

HEATSTRIP™



Scope of delivery	Page 1
Introduction	Page 2
Preparation	Page 3
Installation location	Page 4
Installation instructions	Page 5
Notes	Page 14
Precautionary measures	Page 15
Cleaning and general handling	Page 16
Radio receiver module	Page 17
Technical data	Page 21
Scope of delivery:	
HEATSTRIP™ (1800, 2400 or 3200 W)	1 unit
Mounting bracket (pre-installed on the device)	1 unit
Installation and instruction manual	1 unit
Connection cable (not applicable for delivery with wired accessories)	1 unit

HEATSTRIP™ Electric Radiant Heaters for the Outdoors

Installation and instruction manual

Thank you for choosing a HEATSTRIP™ electric radiant heater. Thereby, you have acquired one of the most advanced heating systems for indoor and outdoor use. The so-called dark infrared radiant heater features a focussed heat distribution system which transports the heat where it is needed. No energy is wasted for unused areas, if the radiator is installed properly. Our manual will help you do this.

Please note: The HEATSTRIP™ is protected from water splashed from all sides (Protection class IPX 4).

Please read the following instructions carefully before installing.



The new HEATSTRIP™ is a high-intensity radiant heater designed for indoor or covered outdoor areas in private or commercial surroundings and should not be used for other purposes.

Before starting the installation, you must ensure that the operating voltage corresponds to that indicated on the label of the radiant heater. The radiator is basically equipped with a separate cable for the electrical connection including a safety plug (Schuko). Changes when used with accessory modules such as radio receivers etc. are reserved. The device must be securely mounted and should be connected by a professional who performs this in accordance with the applicable standards for electrical installations.

The HEATSTRIP™ should be equipped with a "ON/OFF switch. It can also be controlled comfortably using a radio transmitter and receiver module, which are available as accessories. An optional connection to a fault current circuit breaker is strongly recommended. If the radiator or the connecting cable is defective, it must be returned to the dealer or the manufacturer for repair.

The local building and fire safety regulations must be strictly adhered to.

Installation is permitted only on the ceiling or horizontally on the wall.

Minimum distances:**For ceiling installation:**

The radiator must be at a minimum distance of 600 mm to any adjacent wall on the right or left and 60 mm to the rear non-combustible mounting surface. The minimum distance to the socket outlet must be 100mm. The socket outlet should not be above the radiator. There should be no illuminated surfaces or objects at least 800 mm under the radiator. The minimum mounting height is 2100 mm.

For wall mounting:

The radiator must be at a minimum distance of 600 mm to any adjacent wall on the right or left and 60 mm to the rear non-combustible mounting surface. The minimum distance to the socket outlet must be 100mm. The socket outlet should not be above the radiator. There should be no illuminated surfaces or objects at least 800 mm under the radiator. There should be a minimum distance of 400 mm between the radiator and an above-lying surface such as the ceiling. The minimum mounting height is 2100 mm. Make sure that thermal insulating materials, cables, furniture, combustible materials or other objects do not come into contact with the upper surface of the radiant heater. If the HEATSTRIP™ is installed in damp surroundings, the switch or other control devices must be placed such that they cannot be touched by persons who are in direct contact with water.

Radio receiver module – Optional accessories

The radio receiver uses an encrypted signal in the 866Mhz range. A maximum of 28 transmit buttons can be assigned to a receiver. The 32-BIT encryption provides a high level of protection from misinterpretations by other external transmitters such as mobile phones, Gameboys etc. The red LED shows that it is ready for operation.

The gree LEDs indicate the heating stages.

By pressing the transmit button, you can set the desired heating level.

Before installing and programming the radio modules, check whether the following control modules and/or appliances are working properly.

