installation procedure or install a sensor bar. If spurious detection of obstacles occurs when this parameter is modified, end limit setting and auto-programming will have to be carried out again.
P8	Opening speed	0: slowest speed: approx. 3.5 cm/s to 9: fastest speed: approx. 18 cm/s	If spurious detection of obstacles occurs when this parameter is modified, end limit setting and auto-programming will have to be carried out again.
P9	Choice of operating direction (type of door)	0: direction 1: all types of doors except swinging doors 1: direction 2: swinging doors	If this setting requires modification the end limit setting must be repeated along with self-learning.
A0	Safety action prior to opening (safety ADMAP)	0: no effect 1: movement rejected	If value 1 is selected, triggering the safety input will inhibit door opening.
A1	Safety action during closure	1: stop 2: stop + partial re-opening 3: fully reopen	Value 1 is not allowed when using a sensor bar on the safety input.
A2	Obstacle detection action during closure	2: stop + partial re-opening 3: fully reopen	
t0	Automatic closure time delay	0 to 12 (time delay value = value x 10 s) 2: 20 s	
t1	Lighting time delay	0 to 60 (time delay value = value x 10 s) 6: 60 s	Remark: Due to the thermal cut out protection system, the integrated light may cut out automatically if it is used for an extended length of time. We therefore recommend selecting a light time delay in excess of 2 mn (t1=12 or 120s) only when remote lighting is used.

(Boldface text = default values)

Programming example: setting the "P7" closure approach speed (Fig. 41)

Setting up a long soft stop function zone "P7" = 2.

Special case: adjusting the position of the door for partial opening (Fig. 42)

Select setting "P6" and validate by pressing "OK".

Move the door to the desired partially open position:

- . Pressing and holding the "-" button will close the door.
- . Pressing and holding the "+" button will open the door.

. Validate by pressing "OK".

. Exit the menu with "SET".

Forced mode (Fig. 43)

This function is used to move the door to a specific position:

- . Pressing and holding the "-" button will close the door.
- . Pressing and holding the "+" button will open the door.

Programming a Situo Telis Composio Impresario type remote control (Fig. 44)

Before programming the remote control, make sure that it has already memorised the system key. (Refer to the corresponding remote control documentation).

[1]. Press the "PROG" button on Dexxo Pro until the light comes on.

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

Wait for the Dexxo Pro light to blink.

This may take from a few seconds to around a minute depending on the number of products connected to the system.

Remark: Dexxo Pro can memorise up to six Situo remote controls. For other types of remote controls, no limit applies.

PROGRAMMING KEYGO IO REMOTE CONTROLS FOR FULL AND PARTIAL OPENING OPERATION

In order for the garage door to open fully and partially, parameter P4 must be activated (refer to the section entitled "Parameter setting").



When parameter P4 is activated, all the remote control buttons previously programmed during commissioning become programmed buttons to partially open the garage door.

An additional memorising command must be performed on buttons which are used to fully open the garage door.

The operations to be performed differ according to the desired function for the button being programmed (full or partial opening), and depending on the memorisation which has already been performed on the button prior to activation of parameter P4.

Switch to full opening for a button previously memorised during commissioning (Fig.45)

[1]. Simultaneously press the large button and the small button in the centre of the remote control.

The remote control indicator light flashes.

[2]. Press the remote control button previously memorised during commissioning within 10 seconds.

The button for full opening has been memorised.

Memorise a button that has not yet been programmed to trigger partial opening (Fig.24)

[1]. Press the "PROG" button on the Dexxo Pro until the light comes on (2 seconds).

[2]. Simultaneously press the outer right and outer left buttons on the remote control.

The remote control indicator light flashes.

[3]. Briefly press the selected button to partially open the Dexxo Pro motor.

The light of the Dexxo Pro motor flashes for 5 seconds. The button for full opening has been memorised.

Memorise a button that has not yet been programmed to trigger full opening (Fig.46)

[1]. Press the "PROG" button on the Dexxo Pro until the light comes on (2 seconds).

[2]. Simultaneously press the outer right and outer left buttons on the remote control.

The remote control indicator light flashes.

[3]. Briefly press the selected button to operate the Dexxo Pro motor for full opening.

The light of the Dexxo Pro motor flashes for 5 seconds.

[4]. Simultaneously press the large button and the small button in the centre of the remote control.

The remote control indicator light flashes.

[5]. Press the remote control button that you wish to use for full opening within 10 seconds.

The button for full opening has been memorised.

SPECIAL OPERATION

After a power outage, the next time the door is moved, it must be opened completely; the motor must be stopped at the upper stop before it can start operating normally again.

For other specific operations, see page 5 of the user manual.

CLEARING REMOTE CONTROLS AND ALL SETTINGS

Clearing remote controls **Fig. 47 to 49**

Clearing Keytis or Keygo remote controls

Individually clearing a remote control button

This can be done:

- by programming from the Dexxo Pro motor (**Fig. 21**).
Programming a previously programmed button automatically clears any previously stored programming settings.
- by directly clearing the remote control (only for Keytis remote controls) (**Fig. 47**).
Simultaneously press the **"PROG"** button and the **BUTTON** to be cleared on the remote control.

Clearing all remote controls (**Fig. 48**)

[1]. Press the **"PROG"** button on Dexxo Pro until the light blinks (seven seconds). This will:

- Clear the system key memorised by Dexxo Pro,
- Clear the programming for all memorised remote controls.

[2]. For Keytis remote controls, repeat the direct clearing procedure for all of the Keytis remote control buttons programmed on the Dexxo Pro system: **Fig. 47**.

Keytis remote control general reset (**Fig. 49**)

Simultaneously press the **"PROG"** and **"KEY"** buttons. This will:

- perform a program general clear action (all buttons),
- clear all settings from the remote control (refer to Keytis io remote control documentation),
- change the system key memorised by the remote control.

Resetting all settings **Fig. 50**

Press the **"SET"** button until the light goes out (7 s).

This clears all previously stored settings and returns them to their default values.

LOCKING PROGRAMMING (**Fig. 51**)

Used to lock the programming settings (end limit setting, self-learning, setup).

Simultaneously press the **"SET"**, **"+"** and **"-"** buttons:

- start by pressing **"SET"**.
- pressing **"+"** and **"-"** must take place within two seconds.

To access programming mode once again, repeat the same procedure.

REFITTING COVERS

Refit the motor head and built in light covers (**Fig. 52**).

