

PLANAR cottage heater manual

PLANAR 44D heaterpackage brings the comfort to Your cottage. The only available solution where the heater is installed on the outer wall of the cottage leaving noise, exhaust gases and the needed space outside. Only fresh, heated air will flow inside through the wall-through mounting set. If wanted, it is possible to circulate the inner air through the heater, in this case You need additionally an intake wall-through pipe (not included in standard package).

PLANAR heater works effectively and silently with the long lasting brushless motor. The heat will spread quickly even to the larger area. Automatically regulating 1-4 kW power is enough for even up to space of 100 m² of floor area.

Naturally You can use at the same time other heat sources like fireplace or oven etc. PLANAR heater does not use the air inside for the burning process causing underpressure in the room. Otherwise it just brings fresh heated air inside helping fireplaces to work better and keep the chimney dry. To prevent the overpressure inside the room it is recommended to install separate air-valve. The overpressured air naturally leaves through the possible chimneys for the fireplaces, just check they are in open position all time when the heater is working.

Safety and specially the fire-safety is the most important matter in cottage use. PLANAR heater is CE-approved and has electronically controlled functions for the errors and overheating situations. The heater will stop automatically in error situations. Also it is fully outside in non-burning, metallic mounting-box. Exhaust gases and all hot parts are safely isolated outside. The wall-through installation works same time to protect noise and to isolate the hot tube from the burning materials. It is made of only non-burning parts. The air-valve to be installed inside is specially planned to spread the heated air silently for the maximum large area.

PLANAR heater needs always electric power of 12 (24)V, normally accumulator. In the mounting box, there is a planned space for max. 60Ah battery, we strongly recommend AGM type of batteries. Naturally if the cottage already has a solar power system with batteries-this can be used as well. If not, the recharging of the battery can easily be made of small solar panel and charging unit. The electricity need is very small, approx. 50 W solar panel is enough for charging.

Technical data

Fuel:	diesel, winter quality for winter use
Power:	1-4 kW, automatic thermostate
Voltage:	12V (battery) + charging system needed (not included)
Fuel consumption:	0,12-0,51 l/h = 2,9-12,2 l/24h
Consumption of electricity:	0,3-0,7A = 7,2-16,8 Ah/24h
Heat reguator:	Remote control with thermostate (manual by power also possible)
Ignition:	Remote control or GSM smartphone app (option)
Measurements:	880x320x280 mm mounting box, outside installation
Weight:	n. 24 kg
Heated area:	60-100 m ²

PLANAR- COTTAGE HEATERS INSTALLATION, USE AND SERVICE

Before installation and use it is necessary to get carefully familiar with these instructions and the separate installation manual of the heater. Correct and careful installation guarantees long life for the heater parts. If You are not certain of the installation, leave it for the professionals or ask from the importer info@teplostar.se

CHOOSING THE CORRECT MOUNTING PLACE

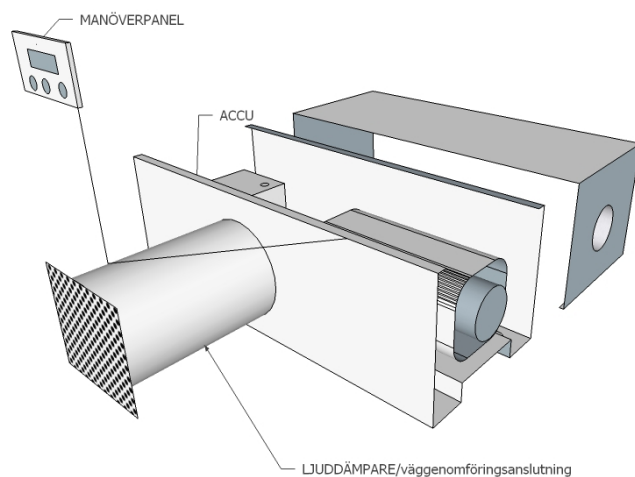
Choose the mounting place so that there is free space for the heated air to spread for the whole area. Note that You need to drill a hole of 210 mm diameter for the wall for the wall-through kit and a small 6-8 mm hole for the remote control wire.

The inner air-valve should locate 70-120 mm up from the floor surface.

Also note that the charging of battery must be organized.

The fuel tank (not included) should be approx.. 20-50 l., and to be placed normally under the mounting box. It can be also covered by separate box.

Note also that the snow, falling from the roof should not reach the mounting box.



Picture 1. mounting kit

Following parts are included for the cottage heater kit:

- Planar 44D 12 V heater with the full basic installation kit, digital remote with thermostate and a fuel pick-up part (Fuel tank not included!). Separate installation instructions for the heater.
- Exhaust pipe with the silencer
- Mounting box 880x320x280 mm, zincd and PURAL-painted, dark grey RAL7024, space for the battery of 60 Ah, AGM (Battery not included)
- Installation part set for the mounting box, max load 180 kgs, easy to install, painted and resonance voice protected. Picture 2.
- 100 mm airpipe set (from the heater)
- 100/200 mm round wall-through kit with the silencer, Non-burning mineral wool isolated. Length 300 mm, including the connection parts for the inner air-valve. Picture 3.
- Inner air-valve, perforated, silent, 220x160x70 mm. colour white. Special construction to spread the heat for the max. area. Picture 4.

