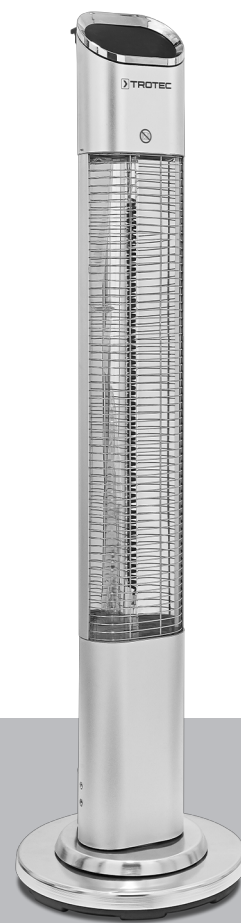


IRS 2050 E

EN

OPERATING MANUAL
RADIANT HEATER



 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

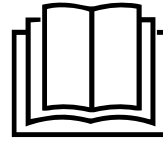
Information marked with this symbol helps you to carry out your tasks quickly and safely.



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:



IRS 2050 E



<https://hub.trotec.com/?id=45202>

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 from the device 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.

- Do not use the device in potentially explosive rooms or areas and do not install it there.
- 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 use the device as source of ignition.
- Do not cover the device during operation.
- Do not sit on the device.
- 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 mains connection must correspond to the specifications in the Technical annex.
- Insert the mains plug into a properly fused 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 power cable 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!
- When installing the device, observe the minimum distances from walls and other objects as well as the storage and operating conditions according to the technical data (chapter Technical annex).
- Keep a safety distance of at least 1 m between the device's radiator side and all combustible materials such as textiles, curtains, beds and sofas.
- Allow the device to cool down before transport and/or maintenance work.
- The device must not be positioned 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.
- The device must not be used with a programming switch, timer, separate remote control system or similar equipment that switches the device on automatically, as this could cause a fire hazard if the heater is covered or positioned incorrectly.
- Do not use the device if it has been dropped or if it shows visible signs of damage.

Intended use

Use the device for heating surfaces in roofed and non-roofed outdoor areas.

The device is only intended for floor installation.

Intended use comprises:

- heating surfaces
 - in storage facilities,
 - in construction areas,
 - in containers,
 - in the catering trade,
 - at trade fairs and events.

Foreseeable misuse

- The device is not intended for industrial use.
- Do not place the device on flooded ground.
- 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.
- Do not use the heating device in immediate proximity to swimming pools.
- The device may not be exposed to moisture or weather effects (rain, sunlight).
- Any use other than the intended use is regarded as a reasonably foreseeable misuse.

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. 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!
Do not touch the mains plug with wet or damp hands. Hold onto the mains plug while pulling the power cable out of the mains socket.



Warning of electrical voltage

Risk of electric shock!
Risk of an electric shock if the heating device comes into contact with water in swimming pools!
Do not use the heating device in immediate proximity to swimming pools!



Warning of hot surface

Parts of this appliance can become very hot and cause burns. Particular attention is to be paid when there are children or vulnerable persons 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 device 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.

Tilt protection

The device comes equipped with a tilt protection. The tilt protection is a safety device intended to minimize the risk of fire in case the device is tipped over inadvertently. The device will be switched off when knocked over (or if its upright position is changed in any other manner).

After this, the device will not start automatically, instead it needs to be switched on as described in the Operation chapter.

Information about the device

Device description

The device IRS 2050 E is used to quickly generate instant heat.

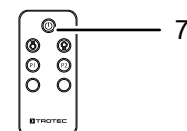
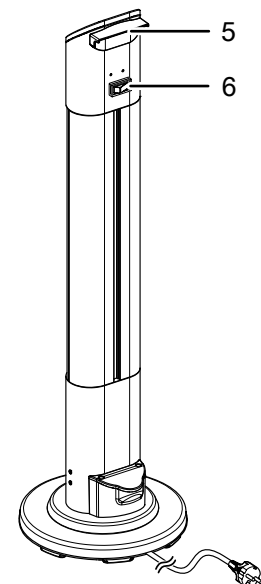
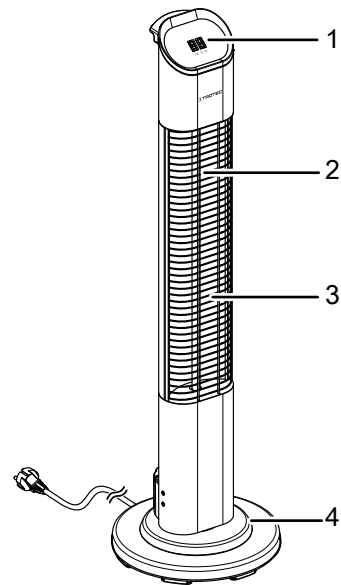
The device is based on the functional principle of heat generation by infrared radiation. The infrared radiation is generated by a carbon heating element and emitted to the surrounding surfaces as heat radiation. Persons or objects are heated directly.

