

MAESTRIA+ 50 RTS

EN Instructions
ES Instrucciones
FR Notice

EN

TRANSLATED VERSION

These instructions apply to all variations of the MAESTRIA+ 50 RTS, which are available in the current catalogue.

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1. PRIOR INFORMATION

1. 1. SPHERE OF APPLICATION

MAESTRIA 50 drives are designed to power all types of exterior vertical blinds.

The installer, a home motorisation and automation professional, must ensure that once the driven product is installed, it respects the current standards in the country of installation.

1. 2. LIABILITY

Before installing and using the drive, please read these instructions carefully. In addition to the instructions provided in this guide, please also comply with the instructions set out in the enclosed ***Safety instructions*** document.

The drive must be installed by a home motorisation and automation professional, in accordance with Somfy's instructions and the applicable regulations in the country of installation.

Any operation of the drive outside the sphere of application described above is prohibited. Such operation shall exclude Somfy from all liability and invalidate the Somfy warranty, as will any failure to comply with the instructions given herein and in the enclosed ***Safety instructions*** document.

After installing the drive, the installer must inform his customers of the operating and maintenance conditions for the drive and must pass the operating and maintenance instructions on to them, as well as the enclosed ***Safety instructions*** document. Any After-Sales Service operation on the drive requires intervention by a home motorisation and automation professional.

Should any doubt arise during installation of the drive or for additional information, consult a Somfy contact or visit www.somfy.com.

⚠ Safety Warning! | Warning! | ⓘ Information

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2. INSTALLATION

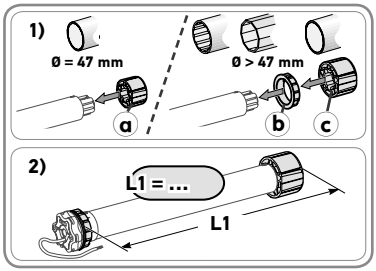
These instructions are **mandatory** for the home motorisation and automation professional installing the drive.

Never drop, knock or puncture the drive or immerse it in liquid.

Install an individual control point for each drive.

2. 1. ASSEMBLY

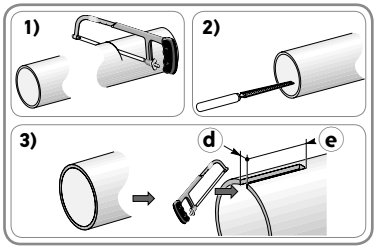
2. 1. 1. Drive preparation



Make sure that the inner diameter of the tube is at least 47 mm.

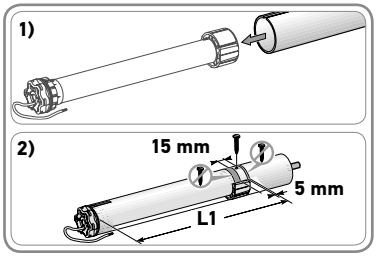
1) Fit the accessories necessary to incorporate the drive into the winding tube:
   - either only the wheel (a) on the drive,
   - or the ring (b) and the wheel (c) on the drive.
2) Measure the length (**L1**) between the inside edge of the drive head and the end of the wheel.

2. 1. 2. Tube preparation



1) Cut the winding tube to the desired length depending on the product to be motorised.
2) Deburr the winding tube and remove all chips.
3) For winding tubes that are smooth inside, cut a notch to the following dimensions: (d) = 4 mm / 0.16 In; (e) = 28 mm / 1.1 In.

2. 1. 3. Drive-tube assembly



1) Slide the drive into the winding tube. For winding tubes that are smooth inside, position the cut notch on the protruding part of the ring.
2) The wheel must be locked in a straight line inside the winding tube:
   - either by securing the winding tube to the wheel using 4 Ø 5 mm Parker screws or 4 Ø 4.8 mm steel pop rivets located between 5 mm and 15 mm from the outside edge of the wheel, irrespective of the type of winding tube.

The screws or pop rivets must only be fastened on the wheel and not on the drive.

