



Installation Guide

Nordkapp™ Cube Bluetooth



ECE 122R - 000056
ECE 10R - 025849

Welcome to the Nordkapp® Air diesel air heater. This guide will walk you through the safe and proper installation and operation of your unit.

Please read all instructions carefully before beginning installation or use.

Important Safety Instructions

 Follow these precautions to avoid injury or damage:

- Do not use biofuels. Use only EN590 standard diesel.
- Do not use the heater to dry people or animals.
- Do not cover the heater, air intake, or air outlet.
- Exhaust pipe gets hot. Do not install near flammable materials or fuel system components.
- Turn off the heater before refueling or maintenance.
- Do not use the heater in areas with flammable vapors or materials (e.g., gas stations, storage sheds).
- Ensure proper ventilation at the installation site.
- A fire extinguisher must be present in the vehicle.
- Disconnect the heater from the battery before repairs or welding.
- Never connect or disconnect plugs while the device is operating.
- Use only parts and accessories approved by the manufacturer.
- This heater is not intended for uninterrupted, continuous use.

NORDKAPP™ CUBE-CASE MODEL

The Nordkapp™ case model heater includes the Nordkapp™ Air heating unit.

In the suitcase model, the heating unit, 5-liter fuel tank, fuel hoses, and fuel pump are pre-installed inside the case.

You only need to connect the air intake pipe and the exhaust pipe, after which the device is ready for use.

If necessary, the suitcase can be opened by removing the mounting screws. This does not affect the warranty.



⚠️ The heater can be installed either indoors or outdoors. When installing outdoors, careful protection against splashing water must be ensured—both for the air intake and the heater components in general.

