

WMS Plug receiver

Operating and installation instructions



Der SonnenLichtManager

Valid from
1 November 2022
Keep for future use.

General information



Fig. 1 WMS Plug receiver

The WMS Plug receiver is used to simply and conveniently retrofit sun shading drives, lighting equipment and window drives with a wireless remote control. The installation does not require electrical work: The WMS Plug receiver is inserted in the existing plug-in connection.

The WMS Plug receiver functionality can be parameterised. The control behaviour can be adjusted to the different requirements of the various products.

The WMS Plug receiver can receive move commands from WMS transmitters, e.g. a WMS Hand-held transmitter, WMS Central transmitter or WMS weather station. It confirms the received commands, the transmitters indicate that they received this confirmation.

The positions for the comfort and scene control and the parameters for the control functions are stored directly in the plug receiver and can be recalled at any time.

Intended use

The WMS Plug receiver is an electronic device to control sun shading systems, lighting equipment and window drives. Any use other than the purpose described in these instructions requires approval from the manufacturer.

The device may only be connected to flexible lines via plug-in connectors designed for this purpose.

Safety instructions



WARNING
The electrical installation (assembly)/dismantling must be performed by a certified electrician in accordance with VDE 0100 or the legal requirements and standards of the country in which the device is being installed. The electrician must observe the installation instructions included with the supplied electrical devices.



WARNING

If hazard-free operation cannot be assumed, the device may not be started or must be deactivated. This assumption is justified if

- ▶ the housing or the connecting lines show signs of damage
- ▶ the device is no longer working.



WARNING

Switch off the supply voltage of the WMS Plug receiver when you perform activities on products connected to the plug receiver or on connected lighting equipment. Danger due to sudden movements of the equipment or electric shock.



CAUTION

Never press the buttons on your transmitter randomly without a line of sight to the sun shading system. Children may not play with this product – keep remote controls and transmitters out of the reach of children!



CAUTION

When using window drives, the installer of the system must ensure that the safety regulations and precautions of DIN EN 60335-2-103 "Particular requirements for drives for gates, doors and windows" as well as ZH 1/494 "[German] guidelines for power-operated doors, windows and gates" are observed.

The WMS Plug receiver may only be used to control window drives where the movement of the window cannot cause any injuries.

Due to both legal regulations for radio systems and structural factors, the operating range of radio remote controls is limited. Sufficient radio reception must be ensured when planning the project.

This is especially the case where the radio signal must pass through walls and ceilings. The control unit should not be installed in the immediate vicinity of metal components (steel beams, reinforced concrete, fire doors).

When mounting the plug receiver behind a metal panel: Mount the plug receiver such that the side of the housing with the printed radio symbol (📶) faces the opening of the panel. This ensures the best possible radio reception.

- Therefore, check that the receiver is functioning properly before the final installation.

Strong local transmitter systems (e.g. WLAN) with transmission frequencies identical to those of the control system may interfere with reception.

Installation

- First switch off the mains circuit at the upstream fuse.
- Locate the plug-in connector for the electric drive, release the safety catch and disconnect the coupling and plug connector. Then connect these to the WMS Plug receiver and lock the plug-in connectors with the retaining clips.
- The WMS Plug receiver must not be exposed to direct sunlight. Route the line in such a way that water cannot flow along the line into the device. The WMS Plug receiver must be mounted securely (jolt-free mounting). If several WMS Plug receivers are in use, they must be mounted a minimum distance of 0.3 m apart.

Special mounting housings are available in white, grey and black for protection against the weather and for discreetly mounting the WMS Plug receiver on the facade.

Commissioning

Further information and aids such as video guides and the WMS practical manual can be found on our support site.

www.warema.com/radio-systems-support

We recommend commissioning using the WMS studio pro PC software!



- After the device is connected, the manually operated switch, if present, must be permanently set to the "up" position and kept there. If you select a different position, the power supply to the device will be interrupted, preventing your sun shading product from being moved in high winds. After retrofitting, the switch can no longer be used to operate the equipment. Therefore, have your electrician electrically bridge the switch.
- Switch the mains supply back on.

i If you purchased the plug receiver in a combination package for awnings, the products (plug receiver, wind sensor and hand-held transmitter) have already been learned into each other and are operational when the voltage is switched on.

- Learn the transmitters and sensors into the WMS Plug receiver. (When the receiver is delivered, it does not "know" any transmitters initially and first needs to learn to which transmitters it should respond. We refer to this process as "learning in".) The learning in process is described in the operating and installation instructions of the WMS transmitters.
- For sun shading products:
Program the run/tilting time as described in the section *Learning in the run/tilting time* so that the sun shading product can move precisely to the comfort position.
- ▶ The device is ready for operation.

i Further documents relating to WMS can be found at: www.warema.com/en/wms.