TROUBLESHOOTING

Operating codes displayed

Code	Description	Comments
C1	Waiting for a command	
C2	Door opening	
C3	Waiting for the door to close	
C4	Door closing	
C5	Obstacle detection	Displayed during obstacle detection then for 30 s.
C6	Safety input active	Displayed after a movement request or during movement, when the safety input is active. This display is maintained as long as the safety input is active.
C9	Pedestrian door safety contact active	Displayed after a movement request or during movement, when the pedestrian door contact is open. The display is maintained as long as the pedestrian door contact remains open.
Ca	Safety mechanism self test	Displayed during safety mechanism self tests.
Cd	Working from back-up battery Waiting for a command	

Programming codes displayed

Code	Description	Comments
S1	Awaiting setting	Pressing the "SET" button for 2 s starts the learning mode.
S2	Learning mode	Pressing the "OK" button starts the learning cycle: the S2 display blinks during the entire cycle. Pressing the "+" or "-" buttons will control the motor in forced mode.
F0	Awaiting motor control memorisation	Pressing a remote control button will assign this button to motor control. Pressing the "PROG" button will call up the "Awaiting remote lighting control memorisation mode: F1 ".

Error and failure codes displayed

Code	Description	Comments	Action required?
E1	Maximum force reached	During learning, the door requires too much force for the motor.	Check door balance and correct operation by manual operation.
E4	Safety mechanism self test fault	The safety device self test failed	Check that "P2" is setup correctly depending on the devices connected to the safety input. Check safety device wiring. When photoelectric cells are used, check their proper alignment.
Eb	Other faults and failure conditions	These codes correspond to various electronic circuit board failures.	Cut the power supply (mains & battery back-up), wait for a few minutes then re-connect the power supply. Perform a learning cycle. If the fault persists, contact Somfy Technical Support.

Accessing stored data

To access stored data, select the **"Ud"** setting then press **"OK"** as shown in **Fig. 40**.

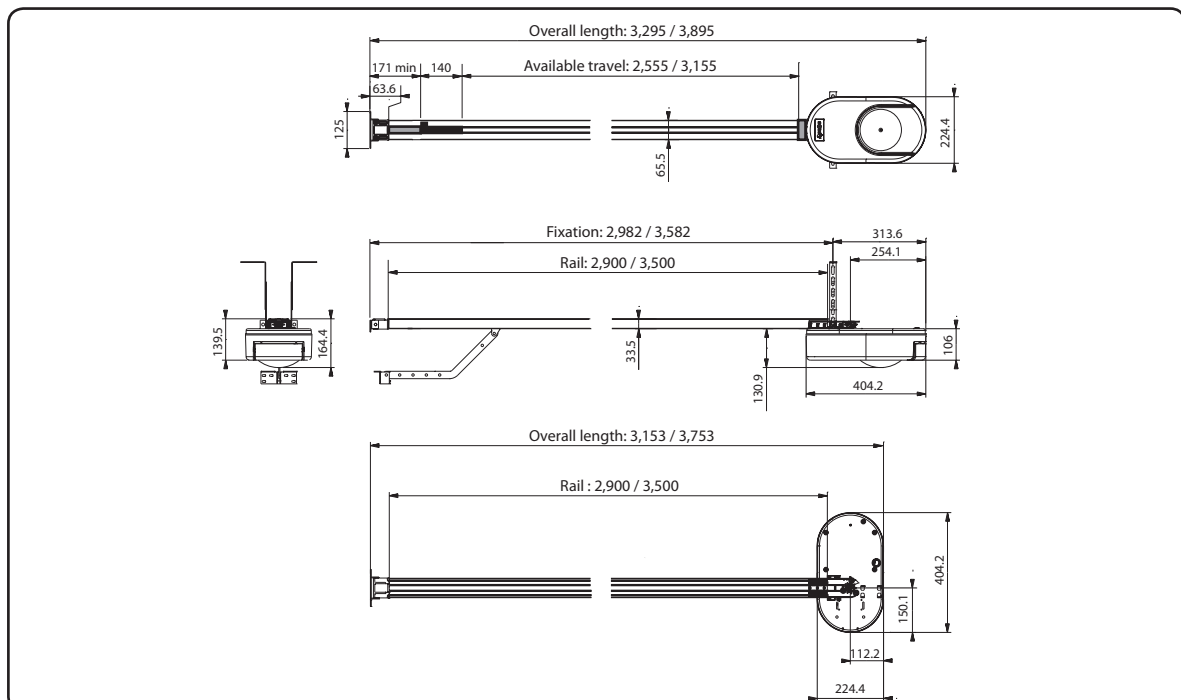
Data	Description
U0	Total cycle counter: tens and units
U1	Total cycle counter: thousands and hundreds
U2	Total cycle counter: hundreds of thousands
U3	Cycle counter with obstacle detection: tens and units
U4	Cycle counter with obstacle detection: thousands
U5	Number of control channels memorised (single direction remote control only)
d0 to d9	Log of the last ten faults
dd	Clears the fault log: press "OK" for 7 s (Fig.40).

