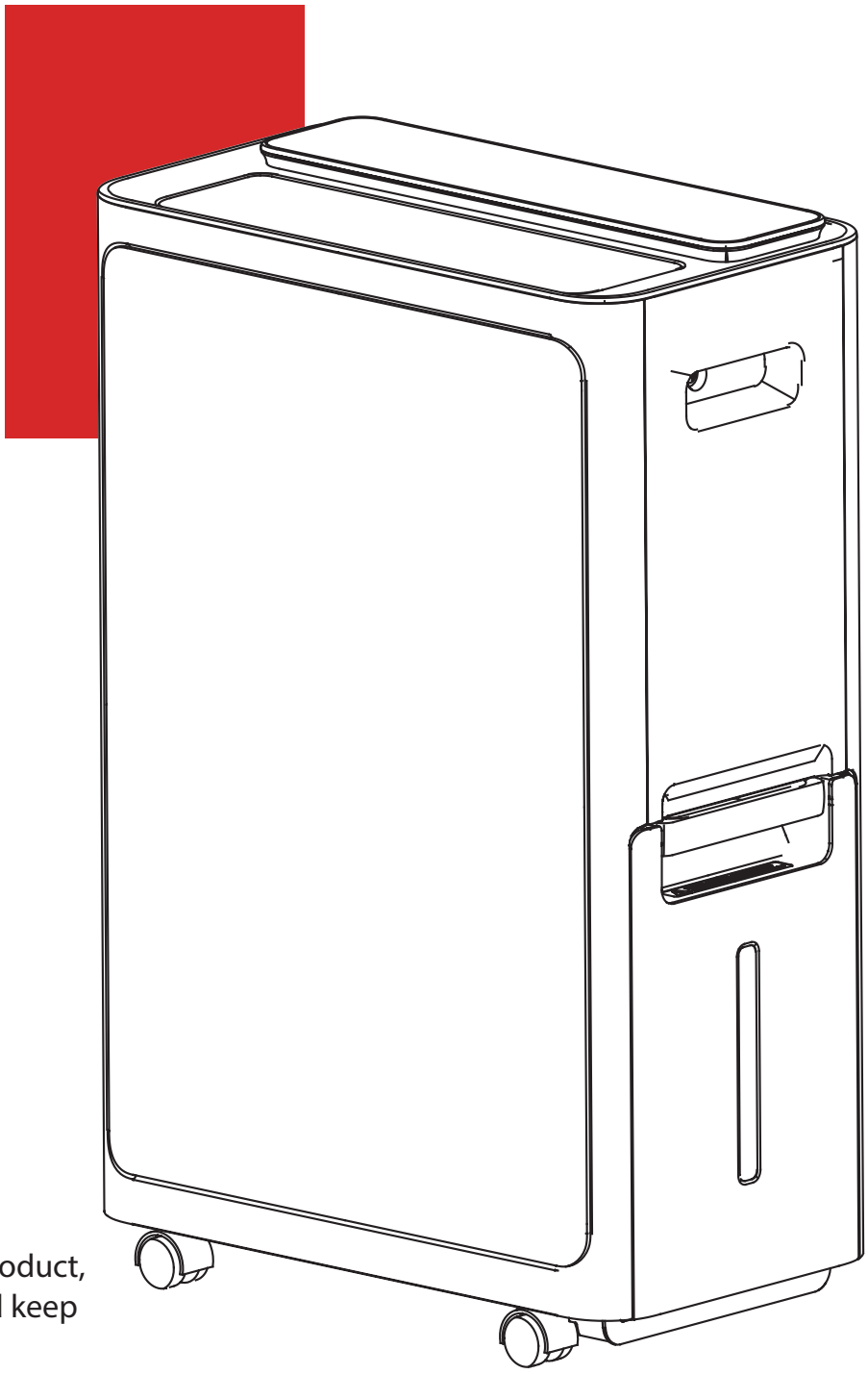

USER MANUAL

Dehumidifier

RAD-DIA28SG

Warning notices: Before using this product, please read this manual carefully and keep it for future reference.

