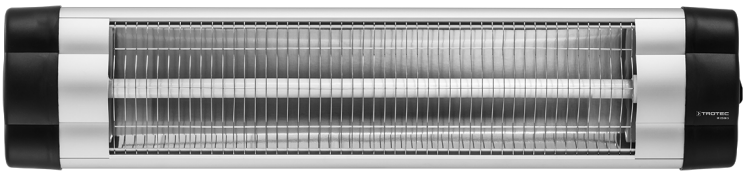
# IR 2500 S



# EN

**OPERATING MANUAL**
RADIANT HEATER

TRT-BA-IR2500S-TC-003-EN

TROTEC

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## Notes regarding the operating manual

### Symbols

**Warning of electrical voltage**
This symbol indicates dangers to the life and health of persons due to electrical voltage.

**Warning of hot surface**
This symbol indicates dangers to the life and health of persons due to hot surface.

**Warning**
This signal word indicates a hazard with an average risk level which, if not avoided, can result in serious injury or death.

**Caution**
This signal word indicates a hazard with a low risk level which, if not avoided, can result in minor or moderate injury.

**Note**
This signal word indicates important information (e.g. material damage), but does not indicate hazards.

**Info**
Information marked with this symbol helps you to carry out your tasks quickly and safely.

**Follow the manual**
Information marked with this symbol indicates that the operating manual must be observed.

You can download the current version of the operating manual and the EU declaration of conformity via the following link:

**IR 2500 S**

https://hub.trotec.com/?id=40762

## Safety

**Read this manual carefully before starting or using the device. Always store the manual in the immediate vicinity of the device or its site of use!**

**Warning**
**Read all safety warnings and all instructions.**
Failure to follow the warnings and instructions may result in electric shock, fire and / or serious injury.
**Save all warnings and instructions for future reference.**
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 shall not play with the appliance. Cleaning and user maintenance shall not be made by children without supervision.

**Warning**
Children of less than 3 years should be kept away unless continuously supervised.
Children aged from 3 years and less than 8 years shall only switch on/off the appliance provided that it has been placed or installed in its intended normal operating position and they have been given supervision or instruction concerning use of the appliance in a safe way and understand the hazards involved.
Children aged from 3 years and less than 8 years shall not plug in, regulate and clean the appliance or perform user maintenance.

**Warning**
Do not use the device in small rooms if persons are present who cannot leave the room independently and who are not under constant supervision.

- Do not use the device in potentially explosive rooms.
- Do not use the device in aggressive atmosphere.
- Let the device dry out after a wet clean. Do not operate it when wet.
- Do not use the device with wet or damp hands.
- Do not expose the device to directly squirting water.
- Never insert any objects or limbs into the device.
- Do not cover or transport the device during operation.
- This appliance is not a toy! Keep away from children and animals. Do not leave the device unattended during operation.
- Check accessories and connection parts for possible damage prior to every use of the device. Do not use any defective devices or device parts.
- Ensure that all electric cables outside of the device are protected from damage (e.g. caused by animals). Never use the device if electric cables or the power connection are damaged!
- The electrical connection must correspond to the specifications in chapter Technical data.
- Insert the mains plug into a properly secured mains socket.
- Observe the device's power input, cable length and intended use when selecting extensions to the power cable. Completely unroll extension cables. Avoid electrical overload.
- Before carrying out maintenance, care or repair work on the device, remove the mains plug from the mains socket. Hold onto the mains plug while doing so.
- Switch the device off and disconnect the power cable from the mains socket when the device is not in use.
- Do not under any circumstances use the device if you detect damages on the mains plug or power cable.
  If the supply cord is damaged, it must be replaced by the manufacturer, its service agent or similarly qualified persons in order to avoid a hazard.
  Defective power cables pose a serious health risk.
- During the installation of the device observe the minimum distances from walls and other objects as well as the storage and operating conditions specified in the Technical data chapter.
- Do not use the device in immediate proximity to curtains.
- Do not transport the device during operation.
- Allow the device to cool down before transport and / or maintenance work.
- Do not use this device near bathtubs, shower trays, swimming pools or other water containers. Risk of electric shock!
- The device must not be installed directly beneath a wall socket.
- The device must be set up in a way that the switches and controllers cannot be touched by a person in a bathtub or shower.

