Contents

EN

1. Introduction

The Oximo 40 WireFree™ RTS is a motorising kit for roller shutters, consisting of an Oximo 40 DC RTS low power motor, an Oximo WireFree™ Battery with a broad voltage range and an Oximo WireFree™ Solar Panel.

The Oximo 40 WireFree™ RTS operates using solar power: the solar energy collected by the solar panel is stored as electrical energy in the battery. The battery supplies the motor. No wiring to the mains circuit is required for the Oximo 40 WireFree™ RTS to operate.

The Oximo 40 WireFree™ RTS is fitted with Somfy Radio Technology (RTS). The Oximo 40 WireFree™ RTS is operated using an RTS control point and is compatible with RTS Sun sensors.

N.B.: Sequential control points (eg Keygo, Inis, Keytis,...) are not compatible with the Oximo 40 DC RTS motor.

The Oximo 40 WireFree™ RTS is fitted with:

- obstacle protection to protect the roller shutter.
- anti-freeze protection to protect the roller shutter.
- excessive discharge protection for the battery.

2. Safety

2.1 Safety and responsibility

Before installing and using the product, please read the installation guide carefully.

This Somfy product must be installed by a professional motor installer, for whom these instructions are intended.

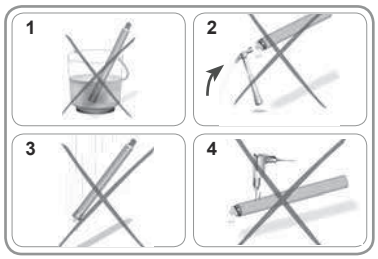
Moreover, the installer must comply with current standards and legislation in the country in which the product is being installed, and inform his customers of the operating and maintenance conditions for the product.

Any usage outside of applications defined by Somfy constitutes non-compliance, and is therefore not covered by the guarantee. In this event, as for all usage not consistent with the instructions given herein, Somfy accepts no responsibility for harm or damage.

Never begin installing without first checking the compatibility of this product with the associated equipment and accessories.

2.2 Specific safety advice

As well as the safety instructions in this guide, it is also essential to observe the rules for use, as well as the instructions detailed in the attached document: "Safety advice to follow and keep".



2.2.1 Motor

1) Never immerse the motor in liquid!
2) Avoid impacts!
3) Do not drop it!
4) Never drill holes in the motor!

2.2.2 Battery

► See manual for Oximo WireFree™ Battery.

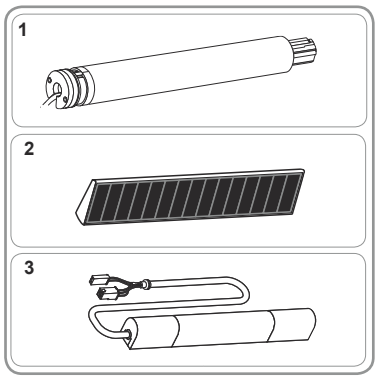
2.2.3 Solar panel

► See manual for Oximo WireFree™ Solar Panel.

3. Contents

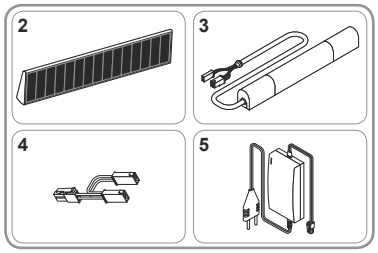
3.1 Contents of the kit

- 1 Oximo 40 DC RTS motor (1)
- 1 Oximo WireFree™ Solar Panel: 12 V solar panel (2)
- 1 Oximo WireFree™ Battery: NiMH 12 V – 2.2 Ah battery (3)



3.2 Additional parts (optional)

- 1 Oximo WireFree™ Solar Panel: 12 V solar panel (additional) (2)
- 1 Oximo WireFree™ Battery: NiMH 12 V – 2.2 Ah spare battery (3)
- 1 Oximo WireFree™ Y Cable: Y splitter cable to connect 2 solar panels (4)
- 1 Oximo WireFree™ Power Supply: external battery charger (5).

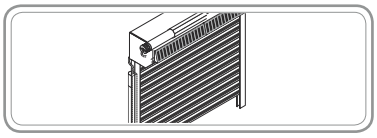


4. Installation

4.1 Installation recommendations

4.1.1 Motor location and distances to observe

The three components that make up the Oximo 40 WireFree™ RTS kit must be installed on the same side as the roller shutter.