TOSHIBA

User Manual

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SAFETY PRECAUTIONS

Must read the warning message.

Read Safety Precautions Before Operation and Installation To prevent death or injury to the user or other people and property damage,the following instructions must be followed. Incorrect operation due to ignoring of instructions may cause death, harm or damage.

Explanation of Symbols

⚠ WARNING **The signal word indicates a hazard with a medium level of risk which, if not avoided, may result in death or serious injury.**

⚠ CAUTION **The signal word indicates a hazard with a low degree of risk which, if not avoided, may result in minor or moderate injury.**

⚠ WARNING

- Do not exceed the rating of the power outlet orconnection device.
- Do not operate or stop the unit by switching on or off the power.
- Do not damage or use an unspecified power cord.
- Do not modify power cord length or share the outlet with other appliances.
- Do not insert or pull out plug with wet hands.
- Do not place the unit near a heat source.
- Disconnect the power if strange sounds, smell, or smokecomes from it.
- You should never try to take apart or repair the unit by yourself.
- Do not use the machine near flammable gas or combustibles, such as gasoline, benzene, thinner, etc.
- Do not drink or use the water drained from the unit.
- Do not take the water bucket out during operation.
- Do not use the unit in small spaces.
- Do not put in places where water may splash onto the unit.
- Place the unit on a level, sturdy section of the floor.
- Do not cover the intake or exhaust openings with cloths or towels.
- Care should be taken when using the unit in a room with the following persons: infants, children, elderly people, and people not senstive to humidity.
- Do not use in areas where chemicals are handled.
- Never insert your finger or other foreign objects into grills or openings.
- Take special care to warn children of these dangers.
- Do not place heavy object on the power cord and take care so that the cord is not compressed.
- Do not climb up on or sit on the unit.
- Always insert the filters securely. Clean filter once every two weeks.
- If water enters the unit, turn the unit off and disconnect the power , contact a qualified service technician.
- Do not use extension cords.

⚠ CAUTION

- This appliance can be used by children aged from 8 years and above and person 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. (be applicable for the European Countries)
- This appliance is not intended for use by persons (including childern) 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. (be applicable for other countries except the European Countries)
- 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.
- Prior to cleaning or other maintenance, the appliance must be disconnected from the supply mains.
- Do not install the appliance in a location that may be exposed to combustible gas. If combustible gas accumulates around the unit, it may cause fire.
- If the appliance is knocked over during use, turn off the unit and unplug it from the main power supply immediately. Visually inspect the unit to ensure there is no damage. If you suspect the unit has been damaged, contact a technician or customer service for assistance.In a thunderstorm, the power must be cut off to avoid damage to the machine due to lightning.
- Do not run cord under carpeting. Do not cover cord with throw rugs, runners, or similar coverings.
- Do not route cord under furniture or appliances.
  Arrange cord away from traffic area and where it will not be tripped over.
- Do not operate unit with a damaged cord or plug. Discard unit or return to an authorized service facility for examination and/or repair.
- The appliance shall be installed in accordance with national wiring regulations.
- Contact the authorised service technician for repair or maintenance of this unit.
- Turn off the product when not in use.

Note about Fluorinated Gasses(Not applicable to the unit using R290 Refrigerant)

- Fluorinated greenhouse gases are contained in hermetically sealed equipment. For specific information on the type, the amount and the CO2 equivalent in tonnes of the fluorinated greenhouse gas(on some models), please refer to the relevant label on the unit itself.
- Installation, service, maintenance and repair of this unit must be performed by a certified technician.
- Product uninstallation and recycling must be performed by a certified technician.

