

The image features a large, thick green swoosh that curves from the top left towards the bottom right, framing the central text. The Waykar logo is in the top left corner.

waykar

# USER MANUAL

Portable Tent Air Conditioner

**THG45A >**

Please read the manual  
carefully before operating  
the device and keep it for  
future reference.



# Message from WAYKAR

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Thank you for choosing Waykar. Established in 2014 with a commitment to protecting indoor climates, Waykar has grown into a leading brand in the HVAC industry, known for premium products that prioritize comfort and health in your indoor space.

Before you start exploring this product, read this manual carefully for necessary instructions first. It's advised to keep it for future reference.

## 24/7 Full-Time Response

Upon receipt of the AC unit, kindly inspect the package contents immediately for any potential missing or damaged parts. In case of issues, we would appreciate your prompt contact with Waykar support for solutions before initiating a return. Send us an email or scan the QR code to start a live chat.

**support@waykar.com**



## Important: Please Read Before Usage

Ensure the air conditioner is always kept in an upright position, whether in transit or stationary, to avoid internal damage. After unpacking the air conditioner each time, it is recommended to set it upright and let it sit for **24 HOURS** before plugging it in.

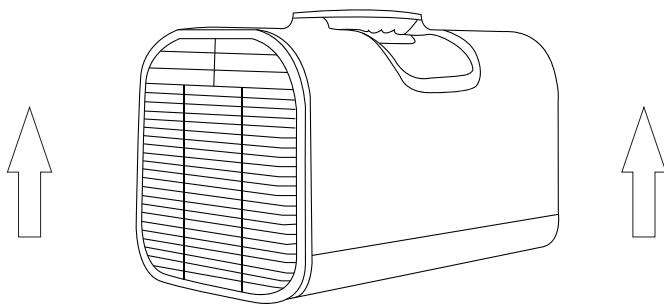


Table of Contents

SAFETY PRECAUTIONS..... 01

PARTS ILLUSTRATION..... 03

PACKAGE CONTENTS..... 04

POWER SUPPLY..... 04

INSTALLATION GUIDE..... 05

FUNCTION OVERVIEW..... 09

OPERATION INSTRUCTIONS..... 10

TROUBLESHOOTING..... 14

MAINTENANCE & CLEANING..... 15

SPECIFICATIONS..... 25

WARRANTY & CONTACT..... 26



# SAFETY PRECAUTIONS

Placement and Setup	Device Operation	User Safety	Servicing and Repair	Cleaning & Storage	Disposal & Recycling
<p>The portable tent air conditioner is designed for small to mid-sized confined spaces, including small rooms, RVs, camping tents, fishing tents, emergencies, and tented weddings. Usage outside of these contexts is not recommended.</p> <p>Set it on solid and even ground to prevent vibration and movement during operation.</p> <p>Do not use any parts or accessories other than those provided in the package for installation. Doing so may cause malfunctions, water leakage, or potential safety hazards.</p> <p>Verify that the air conditioner's voltage matches your electrical supply and plug it into grounded outlets. You can also power the air conditioner using a portable power station, a solar panel charger, or a portable fuel generator (Minimal Power: 500W).</p> <p>Avoid installing the air conditioner in a humid environment to prevent circuit shortages.</p>					
Placement and Setup	Device Operation	User Safety	Servicing and Repair	Cleaning & Storage	Disposal & Recycling
<p>Keep doors and windows closed for optimal temperature control efficiency.</p> <p>Avoid sitting, standing, spraying water, or placing heavy objects on the device.</p> <p>Keep it away from heat-generating devices, including stoves, electric kettles, etc.</p> <p>Ensure the the air inlets/outlets of the air conditioner are kept clear of objects. Do not cover them with clothes or other items for drying purposes.</p> <p>No pesticide sprays or flammable liquids and gases are allowed near the device.</p>					
Placement and Setup	Device Operation	User Safety	Servicing and Repair	Cleaning & Storage	Disposal & Recycling
<p>Be sure to unplug the air conditioner during outdoor camping in thunderstorms.</p> <p>Put the power cable away to prevent tripping hazards.</p> <p>Do not insert fingers, rods, or other thin objects into the air inlet and outlet, as doing so may pose a risk of product damage and personal injury.</p> <p>Children aged 8 and above, as well as individuals with reduced physical, sensory, or mental capabilities, should only operate the device under supervision. Children under the age of 8 should not tamper with the portable air conditioner.</p> <p>This portable air conditioner is not waterproof. To prevent the risk of electrical shock, do not use the unit in rainy conditions or place it on wet surfaces.</p>					

# SAFETY PRECAUTIONS

Placement and Setup	Device Operation	User Safety	Servicing and Repair	Cleaning & Storage	Disposal & Recycling
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Immediately stop and unplug the device at any indication of malfunction or damage.

For damaged cords, contact the manufacturer or certified technicians for replacement. Servicing or dismantling of the device without certification may pose safety hazards.

It is strictly prohibited to dismantle and modify the device without professional certification. Such actions may lead to safety hazards and void the warranty.

Placement and Setup	Device Operation	User Safety	Servicing and Repair	Cleaning & Storage	Disposal & Recycling
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Be sure to unplug the air conditioner first before cleaning, packing, or servicing the device.

Use soft, damp cloth and neutral detergent to clean the air conditioner. Alcohol, gasoline, benzene, and other chemical solvents are strictly prohibited for cleaning purposes.

If the air conditioner is not going to be used for an extended period, please remember to unplug it and store it properly in a well-ventilated place.

Placement and Setup	Device Operation	User Safety	Servicing and Repair	Cleaning & Storage	Disposal & Recycling
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The air conditioner contains flammable refrigerant R290. Please dispose of the device properly in accordance with local regulations regarding the safe disposal of refrigeration and air-conditioning equipment.

If the air conditioner is beyond repair, please separate it from other solid waste and reach out to the local recycling center to safely reclaim and recycle refrigerants to prevent environmental damage.

## WARNING

DANGER—Risk of Fire or Explosion. Flammable Refrigerant Used. To Be Repaired Only By Trained Service Personnel. Do Not Puncture Refrigerant Tubing.

CAUTION—Risk of Fire or Explosion. Dispose of Properly In Accordance With Federal Or Local Regulations. Flammable Refrigerant Used.