Somfy recommends that all components be fitted systematically to the left of the roller shutter, even when fitting a solar panel. If it proves necessary to fit a second solar panel, it would no longer be possible if the components are fitted on the right hand side of the roller shutter.

- Minimum distance to be kept between two RTS motors: 20 cm.
- Minimum distance to be kept between the Oximo 40 DC RTS motor and an RTS control point: 30 cm.

4.1.2 Location of the solar panel(s)

► **See manual for Oximo WireFree™ Solar Panel.**

4.1.3 Battery location

► **See manual for Oximo WireFree™ Battery.**

4.2 Charging the battery for the first time

► **See manual for Oximo WireFree™ Battery.**

4.3 Installing the solar panel(s)

► **See manual for Oximo WireFree™ Solar™ Panel.**

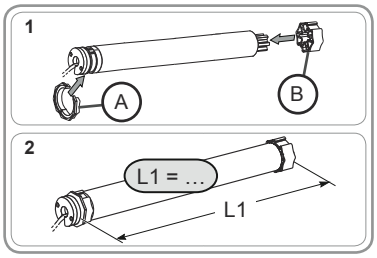
4.4 Installing the battery

► **See manual for Oximo WireFree™ Battery.**

4.5 Installing the motor

4.5.1 Preparing the motor

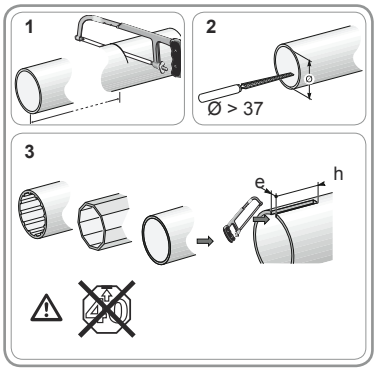
1) Fit the crown (A) and the drive wheel (B) to the motor.
2) Measure the length (L1) between the motor head and the end of the drive wheel.



4.5.2 Preparing the tube

Caution! Do not use octo 40 tube with inner clip.

1) Cut the roller tube to the required length.
2) Deburr the roller tube and remove the swarf.
3) For smooth roller tubes, cut a notch with the following measurements:
   - e = 5 mm
   - h = 18 mm



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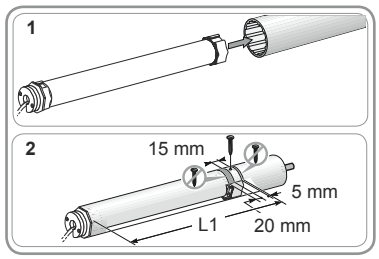
4.5.3 Motor/tube assembly

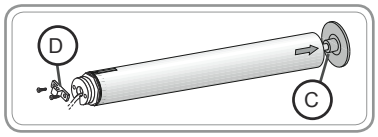
1) Slide the motor into the roller tube.
   For smooth roller tubes, position the notch previously cut on the crown.
2) Attach the roller tube to the drive wheel with three steel pop rivets Ø 4 mm placed at:
   - at least 5 mm from the far end of the drive wheel: L1 - 5, and
   - no more than 15 mm from the far end of the drive wheel.

Caution! The pop rivets must only be attached to the drive wheel and not to the motor.

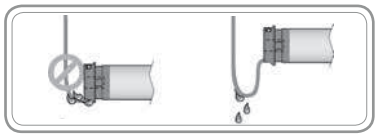


4.5.4 Fitting the motorised tube

- Fit the tube/motor assembly to the end bracket (C).
- Fit the tube/motor assembly to the motor bracket (D).



Caution! Always make a loop in the power supply cable to prevent water from entering the motor!



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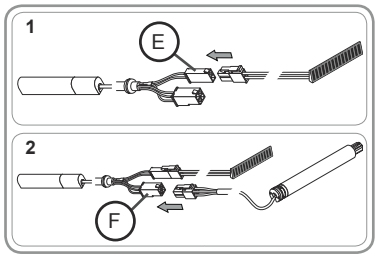
5. Wiring

Caution! The cables and connectors must be protected from the roller shutter movement.

Somfy recommends placing the connectors behind the end piece and fixing the cables inside the roller shutter casing.

