

CentronicPLUS

SC91 1A PLUS

en

Assembly and Operating Instructions

Radio sun/wind/rain sensor, bidirectional

Important information for:

- Fitters / • Electricians / • Users

Please forward accordingly!

These instructions must be kept safe for future reference.

4036 630 293 0 23/01/2023



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General

You can control one or more CentronicPlus sun protection systems with the sensor. The thresholds for sun protection and wind monitoring can be set with the CentronicPlus/ Centronic sun protection controls. Reactions to the rain alarm can only be set with the CentronicPlus sun protection control.

This device is exceptionally easy to use.

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.

Licensing information for open source software

This device uses free/open source software.

The licence texts are enclosed with the product in the licence documentation, which can be identified by the following symbol:



The licence texts for the licensed software being used can be downloaded from www.becker-antriebe.com/licenses.

Written request for the licence texts:

Becker-Antriebe will, on request, provide the licence texts for the licensed software being used at cost price, either on a USB stick or a similar data carrier. Please send an email to the following email address for more information:

licenses@becker-antriebe.com



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.
- Always keep the sensor clean and free of leaves, snow, etc., and check it regularly to make sure it is in perfect working order.
- Sudden gusts of wind may damage the system despite wind monitoring because the shading solution cannot be retracted suddenly due to the inertia of the overall system. If a storm is brewing, make sure that the shading solution is retracted and is secured in this position.



Caution

- **Risk of injury due to electric shock.**
- **Connections to the 230 V mains must always be performed by an authorised specialist.**
- **Disconnect the connecting cable from the power prior to installation.**
- **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.**
- **When connecting the control cables (protected extra-low voltages), only use cables with sufficient electrical strength.**
- **Observe the specifications for the sun protection system.**

Intended use

The sensor described in these instructions must only be used for CentronicPlus-compatible radio drives and radio control units.

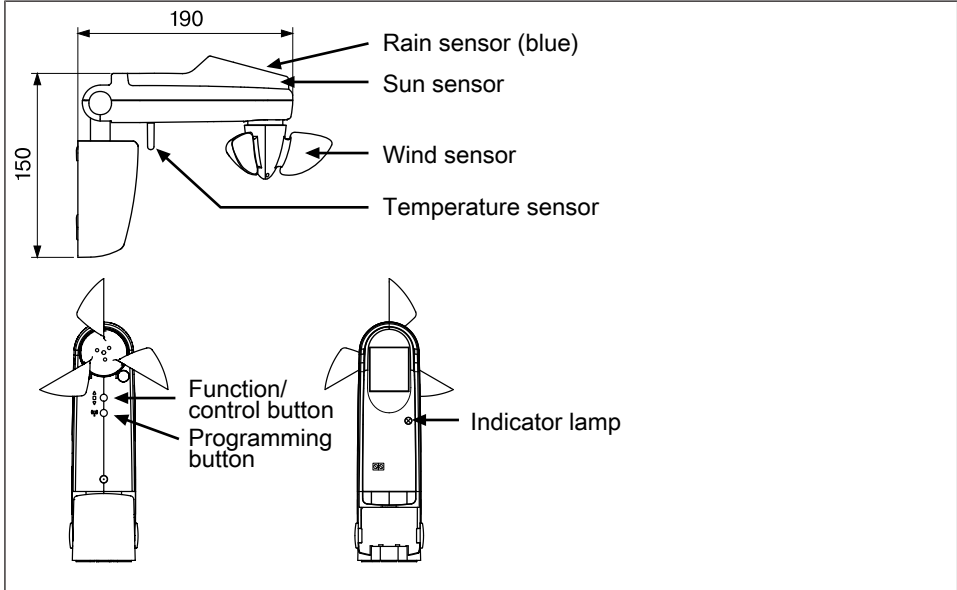
- Please note that radio-controlled systems may not be used in areas with a high risk of interference (e.g. hospitals, airports).
- The remote control is intended solely for use with equipment and systems in which malfunctions in the transmitter or receiver would not pose any risk to persons, animals 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.



