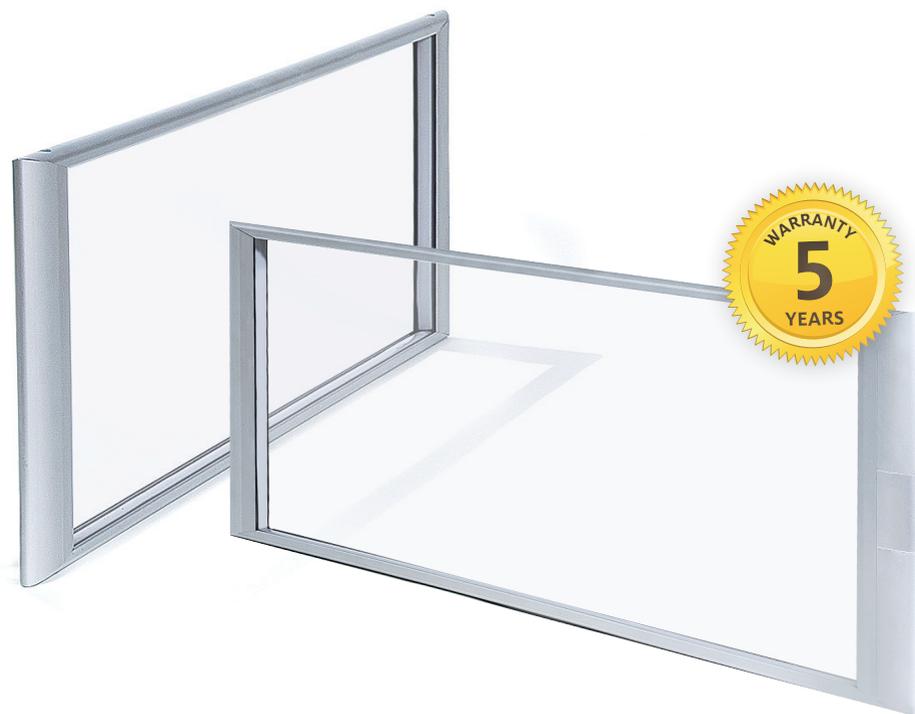




Infrared Heating
Glass Solutions



Infrared heater **PION ThermoGlass®**

User Manual

Model types:

P04 – 400 W / **P06** – 600 W / **P10** – 1000 W / **P13** – 1300 W



Lower
weight



Smaller
dimension



More
heat

www.pion.cz/en

Dear Customer,

Infraline, s.r.o. would like to thank you for the trust you have put in our company by purchasing the PION ThermoGlass® infra-red heater.

We firmly believe that you will be satisfied with its thermal comfort, convenience and low cost of use.

Please take a few minutes to review this manual, which will provide you with the necessary information about placing and using your new heater.

Heating by means of infra-red radiation is highly effective and reasonably economical. It is currently considered to be the most effective type of heating. Heat transfer by means of infra-red rays causes that 93% of the radiated heat is absorbed by the floor, walls and objects in the room, which then warm up the surrounding air.

Install infrared heaters PION ThermoGlass® on the wall.

The heating side of the panel heats up to 220 °C, evenly radiating heat rays and heating up the surrounding surfaces which then use the accumulated heat to warm up the surrounding air.

Unlike conventional convection heating, the vertical distribution of temperature is different; the air near the floor is warmer than the air at head level of a standing person so one feels very comfortable.

This heating method has many advantages over the other types, such as increased area for heat transfer, occurrence of rotating columns of dust limited to a minimum, generally slower cooling of the room, minimum heating of air under the ceiling or significantly reduced drying of air. All these features in turn contribute to the conservation of electricity, thus ranking infra-red heating among the most convenient and at the same time energy efficient methods of modern heating.



WARNING:

Before using the infrared heater for the first time, please make sure you have read this user manual thoroughly; and once finished, keep the brochure handy for possible future consultation, as long as you continue using the unit.