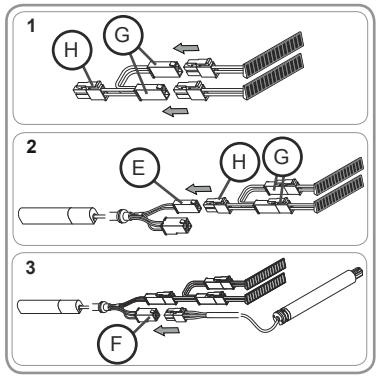
5.1 With 1 solar panel

1) Wire the 2-pin connector of the solar panel to the battery connector (E).
2) Wire the 4-pin connector of the Oximo 40 DC RTS motor to the battery connector (F).



5.2 With 2 solar panels

1) Wire each solar panel to a connector on the Y splitter cable (G).
   ► See manual for Oximo WireFree™ Solar Panel.
2) Wire the 2-pin connector of the Y splitter cable (H) to the battery connector (E).
3) Wire the 4-pin connector of the Oximo 40 DC RTS motor to the battery connector (F).



6. Commissioning

The Oximo 40 WireFree™ RTS is commissioned using an RTS control point.

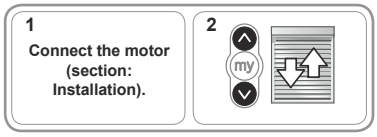
Caution! Sequential control points (eg Keygo, Inis, Keytis,...) are not compatible with the Oximo 40 DC RTS motor.

Caution! If the installation consists of several motors, only one motor should be activated at a time! (Refer to the Oximo WireFree™ Battery guide to activate or deactivate a motor using the PROG button located on the battery).

6.1 Pre-programming the RTS control point

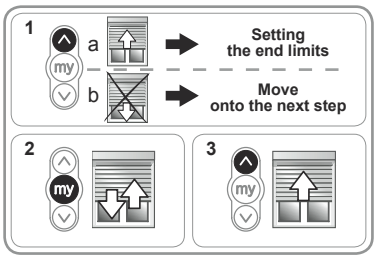
Caution! Before commissioning the Oximo 40 WireFree™ RTS, have the battery charged fully by a professional using the Somfy compatible external battery charger (see Oximo WireFree™ Battery guide).

1) Follow the steps described in the section entitled "Installing" to connect the motor to the power supply (battery and solar panel).
2) Simultaneously press the Up/Down buttons on the RTS control point:
   ► The roller shutter makes an up and down movement, the control point has been pre-programmed in the motor.



6.2 Checking the direction of rotation

1) Press the up button on the RTS control point:
   a) If the roller shutter is raised, the direction of rotation is correct:
      ► Move onto the section entitled “Setting the end limits”.
   b) If the roller shutter is lowered, the direction of rotation is incorrect:
      ► 2) Press the RTS control point STOP/my button until the roller shutter makes an up and down movement: the direction of rotation has been reversed.
      ► 3) Press the RTS control point Up button to check the direction of rotation.



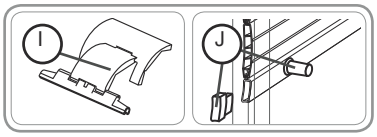
6.3 Setting the end limits and storing the first RTS control point

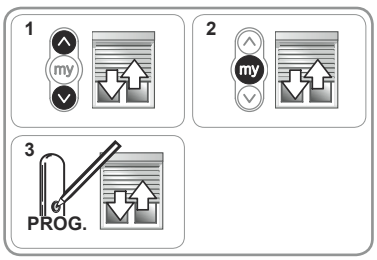
Setting the end limits depends on the type of connections and bolts used as well as whether or not there are stops on the end slat.

6.3.1 With locking straps and stops on the end slat

If the roller shutter is fitted with locking straps (I) and stops on the end slat (J), the end limits are automatically set after the following procedure has been carried out:

1) Press the Up and Down buttons until the roller shutter moves up and down.
2) Press the STOP/my button until the roller shutter moves up and down.
3) Press the RTS control point PROG button to program the first control point:
   ► The roller shutter moves up and down briefly.
   ► The end limit positions have been programmed.





