



## Sun- Wind sensor

### Rojaflex RSWS-01

For Rojaflex radio awning motors and radio receivers REHK-BI

# ORIGINAL ASSEMBLY AND OPERATING INSTRUCTIONS

Eine aktuelle Vollversion der Anleitung finden Sie hier/  
You can find a current full version of the manual here/  
Vous trouverez ici une version complète et actuelle du mode d'emploi/  
Puede encontrar una versión completa actual del manual aquí/  
Potete trovare una versione completa attuale del manuale qui/  
Een actuele volledige versie van de handleiding vindt u hier/  
Aktualną, pełną wersję podręcznika można znaleźć tutaj/  
A kézikönyv aktuális, teljes verzióját itt találja:

Original Montageanleitung **DE**

Original instructions **EN**

Mode d'emploi original **FR**

Instrucciones originales **ES**

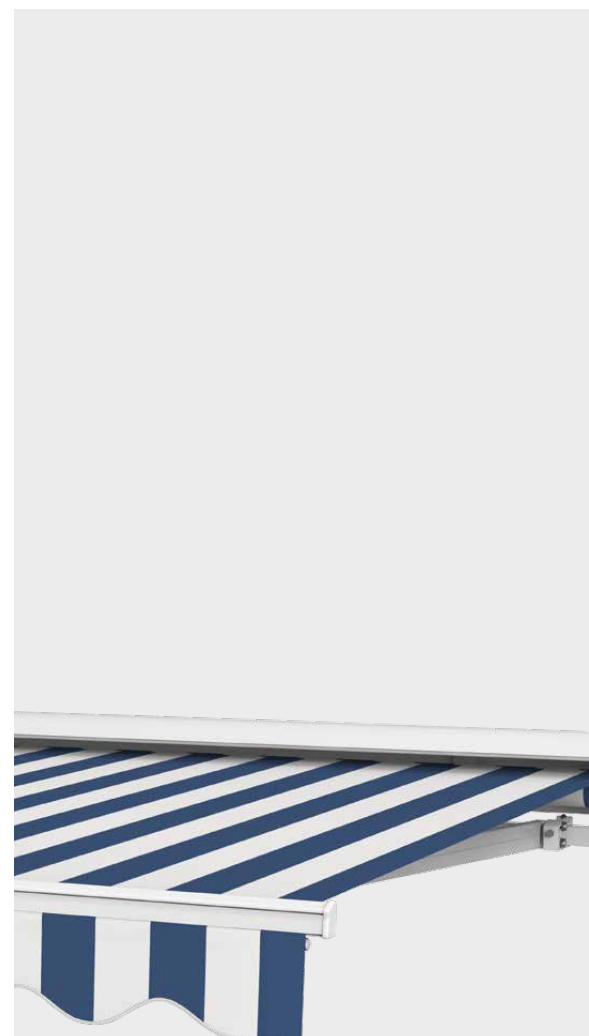
Manuale d'uso originale **IT**

Originele gebruiksaanwijzing **NL**

Oryginalna instrukcja obsługi **PL**

Eredeti összeszerelési útmutató **HUN**





## CONTENTS

<b>General safety instructions</b>	<b>3 - 5</b>
<b>Function overview</b>	<b>6</b>
<b>Technical data / scope of delivery / Mounting</b>	<b>7</b>
<b>Programming and settings</b>	<b>8 - 10</b>
<b>Other settings and notes</b>	<b>11</b>
<b>Contact information</b>	<b>Back</b>

### ATTENTION!

After unpacking, compare the device type with the corresponding information on the type plate. Incomplete devices or devices that do not comply with the specifications must not be put into operation and a complaint must be lodged with our customer service department (see contact information) before commissioning.

EU Declaration of Conformity according to Article 10(9):

Herewith declares Schoenberger Germany Enterprises GmbH & Co. KG, Hohenschäftlarn, that the radio system type rojaflex sun-wind sensor "**RSWS-01**" complies with the directive 2014/53/EU.

The full text of the EU Declaration of Conformity is available at the following Internet address:  
[www.rojaflex.com/konformitaetserklaerungen.html](http://www.rojaflex.com/konformitaetserklaerungen.html)



 **WARNING!**
**Important safety instructions!**

- For the safety of persons it is important to follow these instructions!
- Please keep the manual and hand it over to the new owner in case of change of ownership!
- This appliance can be used by children aged from 8 years and above and persons with reduced physical, sensory or mental capabilities or lack of experience and knowledge if they have been given supervision or instruction concerning use of the appliance in a safe way and understand the hazards involved.
- Children are not allowed to play with the device.
- Cleaning and maintenance by the user must not be carried out by children without supervision.

