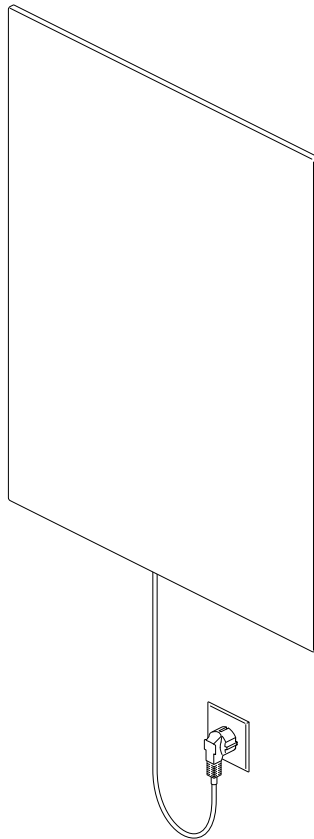


INSTALLATION AND ASSEMBLY INSTRUCTIONS

Infrared heater



Disclaimer

DIGEL HEAT makes no representations or warranties with respect to this manual and, to the extent permitted by law, limits its liability for breach of any implied warranty to substitution of this manual for another. In addition, DIGEL HEAT reserves the right to revise this publication at any time without being obliged to inform anyone of this revision.

The information provided in this documentation comprises general descriptions and/or technical features for the performance of the products described therein. This documentation cannot serve as a proper assessment of the suitability or reliability of the products for a specific application by a user and may not be used as a replacement for such an assessment. It is the responsibility of each such user or installer to carry out an appropriate and full risk assessment, evaluation and examination of the products with regard to their respective specific application. Neither DIGEL HEAT nor one of its partners or subsidiaries can be held responsible or liable for any misuse of the information contained herein. Please inform us if you have any suggestions for improvements or additions or you have noticed any errors in this publication.

All relevant government, regional and local safety regulations must be observed at all times when installing and using this product. For safety reasons and to ensure compliance with the documented system data, only the manufacturer is authorised to carry out repairs on components.

Failure to comply with this information may result in injuries or damage to the equipment.

Copyright © 2021 DIGEL HEAT

All rights reserved. No part of this publication may be reproduced, processed or transmitted in any form, including photocopying, recording or any other electronic or mechanical process, without the written permission of the publisher. Requests for permission must be sent in writing to the publisher at the address specified below, marked "FAO Permission Coordinator".

Digel Sticktech GmbH & Co. KG
Hermann-Burkhardt-Str. 7
D-72793 Pfullingen

Table of contents

1.	Introduction	5
1.1	Description of the user	5
1.2	Safety symbols used in this manual	5
1.3	Storing the instructions	5
1.4	Obtaining documentation and information	6
1.4.1	Online	6
1.4.2	Ordering documentation	6
1.4.3	Other languages	6
1.4.4	Feedback on the documentation	6
1.4.5	Support and service	7
2	Product descriptions	8
2.1	Intended use and reasonably foreseeable misuse	8
2.2	Technical information	8
2.3	Product components	11
2.4	Measures to improve environmental sustainability	12
3	Safety instructions	15
3.1	Warnings and safety information	15
3.2	Explanation of the information on the unit and packaging	18
4	Installation	19
4.1	Transport and storage of the product	19
4.2	Assembling the product	19
4.2.1	Unpacking and checking the packaging contents	19
4.2.2	Minimum space requirement	19
4.2.3	Installation of the infrared heater	20
4.2.4	Disassembly	24
4.3	Initial start-up	25

5	Maintenance and cleaning	25
5.1	Maintaining the product	25
6	Disposal	26
6.1	Disposal of electronic equipment	26
6.2	Disposal of packaging	26
7	Warranty	27
7.1	Warranty declaration	27
7.2	Exclusion of warranty	27
7.3	Assertion, presentation of the original proof of purchase, applicable law	28
7.4	Contacting us	28

1. Introduction

1.1 Description of the user

This document is intended for the installer and user of the DIGEL HEAT infrared heater. Assembly and electrical installation may only be carried out by a trained specialist.

1.2 Safety symbols used in this manual



"Danger" indicates an imminently dangerous situation that may result in death or severe injuries if it is not avoided.



"Warning" indicates a potentially dangerous situation that may result in death or severe injuries if it is not avoided.



"Caution" indicates a potentially dangerous situation that may result in minor to moderate injuries if it is not avoided.

NOTE

"Note" indicates a situation that may result in material damage if it is not avoided.

