

AIRREX INFRARED HEATER

USER MANUAL

Models AH-500i / 900i



AH-500i



AH-900i

- Thank you for purchasing the Airrex infrared heater!
- Read the user manual carefully before using the heater.
- After reading the user manual, make sure it is kept in a place accessible to everyone using the heater.
- Read the safety instructions carefully before using the heater.
- These heaters are set to operate in the European region. If you take the heater to other regions, check the mains voltage of your destination country.
- This user manual also includes instructions for activating the five-year warranty.
- Due to active product development, the manufacturer reserves the right to make changes to the technical information and functional descriptions in this user manual without prior notice.
- Always check and use the latest user manual from our website rexnordic.com.
- Translation of the original instructions.
- This product is not suitable for primary heating purposes.



HEPHZIBAH CO., LTD.



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■ SAFETY INSTRUCTIONS

The purpose of these safety instructions is to ensure the safe use of Airrex heaters. Following these instructions prevents injury or death as well as damage to the heater and other objects or premises.

Read the safety instructions carefully. The instructions contain two concepts: "Warning" and "Note".



WARNING

This marking indicates a risk of injury and/or death.



CAUTION

This marking indicates a risk of minor injury or structural damage.

SYMBOLS USED IN THE USER MANUAL:



Prohibited action



Mandatory action



WARNING



Use only 220/230 V mains power. Incorrect voltage may cause fire or electric shock.



Always check the condition of the power cord and avoid bending it or placing objects on top of the cord.

A damaged power cord or plug can cause a short circuit, electric shock, or even a fire.



Do not handle the power cord with wet hands.

This may cause a short circuit, fire, or danger to life.



Never use the heater near containers with flammable liquids or aerosols, or leave them near the heater due to the risk of fire and/or explosion.



Ensure that the fuse matches the recommendation (250 V / 3 A). An incorrect fuse may cause malfunctions, overheating, or fire.



Do not turn off the heater by cutting the power supply or unplugging the power cord. Cutting the power during heating may result in malfunctions or electric shock. Always use the device's power button.



Do not place any flammable materials near the heater, such as curtains, carpets, paper, matches, clothes, etc. Otherwise, it will be exposed to a fire hazard.



Before remote use (WiFi), you should check that there are no faults in the product before use.



If the supply cord is damaged, it must be replaced by the manufacturer, its service agent or similarly qualified persons in order to avoid a hazard.



If the plug becomes dirty, clean it carefully before plugging it into the socket. A dirty plug may cause a short circuit, smoke, and/or fire.



Do not extend the power cord by connecting additional cords to it or its connectors. Poorly made connections may cause a short circuit, electric shock, or fire.



Before cleaning or servicing the device, unplug the power cord from the socket and allow the device to cool down sufficiently. Failure to follow these instructions may result in burns or electric shock.



The device's power cord must be connected to a grounded socket.



Do not cover the heater with anything, e.g. clothes, fabrics, or plastics. This may cause a fire.



Insert the plug firmly into the socket, otherwise it may cause an electric shock.

KEEP THESE INSTRUCTIONS AVAILABLE TO ALL USERS NEAR THE DEVICE.

■ SAFETY INSTRUCTIONS

WARNING

-  Do not put your hands or any objects inside the safety net. Touching the internal parts of the heater may cause burns or electric shock.
-  Do not move the heater while it is running. Turn off the heater and unplug the power cord from the socket before moving the device.
-  Use the heater only for heating indoor spaces. Do not use it for drying clothes. If the heater is used to heat spaces intended for plants or animals, exhaust gases must be vented outside through a flue and sufficient fresh air supply must be ensured.
-  When cleaning, the plug must be removed from the socket and you must wait until the heater has cooled down sufficiently. Otherwise, it may cause electric shock or burns.
-  Do not use the heater in enclosed spaces or in spaces mainly occupied by children, the elderly, or people with disabilities. Always ensure that people near the heater understand the necessity of effective ventilation.
-  We recommend that this heater is not used at very high altitudes. Do not use the device at altitudes above 1,500 meters above sea level. At altitudes of 700–1,500 meters, ventilation must be effective. Poor ventilation in the heated space may lead to the formation of carbon monoxide, which can cause injury or death.
-  Do not unplug the power cord by pulling it forcefully.
-  Do not place flammable objects near the heater and keep a fire extinguisher available.
-  Be careful not to block the exhaust pipe.
-  A metallic sound may be caused by the sudden expansion and contraction of the pipe during the first period of use.
-  Do not tilt the heater more than 30 degrees when moving it.
-  Use only winter-grade, clean diesel fuel (B7) that meets the requirements of the EN590 standard, or HVO100 fuel that meets the requirements of the EN15940 standard in this heater.
-  Children shall not play with the appliance.
-  Cleaning and user maintenance shall not be made by children without supervision.
-  Do not place electrical devices or heavy objects on top of the heater. Objects placed on top of the device may cause malfunctions, electric shocks, or injuries if they fall from the heater.
-  Use the heater only in well-ventilated, open spaces where the air is exchanged 1–2 times per hour. Using the heater in poorly ventilated spaces may cause carbon monoxide, which may lead to injury or death.
-  Do not use the device in rooms where people are sleeping.
-  Do not use water to clean the heater. Water may cause a short circuit, electric shock and/or fire.
-  Do not touch hot surfaces such as the protective grille, exhaust pipe, etc. while the heater is running or immediately after turning it off. Pay special attention to ensure that children cannot touch hot surfaces. This may cause burns.
-  Do not use gasoline, thinner, or other technical solvents to clean the heater. They may cause a short circuit, electric shock and/or fire.
-  The heater must be placed in a location where safety distance requirements are met. There must be 15 cm of free space around the device and at least 1,5 m of free space in front of and above the device.
-  Never use gasoline, alcohol, etc.
-  Do not touch hot parts during heating.
-  Do not use this heater near fabric curtains, carpets, or plastic or vinyl curtains that may cover the heater due to wind or other physical force and cause a fire.
-  The appliance is not be used by persons (including children) with reduced physical, sensory, or mental capabilities, or who lack experience and knowledge, unless they have been given supervision or instruction.
-  Children being supervised not to play with the appliance.
-  This appliance can be used by children aged 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.

IMPORTANT THINGS TO NOTE BEFORE USE

ENSURE THE SAFETY OF THE HEATER'S PLACEMENT LOCATION

- The immediate surroundings of the heater must be free of flammable materials.
- There must always be 15 cm of space between the sides and back of the heater and the nearest furniture or other obstacle.
- There must be a distance of 1,5 meter in front of and above the heater from all objects and materials. Note that different materials may react to heat in different ways.
- Ensure that there are no fabrics, plastics, or other objects near the heater that could cover it if airflow or another force moves them. Covering the heater with fabric or other objects may cause a fire.
- The heater must be placed on a level surface.
- When the heater is in place, lock its wheels.
- In small spaces, a separate exhaust gas removal duct must be used. The pipe diameter must be 75 mm and the maximum length 5 meters. Ensure that water cannot flow into the heater through the exhaust duct.
- Place fire extinguishing equipment suitable for oil and chemical fires in the immediate vicinity of the heater.
- Do not place the heater in direct sunlight or near a strong heat source.
- Place the heater in the immediate vicinity of a power outlet.
- The power cord plug must always be easily accessible.