 **WARNING!**

**The motor controlled by the wireless wind-sun sensor must be disconnected from its power source during cleaning, maintenance and replacement of parts!**

 **WARNING!**

**Non-observance may result in danger to life!**

**There is a danger to life from electric shock when working on electrical equipment!**

**Observe the instructions and safety instructions of the drive / receiver controlled by the sensor as well as the corresponding instructions of the driven sun shading system!**

 **ATTENTION!**

**The following instructions must be observed!**

The range of radio controls is regulated by the legal requirements for radio equipment and is influenced by structural conditions, among other things.

When planning, make sure you have adequate radio reception.

This is especially true if the radio transmitter is located in a different room than the radio receiver, and therefore the radio signal must penetrate walls or ceilings.

Do not install the radio control in the direct vicinity of large metallic surfaces. Other transmitting equipment (e.g. radio headphones, baby monitors, radio weather stations) whose transmission frequency is identical to that of the radio control unit may interfere with reception.

 **Attention!**

Instructions for the correct use and the conditions of use must be observed!

Improper use increases the risk of damage to the sun shading system!

- Use the radio control (sensor) only for connection to roller shutter, awning and blind motors.
- Mount the sensor as close as possible to the sun shading system to be controlled.
- Mount the sensor horizontally.
- Do not mount the sensor under roof projections or in areas protected from the wind. The sensor must be mounted in such a way that a measurement of the wind speed as well as the solar radiation can take place without interference!

- Deactivate the automatic functions of the sensor in case of snow, icing or danger of frost to avoid damage to the motor or the driven system.
- Only use original components and accessories from the manufacturer.
- Instruct all persons in the safe use of the device and the motor controlled by it.
- During commissioning, observe the moving equipment (roller shutter, awning, blind) and keep people away from it until the movement is finished.
- Prohibit children from playing with the device.
- Store the handheld transmitter in such a way that unintentional operation, e.g. by children playing, is prevented.
- Secure the controlled system against unauthorized operation.
- Take safety precautions against unintentional switch-on.
- Carry out all cleaning work on the sun shading system in a de-energized state.
- Use caution when operating the open/extended system, as parts may fall if fasteners (e.g. springs) slacken or are broken.
- Never use defective or damaged equipment.
- Check that the motor controlled by the sensor and the motor power cable are intact.



**WARNING!**

**The use of defective devices can endanger persons and cause damage to property.**

**Regularly check the sensor and the system controlled by the sensor for proper function and keep people away from it until the test of fault-free function has been completed!**

**Please contact our service department (see contact information page) if you notice any damage to the device.**



**ATTENTION!**

**After unpacking, compare the device type with the corresponding information on the type plate.**

**Incomplete devices or devices that do not comply with the specifications must not be put into operation.**



**IMPORTANT!**

**Disposal instructions!**

**(European Directive 2012/19/EU (WEEE))**

Our electrical and electronic products are marked with a crossed-out wheeled garbage can, which indicates that these products and any batteries they may contain must be collected separately at the end of their useful life and must not be disposed of together with normal household waste.



The substances contained in these products may have negative effects on health and the environment, so users of electrical products and batteries also have a responsibility in recycling these waste materials and in this way contribute to the protection, preservation and improvement of the environment.

**Obligation for separate disposal**

Our duty as manufacturers is, among other things, to inform you of your obligation to separate disposal.

- When disposing of products with batteries, remove them from the product and dispose of them separately.
- When disposing of illuminants, they must be disposed of separately to the receptacle.

**Return option and Recycling program EU**

We are connected to public-law return systems throughout Europe and thus offer our customers access to a Europe-wide network of local recycling facilities (recycling centers, take-back points or similar).

Our products are professionally recycled via these local facilities. This reduces the amount of waste - to the benefit of the environment.

**Our registration numbers:**

	<b>Reg. No.*</b>
<b>WEEE</b>	<b>DE 41060608</b>
<b>Battery</b>	<b>DE 88866710</b>
<b>Illuminant</b>	
<b>Transport and Shipping packaging</b>	<b>DE5768543732165</b>

**\*For registration data of other European countries, see Contact Information page.**

A take-back by us as manufacturer according to §19 WEEE is not to be asserted.