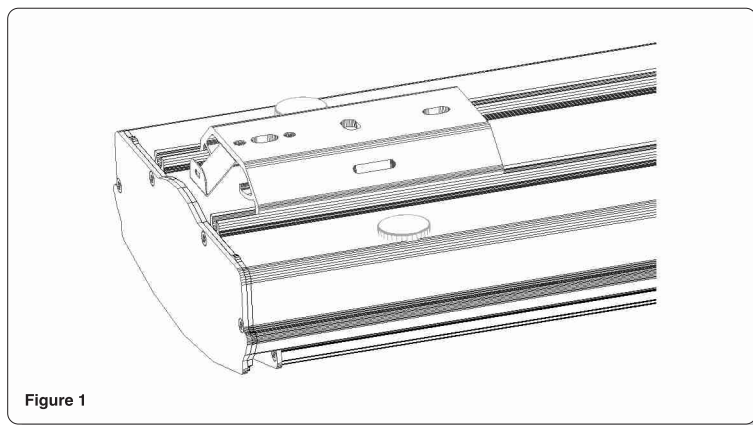
While teaching a transmitter, it should be at a distance of max. 5m.

5 Installation Instructions

Secure the mounting brackets included in the delivery, keeping in mind the appropriate distances to the wall and ceiling. Make sure to use mounting material which is appropriate for the weight of the radiant heater.

Now you can slide the radiator sideways on the mounting brackets. The radiator is mounted optimally when the spring retention of the mounting brackets is pushed laterally across the front panels and snaps into place. If you have no room for pushing the radiator laterally on both the mounting brackets, you must change the assembly sequence:

- 1.) fix a mounting bracket to the wall or the ceiling
- 2.) slide the radiator sideways on this bracket till the radiator snaps into place
- 3.) screw in the second mounting bracket to the wall or the ceiling



Installation, Figure 1:

Insert the mounting bracket used to attach the HEATSTRIP™ holder into the slot, until the locking springs lock onto the front plate and thus prevents the radiator from slipping out.

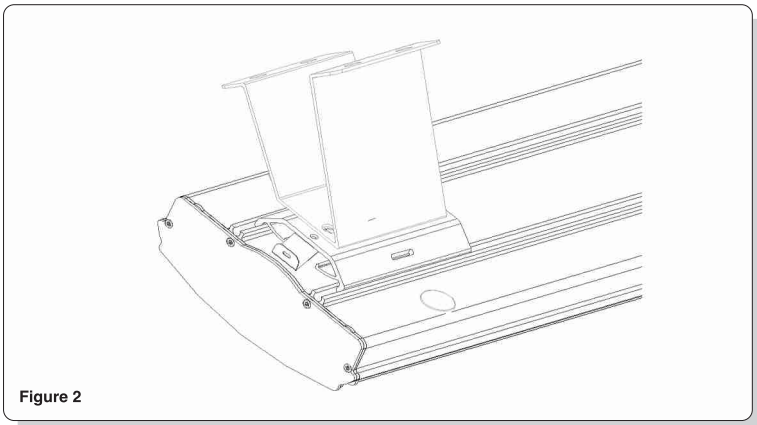
Installation, Figure 2:

Heatstrip with wall holder

Install the mounting bracket and the wall holder using the screws provided.

Install the assembled components on the wall/ceiling using suitable screws.

Insert the Heatstrip laterally till the locking springs click into the front plate and thus prevent it from slipping out.



7 Mounting Instructions

Installation, Figure 3:

HEATSTRIP™ with weather shield and wall holder. Screw the mounting bracket and weather shield and the wall holder together. Fix to the wall/ceiling using suitable screws and slide the radiant heater sideways.