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Safety instructions

Operational safety

- Do not use the heaters for other than the stated purposes of heating.
- Do not interfere with the structural design of the heaters! Making any structural modifications will void the warranty.
- Install the heaters in accordance with the installation and wiring instructions.
- The heaters are designed to heat residential and utility rooms, except for areas where there is a risk of explosion.
- The heaters can be used in wet areas, but may not be in direct contact with water.
- Do not sink the heaters in water or other liquids; this would cause damage to the heaters.
- The power cable may not be in contact with the hot surface of the heater!
- Do not hang any other objects on the fixed heater and do not cover its surface.
- Heater repairs must be performed by qualified personnel of an authorized service centre.
- Only original spare parts can be used to repair the heaters.
- Do not touch the heating side; this reduces heating efficiency.

Wiring instructions

- Connect the heaters to a 230V AC power source only.
- Heater connection to the mains should only be done using a dedicated cable.
- In the case of fixed installation with thermostats, entrust the electrical connection to a professional company.
- Faulty connection of the device will void the warranty!
- The heater must be grounded and equipped with electrical protection against overvoltage and short-circuit current.



CAUTION:

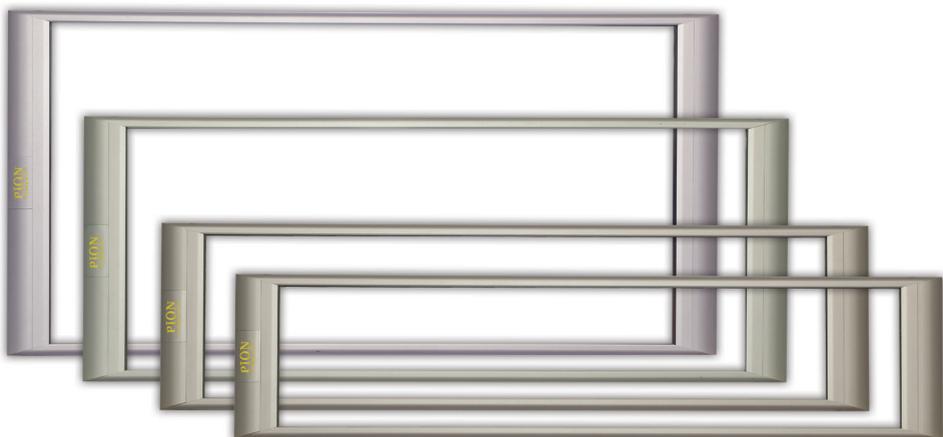
- **When in operation, the heating side of the panel reaches a temperature of 220 °C. Avoid touching the surface of the heater not only when in the „on“ mode, but also several minutes after switching off. Risk of burn injury!**
- **The heater must not be used, if the glass is damaged!**
- **Do not install the heater on the ceiling, but on the wall only.** (see p. 7)
- **The bottom edge of the heater must be at least 1,8 m above the floor.** (see p. 7)
- **Prevent children from operating and touching the heaters!**

Technical data:

Model	Nominal Output (W)	Voltage (V)	Rate of Current (A)	Dimensions (mm)	Weight (kg)	IP Code	Heated area (m ²)
P04	400	230	1.7	835 x 117 x 23	2.2	IP54	6.0
P06	600	230	2.6	835 x 157 x 23	2.7	IP54	9.0
P10	1000	230	4.3	835 x 268 x 23	4.0	IP54	15.0
P13	1300	230	5.7	835 x 307 x 23	5.0	IP54	20.0

Contents of the Product Package

- PION Thermo Glass infrared heating unit
 - Installation set
 - Protective packaging
 - User manual
- The heater may not be operated if the glass is damaged!
 - The heater must be installed min. 1.8 m above the floor.
(See the Minimum Space and Size Requirements table on page 7)
 - This appliance is not intended for use by persons (including children) whose reduced physical, sensory or mental capabilities or lack of experience and knowledge prevent them from safe use of the appliance unless supervised or instructed on the use of the appliance by a person responsible for their safety.



CAUTION:

When handling the heater during installation, use clean cloth gloves. Avoid contact with the heating glass surface. In case the surface or the supporting and insulating members are contaminated, immediately clean the affected spots with alcohol or a window cleaner.

