# **IRS 2000 E**







# **Table of contents**

Notes regarding the operating manual	2
Safety	2
Information about the device	5
Transport and storage	5
Assembly and installation	6
Operation	7
Errors and faults	8
Maintenance	9
Technical annex	9
Disposal	10

# 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 2000 E



https://hub.trotec.com/?id=42627

# 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.



#### **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 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 or transport 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 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, beds or sofas.
- 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 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.

#### Intended use

Use the device for heating surfaces in roofed outdoor areas and protected from weather exposure.

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,
  - in roofed outdoor areas (e.g. covered terraces).

#### Improper use

The device is not intended for industrial use.

- Do not place the device on wet or 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.
- 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

# 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 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

Improper handling entails a risk of burning and electric shock.

Only use the device as intended!



# 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 off the device.
- 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).

When the device is moved out of its upright position, an acoustic signal is emitted. The acoustic signal stops as soon as the devices is brought back into an upright position. 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**

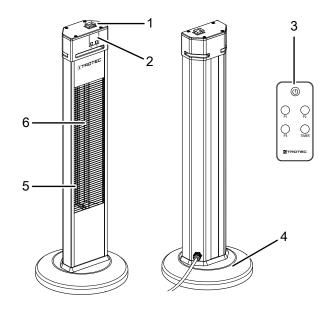
The device IRS 2000 E is used to quickly generate instant heat.

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.

- 3 heating levels
- approx. 5,500 operating hours with a light reduction of 80 %
- timer function (1-24 hours)
- silent operation
- no dust circulation (suitable for allergy sufferers)
- with tilt protection

# **Device depiction**



No.	Designation
1	On / off switch heater
2	Control panel
3	Remote control
4	Foot
5	Grille
6	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, 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 installation**

# Scope of delivery

- 1 x Device
- 1 x Remote control
- 1 x Foot
- 4 x Fastening screw
- 1 x Manual

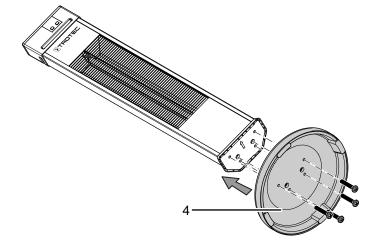
# **Unpacking the device**

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

# **Assembly**

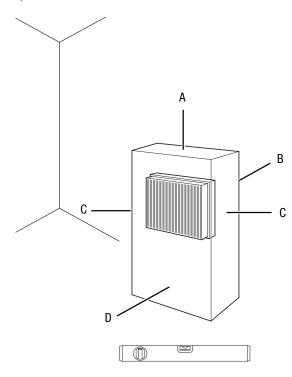
# Foot assembly

- 1. Screw the foot (4) to the device using the 4 screws supplied.
- 2. Check the foot (4) for tight fit.
- 3. Set the device up in an upright and stable position.



#### 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.
- Make sure that the device cannot come into contact with moisture or water.

# 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.

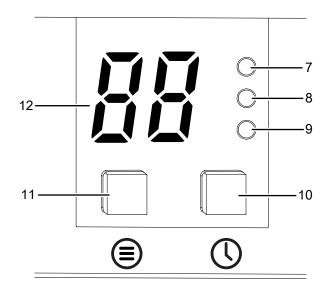
#### **Connecting the power cable**

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

# **Operating elements**



No.	Designation	Meaning
7	Standby lamp	Flashes red, when the device is in standby mode.
8	Timer lamp	Is illuminated in orange, when the timer function is activated.
9	Operating light	Is illuminated in blue, when the device is heating.
10	Timer button	Automatic switch-off timer function in increments of 1 hour up to 24 hours
11	Heating level button	For selecting the heating level
12	Segment display	Heating level indication: P 0 = device in standby mode P 1 = 650 W P 2 = 1350 W P 3 = 2000 W Indication of the number of hours during timer programming



#### Info

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



# **Warning of hot surface**

The grille (5) heats up during operation and can still be hot after switch-off.

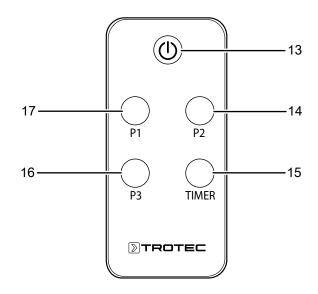
Do not touch the grille (5) during operation, wait until it has cooled down after switch-off.

#### 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
13	Power button	Switching the device on and off
14	P2 button	Selecting a heating capacity of 1350 W
15	TIMER button	Automatic switch-off timer function in increments of 1 hour up to 24 hours
16	P3 button	Selecting a heating capacity of 2000 W
17	P1 button	Selecting a heating capacity of 650 W

#### Switching the device on

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

- 1. Press the heater's on / off switch (1).
  - ⇒ An acoustic signal is emitted.
  - ⇒ The standby lamp (7) flashes.
  - ⇒ The device is now in standby mode.
- 2. Use the heating level button (11) at the device or the heating capacity buttons on the remote control (3) to select the desired heating level.
  - ⇒ The device now starts heating at the selected heating level



# **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 and a heating level has been selected.
- ✓ The operating light (9) is illuminated in blue.
- Press the timer button (10 or 15) at the device or on the remote control several times to set the desired number of hours until automatic switch-off.
  - ⇒ The segment display (12) indicates the number of hours until automatic switch-off and the timer lamp (8) is permanently illuminated.
- 2. Press the heating level button (11).
  - ⇒ The segment display (12) again indicates the selected heating level.
  - ⇒ The timer has been programmed and the device will switch off after the predefined time.
- 3. In order to delete the setting, select 00 hours using the timer button at the device (10) or on the remote control (15).
  - ⇒ The timer lamp (8) goes out.
  - ⇒ The timer has been deleted.

#### Shutdown



# **Warning of electrical voltage**

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

- Switch the device off by selecting P 0 via the heating level button (11) and activating standby mode. Then set the heater's on / off switch (1) to 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 Storage chapter.

# **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.
- 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 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 heater's on / off switch (1). 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 (1) 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.

# Your 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 housing 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. 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	IRS 2000 E
Heating capacity	
Level 1	650 W
Level 2	1350 W
Level 3	2000 W
Nominal current consumption	8.6 A
Mains connection	220-240 V / 50-60 Hz
Plug type	CEE 7/7
Type of protection	IP34
Cable length	1.80 m
Dimensions	300 x 300 x 1000 mm
(length x width x height)	
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. For further return options provided by us please refer to our website https://de.trotec.com/shop/.

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

Grebbener Str. 7 D-52525 Heinsberg 1+49 2452 962-400 ■+49 2452 962-200

info@trotec.com www.trotec.com