⚠ CAUTION

- The manufactures nameplate is located on the rear panel of the unit and contains electrical and other technical data specific to this unit.
- Be sure the unit is properly grounded. To minimize shock and fire hazards, proper grounding is important. The power cord is equipped with a three-prong grounding plug for protection against shock hazards.
- Your unit must be used in a properly grounded wall receptacle. If the wall receptacle you intend to use is not adequately grounded or protected by a time delay fuse or circuit breaker(please refer to the nameplate for the electrical data), have a qualified electrician install the proper receptacle.
- Do not operate your appliance in a wet room such as a bathroom or laundry room.
- The unit s circuit board(PCB) is designed with a fuse to provide overcurrent protection.
- The specifications of the fuse are printed on the circuit board, such as: T3.15A/250V (or 350V), etc.

GET TO KNOW YOUR PRODUCT

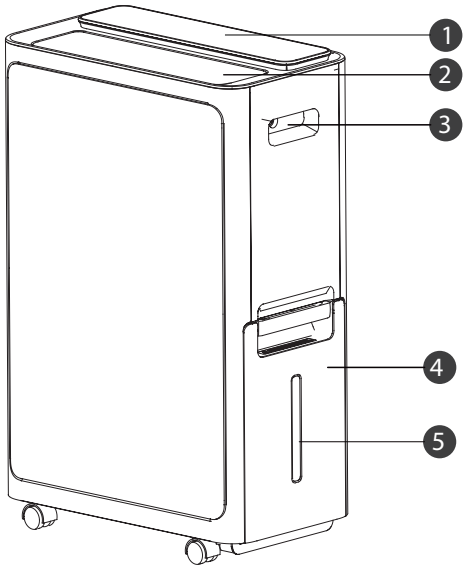
Name of each component of the product

Identification of parts

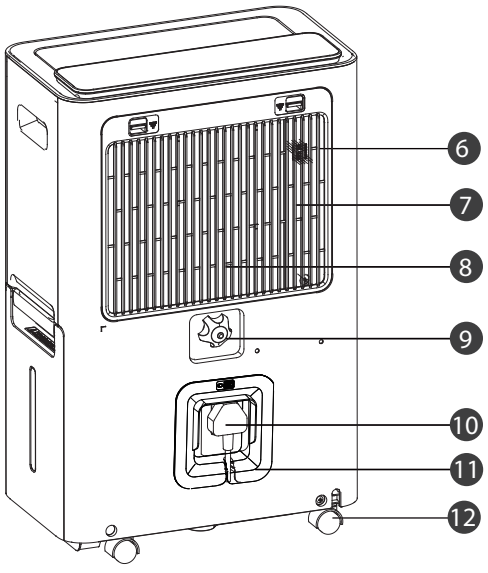
NOTE

All the illustrations in the manual are for explanation purpose only. Your machine may be slightly different.