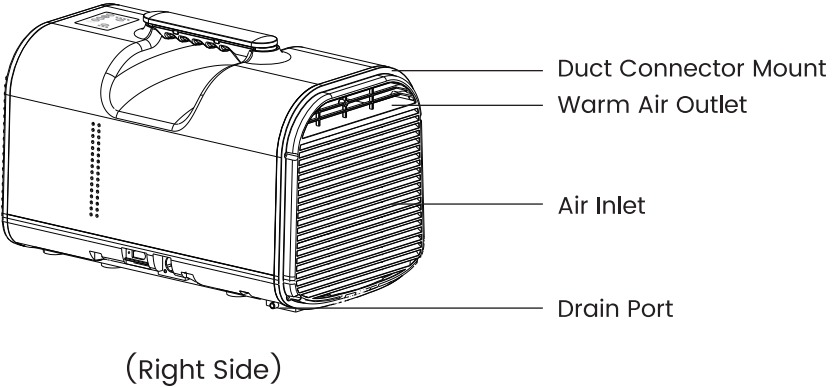
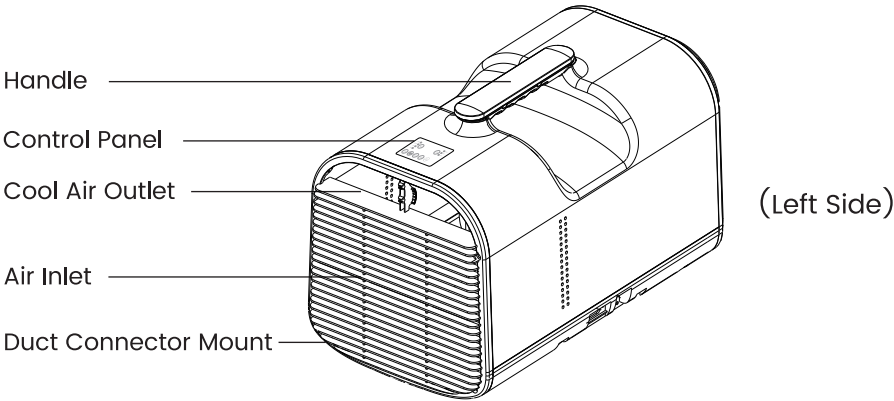
WARNING: Appliance shall be installed, operated and stored in a room with a floor area larger than 5 m<sup>2</sup> (54 ft<sup>2</sup>).

Do not piece or burn. Be aware that refrigerants may not contain an odour.



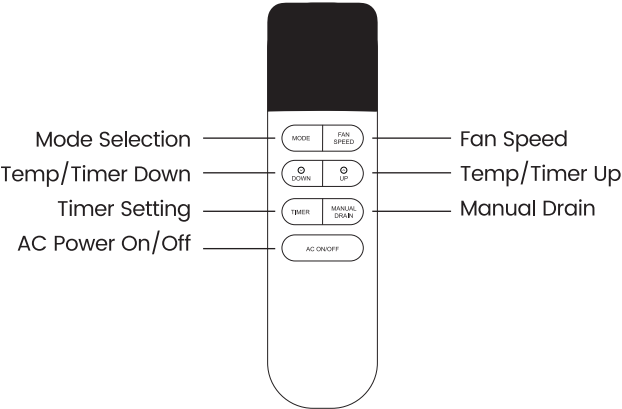
A3

# PARTS ILLUSTRATION



**Note:**  
This drawing is for demonstration purposes only. The actual product may vary slightly in appearance.

## Remote Control







# PACKAGE CONTENTS

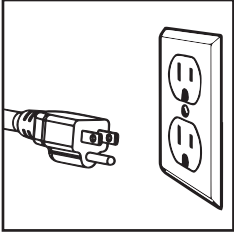
The package of this portable tent air conditioner includes:

- |  |                  |
|--|------------------|
| 1 x Portable Tent Air Conditioner                  | 2 x Drain Plug   |
| 2 x Dual Duct Connectors                           | 4 x Screws       |
| 3 x Extendable Exhaust Hoses                       | 1 x Screw Driver |
| 1 x Drain Hose (Ø7mm)                              | 1 x User Manual  |
| 1 x Remote Control (with mount holder and 3M tape) |                  |

# POWER SUPPLY

The power requirements of the portable air conditioner are 110V/60Hz, AC only. It's equipped with a built-in power connector to plug directly into a standard 110V AC outlet.

	<b>Standard Household Outlets:</b> <ul style="list-style-type: none"><li>•110V AC power</li><li>•Three-prong outlet</li></ul>		<b>Campsite Power Hookups:</b> <ul style="list-style-type: none"><li>•110V AC power</li><li>•4.5A max. input current</li></ul>
	<b>Portable Power Stations:</b> <ul style="list-style-type: none"><li>•110V AC output</li><li>•Minimum 500W power (Surge 1800W)</li></ul>		<b>Solar Power Kit with Generator &amp; Power Station:</b> <ul style="list-style-type: none"><li>•110V AC output</li><li>•Minimum 500W power (Surge 1800W)</li></ul>

	<p>Note: ONLY use the provided original AC power plug to connect the air conditioner to power. It is forbidden to extend the power cord on your own.</p> <p>In the event of a damaged power plug, please contact the manufacturer for assistance.</p>
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Plug it into household grounded outlets if you have access to the power grid. If you are away from a wall outlet, the portable tent air conditioner can be powered by a portable power station, a solar panel charger, or a portable fuel generator for outdoor usage.

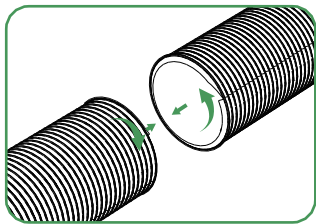
NOTE: The aforementioned power station, solar panel charger, and portable fuel generator are NOT included in this package.

# INSTALLATION GUIDE

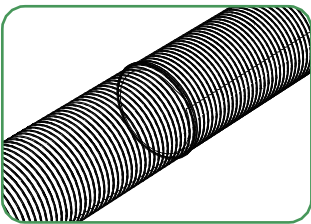
This portable air conditioner is designed to function straight out of the box, without the troublesome installation process of traditional AC units. Simply connect it to power, and it will start cooling down the space. However, for optimal performance, please follow the instructions below to properly position the device and attach the exhaust hose.

## Exhaust Hose Connection and Attachment

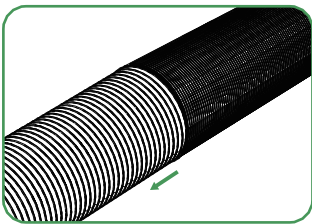
### 1. Connecting Two Exhaust Hoses (If a single hose is long enough, skip this step)



Slightly extend the ends of the two exhaust hoses. Align the connector edges of both hoses carefully.

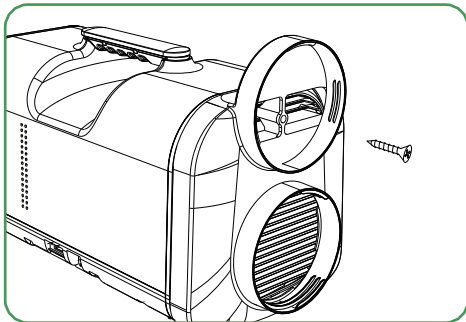


Gently twist the hoses together until they are securely connected, forming a single continuous hose.



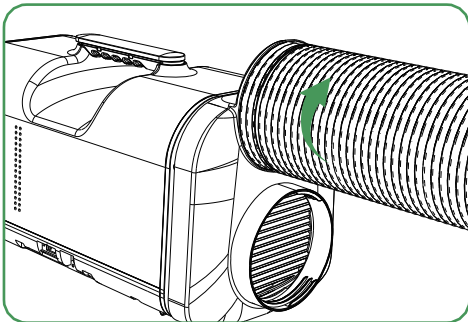
Ensure the connection is tight, then compress the hoses completely before extending them to your desired length.