- **Ensure that the control unit is not installed or operated close to metal surfaces or magnetic fields.**
- **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



Indicator lamp on start-up	Lights up green for 1–6 seconds	The sensor has started up and is still booting up.
Indicator lamp during operation	Briefly lights up yellow	The sensor is sending sensor data to its receiver.
	Briefly lights up green	The sensor is sending the current drive command to its receiver.
	Colour change	The sensor is performing a search for the programming process.
	Permanently lights up red	No receiver was found in programming mode.
	Permanently lights up green	A receiver was paired with the sensor in programming mode.
	Permanently lights up blue	A receiver was found in the same network in programming mode but has not yet been paired with the sensor.
	Permanently lights up yellow	A receiver was found in a different network in programming mode.
	Lights up green 3 times	The sensor has been identified by another network participant.

Explanation of functions

The sensor continually transmits the current measured sensor values. The reaction to the thresholds set in the receiver being exceeded or not met depends on the receiver being used and on the particular settings on this receiver.

i **The rain sensor is heated in order to ensure correct rain detection.**

Indicator lamp

The indicator lamp provides visual feedback such as radio transmissions. Once the power supply has been switched on and while the device is starting up, this lamp will briefly light up green.

Function/control button

This button is for adjusting the settings. In normal mode, the drive commands are executed in the following order RETRACT - STOP - EXTEND - STOP, etc.

Program sensor

Establish programming mode

i **This step is only necessary if one of the devices to be programmed is not yet part of the installation. This is the case for brand new products, for example, or devices from another installation or products that have been restored to factory settings.**

Please find the appropriate description in the instructions for the receiver.

Programming the CentronicPLUS sensor










There are multiple ways to program the sensor:

- With the programming button on the sensor
- With an SWCxxxPLUS transmitter

With the programming button on the sensor

i **With brand new products, devices from another installation or products that have been restored to factory settings, programming mode must be established beforehand (see Establishing programming mode).**



	 	<p>Press the programming button for 3 seconds when it is ready to program. The sensor performs a search and the indicator lamp continuously changes colour. The sensor then switches to receiver selection and selects the receiver with the best connection quality.</p> <ul style="list-style-type: none"> ▷ The receiver confirms. <p>If you do not receive confirmation from the required receiver, press the programming button to toggle between the available receivers until the required receiver confirms.</p> <ul style="list-style-type: none"> ▷ The sensor displays the current assignment status of the receiver via the indicator lamp.
<p>Assignment status</p>		
<p>Lights up yellow:</p>		<p>The receiver is not yet part of the installation or is in the as-delivered condition.</p>
<p>Lights up blue:</p>		<p>The receiver is not assigned to the selected channel.</p>
<p>Lights up green:</p>		<p>The receiver is assigned to the selected channel.</p>
	 <p>or</p>  	<p>Press the function/control button to change the assignment status of the selected receiver. If the receiver is not yet part of the installation, it will be added and assigned to the selected channel.</p> <ul style="list-style-type: none"> ▷ The receiver signals once to confirm the channel assignment, or signals twice to cancel the channel assignment. ▷ The sensor lights up accordingly to confirm the new assignment status. <p>▶ The receiver is now part of the installation.</p>
		<p>Then press the programming button for 3 seconds to change to normal mode.</p> <ul style="list-style-type: none"> ▶ The indicator lamp goes out.

With an SWCxxxPLUS transmitter



With brand new products, devices from another installation or products that have been restored to factory settings, programming mode must be established beforehand (see Establishing programming mode).



Bring the transmitter as close as possible to the sensor to be programmed.

● 3s

Ⓜ 1x



Press the programming button on the transmitter for 3 seconds. The transmitter performs a search and the LED ring continuously changes colour. The transmitter then switches to receiver selection and selects the sensor/receiver with the best connection quality.

▸ The sensor/receiver confirms.

If you do not receive confirmation from the required sensor, you can press the ▲/▼ button to toggle between the available sensors/receivers **until the indicator lamp on the required sensor flashes 3 times to confirm.**

▸ The transmitter displays the current assignment status via the LED ring.