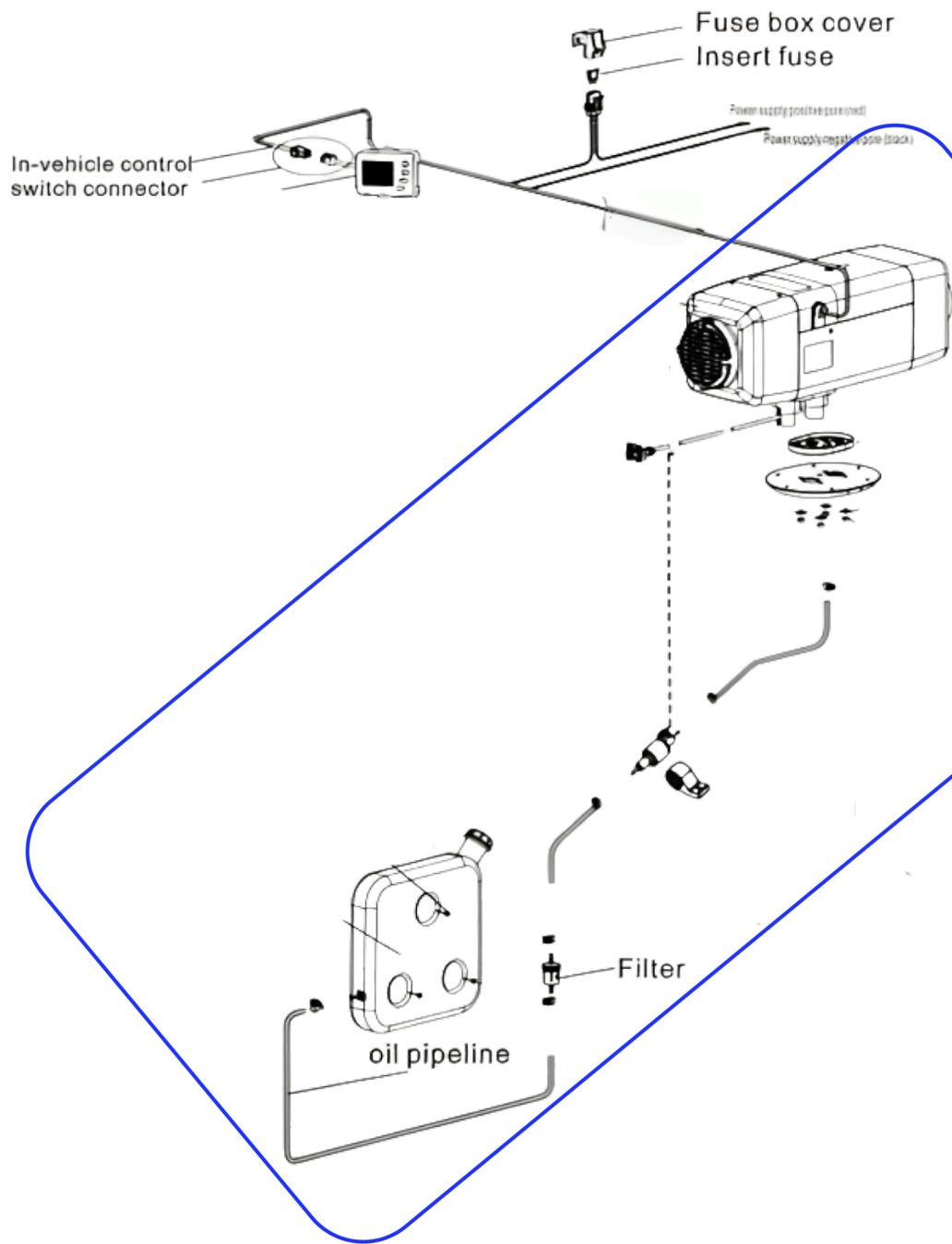
CONNECTING TO 230V MAINS POWER

Cube heaters can be connected to mains power using the Nordkapp 12V–230V converter. The converter is connected to the device's positive (+ red) and negative (– black) terminals.



⚠ Before using the mains power converter, carefully inspect its cables and connections. If you notice any damage to the cables, use of the converter is strictly prohibited.

⚠ Do not handle the converter in freezing conditions! Cables stiffened by cold may become damaged when handled.



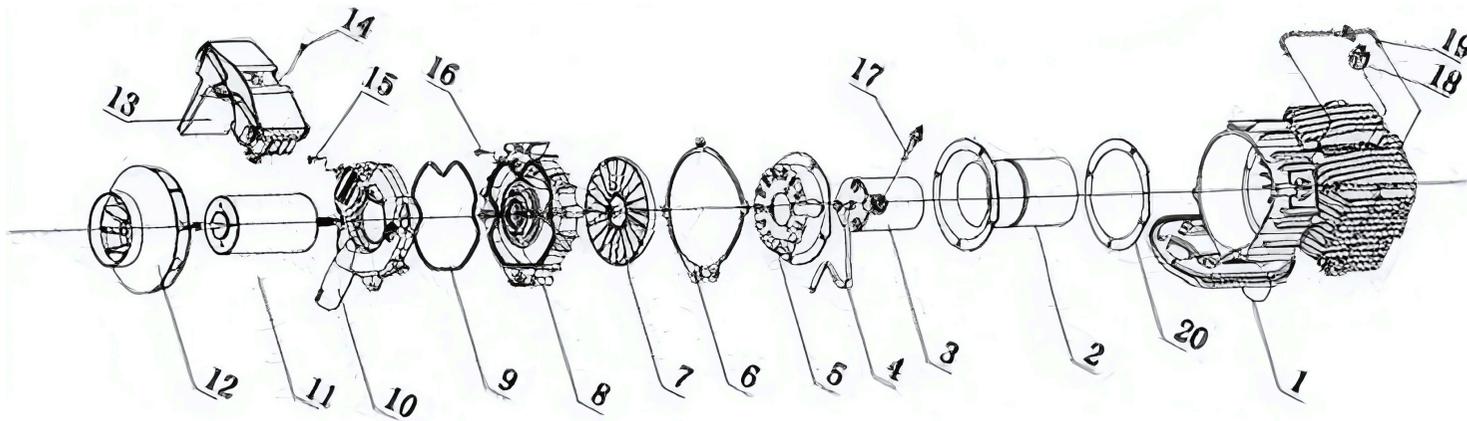
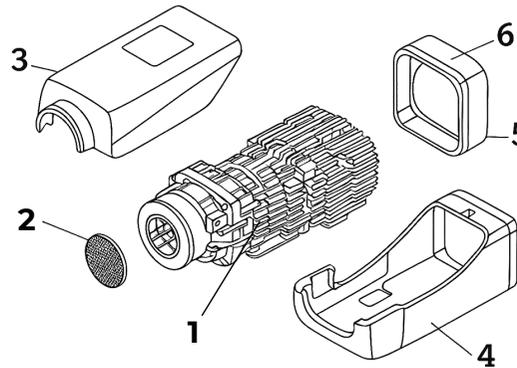
Pre-installed inside the Cube