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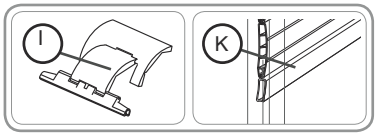
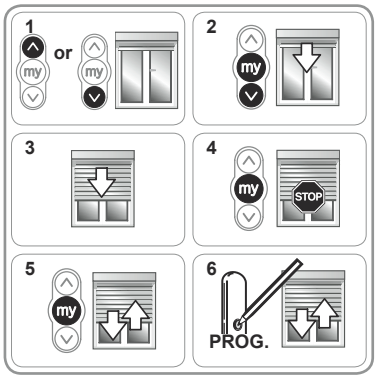
6.3.2 With locking straps and without stops on the end slat

If the roller shutter is fitted with locking straps (I) but without stops on the end slat (K), the lower end limit is automatically set, whereas the upper end limit must be set using the control point.



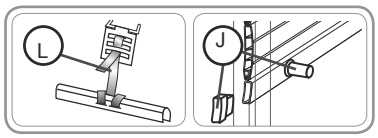
Setting the upper end limit

1) Place the roller shutter in the required upper end limit position.
   - If necessary, adjust the position of the roller shutter using the Up or Down buttons.
2) Press the STOP/my and down buttons simultaneously:
   ► The roller shutter begins to lower in one continuous movement even after the STOP/my and Down buttons have been released.
3) Lower the roller shutter until it reaches mid-height.
4) Briefly press the STOP/my button to stop the roller shutter moving.
5) Press the STOP/my button again until the roller shutter moves up and down:
6) Press the RTS control point PROG button to program the first control point:
   ► The roller shutter moves up and down briefly.
   ► The end limit positions have been programmed.



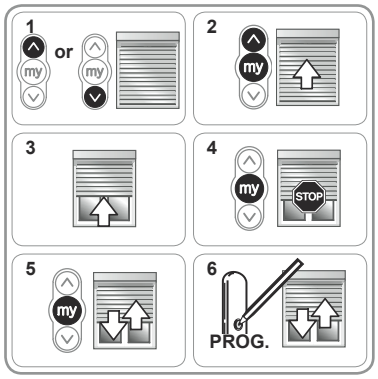
6.3.3 With flexible straps and stops on the end slat

If the roller shutter is fitted with flexible straps (L) and stops on the end slat (J), the upper end limit is automatically set, whereas the lower end limit must be set using the control point.



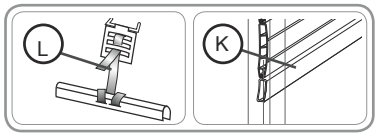
Setting the lower end limit

1) Place the roller shutter in the required lower end limit position.
   - If necessary, adjust the position of the roller shutter using the Up or Down buttons.
2) Press the STOP/my and Up buttons simultaneously:
   ► The roller shutter is raised in one continuous movement even after the STOP/my and Up buttons have been released.
3) Raise the roller shutter until it reaches mid-height.
4) Briefly press the STOP/my button to stop the roller shutter moving.
5) Press the STOP/my button again until the roller shutter moves up and down:
6) Press the RTS control point PROG button to program the first control point:
   ► The roller shutter moves up and down briefly.
   ► The end limit positions have been programmed.



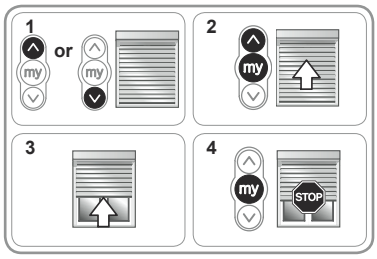
6.3.4 With flexible straps and without stops on the end slat

If the roller shutter is fitted with flexible straps (L) but without stops on the end slat (K), the lower and upper end limits must be set using the control point.



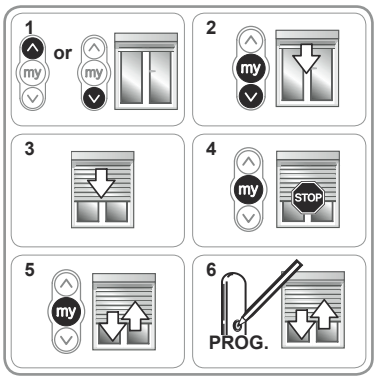
Setting the lower end limit

1) Place the roller shutter in the required lower end limit position.
   - If necessary, adjust the position of the roller shutter using the Up or Down buttons.
2) Press the STOP/my and Up buttons simultaneously:
   ► The roller shutter is raised in one continuous movement even after the STOP/my and Up buttons have been released.
3) Raise the roller shutter until it reaches mid-height.
4) Briefly press the STOP/my button to stop the roller shutter moving and continue by adjusting the upper end limit.