Product overview



Front View



Back View

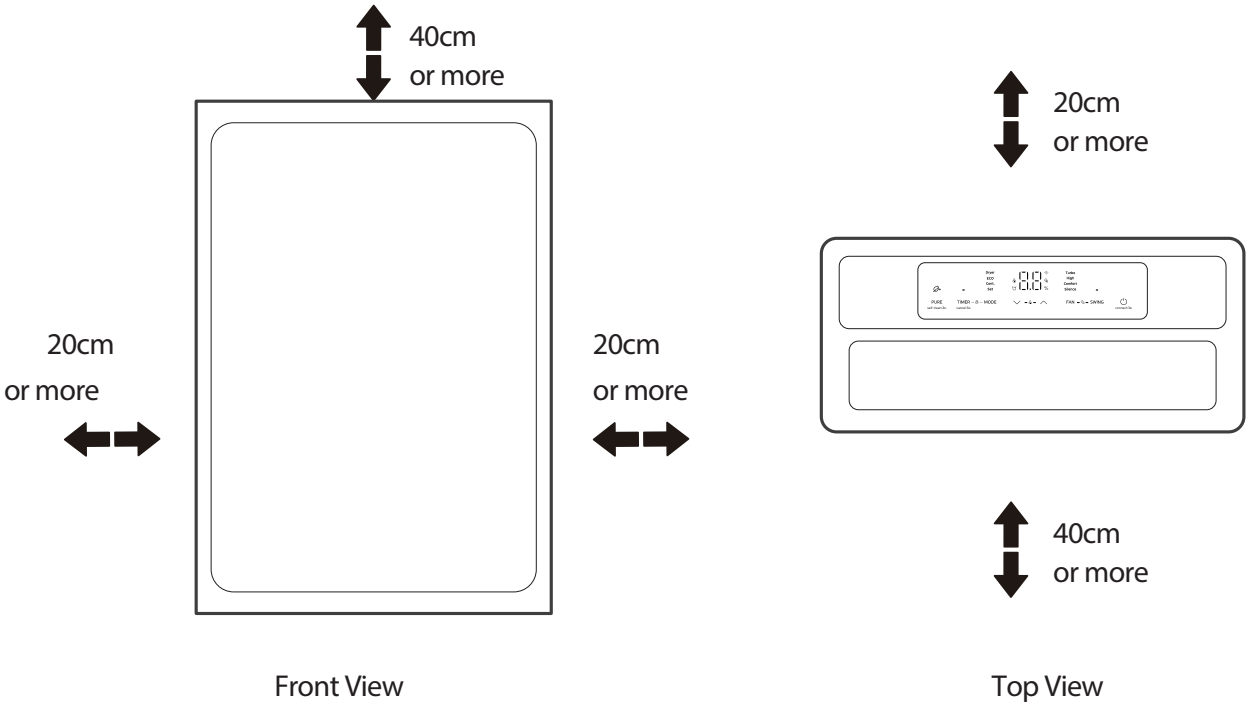
1	control panel	6	rear grille	11	hook for power cord
2	air outlet louver	7	air filter	12	caster
3	handle (both sides)	8	HEPA filter		
4	water tank	9	continuous outlet		
5	water level window	10	power cord and plug		

Design Notice

In order to ensure the optimal performance of our products, the design specifications of the unit are subject to change without prior notice.

Positioning the unit

Safe distance requirements



Casters(At four points on the bottom of unit)

- Casters can move freely.
- Do not force casters to move over carpet, nor move the unit with water in the bucket. (The unit may tip over and spill water.)

A dehumidifier operating in a basement will have little or no effect in drying an adjacent enclosed storage area, such as a closet, unless there is adequate circulation of air in and out of the area.

- Do not use outdoors.
- This dehumidifer is intended for indoor residential applications only. This dehumidifer should not be used for commercial or industrial applications.
- Place the dehumidifier on a smooth, level floor strong enough to support the unit with a full bucket of water.
- Allow at least 20cm of air space on all sides of the unit for good air circulation (at least 40cm of air space on air outlet).
- Place the unit in an area where the temperature will not fall below 5° C(41° F). The coils can become covered with frost at temperatures below 5° C(41° F), which may reduce performance.
- Place the unit away from the clothes dryer, heater or radiator.
- Use the unit to prevent moisture damage anywhere books or valuables are stored.
- Use the dehumidifier in a basement to help prevent moisture damage.
- The dehumidifier must be operated in an enclosed area to be most efective.
- Close all doors, windows and other outside openings to the room.

When using your product

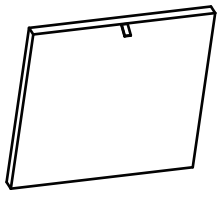
Preparations for product use.

- This unit is designed to operate with a working environment between 5°C/41°F and 32°C/90°F,and between 30%(RH) and 80%(RH).
- If the unit has been switched off and needs to be switched on again quickly , allow approximately three minutes for the correct operation to resume.
- Do not connect the dehumidifier to a multiple socket outlet, which is also being used for other electrical appliances.
- Select a suitable location, making sure you have easy access to an electrical outlet.
- Plug the unit into a electrical socket-outlet with earth connection.
- Make sure the Water bucket is correctly fitted otherwise the unit will not operate properly.

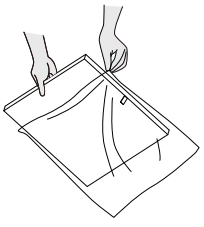
NOTE

When the water in the bucket reaches to a certain level, please be careful to move the machine to avoid it falling down.