NORDKAPP™ Air-Heater Installation

Structure Overview

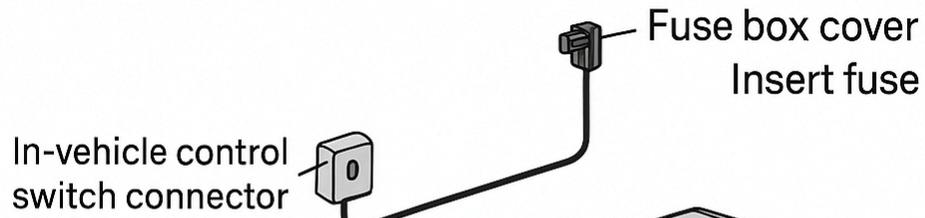
- 1.Engine
- 2.Air intake
- 3.Upper protective cover
- 4.Lower protective cover
- 5.Air outlet
- 6.Rear protection cover



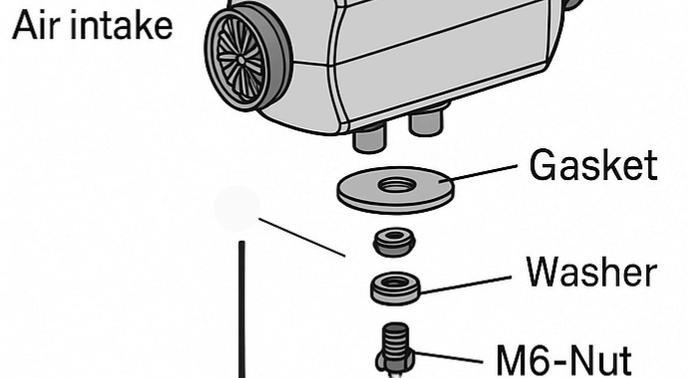
- 1.Exhaust pipe
- 2.Combustion chamber pipe
- 3.Combustion chamber
- 4.Fuel line
- 5.Air intake guide
- 6.Gasket
- 7. Fan blades
- 8. Fan housing
- 9. Gasket
- 10. Combustion chamber air intake pipe
- 11. Fan motor
- 12. Hot air fan
- 13. Control panel
- 14. Adjustment screws
- 15. Adjustment screws
- 16. Adjustment screws
- 17. Igniter
- 18. Temperature sensor
- 19. Sensor bracket