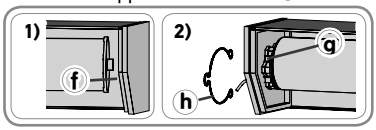
   - or by using a wheel lock, for non-smooth tubes.

2. 1. 4. Mounting the tube-drive assembly

- Fit the tube end into the winding tube.

Star head drive

1) Fit and attach the tube-drive assembly to the end support (f) and the star head support for the drive (g).



Make sure that the tube-drive assembly is locked in place on the end support. This prevents the tube-drive assembly from coming out of the end support fixing.

2) Depending on the type of support, fit the retaining ring (h).

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2. 2. WIRING

⚠ Cables routed through a metal internal wall must be protected and insulated by sleeving or sheathing.

⚠ Secure the cables to prevent any contact with moving parts.

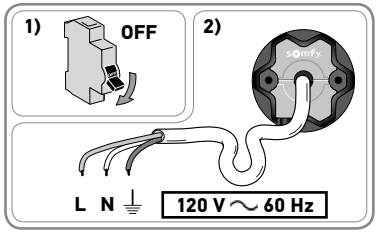
⚠ If the drive is used outdoors and if the power supply cable is of the H05-VVF type, run the cable in a UV-resistant duct, e.g. trunking.

Leave the drive power supply cable accessible: it must be easily replaceable.

Always make a loop in the power supply cable on the outside to prevent water from entering the drive.

1) Switch the power supply off.
2) Connect the drive according to the information provided in the table below:

	Cable		
	Neutral (N)	Hot (L)	Ground (⏚)
120 V ~ 60 Hz	White	Black	Green



2. 3. SET-UP

This guide describes only the commissioning using an RTS control point as Telis 1 RTS. For commissioning using other RTS control point, refer to the corresponding guide.

2. 3. 1. Identification of the set-up steps already performed

Power must only be supplied to one drive at a time.

Three different reactions allow the drive status to be identified. Switch off the power for two seconds on a single driven product to identify the drive's status:

Reaction 1:

The driven product moves up and down briefly upon power-up.

The end limits have been set and no control point is programmed.

- See section "Preprogramming of the Somfy local control point" (§***2. 3. 2***) then section "Programming of the Somfy local control point" (§***2. 3. 6 A***).

Reaction 2:

The driven product does not move up and down briefly upon power-up and does not react when the buttons on the control point are pressed.

The end limits have not been set and no control point is programmed.

- See section Preprogramming of the Somfy local control point (§***2. 3. 2***).

Reaction 3:

The driven product does not move up and down briefly upon power-up but reacts when the buttons on the control point are pressed.

The set-up procedure is complete.

- To modify the advanced settings, see section "Setting advanced sections" (§***2. 3. 5***).

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Follow the following steps for set-up:

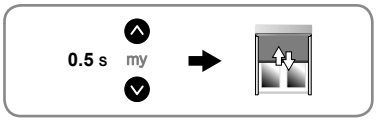
1) Preprogramming of the Somfy local control point (§***2. 3. 2***)
2) Checking the rotation direction (§***2. 3. 3***)
3) Setting the end limits (§***2. 3. 4***)
4) Setting advanced functions (§***2. 3. 5***)
5) Programming of the Somfy local control point (§***2. 3. 6***)

2. 3. 2. Preprogramming of the Somfy local control point

- Simultaneously press the "Up" and "Down" buttons: The driven product moves up and down briefly.

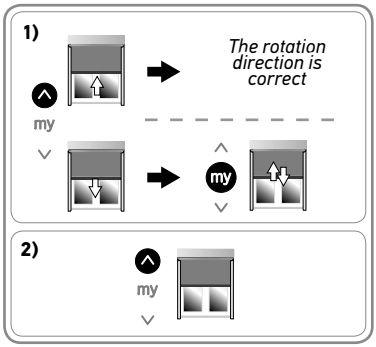
This control point is now preprogrammed in the drive.