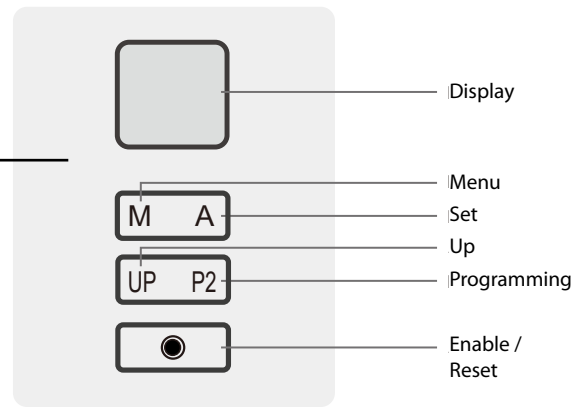
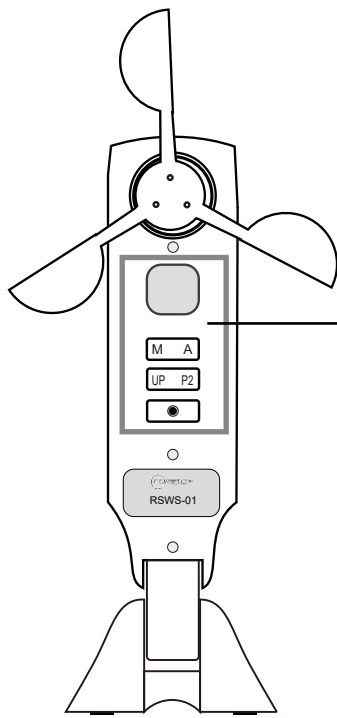
**Information on the degree of fulfillment of the collection and recycling requirements**

It is also our duty as a manufacturer to inform you about the degree of fulfillment of the collection and recycling requirements. Since we are connected to a qualified take-back system, we can refer to the degree of fulfillment of the recycling companies.

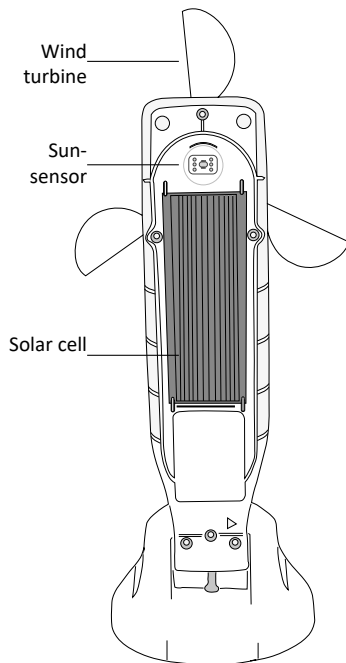
You can find this information on our website.

**Deletion of personal data**

Some of our products contain personal data. This applies in particular to information and telecommunications technology devices such as computers and smartphones. In your own interest, please note that each end user is responsible for deleting the data on the old devices to be disposed of!



Display



Display ads

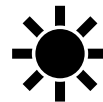


Radio command  
- manual radio command is executed



Battery-Capacity  
- Battery symbol appears in the display when the battery charge falls below the minimum charge!

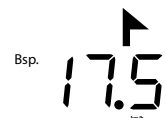
Battery fully charged: approx. 3.3 V  
Minimum charge: 2.7 V



Sun  
Function display sun intensity  
- current value is displayed



Wind  
Function display wind speed  
- current value is displayed



Cycle display  
- current values "sun" and "wind" are displayed alternately

Functional Description:

With the RSWS-01 sun and wind sensor, sun protection systems (awnings, blinds) can be controlled according to the intensity of the sun and the speed of the wind.

The desired values can be set between 0 and 100 kLux (sun intensity) and 0 to 180 km/h (wind speed). The sensor then controls the sun shading system with a fixed time delay. The corresponding values must be exceeded or fallen short of without interruption for at least the specified time in each case.

Value "Sun" - Extend plant: min. 5 min.  
Value "Wind" - retract plant: max. 3 sec.

Value "Sun" - Run in plant: min. 15 min.  
**ATTENTION! After the "Wind" function has been triggered, the system cannot be extended for approx. 15 minutes!**

The "Sun" function can - the "Wind" function can NOT be completely deactivated.