Fuse box cover
Insert fuse

In-vehicle control
switch connector



Air intake

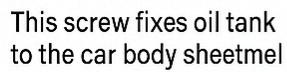


Gasket

Washer

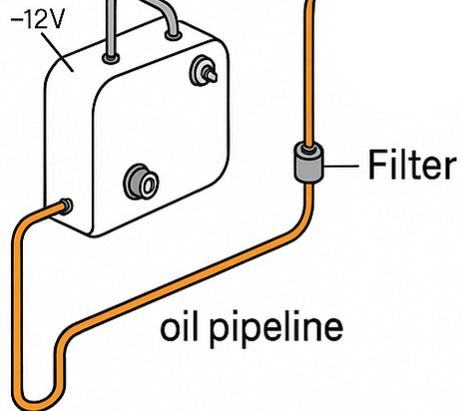
M6-Nut

This screw fixes oil tank
to the car body sheetmetal

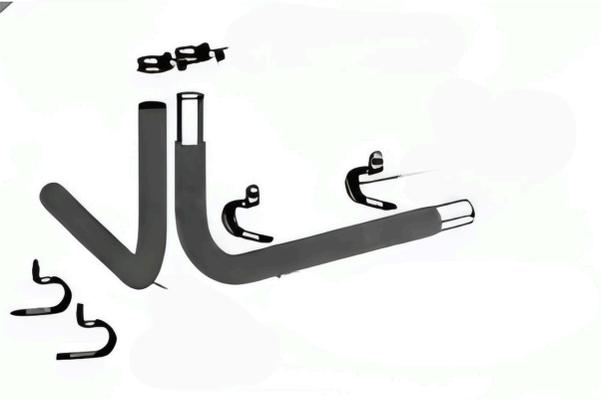


-12V

Filter



oil pipeline



Site Selection

Choose an installation location with:

- At least 50 mm clearance for air intake
- At least 150 mm clearance for air outlet
- Protection from water, impact, and excessive heat
- Splash protection if installed outside
- Unobstructed airflow if installed inside
- Proper exhaust placement in boats to avoid water ingress during tilt

Required Tools and Materials

- Drill and M6 drill bit
- Screwdriver or socket wrench for M6 screws
- The heater comes with fixing plates.
- Fire extinguisher (mandatory in vehicles)

Mounting the Heater

1: Choose the Location

- Flat, dry, unobstructed
- Not exposed to luggage or the elements
- Flat mounting surface (max deviation 1 mm)

Installation of Air Intake and Exhaust Pipes

- The heater requires fresh air for combustion and expels used gases through the exhaust pipe.
- Both the air intake and exhaust pipes must be installed so that they point outside the vehicle.
- Ensure that the pipes do not become blocked and are not positioned too close to the ground or obstacles.
- Make sure there is sufficient space around the heater to ensure good ventilation. The distance between the heater's air intake opening and the nearest walls or partitions must be at least 50 mm. The distance between the heater's exhaust outlet and the nearest walls or partitions must be at least 150 mm. When installing the heater, carefully check that no foreign objects can block the air intake or exhaust openings.

Air Intake Pipe

- The air intake hose is made of aluminium and is connected to the heater's intake port.
- Ensure the pipe is not exposed to water, dirt, or direct rain.
- The air intake pipe should be directed downwards or horizontally and fastened in place using the supplied brackets.



Air Filter

The unit includes two air filters of different sizes: one small and one large.

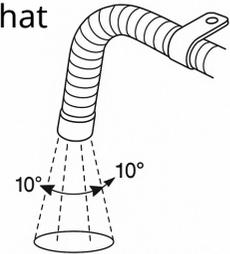
If the intake air is drawn from the same space in which the heater is installed, the smaller air filter can be connected directly to the intake port at the bottom of the unit. In this case, a separate intake pipe is not needed.

If the intake air is drawn from a different space, the larger air filter must be attached to the end of the intake pipe.

If a filter is installed, it should be cleaned regularly to maintain optimal performance.

Exhaust Pipe

- The exhaust pipe is made of stainless steel and becomes very hot during operation.
- Position the end of the exhaust pipe so that it does not face the driving direction, and install it at a 90° downward angle relative to the road surface.
- The included 90-degree elbow allows the exhaust pipe to be attached to the side of the heater.
- Ensure that exhaust gases do not enter the vehicle or come near the air intake. The distance between the ends of the air intake and exhaust pipes must be at least 20 cm to prevent exhaust gases from being drawn back into the device. It is recommended that both pipe ends face downward to prevent water from entering.
- The pipe can be bent, but the bend radius must be at least 50 mm.
- If necessary, you may drill small holes (approx. 4 mm) in the exhaust pipe to allow condensation to drain.
- If the installation area is exposed to splashes or physical contact, use a heat shield.