Setting the upper end limit

1) Place the roller shutter in the required upper end limit position.
   - If necessary, adjust the position of the roller shutter using the Up or Down buttons.
2) Press the STOP/my and Down buttons simultaneously:
   ► The roller shutter is lowered in one continuous movement even after the STOP/my and Down buttons have been released.
3) Lower the roller shutter until it reaches mid-height.
4) Briefly press the STOP/my button to stop the roller shutter moving.
5) Press the STOP/my button again until the roller shutter moves up and down:
6) Press the RTS control point PROG button to program the first control point:
   ► The roller shutter moves up and down briefly.
   ► The end limit positions have been programmed.



6.4 Checking the settings

- Check the setting of the upper and lower end limits using the RTS control point.

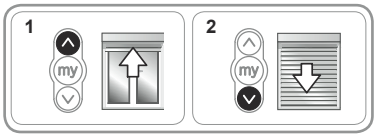
6.5 Favourite position (“my”)

The Oximo 40 DC RTS motor is supplied with a pre-programmed favourite position which corresponds to almost complete closure of the roller shutter (slats in sun protection position).

To modify the pre-programmed favourite position, refer to section 8.1.

Activating the favourite position

- Carry out 1 complete roller shutter Up and Down cycle up to the upper and lower end limits to activate the favourite position.



6.6 Activating/deactivating the motor

The Oximo 40 DC RTS motor can be deactivated for transportation, during extended periods of storage or when commissioning another RTS motor nearby, using the battery's PROG button.

This limits battery discharge and eliminates any risk of spurious operation.

This function is operational after wiring.

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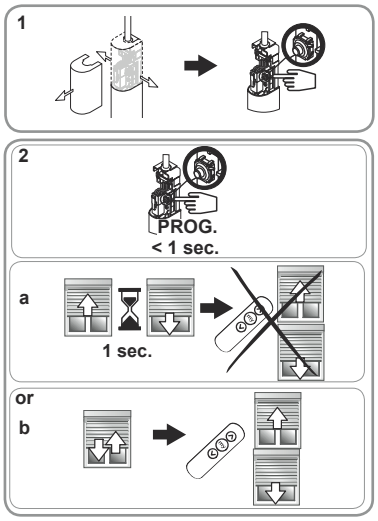
To activate or deactivate the motor:

1) Remove the battery's plastic cover on the cable side to access the PROG button.
2) Press the battery's PROG button for a maximum of 1 second, then release it.
   a) If the roller shutter moves in one direction then a second later moves in the other direction:
      ► The battery has deactivated the motor: the roller shutter does not move, whatever signals are sent by the control points or associated sensors.
   b) If the roller shutter moves up and down briefly.
      ► The battery has activated the motor: the roller shutter moves according to the signals sent by the control points or associated sensors.
3) Refit the battery's plastic cover.

Note:after installing the roller shutter, check that the motor is activated using the RTS control point.



7. Use and operating mode

7.1 With an RTS control point

Caution! The motor will not respond to commands from a Telis Mod/Var thumbwheel.

7.1.1 Favourite position (“my”)

- Briefly press the STOP/my button:
  ► The roller shutter starts to move and stops in the favourite position (my).

If the roller shutter remains in initial position, the favourite position has not been activated: see section 6.5.

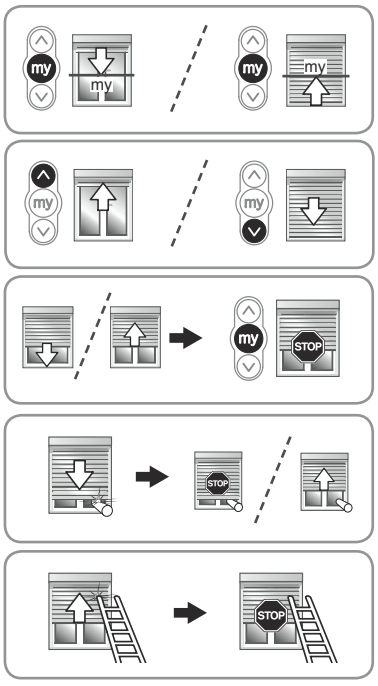
7.1.2 Up / Down buttons

- Briefly press the Up or Down button to raise or lower the roller shutter completely.

7.1.3 STOP function

The roller shutter is moving

- Press the STOP/my button:
  ► The roller shutter stops automatically.