TECHNICAL SPECIFICATIONS

Dexxo Pro 800 io		Dexxo Pro 1000 io	
BASIC TECHNICAL CHARACTERISTICS			
Mains supply		230 V - 50 Hz	
Max. power consumption	Standby-Operation	5 W - 600 W (with 500 W remote lighting)	
Traction force	Peak force	800 N	1000 N
	Starting force (1)	650 N	800 N
Use		20 cycles max. per day with a standard rail - 50 cycles max. per day with a high performance rail tested for 36,500 cycles with a standard rail and 90,000 cycles with a high performance rail	
Number of Opening/Closing cycles per day		18 cm/s	
Max. speed		7 buttons - 2 character LCD display	
Programming interface		- 20 ° C / + 60 ° C - indoor dry - IP 20	
Operating temperature		Mechanical stopper at opening	
Travel end limits		Memorized end limit position at closing	
Electrical insulation		Class 2: double insulation 	
Built in lighting		230 V / 40 W ; E14 socket	
Somfy radio frequency		868 - 870 MHz	
Number of channels that can be memorised		Situo io : 6 Others: unlimited	
CONNECTIONS			
Safety input	Type	Dry contact: NC	
	Compatibility	Photoelectric TX/RX cells - Reflex cell - Sensor strip with dry contact output	
Pedestrian door safety input		Dry contact: NC	
Wired control input		Dry contact: NO	
Remote lighting output		230 V - 500 W - class 2 	
Orange light output		24 V - 15 W with built in flashing control	
24 V controlled power supply output		Yes: for possible photoelectric TX/RX cell self-test	
Safety input test output		Yes: for possible reflex cell or sensor strip self-test	
Accessory power supply output		24 V - 500 mA max	
Remote aerial input		Yes: io aerial compatible (Réf. 9013953)	
Backup battery input		Yes: battery pack compatible (Réf. 9001001)	
	Autonomy	12 hours; 1 to 3 cycles depending on door	
		Charge time: 48 hours	
OPERATION			
Forced operation mode		By pressing and holding the motor control button	
Lighting time delay (after movement)		Programmable : 60 s to 600 s	
Automatic closing mode		Yes: programmable closing time delay from 10 to 120 s	
Orange light pre-warning		Programmable: with or without prior warning (duration set to 2 s)	
Safety input operation	While closing	Programmable: Stop - Partial re-opening - Full reopening	
	Before opening	Programmable: no effect or motion refused	
	(Dangerous Movement Area Accessible to the Public)		
Built-in obstacle detection		Adjustable sensitivity: 4 levels	
Operation when an obstacle is detected		Programmable : partial re-opening or full reopening	
Preset partial opening command		Yes can be selected: adjustable partial opening position	
Progressive start up		Yes	
Opening speed		Programmable from 3.5 cm/s to 18 cm/s: 10 possible values	
Closing speed		Programmable from 3.5 cm/s to 18 cm/s: 10 possible values	
Closure approach speed		Programmable: does not slow down, short slowdown zone (30 cm), long slowdown zone (50 cm)	
Troubleshooting		Recording and accessing data: Cycle counter, cycle counter with obstacle detection, number of radio channels stored, history of the last ten defects recorded.	

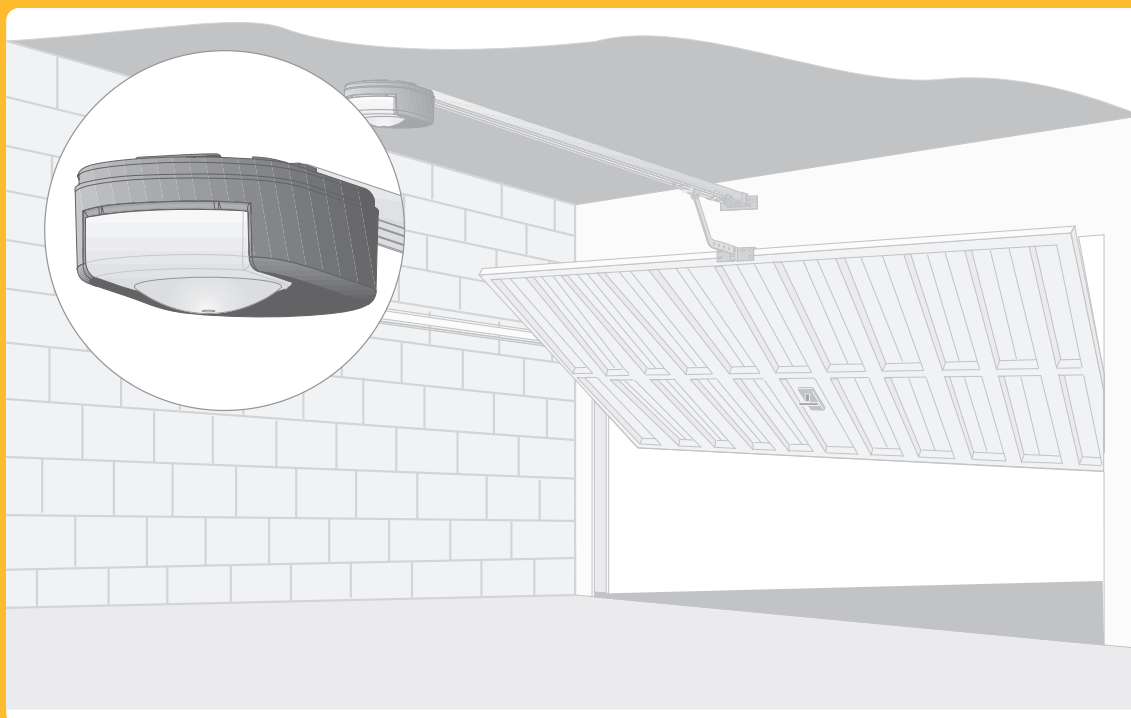
(1) Maximum load for motor to start and drive door for at least 5 cm (according to RAL-GZ definition)

Dimensions



Dexxo Pro io User Manual

EN



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GENERAL PRESENTATION

Thank you for choosing a Somfy product. This product is designed and manufactured by Somfy in line with quality procedures that are ISO 9001 compliant.

The world of Somfy

Somfy develops, produces and sells automation systems for residential and commercial applications. Alarm systems, automatic blinds and shutters, garage doors and gates - all Somfy products are designed to fulfill your needs in terms of safety, comfort and security.

At Somfy, the quest for quality is a continual process. Somfy has built its reputation on the quality of its products and is synonymous with innovation and technological leadership worldwide.

Support

Getting to know you, listening, answering your needs, is all part of the Somfy approach.

Please contact your local Somfy retailer or installer for details on other Somfy products.

Internet: www.somfy.com

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SAFETY INSTRUCTIONS

Standards

This product complies with the “safety, specific rules for powering vertically opening garage doors in residential use” requirements (standard EN 60335-2-95). When installed in line with these instructions and in compliance with the “Installation Checklist”, the product will be compliant with standards EN 13241-1 and EN 12453.

The instructions referred to in the Installation Manual and Instructions for Use of this product are designed to ensure that damage to property and injury to persons is avoided along with compliance with the above standards. Failure to comply with these instructions absolves Somfy from any liability for any damage that may be caused. Dexxo Pro is a product that must be installed inside the garage with a built-in back-up control system.

Somfy hereby declares that the device is compliant with the essential demands and other relevant requirements of directive 1999/5/CE. A declaration of compliance is available from the web site at www.somfy.com/ce (Dexxo Pro io). This product is usable in the European Union and in Switzerland.



These are important safety instructions. For safety reasons, it is important to always follow all instructions. Retain these instructions for future reference.

Safety instructions

Every month, test that the motor drive unit reverses its motion when it encounters an obstacle that is at least 50 mm from ground level. If this is not the case, call your installation specialist. Always be very careful when using the manual release cord for a manually operated door may fall quickly due to weak or broken springs or if it is badly balanced.

Before manually operating the door or performing maintenance work, always turn the power off and where necessary remove the battery (Fig. 1).