ⓘ Preprogramming is lost if power to the drive is switched off before the control point is registered.



2. 3. 3. Checking the rotation direction

1) Press the "Up" button:
   - If the driven product raises, the rotation direction is correct.
   - If the driven product lowers, the rotation direction is incorrect. Press the "my" button until the driven product moves up and down briefly: the rotation direction has now been modified.
2) Press the "Up" button to check the rotation direction.



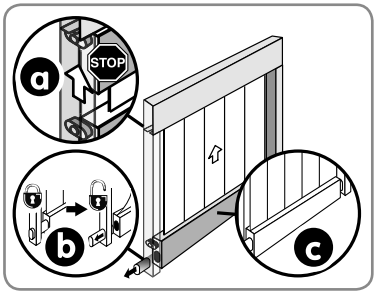
2. 3. 4. Setting the end limits

ⓘ The procedure used to set the end limits depends on the equipment of the driven product (see table below).

ⓘ Pressing and holding the "Up" or "Down" buttons causes the driven product to raise or lower continuously.

Pressing the "Up" or "Down" buttons briefly causes the driven product to raise or lower briefly.

Available devices					
ⓐ Top stop	ⓑ Catching system at lower end limit			ⓒ Heavy load bar	**Steps to be performed**
	None	Manual	*Auto.		
	✓	✓			***See E1***
✓		✓			***See E2***
✓	✓			✓	***See E3****
✓			✓		***See E4***
			✓		***See E5***



*Automatic

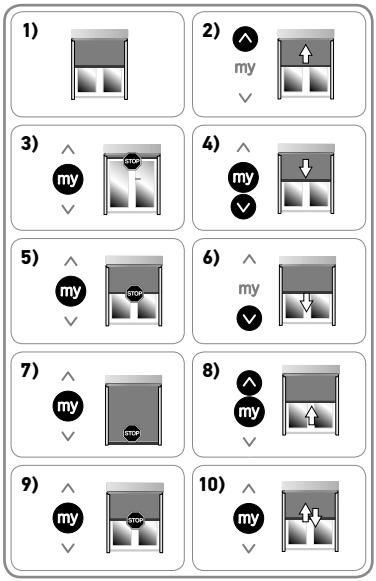
**This step is especially suitable for "ZIP screens" or for any other specific driven product with a heavy load bar and a top stop.

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E1. MANUAL ADJUSTMENT OF THE UPPER END LIMIT AND THE LOWER END LIMIT

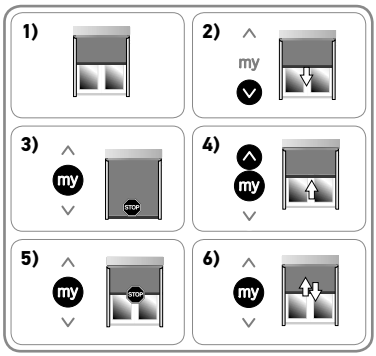
1) Position the driven product at its half-way position.
2) Press the "Up" button: the driven product raises.
3) Press "my" to stop the driven product at the upper end limit position (if necessary, adjust the position of the driven product using the "Up" or "Down" buttons).
4) Press the "my" and "Down" buttons simultaneously: the driven product lowers.
5) Press "my" to stop the driven product at it's half-way position.
6) Press the "Down" button: the driven product lowers.
7) Press "my" to stop the driven product at the lower end limit position (if necessary, adjust the position of the driven product using the "Up" or "Down" buttons).
8) Press the "my" and "Up" buttons simultaneously: the driven product raises.
9) Press "my" to stop the driven product.
10) Press "my" until the driven product moves up and down briefly to validate the end limit setting.



E2. MANUAL ADJUSTMENT OF THE LOWER END LIMIT AND AUTOMATIC ADJUSTMENT OF THE UPPER END LIMIT

1) Position the driven product at its half-way position.
2) Press the "Down" button: the driven product lowers.
3) Press "my" to stop the driven product at the lower end limit position (if necessary, adjust the position of the driven product using the "Up" or "Down" buttons).
4) Press the "my" and "Up" buttons simultaneously: the driven product raises.
5) Press "my" to stop the driven product.
6) Press "my" until the driven product moves up and down briefly to validate the lower end limit setting.