1.3 Storing the instructions

Make sure that you have read and understood the complete manual and all safety instructions before using this product. Failure to do so may result in severe injuries or even death.

Follow all instructions. This prevents fires, explosions, electric shocks and other hazards that may cause material damage and/or lead to severe or fatal injuries.

The product may only be used by persons who have read in full and understood the contents of these operating instructions.

Make sure that all persons who use this product have read and follow these warnings and instructions.

Keep all safety information and instructions for future reference and pass them on to

later users of the product.

The manufacturer shall not be liable for cases of material damage or injuries caused by incorrect handling or failure to comply with the safety instructions. In such cases, the warranty is invalidated.

1.4 Obtaining documentation and information

1.4.1 Online

You can find an up-to-date version of the documentation on the following website: www.digel-heat.com

1.4.2 Ordering documentation

Documentation, user instructions and technical information can be ordered from DIGEL HEAT by calling +49 (0) 7121 976 768 0 or by sending an email to info@digel-heat.com.

1.4.3 Other languages

This is the English version of the operating instructions. Manuals in other languages are available on <https://www.digel-heat.com/downloads.php>.

1.4.4 Feedback on the documentation

If you read DIGEL HEAT product documentation online, you can submit comments via the support website (www.digel-heat.com). You can also send your comments via email to info@digel-heat.com.

We look forward to hearing from you.

1.4.5 Support and service

For further questions, other information, technical assistance, questions on maintenance work or to order user instructions, please contact:

Digel Sticktech GmbH & Co. KG

Hermann-Burkhardt-Str. 7

D-72793 Pfullingen

+49 (0) 7121 976 768 0

info@digel-heat.com

2 Product descriptions

2.1 Intended use and reasonably foreseeable misuse

The DIGEL HEAT CLASSIC or STANDARD infrared heater is designed as an indoor ceiling or wall heater. All other models are only suitable for wall mounting. The unit should only be used in the home or in similar environment (e.g. in offices, shops and schools).

The DIGEL HEAT infrared heater is not designed for use outside or in small rooms. The unit must not be used for cooking.

The DIGEL HEAT infrared heater may only be used with original accessories and original components.

The unit may only be used in accordance with this instruction manual. Any use other than that described in this manual is considered improper use. Improper use may result in dangers for humans, animals and the environment.

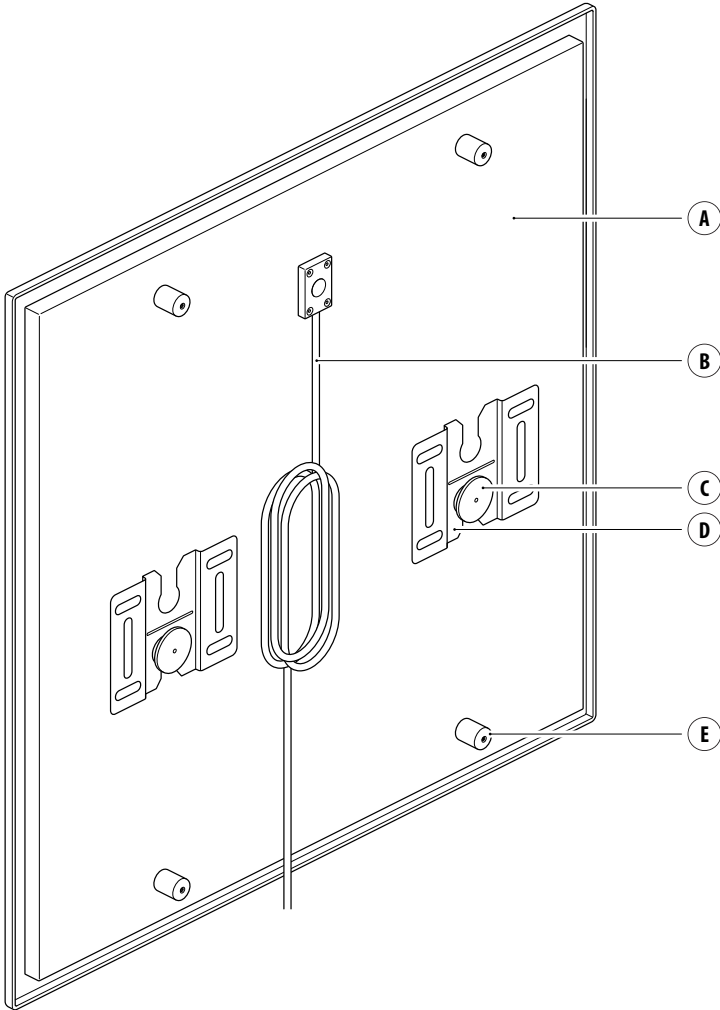
2.2 Technical information

Parameter	Unit
Product name	DIGEL HEAT infrared heater
Description	Infrared heater
Model name	Classic, Standard, picture heater, glass picture heater, mirror heater, glass heater, blackboard heater, floor standing heater
Fuel type	Electric