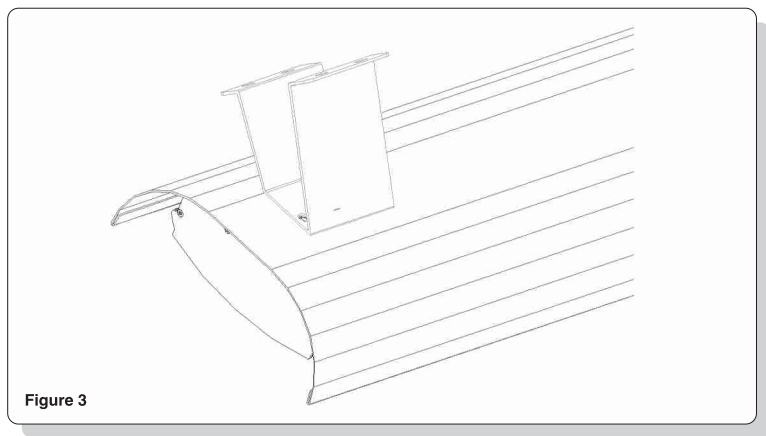
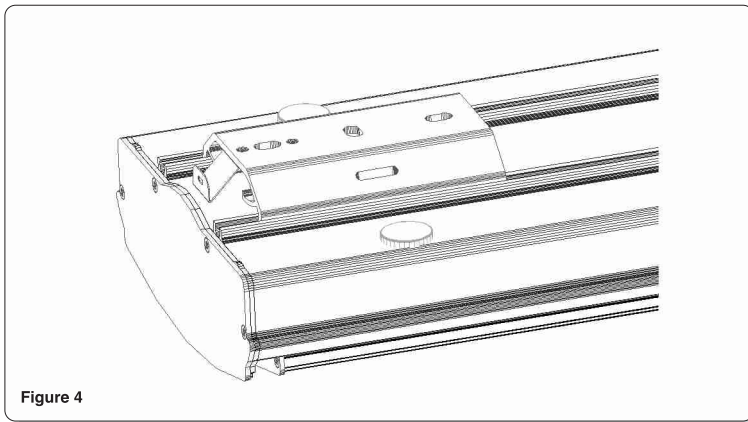


Figure 3

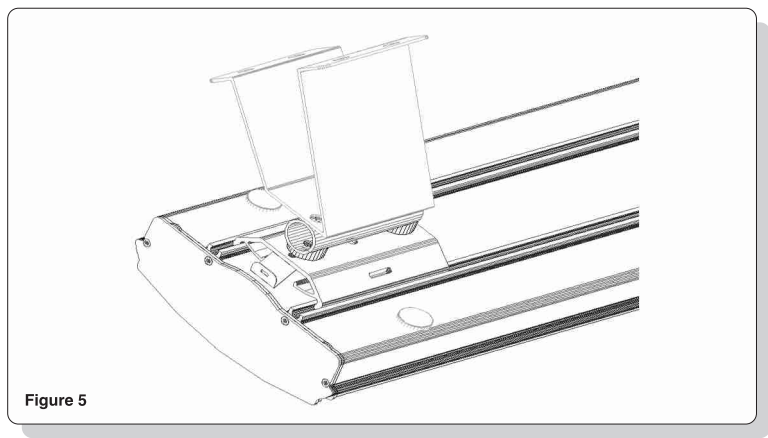
Installation, Figure 4:

The retaining springs prevent the mounting bracket from slipping out of the guides.



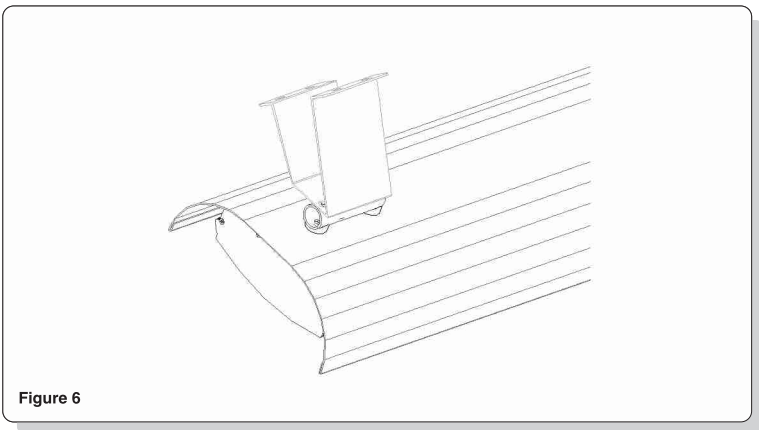
Installation, Figure 5:

Adjustable wall holder for the Heatstrip.



Installation, Figure 6:

The figure shows the adjustable wall bracket with a weather shield.



Installation, Figure 7:

Each HEATSTRIP™ is equipped with a green operation LED that indicates the operating status of the radiator. (Green = Operating status ON)

Warning: Even if the operation LED is extinguished, for instance, when the HEATSTRIP™ is just switched off, the device still dissipates extreme heat over a long period.