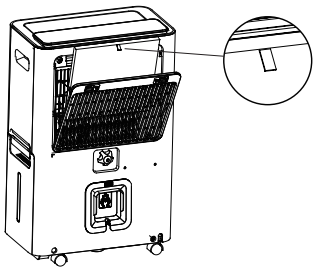
Accessories



Big HEPA filter(1 pc)



NOTE: Be sure to remove the plastic sealing film before using big HEPA filter.



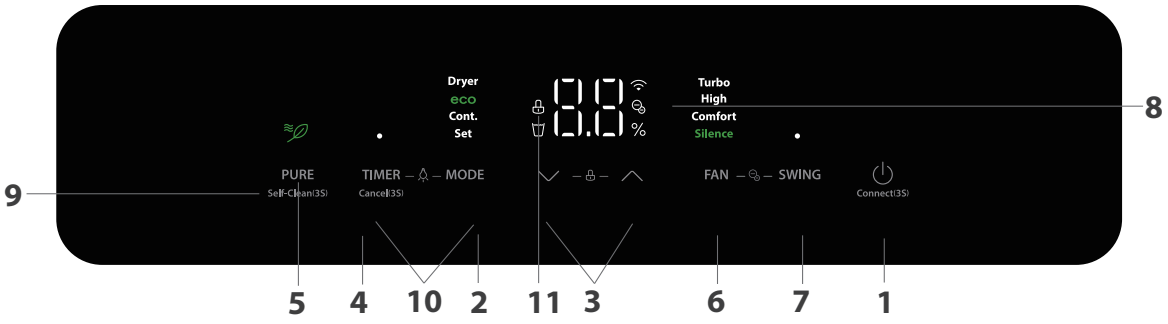
GET TO KNOW THE FEATURES

Operation Display

Control Panel Features

NOTE

The following control panels are for explanation purpose only. The control panel of the unit you purchased may be slightly different according to the models.
When the machine is turned on or off, or when the mode is switched on, there will be a slightly obvious sound of compressor operation, because the compressor frequency is increased or decreased, it is normal.



Indicator	Function	Indicator	Function
	Wireless light		Water filled lamp light
	Fresh light		Purification mode light
	Display ON /OFF light		Control panel locking light

1.POWER ON/OFF button

Press to turn the dehumidifier on or off.

NOTE

When the compressor startups or stops running, the unit may make a loud voice, it is normal.
After each turn on, the negative ion function is enabled by default.

2.MODE Function

Each time you press the MODE button, you can cycle between:
Dryer - ECO - Cont. - Set mode.

NOTE

When switching mode or power on, it will display the setting humidity for 5 seconds. After 5 seconds, it will switch back to the ambient humidity display.

ECO MODE
Press the Mode button and select ECO mode.
In Smart dehumidification mode, you can press the UP and DOWN buttons to adjust the humidity.
The humidity range is 35% to 85%. The default value is 60%.

NOTE

When this function is selected, FAN speed regulation is not available.

SET MODE
Press the Mode button and select Set mode. When this mode is selected, it will display the setting humidity for 5 seconds. After 5 seconds, it will switch back to the ambient humidity display.

CONT. MODE
Press the Mode button and select Cont. mode.

NOTE

When this function is selected, the setting humidity will not be displayed. In this mode, the setting humidity cannot be adjusted.

DRYER MODE
Press the Mode button and select Dryer mode.

NOTE

When this mode is selected, the continuous dehumidification function is enabled and the high speed FAN mode is accompanied. Setting humidity and FAN speed cannot be adjusted in this mode.

3.Up and Down buttons

Humidity Set Control buttons
In Setting dehumidifying mode, The humidity level can be set within a range of 35%RH(Relative Humidity) to 85%RH(Relative Humidity) in 5% increments. Press and hold the ∨ button the humidity drop continuously. Press and hold the ∧ button the humidity rise conti-nuously.