### 2. Attach the Duct Connector to the AC Unit



Attach the provided dual duct connectors to the Duct Connector Mount on the two sides of the AC unit, and secure them with the included screws and screwdriver. Press firmly on all corners to ensure they are tightly secured.

### 3. Mount the Exhaust Hose onto the Connector



Extend the exhaust hose and hold it in alignment with a duct connector. Then, rotate the exhaust hose clockwise until it is securely mounted onto the duct connector. Next, unfold the exhaust hose to your preferred length.

**Note:** Three pieces of exhaust hoses are included in the package. You can attach them to the cool air outlet or warm air outlet as needed.

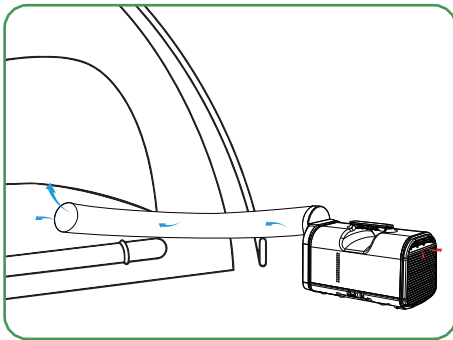
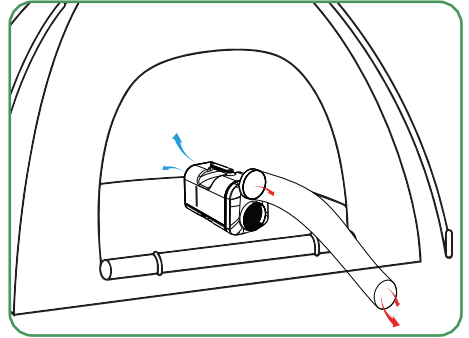
# INSTALLATION GUIDE

## Positioning the AC unit

The portable air conditioner can be used in various spaces to create a comfortable environment. Since one side of the AC outlet emits cool air (marked with the [❄️] symbol) while the other side expels warm air (marked with the [🔥] symbol), it's important to position the exhaust hoses correctly to achieve the most efficient cooling effect.

### 1. AC unit placed inside a tent

- Position it in a tent with the cool air outlet facing inward;
- Connect exhaust hose(s) to the warm air outlet, directing them outside the tent through a suitable opening or flap.



### 2. AC unit placed outside a tent

- Place the unit with the warm air outlet facing away from the tent;
- Attach exhaust hoses to cool air outlet and direct cooling air into the tent through suitable opening or flap.

With the extra hoses provided, you can direct air from your tent into the AC unit to improve circulation.

## Power Supply for Remote Control

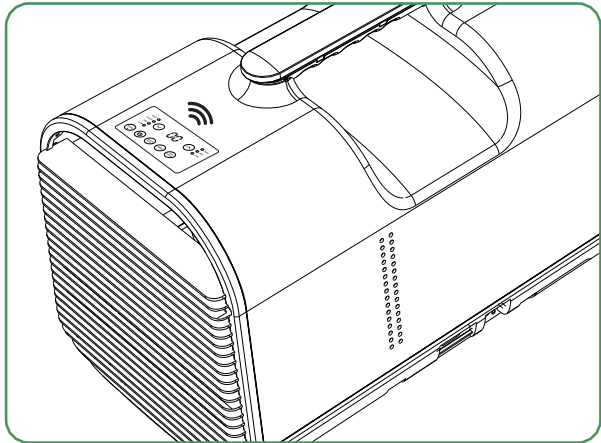
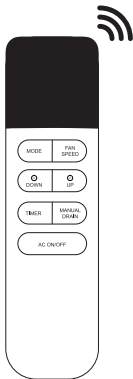
The remote controller is powered by two AAA batteries (not included). Press against the compartment cover and slide it downward to remove.

# INSTALLATION GUIDE

## AC Remote Pairing Guide

The remote control provided with the portable air conditioner is pre-programmed to function with the AC unit. In the event of replacing the remote, please refer to the following instructions to pair the new remote with the air conditioner.

1. Plug in the air conditioner and set it to standby mode. Insert two AAA batteries into the remote control.
2. Press the [☺] label on the AC for 3 seconds until the blue indicators flash on both sides of the AC control panel.
3. Press the AC ON/OFF button on the remote control until the air conditioner turns on.
4. At this point, the remote control has been successfully paired with the air conditioner.



# INSTALLATION GUIDE

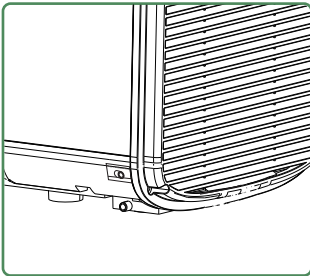
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## Mounting the remote on the AC unit

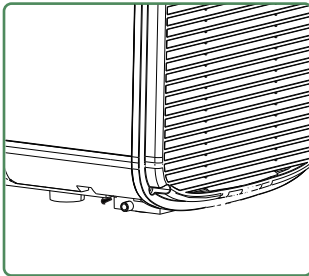
1. Ensure the unit surface is smooth and dry, free from dust or debris.
2. Peel off the protective backing from one side of the included 3M double-sided tape, and apply the tape to the matching position on the back of the mount holder, ensuring they are firmly attached.
3. Peel off the other side of the tape backing, and press the entire mount holder firmly against your desired spot on the unit surface.
4. Let the 3M tape set and bond with the air conditioner surface for about 24 hours until it's securely in place. Then, you can place the remote control into the mount holder.

## Connecting to a drain hose

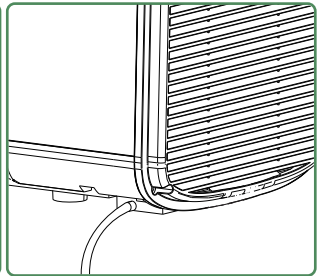
Follow the steps below to attach the drain hose before activating Manual Drain. When Manual Drain is off, ensure the drain plug is in place so that water will be evaporated and expelled through the air outlet.



Step One: Locate the drain port on the AC unit.



Step Two: Remove the drain plug and store it properly.

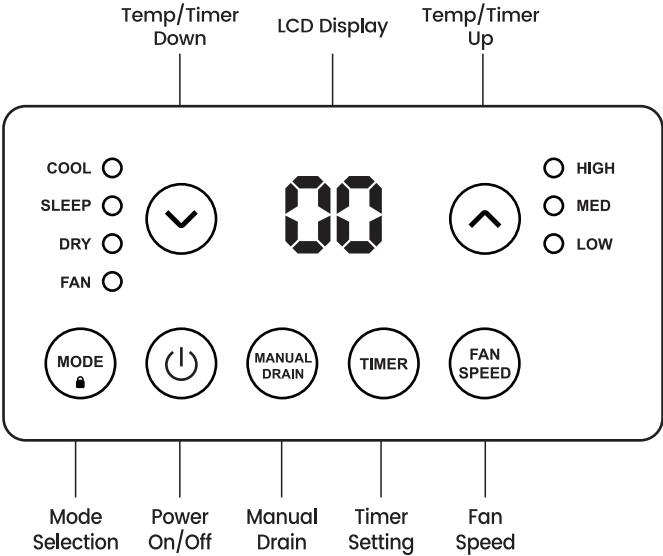


Step Three: Insert the drain hose into the drain port.