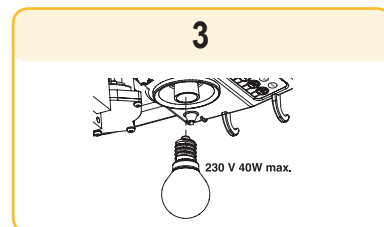
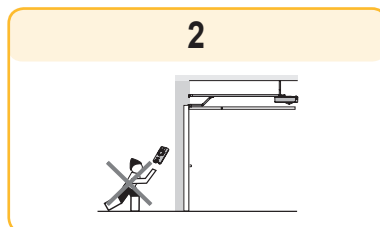
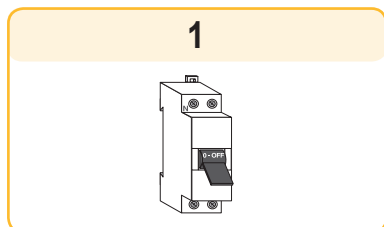
Never let children play with door control systems. Keep the remote controls out of reach of children (Fig. 2).

When replacing the light bulb, select a 230 V 40 W E14 type (Fig. 3).

Regularly check the operation of the door to identify any sign of wear, deterioration or incorrect balancing. Do not operate the door if repairs or adjustments are required.

Remain at a safe distance when operating the door.

In accordance with standard EN12453 concerning the safe use of motorised doors and gates, the remote control of an automatic garage door which is not visible to the user, particularly using the TAHOMA unit, always requires a photoelectric cell type safety device to be installed on this automatic function. Failure to comply with these instructions absolves SOMFY of any liability resulting from damage that may be caused.

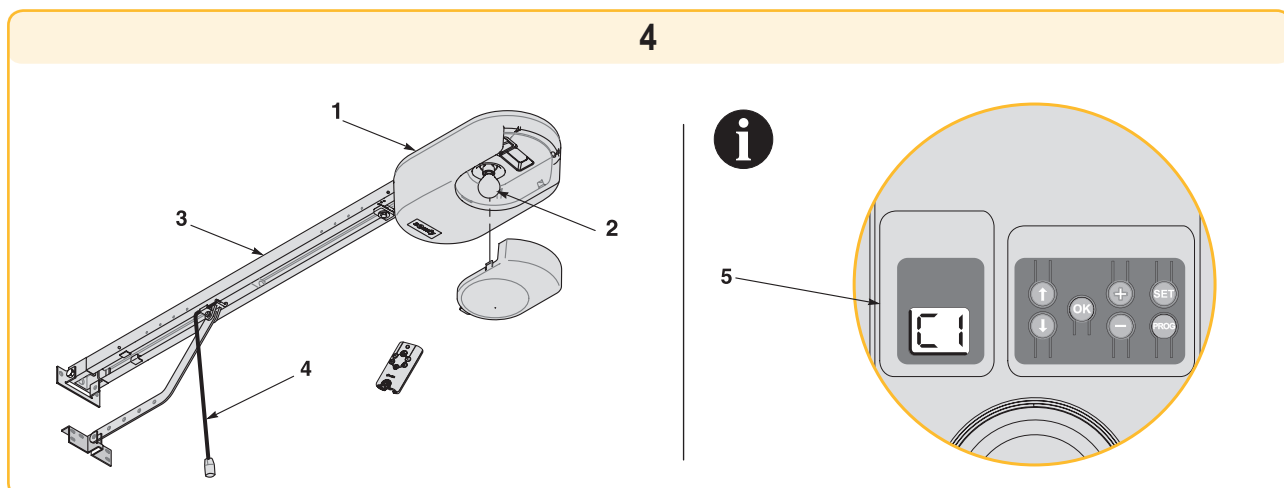


PRODUCT PRESENTATION

Description (Fig. 4)

The Dexxo Pro system is designed to power garage doors in residential use. This motor drive system comprises:

- A motor head (1) with integrated light (2) and digital operating display (5).
- A rail assembly (3) with a manual release cord (4).

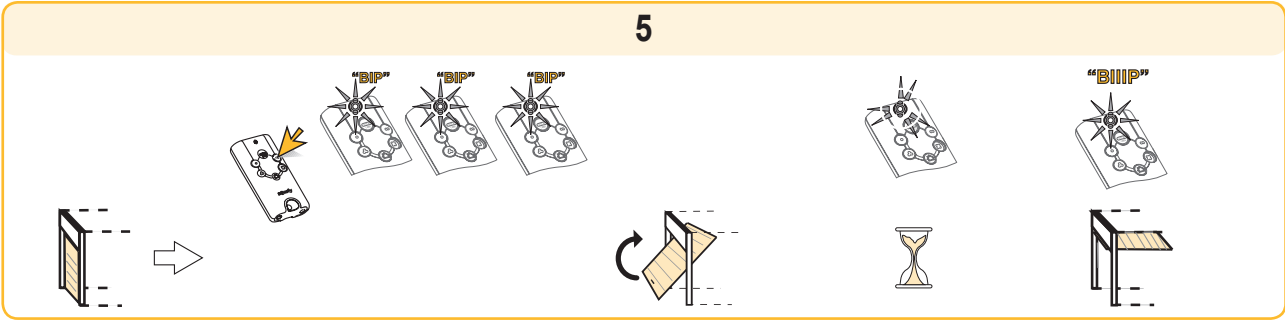


OPERATION AND USE

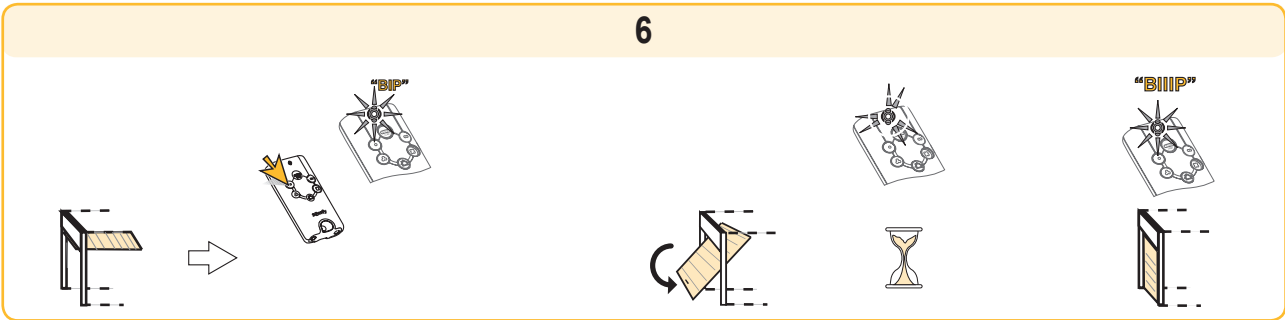
Normal operation

Using Keytis or similar remote controls

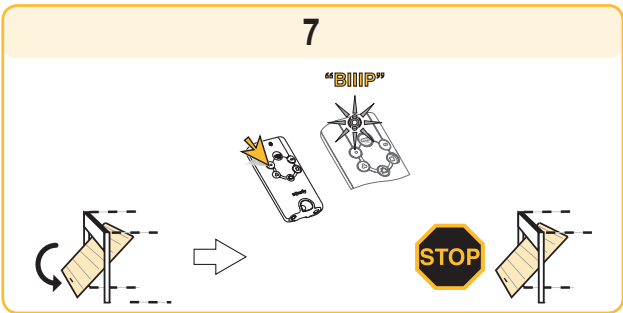
Open (Fig. 5)



