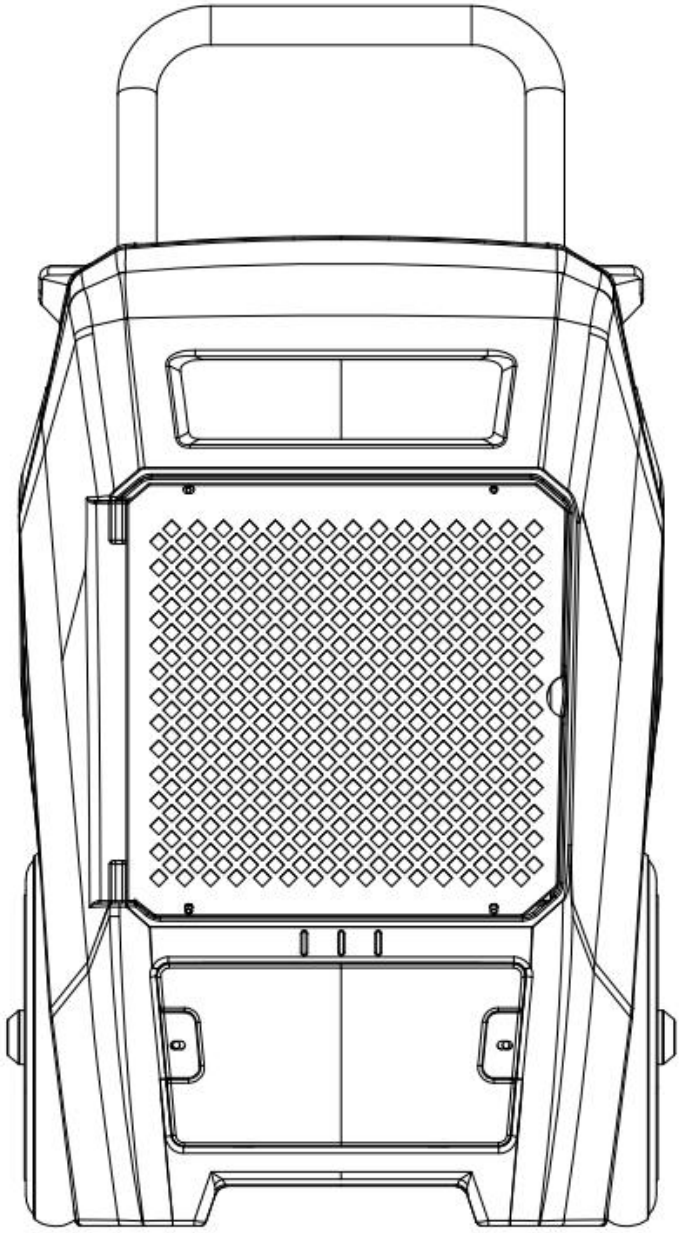
COMMERCIAL&INDUSTRIAL DEHUMIDIFIER



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If you have any questions when using the product, you could contact us via email:support@tiitss.com

BEFORE YOU BEGIN

1.1 PRODUCT DESCRIPTION

This restoration dehumidifier remove moisture of room . which commonly used in basement, warehouse , villa and many so on

The environmentally friendly R32 is used as the refrigerant. R32 has no damaging influence on the ozone layer (ODP), a negligible greenhouse effect (GWP) and is available worldwide. Because of its efficient energy properties, R32 is highly suitable as a coolant for this application. Precautions must be taken into consideration due to the coolant's flammability.

1.2 SYMBOLS FROM THE UNIT AND USER MANUAL



warning

This unit uses a flammable refrigerant.
If refrigerant leaks and comes in contact with fire or heating part, it will create harmful gas and there is risk of fire.



Read the USER MANUAL carefully before operation.



Further information is available in the USER MANUAL, SERVICE MANUAL, and the like.



Service personnel are required to carefully read the USER MANUAL and SERVICE MANUAL before operation.