Mounting instructions

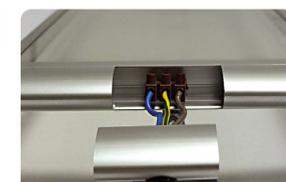
- Take the heater panel out of the packaging and place it on a horizontal surface with the heating side facing down.
- Select an appropriate place for the installation of the heater on the wall and mark the position of the holes for the fastening of the hangers (see the installation diagram).
- Fasten the hanger fixtures using screws to the marked points.
- Remove the power connection cover and connect the power cable to the panel. Route the cable through the opening in the fitting and replace the connection cover.
- Heater connection to the mains should only be done using a dedicated cable.
Do not leave the cable lying loosely on the hot panel surface as there is a risk of damage to the cable!
- Before turning the heater on, wipe the heating panel with alcohol.
- The start-up time of the infra-red heater for the selected mode is about 5 minutes.



hanger angle bar



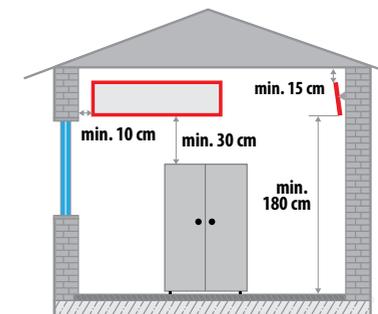
power connection cover



cable connection clamps

Minimum Space and Size Requirements

- 1) – The bottom edge of the heater must be at least 1,8 m above the floor.
- 2) – The distance from walls must be at least 10 cm.
- 3) – The distance from ceiling must be at least 15 cm.
- 4) – The distance between the heater and objects situated in heater's impact zone must be larger than 30 cm.



CAUTION:

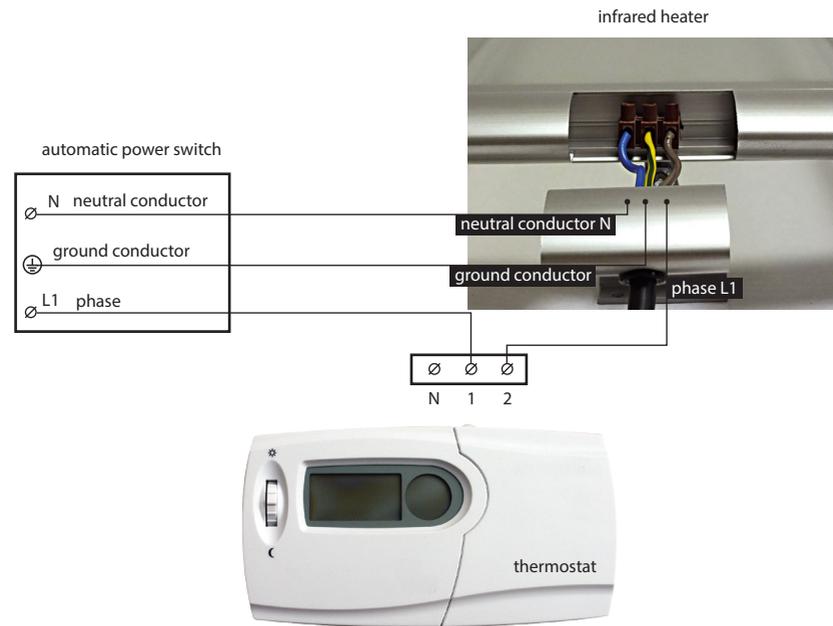
Keep the minimal installation height of the heater at 1,8 m above the floor. The standard enclosed fixture set ensures safe attachment of the infrared heater on the wall with wooden, concrete, metal, etc. surface. In the case of walls with an artificial surface finish then standard mounting is allowed only if the plastic material has a thermal tolerance of 80 °C or more.

Wiring instructions

If you have chosen fixed power grid connection for your heaters, please entrust the installation to a professional company. When implementing this connection method, observe the following guidelines:

- Electrical connection of the heater must be provided by a cable of corresponding electrical load.
- Remove the power connection cover and connect the power cable to the panel.
- Attach the wire ends of the power cable to the relevant clamps on the heater as indicated.
- Route the cable through the opening in the fitting and replace the connection cover.
- When connecting the unit to a power grid using a thermostat, the installation must be carried out in compliance with the instructions provided by its manufacturer.
- The thermostat should be mounted 1.5 meters above the floor. When selecting its position, avoid draught and such zones that would put the thermostat under direct impact of heat rays or other types of heat sources in order to prevent malfunctions.
- In accordance with the relevant regulations, the fixed wiring must include means for disconnection from the grid and opening of contacts at all poles.