USE ONLY WINTER-GRADE, CLEAN DIESEL FUEL (B7) THAT MEETS THE REQUIREMENTS OF THE EN590 STANDARD, OR HVO100 FUEL THAT MEETS THE REQUIREMENTS OF THE EN15940 STANDARD IN THIS HEATER.

- The use of other types of fuel may cause malfunctions, incomplete combustion, and soot formation. The use of contaminated or non-standard fuel may shorten the device's lifespan.
- ALWAYS turn off the heater when adding fuel to the tank.
- All fuel leaks in the heater must be repaired immediately at a service center authorized by the manufacturer/importer.
- Follow all relevant safety instructions when handling fuel.
- To avoid incomplete combustion, always run the heater for a minimum of five (5) minutes before shut down.

THE OPERATING VOLTAGE OF THE HEATER IS 220/230V / 50 HZ

- It is the user's responsibility to connect the device to a network that supplies the correct voltage.
- Note: use the correct adapter for the power plug if necessary.

CAUTION



Do not place the heater on an unstable, sloping, or wobbly surface. Tipping and/or falling of the device will cause malfunctions and may lead to a fire.



If the heater is not used for a long time, unplug the power cord from the socket.



This device may be used by children who are at least 8 years old and by persons who have reduced physical, sensory or mental capabilities or lack experience and knowledge, if they are given supervision or instruction concerning the safe use of the device and they understand the hazards involved.



Children must not clean or maintain the device without supervision.



During a thunderstorm, the device must be switched off and unplugged from the socket.



Never allow the heater to get wet. The device must not be used in bathrooms or other similar areas. Water may cause a short circuit, electric shock and/or fire.



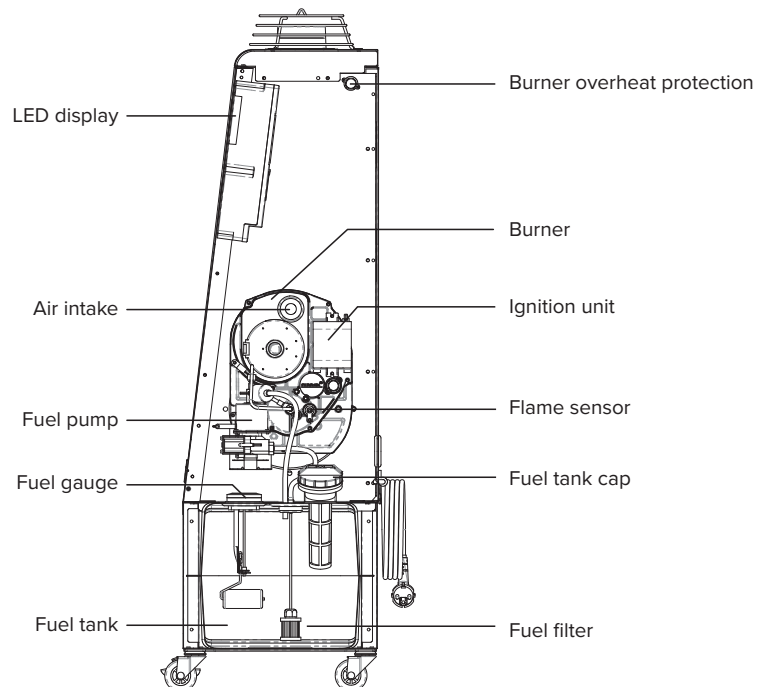
The heater must be stored in a dry place indoors. Do not store in hot or particularly humid spaces. Possible corrosion caused by moisture may cause malfunctions.



When the heater is not used for a long time, add diesel fuel stabilizer to the tank to prevent clogging of the fuel systems.

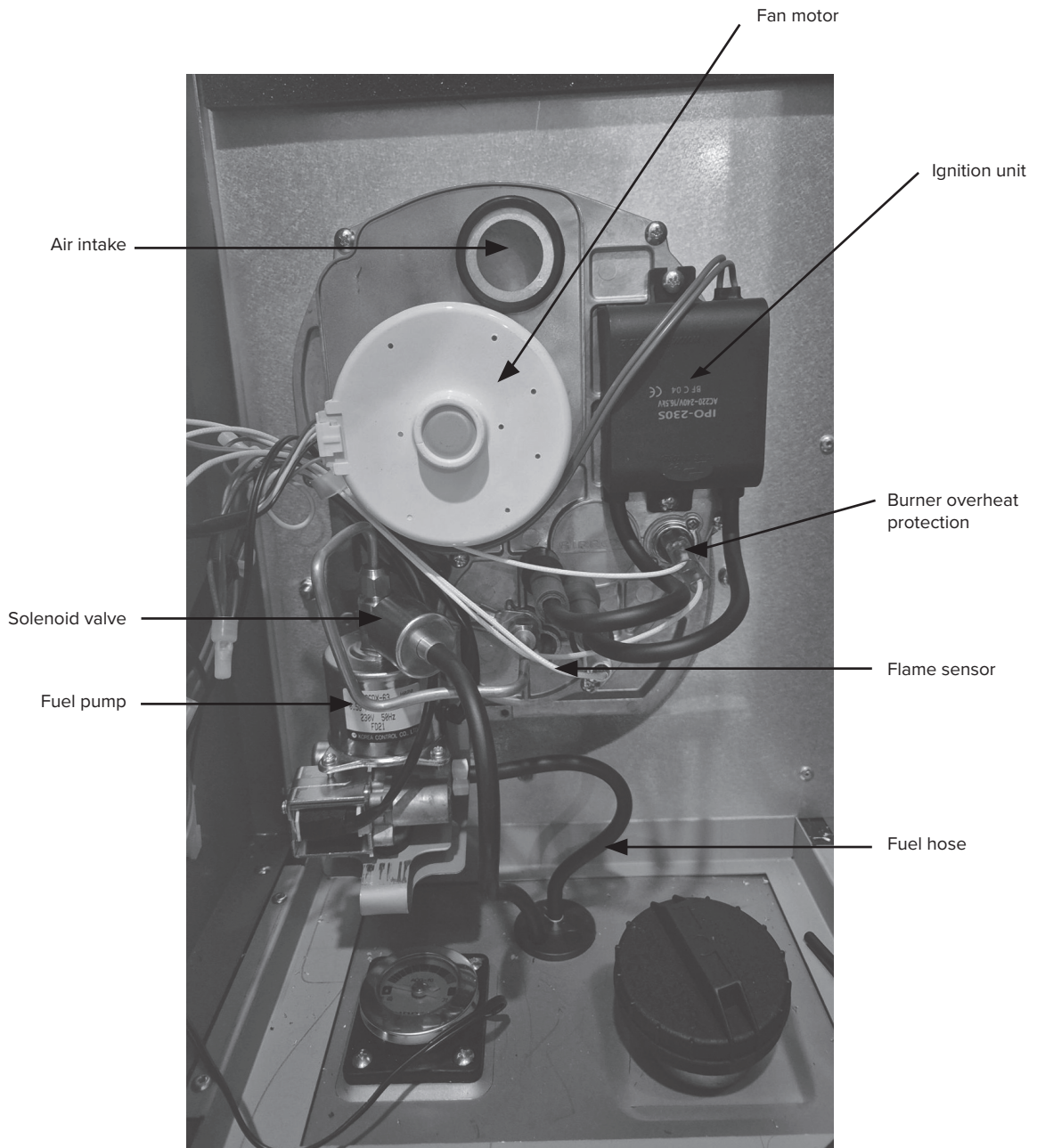
■ HEATER STRUCTURE

STRUCTURAL DIAGRAMS



■ HEATER STRUCTURE

BURNER STRUCTURE



■ HEATER STRUCTURE

CONTROL SWITCHES AND DISPLAY



1. LED DISPLAY The display can be used for checking temperature, timer, error codes, etc.

2. AUTOMATIC OPERATION

This light is on when the heater is in automatic mode.