- THE FOLLOWING SHOULD ALWAYS BE OBSERVED FOR SAFETY

- This appliance can be used by children aged from 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. Children shall not play with the appliance. Cleaning and user maintenance shall not be made by children without supervision.
- This appliance is designed to use indoor ,not for outdoor .
- The unit is designed only for use with R32(propane) gas as the designated refrigerant.
- The refrigerant loop is sealed. Only a qualified technician should attempt to service!
- Do not discharge the refrigerant into the atmosphere.
- R32 (propane) is flammable and heavier than air.
- It collects first in low areas but can be circulated by the fans.
- If propane gas is present or even suspected, do not allow untrained personnel to attempt to find the cause.
- The propane gas used in the unit has no odor.
- The lack of smell does not indicate a lack of escaped gas.
- If a leak is detected, immediately evacuate all persons from the store, ventilate the room and contact the local fire department to advise them that a propane leak has occurred.

- Do not let any persons back into the room until the qualified service technician has arrived and that technician advises that it is safe to return to the room.
- No open flames, cigarettes or other possible sources of ignition should be used inside or in the vicinity of the units.
- Component parts are designed for propane and non-incentive and non-sparking. Component parts shall only be replaced with identical repair parts.
- FAILURE TO ABIDE BY THIS WARNING COULD RESULT IN AN EXPLOSION, DEATH, INJURYAND PROPERTY DAMAGE.

FOR YOUR SAFETY

 **WARNING**	**Please read this manual carefully and fully understand before operating your appliance.**

- 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.
- The appliance shall be disconnected from its power source during service.
- Always operate the unit from a power source of equal voltage, frequency and rating as indicated on the product identification plate.
- Always use a power outlet that is grounded.
- Unplug the power cord when cleaning or when not in use.
- Do not operate with wet hands. Prevent water from spilling onto the unit.
- Do not immerse or expose the unit to rain, moisture or any other liquid.
- Do not unplug while the unit is operating.
- Do not unplug by pulling on the power cord.
- Do not use an extension cord or an adapter plug.
- Do not put objects on the unit.
- Do not climb or sit on the unit.
- Do not insert fingers or other objects into the air outlet.
- Do not touch the air inlet or the aluminum fins of the unit.
- Do not operate the unit if it is dropped, damaged or showing signs of product malfunction.

- Do not clean the appliance with any chemicals.
- Ensure the unit is far away from fire, inflammable, or explosive objects.
- The unit shall be installed in accordance with national wiring regulations
- Do not use means to accelerate the defrosting process or to clean, other than those recommended by the manufacture.
- The appliance shall be stored in a room without continuously operation sources (for example: open flames, an operating gas appliance or an operating electric heater).
- The appliance shall be stored so as to prevent mechanical damage from occurring.
- Do not piece or burn, even after use.
- Be aware that refrigerants may not contain an odour.
- Pipe-work shall be protected from physical damage and shall not be installed in an unventilated space, if that space is smaller than 4 m^2 .
- Compliance with national gas regulations shall be observed.
- Keep any required ventilation openings clear of obstruction.
- The appliance shall be stored in a well-ventilated area where the room size corresponds to the room area as specified for operation.

 WARNING	Any person who is involved with working on or breaking into a refrigerant circuit should hold a current valid certificate from an industry-accredited assessment authority, which authorizes their competence to handle refrigerants safely in accordance with an industry, recognized assessment specification.

 WARNING	Servicing shall only be performed as recommended by the equipment manufacturer. Maintenance and repair requiring the assistance of other skilled personnel shall be carried out under the supervision of the person competent in the use of flammable refrigerants.

2.2 SAFETY PRECAUTIONS ON SERVICING

Please follow these warnings when to undertake the following when servicing an appliance with R32.

2.2.1 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 minimized. For repair to the refrigerating system, the following precautions shall be complied with prior to conducting work on the system.

2.2.2 Work procedure

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

2.2.3 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. The area around the work space shall be sectioned off. Ensure that the conditions within the area have been made safe by control of flammable material.

2.2.4 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 flammable atmospheres. Ensure that the leak

detection equipment being used is suitable for use with flammable refrigerants, i.e. no sparking, adequately sealed or intrinsically safe.