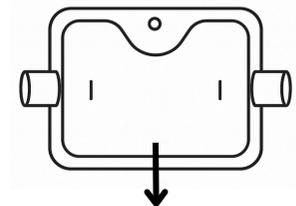


! Safety

- The exhaust pipe must not touch fuel lines, electrical wires, or vehicle structures.
- The pipe can reach temperatures of up to 500 °C during use. If it passes through a wall, door, or vehicle structure, always use fireproof insulation and seals.
- Do not use polyurethane foam, plastic, or other easily flammable insulation materials.
- Always ensure safe clearance from flammable materials. Consult a professional installer if necessary.

Installing the Silencer (Exhaust)

- A silencer can be installed on the exhaust pipe to reduce the operational noise outside the vehicle. Install the silencer near the end of the exhaust pipe and ensure it does not collect water. Silencers are equipped with a notch or small hole for condensation drainage – install the silencer so that the notch faces downward. You may also drill a condensation hole before the silencer, if desired. Secure the silencer using the supplied brackets or metal hose clamps.



Air Duct Installation

General Information

- Air ducts transport heated air to desired areas within the vehicle.
- The ducts are connected to the warm air outlet of the heater.
- You can use the supplied hose or purchase an optional distribution kit to heat multiple spaces.

Heating air can be drawn from either outside (fresh air) or inside (recirculated air):

- **Using fresh air:** Air is drawn from outside, heated, and directed indoors. This improves ventilation in heated areas and reduces humidity. It is important to consider the location of ventilation outlets in the cabin and ensure that there are enough of them.
- **Using indoor air:** In this option, indoor air is used for heating. This allows for faster heating since already warm air is reused. However, this method does not reduce humidity and does not refresh the air in the heated areas.

Routing the Air Duct

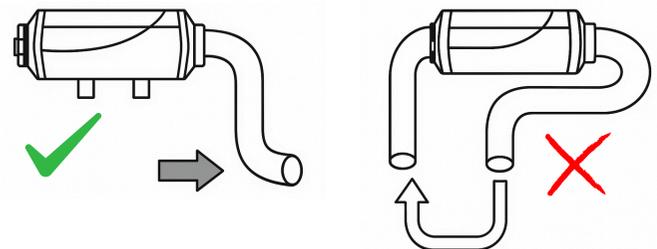
- Avoid sharp bends immediately after the heater – the first 1 meter of the duct should be as straight as possible.
- Ensure the duct is not compressed and cannot be stepped on.
- Avoid 90° bends or curves that may obstruct airflow.

Placement of the Air Outlet

- Direct the airflow so that hot air does not blow directly onto people, fabrics, or sensitive surfaces.
- You may use grilles or adjustable nozzles to guide the airflow direction.

Safety

- Never recirculate hot air back into the heater's intake.
- Do not connect the heater to the vehicle's original air duct system.
- Use only heat-resistant hoses (minimum 130 °C).



Nordkapp™ Air Share Kit (optional, sold separately)

If necessary, you can install an air distribution kit on the heater to distribute the heat to multiple separate spaces.

You can find the Air Share Kit in the Nordkapp online store.