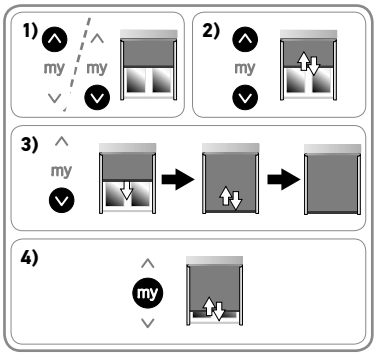
ⓘ After pressing "my", the upper end limit is adjusted automatically.



E3. END LIMIT AUTOMATIC SETTINGS

1) Position the driven product at its half-way position.
2) Briefly press the "Up" and "Down" buttons simultaneously: the driven product moves up and down briefly.
3) Press the "Down" button: the driven product lowers until it detects the lower end limit, performs a brief upward movement and returns to its lower end limit position.
4) To validate the setting, press the "my" button until the driven product moves up and down briefly.

ⓘ If the lower end limit is not set automatically after several attempts, restart the setting and perform the step ***E2***.

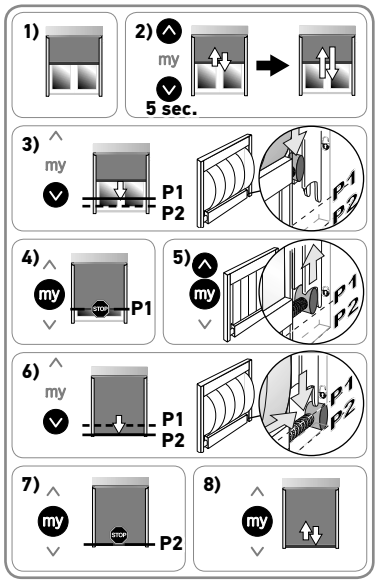


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E4. MANUAL ADJUSTMENT OF THE LOWER END LIMIT AND AUTOMATIC ADJUSTMENT OF THE UPPER END LIMIT WITH AUTOMATIC CATCHING SYSTEM

ⓘ The catching system at the lower end limit my vary depending on the driven product, but the procedure for setting the entrance/exit positions of the catches remains the same on all systems.

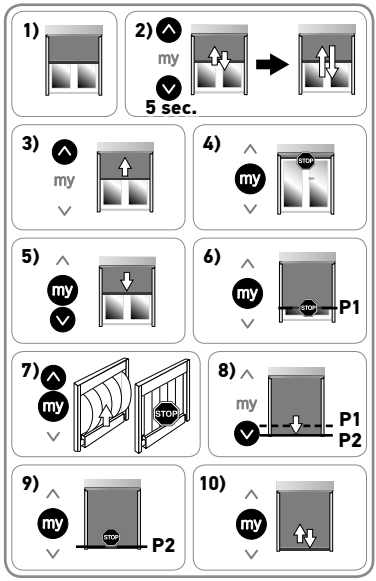
1) Position the driven product at its half-way position.
2) Press and hold the "Up" and "Down" buttons simultaneously for 5 seconds until a slow up and down movement.
3) Press the "Down" button: the driven product lowers.
4) Press the "my" button to stop the product at position (P1), which corresponds to the automatic catching system's entrance point.
5) Press the "my" and "Up" buttons simultaneously: the driven product raises and stops, putting tension on the fabric.
6) Press the "Down" button: the driven product lowers.
7) Press the "my" button to stop the driven product at position (P2), which corresponds to the automatic catching system's exit point.
8) Press "my" until the driven product moves up and down briefly to validate the end limit setting.



E5. MANUAL ADJUSTMENT OF END LIMITS WITH THE AUTOMATIC CATCHING SYSTEM

ⓘ The catching system at the lower end limit my vary depending on the driven product, but the procedure for setting the entrance/exit positions of the catches remains the same on all systems.