Type of control of heat supply	Electronic control of the heat supply with DIGEL HEAT control units or comparable control units, which are compliant according to the current Ecodesign Directive (EU 2015/1188). (The unit must be connected to a grounded AC wall outlet or supply line with a radio socket receiver, surface-mounted receiver or flush-mounted radio receiver.)
Other control options	
Type of heat output / room temperature control	Type of heat output / room temperature control Optional DIGEL HEAT control units
Technical service life	>20 Years
Input voltage	230VAC
Nominal heat output	250 watts, 350 watts, 420 watts, 430 watts, 540 watts, 560 watts, 680 watts, 750 watts, 810 watts, 820 watts, 860 watts, 900 watts, 930 watts, 1035 watts, 1150 watts, 1250 watts, 1350 watts
Minimum heat output	Nominal heat output -8%
Max. cont. heat output	Nominal heat output
Auxiliary power consumption	N.A.
At nominal heat output	N.A.
At minimum heat output	N.A.
In standby mode	N.A.
Surface temperature	approx. 90°C to 105°C
Weight	3.5 kg to 25 kg
Materials	Surface: sheet steel, powder-coated aluminium or toughened safety glass Rear panel: powder-coated sheet steel
Protection class	IP20, IP54 fixed connection IP64
Ambient conditions	0°C to +35°C; 10-80 % relative humidity

Specification	Value
Type of heat output / room temperature control	
single stage heat output, no room temperature control	no
two or more manual stages, no room temperature control	no
room temperature control with mechanic thermostat	no
with electronic room temperature control	no
electronic room temperature control plus day timer	no
electronic room temperature control plus week timer	yes
Other control options	
room temperature control with presence detection	no
room temperature control with open window detection	yes
with remote control option	yes
with adaptive start control	yes
with working time limitation	no
with black bulb sensor	no

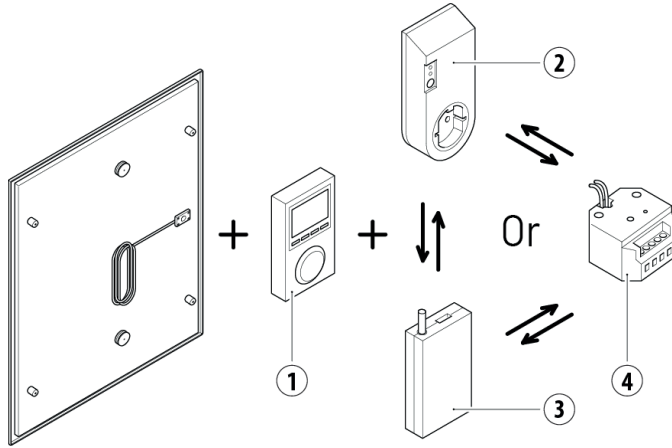
2.3 Product components



- A. Infrared heater
- B. Power cable with mains plug
- C. Fastening bolts
- D. Support
- E. Spacer

2.4 Measures to improve environmental sustainability

In order to reduce the energy consumption and thus reduce CO₂ emissions, you should connect your DIGEL HEAT infrared heater with a combination of the following control components.



	Item no.	Description
1	7729936	Radio thermostat which can be programmed with adaptive start control
2	7729977	Radio socket receiver
3	7729997	Radio receiver for fixed connection (surface-mounted)
4	7729974	Radio receiver for fixed connection (flush-mounted)

Optional for supplementing and improving the seasonal space heating energy efficiency:

Item no.	Description
6412305	Radio open window detector
6700105	Central control TYDOM (for control via the app)

Your DIGEL HEAT infrared heater complies with Regulation (EU) 2015/1188 (Ecodesign) if the infrared heater is designed with a radio thermostat ① and a radio receiver ②③④.

Calculation basis for electric fixed space heaters

In Brussels, the seasonal space heating energy efficiency (η_s), which is to be determined for every electric space heater, has been worked out.

According to Annex II, point 1 of Regulation 2015/1188, the seasonal space heating energy efficiency of electric fixed local space heaters with a nominal heat output above 250 watts shall not be less than 38 % - for a nominal heat output under 250 watts, not less than 34%.

How do you calculate the seasonal space heating energy efficiency (η_s)?