The device functions can be selected using the remote control.

Using the timer function the device can be switched off automatically with time delay.

- 9 heating levels
- approx. 5,500 operating hours
- timer function (1-24 hours)
- silent operation
- no dust circulation (suitable for allergy sufferers)
- water-jet-proof
- with tilt protection
- with swing function

Device depiction



No.	Designation
1	Control panel
2	Heating rod
3	Grille
4	Foot
5	Transport handle
6	On/off switch heater
7	Remote control

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, proceed as follows:

- Hold onto the mains plug while pulling the power cable out of the mains socket.
- 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.
- Remove batteries from the remote control.

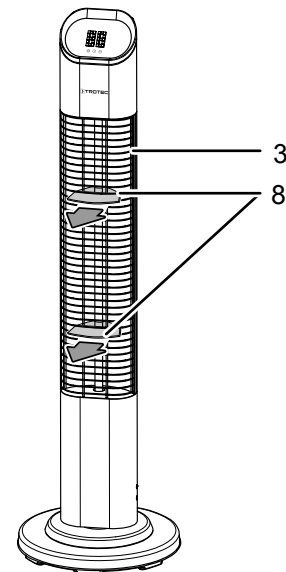
Assembly and start-up

Scope of delivery

- 1 x device
- 1 x Remote control
- 1 x Foot
- 2 x Screw for foot
- 2 x Screw for foot cable
- 2 x Washer
- 1 x Fixation plate (small)
- 2 x Fixation plate (large)
- 2 x Screw for floor mounting
- 2 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. Remove the transport protection (8) from the grille (3) of the radiant heater.



4. Fully unwind the power cable. Make sure that the power cable is not damaged and that you do not damage it during unwinding.

Assembly

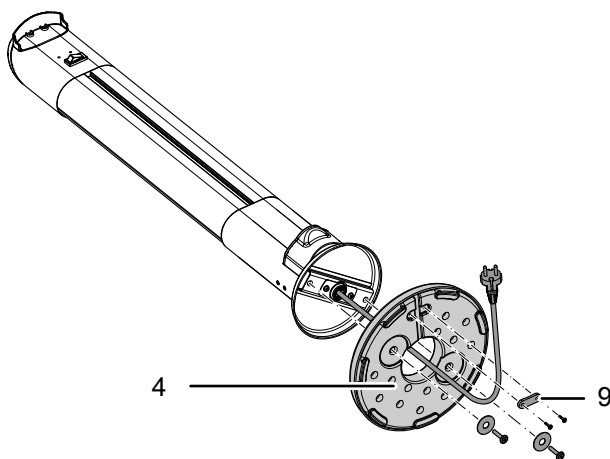


Warning

Risk of fire due to improper installation!
There is a risk of fire if the required minimum distances are not observed.
Observe the "Installation" section in the "Assembly and start-up" chapter and the technical data in the "Technical annex" chapter.

Foot assembly

1. Screw the foot (4) to the device using the two washers and two screws for the foot supplied.
2. Place the foot cable in the notch underneath the foot (4).
3. Position the small fixation plate (9) over the foot cable.
4. Screw the small fixation plate (9) and foot cable to the foot (4) using the two screws for the foot cable supplied.