1) Position the driven product at its half-way position.
2) Press and hold the "Up" and "Down" buttons simultaneously for 5 seconds until a slow up and down movement.
3) Press the "Up" button: the driven product raises.
4) Press "my" to stop the driven product at the upper end limit position (if necessary, adjust the position of the driven product using the "Up" or "Down" buttons).
5) Press the "my" and "Down" buttons simultaneously: the driven product lowers.
6) Press the "my" button to stop the product at position (P1), which corresponds to the automatic catching system's entrance point.
7) Press the "my" and "Up" buttons simultaneously: the driven product raises and stops, putting tension on the fabric.
8) Press the "Down" button: the driven product lowers.
9) Press the "my" button to stop the driven product at position (P2), which corresponds to the automatic catching system's exit point.
10) Press "my" until the driven product moves up and down briefly to validate the end limit setting.



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2. 3. 5. Setting advanced functions

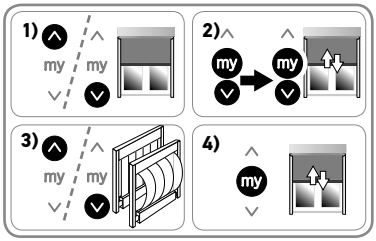
ⓘ Set the advanced functions after having performed the end limit settings (§2.3.4) and before programming the Somfy local control point (§2.3.6).

A. FABRIC TENSIONING FUNCTION WITH AUTOMATIC CATCHING SYSTEM AT LOWER END LIMIT

ⓘ This function is used to adjust the fabric tension of the driven product on 3 threshold levels (strong-medium-weak).

ⓘ By default, fabric tension level is set on medium.

- To adjust the fabric tension:



1) Place the driven product at its half-way position.
2) Briefly press the "my" and "Down" buttons simultaneously, immediately followed by pressing and holding the "my" and "Down" buttons simultaneously until the driven product moves up and down briefly.

ⓘ The drive is now in set mode for **ten seconds** only.

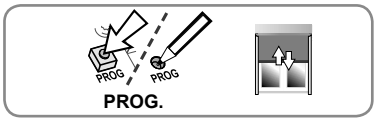
3) Adjust the fabric tension using the "Up" or "Down" buttons.
   - To increase the tension on the fabric, press the "Up" button until the driven product moves up and down slowly: the fabric tension of the driven product passes to the upper threshold.
   - To decrease the tension on the fabric, press the "Down" button until the driven product moves up and down slowly: the fabric tension passes to the lower threshold.
4) To validate the setting, press the "my" button until the driven product moves up and down briefly.

2. 3. 6. Programming of the first Somfy local control point

ⓘ Programming (final) of the first control point is possible only if the end limits of the driven product are set.

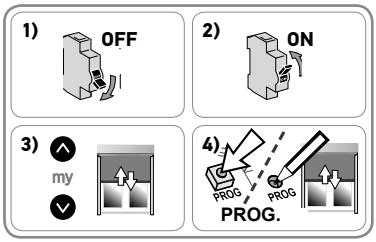
A. PROGRAMMING OF THE PREPROGRAMMED SOMFY LOCAL CONTROL POINT

- Press the PROG button of the preprogrammed control point: the driven product performs a brief up and down movement; the control point is programmed definitively.



B. PROGRAMMING OF A NON-PREPROGRAMMED CONTROL POINT

1) Switch off the power supply (the pre-programmed control point is deleted).
2) Switch the mains power supply back on. The driven product moves up and down briefly.
3) Simultaneously press the "Up" and "Down" buttons of the control point to be programmed until the driven product moves up and down briefly.
4) Briefly press the PROG button of this control point: the driven product performs a brief up and down movement; the control point is programmed.



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2. 4. TIPS AND ADVICE ON INSTALLATION

2. 4. 1. Questions about the drive?

