

KAISAI KEX-24HRD

Kaisai ECO Split Air Conditioner User Manual

Model: KEX-24HRD

1. INTRODUCTION

This manual provides essential information for the safe and efficient operation, installation, and maintenance of your Kaisai ECO Split Air Conditioner, model KEX-24HRD. Please read this manual thoroughly before using the appliance and retain it for future reference. This air conditioner is designed to provide optimal climate control for spaces up to 100 m², offering both cooling and heating functionalities with high energy efficiency.

2. SAFETY INFORMATION

Important Safety Instructions: Always follow basic safety precautions to reduce the risk of fire, electric shock, or injury.

- Professional Installation:** Installation, maintenance, and repair of this unit must be performed by qualified and certified personnel only. Improper installation can lead to electric shock, fire, or water leakage.
- Electrical Safety:** Ensure the power supply matches the unit's requirements. Do not use damaged power cords or plugs. Do not operate with wet hands. Always disconnect power before cleaning or servicing.
- Refrigerant:** This unit uses R32 refrigerant. Do not attempt to handle or release refrigerant. In case of leakage, ventilate the area immediately. R32 is mildly flammable.
- Children and Vulnerable Persons:** This appliance is not intended for use by persons (including children) with reduced physical, sensory or mental capabilities, or lack of experience and knowledge, unless they have been given supervision or instruction concerning use of the appliance by a person responsible for their safety. Children should be supervised to ensure that they do not play with the appliance.
- Ventilation:** Ensure proper ventilation around the outdoor unit to prevent overheating. Do not block air inlets or outlets.
- Cleaning:** Use a soft, dry cloth for cleaning. Do not use volatile liquids or abrasive cleaners.
- Location:** Install the unit on a stable, level surface that can support its weight. Avoid direct sunlight or heat sources.

3. PRODUCT OVERVIEW

The Kaisai ECO Split Air Conditioner system consists of an indoor unit, an outdoor unit, and a remote control, designed for efficient climate control. The indoor unit is typically mounted on a wall, while the outdoor unit is placed outside the building.



Figure 3.1: Complete Kaisai ECO Split Air Conditioner system, showing the indoor unit, outdoor unit, remote control, and various installation components including copper piping, drainage hose, electrical cable, and wall brackets.



Figure 3.2: The indoor unit of the Kaisai ECO Split Air Conditioner, featuring a clean white design with the 'KAISAI eco' logo and a digital display for temperature and mode indicators.



Figure 3.3: The outdoor unit of the Kaisai ECO Split Air Conditioner, characterized by its robust casing and a large fan with blue blades, designed for efficient heat exchange.

4. KEY FEATURES

The Kaisai ECO Split Air Conditioner is equipped with advanced features for enhanced comfort and energy efficiency:

- **Extra Quiet Operation:** Utilizes the latest technologies to ensure very quiet operation, minimizing noise disturbance.
- **Efficient Climate Control:** Features DC inverter technology for high energy efficiency, achieving A++ for cooling and A+ for heating.
- **Turbo Mode:** Allows the unit to reach the set temperature more rapidly for quick comfort.
- **24-Hour Timer:** Enables users to program specific on and off times for automated operation.
- **Follow Me Function:** The remote control's integrated temperature sensor helps regulate the room temperature more accurately based on the remote's location.
- **Sleep Mode:** Provides a quiet and efficient operation during sleep, preventing overcooling or overheating.
- **R32 Refrigerant:** Uses environmentally friendly R32 refrigerant, which has a 68% reduced environmental impact compared to R-410A and is easily recyclable.
- **Advanced Filtration:** Includes Bio HEPA filter and Cold Catalytic filter for improved air quality.
- **Self-Cleaning Evaporator:** Helps maintain the cleanliness and efficiency of the indoor unit's evaporator coil.
- **WiFi Ready:** Allows for smart control via a mobile application (additional module may be required).

KAISAI

ECO



BIO HEPA
FILTER



KALTKATALYTISCHER
FILTER



SELBSTREINIGENDER
VERDAMPFER

ECONOMISCHE WAHL

Die wirtschaftliche Lösung für Ihr Zuhause



WLAN
READY



ÖKOLOGISCHES
KÄLTEMITTEL R32



MULTIFUNKTIONALE
FERNBEDIENUNG



BREITER
TEMPERATURBEREICH

Figure 4.1: Visual representation of the Kaisai ECO's advanced features, highlighting its smart capabilities, environmental friendliness, and air purification functions.