# FUNCTION OVERVIEW

## Control Panel Illustration



## Features

### Celsius to Fahrenheit Conversion

The temperature setting on the air conditioner is initially configured in Celsius by default. To convert it to Fahrenheit, press and hold the [⬆] and [⬇] buttons on the AC unit simultaneously for 3 seconds.

Please be aware that this conversion is only applicable in Cool and Sleep modes. Furthermore, it is not possible to switch the scale of temperature using the remote control.

### Child Lock Protection

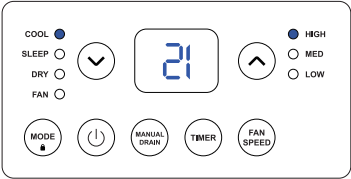
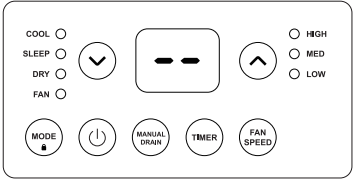
When the child lock is activated, all buttons on the control panel become unresponsive to prevent accidental operation. If any button is pressed while the child lock is enabled, the indicator lights will flash briefly to signal that the control panel is locked.

To Enable Child Lock: Press and hold the [MODE] button for 3 seconds until you hear a short beep. To Disable Child Lock: Repeat the same process.

# OPERATION INSTRUCTIONS

## Power On/Off & Standby Mode

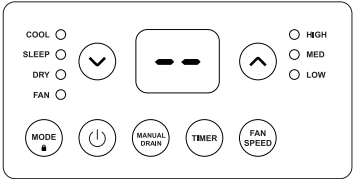
Plug in the air conditioner via the built-in AC power connector. After being connected to power, it will enter standby mode and the control panel will display as showed:



Next, press the power button on the AC unit or on the remote control to turn on the air conditioner. The default setting is the Cool mode at 21°C, with High fan speed.

The temperature display defaults to Celsius with each power cycle. To switch to Fahrenheit, if needed, press and hold the [ ^ ] and [ v ] buttons on the AC simultaneously for 3 seconds.

When the AC unit is running, press the power button to enter standby mode. The compressor will stop working immediately, but the airflow through the warm air outlet will not stop until later.



Please do not unplug the portable air conditioner until the warm air outlet has stopped expelling air.

## Power-off Memory Function

In the event of an unexpected power failure or the need to terminate the device during a program cycle, it will autonomously preserve the current settings and resume operation upon being powered on again.

Note: If the AC unit is manually turned off to standby mode or switched off by a timer before power is disconnected, it will remain in standby mode when power is restored.

## 3-Minute Delay Compressor Protection

In the event of frequent power cycling, a 3-minute protection mechanism is activated, imposing a delay before the compressor restarts. If the unit is already in standby mode before power is turned off, the 3-minute compressor protection will not be triggered.

# OPERATION INSTRUCTIONS

## Mode Selection

Press the [MODE] button to cycle through the 4 modes: Cool, Sleep, Dry, and Fan. When a mode is chosen, its matching indicator will illuminate.

Mode	Cool	Sleep	Dry	Fan
Application Scenario	Cool down your space in summer	Enjoy a cool night's sleep efficiently	Dehumidify your living space	Works as a fan to dry your clothes
Temperature	16-32°C/60-89°F Adjustable	16-32°C/60-89°F Adjustable	Shows "04" No Temperature	Fixed at 25°C and Only in Celsius
Fan Speed	High, Medium, Low	Defaults to Low	High, Medium, Low	High, Medium, Low
Timer	Applicable	Applicable	Applicable	Applicable

NOTE: After selecting a mode, the default setting value will briefly flash on the display before confirming and exiting. During this time, the [MODE] and [TIMER] buttons will be unresponsive, but the [FAN] button remains functional (except for Sleep and Dry Mode, in which the fan speed isn't adjustable).

In Cool and Sleep modes, the compressor will automatically pause when the room temperature drops one degree below the target and resume when it rises one degree above the target.

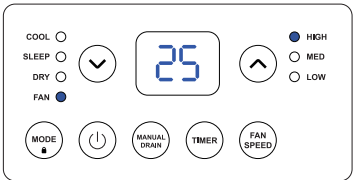
## Temperature Adjustment

In Cool and Sleep modes, the target temperature is adjustable from 16°C/60°F to 32°C/89°F. Press the [UP] or [DOWN] button to change the temperature in increments of 1°C/2°F. The default setting is 21°C/70°F.

In Dry or Fan mode, the [UP] and [DOWN] buttons will not be functional for temperature adjustment. The display will indicate [04] for minimal temp protection in Dry mode and [25] for fixed temp level in Fan mode.



Temperature Display in Dry Mode



Temperature Display in Fan Mode

# OPERATION INSTRUCTIONS

## Fan Speed Setting

The fan speed can be adjusted from High, Medium, to Low levels in Cool, Dry, and Fan modes, with High Speed as the default setting. Simply press the [FAN] button to select your desired airflow speed.

In Sleep mode, the default fan speed is set to Low and remains fixed.

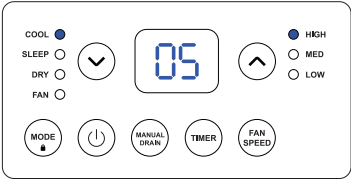
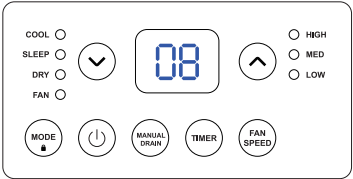
## Timer Setting

The 24-hour timer function allows you to run the air conditioner for your desired period of time, making operation more convenient.

**Programmed Start-up:** While the AC is in standby mode, it can be programmed to commence operation at specified times.

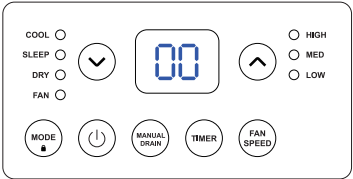
**Programmed Shut-down:** During AC operation in any mode, it can be scheduled to automatically turn off and enter standby mode when the timer reaches its endpoint.

Press the [TIMER] button, and the timer length will flash on the display (After 3s of inactivity, the timer setting will auto exit).



Press the [▲] or [▼] buttons to set your desired duration time in 1-hour increments. The selected number will flash three times before auto exiting the timer setting.


To cancel a timer, press and hold the [TIMER] button for 3s until the display shows "00," accompanied by two beeps emitted simultaneously by the device.

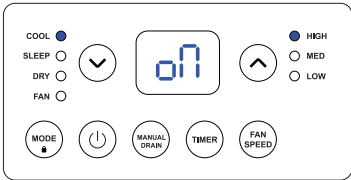


When the timer ends, the AC unit will stop working and emit two beeps as a reminder. It will then enter standby mode.