Operation

The operating and installation instructions of each WMS transmitter describe how to operate the products connected to the WMS Plug receiver.

Maintenance

There are no parts inside the device requiring maintenance.

Liability

Failure to comply with the product information in these instructions and any use of the device other than its intended use may result in the manufacturer refusing to honour warranty claims for product damage. In this case, liability for secondary harm to persons or damage to property will also be excluded. Observe the information in the operating instructions for your sun shading system. Liability is also excluded for damage to the sun shading system resulting from operation under icy conditions.

Cleaning

Clean the housing with a soft, damp cloth. Do not use detergents, cleaning agents, solvents, abrasive substances or steam cleaners!

Obligations for the disposal of electrical devices



A marking with this symbol indicates the following obligations under the scope of legal regulations:

- The owner of this electrical device must dispose of it separately from unsorted municipal waste for further recycling.
- Used batteries and accumulators that are not enclosed in the old device, as well as lamps/bulbs that can be removed from the old device without breaking, must be disposed of separately.
- Distributors of electrical devices and disposal companies are obliged to take back the equipment free of charge.
- The owner must take it upon themselves to delete any personal data contained in the electrical device prior to disposal.

Connection pin assignment

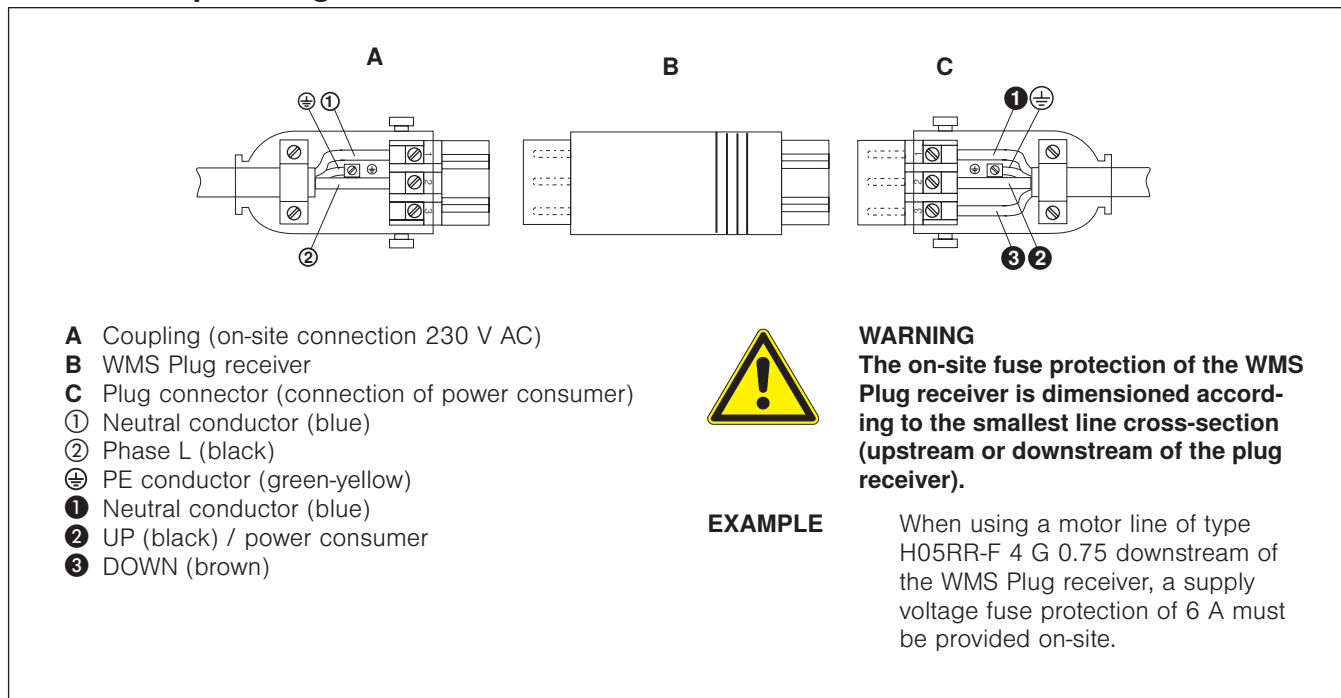


Fig. 2 Plug-in connection

Products

The WMS Plug receiver can be used to control a large number of different products. The following table provides an overview of the products, the product type and the commissioning and operating capabilities.

