Centronic SensorControl
SC211A-II

en **Assembly and Operating Instructions**

Radio awning movement sensor

Important information for:

・Fitters /・Electricians /・Users

Please forward accordingly!

These instructions must be kept safe for future reference.

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General

The SC211A-II enables you to control or monitor an articulated-arm awning. The threshold for monitoring wind and vibration can be set using any Centronic hand-held or wall transmitter with a wind threshold-adjustment feature.
The SC211A-II detects two kinds of awning motion and evaluates them separately:

- Wind
- Increase or decrease in the awning's angle of inclination (adjustable)

This device is exceptionally easy to use.
Please observe these Assembly and Operating Instructions when installing and setting up the equipment.

Explanation of pictograms

	**CAUTION**	CAUTION indicates a hazardous situation which, if not avoided, could result in injury.
	ATTENTION	ATTENTION indicates measures that must be taken to avoid damage to property.
		Denotes user tips and other useful information.

Warranty

Structural modifications and incorrect installation which are not in accordance with these and our other instructions can result in serious injuries, e.g., crushing of limbs. Therefore, structural modifications may only be carried out with our prior approval and strictly in accordance with our instructions, particularly the information contained in these Assembly and Operating Instructions.
Any further processing of the products which does not comply with their intended use is not permitted.
The end product manufacturer and fitter have to ensure that all the relevant current statutory, official and, in particular, EMC regulations are adhered to during utilisation of our products, especially with regard to end product manufacture, installation and customer advice.

Safety instructions

General information

- Please keep the instruction manual safe!
- Only use unmodified original parts from the control unit manufacturer.
- Keep children away from control units.
- Observe all pertinent country-specific regulations.
- Dispose of exhausted batteries properly. Only replace batteries with the identical type (see Technical data).

Caution

- **Keep people out of the system's range of travel.**
- **If the system is controlled by one or more transmitters, the system's range of travel must always be visible during operation.**

Intended use

The SC211A-II is intended solely for the operation of an open, half-closed (semi-cassette), or fully closed (cassette) articulated-arm awning.
For safety reasons, the SC211A-II may only be operated with one sun protection drive with integrated radio receiver. The operation of two or more articulated-arm awnings with one SC211A-II is not permitted.
The SC211A-II is compatible with the Centronic SunWindControl SWC241A-II hand-held transmitter. Operation using other sun protection controls from the Centronic range is not recommended.

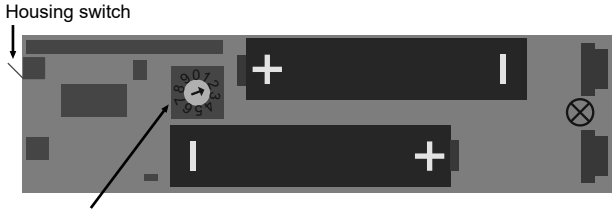
Attention
After the end of the season or before the sun protection system is to remain unused for an extended period of time (e.g. winter), remove the batteries so as to avoid damage due to leaking batteries.

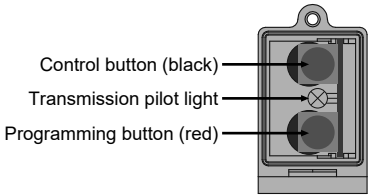
Use for other purposes or for purposes beyond the above constitutes improper use.

- Please note that radio-controlled systems may not be used in areas with a high risk of interference (e.g. hospitals, airports).
- The remote control is intended solely for use with equipment and systems in which malfunctions in the transmitter or receiver would not pose any risk to persons, animals or property, or which contain safety devices to eliminate such risks.
- The operator is not protected from interference from other telecommunications systems and terminal equipment (e.g. even from radio-controlled systems which are properly operated in the same frequency range).
- Only connect radio receivers to devices and systems approved by the manufacturer.

- **Radio-controlled systems transmitting on the same frequency may cause reception interference.**
- **Note that the range of the radio signal is limited by legislation as well as by design.**

Explanation of displays and buttons





Explanation of functions

Transmission pilot light

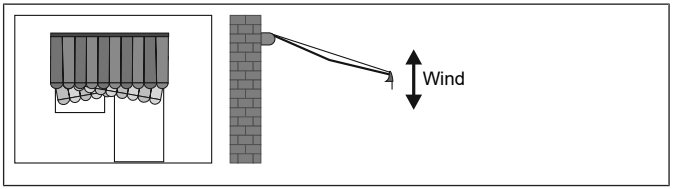
A green transmission pilot light indicates that there is a radio signal when a button is pressed.
A red transmission pilot light indicates that the SC211A-II has not yet been programmed.