Observations	Possible causes	Solutions
The driven product does not operate.	The wiring is incorrect.	Check the wiring and modify as required.
	The drive's overheating protection has tripped.	Wait for the drive to cool down.
	The cable used is not compliant.	Check the cable and make sure that it has 3 conductors.
	The Somfy RTS control point battery is low.	Check the battery and replace it as required.
	The control point is not compatible.	Check the compatibility and replace the control point as required.
	The Somfy RTS control point being used is not programmed in the drive.	Use a programmed control point or program this control point.
The driven product stops too soon.	The ring is not correctly installed.	Secure the ring correctly.
	The end limits are incorrectly programmed.	Reset the end limits.

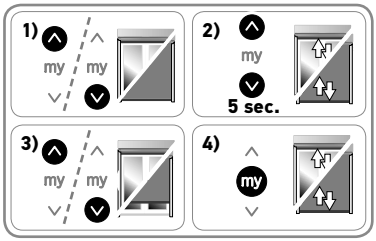
2. 4. 2. Re-setting the end limits

ⓘ The following steps apply only for end limits that are set manually.

ⓘ An RTS control point must be definitively programmed in order to carry out these steps.

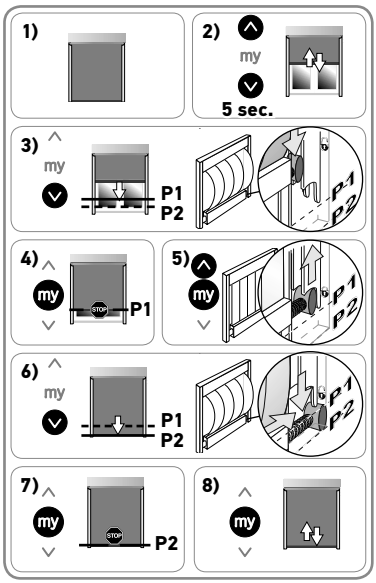
A. READJUSTMENT OF END LIMITS SET IN MANUAL MODE

1) Place the driven product in its end limit position to be modified.
2) Press and hold the "Up" and "Down" buttons simultaneously for 5 seconds until the driven product moves up and down briefly.
3) Place the driven product in its new end limit position using the "Up" or "Down" buttons.
4) To validate the setting, press the "my" button until the driven product moves up and down briefly.



B. READJUSTMENT OF THE AUTOMATIC CATCHING SYSTEM AT THE LOWER END LIMIT

1) Place the driven product at its lower end limit.
2) Press and hold the "Up" and "Down" buttons simultaneously for 5 seconds: the driven product moves up and down briefly.
3) Press the "Down" button: the driven product lowers.
4) Press the "my" button to stop the product at position (P1), which corresponds to the automatic catching system's entrance point.
5) Press the "my" and "Up" buttons simultaneously: the driven product raises and stops, putting tension on the fabric.
6) Press the "Down" button: the driven product lowers.
7) Press the "my" button to stop the driven product at position (P2), which corresponds to the automatic catching system's exit point.
8) To validate the setting, press the "my" button again until the driven product moves up and down briefly.



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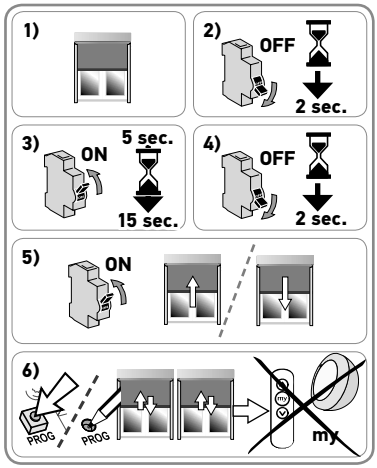
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2. 4. 3. Restoring the original configuration

Only switch off power (double cutout) for the driven product to be reset.

This reset deletes all programmed control points, sensors and end limit settings and resets the driven product's favourite (my) position.

