# IR 2050 / IR 3050



**OPERATING MANUAL**RADIANT HEATER







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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

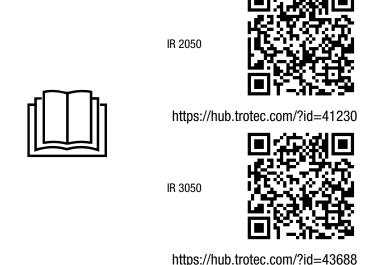
Information marked with this symbol helps you to carry out your tasks quickly and safely.



# 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:



# 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.



#### Warning

Always remove the transport protection made of plastic foam completely from the device before taking the device into operation. Otherwise there is a risk of fire! Observe the Assembly and installation chapter.

- 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.
- 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.
- Check the power cable and mains plug for damage. If you notice damages, do not try to take the device back into operation. Order a new power cable with mains plug from Trotec and replace the defective power cable with mains plug with the new one.
  - 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 installed directly beneath a socket.
- Do not use the device if it has been dropped or if it shows visible signs of damage.
- Use the CR 2025 button battery type.
- Never charge batteries that cannot be recharged.
- Different types of batteries and new and used batteries must not be used together.
- Insert the batteries into the battery compartment according to the correct polarity.
- Remove discharged batteries from the device. Batteries contain materials hazardous to the environment. Dispose of the batteries according to the national regulations.
- Remove the batteries from the remote control if you will not be using the device for a longer period of time.
- Never short-circuit the supply terminal in the battery compartment!
- Do not swallow batteries! If a battery is swallowed, it can cause severe internal burns within 2 hours! These burns can lead to death!
- If you think batteries might have been swallowed or otherwise entered the body, seek medical attention immediately!
- Keep new and used batteries and an open battery compartment away from children.
- If the battery compartment does not close securely, stop using the product via the remote control.



#### Intended use

Use the device IR 2050 / IR 3050 for heating surfaces in roofed and non-roofed outdoor areas.

Intended use comprises:

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

#### Note

Please use a safety fuse (overcurrent protection device) or a type C circuit breaker.

#### Foreseeable misuse

- 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.
- Do not install the heating device in immediate proximity to swimming pools!
- The device must not be mounted to the ceiling.
- 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

# 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 install 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

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**

#### Note

Please use a safety fuse (overcurrent protection device) or a type C circuit breaker.

The device IR 2050 / IR 3050 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.

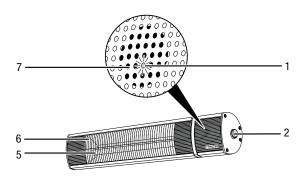
The 3 heating levels can be selected using the remote control.

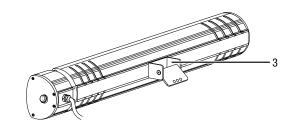
The device indicates operation by means of two-coloured LEDs.

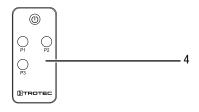
- suitable for outdoor use
- IP65 type of protection water-jet-proof professional device, dustproof and rainproof from all directions
- The IR 2050 comes equipped with a high-quality low-glare short-wave infrared tube offering more heat, lower brightness and a long service life.
- The IR 3050 comes equipped with two high-quality lowglare short-wave infrared tubes offering more heat, lower brightness and a long service life.
- approx. 6,000 operating hours with a light reduction of 80 %
- only suitable for wall mounting
- adjustable angle
- no dust circulation (suitable for allergy sufferers)