4.TIMER Function

- Press Timer button, the TIMER indicator light illuminates. It indicates the Auto Start or Auto Stop program is initiated. For some units, continuing to press the Timer button will cancel the timer settings.
- Press or hold the UP or DOWN button to change the Auto time by 0.5 hour increments, up to 10 hours, then at 1 hour increments up to 24 hours. The control will count down the time remaining until start.
- The selected time will register in 5 seconds, and the system will automatically revert back to display the previous humidity setting or room humidity when the unit is on. When the unit is off, there is no display.
- Turning the unit ON or OFF at any time or adjusting the timer setting to 0.0 will cancel the Auto Start/Stop timed program.

5.PURIFY Function

Power ON/OFF, press this button to enter the PURIFY function.
After the function is on, 3 seconds 'On' will be displayed.

6.FAN Function

Press this button to switch between Turbo→High Comfort→Silence→Turbo Sets the FAN speed.

7.SWING Function

Press this button to turn on or off the SWING function.

8.ION Function

Press the FAN and SWING buttons at the same time and continue for 3 seconds to enable/disable the negative ion function.

NOTE

When you open the PURIFY Function, you can switch this function ON/OFF.

9.Self-clean- Function

Turn this function ON/OFF by press the PURIFY button for 3 seconds.

10.DISPLAY

In the startup state, press TIMER and MODE keys and continue for 3 seconds to turn on/off the digital display function.

11.Child Lock Function

Press Up and DOWN buttons for 3 seconds to lock or unlock the control panel.

Display

Shows Error codes and protection code: The unit may stop operation or continue to run safely. If the error codes appear, wait for about 10 minutes. The problem may resolve itself. If not, disconnect the power, then connect it again. Turn the unit on. If the problem persists, disconnect the power and contact your nearest customer service center.
Error code appears and begins with the letters as the following in the window display of indoor unit: EH(xx), EL(xx), EC(xx), PH(xx), PL(xx), PC(xx)

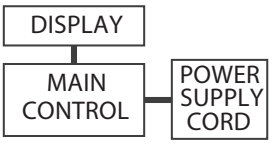
Electronic Work

WARNING:
BEFORE PERFORMING ANY ELECTRICAL OR WIRING WORK, TURN OFF THE MAIN POWER TO THE SYSTEM.

More features

Wireless operation(on some models):

- For the first time to use Wifi function, press the POWER button for 3 seconds to initiate the Wifi connection mode. The LED DISPLAY shows 'AP' to indicate you can set Wifi connection. If connection (router) is successful within 8 minutes, the unit will exit Wifi connection mode automatically and the Wireless indicator illuminates. If connection is failure within 8 minutes, the unit exits Wifi connection mode automatically.

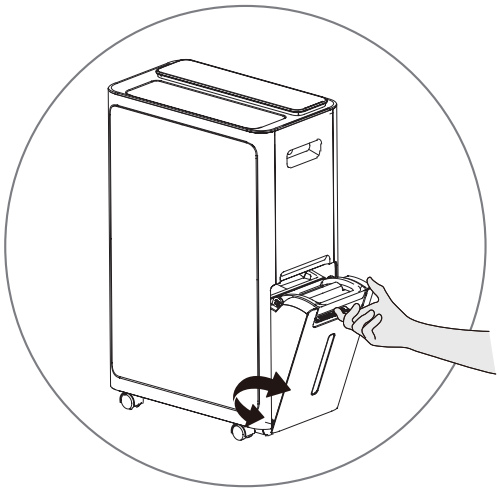


NOTE: The cographs are for explanation purpose only. Your machine may be slightly diferent.
The actual shape shall prevail.

DUMP THE COLLECTED WATER

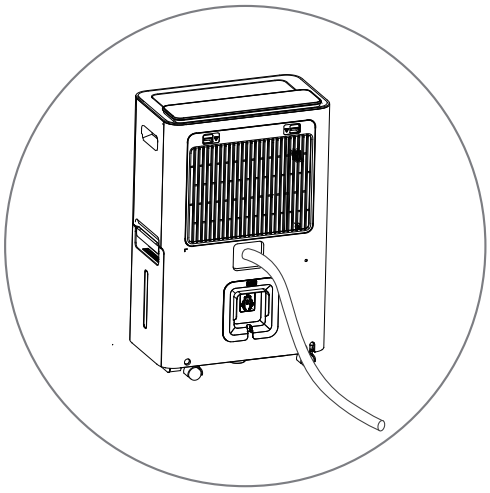
When your product has been in use for a while.