3. MANUAL OPERATION

This light is on when the heater is in manual mode.

4. POWER BUTTON (ON/OFF) Turns the device on and off.

5. MODE SELECTION This button is used to select the desired operating mode between automatic and manual operation.

If you press this button for 3 seconds, the LED display will lock. And if you press it again for 3 seconds, the LED display will unlock.

6. ADJUSTMENT ARROW BUTTONS (INCREASE/DECREASE) These buttons are used to set the desired temperature or heating power (HI/LO).

7. OPERATION INDICATOR This light is on when the burner is operating.

8. SHUTDOWN TIMER This button activates or deactivates the shutdown timer function.

9. SHUTDOWN TIMER INDICATOR LIGHT The light indicates whether the shutdown timer is active or not.

10. FUEL GAUGE The segment of four lights indicates the remaining amount of fuel.

11. CHECK INDICATOR LIGHT This indicator light is on if the burner has malfunctioned or shut down during operation.

12. WIFI INDICATOR LIGHT This indicator light turns on when a wifi connection is established. If the WiFi indicator light blinks once, WiFi is connected to the router but not to the internet. If the WiFi light blinks twice, the heater is searching for a WiFi network.

13. BLUETOOTH INDICATOR LIGHT

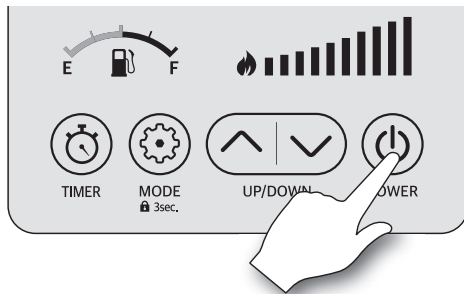
This indicator light is on when Bluetooth is connected. If the Bluetooth light blinks, the device is searching for a device to connect to.

■ INSTRUCTIONS FOR USE

STARTING AND SHUTTING DOWN

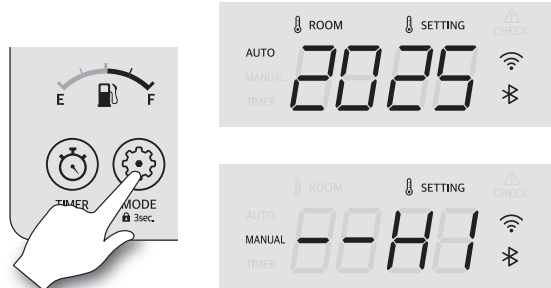
1. START THE HEATER

- Press the power button. The device will beep when activated.
- The device can be turned off by pressing the same button.



2. SELECT THE OPERATING MODE

- Select the desired operating mode, either automatic or manual operation.
- You can make the selection with the MODE button.
- Automatic operation is the default.



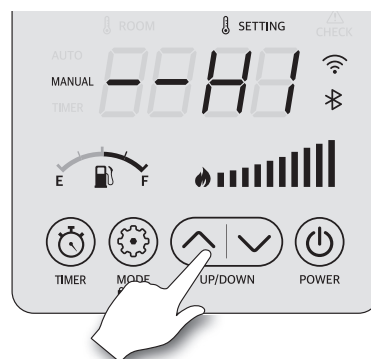
3. SET THE TARGET TEMPERATURE OR DESIRED HEATING POWER USING THE ARROW BUTTONS

- The temperature can be adjusted between 0–40 °C.
- Heating power can be changed between HI/LO modes in manual operation.

AUTOMATIC OPERATION



MANUAL OPERATION



TIMER

SHUTDOWN TIMER

If you want the heater to turn off automatically, you can use the shutdown timer.

Activate the shutdown timer function with the TIMER button.

Then select the desired shutdown delay with the arrow buttons. The shortest possible delay is 30 minutes.

- When the device is switched off, all timer functions are reset and must be set again if necessary.

INSTRUCTIONS FOR USE

AUTOMATIC OPERATION

In this mode, you can set the desired temperature, after which the heater will operate automatically and turn on as needed to maintain the set temperature. Automatic operation is selected by default when the heater is started.

1. Plug the power cord into the socket. 1. **START THE HEATER.** When the heater is operating, the current temperature is shown on the left and the set target temperature on the right.



2. The AUTO light is on when automatic operation is selected. To switch from automatic mode to manual mode, press the MODE button.



3. The temperature can be adjusted with the arrow buttons.

- The temperature can be set between 0–40 °C
- The default setting of the heater is 25 °C.
- By pressing the arrow button for two (2) seconds, the temperature setting changes faster.
- The display range for the current temperature is -9...+50 °C.



4. When the power is turned on, the heater starts automatically when the current temperature drops two (2) degrees below the target temperature. Similarly, the heater turns off when the current temperature rises one degree (1 °C) above the set target temperature.



5. When you press the start button to turn off the device, the display shows only the current temperature.



TIPS FOR USING THE HEATER

- If the current temperature is below -9°C, the display shows the text "LO" in the current temperature view. If the current temperature exceeds +50°C, the display shows the text "HI" in the current temperature view.
- One press of the arrow button changes the temperature setting by one degree. By pressing the arrow button for more than two (2) seconds changes the display setting by one degree every 0.5 seconds.
- Pressing both arrow buttons for five (5) seconds while the heater is on changes the temperature unit from Celsius (°C) to Fahrenheit (°F). The device uses by default Celsius degrees (°C).
- In automatic mode, after startup, the device operates for a three (3) minute stabilization period, after which the device switches to either HI or LO mode based on the difference between the set temperature and the current temperature.

■ INSTRUCTIONS FOR USE

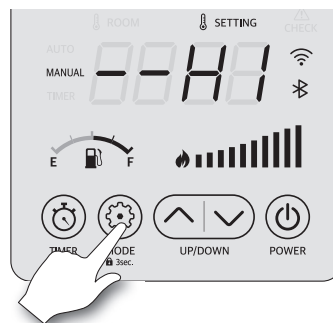
MANUAL OPERATION

In manual mode, the heater operates in either HI or LO mode.

1. Plug the power cord into the socket. 1. START THE HEATER. When the heater is started, the HI text appears on the right side.



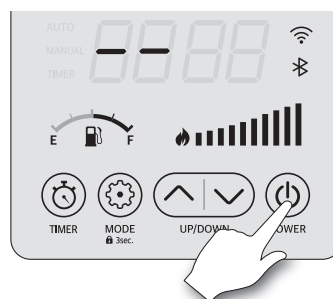
2. The MANUAL light is on when manual operation is selected. To switch from manual mode to automatic mode, press the MODE button.



3. When manual operation is on, the ring rotates on the left side. The selected mode (HI or LO) appears on the right side. Select the desired operating mode (HI or LO) with the arrow buttons. (▲/▼) For the first 3 minutes, the device operates in HI mode to stabilize combustion. If the mode is switched to LO during this time, the LO text flashes on the LED display. If the arrow buttons are not pressed for three (3) seconds, the mode (HI or LO) shown on the display is activated.



