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› Samsung 1 Ton 5 Star Bespoke AI Inverter Smart Split AC (AR50H12D1ZHNNA) User Manual

Samsung AR50H12D1ZHNNA

Samsung 1 Ton 5 Star Bespoke AI Inverter Smart Split AC

Model: AR50H12D1ZHNNA - User Manual

1. PRODUCT OVERVIEW

This manual provides essential information for the safe and efficient operation of your Samsung 1 Ton 5 Star Bespoke AI Inverter Smart Split AC, model AR50H12D1ZHNNA. This advanced air conditioner features AI Inverter technology, Wi-Fi connectivity, voice control, and multiple cooling modes to ensure optimal comfort and energy efficiency.



Image 1.1: Samsung Bespoke AI Inverter Smart Split AC Indoor Unit.

2. SAFETY INFORMATION

Read all safety warnings and instructions carefully before installing, operating, or servicing this appliance. Keep this manual for future reference.

- **Installation:** Installation must be performed by qualified service personnel in accordance with local and national wiring regulations. Improper installation can lead to electric shock, fire, or water leakage.
- **Power Supply:** Ensure the power supply matches the specifications of the unit. Do not use damaged power cords or plugs.
- **Maintenance:** Disconnect power before cleaning or performing any maintenance. Do not attempt to repair the unit yourself. Contact authorized service personnel.
- **Refrigerant:** This unit uses R32 refrigerant. Handle with care and ensure proper ventilation during installation and servicing.

- **Children:** Keep children away from the unit and remote control. Do not allow children to play with the appliance.

3. PACKAGE CONTENTS

Verify that all components are present in the box:

- 1 x Indoor Unit
- 1 x Outdoor Unit
- 1 x Remote Control
- 2 x AAA Batteries (for remote)
- 1 x Connecting Wire (3.5m)
- 1 x Copper Pipe/Copper Tube (3m)
- User Manual (accessible from brand website)

Included in the Box



Image 3.1: Included components in the product package.

4. SETUP AND INSTALLATION

Professional installation is highly recommended for this split AC unit to ensure proper functioning and safety. Refer to the detailed installation guide provided by Samsung service technicians.

4.1. Dimensions

- **Indoor Unit:** 88.9 cm (W) x 29.9 cm (H) x 21.5 cm (D)
- **Outdoor Unit:** 79 cm (W) x 54.8 cm (H) x 28.5 cm (D)
- **Indoor Unit Weight:** 9.7 kg
- **Outdoor Unit Weight:** 25.7 kg



Image 4.1: Product Dimensions for Indoor and Outdoor Units.

4.2. Room Size Suitability

This 1 Ton AC unit is suitable for medium-sized rooms, typically ranging from 80 to 110 square feet.



Image 4.2: Room Size Recommendations.

5. OPERATING INSTRUCTIONS

5.1. Remote Control Functions

The remote control allows you to manage all functions of your AC unit. Insert the two AAA batteries into the remote control before use.



Image 5.1: Remote Control Layout and Functions.

- **On/Off Button:** Powers the unit on or off.
- **Temperature Up/Down:** Adjusts the desired temperature.
- **Mode Control:** Cycles through cooling modes (Cool, Fan, Dry, Auto).
- **Fan Speed:** Adjusts the fan speed.
- **Timer:** Sets a timer for automatic on/off.
- **Fast Cooling:** Activates rapid cooling.
- **4 Way Swing:** Controls the vertical and horizontal airflow direction.
- **5 Stage Convertible Mode/Energy Saving:** Selects power consumption levels.
- **Auto Clean:** Initiates the self-cleaning function.

5.2. 5-in-1 Convertible Modes

The 5-in-1 Convertible Modes allow you to adjust the AC's cooling capacity and power consumption based on your needs, offering flexibility and energy savings.

- **Home Alone Mode (40%):** Reduced cooling for single occupancy.
- **Eco Mode (60%):** Energy-efficient cooling for general use.
- **Pleasant Mode (80%):** Balanced cooling for comfort.
- **Normal Mode (100%):** Full cooling capacity.
- **Party Mode (120%):** Enhanced cooling for larger gatherings or quick cooling.