## Intended use

Use the device IR 2500 S for heating surfaces in roofed outdoor areas protected from weather effects.

Intended use comprises:

- Heating surfaces
  - in storage facilities,
  - in construction areas,
  - in containers,
  - in the catering trade,
  - at trade fairs and events,
  - in roofed outdoor areas (e.g. covered terraces).

## Improper use

The device is not intended for industrial use.

- Do not place any objects, e.g. clothing, on the device.
- Do not use the device for heating in vehicles.
- Do not use this device in the vicinity of fuel, solvents, varnishes or other easily inflammable vapours or in rooms where these substances are stored.
- The device may not be used as a heating device for babies / children or animals.
- The device may not be installed inside a shower or directly above a bathtub.
- The device must not be used near swimming pools.
- Do not use this device in the immediate vicinity of sinks, bathtubs or other water containers.

  Never immerse the device in water.
- The device may not be exposed to moisture or weather effects (rain, sunlight).
- Any operation other than as described in this manual is prohibited. Non-observance renders all claims for liability and guarantee null and void.

Any unauthorised changes, modifications or alterations to the device are forbidden.

## Personnel qualifications

People who use this device must:

- be aware of the dangers that occur when working with electric devices in damp areas.
- have read and understood the operating manual, especially the Safety chapter.

Maintenance tasks which require the housing to be opened must only be carried out by specialist electrical companies or by Trotec.

## Symbols on the device

| Symbols | Meaning |
|---|---|
| | This symbol located on the device indicates that it is prohibited to place objects (such as towels, clothes etc.) above or directly in front of the device.<br>In order to avoid overheating and fire hazards, the heater must not be covered. |

## Residual risks

**Warning of electrical voltage**

Work on the electrical components must only be carried out by an authorised specialist company!

**Warning of electrical voltage**

Before any work on the device, remove the mains plug from the mains socket!
Hold onto the mains plug while pulling the power cable out of the mains socket.

**Warning of hot surface**

Some parts of this product can become very hot and cause burns. Particular attention has to be given where children and vulnerable people are present!

**Warning**

Dangers can occur at the device when it is used by untrained people in an unprofessional or improper way!
Observe the personnel qualifications!

**Warning**

The device is not a toy and does not belong in the hands of children.

**Warning**

Risk of suffocation!
Do not leave the packaging lying around. Children may use it as a dangerous toy.

**Warning**

Improper installation entails a risk of fire.
Do not place the device on combustible ground.
Do not place the device on high-pile carpets.

**Warning**

Risk of injury due to infrared radiation!
Do not stay in the device's immediate vicinity for too long. Do not look directly into the device for too long.
Observe the minimum distances.

**Warning**

In order to avoid overheating and fire hazards, the heater must not be covered.

**Warning**

Coarse dirt particles on the heating rods can cause the device to overheat. Fire hazard!
Remove coarse dirt particles from the heating rods according to the Maintenance chapter before switching on the device.

## Behaviour in the event of an emergency

1. Switch the device off.
2. In an emergency, disconnect the device from the mains feed-in: Hold onto the mains plug while pulling the power cable out of the mains socket.
3. Do not reconnect a defective device to the mains.

## Information about the device

### Device description

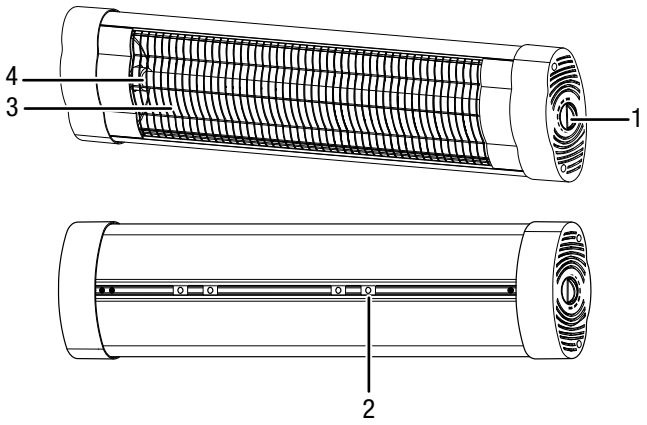
The device IR 2500 S is used to quickly generate instant heat.