4. When you press the start button to turn off the device, the display shows only "- -".



TIPS FOR USING THE HEATER

- To stabilize combustion, the heater operates in HI mode for 3 minutes from the start of heating.
- During this time, if LO mode is selected, the LO text flashes.
- The indicator stops flashing after the 3-minute stabilization period.

■ USING THE MOBILE APPLICATION

INSTALLING THE APPLICATION



1. Open Google Play or the App Store.
2. Search for the REXNORDIC app.
3. Install the app.

REGISTER AS AN APPLICATION USER

REXNORDIC

E-mail

Password

Sign In

[Forgot Password](#) | [Join](#)

1. Start new user registration by pressing the JOIN button on the login screen.
If you already have REX NORDIC account, log in with your email and password.

REXNORDIC

■ Join

E-mail

Password

Confirm Password

Password must contain

- Minimum of 8 characters
- At least one special character

Join

2. Enter your email address and your desired password twice, then click the JOIN button.

REXNORDIC

Waiting for your **E-mail Authentication.**

Please check your E-mail.



Resend

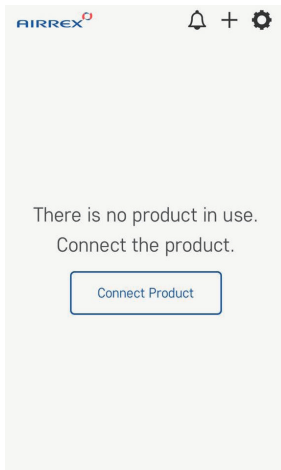
Authentication Done

[Logout](#)

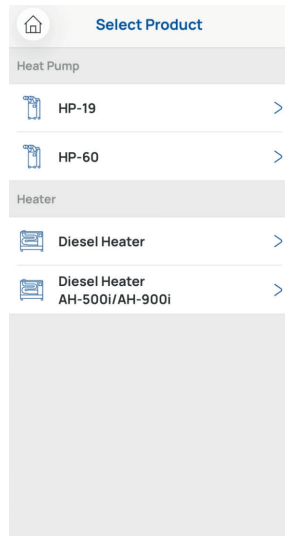
3. Open the email you received and confirm your email address by clicking the button/link.

■ USING THE MOBILE APPLICATION

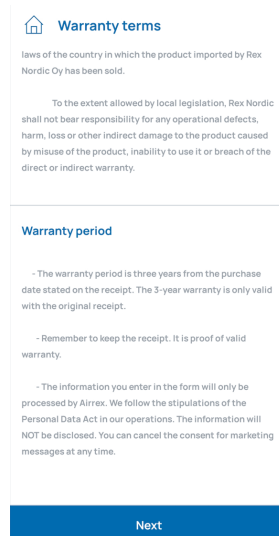
CONNECTING THE HEATER TO THE APPLICATION



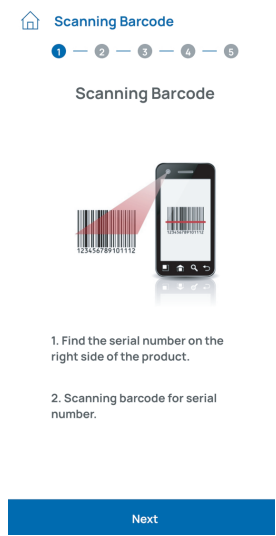
1. Start the pairing process by pressing the **CONNECT PRODUCT** button



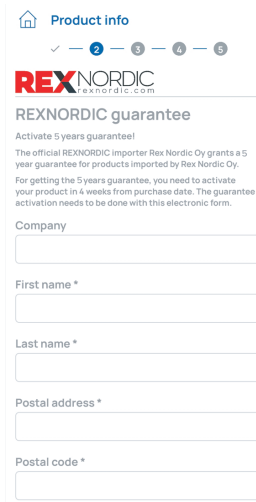
2. Select Diesel Heater from the product list.



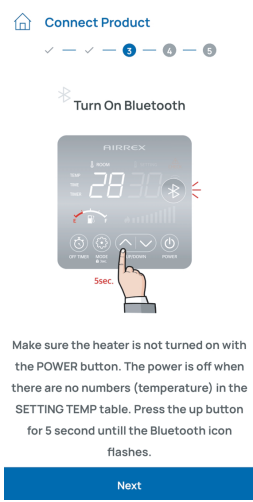
3. Read all terms of use and accept them by clicking the **NEXT** button.



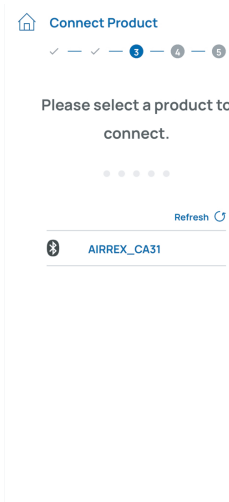
4. Find the serial number on the right side of the heater. Scan the barcode with your camera to read it. Press **Manual** if you want to enter the serial number manually.



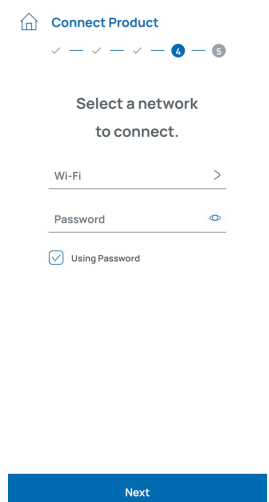
5. Fill in the Rex Nordic 5-year warranty form. Remember to fill in all the information.



6. Turn off the heater and press the up button for 5 seconds, and the Bluetooth icon will start blinking. Press the **NEXT** button in the app.



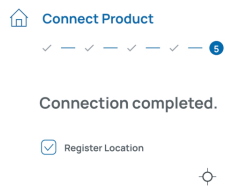
7. Select the product to connect from the Bluetooth list.



8. Select WiFi network by tapping the WiFi selection field. Once you have selected the WiFi network, enter the correct WiFi password in the given field. Connect the heater to your WiFi network by pressing **NEXT**.

■ USING THE MOBILE APPLICATION

CONNECTING THE HEATER TO THE APPLICATION



9. Press the location icon to provide location information to the app. If you do not want to register the heater's location, uncheck the register location box.

NOTE



The WiFi light blinks twice

Searching for WiFi network

The WiFi light blinks once

Connected to WiFi network, but not to the internet

The WiFi light is on

Connected to WiFi network and the internet.

Bluetooth is blinking

Searching for Bluetooth connection

The Bluetooth light is on
Bluetooth is connected to the device

TIPS FOR USING THE MOBILE APPLICATION

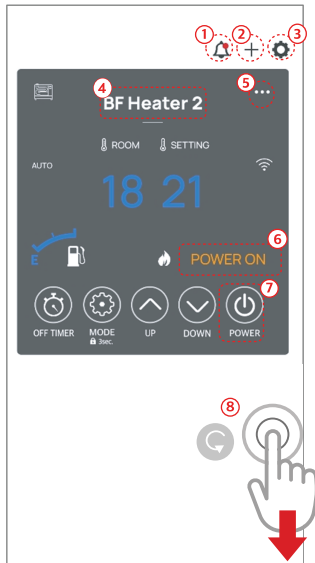
- Refresh the display by swiping down with one finger.
- When the heater is turned off, reset the WiFi and Bluetooth settings by pressing the UP and DOWN buttons for 5 seconds.
- Note that the heater cannot be started from the mobile app if the heater is turned off.