Alternatively, a radio control unit can be connected laterally to the device using which you can control the device easily via radio, to thus reduce the power as required. The various power ranges are also indicated by the LEDs.

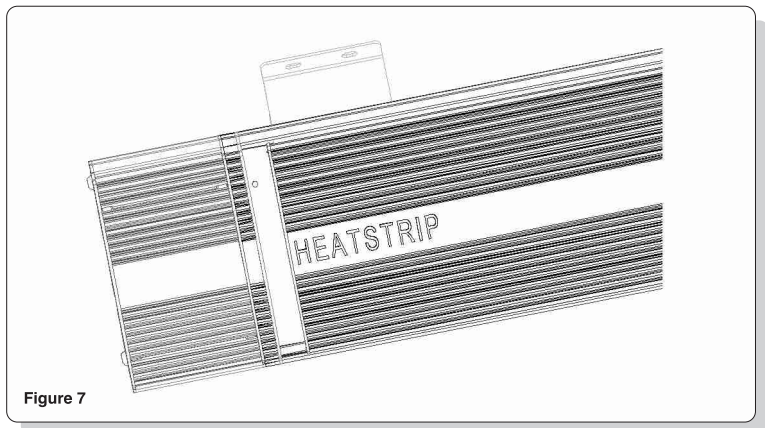


Figure 7

Installation, Figure 8:

If you use accessories such as radio control or end piece, you must screw in the mounting bolts provided in the delivered accessories, finger tight into the threaded sleeves of the HEATSTRIP™.

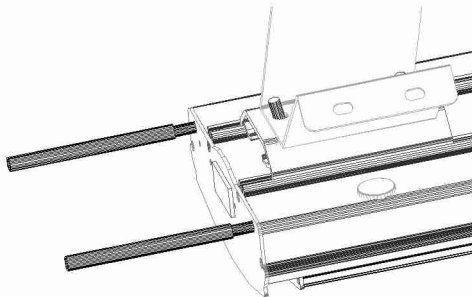
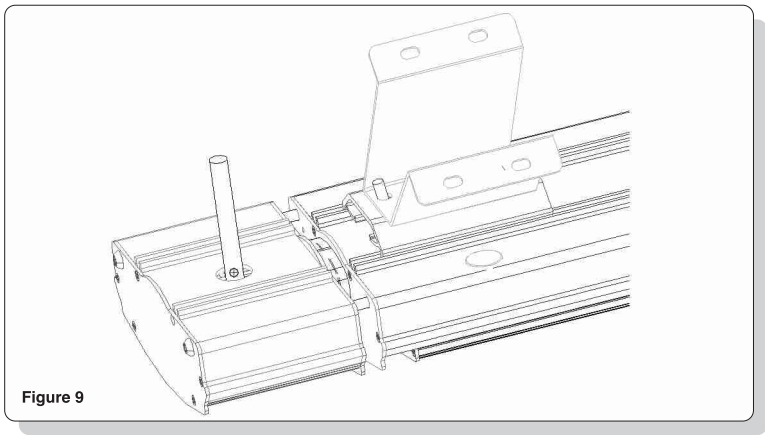


Figure 8

Installation, Figure 9:

Slide the attachment on the mounting bolts till the plug adaptor is engaged on both sides. Screw in the attachment to the mounting bolts using the screws provided. Tighten the screws only finger-tight.



Technical changes are for the purpose of technical advancement and are reserved.

The front side of the heater can reach a temperature of up to 400°C. Do not touch any part of the heater when it is on or 30 minutes after you have shut it off.

This device should not be operated by children or physically and mentally impaired persons.

Use caution while operating the device.

Make sure that cables, furniture, combustible materials or other objects do not come into contact with the upper surface of the radiant heater. The radiator must be at a minimum distance of 1.50 m to any adjacent wall and 6 cm to the rear mounting surface. The customary building and fire safety regulations must be strictly adhered to.

Operate the radiator only if it is at a minimum distance of 800 mm to any surface below it.