**Regularly check the wind function in particular to ensure that the sun shading system is not damaged in the event of an upcoming wind is reliably retracted! In doing so, also note the display of the battery charge (see display indications)!**

## Technical data

Input voltage	3.3 V DC (integrated rechargeable battery)
Transmit frequency	433.05 - 434.79 MHz
Operating current	≤ 20 mA
Quiescent current	≤ 0.5 - 22 µA (depending on light intensity)
Standby consumption	≤ 3 µW
Transmitting power	≤ 10 mW
Protection class	IP 54
Adjustment range light value	15 kLux - 75 kLux
Adjustment range wind speed	0 - 80 km/h* <span style="float: right;">* It is imperative that the wind speed permitted for the the permissible wind speed for the sun protection system!</span>
Range	Open field: approx. 100 m / indoors: approx. 30 m *
Channels	1-channel
Compatibility	Rojaflex radio motors and radio receivers with bidirectional radio system
Dimensions	L/W/H approx. 216x88(52)x50(26) (without wind wheel) 260x125x76 (with wind wheel)

Art. No. 1000018669

\* Range data are approximate values and depend on the structural conditions.

## Scope of delivery

After unpacking, please compare the package contents with the information on the scope of delivery in these instructions.

1. Sun- Wind sensor RSW-01
2. Instruction manual

1.



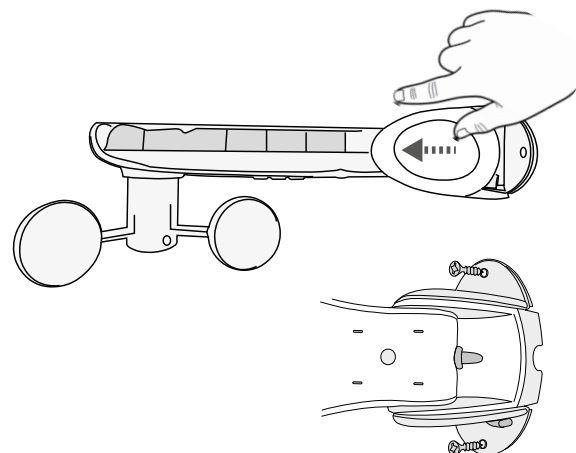
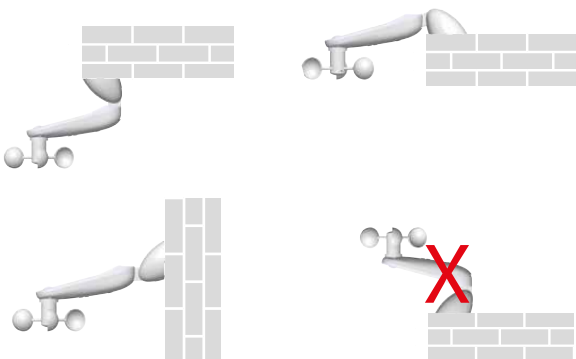
2.



## Mounting

- Select the installation site so that wind and light measurement can take place without interference.
- Install sensor horizontally.
- Mount the windmill pointing downwards.

- Slide on the side base covers in the direction of the sensor.
- Fasten the base with suitable screws.

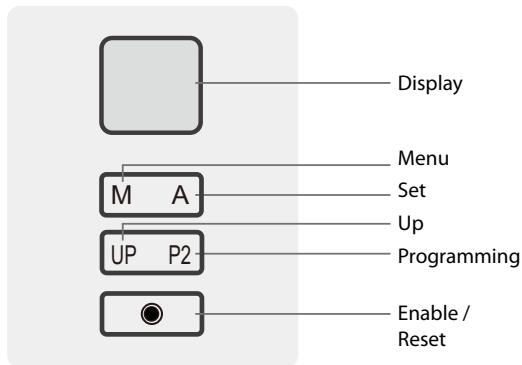




## Sensor programming

To be able to program the sensor, a hand-held or wall transmitter must already be programmed in the corresponding receiver (Rojaflex radio motor or radio receiver).