Assignment status

Lights up yellow:

The **sensor/receiver** is not yet part of the installation or is in the **as-delivered condition**.

i Briefly pressing the **STOP** button adds the device to the installation and updates the assignment status.

Lights up blue:

The **receiver** is **not assigned to the selected channel**.

Lights up green:

The **receiver** is **assigned to the selected channel**.

Lights up white:

Centronic PLUS sensor selected.

Lights up red:

No receiver located.



Press the **STOP** button on the transmitter to change the assignment status of the selected receiver. If the receiver is still not assigned to the selected sensor, it will now be added.

▸ The sensor lights up accordingly to confirm the new assignment status.

▸ The sensor is now part of the installation.

● 3s












Then press the programming button on the transmitter for 3 seconds to change to normal mode.

▸ The indicator lamp goes out.



Sensor assignment with the hand-held transmitter

	<p>Bring the transmitter as close as possible to the required sensor.</p>
<p>● 3s</p>	<p>Ⓜ 1x</p> <p></p> <p></p> <p>Press the programming button on the transmitter for 3 seconds. The transmitter performs a search and the LED ring continuously changes colour. The transmitter then switches to receiver selection and selects the sensor/receiver with the best connection quality.</p> <ul style="list-style-type: none"> ▷ The sensor/receiver confirms. <p>If you do not receive confirmation from the required sensor, you can press the ▲/▼ button to toggle between the available sensors/receivers until the indicator lamp on the required sensor flashes 3 times to confirm.</p> <ul style="list-style-type: none"> ▷ The transmitter displays the current assignment status via the LED ring.
<p>Assignment status</p>	
<p>Lights up yellow:</p>	<p>The sensor/receiver is not yet part of the installation or is in the as-delivered condition.</p> <p>i Briefly pressing the STOP button adds the device to the installation and updates the assignment status.</p>
<p>Lights up blue:</p>	<p>The receiver is not assigned to the selected channel.</p>
<p>Lights up green:</p>	<p>The receiver is assigned to the selected channel.</p>
<p>Lights up white:</p>	<p>Centronic PLUS sensor selected.</p>
<p>Lights up purple</p>	<p>Centronic PLUS transmitter selected.</p>
<p>Lights up red:</p>	<p>No receiver located.</p>

	<p data-bbox="333 52 423 100">M 1x</p> 	<p data-bbox="434 52 1058 100">Briefly press the programming button on the transmitter to change to the setting mode.</p> <ul style="list-style-type: none"> <li data-bbox="497 121 1058 169">▷ The receiver with the best connection quality to the transmitter confirms. <li data-bbox="497 188 1058 256">▷ The LED ring lights up white in the lower area and shows the current assignment status of the selected sensor in the upper area. <p data-bbox="434 268 1058 395">i If a sensor/receiver has not yet been added to the installation (LED ring lights up yellow), it will not be possible to select it in this way. The sensor/receiver must be added to the installation beforehand.</p> <p data-bbox="434 416 1058 448">Assignment status in the upper area of the LED ring</p> <table border="1" data-bbox="434 459 1058 667"> <tr> <td data-bbox="434 459 639 539">Lights up blue:</td> <td data-bbox="642 459 1058 539">The receiver is not assigned to the selected sensor.</td> </tr> <tr> <td data-bbox="434 544 639 619">Lights up green:</td> <td data-bbox="642 544 1058 619">The receiver is assigned to the selected sensor.</td> </tr> <tr> <td data-bbox="434 624 639 667">Lights up red:</td> <td data-bbox="642 624 1058 667">No receiver located.</td> </tr> </table> <p data-bbox="434 678 1058 799">If you do not receive confirmation from the required receiver, you can press the ▲/▼ button to toggle between the available receivers until the required receiver confirms.</p>	Lights up blue:	The receiver is not assigned to the selected sensor.	Lights up green:	The receiver is assigned to the selected sensor.	Lights up red:	No receiver located.
Lights up blue:	The receiver is not assigned to the selected sensor.							
Lights up green:	The receiver is assigned to the selected sensor.							
Lights up red:	No receiver located.							
	<p data-bbox="333 821 423 869">M 1x</p> <p data-bbox="333 895 356 919">or</p> <p data-bbox="333 930 423 978">M 2x</p> 	<p data-bbox="434 821 1058 890">Press the STOP button on the transmitter to change the assignment status of the selected receiver. If the receiver is still not assigned to the selected sensor, it will now be added.</p> <ul style="list-style-type: none"> <li data-bbox="497 911 1058 959">▷ The receiver signals once to confirm the sensor assignment, or signals twice to cancel the sensor assignment. <li data-bbox="497 978 1058 1026">▷ The transmitter lights up accordingly to confirm the new assignment status. 						
	<p data-bbox="154 1118 188 1142">3s</p> 	<p data-bbox="434 1109 1058 1157">Then press the programming button on the transmitter for 3 seconds to change to normal mode.</p> <ul style="list-style-type: none"> <li data-bbox="452 1176 676 1200">▶ The LED ring goes out. 						