The heater should be connected as a fixed test installation by an electrician, who does it according to the existing electrical standards. The connections to the main power supply must be in accordance with the official wiring rules. The radiator should not be placed directly under a socket outlet.

If the HEATSTRIP™ is installed in damp surroundings, the switch or other control devices must be placed such that they cannot be touched by persons who are in direct contact with water.

If the connecting cable is defective, it must be returned to the dealer or manufacturer for repair.

If the radiator is defective, it must be returned to the manufacturer for repair.

If the HEATSTRIP™ is placed outdoors, it is important that it is cleaned regularly to ensure durable and efficient functioning.

The aluminium construction combined with the silver anodised finish protects the HEATSTRIP™ even in coastal areas very well.

To achieve optimal heating, you should clean the surfaces of the radiator regularly with a damp cloth and some water. It is particularly important here, that the radiator is not in use or is turned off at least 60 minutes before cleaning. Otherwise there is an increased risk of injury due to burning.

Caution:

Do not use a high pressure water hose or the like to clean the heater.

As a guideline:

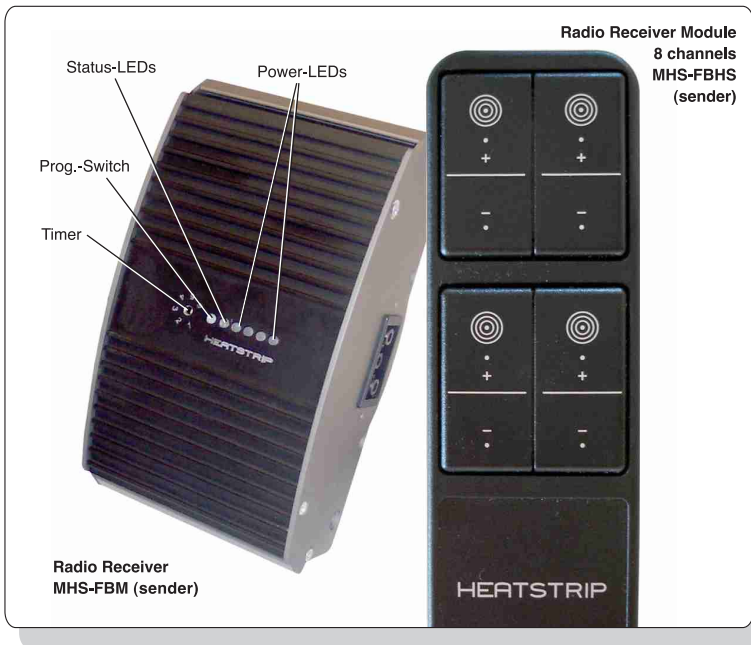
The radiant heater should also be cleaned when you clean other furniture in the outdoor area. In coastal areas, additional cleaning every 14 days would ensure extra protection and consistent performance.








The radio receiver uses an encrypted signal in the 866Mhz range. A maximum of 28 transmit buttons can be assigned to a receiver. The 32-BIT encryption provides a high level of protection from misinterpretations by other external transmitters such as mobile phones, Gameboys etc.

The red LED shows that it is ready for operation.

The gree LEDs indicate the heating stages.

By pressing the transmit button, you can set the desired heating level. Before installing and programming the radio modules, check whether the following control modules and/or appliances are working properly. While teaching a transmitter, it should be at a distance of max. 5m.



Teaching the handheld	Press PROG button for 0.5 sec. RED LED blinks Press the transmitter RED LED on for 4 seconds RED LED blinks wait for 30 seconds RED LED off Transmitter programmed
Turning the handheld Operation Stand-by mode Heating off	Press PROG button for 3 secs BLUE LED glows
Control on "POWER 4" (FullPower)	Press  button
Control on "POWER 0" (OFF)	Press  button again
Control on "POWER 3"	Press button  All 3 "GREEN" LEDs glow
Control on "POWER 2"	Press button  again ON 2 "GREEN" LEDs glow
Control on "POWER 1"	Press button  again ON 1 "GREEN" LED glows
Control on "POWER 0" (OFF)	Press button  again ON All 3 "GREEN" LEDs glow
Stand-by mode Heating off Party mode (Switch off after 4 hours)	BLUE LED glows Press  button for 4 seconds All 3 "GREEN" LEDs glow RED LED glows
Set mode Set timer using a suitable screwdriver, from 30 min. to FullTime (Default setting 12 hrs.) 6 positions:	1 2 3 4 5 6 Level 0.5 1 2 4 8 12 Hours

Important note on the handheld radio transmitter (MHS-FBHS):

The handheld radio transmitter can control up to 4 different devices or groups of devices in different ways. To do this, please define the assignment yourself and teach the individual devices and/or groups of devices using one of the available buttons.