5. PACKAGE CONTENTS

Upon unpacking, please verify that all the following components are included in your package:

- Kaisai ECO Indoor Unit (Wall Machine)
- Kaisai ECO Outdoor Unit
- Remote Control
- 5 meters of insulated, pre-fabricated refrigerant conductor (copper piping)
- 5 meters of condensation line (drainage hose)
- 5 meters of NYM power cable (5 x 1.5)
- Wall brackets for the outdoor unit (fire-dip galvanized steel, powder coated, extension 465 mm, up to 140 kg load-bearing capacity)
- User Manual (this document)



Figure 5.1: The included mounting set and connection lines, essential for the installation of the split air conditioning system.

6. SETUP AND INSTALLATION

WARNING: Installation of this air conditioning unit requires specialized knowledge and tools. It must be performed by a qualified and certified HVAC technician to ensure safety, proper operation, and compliance with local regulations regarding refrigerant handling.

6.1. Site Selection

- **Indoor Unit:** Choose a location that allows for even air distribution throughout the room, away from direct sunlight or heat sources. Ensure sufficient space around the unit for maintenance and airflow.
- **Outdoor Unit:** Select a location with good ventilation, away from obstacles that might block airflow. Ensure it is on a stable surface and can withstand weather conditions. Minimize the distance between indoor and outdoor units for optimal performance.

6.2. Installation Steps (Overview for Technician)

1. Mount the indoor unit securely on the wall using the provided mounting plate.
2. Drill a hole through the wall for the refrigerant pipes, drainage hose, and electrical cable.
3. Install the outdoor unit on the wall brackets or a stable ground pad.
4. Connect the refrigerant pipes between the indoor and outdoor units, ensuring proper insulation and leak-free connections.
5. Connect the drainage hose from the indoor unit to an appropriate drainage point.
6. Perform electrical wiring connections according to the wiring diagram provided in the detailed installation manual (not included in this user manual).
7. Evacuate the refrigerant lines to remove air and moisture.
8. Perform a leak test.
9. Open the service valves and release the refrigerant.
10. Test run the unit to ensure proper operation in all modes.



Figure 6.1: An example of the indoor unit properly installed on a wall, demonstrating typical placement in a living space.

7. OPERATING INSTRUCTIONS

Your Kaisai ECO Split Air Conditioner is controlled primarily via the wireless remote control. Familiarize yourself with the remote's functions for optimal use.



Figure 7.1: The remote control for the Kaisai ECO air conditioner, featuring a clear LCD display and intuitive buttons for mode selection, temperature adjustment, fan speed, and special functions.

7.1. Remote Control Functions

- **ON/OFF Button:** Powers the unit on or off.
- **MODE Button:** Cycles through operating modes: Auto, Cool, Dry, Heat, Fan.
- **Temperature Buttons (▲/▼):** Adjusts the desired temperature setting.
- **FAN Button:** Selects fan speed: Auto, Low, Medium, High.
- **TIMER Button:** Sets the 24-hour timer for automatic on/off operation.
- **ECO Button:** Activates energy-saving mode.
- **LED Button:** Turns the indoor unit's display LED on or off.
- **Follow Me Button:** Activates the Follow Me function, using the remote's sensor for temperature reading.
- **TURBO Button:** Activates Turbo mode for rapid cooling or heating.
- **SLEEP Button:** Activates Sleep mode for quiet and energy-efficient operation during sleep.
- **SET/CLEAN Button:** May be used for setting specific functions or initiating a self-clean cycle (refer to detailed remote manual for specific model functions).

7.2. Basic Operation

1. **Power On:** Press the ON/OFF button. The unit will start in the last selected mode or Auto mode.
2. **Select Mode:** Press the MODE button repeatedly until the desired mode (Cool, Heat, Fan, Dry, Auto) is displayed.
3. **Set Temperature:** Use the ▲/▼ buttons to set your desired temperature.

- 4. **Adjust Fan Speed:** Press the FAN button to cycle through fan speed options.
- 5. **Power Off:** Press the ON/OFF button again.

8. MAINTENANCE

Regular maintenance ensures optimal performance and longevity of your air conditioner. Always disconnect power before performing any maintenance.

8.1. Air Filter Cleaning

The air filters should be cleaned every two weeks or more frequently depending on usage and air quality.

- 1. Open the front panel of the indoor unit.
- 2. Remove the air filters.
- 3. Clean the filters using a vacuum cleaner or wash them with lukewarm water (below 40°C).
- 4. Allow the filters to dry completely in a shaded area before re-installing. Do not expose to direct sunlight.
- 5. Re-install the filters and close the front panel.

8.2. Outdoor Unit Cleaning

Periodically clean the outdoor unit's coil and fan blades to remove dust, leaves, and debris. Use a soft brush or vacuum cleaner. Ensure the area around the outdoor unit is clear of obstructions.

8.3. Professional Servicing

It is recommended to have your air conditioner professionally serviced at least once a year by a qualified technician. This includes checking refrigerant levels, electrical connections, and overall system performance.