**Each keystroke must be executed within approx. 4 seconds!  
Otherwise, the system automatically exits the programming mode.**



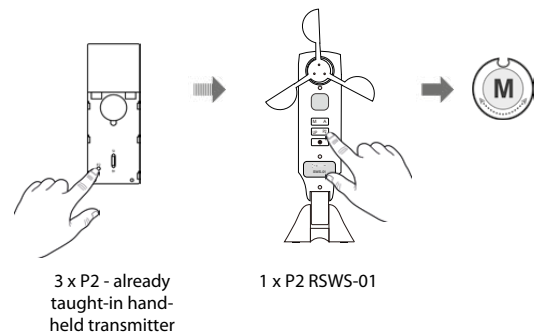
**The sensor switches the display off after approx. 30 sec. of inactivity.**

**Activate the display with any key to make or check settings.**

### 1. Programming - Solar Wind Sensor RSWS-01

(display must be activated)

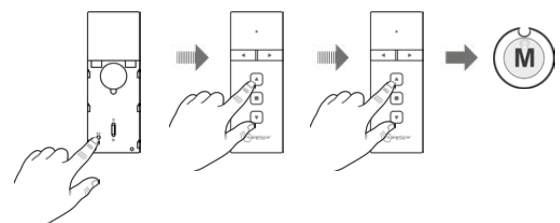
- 1.1 Press key P2 3 times in succession on an already programmed handheld transmitter.
- 1.2 Press the P2 key on the RSWS-01 once. Motor moves up/down briefly. RSWS-01 is programmed.



### 2. Activating the "Sun" function

(display must be activated)

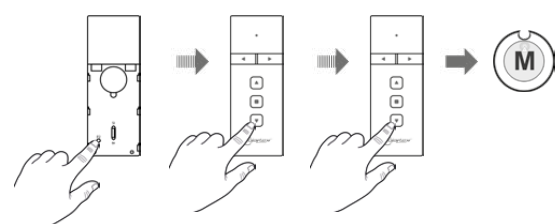
- 2.1 Press the P2 - UP - UP keys on the handheld transmitter in succession. Motor moves up/down briefly. **Motor beeps 3 x = sun function activated**



### 3. Deactivating the "Sun" function

(display must be activated)

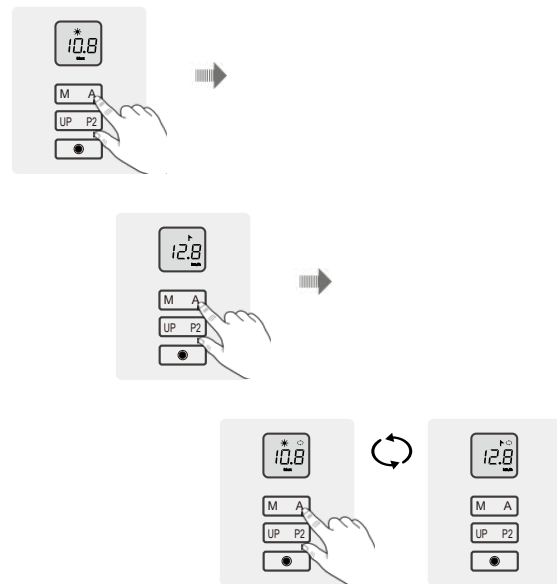
- 3.1 Press the P2 - DOWN - DOWN keys on the handheld transmitter in succession. Motor moves up/down briefly. **Motor beeps 1 x = sun function deactivated**





## Check current measured values for "Sun" and "Wind" (display must be activated)

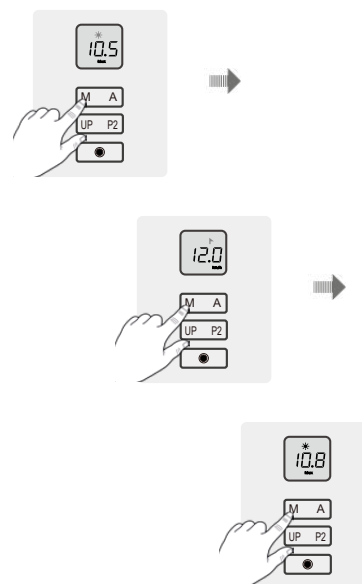
1. Press the A key briefly
  - Symbol ☀ appears in the display.
  - currently **measured** value in kLux is displayed.
2. Briefly press key A again
  - Symbol 🌬 appears in the display.
  - currently **measured** value in km/h is displayed.
3. Press key A again briefly
  - Symbol ↻ appears in the display.
  - currently **measured** values in kLux and km/h are displayed alternately.



The display switches off automatically after approx. 30 sec.