The formula is: $\eta_s = 30\% + F(1) + F(2) + F(3) - F(4) - F(5)$

Infrared heaters have a base value of 30%. "F(1)" to "F(5)" are the so-called correction factors, of which, however, only "F(2)" and "F(3)" are relevant for the infrared heater.

As can be seen in the tables in the Regulation regarding correction factor "F(2)", the following individual values should be included for electric fixed local space heaters (values are mutually exclusive and cannot be added together):

- Mechanic thermostat: + 1%
- Electronic thermostat: + 3%
- Electronic thermostat with day timer: + 5%
- Electronic thermostat with week timer: +7%

Correction factor "F(3)" should be included as follows (values cannot be added together):

- With remote control option: +1%
- Room temperature control with open window detection: + 1%
- With adaptive start control function: + 1%

Conclusion and calculation example

A maximum value of 39% can thus be achieved. You can already achieve the required 38% with the control components shown in our overview chart (infrared heater + radio thermostat + radio receiver).

+ DIGEL HEAT infrared heater	30%
+ Electronic thermostat with week timer	7%
+ With "adaptive start control" function	1%
= Result:	38%

In order to reach the maximum value of 39%, you also need the radio open window detector.

+ DIGEL HEAT infrared heater	30%
+ Electronic thermostat with week timer	7%
+ With "adaptive start control" function	1%
+ Radio open window detector	1%
= Result:	39%

With DIGEL HEAT infrared heaters, you can count on quality products manufactured in Germany. Our infrared heaters are constantly being further developed and optimised! In addition, you can always rely on the best service and the entire expertise of us and our sales network!

You can find an up-to-date information sheet on the topic and the Ecodesign Directive on our website.

Directive:

<https://eur-lex.europa.eu/legal-content/EN/ALL/?uri=CELEX:32009L0125>

3 Safety instructions



Read all the safety instructions and make sure that you have understood them.






3.1 Warnings and safety information

- The unit is suitable for indoor use. Never use it outside.
- The unit has no in-built temperature control (only temperature limiter). For this reason, the unit must not be used in small rooms where the people there cannot leave them independently, unless constant supervision is guaranteed.
- This unit is not designed for use by persons (including children aged 8 and over) with reduced physical, sensory or mental abilities or a lack of experience and/or knowledge, unless they are supervised by someone who is responsible for the safety of the unit and its correct use and gives appropriate instructions.
- Children aged 3 - 7 may only switch the unit on and off if they are supervised and have been instructed in the safe use of the unit and have understood the resulting hazards, provided that the unit is positioned or installed in its normal place of use. Children aged 3-7 must not insert the plug in the socket, regulate the unit, clean the unit and/or carry out user maintenance.
- Children under 3 years of age must be kept away unless they are constantly supervised.
- Keep the unit away from children to avoid injuries. Children must be supervised and it must be ensured that they do not play with the unit.
- Never leave children unsupervised with the packaging material. The packaging material can cause death by suffocation. Children often underestimate the risks. Always keep the packaging material away from children.
- Always be alert and act with caution. Do not use electrical equipment if you suffer from concentration problems or do not have the necessary awareness or if you are under the influence of drugs, alcohol or medication. Even the slightest lack of attention when using electrical equipment may cause serious accidents and injuries.
- Check the unit (and, if necessary, the cables) for damage prior to use. If you notice visible damage, a strong odour or excessive overheating of components, unplug everything immediately and stop using the unit.

- Failure to install and use the unit in accordance with this manual can cause dangerous interference with the radio or television reception or affect other electronic equipment.
- The infrared heater may only be mounted using the suspension device supplied. The warranty will be invalidated for damage resulting from installation without the original suspension device and no liability is accepted for consequential damage. The heating elements may only be used with the original frame, otherwise the warranty and liability for consequential damage are excluded. Before connecting the unit to the power supply, check that the mains voltage in your house matches the voltage indicated on the power supply.
- The unit must be connected to a grounded AC wall outlet with a radio socket receiver, radio thermostat or flush-mounted radio receiver.
- The unit has a Schuko type plug. Only plug your unit into a socket that corresponds to the plug on your unit.
- Never pull on the mains cable as this can cause damage to the plug. Unplug the unit to turn off the power!
- Do not pinch the cable and avoid kinks.
- If the mains supply cable of this unit gets damaged, it must be replaced by the manufacturer or its customer service or by a similarly qualified person in order to avoid hazards.
- Never touch a mains plug or the unit with wet hands.
- Keep the unit away from moisture. Do not use the unit in the direct vicinity of a bath, shower or swimming pool.
- Persons taking a bath or shower must never come into contact with the mains voltage.
- High-quality toughened safety glass is used for glass heaters. This is a mechanically stable safety glass that breaks up into small, less sharp pieces in the event of damage. **WARNING!** Mechanical stress on the glass must be avoided. If the glass front is damaged, the heating element must be immediately disconnected from the mains and not operated again. The infrared heater must be dismantled as there is a danger of falling parts.
- Only use the unit within the specified power limits.
- Ensure that the circuit can be broken immediately, e.g. via a fuse switch or a residual current circuit breaker.