- Use only simple configurations to avoid airflow restriction
- Excessive complexity can cause overheating and loss of efficiency
- Keep first meter of duct straight
- Do not use 90° bends in the first meter

Electrical Wiring

1: General Notes

- Compatible with 12V or 24V systems (check model)
- Power from vehicle battery or external AC-DC adapter (230V/220V → 12V/24V)
- Always use correct polarity and fuse

2: Battery Connection

- Red wire to positive, black to negative terminal
- Use 15A fuse close to battery on positive wire
- Never connect/disconnect while heater is on
- Avoid routing wires near metal without protection

3: AC Operation (Optional)

- Use Nordkapp™ AC adapter in dry, protected area
- Check all wires and connections before starting
- UPS (uninterruptible power supply) recommended for outages



Do not handle the adapter in freezing conditions! The wire, stiffened by frost, may be damaged when handling it.

⚠ If operating on AC without UPS

If the heater is used via a mains power adapter without a UPS device, the power supply will be suddenly interrupted in the event of a power outage.

This may lead to the following issues:

- Fuel remaining in the combustion chamber can cause sooting or malfunction during the next start-up
- The heater does not have time to complete the automatic cooling process
- The control unit may lose settings or remain in an error state
- The heater must always be turned off from the control panel and the power must only be disconnected when the fan has stopped.

⚠ It is the user's responsibility to ensure that the heater is turned off as instructed. Do not leave the heater on unattended when connected to the mains if the UPS is not in use.

4: Wire Protection and Finishing

- Route wires neatly and secure with clips
- Keep away from moving or hot parts
- Check all connections are tight and safe from being pulled

Startup and Shutdown

1: First Startup

- Ensure all installations are correctly and securely completed.
- Check fuel lines for leaks or air bubbles.
- Initial use may produce smoke and strong odor (normal).
- Odors typically fade after a few hours at full power.
- Ensure good ventilation during initial operation.
- Heater begins with a glow plug preheating cycle (up to 2 minutes, no visible signs).

2: Shutdown

- Always turn off using the control panel or power switch.
- Never disconnect power during operation.
- Heater performs an automatic cooling cycle with low-speed fan.
- Wait until the fan fully stops before cutting power.

3: Restarting the Heater

- If the heater fails to start, wait 5–10 seconds before retrying.
- Check for error codes on the display (refer to control panel manual).

Maintenance and Service

⚠ Warranty is void if the following maintenance is neglected.

Regular maintenance improves the reliability of the heater, prevents sooting and extends its service life. Below are instructions that will keep the device in good condition.

Monthly Maintenance:

- Run the heater at full power for 20 minutes monthly.
- Burns off potential deposits and ensures fuel circulation.

Annual Inspection:

- Check all fuel line and connector seals.
- Inspect electrical wiring and signs of corrosion.
- Clean and inspect air intake and exhaust systems.
- Remove debris or soot from exhaust outlet.

Fuel System Maintenance:

- If unused for long periods, drain tank and lines (for separate tanks).
- Flush with clean diesel (never use gasoline).
- If using kerosene, ensure system is completely dry before switching back to diesel.

Storage

- Disconnect from battery or power supply.
- Store in a dry, clean location.

Bluetooth-Control Panel Manual

Display

In standby mode, the display shows:

- Ambient temperature
- Altitude
- Voltage level
- Fault status (if any)



Overview

Used to set temperature, clock, ventilation, and manual fuel pumping. Features four buttons and multiple display modes. Bluetooth enables mobile app control.

Buttons and Functions:

Button:

Power: Short press = ON, long press = OFF

Up(+): Increase temp / navigate up

Down (-): Decrease temp / navigate down

Settings: Enter or confirm settings.

Switching Modes

Mode

Switching

**Manual/
Thermostat**

Hold Up + Down for 3 sec to toggle manual/thermostat mode. In other modes:
hold ON or Power button for 3 sec

Usage Instructions

Temperature Unit

- Hold Up for 2 sec to toggle °C/°F

Ventilation Mode

- Hold Power 9 sec, adjust speed with Up/Down, confirm with Power

Clock Settings

- Navigate to clock menu
- Press Settings to enter
- Adjust with Up/Down, confirm with Power, hold Power 3 sec to save