The device is based on the functional principle of heat generation by infrared radiation. Persons or objects are heated directly.

The temperature can be infinitely adjusted via an integrated thermostat.

- suitable for the application in roofed outdoor areas
- splash-proof IP34
- suitable for mounting on walls and ceilings or on the telescopic tripod
- adjustable angle
- no dust circulation (suitable for allergy sufferers)

### Device depiction




| No. | Designation |
|---|---|
| 1 | On/off rotary switch (stepless thermostat) |
| 2 | Bracket for wall/ceiling mounting |
| 3 | Grille |
| 4 | Heating rod |

## Transport and storage

**Note**

If you store or transport the device improperly, the device may be damaged.
Note the information regarding transport and storage of the device.

### Transport

**Before** transporting the device, observe the following:

- Switch the device off.
- Hold onto the mains plug while pulling the power cable out of the mains socket.
- Do not use the power cable to drag the device.
- Allow the device to cool down sufficiently.

### Storage

**Before** storing the device, observe the following:

- Allow the device to cool down sufficiently.

When the device is not being used, observe the following storage conditions:

- dry and protected from frost and heat
- in an upright position where it is protected from dust and direct sunlight
- with a cover to protect it from invasive dust if necessary
- Place no further devices or objects on top of the device to prevent it from being damaged.

## Assembly and installation

### Scope of delivery

- 1 x Device
- 4 x Mounting bracket
- 2 x Wing nut
- 2 x Screw
- 4 x Washer
- 4 x Fastening screw
- 4 x Wall plug
- 1 x Manual

### Unpacking the device

1. Open the cardboard box and take the device out.
2. Completely remove the packaging.
3. Fully unwind the power cable. Make sure that the power cable is not damaged and that you do not damage it during unwinding.

### Assembly

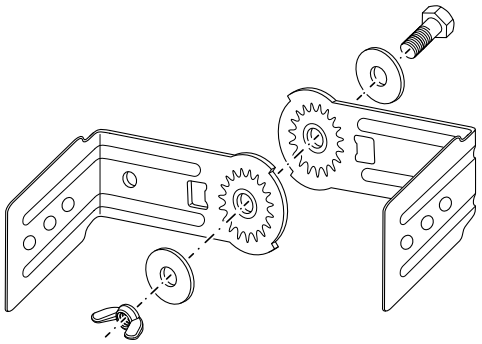
The device is suited for wall and ceiling mounting. Alternatively, you can also use a telescopic tripod. Observe the following requirement for installation inside a room:

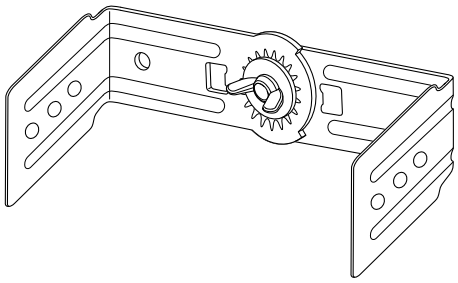
**Warning**
Risk of fire due to improper installation!
There is a risk of fire if the required minimum distances are not observed.
The device must be positioned at a distance of at least 180 cm from the floor, at least 90 cm from walls and other objects such as curtains or sockets, and at least 70 cm from the ceiling.

### Mounting the wall/ceiling holder

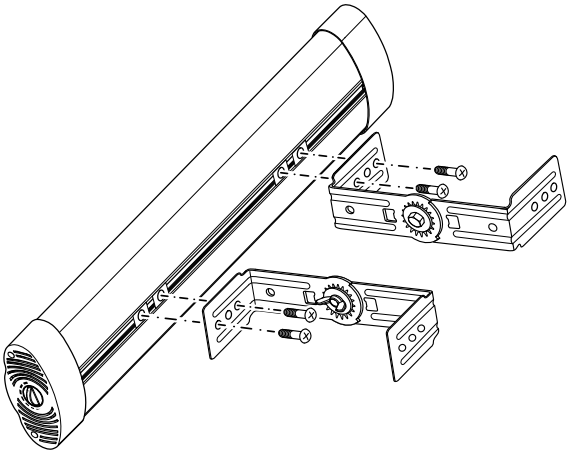
✓ Use tools suitable for the intended task.