RESETTING WIFI SETTINGS

1. Press the power button to put the heater into standby mode. (Turned off)
2. Press the Mode button and the down arrow button for more than five (5) seconds. (Beep will be heard)
3. Then press both arrows for more than 5 seconds (beep will be heard)
4. Delete existing heater from REXNORDIC apps interface.
5. Before reconnecting, remove the Bluetooth connection to the Airrex heater from the phone's bluetooth menu.
6. Open the REXNORDIC App and connect the heater again by following the instructions.

■ USING THE MOBILE APPLICATION

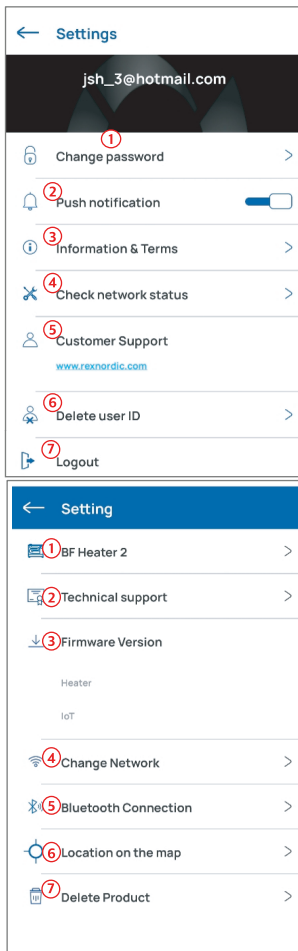
USING THE MOBILE APPLICATION



APPLICATION CONTROL PANEL

The mobile app works the same way as the device's LED display. Refer to the user manual to find out what each button does.

1. Push notifications
2. Add new product
3. App settings menu
4. Product name
5. Product settings menu
6. Product operating mode
7. Turn off the heater
8. Swipe down to refresh the product status again



3. APPLICATION SETTINGS MENU

1. To change your password, click this button. You will receive instructions for changing your password by email.
2. Select to turn push notifications on or off.
3. Here you can read license information, terms of use, and privacy information.
4. Checking the server connection status.
5. You can view the customer service website.
6. To delete your user account, first remove all registered products. Then contact the importer to have your user data deleted.
7. You are always automatically logged in after registration. You can log out if necessary.

PRODUCT SETTINGS MENU

1. Change product name
2. Show product maintenance information
3. Firmware version
4. Change WiFi network
5. Connect Bluetooth (used only for changing WiFi information)
6. Set the device location.
7. Remove product from the app

■ USING THE MOBILE APPLICATION

NOTE ON USING THE MOBILE APPLICATION

- The wireless router and LAN cable must be purchased separately.

- The Airrex heater uses the WPA2 security method for connection.

- Airrex only supports the 2.4 GHz WiFi frequency. It does not support the 5 GHz frequency.

- Airrex uses Bluetooth v4.2 and BLE. The BLE connection is only used for initial pairing and for establishing a connection between the smart device and the heater. The connection is maintained via the WiFi network. If you want to change the product's network, you must reconnect BLE.

- The REXNORDIC mobile app supports Android version 5.1 and newer. On iPhone, the app supports iOS version 10 and newer, as well as iPhone 7 and newer.

- Install the wireless router close to the product. Depending on the product's location or the distance from the wireless router, the RSSI (wireless network signal strength) may vary, and transmission time and reception data transfer speed may also vary.

- Make sure that the SSID (wireless router identifier or name) is set as a combination of English letters and numbers. If you see special characters, the information may not have been transferred correctly to the product's modem, and a connection cannot be established.

- Depending on the network settings or connection status, establishing a connection may not be successful. If you are not connected to the network or have problems setting up the network, contact your network service provider.

- When searching for a wireless network, you may also detect other SSIDs (wireless router names) nearby. Using another user's network is illegal. Violating the law may result in legal consequences. Make sure you connect to a network (router) that you are authorized to use.

- The details of the description may vary depending on the app version. Information may change without prior notice to the user.



4G INTERNET DONGLE (OPTIONAL)

If you do not have access to a WiFi network, the Airrex heater can be equipped with an internal 4G Internet dongle. You can purchase a 4G internet dongle from stores that sell them.



INSTALLING THE 4G INTERNET DONGLE IN THE HEATER

1. Unplug the heater's power plug from the socket.
2. Open the side door of the Airrex heater
3. Remove the screws to detach the panel
4. Loosen the controller cover screw for installing the 4G internet dongle.

5. Connect the 4G internet dongle to the connector and close the cover.
6. Attach the panel and turn on the heater.
7. Create a WiFi network according to the instructions included with the 4G internet dongle as per the provided instructions.

■ SERVICE AND CLEANING

REPLACING THE FUEL FILTER



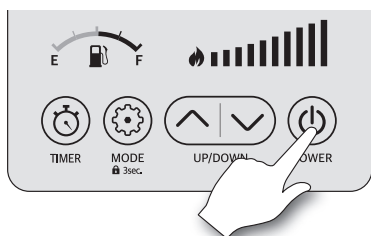
The fuel filter is located in the heater's tank. The recommended replacement interval for the filter is 6 months. (Depending on the quality of the diesel)

REPLACING THE FUEL FILTER

1. Disconnect the fuel hoses from the fuel pump.
2. Lift the rubber gasket of the fuel tank off with a screwdriver.
3. Carefully open the nut with a spanner.
4. Make sure there are two (2) small O-rings on the copper tube before installing the new fuel filter.
5. Gently screw the fuel filter onto the copper pipe.
6. Place the fuel filter back into the tank and attach the fuel hoses to the fuel pump.

NOTE! The heater automatically bleeds the fuel system.

AUTOMATIC FUEL SYSTEM BLEEDING



If the heater's fuel pump makes an unusually loud noise and the heater does not function properly, the most likely cause is air in the fuel system.

AUTOMATIC FUEL SYSTEM BLEEDING

Whenever the power cord is connected to the socket and the start button is pressed, automatic bleeding will start. (This function only works when combustion conditions are met.)

HEATER STORAGE

It is recommended to unplug the power cord from the socket whenever the device is in storage.

Allow the heater to cool down completely before storing it. Protect the heater during storage by covering it with the fabric cover supplied with the delivery.

Storing the heater outdoors or in a very humid environment may cause corrosion, which can lead to significant technical damage.

CAUTION

If the heater is not used for a long time, add fuel stabilizer to the fuel tank to prevent microbes from forming inside the tank.

■ SERVICE AND CLEANING

ANNUAL MAINTENANCE

It is recommended to service the heater annually. This includes replacing the fuel filter, nozzle, and gaskets, as well as general cleaning and inspection of the heater.

The spare parts required for annual maintenance are included in the separately sold Airrex heater service kit. Make sure you use the appropriate service kit for your heater.

The annual service is also available as a comprehensive paid service.

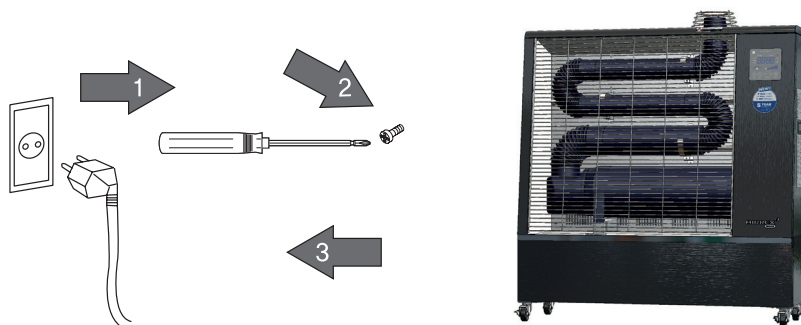


NOTE

Annual service is a mandatory procedure to maintain the 5-year warranty of the heater.