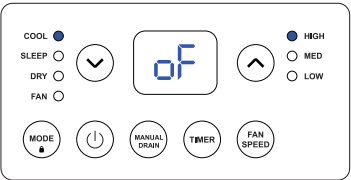
# OPERATION INSTRUCTIONS

## Dual Drainage: Auto & Manual

The featured Auto Drain automatically vaporizes and expels condensation through the air outlets, with no drain hose required. For Manual Drain, simply connect the included drain hose to the unit's drain port and press the  button briefly to activate. Manual Drain is recommended when using Dry Mode.



"oN" symbol for Manual Drain enabled



"oF" symbol for Manual Drain disabled

Note: The "oN" and "oF" symbols will appear on the screen for 3 seconds after adjusting the setting.

The drain setting can also be adjusted while the unit is in standby mode and will be retained after a power cycle.  
When Manual Drain is deactivated, ensure the drain plug is securely placed in the drain port to prevent water from spilling.

## Error Code Explanation

Error	Meaning	Recommended Actions
H0	Compressor min. temperature protection	Minimum temp reached. Please set the temp higher.
E0	Communication error between the circuit board and driver board	Contact maintenance personnel.
E1	Temp sensor fault: loose connection or short circuit	Contact maintenance personnel.
E2	Overvoltage protection	Ensure that the power supply matches the required voltage.
E3	Under-voltage protection	Ensure that the power supply matches the required voltage.
E4	Compressor phase failure protection	Contact maintenance personnel.
E5	Compressor motor stall protection	Contact maintenance personnel.
E6	Phase current abnormal protection	Contact maintenance personnel.
E7	Software overcurrent protection	Contact maintenance personnel.
E8	Hardware overcurrent protection	Contact maintenance personnel.

# TROUBLESHOOTING

If your portable air conditioner malfunctions, we recommend trying the following troubleshooting steps before contacting the manufacturer. This can help you save time and potentially resolve the issue.

The listed problems are common issues that may occur with general portable air conditioner. It's important to note that this doesn't imply that this portable air conditioner is prone to defects over time.

If the problem persists after following the recommended actions, please unplug the portable air conditioner and contact Waykar Customer Service as soon as possible for assistance.

Problems	Possible Causes	Solutions
Failure to power on	Loose cable connection	Ensure the portable AC is securely plugged into power.
Unusually slow cooling	Dirty or clogged air filter	Clean the filter.
	Blocked air inlets/outlets	Make sure the air inlets/ outlets are kept clear of objects.
	Poor insulation	Check for open windows, doors, or curtains.
	Presence of other heat sources	Identify and remove the heat sources.
	Detached exhaust hoses	Reattach the exhaust hoses.
Water leakage	Uneven device placement	Position the air conditioner on a flat surface.
	Loose or missing drain plug (for Auto Drain).	Put the drain plug back into place and ensure it's tightened.
	Blocked drain port or hose	Clean the drain port or drain hose.
	Accumulation of condensed water	Attach the included drain hose to the drain port.
Device vibration with tittering sound	Refrigerant flowing sound	Normal phenomenon. No action required.
Strange Noise	Noise Level Under 70 dB	Normal operating sound of the device. No action is required.
	Device malfunction	Unplug it and contact Waykar support for repair and maintenance.

# MAINTENANCE & CLEANING

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It's advisable to clean the air conditioner surface and its filter regularly to keep it in good condition and ensure efficient operation. However, remember to unplug the portable air conditioner before cleaning it.

## Exterior Cleaning

Use a soft, damp cloth to wipe clean the dust buildup on the surface of the AC unit. Neutral detergents are acceptable for cleaning, but avoid abrasive cleaners or harsh chemicals as they may damage the finish.

Pay special attention to the air inlets and outlets to remove any dust or debris buildup that could obstruct airflow.

## Filter Cleaning

The filter is recommended to be cleaned once a month. Given that dismantling the unit is necessary to access the filter, it's advisable to have a certified technician handle the cleaning process. Alternatively, you can follow the steps below to remove the filter from the AC unit.

1. Place the unit on a table for easy handling without tilting the device.
2. Use a screwdriver to loosen the securing screws located on the four corners of the Duct Connector Mount. Then, pull out the Mount, remove the filter, and soak it in warm water.
3. Brush off dust and debris from the filter and rinse it thoroughly.
4. Allow the filter to air dry completely after wiping it with a clean cloth. Avoid drying it under direct sunlight to prevent deformation.
5. Once dry, reinsert the filter and secure it with the screws.

**Note:** Please ensure the filter is securely aligned and held in place when reinserting it into the filter compartment. If not properly positioned, the filter may fall out of place, preventing the Duct Connector Mount from fully closing.

# MAINTENANCE & CLEANING

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## Device Storage

You can follow these steps for proper storage during long periods of non-use to preserve performance and lifespan of the portable AC unit.

- Firstly, unplug the unit and allow it to cool.
- Detach the drain hose, if attached. Tilt the unit slightly to the drain port side to remove the remaining condensation water inside the device.
- Clean and dry the filter.
- Wrap the power cord neatly around the handle.
- Store it in a dry and well-ventilated place, away from direct sunlight.

## Warnings Regarding the R290 Refrigerant



**Refrigerant  
Safety Group A3**

This portable air conditioner contains R290, a flammable refrigerant. All operators or maintenance personnel for refrigeration systems must hold a valid certificate from an industry-recognized body for the safe disposal of refrigerants. Repairs and maintenance should strictly adhere to the manufacturer's guidelines. If additional help is required, ensure it's under the supervision of personnel qualified in handling combustible refrigerants.

**DANGER**—Risk of Fire or Explosion. Flammable Refrigerant Used. To Be Repaired Only By Trained Service Personnel. Do Not Puncture Refrigerant Tubing.

**CAUTION**—Risk of Fire or Explosion. Dispose of Properly In Accordance With Federal Or Local Regulations. Flammable Refrigerant Used.

**WARNING:** Appliance shall be installed, operated and stored in a room with a floor area larger than 5 m<sup>2</sup> (54 ft<sup>2</sup>).



# MAINTENANCE & CLEANING

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## **Transportation, marking and storage for units that employ flammable refrigerants**

### **1. General**

The following information is provided for units that employ FLAMMABLE REFRIGERANTS.

### **2. Transport of equipment containing flammable refrigerants**

Attention is drawn to the fact that additional transportation regulations may exist with respect to equipment containing flammable gas. The maximum number of pieces of equipment or the configuration of the equipment permitted to be transported together will be determined by the applicable transport regulations.

### **3. Marking of equipment using signs**

Signs for similar appliances used in a work area are generally addressed by local regulations and give the minimum requirements for the provision of safety and/or health signs for a work location. All required signs are to be maintained and employers should ensure that employees receive suitable and sufficient instruction and training on the meaning of appropriate safety signs and the actions that need to be taken in connection with these signs.

The effectiveness of signs should not be diminished by too many signs being placed together. Any pictograms used should be as simple as possible and contain only essential details.

### **4. Disposal of equipment using flammable refrigerants**

See national regulations.

### **5. Storage of equipment/appliances**

The storage of the appliance should be in accordance with the applicable regulations or instructions, whichever is more stringent.