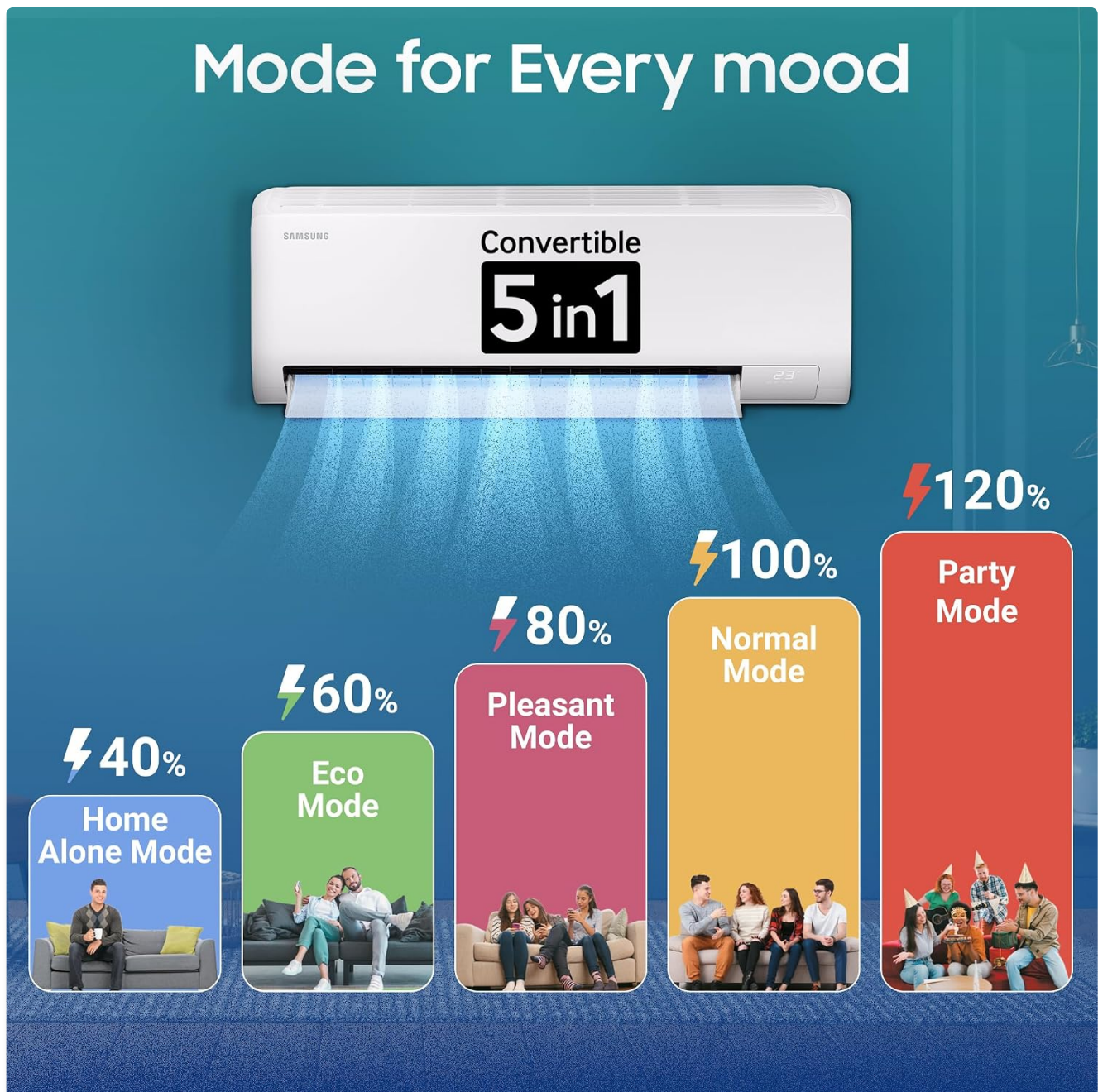


Image 5.2: Understanding 5-in-1 Convertible Modes.

5.3. AI Energy Mode

The AI Energy Mode intelligently optimizes energy consumption by learning your usage patterns, indoor temperature, outdoor temperature, and operating time. This can lead to significant energy savings.