# **Device depiction**

#### IR 2050



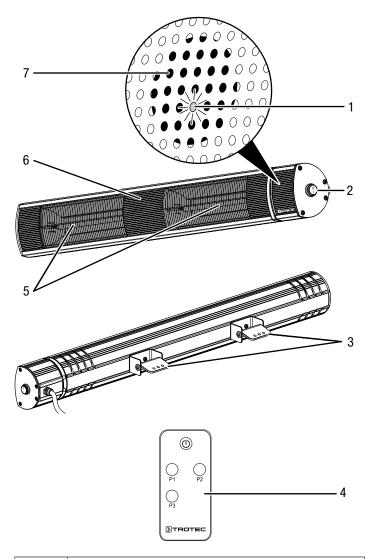




No.	Designation
1	Operating light (behind grille)
2	On/off switch
3	Wall holder with adjustable inclination angle
4	Remote control
5	Heating rod
6	Grille
7	Infrared receiver for remote control



# IR 3050



No.	Designation
1	Operating light (behind grille)
2	On/off switch
3	Wall holder with adjustable inclination angle
4	Remote control
5	Heating rod
6	Grille
7	Infrared receiver for 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:

- Store the device in a dry location and protected from frost and heat.
- Store the device in an upright position where it is protected from dust and direct sunlight.
- If required, use a cover to protect the device from invasive dust.
- 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

#### **IR 2050**

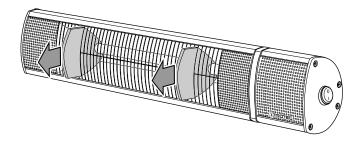
- 1 x Device
- 1 x Mounting bracket
- 2 x Wing nut
- 3 x Screw
- 2 x Fastening screw
- 3 x Wall plug
- 1 x SW 5 Allen wrench
- 1 x Remote control
- 1 x Manual

#### IR 3050

- 1 x Device
- 2 x Mounting bracket
- 4 x Wing nut
- 6 x Screw
- 4 x Fastening screw
- 6 x Wall plug
- 1 x SW 5 Allen wrench
- 1 x Remote control
- 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 from the grille (6) 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 of electrical voltage

Risk of injury due to incorrect assembly! Local or national regulations may apply for installation. We recommend to have the installation carried out by a qualified electrician.

The device is only suited for wall mounting. Observe the following requirement for installation inside a room:



#### Warning

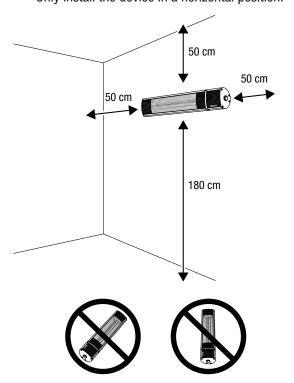
Risk of fire due to improper installation! There is a risk of fire if the required minimum distances are not observed.

Observe the "Installation" section in the "Assembly and start-up" chapter and the technical data in the "Technical annex" chapter.

#### 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 50 cm from adjacent walls or other objects.
- Do not install the device at the ceiling or directly behind a door.
- Never install the device in a way that it radiates directly onto walls or other objects. Observe the minimum distances from walls or other objects according to the Technical data chapter.
- Only install the device in a horizontal position.



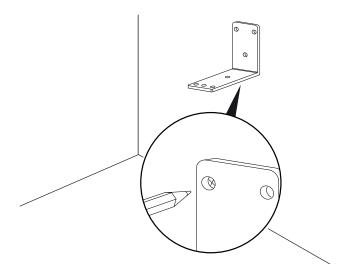


The following is required for installation:

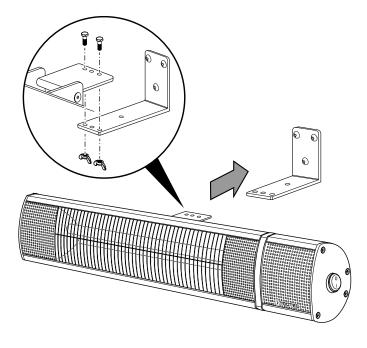
- a pencil for marking the drill holes
- a suitable drill
- wall plugs appropriate for the structure of the wall
- a screwdriver
- a spirit level

#### **IR 2050**

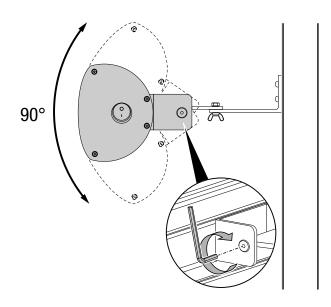
1. Mark the drill holes on the wall.