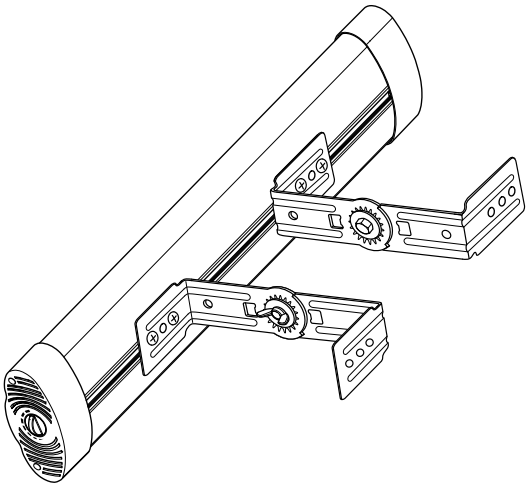
1. Connect two mounting brackets each using a screw, wing nut and washers.





2. Fasten the mounting brackets to the bracket for wall/ceiling mounting using the fastening screws. The brackets' position can be freely adjusted. We recommend maintaining a distance of 45 to 55 cm between them.

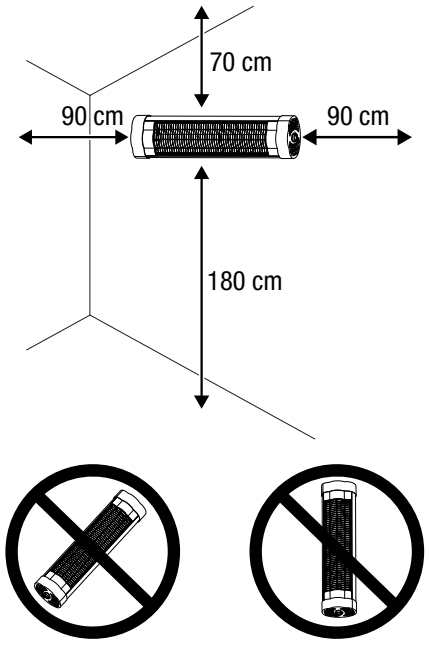




## Installation

When installing the device, observe the minimum distances from walls and other objects as described in the Technical data chapter.

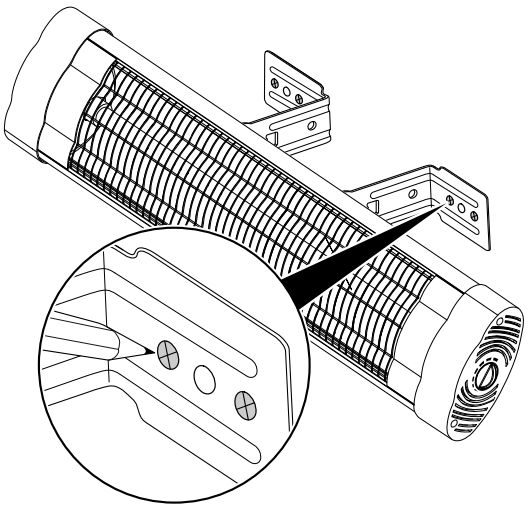
- Minimum distance of 180 cm from the floor.
- Minimum distance of 90 cm from adjacent walls.
- Minimum distance of 70 cm from the ceiling in case of wall mounting.
- For installation in bathrooms or washing rooms, observe the national regulations on safety distances.
- Do not install the device directly behind a door.
- Never install the device in a way that it radiates directly onto walls or other objects.
- Only install the device in a horizontal position.