SURFACE CLEANING



Remove the screws, lift the safety grille slightly, and pull it out.

FOLLOW THESE CLEANING INSTRUCTIONS:

- The exterior surfaces can be gently cleaned with mild detergents if necessary.
- Clean the heat reflectors behind and on the sides of the heating pipes with a soft and clean microfiber cloth.

NOTE! The heating pipes are coated with a ceramic coating. Clean them with special care. Do not use abrasive cleaners.

DO NOT REMOVE OR DETACH THE HEATING PIPES!

- Clean the LED display with a soft and clean microfiber cloth.
- Install the safety grille by performing these steps in reverse order.

■ SERVICE AND CLEANING

SERVICE LOG

Heater model:

Serial number:

Date:

Service performed by:

Work performed:

Date:

Service performed by:

Work performed:

Date:

Service performed by:

Work performed:

Date:

Service performed by:

Work performed:

■ DIAGNOSIS AND REPAIR OF MALFUNCTIONS

ERROR MESSAGES

TIP!

The warning sound can be stopped by pressing the start button.



BURNER ERROR

The heater will attempt to start twice, after which it will display this error message. Most likely cause: clogged nozzle or fuel filter. Has the annual service been performed?



FLAME SENSOR ERROR

Check that the flame sensor connector is connected. Make sure the flame sensor is installed correctly. The sensor may also be damaged.



TEMPERATURE SENSOR ERROR

The temperature sensor is probably damaged. The heater can still be used in manual mode. Contact authorized Airrex service to repair the temperature sensor.



SHOCK OR TILT ERROR

The warning light will turn on if the device tilts more than 50° or is subjected to a strong impact or shock. The heater has been switched off by its safety systems.



OVERHEATING ERROR

The warning light will turn on when the overheat sensor temperature reaches the limit value. The heater has been switched off by its safety systems. When the device has cooled down, it will restart automatically.



FAN MOTOR ERROR

This error may occur if the fan motor connection cable is disconnected or if the connection is poor.



FAN MOTOR SPEED ERROR

This error may occur if the fan motor speed exceeds the allowed limit during operation. Post purge will be performed.



BURNER OVERHEATING ERROR

If the burner overheat sensor is damaged or the burner overheat sensor temperature reaches the limit value. The device can be restarted once it has cooled down sufficiently.



PREHEATING SENSOR ERROR

This error occurs if the preheating sensor is damaged or the sensor connector is not connected.



EMPTY FUEL TANK

When the fuel tank is completely empty, the message "OIL" will appear on the display. The device emits a continuous sound signal. The tank does not empty enough to require bleeding the fuel system.



CAUTION

NOTE!

If the safety systems shut down the heater, ventilate the heated area thoroughly to remove all exhaust gases and/or fuel vapors.

DIAGNOSIS AND REPAIR OF MALFUNCTIONS

FAULT DESCRIPTION		POSSIBLE CAUSE	CORRECTIVE ACTION
The heater does not start	The device is not receiving power.	The power cord is not plugged into the socket.	Plug the power cord into the socket.
		The electrical network is not supplying power.	Check the operation of the electrical network and the fuses at the installation site.
		Blown fuse	Replace the fuse (250 V 3A).
		The power cord has been disconnected from the heater.	Contact official Airrex service
	The fuel level warning light is on.	The fuel tank is empty.	Add clean diesel (EN 590).
		The current temperature is higher than the set target temperature.	Set the target temperature higher than the current temperature.
	The fuel pump is making a loud noise.	There is air in the fuel system.	Bleed the fuel system as described in the user manual.
	No fuel is reaching the burner.	The fuel filter is dirty.	Replace the fuel filter.
	The burner is not receiving sufficient voltage.	The mains voltage is too low.	Connect the device to a 220/230 V mains power supply.
	ER0 error message	There is air in the fuel pump.	Bleed the fuel system as described in the user manual.
		The fuel filter is clogged.	Check the condition of the fuel filter and replace it, if it is not completely bright.
		The fuel filter and nozzle are clogged.	If the fuel filter has been replaced and the heater still does not start, the nozzle is likely clogged and must also be replaced.
	ER1 error message	Flame sensor error	Check that the flame sensor connector is connected. Make sure the flame sensor is installed correctly. The sensor may also be damaged.
	ER2 error message	Temperature sensor error	The temperature sensor is probably damaged. The heater can still be used in manual mode. Contact authorized Airrex service to repair the temperature sensor.
	ER3 error message	Shock or tilt error	The warning light will turn on if the device tilts more than 50° or is subjected to a strong impact or shock. The heater has been switched off by its safety systems. Place the device on a flat and stable surface.
	ER4 error message	Overheating error	The warning light is lit when the temperature in the top section of the heating element exceeds the limit value. The heater has been switched off by its safety systems. When the device has cooled down, it will automatically restart.
	ER 5 error message	Fan motor error	The fan motor is likely damaged. Contact official Airrex service for fan motor repair.
	ER 6 error message	Fan motor speed error	The fan motor is likely damaged. Contact official Airrex service for fan motor repair.
	ER8 error message	Burner overheating error	The burner overheat sensor has reached the limit value. The heater can be started once it has cooled down sufficiently. If the heater does not start despite cooling down, contact official Airrex service.
	ER9 error message	Preheating sensor error	The preheating sensor is probably damaged or the connector is not connected. Contact official Airrex service to repair the preheating sensor.
The heater shuts down soon after starting.	The fuel level warning light is on.	The fuel is running low.	Fill the tank with clean diesel (EN 590).
	Smoke comes from the exhaust pipe when the device is turned off.	The fuel filter is clogged.	Replace the fuel filter.
		The fuel filter and nozzle are clogged.	If the fuel filter has been replaced and the heater still does not start, the nozzle is likely clogged and must also be replaced.
		Incorrect fuel type	Empty the fuel tank and fill it with clean winter-grade diesel (EN 590).
		The fuel contains water or other impurities.	Empty the fuel tank and fill it with clean winter-grade diesel (EN 590).
		The fuel pump is damaged.	Contact official Airrex service

DIAGNOSIS AND REPAIR OF MALFUNCTIONS

FAULT DESCRIPTION		POSSIBLE CAUSE	CORRECTIVE ACTION
The heater shuts down during a power outage.	The heater has shut down by itself.	There has been a power outage and the heater has been without power.	The device will start when power is restored.
The heater shuts down during the night.	ERO error message	Insufficient ventilation	The heated space has run out of fresh air. The ventilation of the space must be increased.
The heater shuts down after a few hours of use.	ERO error message	Insufficient ventilation	The heated space has run out of fresh air. The ventilation of the space must be increased.
The heater produces smoke and forms soot.	There is a blockage in the fuel system.	Incorrect fuel type	Empty the fuel tank and fill it with clean winter-grade diesel (EN 590).
	The burner does not get enough fresh air.	Insufficient ventilation	The heated space has run out of fresh air. The ventilation of the space must be increased and the heater must be serviced.
		The fuel filter is clogged.	Replace the fuel filter.
Noisy burner		The fuel filter is clogged.	Replace the fuel filter.
	The fuel pump is making a loud noise.	There is air in the fuel system.	Bleed the fuel system as described in the user manual.