2.2.5 Presence of fire extinguisher

If any hot work is to be conducted on the refrigeration equipment or any associated parts, appropriate fire extinguishing equipment shall be available to hand. Have a dry powder or CO2 fire extinguisher adjacent to the charging area.

2.2.6 No ignition sources

No person carrying out work in relation to a refrigeration system which involves exposing any pipe work that contains or has contained flammable refrigerant 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 flammable 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.

2.2.7 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.

2.2.8 Checks to the refrigeration 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 charge size 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;
– refrigeration 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.

2.2.9 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:
-those capacitors are discharged: this shall be done in a safe manner to avoid possibility of sparking;
-that there no live electrical components and wiring are exposed while charging, recovering or purging the system;
-that there is continuity of earth bonding

that there is continuity of earth bonding.

WARNING!

Install the unit in rooms which exceed 4 m².

Do not install the unit in a place where inflammable gas may leak.

NOTE!

The manufacture may provide other suitable example or may provide additional information about the refrigerant odour

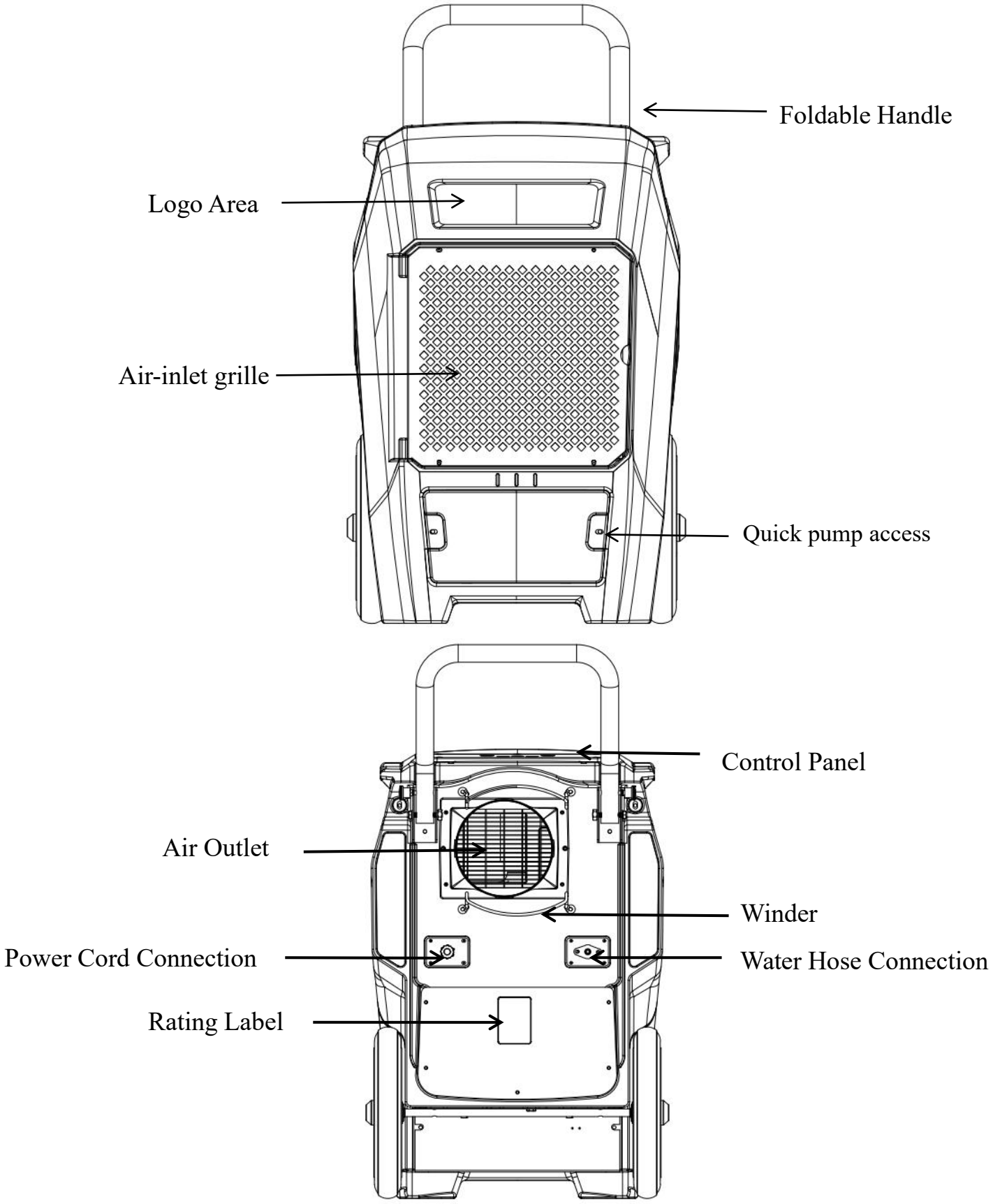
SPECIFICATIONS

DEHUMIDIFIER Model No.:OYR210D	
Power supply	AC115V/60Hz
Dehumidify Capacity	115Pints/D(80℉/60%RH) 210Pints/D(95℉/90%RH)
Rated Input Current	6.8A (80℉/60%RH)
MAX. Input Current	9.0A
Refrigerant /Charge	R32 / 13.06oz
Maximum Design Pressure	High Side: 550psig Low Side: 260psig
BCSC	15A
Compressor Input	RLA: 6.15A LRA:36A
Fan Motor Power	1.55A/0.241HP
C US 302422	CONFORMS TO UL STD.60335-1&60335-2-40 CERTIFIED TO CSA STD.60335-1&60335-2-40

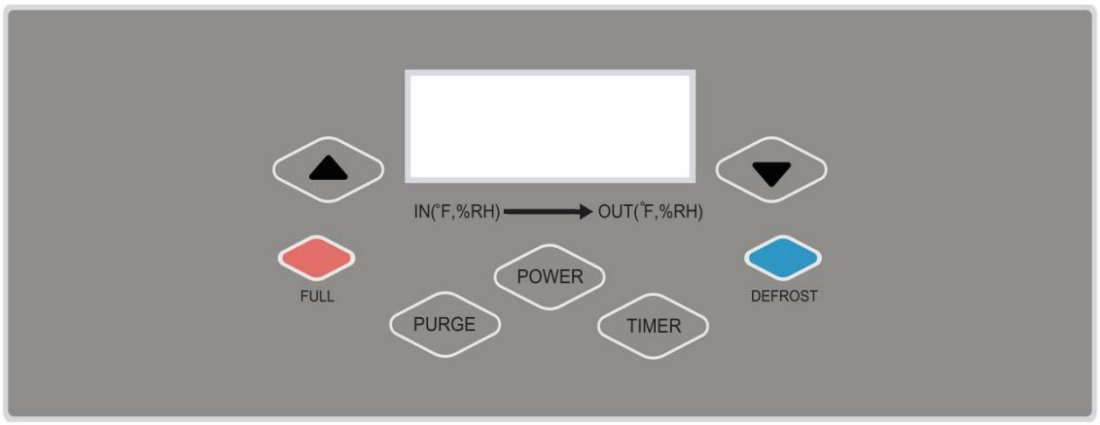
FEATURES

*Hot Gas Valve system for fast defrost
*Easy to assemble and disassemble the housing for repair
*With fast connector of hose , convenient for assembly and disassemble
*Foldable handle ,easy to operate
*Quick pump access in front for easy servicing
*Tough semi-pneumatic wheel

DRAWINGS


Foldable Handle
Logo Area
Air-inlet grille
Quick pump access
Control Panel
Air Outlet
Winder
Power Cord Connection
Water Hose Connection
Rating Label

OPERATION





Power Button: When the machine is in the standby mode, the display screen will be displayed in low light LED. To start the dehumidifier, press the power button. Concurrently, the display screen will light up and the unit will run in Auto mode ,the default humidity setting data is 10%RH,and the machine will start if the humidity condition meets the requirement of compressor operation.

Press the power button again to turn off the machine, and the fan will shut down in 1 minute later.