Wiring diagram for the heater with a thermostat



Unit Operation and Maintenance

The heating unit you have purchased basically does not require any maintenance or service. There are only two tasks necessary for ensuring its continuous reliable operation over the years:

- If dusty, use a wet cloth to clean the casing and use industrial alcohol for wiping the heat-emitting panel (only when the heater is off and cool).
- Once a year, prior to the heating season, check whether the wire contacts of the power cord are in working condition and make sure the clip connectors have not come loose.

The infrared heater may only be used under the following conditions:

- The ambient temperature must be between $-50\text{ }^{\circ}\text{C}$ to $+50\text{ }^{\circ}\text{C}$.
- Relative air humidity at a temperature of $25\text{ }^{\circ}\text{C}$ must not exceed 80% .

Troubleshooting

Problem	Solution Tips
Insufficient heating performance	<ul style="list-style-type: none"> • Check what the voltage is on the unit's terminal clamps, the values should read $230\text{ V} \pm 10\text{ V}$ when in operation. • Make sure that the thermostat is in perfect condition. • Compare the values indicated on the thermostat with the reading of your standard indoor thermometer, duly located next to the thermostat. The deviation in thermostat start-up must fall within the range of $\pm 2\text{ }^{\circ}\text{C}$.
The unit does not heat	<ul style="list-style-type: none"> • Make sure there is power in the power grid. • Check whether the power cord is intact. • Check all contacts at the unit's terminal board. • Check the power plug contact points . • See whether the thermostat is working properly. • Turn to authorized dealers for help.

Storage Instructions

The heater should be stored in its original package on such premises where temperature ranges between $-50\text{ }^{\circ}\text{C}$ and $+50\text{ }^{\circ}\text{C}$ and air humidity does not exceed 80%. The heater should be safeguarded against banging, dust and moisture. The heat-emitting panel should be treated and handled with extra care; don't touch its surface. Should it ever get stained then you may wipe it with industrial alcohol.

Terms of Warranty

- The manufacturer guarantees the heater's sound operation for a period of 5 years from the date of purchase.
- Should functional defects occur during the guarantee period as a result of some failure or shortcoming on the part of the manufacturer, then the manufacturer shall repair such an appliance free of charge or replace it in compliance with the stipulations of herein stated terms and conditions.
- The guarantee may be claimed only if an original of the shipping document with a proof of purchase is presented simultaneously.
- This warranty does not constitute a right for indemnification of damages that originated as a result of adjustments carried out on the appliance without the prior written consent of the manufacturer even if these had been made so that the product would comply with the local technical regulations and safety standards in force.

This warranty is void should any of the following occur:

- The buyer tampers with the construction design of the appliance.
- Incorrect handling and/or operating the appliance.
- Using the appliance in ways that do not comply with the relevant applicable provisions and/or the stipulations of the user manual provided by the manufacturer.
- Installing equipment whose operation is in breach of technical regulations and safety standards.
- Repairs carried out by an unauthorised service provider/s or seller/s.
- Some type of accident, a lightning strike, flood, fire as well as other adverse causes that are beyond the reasonable control of the manufacturer so that the event is considered as force majeure.
- Flaws and defects that originated in the course of transportation en route to the client (apart from times when the transportation is carried out by an authorized dealer or the manufacturer).
- The internal system within which the appliance was operated turns out to be defective.
- Operating the appliance at a higher voltage than prescribed (i.e. with a deviation of over 10% above the nominal level) and/or at environmental humidity exceeding 80% at 25°C temperatures.

Certificate of Warranty

A. The appliance was accepted for repair under warranty:

Name of company: _____

Address: _____

Description of reported defect: _____

Received on (date): _____ Returned on (date): _____

Signature: _____

B. The appliance was accepted for repair under warranty:

Name of company: _____

Address: _____

Description of reported defect: _____

Received on (date): _____ Returned on (date): _____

Signature: _____

Receipt A	Receipt B
A. The appliance was accepted for repair under warranty:	B. The appliance was accepted for repair under warranty:
Name of company: _____	Name of company: _____
Address: _____	Address: _____
Description of reported defect: _____	Description of reported defect: _____
Received on (date): _____	Received on (date): _____
Returned on (date): _____	Returned on (date): _____
Signature: _____	Signature: _____