1) Position the driven product at its half-way position.
2) Cut the power supply for 2 seconds.
3) Switch the power supply back on for 5 to 15 seconds.
4) Cut the power supply for 2 seconds.
5) Switch the power supply back on: the driven product moves for a few seconds.
6) Press the PROG button on the Somfy local control point for ≈ 7 s until the driven product moves up and down two times: the drive is reset to its original configuration.



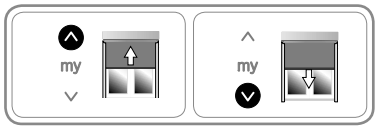
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3. OPERATION AND MAINTENANCE

This drive does not require any maintenance operation.

3. 1. "UP" AND "DOWN" FUNCTIONS

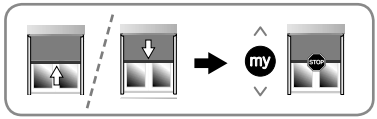
- Briefly press the "Up" or "Down" button: the driven product raises or lowers.



3. 2. STOP FUNCTION

The driven product is moving.

- Press the "my" button: the driven product stops.



3. 3. FAVOURITE (MY) POSITION

ⓘ A slightly open position, referred to as the "favourite (my) position", other than the fully up or fully down position, is programmed by default in the drive.

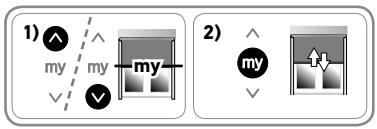
- To activate this function, the drive must have performed one complete cycle.



3. 3. 1. To modify the favourite (my) position

1) Set the driven product to the desired favourite (my) position.
2) Press the "my" button until the driven product moves up and down briefly: the new favourite (my) position is programmed and the old favourite (my) position is deleted.

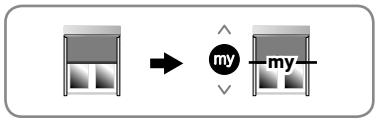
ⓘ It is not possible to save a favourite position close to the end limit positions.



3. 3. 2. To use the favourite (my) position

The driven product must be stopped.

- Press the "my" button: the driven product moves to the favourite (my) position.



3. 3. 3. Deleting the favorite position (my)

ⓘ If the Catching system is activate, it will not be possible to erase the "favourite (my) position".

1) Press the “my” button: The awning moves and stops in the favorite position (my).
2) Press the “my” button again until the awning makes a movement: The favorite position (my) has been deleted.

3. 4. FABRIC TENSION

ⓘ Fabric tensioning is possible only at the lower end limit with driven products equipped with catches.

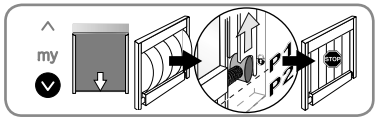
3. 4. 1. Driven product with automatic catching system

ⓘ Fabric tensioning is always active with a driven product equipped with an automatic catching system.

To draw the fabric taut

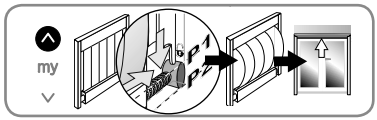
- Press the "Down" button: the driven product lowers. When it reaches the lower end limit, the driven product raises automatically to draw the fabric taut.

ⓘ If the fabric is drawn too tightly or not enough, consult a home motorisation and automation professional to adjust the fabric tension.



To raise the driven product at the upper end limit

- Press the "Up" button. The driven product starts by moving downward to release tension on the fabric, then raises to the upper end limit.



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3. 4. 2. Driven product with manual catches

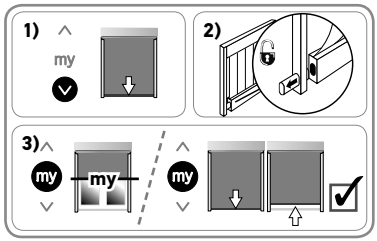
To modify these advanced functions after the first control point programming step, simply switch off the power briefly. Adjustment of the advanced functions of the driven product is then possible during four complete raise/lower cycles.

The fabric can be drawn taut when the driven product, equipped with manual catches, is at the lower end limit. This function is deactivated by default.