Product	Product type	Manual operation		Commissioning	
		Hand-held transmitter	Central control unit	Hand-held transmitter	Central control unit
External venetian blind	External venetian blind	■	■	■	■
Internal venetian blind	External venetian blind	■	■	□ 1)	■
Vertical louvre blind, internal	External venetian blind	■	■	□ 1)	■
Roller shutters	Roller shutter	■	■	■	■
Roller blind inside	Roller shutter	■	■	□ 1)	■
Pleated blind	Roller shutter	■	■	□ 1)	■
Patio awning	Awning	■	■	■	■
Patio awning with wind sensor	Awning	■	■	■ 2)	■
Terrace awning with valance roller blind	Awning	■ 3)	■	□ 1)	■
Terrace awning with valance roller blind and wind sensor	Awning	■ 3)	■	■ 2)	■
Conservatory awning	Awning	■	■	□ 1)	■
Drop-arm awning	Awning	■	■	□ 1)	■
Facade awning	Awning	■	■	□ 1)	■
Markisolette	Awning	■	■	□ 1)	■
Vertical awning	Awning	■	■	□ 1)	■
Window	Window	■	■	■	■
Switching of lights (and other loads; for switching capacity, see Technical Data table)	Light	■	■	■	■

1) The product can only be partially commissioned via the WMS Hand-held transmitter comfort. It is possible to select the product type. However, run times and other parameters can only be adjusted via the central control unit.

- 2) The product can be commissioned via the WMS Hand-held transmitter comfort. However, run times can only be adjusted via the central control unit (the parameters of the WMS Wind sensor packages are fully set at the factory).
- 3) When a single unit has multiple valance roller blinds, these can only be operated jointly via the WMS Hand-held transmitter comfort.



Product types




The product type determines the available functionality when operating the product connected to the WMS plug receiver. It is specified when learning the plug receiver into a WMS transmitter.



CAUTION

When learning in, it is important to select the product type of the connected product. Selection of the wrong product type can lead to malfunctions and may result in damage to the connected product.

Product type	Functionality
 External venetian blind	<ul style="list-style-type: none"> △ short: slats tilt up △ long: product moves up ⊖ product stops ▽ short: slats tilt down ▽ long: product moves down Ⓢ short: product moves to the saved comfort position Ⓢ long: comfort position for the product is saved
 Roller shutter	<ul style="list-style-type: none"> △ product moves up ⊖ product stops ▽ product moves down Ⓢ short: product moves to the saved comfort position Ⓢ long: comfort position for the product is saved

Product type	Functionality
 Awning	<p>Awning without valance roller blind drive</p> <ul style="list-style-type: none"> △ product moves up/retracts. ⊖ or arrow button in opposite direction: product stops ▽ product moves down/extends Ⓢ short: product moves to the saved comfort position Ⓢ long: comfort position for the product is saved <p>The STOP button also deactivates the wind evaluation for one minute.</p> <p>Awning with valance roller blind drive</p> <ul style="list-style-type: none"> △ 1 x short: awning retracts △ 2 x short: valance roller blind retracts fully, then awning retracts fully △ 1 x long: valance roller blind retracts. The position of the awning does not change ⊖ or arrow button in opposite direction: product stops. ▽ 1 x short: awning extends ▽ 2 x short: awning extends fully, then valance roller blind extends fully. ▽ 1 x long: valance roller blind extends. The position of the awning does not change <p>The STOP button also deactivates the wind evaluation for one minute.</p>
 Window	<ul style="list-style-type: none"> △ product closes ⊖ product stops ▽ product opens Ⓢ short: product moves to the saved comfort position Ⓢ long: comfort position for the product is saved
 Light	<ul style="list-style-type: none"> △ product is switched on. ⊖ product switches (ON→OFF, OFF→ON). ▽ product is switched off Ⓢ Short: product switches to the stored comfort position. Ⓢ long: comfort position for the product is saved



Once the product type has been selected, it can no longer be changed directly. To program a WMS Plug receiver for another product type, the receiver must be deleted out of the network entirely and learned in again.

Learning in the run/tilting time

The WMS Hand-held transmitter comfort can be used to change the run times and/or tilting times of the receivers learned into the selected channel.

The WMS Hand-held transmitter comfort can be used to set the "awning", "roller shutter", "external venetian blind" and "window" product types. The switch-on time for the product type "light" cannot be adjusted using the hand-held transmitter.

i If multiple receivers have been learned into the selected channel, it is always the first device in the product channel that is parameterised. After the mode is closed using the mode button, the settings are transferred to all other devices in the channel.

i Where necessary, the run time is automatically lengthened to ensure that the respective product can close or retract fully.



CAUTION

Run times cannot be learned in for awnings with a **WMS Wind sensor**. The run times for these products have already been pre-configured at the factory. The WMS Hand-held transmitter comfort cannot be used to set the run times to the correct values; this requires the WMS Central transmitter or a PC with a WMS Stick and the corresponding software.