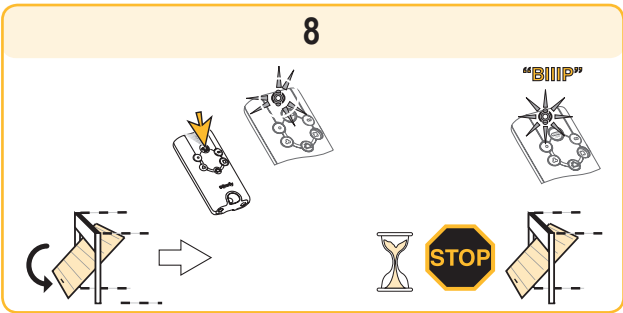
Close (Fig. 6)



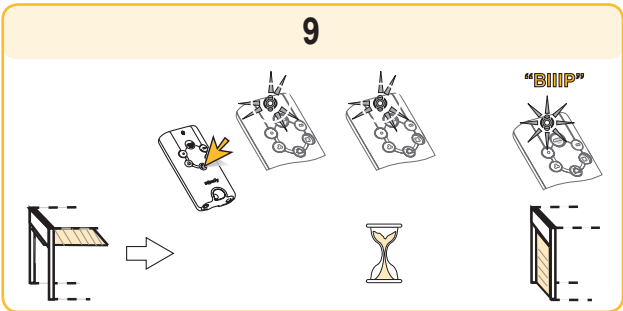
Stop (Fig. 7)



General stop (Fig. 8)



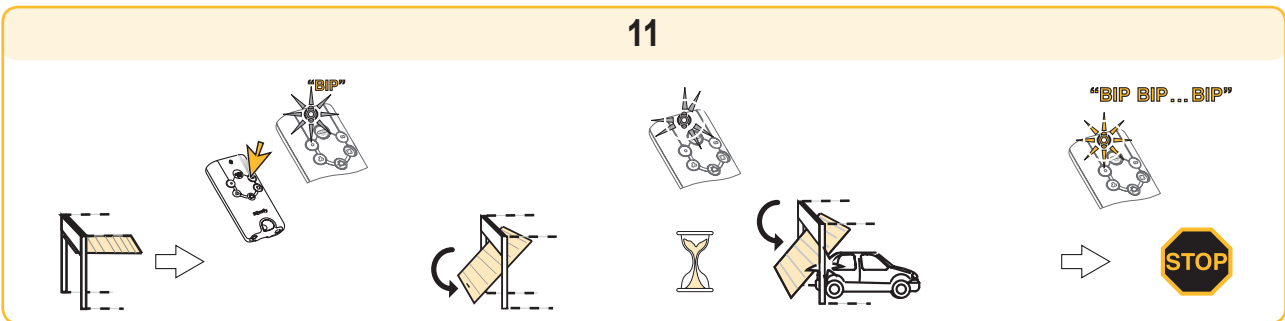
General closure (Fig. 9)



Interrupted motion (Fig. 10)

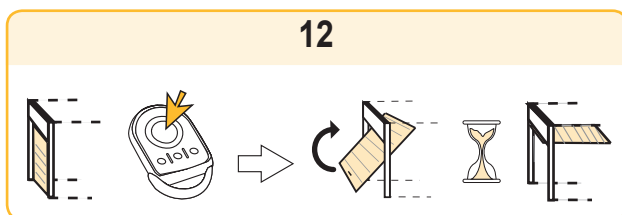


Movement not performed (Fig. 11)

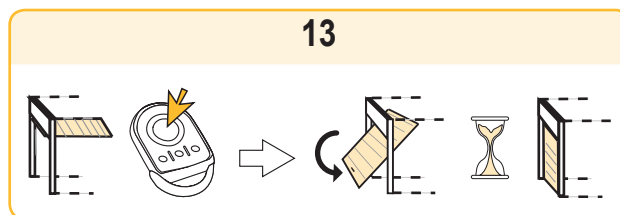


Using Keygo or similar remote controls

Open (Fig. 12)



Close (Fig. 13)



Stop (Fig. 14)

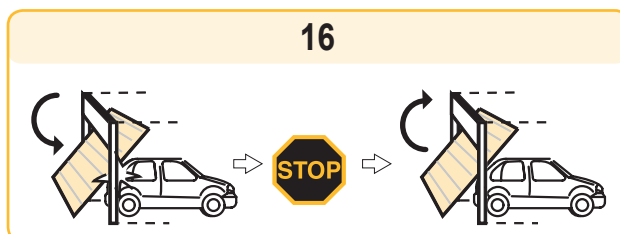
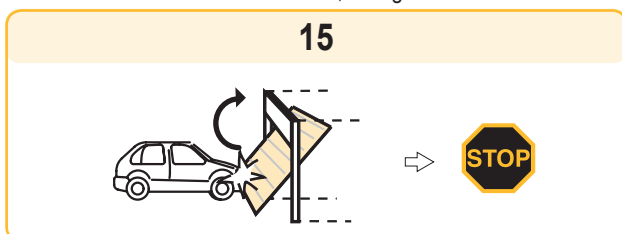


Obstacle detection operation (Fig. 15 and 16)

The detection of an obstacle during door opening will stop the door and cause it to reopen slightly to clear the obstacle (Fig. 15).

When an obstacle is detected during the close cycle, the door will stop and then reopen (Fig. 16).

Once an obstacle has been detected, the light will flash for 30 seconds.



Light operation

The light will come on each time the motor drive unit is operated. The light will go out one minute after the door stops moving.

Repetitive use that causes the light to be continually on may result in a thermal cut out (this will automatically turn the light off).