7.2 Obstacle detection

The automatic obstacle detection function protects the roller shutter and enables obstacles to be cleared:

- If the roller shutter detects an obstacle when it is being lowered:
  ► Either the roller shutter stops automatically.
  ► Or it stops and is automatically raised.
- If the roller shutter detects an obstacle when it is being raised:
  ► The roller shutter stops automatically.

7.3 Anti-freeze protection

The anti-freeze protection function operates in the same way as the obstacle detection function:

- If the motor detects resistance:
  ► It stops automatically to protect the roller shutter and returns it to the initial position.

7.4 Excessive discharge protection for the battery

Each time the motor receives a command to raise or lower, it checks the battery voltage to ensure it is not discharged below 10 V.

- If the battery voltage is above 11.5 V: the motor is operating normally.
- If the voltage is below 11.5 V and above 10 V:
  - When the Up button is pressed, the roller shutter stops briefly when raising.
  - When the Down button or STOP/my button is pressed, the roller shutter does not perform the requested operation but performs two brief movements in the same direction.

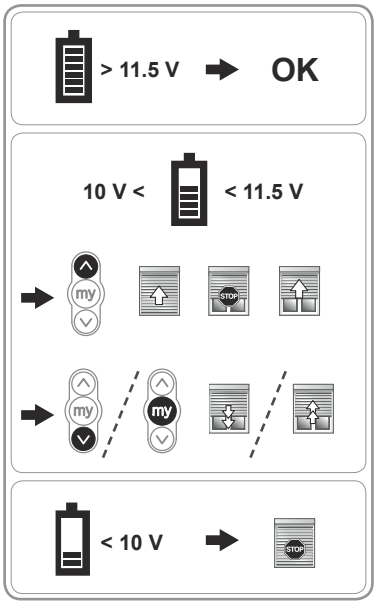
  ► These actions indicate a low battery level.
- If the voltage is less than 10 V:
  - The roller shutter will not operate.

Thanks to the solar panel(s), the battery voltage will rise back up above 12 V, and the motor will resume normal operation.

However, there is an alternative solution to recharge the battery using the Somfy compatible external battery charger.

► See manual for Oximo WireFree™ Battery.

Caution! Never leave the battery discharged.



7.5 Operation with an RTS Sun sensor

To add or remove a sensor, refer to section 8.3.

The operation of the Oximo 40 WireFree™ RTS with an RTS Sun sensor depends on the position of the roller shutter.

7.5.1 The roller shutter is not at the lower end limit

If the Oximo 40 DC RTS motor is linked to an RTS Sun sensor, with the Sun function activated, the favourite position activated and the battery voltage above 11.5 V, then the roller shutter will move in accordance with the information sent by the RTS Sun sensor.

7.5.1.1 Sun appearing

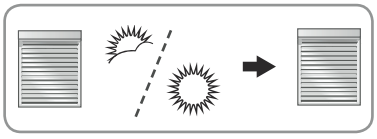
- When the sunshine reaches the threshold set with the RTS Sun sensor and lasts for at least two minutes, the roller shutter will move to the preset favourite position (my).

7.5.1.2 Sun disappearing

- When the sunshine is below the threshold set with the RTS Sun sensor, the shutter will rise to the upper end limit after a time delay of 15 to 30 minutes.

7.5.2 The roller shutter is at the lower end limit

If the roller shutter is at the lower end limit, irrespective of the signals sent by the RTS Sun sensor, the shutter will not move and remains in the lower end limit position.



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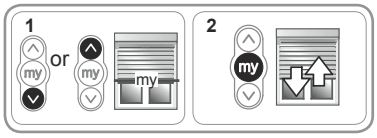
8. Optional additional settings

8.1 Favourite position ("my")

8.1.1 Modifying the favourite position

Check that the favourite position has been activated (see section 6.5).

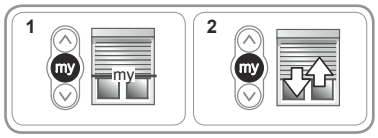
1) Place the roller shutter in the required new favourite position (my) by pressing the Up or Down button on the RTS control point.
2) Press the STOP/my button until the roller shutter moves up and down:
   ► The new favourite position has been programmed.



8.1.2 Deleting the favourite position

Check that the favourite position has been activated (see section 6.5).