- Short circuits can cause electric shocks.
- Keep the unit away from combustible materials such as curtains and drapes.
- Do not place objects on the infrared heaters or cover up the heating element.
- Do not touch heating elements in operation. This may result in severe burns as the surface of the infrared heater can get as hot as 105°C in operation.
- Make sure the plug cannot be used by third parties (in particular children).
- Assuming that the unit cannot be operated safely, it must be switched off and protected from unintended use.
- Disconnect all plugs before cleaning the unit. Do not use any cloths or chemicals that may damage the surface. Wipe the housing with a damp cloth. Electrical / electronic parts must not be cleaned.
- Do not attempt to open, modify or repair the unit. Do not drop it, do not drill into it, do not break it and do not subject it to high pressure.
- You must never carry out repairs to the infrared heater yourself. Always contact a specialist dealer. Modifications to the unit and technical changes are prohibited.

3.2 Explanation of the information on the unit and packaging

Information	Meaning
	<p>The unit complies with the relevant European directives.</p>
	<p>The unit has been tested by TÜV in accordance with the requirements of the EMC directive.</p>
	<p>The unit has been tested by TÜV in accordance with the requirements of the Product Safety Act (ProdSG).</p>
	<p>RoHS Directive 2011/65/EU</p>
	<p>This unit must not be discarded as unsorted waste, but must be taken to a special collection point. WEEE-No: DE 63054412</p>

4 Installation

4.1 Transport and storage of the product



WARNING Exercise caution when handling, lifting, carrying and transporting the product so as not to damage it.

For the safe storage of the product:

1. Ensure that the product is in its original packaging.
2. Store the product at a temperature between +5°C and +40°C at a relative humidity of max. 50 % at +40°C.

4.2 Assembling the product

4.2.1 Unpacking and checking the packaging contents

To check the contents:

1. Remove the transport and packaging elements.
2. Check whether the package includes the following parts:
 - 1 x infrared heater
 - 1 x assembly kit
 - 2 x supports
 - 8 x screws
 - 8 x wall plugs
 - 1 x operating instructions

4.2.2 Minimum space requirement

Please note the following:

- The minimum distance from objects on the front side of the product should be 40 cm. A minimum distance of approx. 20 cm should be maintained at the sides.



WARNING To avoid overheating of the heater, do not cover the device!

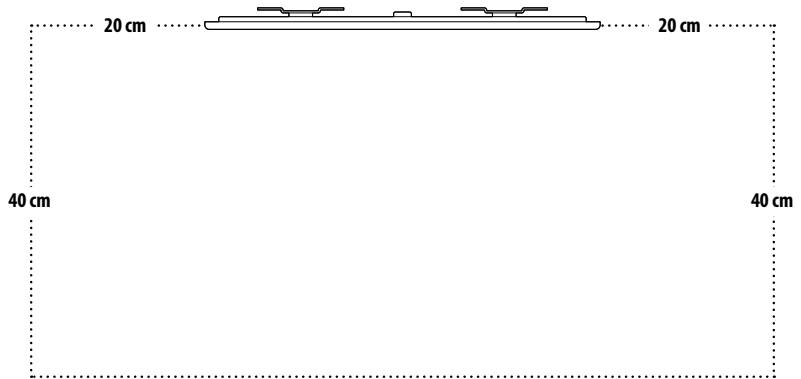


- The heating element must not be installed in the direct vicinity of a bath, shower or swimming pool. In case of installation by a specialist company, the standard VDE 0100 part 701, part 702 and part 703 must be applied.



WARNING The device must not be installed directly under a wall socket!

- VDE 0108 must be complied with for installation in publicly accessible spaces.



4.2.3 Installation of the infrared heater

NOTE

- The infrared heater may only be mounted using the suspension device supplied.
- Assembly and electrical installation may only be carried out by a trained specialist.
- Drilling holes in the infrared heater is not permitted and will destroy your unit. If drilling is carried out on the infrared heater, its operational safety is no longer guaranteed. The unit must therefore no longer be connected to the mains.