Restoring the factory settings of the sensor

(P) ● + ▲ ▼ ● 10s

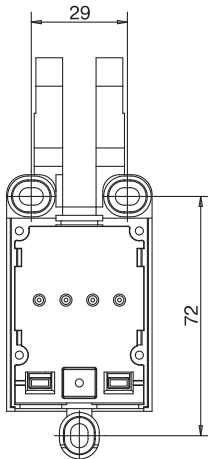
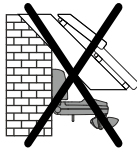
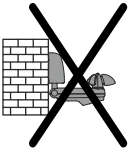
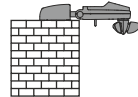
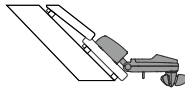
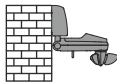
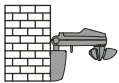


Press the programming button and the function/control button for 10 seconds.

- ▷ The indicator lamp flashes red. Once the data has been deleted, the indicator lamp will flash green twice, and the device will reboot.
- ▶ When the indicator lamp has gone out, the radio receiver has been reset to the factory settings.

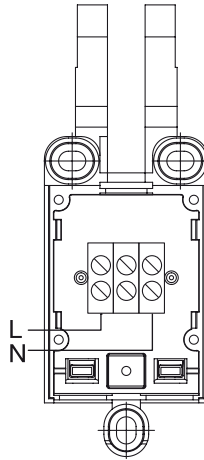
Assembly

i In order to ensure the correct functioning of the sensor, the sensor surfaces must not be covered.



- Check that the transmitter and receiver are functioning perfectly prior to installation in the desired location.
- Fix the sensor to the wall using the three enclosed screws.

Wiring



Caution

Secure the connecting cable against slipping out with the strain relief.

Cleaning

Only clean the device with a suitable cloth. Do not use aggressive cleaning agents that may damage the surface.

Disposal



The crossed-out bin symbol on the product indicates that the device is subject to mandatory disposal separate from household waste. This product must be handed over to a collection point for electrical and electronic equipment at the end of its service life. The packaging material must be disposed of properly.



Technical data

Rated voltage	230-240 V AC / 50-60 Hz
Degree of protection	IP 44
Permissible ambient temperature	-25 to +55 °C
Maximum emitted transmission output	≤ 3 mW
Radio frequency	915.3 MHz

The maximum transmitter range on and in the building is up to 15 m, and up to 150 m in the open.

What to do if...?

Problem	Remedy
Tubular drive does not move.	Reduce distance from receiver.
	Program the sensor into the receiver.
Automatic drive commands are not executed.	Check whether automatic mode is active.
	Wait until the rain sensor has dried.
System does not extend in automatic mode.	Adjust sun threshold value.
	Wait for the wind to die down.
System does not extend in automatic or manual mode.	Wind threshold value exceeded. Wait for the wind to die down.
System extends when it is raining despite rain sensor.	Check the setting for the reaction to rain with the SWCxxxPLUS transmitter.





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