Floor fixing (optional)

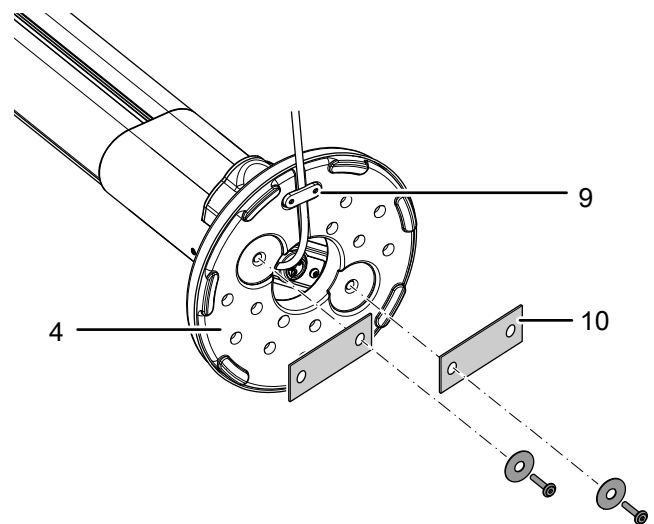
Fixing the device is usually not necessary, but improves the tilt stability if the device is intended to be used permanently in one place.



Info

Depending on the type of ground, floor fixing can be done either with wall plugs (e.g. on stone floors) or without wall plugs (e.g. on wooden floors). Before fixing the device to the floor, enquire about the suitable way of installation or have the device fixed to the floor by a specialist company.

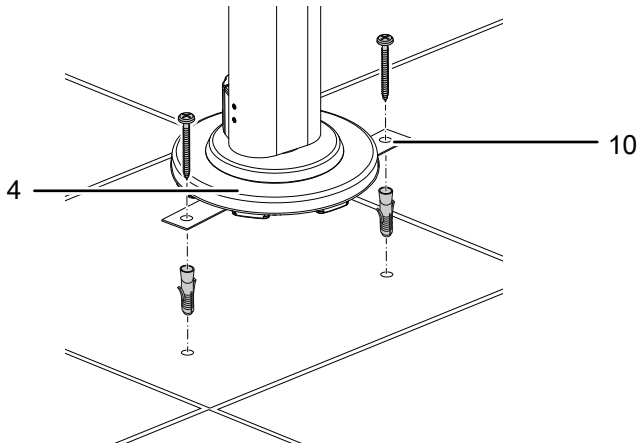
1. Loosen the two screws and two washers under the foot (4) if you have already fixed them during foot assembly.
2. Screw down the two washers with the two supplied screws and the two large fixation plates (10) as shown.



5. Check the foot (4) for tight fit.
6. Set the device up in an upright and stable position.

3. Set the device up in an upright position. Mark the positions for the fixing holes on the floor through the holes in the large fixation plates (10). Observe the minimum distances to other objects.
4. Drill the holes (\varnothing 8 mm) into the floor at the marked positions.
5. Insert appropriate wall plugs into the bore holes depending on the type of floor.

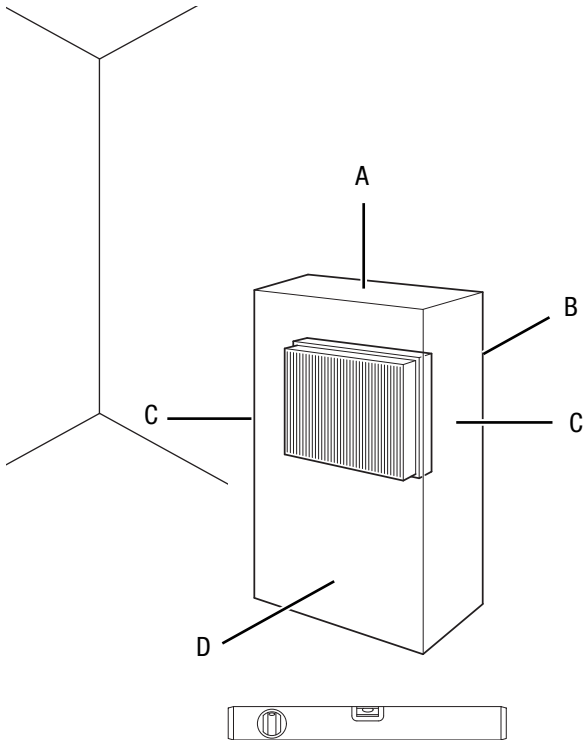
6. Screw down the foot (4) with the two supplied screws and the two large fixation plates (10) as shown.