Tools required:

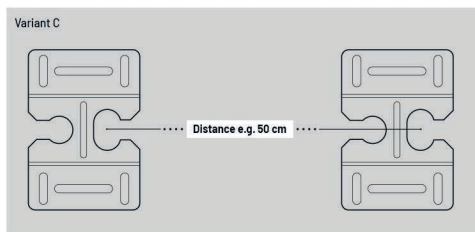
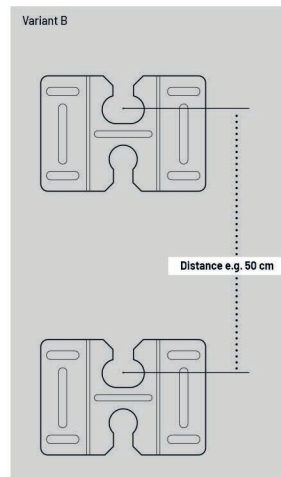
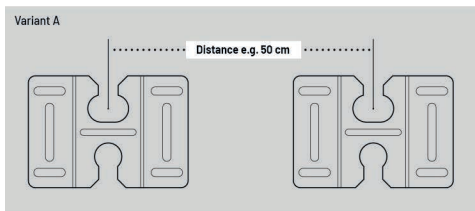
- Pencil
- Drill bit (8 mm)
- Phillips screwdriver
- Self-retracting metal tape measure
- Spirit level

Assembling the unit:

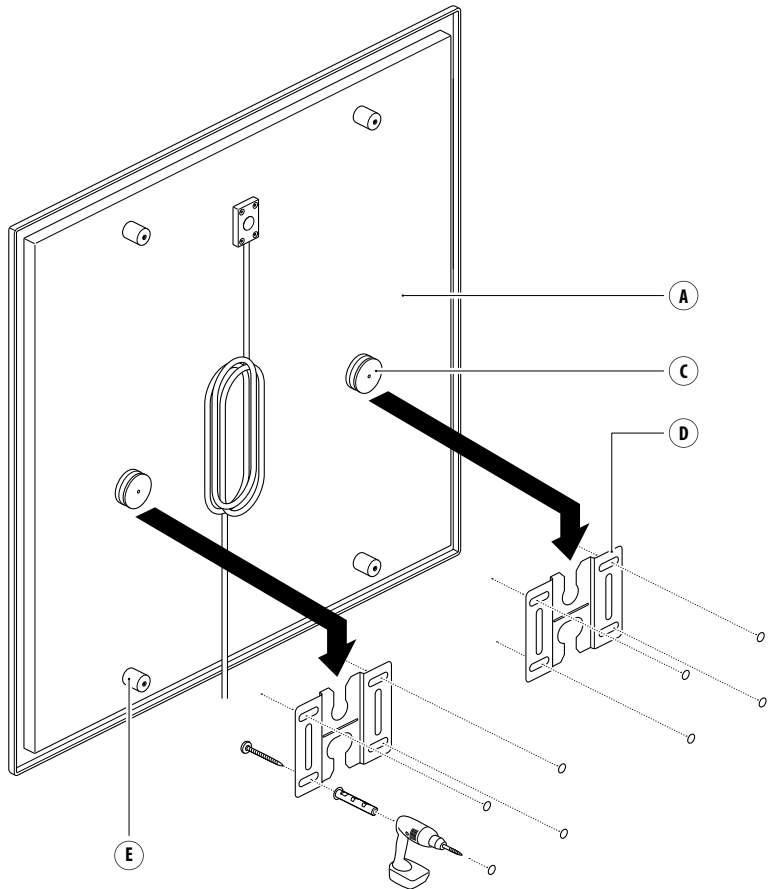
1. Make sure that the load-bearing capacity of the wall or ceiling is adequate. Make sure that the wall or ceiling materials are suitable for assembly.
2. Measure the distance between the centre points of the **fastening bolts** (C) (The distance varies depending on the model and may, for example, be 50 cm).
3. Determine the position of the drill holes in the wall or on the ceiling for mounting the **supports** (D). To do this, use the **supports** as a template. **NOTE!** Please make sure that the unit is suspended 1.2 m above the ground in a child's room or in rooms accessible to children.