There are two ways to remove collected water.



Type 1:

Bucket drainage



Type 2:

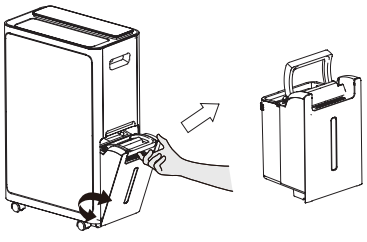
Continuous drainage

Note: The drainage hose is optional
(Inner diameter) φ 13.5mm)
(Outer diameter) φ 16.5mm)

Bucket drainage

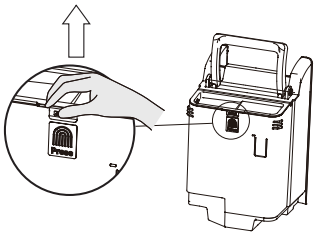
NOTE

- When you remove the bucket from the unit do not set the unit on any electrical components as the bottom may be wet.
- Do not set the unit on an uneven surface afterremoving it from the bucket.
- Ensure the unit is seated properly after returning into the bucket.
- If the bucket is removed during operation, empty bucket icon on the display will blink and stop working until the bucket is seated.



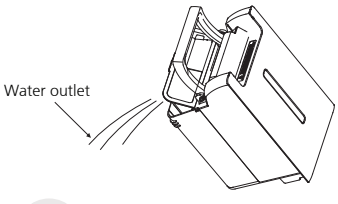
1

Pull out the bucket.
Grab the handle and pull out the tank.



2

Open the cover.
Grab the clasp and pull up.



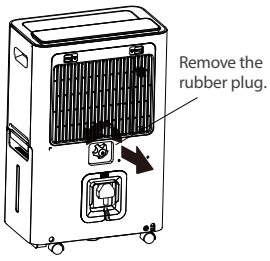
3

Pour the water out.
Pour the water out.
(from water outlet)

Water hose drainage (continuous)

NOTE

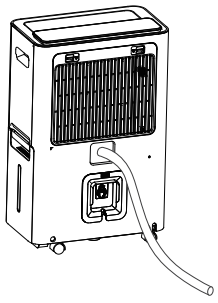
- Make sure the hose is secure so there are no leaks.
- Place the end of the hose into the drain outlet and make sure the end of the hose is level or downwards to let the water flow smoothly .



1

Remove the rubber plug.

Remove the continuous outlet cover by turning it counterclockwise



2

Attach the drain hose. (not include)

Connect drainpipes (not included)

CARE AND MAINTENANCE

How to clean & maintenance your product.

Turn the dehumidifier off and disconnect the plug from the power source before cleaning.

Clean the Grill and Case

- Use water and a mild detergent. Do not use bleach or abrasives.
- Do not splash water directly onto the main unit. Doing so may cause an electrical shock, cause the insulation to deteriorate, or cause the unit to rust.
- The air intake and outlet grilles get soiled easily, so use a vacuum attachment or brush to clean.

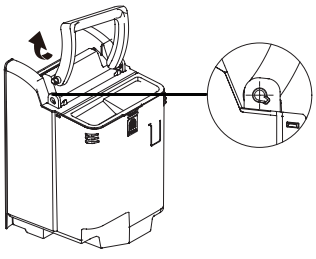
Clean the bucket

- Suggest to clean the bucket thoroughly every few weeks. Partially fill the bucket with clean water and mild detergent.
  Swish it around in the bucket, empty and rinse.

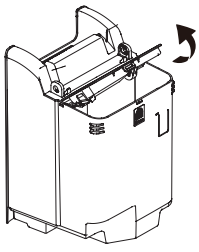
NOTE

Do not use a dishwasher to clean the bucket. After clean, the bucket must be in place and securely seated for the dehumidifier to operate.