7. Check the foot (4) for tight fit.

Installation

When positioning the device, observe the minimum distance from walls or other objects as described in the Technical data chapter.



- Set the device up in an upright and stable position.
- Do not position the device directly below a wall socket.

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.

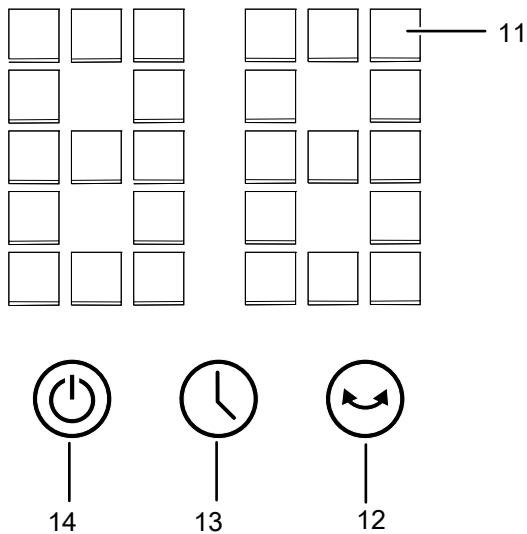
Prior to initial start-up, insert batteries in the remote control.

Connecting the power cable

- Insert the mains plug into a properly fused mains socket.

Operation

Operating elements



No.	Designation	Meaning
11	Segment display	Indication of the number of hours during timer programming Heating level indication:
12	Swing button	Switching the swing function on or off
13	Timer button	Timer function: Automatic switch-off in increments of 1 hour up to 24 hours
14	Power button	Switching the device on or off and changing the heating level standby mode = P 0 heating level 1 (F1) = 200 W heating level 2 (F2) = 400 W heating level 3 (F3) = 600 W heating level 4 (F4) = 800 W heating level 5 (F5) = 1000 W heating level 6 (F6) = 1200 W heating level 7 (F7) = 1300 W heating level 8 (F8) = 1550 W heating level 9 (F9) = 2000 W



Info

An acoustic signal is emitted each time a setting is activated.



Warning of hot surface

The grille (3) heats up during operation and can still be hot after switch-off.

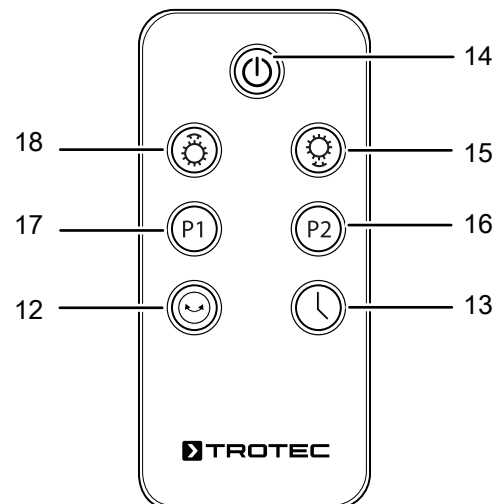
Do not touch the grille (3) during operation, wait until it has cooled down after switch-off.

Remote control

All settings of the device can also be made using the remote control included in the scope of delivery.

Therefore, keep the remote control in a safe place. Should you still be unable to find the remote control, you can reorder a new one from Trotec.

Insert suitable batteries in the remote control (see chapter Technical annex).



No.	Designation	Meaning
12	Swing button	Switching the swing function on or off
13	Timer button	Automatic switch-off timer function in increments of 1 hour up to 24 hours
14	Power button	Switching the device on and off
15	Reduce heating capacity button	Reducing the heating capacity (level 1 – level 9)
16	P2 button	Selecting 2000 W heating capacity (level 9)
17	P1 button	Selecting 1000 W heating capacity (level 5)
18	Increase heating capacity button	Increasing the heating capacity (level 1 – level 9)

Switching the device on

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

1. Set the heater's on/off switch (6) to position **I**.
2. Press the *Power* button (14).
 - ⇒ An acoustic signal is emitted.
 - ⇒ The segment display (11) lights up in blue and indicates **P 0**.
 - ⇒ The device is now in standby mode.