Timer Setting

- Navigate to timer menu with Up/Down
- Short press Power to switch between parameters
- Adjust with Up/Down
- Hold Power 3 sec to save and exit

Start-stop Setting

- Set shutdown temperature
- Heater restarts when temp drops 5°C below set point
- Instructional video available at nord-kapp.com (Documents section)

To enter parameters menu: hold Settings for ~3 sec, navigate with Up/Down, short press Settings to select

Setting	Description
Unit	°C ↔ °F, default °C, toggle with Up
Language selection	Choose in Language settings-menu, confirm with Power 3 sec
Manual fuel pumping	Select the fuel pumping display screen, the display shows 20P, use the up/down buttons to adjust the pumping duration. Press the power button to start/stop pumping
Password	Enter the password mode by pressing the setup button. Press the power button to get started. The password is 1234, use the up/down buttons to select the correct numbers. Press the power button to confirm the selection and move to the next number.
Operating mode	By default, the display shows MT, using the up/down buttons you can select MT (manual) / AT (constant temperature) / ST (start-stop)
Voltage	You can choose 12V / 24V / auto
Power level	2kW, 5kW, 8kW – scroll with the up/down button, confirm selection with the power button (select power depending on which heater you have purchased)
Fuel Pump Volume	22ML, 28ML etc. (The Nordkapp heater has a 22ml pump, so 22ml is selected in the settings)

⚠ Hold Power for 3 sec to save and exit settings.

Pairing the Remote Control

1. Long press the setting button, enter the setting menu, and use the up/down button to find the remote control icon, press the setting button
2. Press the ON button on the remote control for 3 seconds.
3. A confirmation will appear on the screen. If it does not work, repeat the steps.

NOTE! You can find an instructional video on connecting the heater and remote control at nord-kapp.com, in the Documents section.

Audio Prompts

- Sound plays when switching functions
- Voice prompt if idle in settings >1.5 sec
- Hold Down 3 sec to mute quickly

Mobile App Usage

1. Download "HeatGenie" app (QR codes for Android/iOS)
2. Open the app and scan the QR code on the panel or press Automatically Link
3. If you want to disconnect, select "Device Management" > "Unbind the device" (if previously connected) or press the Setting + Power button on the control panel for 3s, the program will notify you that the Bluetooth connection is lost.

NOTE! The HeatGenie app has a separate Settings button. If you try to access the settings, the app will ask for a password. These settings should not be changed, as changing them may damage the heater or impair its performance. For this reason, the settings are password protected.

Display Sleep Mode

- After 3 min inactivity: dims > turns off
- Press any button to wake up



IOS APP



Android APP

Code	Description
E01	Low voltage: 24V <18V, 12V <10V
E02	High voltage: 24V >32V, 12V >17V
E03/F2	Glow plug short/open circuit
E04/F1	Fuel pump short circuit
E05	Overheat > 260°C (check airflow)
E06/F1-3	Fan or hall sensor error
E07	Communication cable fault
E08	Fuel flow issue (check air bubbles/blockage)
E09/F2	Housing temp sensor fault
E10	Ignition failed twice (check fuel circulation)
E11	Ambient temp sensor fault
E12	ECU or ventilation issue (controller >100°C)

Important safety and manufacturer information

Common Mistakes to Avoid

- Cutting power before cooling fan finishes
- Passing exhaust through wall without fireproof insulation
- Intake and exhaust too close together
- Installing muffler upside-down
- Leaving heater unattended on AC without UPS
- Overcomplicated or blocked air ducts

Safety Reminder

- Always follow this guide
- Never use heater if fuel leaks, electrical faults, or abnormal noises occur
- Do not use continuously without breaks
- For concerns, consult the control panel troubleshooting guide or contact support
- Ignoring the instructions can lead to damage to the heater or a safety risk.

Note! We reserve the right to change the manuals. The latest and updated versions can always be found on our website: www.nord-kapp.com/pages/documents

Manufacturer



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