9. TROUBLESHOOTING

Before contacting customer support, please refer to the following common issues and their solutions:

Problem	Possible Cause	Solution
Unit does not start	No power supply; Remote control batteries low; Timer function active.	Check power connection and circuit breaker; Replace remote control batteries; Deactivate timer function.
Insufficient cooling/heating	Dirty air filters; Blocked air intake/outlet; Room too large; Doors/windows open; Temperature setting incorrect.	Clean air filters; Remove obstructions; Close doors/windows; Adjust temperature setting.
Water leakage from indoor unit	Drainage hose blocked or kinked; Improper installation.	Check and clear drainage hose; Contact a qualified technician for inspection.
Unusual noise	Loose parts; Fan obstruction; Refrigerant flow noise (normal).	Check for loose parts; Remove any obstructions; If noise persists or is abnormal, contact technician.
Remote control not working	Batteries dead or incorrectly inserted; Obstruction between remote and unit.	Replace batteries; Ensure clear line of sight to indoor unit's receiver.

If the problem persists after attempting these solutions, please contact a qualified service technician.

10. TECHNICAL SPECIFICATIONS





Specification	Value
Brand	KAISAI
Model Name	Kaisai Eco
Item Model Number	KEX-24HRD
Cooling Capacity	7.0 kW (24000 BTU)
Heating Capacity	A+
Energy Efficiency (Cooling)	A++
Refrigerant Type	R32
Power Source	Corded Electric
Voltage	230 Volts
Wattage	7 KW
Control Method	Remote
Inverter Type	Has Inverter
Form Factor	Mini-Split
Product Dimensions	84.5 x 36.3 x 70.2 cm
Date First Available	20 May 2020

11. WARRANTY AND SUPPORT

For warranty information, please refer to the warranty card included with your product or contact your local Kaisai dealer or distributor. Keep your purchase receipt as proof of purchase for warranty claims.

For technical support, service, or spare parts, please contact the authorized Kaisai service center in your region. Contact details can typically be found on the manufacturer's website or through your point of purchase.



 <p>The image shows a product overview for Kaisai, featuring various air conditioning units, heat pumps, and energy storage solutions. The Kaisai logo is at the top, followed by the text 'PRODUCT OVERVIEW' and 'FOR COMFORT, EFFICIENCY, AND ENERGY'. Below this is a collage of different HVAC units, and at the bottom, the year '2025' is displayed.</p>	<p>Kaisai Product Overview: Air Conditioners, Heat Pumps, and Energy Storage</p> <p>Explore the comprehensive range of Kaisai air conditioning, heat pump, hybrid inverter, and battery energy storage solutions. This product overview details specifications, features, and contact information for Kaisai's innovative HVAC and energy products.</p>
 <p>The image is a cover for the Kaisai 2025/2026 price list. It features the Kaisai logo at the top, followed by the word 'CENNIK' in large, bold letters. Below this, it lists 'KLIMATYZACJA POMPY CIEPŁA REKUPERACJA'. At the bottom, the years '2025/2026' are prominently displayed, along with the text 'WARTOŚĆ NETTO I BEZ VATU'.</p>	<p>Cennik Kaisai 2025/2026: Klimatyzacja, Pompy Ciepła, Rekuperacja</p> <p>Oficjalny cennik produktów Kaisai na lata 2025/2026, obejmujący szeroką gamę klimatyzatorów ściennych, przenośnych, systemów multi-split, klimatyzatorów komercyjnych, pomp ciepła, central rekuperacyjnych oraz akcesoriów. Zapoznaj się z pełną ofertą i specyfikacjami technicznymi.</p>
 <p>The image shows the cover of the Kaisai ICE split-type room air conditioner owner's manual. It features the Kaisai logo and the text 'Owner's Manual & Installation Manual'. Below this is an illustration of the air conditioner unit. The text 'KAISAI ICE' is also visible.</p>	<p>KAISAI ICE Split-Type Room Air Conditioner Owner's Manual & Installation Guide</p> <p>Comprehensive guide for KAISAI ICE split-type room air conditioners, covering installation, operation, maintenance, and troubleshooting. Includes safety precautions, unit specifications, and technical details.</p>
 <p>The image shows a Kaisai console air conditioner in a modern interior setting. The unit is white and rectangular, designed for floor-level installation. It is positioned next to a wooden shelving unit with various decorative items.</p>	<p>KAISAI Console Air Conditioners: Efficient and Flexible Cooling Solutions</p> <p>Explore the KAISAI console air conditioners, designed for floor-level installation to maximize wall space. Learn about their features, technical specifications, and energy efficiency for commercial and residential cooling.</p>