Functions of the handheld radio transmitter:

Button up: ON (⊙), OFF • and increase the heat output +

Button down: Reduce heat output –, 3-stage, OFF •

Radio system information:

The programming is retained even during a power failure.

The radio receiver should be used exclusively for the Heatstrip.

Low risk of collision – very short telegrams (< 1 ms)

Maximum transmission reliability

Rough transmission range of approx. 100m in open area

Easily extensible

Cost advantages:

thanks to fast wireless installation

maintenance-free, as there are no batteries

Environmental impact:

Reduction of cable materials

low cost of transmission due to extremely short transmission protocol

Preventing environmental pollution due to batteries

Electromagnetic radiation – Radio signals:

Many people are concerned that their health may be affected by electromagnetic radiation, and manufacturers are worried about possible claims for damages in the future due to such health hazards.

But the demand for wireless devices continues to increase sharply.

For this reason, the typical emission field strengths of these radio switches were measured under real application conditions at ECOLOG (the Institute for Socio-ecological Research and Education).

What are the results?

This radio system emits 100 times less intense radiofrequency fields than conventional light switches (the radio-frequency fields of the latter are caused by the characteristic sparking when being switched). The intensity of the short-term radio-frequency emissions of EnOcean radio switches is up to 10,000 times lower than that of the permanent radio-frequency emissions from mobile network stations in residential areas.

By avoiding cables and switches, this radio system delivers no interference factors in the field of low frequency electromagnetic emissions.

This radio system is used in kindergartens, hospitals and in the homes and commercial buildings of Feng Shui followers.

Installation:

Please ensure that the control module is accessible.

at least 20 cm above the head

Do not install behind metal surfaces

Install antenna at least 20 cm above the head

Operating voltage: 220 - 240 V / 50 Hz
Heating surface temperature: up to 400° C
Casing temperature: up to 100° C
Heating-up time: approx. 10 min.
Connection: x 2.5 mm cable with safety plug,
temperature-resistant up to 170° C,
1.5 m long

MHS-1800

Max. power: 1800 W
Power demand: approx. 8A
Measurements: 80 x 170 x 1000 mm
Weight: 7 kg

MHS-2400

Max. power: 2400 W
Power demand: approx. 11A
Measurements: 80 x 170 x 1500 mm
Weight: 8 kg

MHS-3200

Max. power: 3200 W
Power demand: approx. 14A
Measurements: 80 x 170 x 2000 mm
Weight: 11 kg

Warranty: 24 months from date of purchase

Operating voltage	220 - 240 V / 50Hz
Switching capacity	max. 3200W Power control in 3 stages
Heating-up time	approx. 10 to 15 min.
depending on weather conditions (outside temperature, wind)	
Size	approx. 170x90x65 mm
Cable connection	Length 1.5 m, 3 x 2.5 mm
Modularity	up to max. 28 transmitters
Transmitter range	up to approx. 100 m open area
Transmitter	Frequency 868.3 MHz
Power	max. 10 mW
Transmission duration	approx. 25 mS
Security	32 bit encryption with up to 3 telegrams
Humidity	max. 85%, noncondensing
Temperature range	-25 to +65°C
Storage temperature	-40 to +85°C
Switching off Receiver output automatically after a fixed time	



WEEE-Reg.-Nr. DE 45650441

MOONICH GmbH
Kramergasse 32
D- 82054 Sauerlach b. München
Tel.: +49-(0)8104-64709-0
Fax: +49-(0)8104-64709-9
e-mail: mail@heatstrip.de
www.heatstrip.de