## Check currently set values for "Sun" and "Wind" (display must be activated)

1. Press the M key briefly
  - Symbol ☀ flashes in the display.
  - currently **set** value in kLux is displayed.
2. Briefly press key A again
  - Symbol 🌬 flashes in the display.
  - currently **set** value in km/h is displayed.
3. Press the M key briefly again
  - Display changes to default setting (current measured value "Sun")

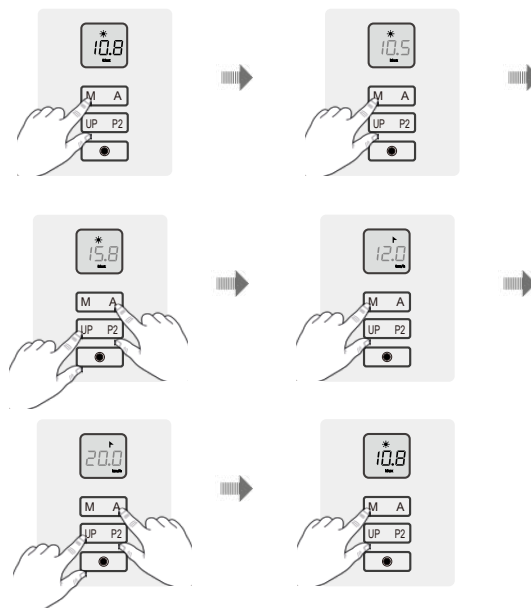


The display switches off automatically after approx. 30 sec.

### Setting the (desired) sun intensity and wind speed (display must be activated)

1. Press M key and hold for approx. 2 sec.
  - Symbol ☀ appears in the display.
  - currently set value in kLux flashes.
2. Use the UP (value higher) and A (value lower) keys to set the desired value for the solar intensity.
3. Press the M key briefly
  - Symbol ▶ appears in the display.
  - currently set value in km/h flashes.
4. Use the UP (value higher) and A (value lower) keys to set the desired value for the wind speed\*.
5. Press the M key briefly again
  - Display changes to default setting (current measured value "Sun")

The display switches off automatically after approx. 30 sec.



#### ATTENTION!

**When setting the values, be sure to observe the maximum wind speed permitted for the sun shading system!**

**A value that is set too high can lead to considerable damage or destruction of the sun shading system!**

#### Lux values (SI) - indications (without guarantee)

Clear sky, sun at zenith	130	kLux
Clear sky, sun elevation 60° <i>(Central Europe at noon in summer)</i>	90	kLux
Clear sky, sun elevation 16° <i>(Central Europe at noon in winter)</i>	20	kLux
Overcast sky, sun elevation 60° <i>(Central Europe at noon in summer)</i>	19	kLux
Overcast sky, sun elevation 16° <i>(Central Europe at noon in winter)</i>	6	kLux
Overcast winter day	3,5	kLux
Twilight <i>(Sun just below the horizon)</i>	0,75	kLux

**According to DIN EN 13561, folding arm awnings are divided into wind resistance classes (see also Beaufort scale)\*.**

Wind resistance class	0	1	2	3
Beaufort scale	< 4	≤ 4	≤ 5	≤ 6
Wind speed (maximum) km/h	< 28	≤ 28	≤ 38	≤ 49
Wind speed (maximum values) m/s	< 7,8	≤ 7,8	≤ 10,6	≤ 13,6

#### Beaufort scale (without guarantee)\*.

Beaufort degree	Designation	Mean wind speed at a height of 10m above free terrain		Examples of the impact of inland wind
		m/s	km/h	
0	calm wind	0 - 0,2	< 1	Smoke rises vertically
1	light breeze	0,3 - 1,4	1 - 5	Wind direction indicated by the train of smoke
2	light breeze	1,5 - 3,4	6 - 12	Wind felt in the face, leaves and wind vanes move
3	light breeze light wind	3,5 - 5,4	13 - 19	Wind moves thin branches and stretches pennants
4	moderate breeze moderate wind	5,5 - 7,4	20 - 27	Wind moves twigs and thinner branches, lifts dust and loose paper
5	fresh breeze fresh wind	7,5 - 10,4	28 - 37	small deciduous trees begin to sway, whitecaps form on lakes
6	strong wind	10,5 - 13,4	38 - 48	strong branches sway, umbrellas are difficult to hold, telegraph lines whistle in the wind
7	stiff wind	13,5 - 17,4	49 - 62	palpable inhibitions when walking against the wind, whole trees move
8	stormy wind	17,5 - 20,4	63 - 73	Branches break from trees, walking in the open air is considerably more difficult
9	storm	20,5 - 24,4	74 - 87	Branches breaking from trees, minor damage to houses (roof tiles or smoke hoods lifted off)
10	severe storm	24,5 - 26,4	88 - 102	Wind breaks trees, major damage to houses
11	hurricane-like storm	26,5 - 32,4	103 - 117	Wind uproots trees, spreads storm damage
12	hurricane	ab 32,5	ab 118	serious devastations