### **6. Storage of packed (unsold) equipment**

Storage package protection should be constructed in such a way that mechanical damage to the equipment inside the package will not cause a leak of the REFRIGERANT CHARGE. The maximum number of pieces of equipment permitted to be stored together will be determined by local regulations.

## **Requirements for operation, service and installation manuals of appliances using flammable refrigerants**

### **Qualification of workers**

The manual shall contain specific information about the required qualification of the working personnel for maintenance, service and repair operations. Every working procedure that affects safety means shall only be carried out by competent persons.

### **Examples for such working procedures are:**

- breaking into the refrigerating circuit;
- opening of sealed components;

### **Competence of service personnel**

#### **1. General**

Information of procedures additional to usual information for refrigerating appliance installation, repair, maintenance and decommission procedures is required when an appliance with FLAMMABLE REFRIGERANT is affected.

The training of these procedures is carried out by national training organisations or manufacturers that are accredited to teach the relevant national competency standards that may be set in legislation.

The achieved competence should be documented by a certificate.

# MAINTENANCE & CLEANING

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## 2. Information and training

- 2.1) The training should include the substance of the following.
- 2.2) Information about the explosion potential of FLAMMABLE REFRIGERANTS to show that flammables may be dangerous when handled without care.
- 2.3) Information about POTENTIAL IGNITION SOURCES, especially those that are not obvious, such as lighters, light switches, vacuum cleaners, electric heaters.
- 2.4) Information about the different safety concepts:
  - Unventilated-Safety of the appliance does not depend on ventilation of the housing.
  - Switching off the appliance or opening of the housing has no significant effect on the safety.
  - Nevertheless, it is possible that leaking refrigerant may accumulate inside the enclosure and flammable atmosphere will be released when the enclosure is opened.
  - Ventilated enclosure-Safety of the appliance depends on ventilation of the housing.
  - Switching off the appliance or opening of the enclosure has a significant effect on the safety.
  - Care should be taken to ensure sufficient ventilation before.
  - Ventilated room -Safety of the appliance depends on the ventilation of the room.
  - Switching off the appliance or opening of the housing has no significant effect on the safety.
  - The ventilation of the room shall not be switched off during repair procedures.
- 2.5) Information about refrigerant detectors:
  - Principle of function, including influences on the operation.
  - Procedures, how to repair, check or replace a refrigerant detector or parts of it in a safe way.
  - Procedures, how to disable a refrigerant detector in case of repair work on the refrigerant carrying parts.
- 2.6) Information about the concept of sealed components and sealed enclosures according to IEC60079-15:2010.
- 2.7) Information about the correct working procedures:
  - a) Commissioning
    - Ensure that the floor area is sufficient for the REFRIGERANT CHARGE or that the ventilation duct is assembled in a correct manner.
    - Connect the pipes and carry out a leak test before charging with refrigerant.
    - Check safety equipment before putting into service.
  - b) Maintenance
    - Portable equipment shall be repaired outside or in a workshop specially equipped for servicing units with FLAMMABLE REFRIGERANTS.
    - Ensure sufficient ventilation at the repair place.
    - Be aware that malfunction of the equipment may be caused by refrigerant loss and a refrigerant leak is possible.
    - Discharge capacitors in a way that won't cause any spark. The standard procedure to short circuit the capacitor terminals usually creates sparks.
    - Reassemble sealed enclosures accurately. If seals are worn, replace them.
    - Check safety equipment before putting into service.
  - c) Repair
    - Portable equipment shall be repaired outside or in a workshop specially equipped for servicing units with FLAMMABLE REFRIGERANTS.
    - Ensure sufficient ventilation at the repair place.
    - Be aware that malfunction of the equipment may be caused by refrigerant loss and a refrigerant leak is possible.

# MAINTENANCE & CLEANING

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- Discharge capacitors in a way that won't cause any spark.
- When brazing is required, the following procedures shall be carried out in the right order:  
Remove the refrigerant. If the recovery is not required by national regulations, drain the refrigerant to the outside. Take care that the drained refrigerant will not cause any danger. In doubt, one person should guard the outlet. Take special care that drained refrigerant will not float back into the building.
- Evacuate the refrigerant circuit.
- Purge the refrigerant circuit with nitrogen for 5 min (not required for A2L REFRIGERANTS).
- Evacuate again (not required for A2L REFRIGERANTS).
- Remove parts to be replaced by cutting, not by flame.
- Purge the braze point with nitrogen during the brazing procedure.
- Carry out a leak test before charging with refrigerant.
- Reassemble sealed enclosures accurately. If seals are worn, replace them.
- Check safety equipment before putting into service.

## d) Disposal

- Ensure sufficient ventilation at the working place.
- Remove the refrigerant. If the recovery is not required by national regulations, drain the refrigerant to the outside. Take care that the drained refrigerant will not cause any danger. In doubt, one person should guard the outlet. Take special care that drained refrigerant will not float back into the building.
- When flammable refrigerants are used,
  - evacuate the refrigerant circuit.
  - purge the refrigerant circuit with oxygen free nitrogen.
  - evacuate again. (not required for A2L refrigerants);
  - cut out the compressor and drain the oil.

## Information on servicing

### 1. General

The manual shall contain specific information for service personnel according.

### 2. Checks to the area

Prior to beginning work on systems containing FLAMMABLE REFRIGERANTS, safety checks are necessary to ensure that the risk of ignition is minimised.

For repair to the REFRIGERATING SYSTEM

### 3. Work procedure

Work shall be undertaken under a controlled procedure so as to minimise the risk of a flammable gas or vapour being present while the work is being performed.

### 4. General work area

All maintenance staff and others working in the local area shall be instructed on the nature of work being carried out. Work in confined spaces shall be avoided.

### 5. Checking for presence of refrigerant

The area shall be checked with an appropriate refrigerant detector prior to and during work, to ensure the technician is aware of potentially toxic or flammable atmospheres. Ensure that the leak detection equipment being used is suitable for use with all applicable refrigerants, i. e. non-sparking, adequately sealed or intrinsically safe.

# MAINTENANCE & CLEANING

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## 6. Presence of fire extinguisher

If any hot work is to be conducted on the refrigerating equipment or any associated parts, appropriate fire extinguishing equipment shall be available to hand. Have a dry powder or CO<sub>2</sub> fire extinguisher adjacent to the charging area.

### a) Commissioning

- Ensure that the floor area is sufficient for the REFRIGERANT CHARGE or that the ventilation duct is assembled in a correct manner.
- Connect the pipes and carry out a leak test before charging with refrigerant.
- Check safety equipment before putting into service.

### b) Maintenance

- Portable equipment shall be repaired outside or in a workshop specially equipped for servicing units with FLAMMABLE REFRIGERANTS.
- Ensure sufficient ventilation at the repair place.
- Be aware that malfunction of the equipment may be caused by refrigerant loss and a refrigerant leak is possible.
- Discharge capacitors in a way that won't cause any spark. The standard procedure to short circuit the capacitor terminals usually creates sparks.
- Reassemble sealed enclosures accurately. If seals are worn, replace them.
- Check safety equipment before putting into service.