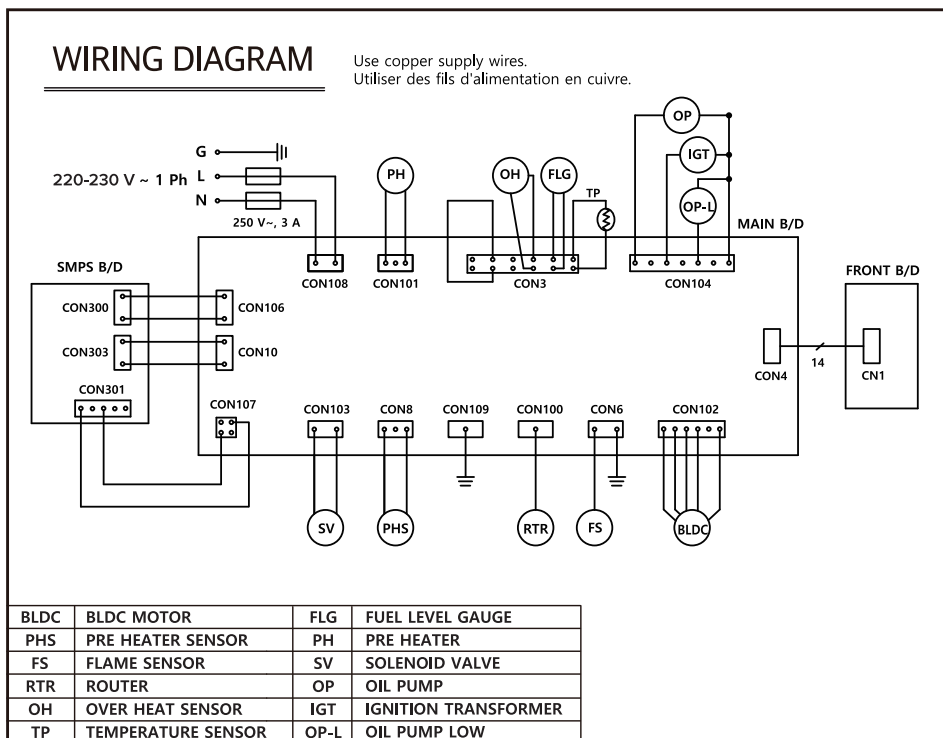
WIFI PROBLEMS

FAULT DESCRIPTION	CORRECTIVE ACTION
The WiFi indicator on the heater display is lit (not blinking), but the mobile app is constantly offline.	Swipe down on the mobile app screen to refresh it. If this does not help, close the app and try again.
The WiFi indicator on the heater display blinks once and the mobile app is constantly offline.	1. Check your wireless router's internet connection. Try to restart the router. 2. Press the arrow buttons simultaneously for 5 seconds, make sure you hear a beep and the WiFi indicator turns off, and press the arrow buttons again for 5 seconds you hear a beep and the WiFi indicator lights up. 3. If this does not help, unplug the heater from the socket and plug it back in.
The WiFi indicator on the heater's LED display blinks twice and the mobile app is constantly offline.	If the WiFi indicator blinks twice, the heater is not connected to the wireless router. Check the following items.
	1) Install the wireless router close to the heater. Depending on the location or distance between the devices, RSSI (wireless network signal strength), transmission time, and reception data transfer rate may vary.
	2) Make sure that the SSID (wireless router identifier or name) is a combination of English letters and numbers. If you use special characters, the information may not transfer correctly to the heater's modem and a connection may not be established.
	3) Depending on the network settings or connection status, establishing a connection may not be successful. If you are not connected or have problems with network configuration, contact your network service provider.
	4) Turn off the wireless router and restart it.
	5) In the mobile app, select from the product settings CHANGE NETWORK and change the wireless router.
	6) Remove the product from the mobile app and register the product again from the beginning. Note: Remove the paired Airrex device from the phone's Bluetooth settings before reconnecting.

■ TECHNICAL SPECIFICATIONS AND CONNECTION DIAGRAM

	AH-500i	AH-900i
Heating capacity	11 / 15 kW	19 / 24 kW
Fuel	Renewable diesel (HVO100, EN 15940) or diesel (EN 590)	
Fuel consumption	1.05 / 1.42 L / h	1.81 / 2.3 L / h
Burner type	Electric pump (pressurized spray type)	
Power supply	220/230 Vac, 50 Hz, Single-phase	
Power consumption	50 W	60 W
Fuel tank capacity	45 liters	70 liters
Product dimensions (WxDxH)	950 x 305 x 1080 mm	1300 x 350 x 1400 mm
Weight	47 kg	81 kg
Pre-heater	180 W	
Safety devices	Overheating prevention, automatic ignition fault detection, excessive vibration / tilt sensor, low fuel indicator	
Control method	Digital MiCOM WiFi controller	
Fuse	Fast, short type amp fuse (250 Vac, 3 A)	
WiFi frequency	2.4 GHz	
Bluetooth	V4.2 BLE	

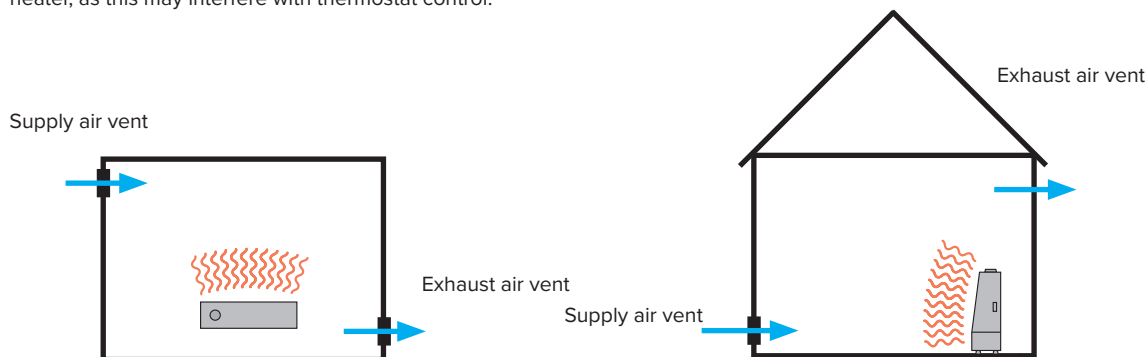
- The manufacturer does not recommend using these heaters at temperatures below -20 °C.
- Due to active product development, the manufacturer reserves the right to make changes to the technical data and functional descriptions in this manual without prior notice.
- The noise level of this product does not exceed 70 dB(A).
- The preheat heater operates only during preheating and initial ignition



CAUTION

ENSURE SUFFICIENT VENTILATION

Over 85% of all malfunctions are caused by insufficient ventilation. It is recommended to place the heater in a central and open location so that it can radiate heat forward without obstruction. The heater needs oxygen to operate, which is why sufficient ventilation must be ensured in the space. Natural ventilation in accordance with building regulations is sufficient, provided that no supply or exhaust air vents are blocked. It is also not recommended to place a supply air vent near the heater, as this may interfere with thermostat control.