Manual release cord operation (Fig. 17)

Dexxo Pro is fitted with a manual release mechanism so that you can move the door manually should a power failure occur, for example. The manual release mechanism should be easily accessible and located **no more than 1.80 metres** above floor level.

[1]. Disengaging the motor drive mechanism

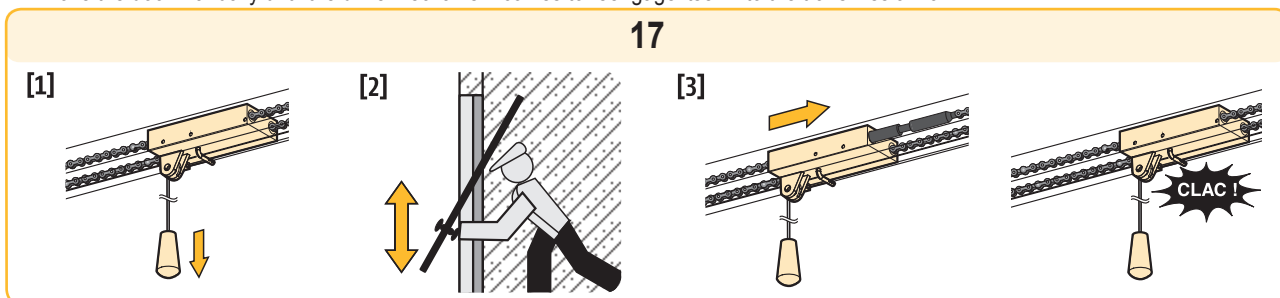
Pull on the manual release cord until the door drive mechanism is disengaged.

[2]. Manually moving the door

This is possible as long as the door drive mechanism is disengaged.

[3]. Reengaging the motor drive mechanism

Move the door manually until the drive mechanism comes to reengage itself into the transmission rail.



When disengaging the motor drive mechanism, use caution for a badly balanced door may cause sudden door movement that may be dangerous.



Only use the cord to disengage the motor drive mechanism. Never use the cord to move the door manually.

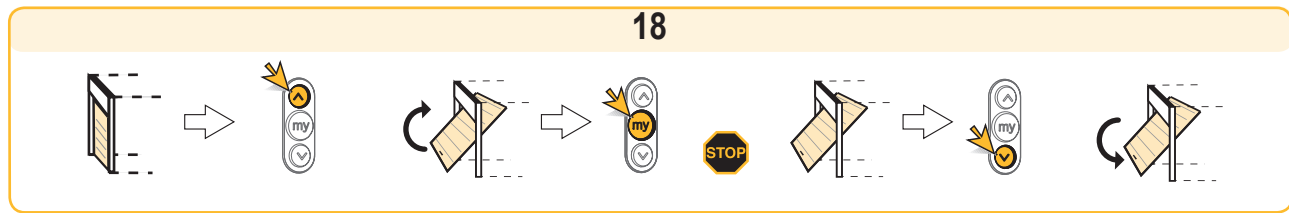


Always reengage the motor drive mechanism before sending another command to the motor drive unit.

Special operation

Depending on the peripherals installed and the operating options set by your installer, the Dexxo Pro system may perform the following special operations:

Using Telis, Situo or Composio (Fig. 18)



Safety photoelectric cell operation

An obstacle detected between the cells will prevent the door from closing.

The door will stop and then completely or partially reopen (depending on the setup selected during installation) when an obstacle is detected during the close cycle.

The light will flash for 30 seconds during this process.

Pedestrian door safety function

Opening a pedestrian door within the garage door will prevent the door from moving.

The light will flash for 30 seconds during this process.

Flashing orange light

The orange warning light will flash every time the door moves.

A two second delay before the door starts to move can be selected during installation.

Remote lighting operation

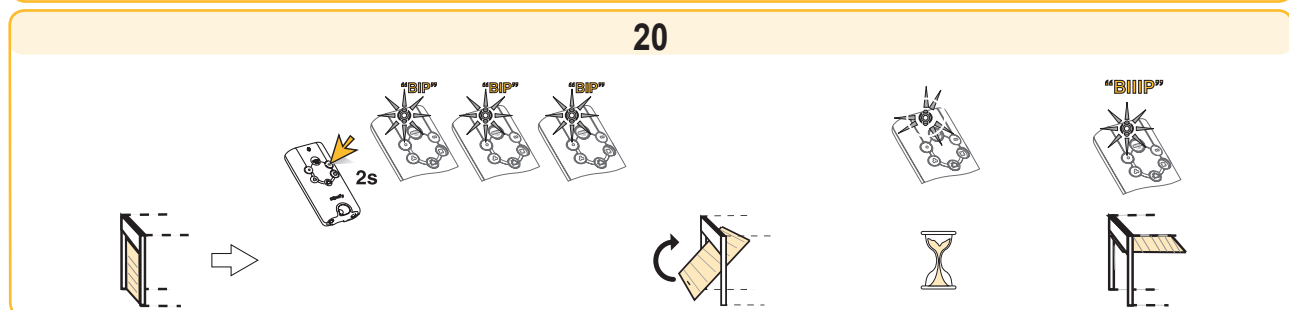
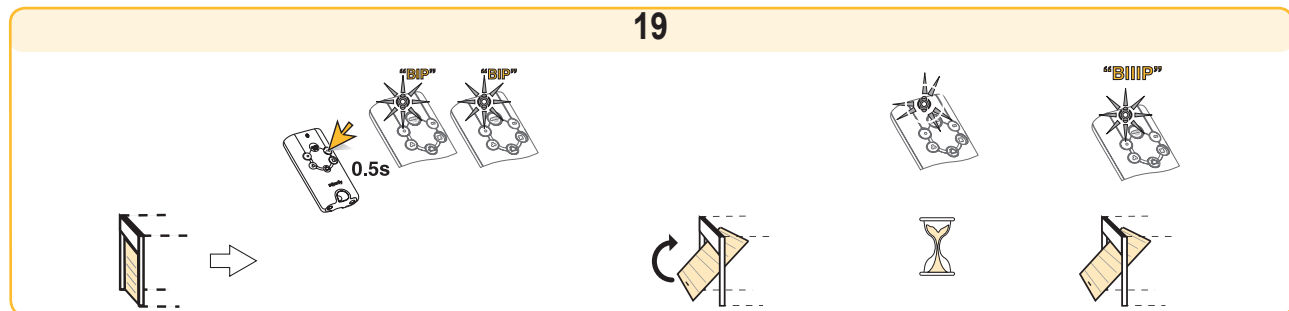
The light comes on every time the motor drive unit is operated. The light will go out one minute after the door stops moving. The time delay can be adjusted during installation.