Control button

The button commands are executed in the following order RETRACT/EXTEND - STOP - EXTEND/RETRACT - STOP, etc.

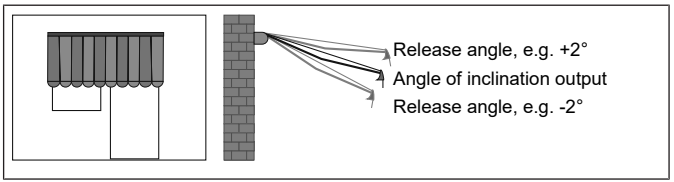
Wind

The SC211A-II detects any vibration in the awning and evaluates it.
The SC211-AII transmits this value to the receiver.
The receiver compares the value to the threshold (set using a transmitter such as the SWC241A-II). If the value measured is above the threshold (wind alarm), the articulated-arm awning is retracted immediately.
If this happens, the articulated-arm awning cannot be extended for approx. 15 minutes.



Angle of inclination / Release angle (optional)

The SC211A-II detects a gradual increase or decrease in the awning's angle of inclination relative to the initial angle of inclination e.g., due to rain (formation of water pools). If the awning reaches the release angle, a retract command is sent to the receiver.
The rotary switch is used to set the release angle between ± 1° and ± 9° in 1° increments.
The factory default is 0 (off).



Commissioning

Caution
It is essential to follow the steps in the correct order.

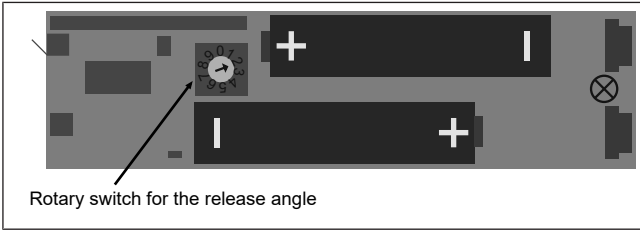
1. Open the housing and carefully remove the PCB

2. Insert batteries correctly.

3. Setting the release angle (optional)

Caution
The release angle may only be set by a specialist in accordance with the specific features of the articulated-arm awning.

1. Set the release angle on the rotary switch.

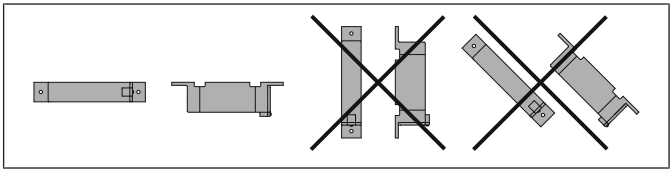


2. This completes the setting process.
The factory default is 0 (off).

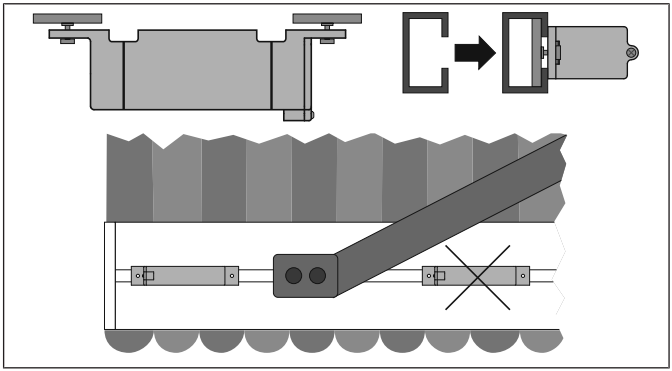
The release angle setting is applied once the initial angle of inclination is set.

4. Assembly of the housing

Attention
Take care not to damage the controller when extending and retracting the articulated-arm awning.



Use the fasteners supplied to mount the controller in the T-slot at the end of the front section.



5. Completely push in the PCB

6. Programming the transmitter

Caution
When programming the transmitter, ensure that the range of travel of the articulated-arm awning is unobstructed, as it may extend immediately.

Before programming the SC211A-II, a master transmitter (e.g. SWC241A-II) must be programmed on the receiver (e.g. tubular drive R30-17-C12a) and the limit positions must be programmed.