1) Press the STOP/my button:
   ► The roller shutter starts to move and stops in the favourite position (my).
2) Press the STOP/my button until the roller shutter moves up and down:
   ► The favourite position has been deleted.



8.2 Adding/Removing an RTS control point

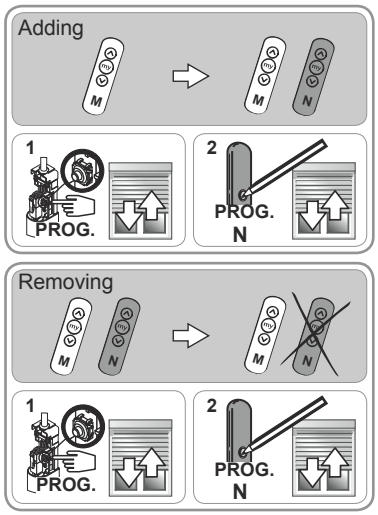
Caution! no more than 12 control points can be programmed in an Oximo 40 WireFree™ RTS

The procedure for adding or removing a control point is the same.

- Access the battery's PROG button.

1) Press and hold the battery PROG button until the roller shutter moves for a few seconds:
   ► The motor is in programming mode for approximately 2 minutes.
2) Briefly press the PROG button on the RTS control point (N) to be added or removed:
   ► The roller shutter moves up and down,
   ► The RTS control point has been programmed or removed from the motor.

Note: The procedure indicated in the RTS control point guide can also be followed (refer to corresponding guide).



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8.3 Adding/Removing an RTS Sun sensor

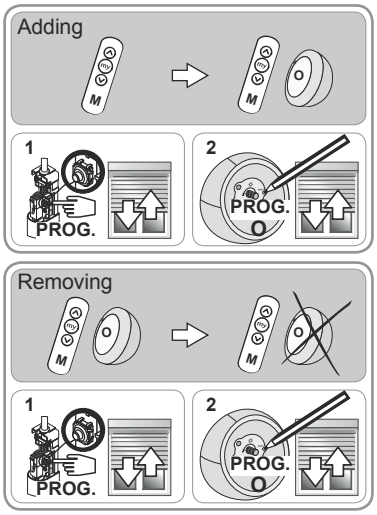
Caution! no more than 3 sensors can be programmed in an Oximo 40 WireFree™ RTS.

The procedure for adding or removing a Sun sensor is the same.

- Check that the favourite position has been activated (see section 6.5). This enables the sensor to be used correctly.
- Access the battery's PROG button.

1) Press and hold the battery PROG button until the roller shutter moves for a few seconds:
   ► The motor is in programming mode for approximately 2 minutes.
2) Briefly press the PROG button on the RTS Sun sensor (O) to be added or removed:
   ► The roller shutter moves up and down,
   ► The RTS Sun sensor (O) is programmed or removed from the motor.

For the use of the RTS Sun sensor, refer to the RTS Sun sensor guide.



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8.4 Modifying the end limits

Adjusting and modifying the end limits depends on the type of connections and bolts used and whether or not there are stops on the end slat.

8.4.1 With locking straps and stops on the end slat

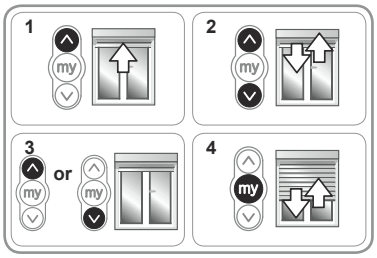
When the roller shutter is fitted with locking straps and stops on the end slat, the end limits are readjusted every 56 cycles, or after the power supply has been cut off.

8.4.2 With locking straps and without stops on the end slat

If the roller shutter is fitted with locking straps and without stops on the end slat, the upper end limit can be modified.

Readjusting the upper end limit

1) Raise the roller shutter to the set upper end limit position.
2) Press the Up and Down buttons until the roller shutter moves up and down.
3) Adjust the upper position of the roller shutter using the Up or Down buttons.
4) Press the STOP/my button until the roller shutter moves up and down:
   ► The new upper end limit position has been programmed.

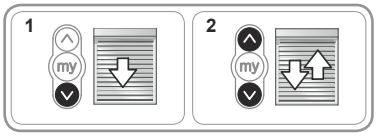


8.4.3 With flexible straps and stops on the end slat

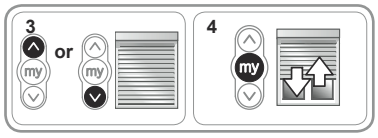
If the roller shutter is fitted with flexible straps and stops on the end slat, the upper end limit is automatically adjusted whereas the lower end limit may be modified.