Always check to determine whether or not the function is activated/deactivated before activating the function and locking the catches. Failing to do so may lead to breakage of the driven product.

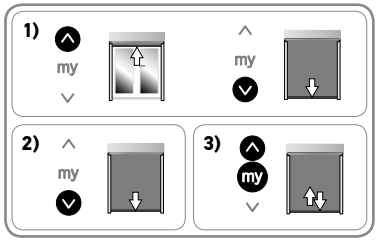
To check whether or not the function is activated

1) Press the "Down" button: the driven product lowers to the lower end limit.
2) **Do not lock** the catches.
3) Press the "my" button.
   - If the driven product goes to the favourite (my) position, the fabric tensioning function is not activated.
   - If the driven product lowers then raises briefly, the fabric tensioning function is activated.



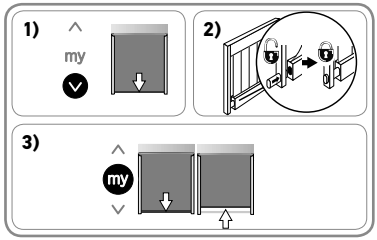
To activate/deactivate the function

1) Perform a complete up and down cycle, all the way to the driven product's upper and lower end limits.
2) Press the "Down" button to place the driven product at the lower end limit.
3) Press the "my" and "Up" buttons simultaneously until the driven product moves up and down briefly.
   - If the function was deactivated, it is now activated.
   - If the function was activated, it is now deactivated.



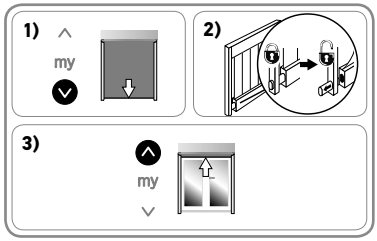
To use this function

1) Press the "Down" button: the driven product lowers to the lower end limit.
2) Lock the catches manually.
3) Press the "my" button: the driven product lowers then raises to draw the fabric taut.



To raise the driven product at the upper end limit

1) Press the "Down" button: the driven product lowers to the lower end limit.
2) Unlock the catches manually.
3) Press the "Up" button: the driven product raises to the upper end limit.



3. 5. OPERATION WITH SENSORS

Refer to the corresponding guide.

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3. 6. TIPS AND ADVICE ON OPERATION

3. 6. 1. Questions about the drive?

Observations	Possible causes	Solutions
The driven product does not operate.	The drive's overheating protection has tripped.	Wait for the drive to cool down.
	The Somfy RTS control point battery is low.	Check the battery and replace it as required.

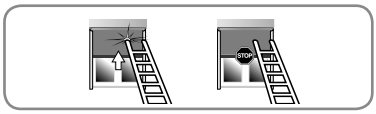
ⓘ If the driven product still does not operate, consult a home motorisation and automation professional.

3. 6. 2. Obstacle detection

ⓘ Obstacle detection is operational only with compatible driven products. Consult a home motorisation and automation professional to find out which products are compatible.

Automatic obstacle detection can be used to protect the driven product and remove any obstacles.

- If the driven product encounters an obstacle when moving downwards, the driven product stops automatically and raises slightly so the obstacle can be removed.
- If the driven product encounters an obstacle when moving upwards, the driven product stops automatically.



3. 6. 3. Frost protection

Frost protection functions in a similar way to obstacle detection:

- If the driven product detects any resistance, it stops automatically.

3. 6. 4. Adding/Deleting Somfy RTS control points and sensors

Refer to the corresponding guide.

3. 6. 5. Replacing a lost or broken Somfy control point

To replace a lost or broken control point, consult a home motorisation and automation professional.

4. TECHNICAL DATA

Radio frequency	433,42 MHz
Power supply	120 V ~ 60 Hz
Operating temperature	-4 °F à +158 °F
Protection rating	IP 44
Maximum number of connected RTS control points	12
Maximum number of connected RTS sensors	3
Safety level	Category I

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