Partial opening operation with a Keytis remote control

If this option is selected:

- A short press on the remote control button will partially open the door (**Fig.19**),
- A long press on the remote control button will fully open the door (**Fig.20**).

The partially open position will only operate from the closed position.

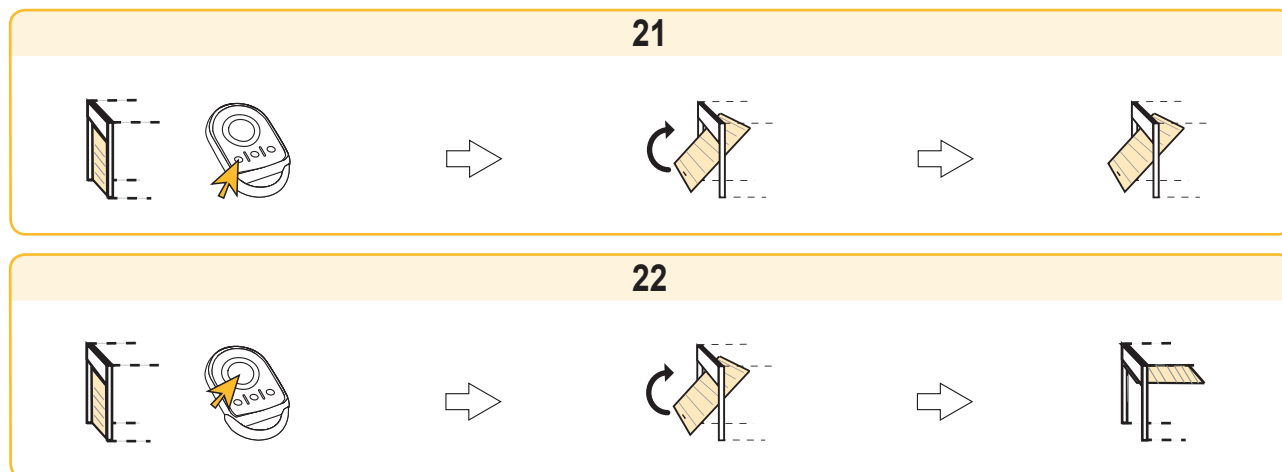


Partial opening operation with a Keygo remote control

If this option is validated:

- Pressing a remote control button programmed for partial opening causes the door to open partially (**Fig. 21**).
- Pressing the remote control button programmed for full opening causes the door to open fully (**Fig. 22**).

The partial open position can only be achieved if the door is previously closed.



Automatic closure mode operation

The door is automatically closed after a time delay set at the time of installation.

An additional command during this time will cancel the automatic closure and the door will remain open.

The next command will close the door.

Working from the back-up battery

If a back-up battery is installed, the Dexxo Pro motor will operate when a power cut occurs.

The following conditions apply to operation:

- Door speed is reduced.
- The light will not come on.
- The safety devices are disabled.

Battery specifications:

- Endurance: The battery will last for 12 hours with a maximum of 1 to 3 operating cycles depending on the weight of the door.
- Recharging time: 48 hours.
- Service life prior to replacement: approx. three years.

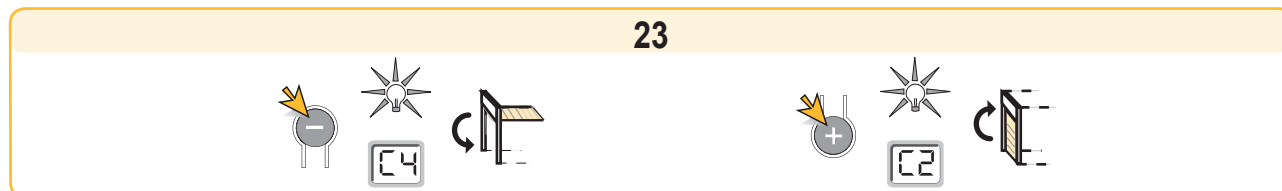
To ensure optimum battery life, we recommend that the power to the motor is switched off and the door is operated for a number of cycles using battery power (three times a year).

Forced operation mode (Fig. 23)

This function is used to move the door at any time (remote control lost, safety mechanism failure, etc.).

Remove the built-in lighting cover:

- Control door motion using the "+" and "-" buttons.
- Pressing and holding the "-" button will trigger closure.
- Pressing and holding the "+" button will trigger opening.



Operation after a power outage

After a power outage, the next time the door is moved, it must be opened completely. Always allow the door to open fully.

EN

TROUBLESHOOTING

Digital display

The LCD display is situated under the lighting cover. It provides motor operation status.

The main operating codes are as follows:

Code	Description	Comments
C1	Waiting for a command	
C2	Door opening	
C3	Waiting for the door to close	
C4	Door closing	
C5	Obstacle detection	Indicates that the door encountered an obstacle. The display is maintained for 30 s after detection.
C6	Safety input active	Indicates that an obstacle preventing door closure is present between the photoelectric cells or is in contact with the safety sensor bar installed on the door.
C9	Pedestrian door safety contact active	Indicates that the pedestrian door within the garage door is open. Door operation is inhibited.
Cd	Working from back-up battery Waiting for a command	Indicates that the main power supply to the motor is cut and that the motor is powered by the battery back-up pack.

If other codes are displayed, contact your Somfy installer.

Power outage

Following a power outage, the motor must recognise its "fully open" position again.

Open the door fully using a memorised remote control. The door will open at a degraded speed.

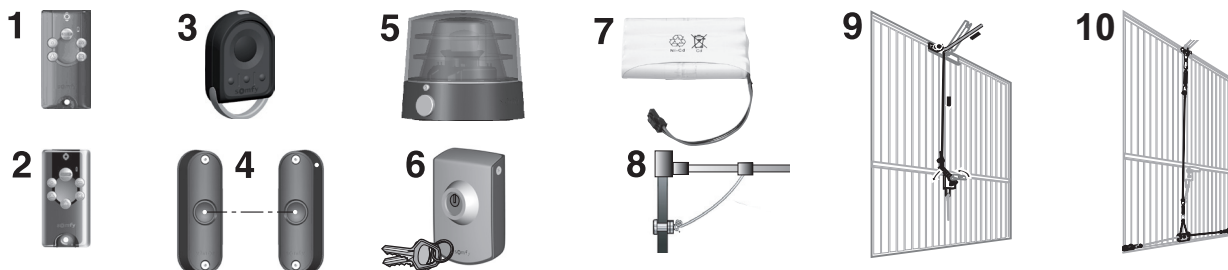


Allow the door to open to the "fully open" position.