- 2. Drill the holes into the wall at the marked positions.
- 3. Insert suitable wall plugs into the drill holes.
- 4. Screw the mounting bracket to the wall.
- 5. Check the mounting bracket for tight fit.
- Screw the device onto the mounting bracket. To do so, fasten the wall holder to the mounting bracket using the fastening screws and wing nuts.
- 7. Make sure that the device is attached securely.

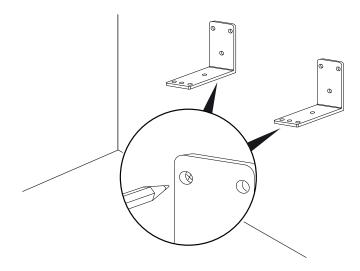


 Tilt the device to the desired angle. The device can be tilted upwards and downwards by 90°.
 Use the Allen wrench to fix the inclination angle.



#### IR 3050

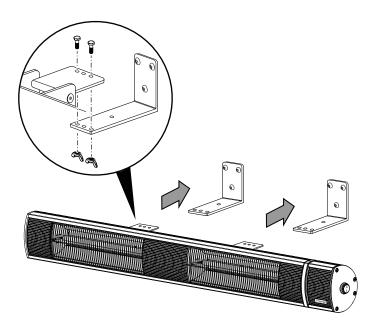
1. Mark the drill holes on the wall.



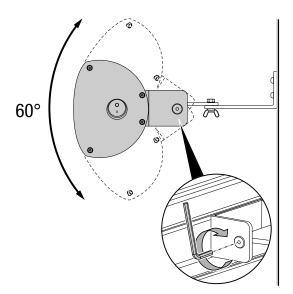
- 2. Drill the holes into the wall at the marked positions.
- 3. Insert suitable wall plugs into the drill holes.
- 4. Screw the mounting brackets to the wall.
- 5. Check the mounting brackets for tight fit.
- Screw the device onto the mounting brackets. To do so, fasten the wall holders to the mounting brackets using the fastening screws and wing nuts.



7. Make sure that the device is attached securely.



 Tilt the device to the desired angle. The device can be tilted upwards and downwards by 60°.
 Use the Allen wrench to fix the inclination angle.



#### Start-up

#### Note

Please use a safety fuse (overcurrent protection device) or a type C circuit breaker.

#### **Note**

Current peaks in the millisecond range may occur temporarily during switch-on of the device. With an output of up to 3,000 watts, this may cause category 16A-B circuit breakers to trigger and to become defective in the long run. If necessary, have the fuses replaced by a specialist

If necessary, have the fuses replaced by a specialis electrical company.



#### 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.

#### Inserting batteries into the remote control



#### Warning of electrical voltage

Do not touch the battery compartment with wet or damp hands.

#### Note

Do not use rechargeable batteries!

Observe the Technical data for start-up.

- Press the locking at the side of the battery compartment together and pull the battery compartment out of the remote control.
- Insert a type CR 2025 battery into the battery compartment and slide the battery compartment back into 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**

#### Note

Please use a safety fuse (overcurrent protection device) or a type C circuit breaker.



#### Info

The device will only emit heat if the settings are made via the remote control.



#### Info

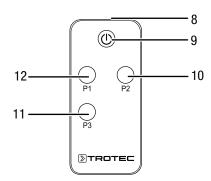
If you switch off the device via the remote control, the device will be set to standby mode. If standby operation is not required, you can switch the device off via the on/off switch (2).

#### **Remote control**

The device settings can only be made using the remote control included in the scope of delivery.