Following parts are NOT included for the cottage heater kit:

- Battery

- Fuel tank. Recommended 20-50 ltr universal, plastic or metallic. Tank pick-up can be installed easily for the tank.
- Charging (solarpanel) system for the battery. The consumption of the electricity is very small, for example in continuous use a battery of 60 Ah will work for 2-5 days without charging. Connection for the already existing solarpanel system and batteries is recommendable too. If not having already solar panels there are small and handy systems available in the market.
- Smartphone use GSM SIMCOM 2 (option)



Picture 2. mounting box wall installation kit



Picture 3. Wall-through part 100/200 mm, length 300 mm



Picture 4. Air-valve (inner part)

INSTALLATION

1. Read the manual for the heater installation first.
2. Drill a hole of \varnothing 210 mm for the selected installation place on the wall, note matters mentioned earlier.
3. Install the wall-through part 100/200 mm L=300 mm to the wall. Isolate it by using mineral wool or polyurethane. Place it so that it comes out from the surface of the inner wall approx. 10-20 mm. Install the air-valve inside the room.
4. Install the box holder parts tightly to the wall in the right position (the side hole of the box should fit to wall through part). Use the rubber parts under the box to prevent resonance voices.

5. Place the mounting box for the holder. Note that at least a dimension of 100 mm should be between the box and the wall. The right, final distance depends normally on the wall thickness. If having a very thin wall, the silencer or pipes can be cutted for shorter.
6. Install the heater on the bottom of the box for the ready installation holes. Correct direction is that air-in (83 mm) side is on the out end and air-out is inside the box. Connect the round air-out pipes (100 mm) inside the box. See picture 5.



Picture 5. Installation on the box

7. Install the fuel pump inside the front box wall, connect it with the screw and bolt, drill a hole for them on the right place.
8. Install exhaust pipe and a silencer and a wool cover under (outside) the box. These should be placed horizontally in the middle part of the box. The exhaust pipe should end in the edge of the battery side. Note that the exhaust pipe is very hot, keep burning materials away from it and warn children not to touch it when heater is working. Picture 6.
9. Install the heater air intake (for burning process) pipe (plastic) on the bottom, outside of the box. Keep it away from the exhaust pipe locating also under the box. The pipe can be connected to the box holder parts.



Picture 6. exhaust pipe and air-intake

10. Install the fuel pipe from the fuel pump to the under of heater by using plastic pipeline and short (cut for 50 mm) rubber pipes (plastic goes inside the rubber pipe). Make it tight enough to avoid leaking. Connect similarly the pipes to the fuel pump-both sides.
11. Install the fuel pick-up to the tank by drilling a hole on the upper side of the tank. The fuel pick up can be also locate in the cap of the tank. Cut the length of the pick up for correct. Picture 7.



Picture 7. tank pick up

12. Connect all the cables of the heater. Cover the + from the battery. Connect the remote cable, take it inside from the small hole on the wall and connect the remote panel to it (4 cables) according to electric wiring diagram. Connect the charging system cables too.
13. Before connecting the electricity, check all the connections, roll all the extra length of the cables inside the box and connect them to the front wall inside. Check that all cables are separate from the hot parts and heater
14. Start the heater and check it works as planned. It may need to have few start attempts for the fuel to get inside. In the beginning there may occur some smoke from exhaust pipe, this is normal. Protection oil will burn from the inner parts and exhaust pipe. Starting process will take some time, so be patient and let automatic system work. Follow the manual of heater functions.
15. When You shut down the heater, a small led in the remote will blink for the sign of it. The blowing process will not end immediately, the heater will cool down and do ventilation process automatically, it will take 3-5 minutes. Never cut down the electricity during this cooling process, it may damage the heater.
16. Correctly used cottage heater will serve for a long time. The common problems are mainly caused by the poor quality (old) of fuel or the heater not used for a very long time. The best guarantee to keep it working well is to use it regularly, even for the summer time for a short period (once a month).

POSSIBLE ERROR SITUATIONS AND A MAINTENANCE

1. Heater has selfcontrol and will give automatically error codes, see the heater manual for instructions. The codes will be seen in the remote panel.
2. Buy only high-quality diesel for the heater, For winter time use the winter quality in low temperatures. If possible, avoid bio-diesel products. Diesel fuel may get old even in 6 months, always take care You have a fresh fuel available.
3. Heater does not have many parts to be replaced in service, the most common part to be changed within 2-3- years is the ignition plug and its cover sock. These parts are cheap and easy to change by own. Recommended is to purchase few for own stock.
4. In problem situations our technical service will assist and help, the best way to contact is e-mail info@teplostar.se. Also the spare parts can be ordered from here.
5. Always save the guarantee blank (blue) for the service situation. It helps to chase the spare parts.