### c) Repair

- Portable equipment shall be repaired outside or in a workshop specially equipped for servicing units with FLAMMABLE REFRIGERANTS.
- Ensure sufficient ventilation at the repair place.
- Be aware that malfunction of the equipment may be caused by refrigerant loss and a refrigerant leak is possible.
- Discharge capacitors in a way that won't cause any spark.
- When brazing is required, the following procedures shall be carried out in the following order:
  - Safely remove the refrigerant following local and national regulations. If the recovery is not required by national regulations, drain the refrigerant to the outside. Take care that the drained refrigerant will not cause any danger. In doubt, one person should guard the outlet. Take special care that drained refrigerant will not float back into the building;

### d) Decommissioning

- If the safety is affected when the equipment is putted out of service, the REFRIGERANT CHARGE shall be removed before decommissioning.
- Ensure sufficient ventilation at the equipment location.
- Be aware that malfunction of the equipment may be caused by refrigerant loss and a refrigerant leak is possible.
- Discharge capacitors in a way that won't cause any spark.
- Remove the refrigerant. If the recovery is not required by national regulations, drain the refrigerant to the outside. Take care that the drained refrigerant will not cause any danger. In doubt, one person should guard the outlet. Take special care that drained refrigerant will not float back into the building.
- When FLAMMABLE REFRIGERANTS except A2L REFRIGERANTS are used,
  - Evacuate the refrigerant circuit.

# MAINTENANCE & CLEANING

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## 7. No ignition sources

No person carrying out work in relation to a REFRIGERATING SYSTEM which involves exposing any pipe work shall use any sources of ignition in such a manner that it may lead to the risk of fire or explosion. All possible ignition sources, including cigarette smoking, should be kept sufficiently far away from the site of installation, repairing, removing and disposal, during which refrigerant can possibly be released to the surrounding space. Prior to work taking place, the area around the equipment is to be surveyed to make sure that there are no flammable hazards or ignition risks. "No Smoking" signs shall be displayed.

## 8. Ventilated area

Ensure that the area is in the open or that it is adequately ventilated before breaking into the system or conducting any hot work. A degree of ventilation shall continue during the period that the work is carried out. The ventilation should safely disperse any released refrigerant and preferably expel it externally into the atmosphere.

## 9. Checks to the refrigerating equipment

Where electrical components are being changed, they shall be fit for the purpose and to the correct specification. At all times the manufacturer's maintenance and service guidelines shall be followed. If in doubt, consult the manufacturer's technical department for assistance. The following checks shall be applied to installations using.

### FLAMMABLE REFRIGERANTS:

- the actual REFRIGERANT CHARGE is in accordance with the room size within which the refrigerant containing parts are installed;
- the ventilation machinery and outlets are operating adequately and are not obstructed;
- if an indirect refrigerating circuit is being used, the secondary circuit shall be checked for the presence of refrigerant;
- marking to the equipment continues to be visible and legible. Markings and signs that are illegible shall be corrected;
- refrigerating pipe or components are installed in a position where they are unlikely to be exposed to any substance which may corrode refrigerant containing components, unless the components are constructed of materials which are inherently resistant to being corroded or are suitably protected against being so corroded.

## 10. Checks to electrical devices

Repair and maintenance to electrical components shall include initial safety checks and component inspection procedures. If a fault exists that could compromise safety, then no electrical supply shall be connected to the circuit until it is satisfactorily dealt with. If the fault cannot be corrected immediately but it is necessary to continue operation, an adequate temporary solution shall be used. This shall be reported to the owner of the equipment so all parties are advised.

### Initial safety checks shall include:

- that capacitors are discharged: this shall be done in a safe manner to avoid possibility of sparking;
- that no live electrical components and wiring are exposed while charging, recovering or purging the system;
- that there is continuity of earth bonding.

# MAINTENANCE & CLEANING

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## 11. Repairs to sealed components

1) During repairs to sealed components, all electrical supplies shall be disconnected from the equipment being worked upon prior to any removal of sealed covers, etc. If it is absolutely necessary to have an electrical supply to equipment during servicing, then a permanently operating form of leak detection shall be located at the most critical point to warn of a potentially hazardous situation.

2) Sealed electrical components shall be replaced.

## 12. Repair to intrinsically safe components

Do not apply any permanent inductive or capacitance loads to the circuit without ensuring that this will not exceed the permissible voltage and current permitted for the equipment in use. Intrinsically safe components must be replaced.

Replace components only with parts specified by the manufacturer. Other parts may result in the ignition of refrigerant in the atmosphere from a leak.

## 13. Cabling

Check that cabling will not be subject to wear, corrosion, excessive pressure, vibration, sharp edges or any other adverse environmental effects. The check shall also take into account the effects of aging or continual vibration from sources such as compressors or fans.

## 14. Detection of flammable refrigerants

Under no circumstances shall potential sources of ignition be used in the searching for or detection of refrigerant leaks. A halide torch (or any other detector using a naked flame) shall not be used. The following leak detection methods are deemed acceptable for all refrigerant systems. Electronic leak detectors may be used to detect refrigerant leaks but, in the case of FLAMMABLE REFRIGERANTS, the sensitivity may not be adequate, or may need re-calibration. (Detection equipment shall be calibrated in a refrigerant-free area.)

Ensure that the detector is not a potential source of ignition and is suitable for the refrigerant used.

Leak detection equipment shall be set at a percentage of the LFL of the refrigerant and shall be calibrated to the refrigerant employed, and the appropriate percentage of gas (25 % maximum) is confirmed.

Leak detection fluids are also suitable for use with most refrigerants but the use of detergents containing chlorine shall be avoided as the chlorine may react with the refrigerant and corrode the copper pipe-work.

If a leak is suspected, all naked flames shall be removed/extinguished.

If a leakage of refrigerant is found which requires brazing, all of the refrigerant shall be recovered from the system, or isolated (by means of shut off valves) in a part of the system remote from the leak. Removal of refrigerant shall be according to Removal and evacuation.

## 15. Removal and evacuation

When breaking into the refrigerant circuit to make repairs -or for any other purpose- conventional procedures shall be used. However, for flammable refrigerants it is important that best practice be followed, since flammability is a consideration.

# MAINTENANCE & CLEANING

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The following procedure shall be adhered to:

- safely remove refrigerant following local and national regulations;
- purge the circuit with inert gas(optional for A2L);
- evacuate(optional for A2L);
- continuously flush or purge with inert gas when using flame to open circuit ; and
- open the circuit.

The refrigerant charge shall be recovered into the correct recovery cylinders if venting is not allowed by local and national codes. For appliances containing flammable refrigerants, the system shall be purged with oxygen-free nitrogen to render the appliance safe for flammable refrigerants. This process might need to be repeated several times. Compressed air or oxygen shall not be used for purging refrigerant systems. For appliances containing flammable refrigerants, refrigerants purging shall be achieved by breaking the vacuum in the system with oxygen-free nitrogen and continuing to fill until the working pressure is achieved, then venting to atmosphere, and finally pulling down to a vacuum (optional for A2L). This process shall be repeated until no refrigerant is within the system (optional for A2L). When the final oxygen-free nitrogen charge is used, the system shall be vented down to atmospheric pressure to enable work to take place.