Possible versions of the supports:

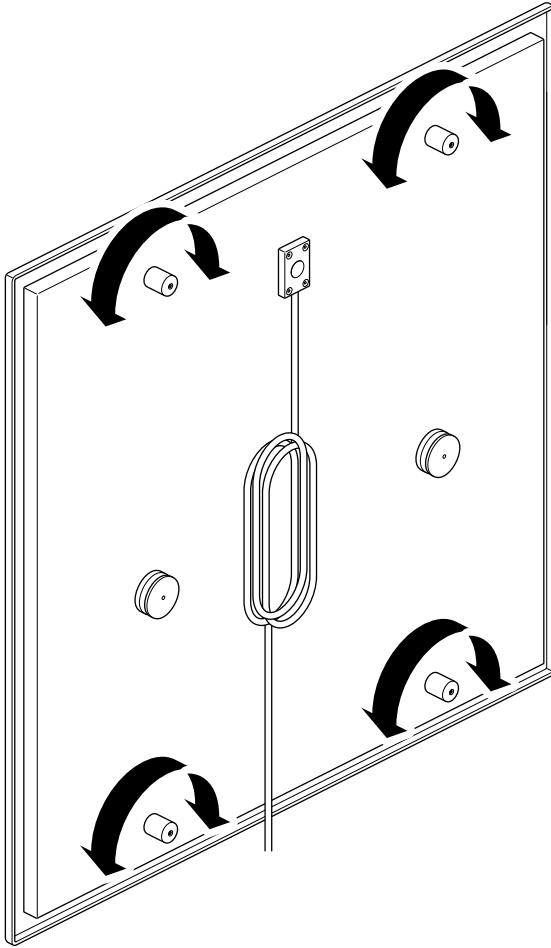
- A. Horizontal installation / ceiling mounting. **NOTE!** Only the Classic and Standard model are suitable for ceiling mounting.
- B. Vertical installation / wall mounting
- C. Horizontal installation / wall mounting
Note: The 250 watt and 350 watt models can only be installed horizontally in version C.



4. Use the 8 mm drill bit to drill the eight holes into the wall.
 5. Insert eight **wall plugs**.
 6. Secure the **supports** (D) with the eight **screws**.
 7. Place the **infrared heater** (A) with the **fastening bolts** (C) on the **supports** (D).
- CAUTION!** Make sure that the infrared heater has fully cooled down.



8. Turn the four **spacers** (E) to lock the **infrared heater** in place.

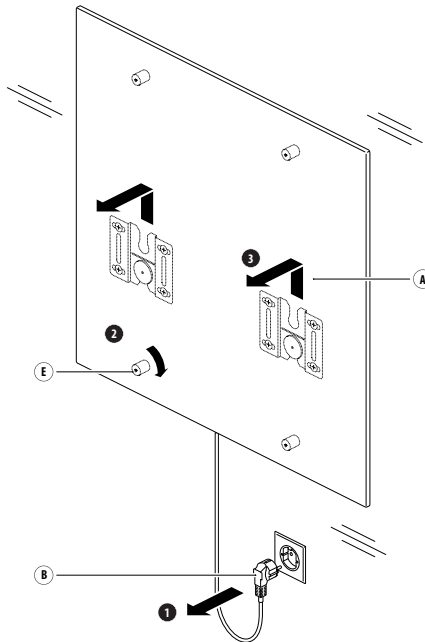


9. Connect the **infrared heater** electrically. Choose one of the following control components (see Measures to improve environmental sustainability)
 - Connect the **mains plug** with a radio socket receiver to a grounded wall outlet.
 - Connect the **power cable** (B) to a radio thermostat. **WARNING!** This fixed electrical connection may only be carried out by a trained specialist.
 - Connect the **power cable** (B) to a flush-mounted radio receiver. **WARNING!** This electrical installation may only be carried out by a trained specialist.

4.2.4 Disassembly

To dismantle the unit:

1. Unplug the **mains plug** (B).
2. Loosen the **spacers** (E), to unhook the infrared heater again.
3. Remove the **infrared heater** (A).



4.3 Initial start-up

NOTE

Please note that when the ink is still fresh and damp, there may be evaporation of the UV ink during the initial heating phases (1-3 days). The ink and its vapours are not harmful to health and do not contain any solvents. Safety data sheets can be requested from the respective specialist dealer.

To start up the infrared heater:

1. Leave the infrared heater in operation for several hours (if necessary, 1-2 days).
2. After this initial start-up, a pleasant indoor climate is immediately established. The operating time of the infrared heater can now be limited to a minimum or timed with the room thermostat. We recommend using our high-quality radio thermostats to achieve the most efficient and energy-saving heating performance possible of the Digel Heat infrared heater.