Readjusting the lower end limit

1) Lower the roller shutter to the set lower end limit position.
2) Press the Up and Down buttons until the roller shutter moves up and down.



3) Adjust the lower position of the roller shutter using the Up or Down buttons.
4) Press the STOP/my button until the roller shutter moves up and down:
   ► The new lower end limit position has been programmed.

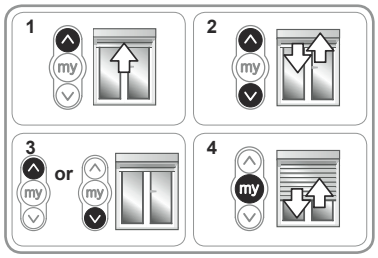


8.4.4 With flexible straps and without stops on the end slat

If the roller shutter is fitted with flexible straps but without stops on the end slat, the lower and upper end limits may be modified.

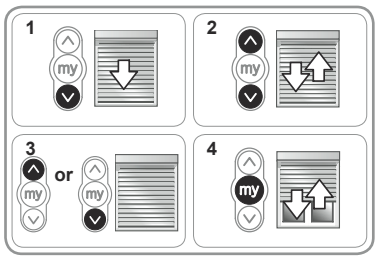
Readjusting the upper end limit

1) Raise the roller shutter to the set upper end limit position.
2) Press the Up and Down buttons until the roller shutter moves up and down.
3) Adjust the upper position of the roller shutter using the Up or Down buttons.
4) Press the STOP/my button until the roller shutter moves up and down:
   ► The new upper end limit position has been programmed.



Readjusting the lower end limit

1) Lower the roller shutter to the set lower end limit position.
2) Press the Up and Down buttons simultaneously until the roller shutter moves up and down.
3) Adjust the lower position of the roller shutter using the Up or Down buttons.
4) Press the STOP/my button until the roller shutter moves up and down:
   ► The new lower end limit position has been programmed.



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9. Tips and recommendations

9.1 Problem with the Oximo 40 WireFree™ RTS?

Problems	Possible causes	Solutions
The roller shutter is not operational.	The wiring is incorrect.	Check the wiring and modify it if necessary.
	The motor is deactivated.	Activate the motor using the battery's PROG button.
	The battery is weak.	See manual for Oximo WireFree™ Battery.
	The control point battery is weak.	Check whether the battery is weak and replace it if necessary.
	The control point is not compatible.	Check for compatibility and replace the control point if necessary.
	The control point used has not been programmed into the motor.	Use a programmed control point or program the control point, see section 8.2.
	External radio equipment is interfering with the radio reception (e.g. Hi-Fi radio headphones).	Turn off all radio equipment nearby.
The roller shutter stops briefly before raising, when the Up button is pressed.	The battery is weak.	See manual for Oximo WireFree™ Battery.
The roller shutter performs two brief movements in the same direction, when the Down button or STOP/my button is pressed.	The battery is weak.	See manual for Oximo WireFree™ Battery.
The roller shutter remains in initial position when the STOP/my button is pressed.	The favourite position is not active.	Activate the favourite position, see section 6.5.
	The favourite position has been deleted.	Program a favourite position, see section 8.1.
The roller shutter moves briefly and stops.	The crown is incorrectly positioned.	Fit the crown correctly.
	The roller shutter is locked by the anti-freeze function.	Wait for the temperature to rise.
The roller shutter stops too soon.	The end limits have been incorrectly set.	Readjust the end limits, see section 8.4.
	The roller shutter has detected an obstacle.	If the obstacle is visible, remove it. If the obstacle is invisible, check the roller shutter assembly.
It is impossible to set the second end limit.	The distance between the two end limits is too small.	Increase the size of the roller shutter.

9.2 Replacing a lost or broken RTS control point or RTS sensor

► See manual for Oximo WireFree™ Battery.

9.3 Restoring the original configuration

► See manual for Oximo WireFree™ Battery.

9.4 Recharging / Replacing the battery

► See manual for Oximo WireFree™ Battery.

9.5 Replacing / Adding a solar panel

► See manual for Oximo WireFree™ Solar Panel.

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