The outlet for the vacuum pump shall not be close to any potential ignition sources, and ventilation shall be available.

## **16. Charging procedures**

In addition to conventional charging procedures, the following requirements shall be followed.

- Ensure that contamination of different refrigerants does not occur when using charging equipment. Hoses or lines shall be as short as possible to minimise the amount of refrigerant contained in them.
- Cylinders shall be kept in an appropriate position according to the instructions.
- Ensure that the REFRIGERATING SYSTEM is earthed prior to charging the system with refrigerant.
- Label the system when charging is complete (if not already).
- Extreme care shall be taken not to overfill the REFRIGERATING SYSTEM. Prior to recharging the system, it shall be pressure-tested with the appropriate purging gas. The system shall be leak-tested on completion of charging but prior to commissioning. A follow up leak test shall be carried out prior to leaving the site.

## **17. Decommissioning**

Before carrying out this procedure, it is essential that the technician is completely familiar with the equipment and all its detail. It is recommended good practice that all refrigerants are recovered safely. Prior to the task being carried out, an oil and refrigerant sample shall be taken in case analysis is required prior to re-use of recovered refrigerant.

It is essential that electrical power is available before the task is commenced.

- a) Become familiar with the equipment and its operation.
- b) Isolate system electrically.
- c) Before attempting the procedure, ensure that:

# MAINTENANCE & CLEANING

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- Mechanical handling equipment is available, if required, for handling refrigerant cylinders;
  - All personal protective equipment is available and being used correctly;
  - The recovery process is supervised at all times by a competent person;
  - Recovery equipment and cylinders conform to the appropriate standards.
- d) Pump down refrigerant system, if possible.
- e) If a vacuum is not possible, make a manifold so that refrigerant can be removed from various parts of the system.
- f) Make sure that cylinder is situated on the scales before recovery takes place.
- g) Start the recovery machine and operate in accordance with instructions.
- h) Do not overfill cylinders (no more than 80 % volume liquid charge).
- i) Do not exceed the maximum working pressure of the cylinder, even temporarily.
- j) When the cylinders have been filled correctly and the process completed, make sure that the cylinders and the equipment are removed from site promptly and all isolation valves on the equipment are closed off.
- k) Recovered refrigerant shall not be charged into another REFRIGERATING SYSTEM unless it has been cleaned and checked.

## 18. Labelling

Equipment shall be labelled stating that it has been de-commissioned and emptied of refrigerant. The label shall be dated and signed. For appliances containing FLAMMABLE REFRIGERANTS, ensure that there are labels on the equipment stating the equipment contains FLAMMABLE REFRIGERANT.

## 19. Recovery

When removing refrigerant from a system, either for servicing or decommissioning, it is recommended good practice that all refrigerants are removed safely. When transferring refrigerant into cylinders, ensure that only appropriate refrigerant recovery cylinders are employed. Ensure that the correct number of cylinders for holding the total system charge is available. All cylinders to be used are designated for the recovered refrigerant and labelled for that refrigerant (i. e. special cylinders for the recovery of refrigerant). Cylinders shall be complete with pressure-relief valve and associated shut-off valves in good working order. Empty recovery cylinders are evacuated and, if possible, cooled before recovery occurs. The recovery equipment shall be in good working order with a set of instructions concerning the equipment that is at hand and shall be suitable for the recovery of the flammable refrigerant. If in doubt, the manufacturer should be consulted. In addition, a set of calibrated weighing scales shall be available and in good working order. Hoses shall be complete with leak-free disconnect couplings and in good condition.

The recovered refrigerant shall be processed according to local legislation in the correct recovery cylinder, and the relevant waste transfer note arranged. Do not mix refrigerants in recovery units and especially not in cylinders.

If compressors or compressor oils are to be removed, ensure that they have been evacuated to an acceptable level to make certain that flammable refrigerant does not remain within the lubricant.

The compressor body shall not be heated by an open flame or other ignition sources to accelerate this process. When oil is drained from a system, it shall be carried out safely.



# SPECIFICATIONS

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Model	THG45A
Rated Voltage/Frequency	110V~60Hz
Cooling Capacity	4500 BTU/h
Rated Current	3.2A
Rated Power	350W
Max. Input Current	4.5A
Max. Input Power	490W
Airflow Volume	150 m³/h
Refrigerant/Charge	R290/80g
Maximum Working Pressure (MWP)	Suction: 0.6MPa
	Discharge: 2.6MPa
Maximum Allowable Pressure (MAP)	Suction: 0.6MPa
	Discharge: 2.6MPa
MWP of Heat Exchanger	2.6MPa
Noise Level	≤61dB(A)

## Note:

1. Recommended working temperature for the air conditioner: 41°F to 104°F. The device may experience malfunctions outside this range.
2. Waykar reserves the right to modify the size and shape of this tent air conditioner without formal notice to the public.

## WARNING:

This product can expose you to chemicals including styrene and its compounds, which are known to the State of California to cause cancer or birth defects or other reproductive harm. For more information go to [www.P65Warnings.ca.gov](http://www.P65Warnings.ca.gov).

## Important:

This warning is legally required by California's Proposition 65, which mandates disclosure even for trace amounts of certain substances. The warning does not indicate that the product is unsafe when used as intended; the risk primarily applies to long-term exposure to significant amounts of these substances. The levels in this product are negligible and within safe limits.

# WARRANTY & CONTACT

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## Warranty

All Waykar products are covered under our 12-month warranty. Customers, whether purchasing directly from Waykar or through an authorized retailer, can reach out to Waykar for support. An order invoice or proof of purchase will be appreciated.

Please note that product damage caused by regular wear and tear will not be covered under warranty, and the warranty will be voided for these behaviors (including but not limited to):

1. Failing to follow the instructions in the manual.
2. Purposeful mishandling of the device.
3. Damaging the device through violent impact.
4. Exposing the device to liquids or infiltrating foreign particles.
5. Unauthorized modification or overhauling of the device.
6. Damage from placing the device upside down.

These are our general terms for warranty service. Customers are more than welcome to contact us for any feedback or advice.

## Extend Your Warranty by 1 Year

Register your product at [www.waykar.com](http://www.waykar.com) to extend your 1-year warranty by an additional year.

\*Please fill out all required fields and include your Order ID and Date of Purchase if applicable.

## Customer Support

For any product-related queries, kindly contact our support team at Waykar. In case of missing, displaced, or damaged air conditioner parts, you can always reach out to Waykar support for assistance.

## WAYKAR Office

🏠 805 Victory Trail Rd, Gaffney, SC, 29340 USA

✉ Email: [support@waykar.com](mailto:support@waykar.com)

☎ Tel: +1-(213)-895-4871

💬 Live Chat: [www.waykar.com](http://www.waykar.com)

🕒 24/7 Full-Time Response

\*Have your Order Number ready before contacting customer support.





# waykar



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We hope our products will make your living space healthier and more comfortable.

Your satisfaction is our top priority.

Feel free to tag us when you share a snap on your social media.

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