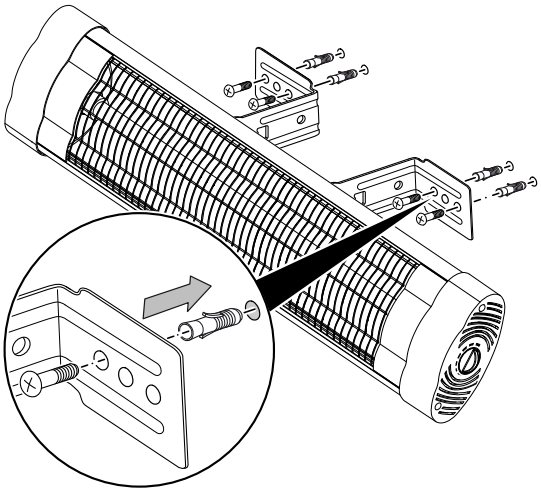

The following is required for installation:

- a pencil for marking the drill holes
- a suitable drill
- wall plugs appropriate for the structure of the wall
- a screwdriver
- a spirit level

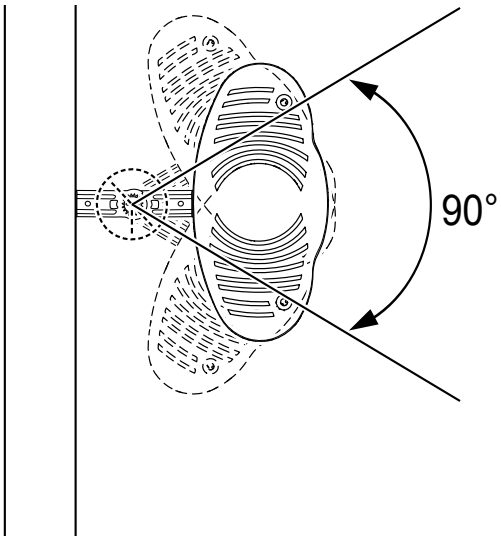
1. Mark the drill holes on the wall / ceiling.



2. Drill the holes into the wall / ceiling at the marked positions.
3. Insert suitable wall plugs into the drill holes.
4. Screw the mounting brackets to the wall / ceiling.



5. Check the mounting brackets for tight fit.
6. Tilt the device to the desired angle. The device can be tilted upwards and downwards by 90°.



## Start-up

**Info**
Odours might arise upon initial start-up or after a longer period of non-use.

- Before restarting the device, check the condition of the power cable. If there are doubts as to the sound condition, contact the customer service.
- Do not create tripping hazards when laying the power cable or other electric cables, especially when positioning the device in the middle of the room. Use cable bridges.
- Make sure that extension cables are completely unrolled.
- Make sure that there are no curtains or similar objects in the immediate vicinity.

### Connecting the power cable

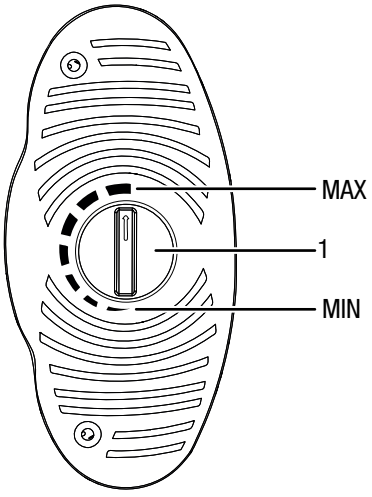
- Insert the mains plug into a properly secured mains socket.
- Make sure that the power cable is guided along the back of the device. Never guide the power cable along the front of the device!

## Operation

### Switching the device on

Once you have completely installed the device as described in the Start-up chapter, you can switch it on.

1. Turn the on/off rotary switch (1) clockwise to switch the device on and to set the desired room temperature.




### Setting the thermostat

The thermostat controls the temperature in a range from 40 °C to 180 °C. As soon as the desired temperature has been reached, the radiant heater switches off.

The temperature measured at the device is not the room temperature but the temperature that is generated due to radiation and reflected heat. Therefore, choose the temperature that seems ideal for you. Since infrared heat also penetrates into deeper layers and since the heat is absorbed and reflected by objects and walls, it may not be necessary to keep the radiant heater permanently switched on in order to create a feeling of warmth.

To find the ideal thermostat setting, please proceed as follows:

- Set the stepless rotary switch (1) of the thermostat to the highest level.
- As soon as the desired temperature has been reached, slowly turn the rotary switch (1) back until the device is switched off.
- The device now automatically maintains the desired temperature level.