Timing Button: Press the timing button ,the display screen will show the current timing data, and then press Add Button  to increase the timing data or press Minus button  to decrease the timing data. Press one time to increase or decrease one hour . The timing indicator will light up after setting. When the machine is in the standby mode, press the timing button to set the start-up time; when the machine is running, press it to set the shutdown time. The timing setting range is from 0 to 24 hours. If you

set the timing data as “00”,it will cancel timing function ,the timing indicator will turn off.

**Add Button:** Press the Add button to increase humidity data or increase timing data .

When setting the humidity data , press the button for one time to increase 5%RH , you can set the humidity range from 10%-90% RH, and 5% RH for one step , it will cycle as below :

10%-15%-20%-25%-30%-35%-40%-45%-50%-55%-60%-65%-70%-75%-80%-85%-90%-10% ⋯

When setting the timing data , press the button for one time to increase 1 hour , you can set the timing range from 1-24 hours ,and 1 hour for one step. it will cycle as below:

01-02-03-04-05⋯-23-24-00-01-02⋯

**Minus Button:** Press the Minus button to decrease humidity data or decrease timing data .

When setting the humidity data , press the button for one time to decrease 5%RH , you can set the humidity range from 90%-10% RH, and 5% RH for one step , it will cycle as below :

90%-85%-80%-75%-70%-65%-60%-55%-50%-45%-40%-35%-30%-25%-20%-15%-10%-90% ⋯

When setting the timing data , press the button for one time to decrease 1

11hour , it will cycle as below:

24-23-22-21-20…-02-01-00-24-23…



Purge Button (Manual Drainage): Press and hold the purge button for 3 seconds, the machine will drain the water automatically by the built-in pump. After 30 seconds, the pump stops draining, then the indicator will turn off.



Defrosting Indicator: When the machine is defrosting, this indicator turns on. After defrosting, it turns off.



Water Full Indicator: When the water pump is full of water, the indicator light turns on to remind the user to drain



Display Screen: The default temperature display is Fahrenheit temperature. When the machine is in standby mode, press the power button for 5 seconds to switch to Celsius temperature. When the machine is running, it shows the temperature and humidity of the inlet air and outlet air. It displays the running time when it is in running mode; and displays the setting timing and setting humidity data when users set .

Memory Function: If there is a power outage or the unit shuts off ,it will auto restart to default humidity setting (10%RH) ,once power is restored .

Note :

when humidity of air inlet ⩾ setting humidity data +3%RH ,and the compressor is out of 3 minutes delay start protection , the fan will start immediately and the compressor will start in 3 seconds later

when humidity of air inlet ⩽ setting humidity data -3%RH , the compressor will stop working immediately ,and the fan will stop working in 1 minute later

AUTO DRAINAGE AND MAINTENANCE

Please disconnect the power supply before cleaning or conducting maintenance.

Cleaning: Clean the unit body with a soft damp cloth. Do not submerse or place water on the unit or control panel. Water may damage the electronic components of the unit. Do not use chemical solvent such as benzene, alcohol, gasoline or other heavy-duty cleaner. The surface may become damaged or deformed.

Cleaning the Air Filter:

Step 1: Pull out the air filter gently.

Step 2: Use a vacuum cleaner to remove the dirt on the surface of the air

filter. If the air filter is exceptionally dirty, immerse it gently into warm water (about 40℃) with a neutral detergent, rinse and dry it thoroughly.

Step 3: Insert the filter back into the unit.

Dehumidifier Storage:

1. Push the purge button to empty the water before transportation or storage.

2. Transport and store the machine upright.

3. Stack machines in warehouse to save space.

TROUBLE SHOOTING GUIDE

Trouble	Possible Cause	Solution
Error Code: E1	Copper head sensor failure	Replace it
Error Code: E2	Air inlet temperature and humidity sensor failure	Replace it
Error Code: E3	Air outlet temperature and humidity sensor failure	Replace it
Error Code: E4	Water pump failure or Water tank of water pump is full	Replace it or check the water pump
Error Code: E5	4-way valve failure	Replace it

Cautions:

<u>If unit malfunctions turn off the unit and unplug it immediately.</u>

<u>Please contact your distributor for service issues.</u>



Do not dispose of electrical appliances in local landfills, or municipal waste locations. Many parts are recyclable. Contact your local government for information regarding the collection systems available in your area.