- It is important to ensure that air circulates in the heated space. Ideally, air should be supplied through the lower supply air vent and CO₂-rich air should be removed through the upper exhaust air vent.
- The recommended diameter of the ventilation openings is 75–100 mm.
- If the room has only a supply **or exhaust air** vent, air cannot circulate in the room and ventilation is insufficient. The situation is the same if ventilation occurs only through an open window.
- Air flowing in through slightly open doors/windows does not guarantee sufficient ventilation.
- The heater requires sufficient ventilation even if the exhaust pipe is routed outside the heated room.

AIRREX WARRANTY

Warranty terms

Warranty provider
Rex Nordic Oy (2646942-1)
Mustanlähteentie 24A,
07230 Askola, FINLAND

1. General description

Rex Nordic provides a warranty to consumers who have purchased a product imported by the importer, either directly or from a reseller. The consumer's rights during the warranty period are determined by the regulations of the country in which the warranty or warranty service claim is made. This warranty is a voluntary warranty from the manufacturer, which provides consumers with rights in addition to those under national consumer legislation, and does not affect these legal rights. The warranty is valid provided that the device is used and maintained according to the instructions.

Time-limited or temporary offers are country-specific, and warranty claims related to them cannot be made in countries other than the country or countries where the offer is valid.

2. Warranty coverage

The importer must provide a material and manufacturing defect warranty for the products they import, in accordance with these warranty terms. The guarantor is responsible for ensuring that the usability and quality of the device remain normal throughout the warranty period. Otherwise, the device is considered defective.

A defect refers to a deviation, as assessed by an expert, from the normal quality of the importer's products or from the manufacturer's specified reference values, taking into account the age and usage time of the device. For example, manufacturing and structural defects, as well as other faults and deficiencies that impair the usability of the device during the warranty period, are considered defects covered by the warranty.

However, the guarantor is not responsible for a defect if a justified reason can be provided that the deviation from the device's normal quality or usability is due to a reason attributable to the buyer. The reason may be, for example, handling the device contrary to the instructions for use, other improper use of the device, neglect or inadequate implementation of maintenance according to the manufacturer's maintenance program. The warranty limitations are described in more detail in section 6.

The warranty covers only products imported by Rex Nordic Oy and sold by an official Rex Nordic Oy reseller.

Only authorized resellers of Rex Nordic Oy are allowed to market and advertise the 5-year warranty.

3. Warranty start time and duration

The warranty period begins on the date of purchase of the product. The product purchase receipt or equivalent proof must be kept and presented in warranty-related matters to confirm the warranty.

The importer grants a 24-month warranty for the products starting from the date of purchase. If the product is specifically mentioned and marketed, the warranty can be extended at rexnordic.com by activating a 3-year additional warranty within 4 weeks of the purchase date.

After registering the additional warranty, the maximum warranty period for the product is a total of 5 years. More information about the warranty periods of different products is available at rexnordic.com.

4. Works covered by the warranty

If the device is sent for warranty service within the extended warranty period, a receipt and warranty certificate (or reliable proof of the purchase date) must be sent with it. Based on the warranty, the repair of a defect covered by the warranty will be carried out free of charge during the warranty period during the normal working hours specified by Rex Nordic Oy.

Any transportation costs incurred during the warranty service or warranty repair of the device are the responsibility of the customer. Keep the original packaging to facilitate transportation. After warranty service or warranty repair, the costs of returning the product to the customer, if the device has been approved for warranty service/repair, are the responsibility of the reseller/importer. If the defect or repair of the product is not covered by the warranty, the customer must pay all maintenance costs, including any postage costs.

If the product or its part is replaced under the rights provided by this warranty, the replaced part becomes the property of the customer and the replaced old part becomes the property of the importer.

5. Warranty for the repaired product

The warranty for a device that has been repaired or replaced under warranty continues until the end of the original warranty period.

6. Warranty limitations

The warranty does not cover:

a. repair of defects caused by natural wear and tear or improper use; incomplete or incorrect service performed by someone other than the importer or operating conditions that deviate from the design criteria; or a device chosen by the buyer that is unsuitable or incorrectly sized for use or a specific application. Instructions for annual maintenance can be found in the user manual supplied with the

product and are available online at rexnordic.com.

- b. use of the product in premises contrary to the instructions for use and/or problems caused by conditions. Always check the required technical specifications in the product's user manual
- c. insufficient ventilation (products that require adequate ventilation to operate)
- d. compensation for direct or indirect damage caused by a defective device
- e. repair of a defect if a third party has made modifications or repairs to the device
- f. repair or replacement of consumable parts for which no separate warranty has been granted

If, during the warranty repair, it is found that the defect or possible defect was caused by any of the above-mentioned reasons, the importer has the right to charge the customer for the labor and material costs incurred for the repair. The importer must inform the customer of such a situation when it becomes apparent, giving the customer the opportunity not to repair a defect not covered by the warranty terms. In the situation described above, the return costs of the product are the responsibility of the customer. The product can also be picked up from the importer's service center, where the product has been sent, without additional costs.

A reasonable time to report a defect must be no later than 60 days from the discovery of the defect or from the day it should have been discovered. In the event of a defect, the customer must always act in such a way that the damage does not worsen due to the customer's actions or negligence. When reporting a defect, the buyer must present a warranty certificate or other reliable proof of the place and date of purchase of the device.

When assessing a reasonable repair time, the severity of the defect as well as safety and reliability, the difficulty of locating the defect, the extent of the repair, and the availability of spare parts must be taken into account.

For software, the manufacturer's license and terms of use must be followed.

7. Submitting a warranty claim

You can make a warranty claim at rexnordic.com or by phone or email to Rex Nordic customer service during its opening hours. Up-to-date customer service contact information is available at rexnordic.com.

Alternatively, if you purchased the product from an official Rex Nordic Oy reseller, you can contact the reseller.

8. Warranty services and options

The most suitable warranty service can be determined by contacting the importer. Rex Nordic will choose one or more of the following options to be used:

- a. An authorized service technician will arrive on site to perform the warranty service.
- b. The customer sends the product for warranty service by mail. Rex Nordic will pay the shipping costs both ways if the warranty conditions are met
- c. The customer delivers the product to an authorized reseller, and the reseller delivers the product to Rex Nordic.
- d. The customer delivers the product directly to the service point specified by Rex Nordic. The customer is responsible for any costs incurred.
- e. Rex Nordic will send by mail an easily replaceable part that the customer can replace themselves.

We are not directly or indirectly responsible for any labor costs. If you need help or more information, please contact Rex Nordic service. Up-to-date contact information is available at rexnordic.com.

9. Disclaimer

This warranty is interpreted according to the laws of the country where the product imported by Rex Nordic Oy has been sold.

To the extent permitted by local law, Rex Nordic is not responsible for any functional defects, damages, losses, or other indirect damages resulting from misuse of the product, unfitness for use, or breach of direct or indirect warranty terms.

NOTE!

This product is subject to the WEEE Directive (2012/19/EU).

Follow local regulations and do not dispose of this product as household waste.

Instead, take it to an appropriate electrical and electronic equipment recycling point.

■ TECHNICAL SUPPORT

WHY OUR SERVICE?

1. We are the official service center for Airrex products.
2. We use only original spare parts.
3. All device spare parts are available from our warehouse.
4. Well-trained, professional, and friendly service staff.
5. We offer fast and reliable service.
6. Our service comes to you—it's that easy!

We are here to help you. See the contact details on our website: rexnordic.com

CUSTOMER SERVICE
info@rexnordic.com

TECHNICAL SUPPORT:
service@rexnordic.com

AIRREX[®]

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