The thermostat controls the room temperature automatically:

- When the set value is exceeded, the radiant heater switches off.
- When the set value is fallen below, the radiant heater automatically switches back on.

When set to the highest thermostat level, the radiant heater runs permanently.

**Info**
The desired room temperature should be higher than the current room temperature.

### Shutdown

**Warning of electrical voltage**
Do not touch the mains plug with wet or damp hands.

- Switch off the device by turning the on/off rotary switch (1) fully counter-clockwise.
- Allow the device to cool down completely.
- Hold onto the mains plug while pulling the power cable out of the mains socket.
- Clean the device according to the Maintenance chapter.
- Store the device according to the Storage chapter.

## Available accessories

**Warning**
Only use accessories and additional equipment specified in the operating manual.
Using insertion tools or accessories other than those specified in the operating manual may cause a risk of injury.

| Designation | Article number |
|---|---|
| telescopic tripod | 1.410.003.190 |

## Errors and faults

**Warning of electrical voltage**
**Tasks which require the housing to be opened must only be carried out by authorised specialist companies or by Trotec.**

The device has been checked for proper functioning several times during production. If malfunctions occur nonetheless, check the device according to the following list.

**The device does not start:**

- Check the power connection.
- Check the power cable and mains plug for damages.
- Check the on-site fusing.
- Wait for 10 minutes before restarting the device. If the device is not starting, have the electrics checked by a specialist company or by Trotec.

**The device does not emit heat:**

- The heating rod might be defective. Have a defective heating rod replaced by a specialist electrical company.
- Check the position of the on/off rotary switch (1). The device may be switched off.

  Switch on the device by turning the on/off rotary switch (1) clockwise until the desired heating capacity has been set.

**RCD or another fuse trips:**

- Check the fuse. Switch off any other devices to reduce the load on the line.

**The device slightly vibrates during switch-on and then stops vibrating:**

- Slight vibrations during switch-on are a normal process. No measures are required.

**Note**
Wait for at least 3 minutes after maintenance and repair work. Only then switch the device back on.

**Your device still does not operate correctly after these checks?**

Please contact the customer service. If necessary, bring the device to an authorized specialist electrical company or to Trotec for repair.

## Maintenance

### Activities required before starting maintenance

**Warning of electrical voltage**
Do not touch the mains plug with wet or damp hands.

- Switch the device off.
- Hold onto the mains plug while pulling the power cable out of the mains socket.
- Allow the device to cool down completely.

**Warning of electrical voltage**
**Tasks which require the housing to be opened must only be carried out by authorised specialist companies or by Trotec.**

### Cleaning the device

**Warning of electrical voltage**
Never immerse the device in water!

**Warning of hot surface**
Do not touch the reflector or the heating rods with bare hands.

Clean the device with a soft, damp and lint-free cloth. Ensure that no moisture enters the housing. Protect electrical components from moisture. Do not use any aggressive cleaning agents such as cleaning sprays, solvents, alcohol-based or abrasive cleaners to dampen the cloth.

Wipe the housing dry after cleaning.

Dirt on the heating rods should be removed with a long brush with soft bristles.

## Technical annex

### Technical data

| Parameter | Value |
|---|---|
| Model | IR 2500 S |
| Heating capacity | 2500 W |
| Power supply | 1/N/PE ~ 220 – 240 V / 50 Hz |
| Plug type | CEE 7/7 |
| Protection class | IP34 |
| Dimensions (depth x width x height) | 90 x 870 x 190 mm |
| Minimum distance to walls and other objects:<br>top:<br>bottom:<br>sides:<br>front: | <br>70 cm<br>180 cm<br>90 cm<br>90 cm |
| Weight | 2.5 kg |

## Disposal

The icon with the crossed-out waste bin on waste electrical or electronic equipment stipulates that this equipment must not be disposed of with the household waste at the end of its life. You will find collection points for free return of waste electrical and electronic equipment in your vicinity. The addresses can be obtained from your municipality or local administration. For further return options provided by us please refer to our website www.trotec24.com.

The separate collection of waste electrical and electronic equipment aims to enable the re-use, recycling and other forms of recovery of waste equipment as well as to prevent negative effects for the environment and human health caused by the disposal of hazardous substances potentially contained in the equipment.

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