Image 5.3: AI Energy Mode Operation.

5.4. Fast Cooling

The Fast Cooling feature rapidly cools the room, providing quick relief from heat. This mode is ideal for quickly reaching your desired temperature.

5.5. 4-Way Swing

The 4-Way Swing function ensures even distribution of cool air throughout the room by automatically adjusting both vertical (up/down) and horizontal (left/right) airflow directions.

4 Way Swing



Image 5.4: 4-Way Airflow Distribution.

5.6. SmartThings App Integration and Voice Control

Connect your AC to the Samsung SmartThings app via Wi-Fi for enhanced control and monitoring. The app allows you to:

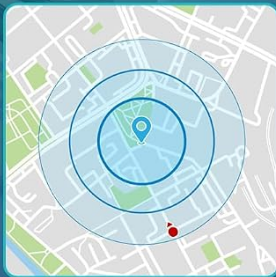
- Control the AC remotely from anywhere.
- Monitor energy usage.
- Set schedules and welcome cooling.
- Receive auto error diagnosis.
- Use voice commands with Alexa, Google Assistant, and Bixby for hands-free operation.



SmartThings

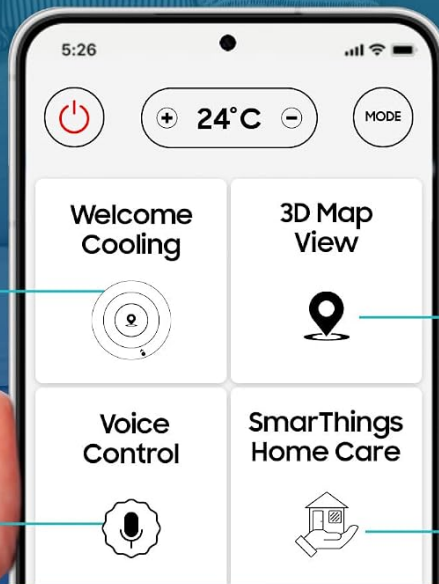


Walk in,
Feel Cool



works with
Google Assistant

works with
amazon alexa



Monitor all devices
at a glance



AI Diagnosis

*Download SmartThings app from play store/app store.

Image 5.5: SmartThings App Interface.

6. MAINTENANCE

Regular maintenance ensures optimal performance and longevity of your AC unit.

6.1. Auto Clean Function

The 3-Step Auto Clean function automatically dries the indoor unit's heat exchanger to prevent the growth of bacteria and mold, ensuring fresh and clean air.

6.2. Filter Maintenance

The unit is equipped with an Antimicrobial Air Filter. Clean the filter regularly (e.g., every two weeks or as needed) to maintain air quality and cooling efficiency. Refer to the full user manual for detailed cleaning instructions.

6.3. Durability Features

Your Samsung AC is designed for durability and anti-corrosion:

- **Durafin Ultra:** Provides rust protection for the outdoor unit.
- **Coated Copper Tubes:** Offer 7.5x better corrosion resistance compared to standard copper tubes.



Image 6.1: Durability and Anti-Corrosion Features.

7. TROUBLESHOOTING

If you encounter issues with your AC, refer to the following common troubleshooting tips. For more complex problems, contact Samsung customer support.

Problem	Possible Cause	Solution
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Problem	Possible Cause	Solution
AC not turning on	No power, remote batteries low, circuit breaker tripped.	Check power supply, replace remote batteries, reset circuit breaker.
Insufficient cooling	Dirty air filter, blocked outdoor unit, wrong mode selected, room too large.	Clean air filter, clear obstructions from outdoor unit, select appropriate mode, ensure room size is within capacity.
Unusual noise	Loose parts, foreign objects, installation issue.	Check for loose parts, remove foreign objects, contact service for installation check.
Water leakage	Blocked drain pipe, improper installation.	Clear drain pipe, contact service for installation check.
Wi-Fi connection issues	Router issues, incorrect password, AC not in pairing mode.	Restart router, re-enter Wi-Fi password, follow SmartThings app pairing instructions.

The SmartThings app also provides an **Auto Error Diagnosis** feature to help identify and resolve issues.