Therefore, keep the remote control in a safe place, otherwise the device can no longer be operated. Should you still be unable to find the remote control, you can reorder a new one from Trotec.

#### IR 2050

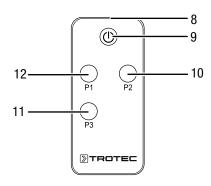


No.	Designation	Meaning
8	Transmitter	Sends signals to the device.
9	Power button	For switching the device on and off
10	P2 button	To select heating capacity level 2 (1500 W)
11	P3 button	To select heating capacity level 3 (2000 W)
12	P1 button	To select heating capacity level 1 (750 W)

#### IR 3050

#### Note

Initially, always start the device at level 1. Subsequently, you can switch over to level 2 or 3, if required.



No.	Designation	Meaning
8	Transmitter	Sends signals to the device.
9	Power button	For switching the device on and off
10	P2 button	To select heating capacity level 2 (2000 W)
11	P3 button	To select heating capacity level 3 (3000 W)
12	P1 button	To select heating capacity level 1 (1000 W)

# Setting the heating level

- 1. Set the on/off switch (2) on the device to I.
  - ⇒ The operating light (1) flashes red.
  - ⇒ The device is now in standby mode.
- 2. Press the power button (9) on the remote control.
  - ⇒ The operating light (1) is illuminated in green.
  - ⇒ The device is switched on, but does not heat yet.

#### IR 2050

- 1. Press the corresponding button (10, 11, 12) to set the desired heating level.
  - During operation the operating light (1) is permanently illuminated in green.
  - ⇒ The device heats.

#### **IR 3050**

- 1. Press the P1 button (12) to switch the device on at level 1.
  - ⇒ During operation the operating light (1) is permanently illuminated in green.
  - ⇒ The device heats.
- 2. To set a higher heating capacity press either the *P2* button (10) or the *P3* button (11).



# 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.

#### Shutdown



# Warning of electrical voltage

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



#### Info

If you switch off the device via the remote control, the device will be set to standby mode. If standby operation is not required, you can switch the device off via the on/off switch (2).

- Switch off the device by pressing the Power button (9) on the remote control. Then set the on/off switch (2) on the device to 0. The operating light flashes red.
- 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.

# **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
remote control IR 2050	7.140.000.575
remote control IR 3050	7.140.000.042

# **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 damages. If you notice damages, do not try to take the device back into operation. Order a new power cable with mains plug from Trotec and replace the defective power cable with mains plug with the new one.
- 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 element may be defective. If the heating element is defective, have it replaced by a specialist electrical company.
- Check the on/off switch. If the on/off switch is set to the 0 position, the device is switched off.
  - Switch the device on.
- Check the operating light. If the operating light flashes red, the device is running in standby mode.
  - Switch on the device by selecting a heating level via the remote control.

#### **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 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 2050	IR 3050
Heating capacity	750 / 1500 / 2000 W	1000 / 2000 / 3000 W
Power supply	220–240 V ~ 50/60 Hz	220–240 V ~ 50/60 Hz
Plug type	CEE 7/7	CEE 7/7
Protection class	IP65	IP65
Dimensions (depth x width x height)	165 x 630 x 105 mm	165 x 960 x 105 mm
Minimum distance to walls and other		
objects:		
top:	50 cm	50 cm
bottom:	180 cm	180 cm
sides:	50 cm	50 cm
front:	50 cm	50 cm
Remote control batteries	type CR 2025 / 3 V	type CR 2025 / 3 V
Weight	2 kg	3 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. 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.

# **Only for United Kingdom**

According to Waste Electrical and Electronic Equipment Regulations 2013 (2013/3113) and the Waste Batteries and Accumulators Regulations 2009 (2009/890), power tools that are no longer usable must be collected separately and disposed of in an environmentally friendly manner.

#### Trotec GmbH

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

info@trotec.com www.trotec.com