PERIPHERALS

A number of peripherals are available.

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Key	Description	Comments
1	Keytis 4 io	Hand held 4 channel remote control.
2	Keytis 4 home io	Hand held 4 channel remote control + general closure function.
3	Keygo io	Hand held 4 channel remote control.
4	Photoelectric cells	To prevent door closure if an obstacle is detected.
5	Orange light	To signal a warning when the door operates.
6	Keyswitch	Keyswitch designed for use outside the garage.
7	Battery	For guaranteed operation even during a power break.
8	Release lock	To engage the manual release system from the outside using the existing door handle. Highly recommended when the garage door is the only access point into the garage.
9	Outside release lock	To engage the manual release system from the outside using the existing door handle. Highly recommended when the garage door is the only access point into the garage.
10	Door locking kit	A system to reinforce door locking.

MAINTENANCE

Replacing the bulb in the light unit (Fig. 25)

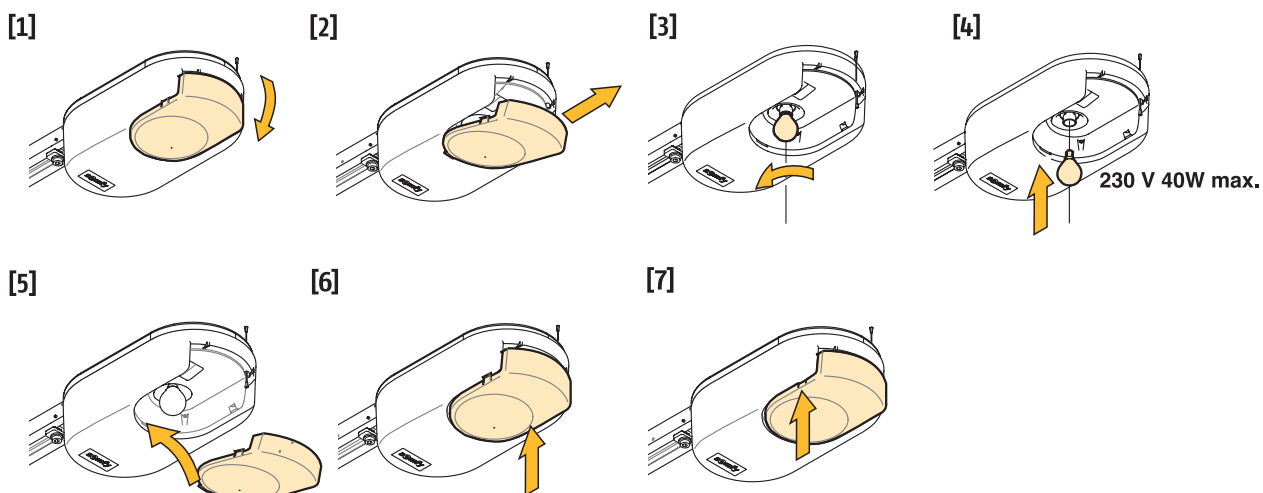
[1] [2]. Remove the light cover.

[3] [4]. Unscrew and replace the defective light bulb.

[5] [6] [7]. Refit the light cover.

Use a 230 V 40 W E14 socket light bulb.

25



Checking

The obstacle detection function

Every six months, check that the door reverses direction when an obstacle prevents the door from closing (at least 50 mm above floor level).

The safety mechanisms (cells, pedestrian door contact, sensor bar)

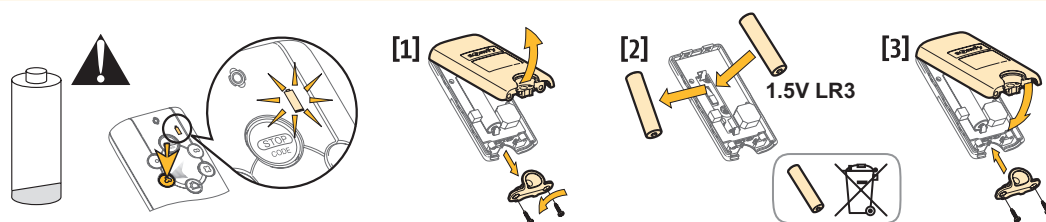
Check correct operation every six months (refer to page 5).

The back-up battery

To ensure optimum battery life, we recommend that the power to the motor is switched off and the door is operated for a number of cycles using battery power (three times a year).

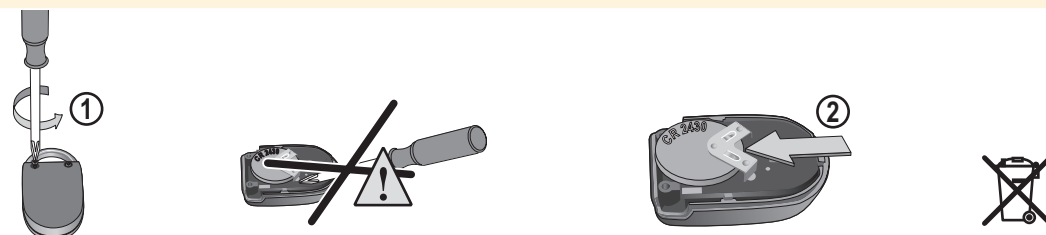
Replacing a Keytis remote control battery

26



Replacing a Keygo remote control battery

27



RECYCLING



Do not dispose of your scrapped appliances, nor your used batteries with household waste. You are liable to dispose of all your electronic or electrical equipment waste by relocating over to a dedicated collection point for recycling.

TECHNICAL SPECIFICATIONS

Basic technical specifications	Dexxo Pro 800 io	Dexxo Pro 1000 io
Mains power supply	230 V - 50 Hz	
Power consumption on standby	5 W	
Max. power consumption	600 W (with 500 W remote controlled lighting)	
Traction force	800 N	1000 N
Use	20 cycles per day with a standard rail (tested for 36,500 cycles) 50 cycles per day with a high performance rail (tested for 90,000 cycles)	
Number of channels that can be memorised	Situo io : 6	Others: unlimited
Somfy radio frequency	868 - 870 MHz	
Integrated light	230 V / 40 W max. E14 socket	
Remote controlled lighting	230 V / 500 W max. Class 2 ☐	
Operating temperature	-20 °C / +60 °C	