To execute mode 1 on the WMS hand-held transmitter comfort, proceed as follows:

Button/display	Action/result
	■ Select the product type and channel for which you would like to change the parameters.
e.g.	▶ The LED below the channel number lights up
	■ Press the mode button with a pointed object until M lights up and mode 1 is selected.
	▶ M and the LEDs above the row of numbers to 1 light up in red
	■ Briefly press the learn button to activate the mode.
	▶ The LEDs above 0 and 1 briefly light up in green ▶ The previously selected channel is then displayed automatically.
Perform the steps described below without interrupting the movement of the unit. Stop the movement of the unit using at the moment it reaches the corresponding position.	
	■ Move the sun shading product to the upper limit position (or the window to the closed position).
	■ Press immediately when the position is reached.
	■ Press to confirm the position.

Button/display	Action/result	
	■ Move the sun shading product to the lower limit position (or the window to the open position).	
	■ Press immediately when the position is reached.	
	■ Press to confirm the position.	
Only for external venetian blinds		■ Tilt the slats all the way up by touching the button briefly numerous times.
		■ Press to confirm the position.
	■ Move the sun shading product to the upper limit position (or the window to the closed position).	
	■ Press immediately when the position is reached.	
	■ Press to confirm the position.	
	■ Leave the mode by pressing the mode button briefly (M is no longer lit)	
	▶ The transmission LED flashes while the settings are being transferred to the other receivers in the channel ▶ The transmission LED then lights up for 2 seconds GREEN: The parameter values were saved in all receivers of the channel RED: Not all receivers in the channel could be reached; learn in the run time again. If the learning procedure was unsuccessful or the learned parameters are not plausible, lights up red. Data are neither saved nor transferred.	
	Finally, perform a calibration: ■ Move the sun shading product to the upper limit position (or the window to the closed position). ■ When the upper limit position is reached, wait for 3 minutes before operating the product again.	

i If, after learning in the run time, the WMS Hand-held transmitter comfort leaves mode 1 automatically after 5 minutes because the mode button was not pressed, the settings of the newly parameterised device are not transferred to the other devices in the channel.

Sensors

Up to four sensor products (e.g. weather stations or photo sensors) can be assigned to each WMS Plug receiver.

They are assigned using a WMS transmitter (hand-held transmitter or central control unit). The allocation is made for each channel and is described in the instructions included with each transmitter.

The WMS Plug receiver evaluates the measuring values of the sensors and responds according to how it is parameterised.



WMS Plug receivers wave during the allocation procedure when the button **T** is pressed.

Safety functions

When you switch on an automatic safety control (such as wind or ice monitoring), the WMS Plug receiver checks whether new measuring values are being received by the corresponding sensor at regular intervals.

If the plug receiver does not receive measuring values for 24 h, it is assumed that the sensor has failed (heartbeat function). The plug receiver moves the connected product to a safe position. Depending on the type of sun shading product, operation is limited until a new valid value is received.

This is a safety function and not an error.



If four sensors have already been assigned to the plug receiver, a sensor must be deleted from the plug receiver before a new sensor can be assigned. The WMS transmitter issues a fault message in this case.

Compatibility


Depending on the software version (based on production date), the WMS Plug receiver can behave differently in combination with other WMS products.

WMS Plug receivers wave to confirm that they have been added to a network.



All WMS Plug receivers can be added to a network with all WMS Central transmitters or WMS Hand-held transmitters. This waving is simply an additional optical signal to confirm the procedure.

Technical data

WMS Plug receiver	min.	typ.	max.	Unit
Supply				
Operating voltage	85	230	265	V AC
Power consumption		2		VA
Frequency	50		60	Hz
Output				
Switching capacity at 230 V AC/cosφ=0.6		700		VA
230 V AC bulbs			800	W
230 V AC halogen lamps			800	VA
LV halogen lamps with electronic transformer			700	VA
Fluorescent lamps with conventional ballast			700	VA
Fluorescent lamps with electronic ballast			1000	VA
RF transceiver				
Transmission frequency	2.40		2.48	GHz
Transmission power			10	dBm
Reception sensitivity		-101		dBm
Operating range (environment without interference)		30		m
Housing				
Dimensions (L×W×H in mm)	136 × 38 × 33			
Degree of protection	IP54			
Safety class	I			
Miscellaneous				
Conformity	 available at www.warema.de/ce			
This device complies with the EMC directives for use in residential and commercial areas.				
WAREMA Renkhoff SE declares herewith that this radio system type WMS Plug receiver is in compliance with the guideline 2014/53/EU.				
Ambient conditions				
Operating temperature	-20	20	60	°C
Storage temperature	-25		70	°C
Humidity (not condensing)	10	40	85	%H _{rel}
Pollution degree	2			
Article numbers				
WMS Plug receiver				2024 678
Mounting housing, white, similar to RAL 9016				317 745
Mounting housing, grey, similar to RAL 9006				317 748
Mounting housing, black, similar to RAL 9011				317 751
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