Setting the heating level

- ✓ The device is in standby mode.
1. Press the *Power* button (14) several times to set the desired heating level.
 - ⇒ The segment display (11) indicates the set heating level (F1–F9).
 - ⇒ There are two ways to set the heating capacity via the remote control:
 - Press one of the buttons *P 1* (17) or *P 2* (16) to select the pre-programmed heating level **P 1** or **P 2**.
 - Press the buttons *Reduce heating capacity* (15) and/or *Increase heating capacity* (18) to set the heating capacity manually.

Setting the timer

The timer allows you to program an automatic switch-off time in increments of 1 hour up to 24 hours at any heating level.

- ✓ The device is switched on.
1. Press the *Timer* button (13) on the device or on the remote control several times to set the desired number of hours until automatic switch-off.
 - ⇒ The timer has been programmed and the device will switch off after the predefined time.
 2. In order to delete the setting, select **00** hours using the *Timer* button (13) on the device or on the remote control.
 - ⇒ The timer has been deleted.

Activating the swing function

The swing function can be switched on as needed. With its on-demand oscillation function, the tower rotates evenly to the right and left by 45° and thus provides several people or groups of people sitting outside with infrared heat.

- ✓ The device is switched on and a heating level has been selected.
1. Press the *Swing* button (12) to activate the swing function.
 - ⇒ The swing function is activated.
 2. Press the *Swing* button (12) again to deactivate the swing function.

Shutdown



Warning of electrical voltage

Do not touch the mains plug with wet or damp hands.

- Set the heater's on/off switch (6) to position **0**.
- 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 Transport and storage chapter.

Errors and faults



Warning of electrical voltage

Tasks which require the device 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 damage. If you notice damages, do not try to take the device back into operation.
 - 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.
- Check the on-site fusing.
- Check whether the device is standing upright and on level ground. The tilt protection may have been tripped owing to the fact that the device was knocked over. Always put up the device in an upright position on a suitable, sufficiently dimensioned surface.
- Wait for 10 minutes before restarting the device. If the device is not starting, have the electricians checked by a specialist company or by Trotec.

The device does not emit heat:

- The heating element may be defective. If the heating element is defective, have it replaced by a specialist electrical company.
- Check the heater's on/off switch (6). If the switch is set to the **0** position, the device is switched off. Switch the device on. If the heater's on/off switch (6) is set to position **I**, check whether the device is in standby mode.

RCD or another fuse trips:

- Check the fuse. Switch off any other devices to reduce the load on the line.
- Contact a specialist electrical company.

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

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

The device does not respond to the infrared remote control:

- Check whether the distance between remote control and device is too large and reduce it if necessary.
- Make sure there are no obstacles, such as furniture or walls, between the device and the remote control. Ensure visual contact between device and remote control.
- Check the charging status of the batteries and change them if required.
- If the batteries have just been changed, check them for correct polarity.

Note

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

The device still does not operate correctly after these checks:

Please contact the customer service. If necessary, bring the device to an authorised 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 device to be opened must only be carried out by authorised specialist companies or by Trotec.

Cleaning the housing



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 housing with a soft, damp and lint-free cloth. Make sure 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	IRS 2050 E
Heating capacity	Level 1 200 W Level 2 400 W Level 3 600 W Level 4 800 W Level 5 1000 W Level 6 1200 W Level 7 1300 W Level 8 1550 W Level 9 2000 W
Mains connection	220–240 V / 50–60 Hz
Plug type	CEE 7/7
Protection class	
Plug	IP44
Housing	IP25
Dimensions (length x width x height)	300 x 300 x 1000 mm
Minimum distance to walls and other objects:	
A: top	100 cm
B: rear	100 cm
C: side	100 cm
D: front	100 cm
Weight	5 kg
Remote control batteries	type CR 2025 / 3 V

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. You can also find out about other return options that apply for many EU countries on the website <https://hub.trotec.com/?id=45090>. Otherwise, please contact an official recycling centre for electronic and electrical equipment authorised for your country.

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.



In the European Union, batteries and accumulators must not be treated as domestic waste, but must be disposed of professionally in accordance with Directive 2006/66/EC of the European Parliament and of the Council of 6 September 2006 on batteries and accumulators. Please dispose of batteries and accumulators according to the relevant legal requirements.

Trotec GmbH

Grebener Str. 7
D-52525 Heinsberg

☎ +49 2452 962-400

☎ +49 2452 962-200

✉ info@trotec.com

www.trotec.com