8. TECHNICAL SPECIFICATIONS

Feature	Specification
Brand	Samsung
Model Name	AR50H12D1ZHNNA
Capacity	1 Ton
Energy Rating	5 Star BEE Rating
ISEER Rating	5.78 W/W
Annual Energy Consumption	448.81 Kilowatt Hours Per Year
Cooling Power	3.35 Kilowatts
Refrigerant	R-32 (Environmental Friendly)
Compressor Type	Digital Inverter (Rotary Scroll)
Noise Level	21 Decibels
Filter Type	Antimicrobial Air Filter

Feature	Specification
Special Features	5 Step Convertible, 4 Way Swing, Fast Cooling, Auto Error Diagnosis, 3 Step Auto Clean, BESPOKE AI, Additional Energy Savings, Wi-Fi, Voice Control (Alexa, Google & Bixby), SmartThings app, Durafin Ultra, Triple Protection Plus, Coated Copper tubes
Control Method	App, Remote
Voltage	230 Volts
Wattage	730 Watts
Product Dimensions (Indoor)	21.5D x 89.9W x 29.9H Centimeters
Product Weight (Total)	35.4 Kilograms

2026 BEE Star Rating

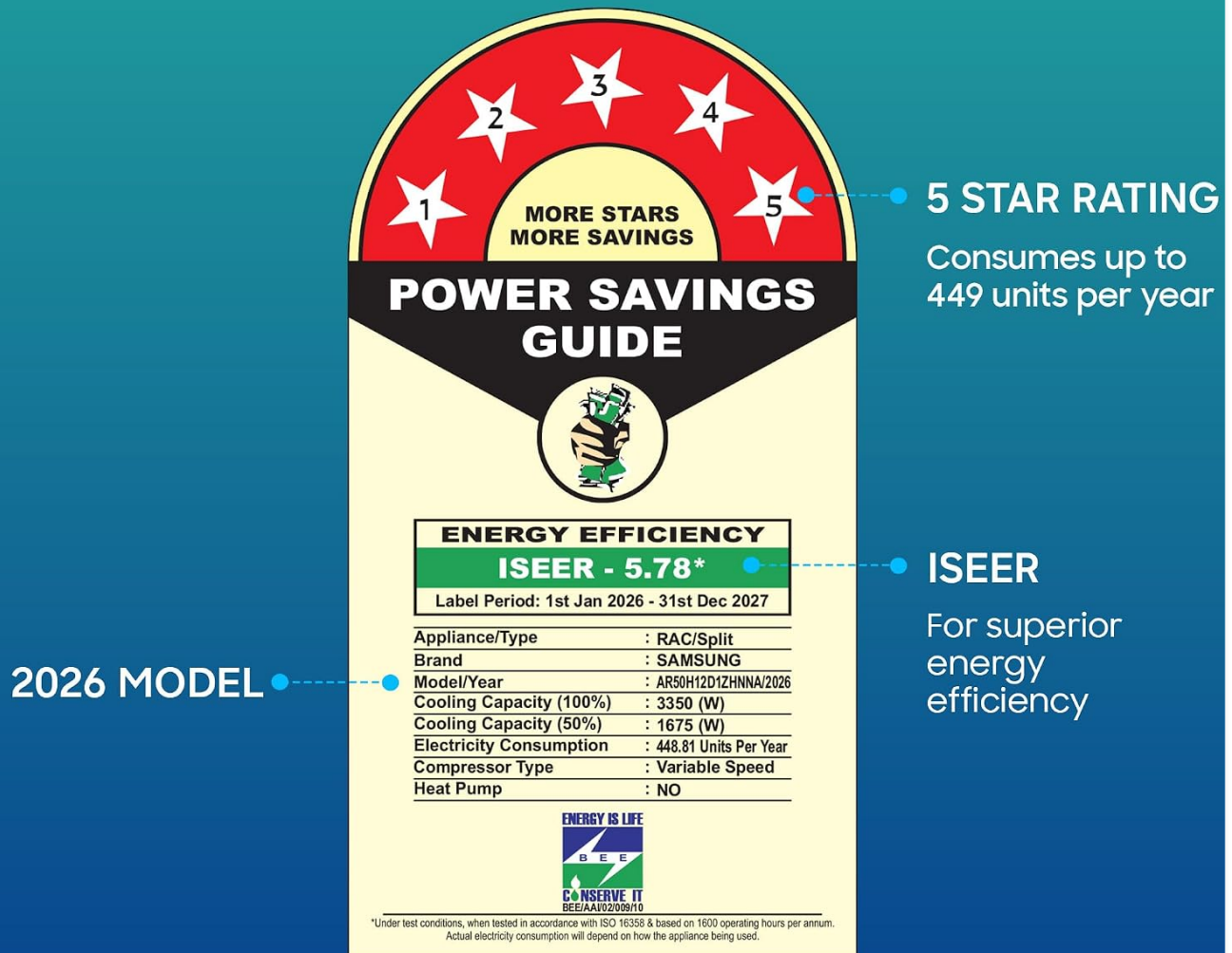


Image 8.1: 2026 BEE 5 Star Rating and Energy Efficiency Details.

9. WARRANTY AND SUPPORT

9.1. Warranty Information

Your Samsung AC comes with the following warranty:

- **5-year comprehensive warranty** on the product.
- **10-year warranty** on the Digital Inverter Compressor.

Note: Brand warranty can be availed using the seller invoice. Terms and conditions apply.



1. Based on internal testing on the AR12TXCAAWKEU model compared with the Samsung conventional AQ12EASER model, measuring the time taken to reduce the room temperature from 33°C to 25°C. Based on internal testing on the AR24TXFCAWKNEU model.
2. Based on internal testing and certified by Intertek.
3. The testing was conducted in Samsung's 132m² residential environment laboratory at a temperature of 35°C/24°C (dry bulb/wet bulb, KS C 9306: air conditioner). Results provided to and interpreted by Intertek, comparing the power consumption between AI energy mode on and off in AI comfort mode of AR07D9181HZN model. Actual savings may vary by usage patterns and environment and the set temperature may increase by up to 2 degrees. Requires the use of the SmartThings App and a Samsung account.