\*Source: BKTex  
Guideline for technical advice, sale and installation of folding arm awnings

**Battery warning indicator**

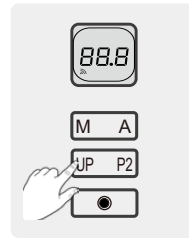
As soon as the battery voltage drops 2.7 V, the battery symbol appears in the display.



**UP button on the sun sensor**

The "UP" key can be used to manually close the controlled sun shading system at any time.

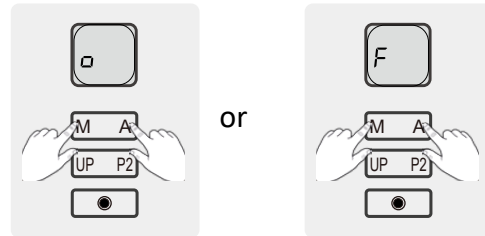
Manual opening by pressing the button on the sensor is not possible (to open the system manually, press the DOWN button on the handheld transmitter).



When the "UP" key is pressed, the "Radio" symbol appears in the display.

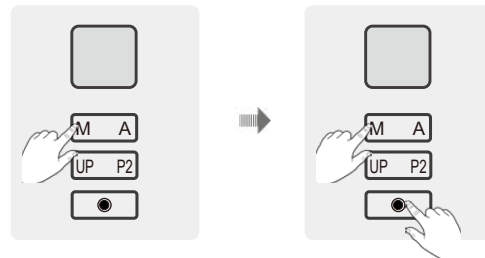
**Radio system setting (SI/BI - directional)**

1. Press and hold the M + A key simultaneously.
  - after approx. 10 seconds the symbol:
    - ☐ = SI - directional or      F = BI - directional
  - to change the radio system, repeat the procedure.



**Reset to factory settings**

1. Display must be switched off.
2. Press and hold the "M" key.
3. Press the "Activate/Reset" key briefly while holding down the "M" key.



**ATTENTION!**

All settings will be reset.

## EU Waste and recycling / Registrations

### Germany for electrical devices:

Stiftung EAR  
WEEE-Reg.-no.: DE 41060608

### Germany for batteries:

Stiftung EAR  
Batt-Reg.-no.: DE 88866710

### Germany for packaging:

LUCID Reg.-no.: DE5768543732165

### Austria for electrical devices:

Elektro Recycling Austria (ERA) GmbH  
ERA Contract no: 40801

### Austria for packaging:

Altstoff Recycling Austria (ARA) AG  
ARA License number: 23363

### Switzerland for electrical devices:

Stiftung SENS  
Membership number: VP11544

### France for electrical devices:

Ecologic  
Membership number / Take-back system: M3670  
National registry: UIN FR208795\_01SUIN

### France for packaging:

Citeo  
Membership number / Take-back system: 532886  
National registry: UIN FR208795\_01SUIN

### Spain for electrical devices:

ECOTIC  
Reg.-no.: RII-AEE- 7601

### Spain for packaging:

Ecoembes  
Membership number: 97556

### Italy for electrical devices:

#### Raccolta differenziata. Verifica le disposizioni del tuo Comune!

Reg.-no.: n/a

### Italy for packaging:

#### Raccolta differenziata. Verifica le disposizioni del tuo Comune!

Membership number: n/a

Reprints, including excerpts, only with the permission of the author.  
Product changes, which from our point of view serve to improve quality, can be made at any time, even without prior notice or notification.  
Illustrations can be example illustrations, which differ in appearance from the delivered goods.  
Errors excepted. No liability is assumed for printing errors.  
Our general terms and conditions apply.

If you have any questions about this product,  
please contact us at the following address:

rojaflex  
is a registered trademark of  
Schoenberger Germany Enterprises GmbH & Co. KG  
Zechtraße 1-7  
82069 Hohenschäftlarn  
Germany

T +49 (0) 8178 / 93 29 93 93  
F +49 (0) 8178 / 93 29 93 94

info@rojaflex.com  
www.rojaflex.com