5 Maintenance and cleaning

5.1 Maintaining the product

To clean the infrared heater:

1. Before cleaning the infrared heater, unplug it from the mains or use the fuse switch to break the circuit.
2. Make sure that the infrared heater has fully cooled down.
3. Wipe the infrared heater with a damp cloth or chamois that you have made damp with a solution made up of a non-abrasive cleaning agent and a few drops of warm water. **CAUTION!** The infrared heater must never be kept under running water or submerged in water. The heating elements must never be cleaned with a wet cloth or spray water. Scouring agents, abrasive and aggressive cleaners and rough cleaning cloths must not be used.
4. Wipe off any remaining moisture with a dry cloth. **WARNING!** The heating element must be completely dry before the heater is started up again.

6 Disposal

6.1 Disposal of electronic equipment



The symbol on the unit, accessories or packaging indicates that this unit must not be discarded as unsorted waste, but must be taken to a special collection point! Dispose of the unit at a collection point for the recycling and disposal of electrical and electronic equipment within the EU and in other European countries which have systems for the separate collection of electrical and electronic equipment. By correctly disposing of the unit, you are helping to prevent potential hazards for the environment and people's health which may be caused by improper handling of old appliances. Recycling materials contributes to the conservation of natural resources. Therefore, do not dispose of old electrical and electronic equipment in unsorted household waste.

6.2 Disposal of packaging

The packaging is made of environmentally friendly materials, which can be disposed of at your local recycling points. By properly disposing of packaging and packaging waste, you are helping to prevent potential hazards for the environment and public health.

7 Warranty

7.1 Warranty declaration

1. Digel Sticktech GmbH & Co. KG (hereinafter referred to as "Digel"), as manufacturer of the Digel Heat infrared heater, guarantees the customer (hereinafter "customer") in accordance with the following provisions that the infrared heating element (hereinafter referred to as "product") supplied to the customer within Europe will be free of malfunctions for a period of five years following conclusion of the purchase contract.
2. In the event of a proven warranty claim within the warranty period, Digel shall either repair or replace the product free of charge.
3. If services are provided under the warranty, the original warranty period shall apply. If a claim is made under the warranty, the warranty period is therefore neither extended nor does a new warranty period begin.
4. In addition to the warranty, the customer shall be entitled to its statutory rights, in particular its warranty claims under §§437 BGB (German Civil Code) et seq. for subsequent performance, withdrawal, reduction as well as reimbursement of expenses and damages without limitation. These rights are neither curtailed nor limited by the warranty declaration issued. This shall apply regardless of whether a warranty claim is made or the warranty is invoked or not.
5. The warranty period for picture surfaces and heating surfaces is two years.
6. The warranty does not expire if the mains plug is disconnected from the unit in order to establish a so-called fixed connection, for instance.

7.2 Exclusion of warranty

Claims under this warranty shall only be entertained if

- the product has no damage or signs of wear caused by use which deviates from the specifications according to the user manual,
- no unauthorised additions, conversions or other modifications have been made to the product, and any defects are not due to the use of accessories, additional parts or spare parts which are not DIGEL HEAT original parts,
- assembly and installation have been carried out properly in accordance with the installation instructions of Digel and thus the limit values for supply voltage and

ambient conditions have been complied with, no chemical or physical effects can be detected on the material surface of the product which can be attributed to improper use (such as through the use of incorrect cleaning agents or through the use of sharp objects), and

- the product number of the product has not been removed and can be identified.

7.3 Assertion, presentation of the original proof of purchase, applicable law

1. Claims under the warranty can only be asserted by handing over or sending the product to Digel Sticcktech GmbH & Co. KG - Reklamationsabteilung -, Hermann-Burkhardt-Straße 7, 72793 Pfullingen. The customer is only entitled to make a claim under the warranty on presentation of the original proof of purchase, which must contain the date of purchase. Digel shall specify a carrier for the customer to send back the product for repair or replacement and shall cover the transport costs. However, if the customer decides to use a different carrier, the manufacturer shall not be liable for the costs of sending the product.
2. This warranty is governed by the laws of the Federal Republic of Germany, excluding the UN Convention on Contracts for the International Sale of Goods (CISG).

7.4 Contacting us

Always get in touch with Digel Sticcktech GmbH & Co. KG first before sending the product. The performance warranty is valid for five years from the date of purchase. The faulty product must be sent within two weeks. Sent the unit to:

Digel Sticcktech GmbH & Co. KG

Hermann-Burkhardt-Str. 7

D-72793 Pfullingen

Annex I - Supplied accessories

Description	Item number
Chipboard screw WÜPOFAST	10000001
Plastic wall plug ZEBRA Shark W-ZK®	10000013
Holder for infrared rear panel	10000090