The SC211A-II has an integrated radio transmitter.
1. After programming the master transmitter, set the wind threshold to the highest possible setting, since high values may be stored on the SC211A-II from assembly, which are transmitted immediately after programming.
2. Ensure that the PCB is completely pushed in. Press the programming button on the master transmitter until the receiver confirms.
3. Press the programming button of the SC211A-II until the receiver confirms.
4. Now press the programming button of the SC211A-II that is to be programmed again until the receiver confirms.

7. Close the housing.

8. Setting the thresholds

Attention
A threshold must be set which does not exceed the maximum permitted load for the articulated-arm awning.

1. Extend the articulated-arm awning to the limit position.
2. Place the threshold regulator on the SWC241A-II in the middle position.
3. Grasp the front section of the articulated-arm awning and shake it in a way that represents the force at which you want the articulated-arm awning to retract, for at least 10 seconds.
4. If the articulated-arm awning remains extended, the wind threshold must be set to a more sensitive setting and the test repeated.
5. If the articulated-arm awning retracts fully, the threshold is at the correct setting.

The articulated-arm awning must not be extended for 15 seconds after retraction.

9. Programming the initial angle of inclination (optional)

The articulated-arm awning must be completely still when programming the initial angle of inclination.

1. Extend the articulated-arm awning to the limit position.
2. Turn off the power to the system.
3. Open the controller.
4. Press the programming button for at least 10 seconds until the LED goes from green to red briefly and then back to green.
5. Close the controller.
6. Now turn the power to the system back on.

This completes the programming process.

Switching off the angle of inclination

1. Extend the articulated-arm awning to the point where you can reach the SC211A-II.
2. Turn off the power to the system.
3. Open the SC211A-II and carefully remove the PCB.
4. Turn the rotary switch to position 0.
5. Slide the PCB back into the SC211A-II.

Ensure that the PCB is completely pushed in. After 3 seconds, the controller is ready for operation again.

6. Then press the red button until the LED lights up green briefly.
7. Close the SC211A-II.
8. Now turn the power to the system back on.

This completes the process.

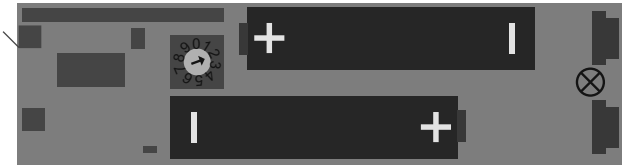
Changing the angle of inclination

1. Extend the articulated-arm awning to the limit position.
2. Turn off the power to the system.
3. Set the new release angle (see "Setting the release angle").
4. Now programme the initial angle of inclination (see "Programming the initial angle of inclination").

This completes the process.

Changing batteries

Caution
Extend the articulated-arm awning to the best position for changing the batteries and then turn off the power to the system. After you have changed the batteries, turn the power back on.



1. Undo the housing screw and carefully pull back the cover as far as it will go.
2. Carefully remove the PCB from the housing.
3. Take out the batteries.
4. Insert the new batteries correctly.
5. Carefully slide the PCB back into the housing.

Ensure that the PCB is completely pushed in. After 3 seconds, the controller is ready for operation again.

6. Then slide the cover back over the housing and screw the screw back in.

Technical data

Rated voltage	3 V DC
Battery type	FR03 (AAA) Lithium
Degree of protection	IP 44
Angle of inclination range	0° to 90°
Permissible ambient temperature	-25 to +55 °C
Maximum emitted transmission output	⩽ 3 mW
Radio frequency	915.3 MHz
Type of mounting	on the front section

The maximum radio range on and in the building is up to 10 m, and up to 100 m in the open.

What to do if…?

Problem	Remedy
The awning retracts every hour, and can only be moved by holding the travel button down.	Insert new batteries.
	Insert batteries correctly.
The awning does not extend to the limit position and then retracts, despite calm conditions.	Vibration is detected when the awning is extending. Adjust the wind threshold on the master transmitter.
Awning does not react to wind.	Program the SC211A-II.
	Adjust the wind threshold on the master transmitter.
An increase or decrease in the awning's angle of inclination is not detected.	The rotary switch for the release angle is set to "0". Set the release angle and program the initial angle of inclination.
The awning extends and then immediately retracts once more every 15 minutes.	There is a high wind and a high sunshine level at the same time. Deactivate the automatic sun protection

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