4. Available on Android and iOS devices. A Wi-Fi connection and a Samsung account are required. Bixby is Samsung's brand of Internet of Things (IoT) voice assistant. Bixby service availability may vary depending on country. Bixby recognizes selected languages and certain accents/dialects. The user interface may change and differ by device. The availability of Bixby features and content providers may vary depending on the country/carrier/language/device model/OS version. A Samsung account log-in and data network connection (Wi-Fi or data network) are required. Amazon, Alexa and all related logos are trademarks of Amazon.Com, Inc. or its affiliates. Google is a trademark of Google LLC.
5. Only available when using Samsung Galaxy smartphones. A Wi-Fi connection and a Samsung account are required. The air conditioner must be connected to the Wi-Fi network and registered in the SmartThings App. Only certain models of air conditioners manufactured in 2024 or later are supported. The automatic activation time varies depending on the user environment. The controllable functions of compatible devices may vary depending on their specification or the usage environment, especially B2B products and some special models manufactured in 2024.
6. Available on Android and iOS devices. A Wi-Fi connection and a Samsung account are required.
7. Available on Android and iOS devices. A Wi-Fi connection and a Samsung account are required. The Welcome & Away Care (energy saving notification) function uses smartphone Geofencing and GPS to determine whether you are close to your personal set location, and its performance may vary depending on the actual usage environment and the cooling function of each model.

Image 9.1: Warranty Details.

9.2. Customer Support

For all product-related complaints or assistance, please contact Samsung customer care:

- **Email:** support.india@samsung.com
- **Toll-Free Telephone:** 1800 40 7267864 (1800 40 SAMSUNG)
- **WhatsApp:** 1800-57-267864

When contacting support, please provide your product's model name (AR50H12D1ZHNNNA) and seller's details from your invoice.

Samsung Cares

On time every time 24x7



All Product Related Complaints/assistance

Manager, Customer Care Samsung India Electronics Pvt. Ltd.,
6th Floor, DLF Centre, Sansad Marg, New Delhi – 110001



support.india@samsung.com



Toll free - 1800 40 7267864 (1800 40 SAMSUNG)

Image 9.2: Samsung Customer Support Information.