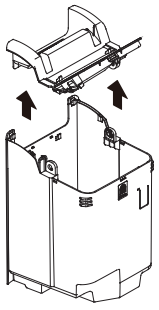
1. Press one side of the handle inward and lift it up.



2. Press the fingerprint in the middle of the water tank to make the water tank cover up.



3. Hold the inside of the tank cover and lift the whole tank cover upward. Clean the components of the tank, dry them naturally, and then reinstall them according to the above steps.



NOTE

When installing the handle, install the clasps on both sides of the handle corresponding to the mounting holes. Otherwise, the handle cannot be properly installed and reset.

Clean the air filter

The air filter behind the front grille should be checked and cleaned at least every two weeks or more often if necessary.

NOTE

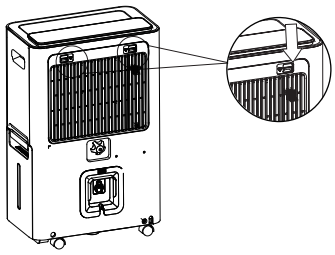
DO NOT CLEAN THE FILTER IN A DISHWASHER.

To remove:

- Press down the tab on the filter and pull it outward, then take it out.
- Clean the filter with warm, soapy water. Rinse and let the filter dry before replacing it. Do not clean the filter in a dishwasher.

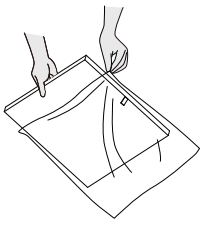
To attach:

- Insert the air filter and HEPA filter into the unit from underside to upside.
- HEPA filter is recommended to be replaced once every 6 months.

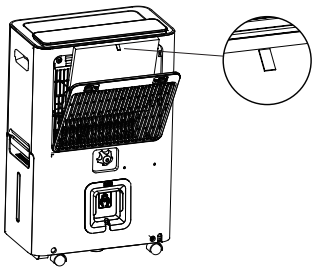


1 Remove the rear grille.

2 Install HEPA filter with handle strap. Mount outwards for replacement.



NOTE: Be sure to remove the plastic sealing film before using HEPA filter.

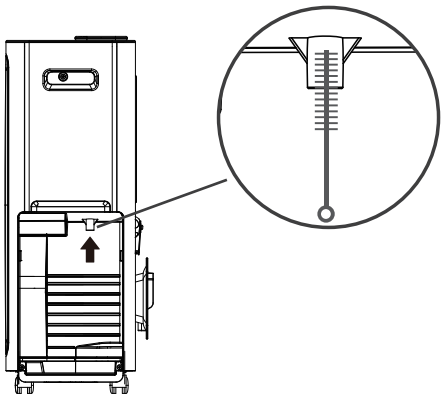


CAUTION
DO NOT operate the dehumidifier without a filter because dirt and lint will clog it and reduce performance.

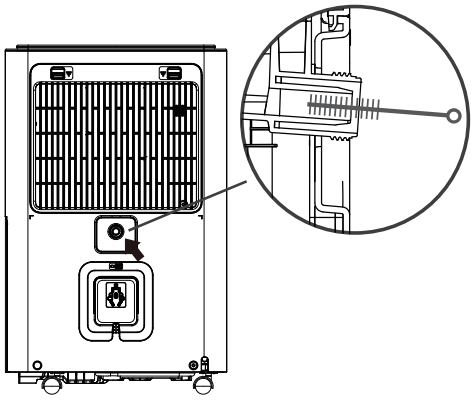
NOTE

The cabinet and front may be dusted with an oil-free cloth or washed with a cloth dampened in a solution of warm water and mildliquid dishwashing detergent. Rinse thoroughly and wipe dry. Never use harsh cleansers, wax or polish on the cabinet front. Be sure to wring excess water from the cloth before wiping around the controls.
Excess water in or around the controls may cause damage to the unit.

Drain clean



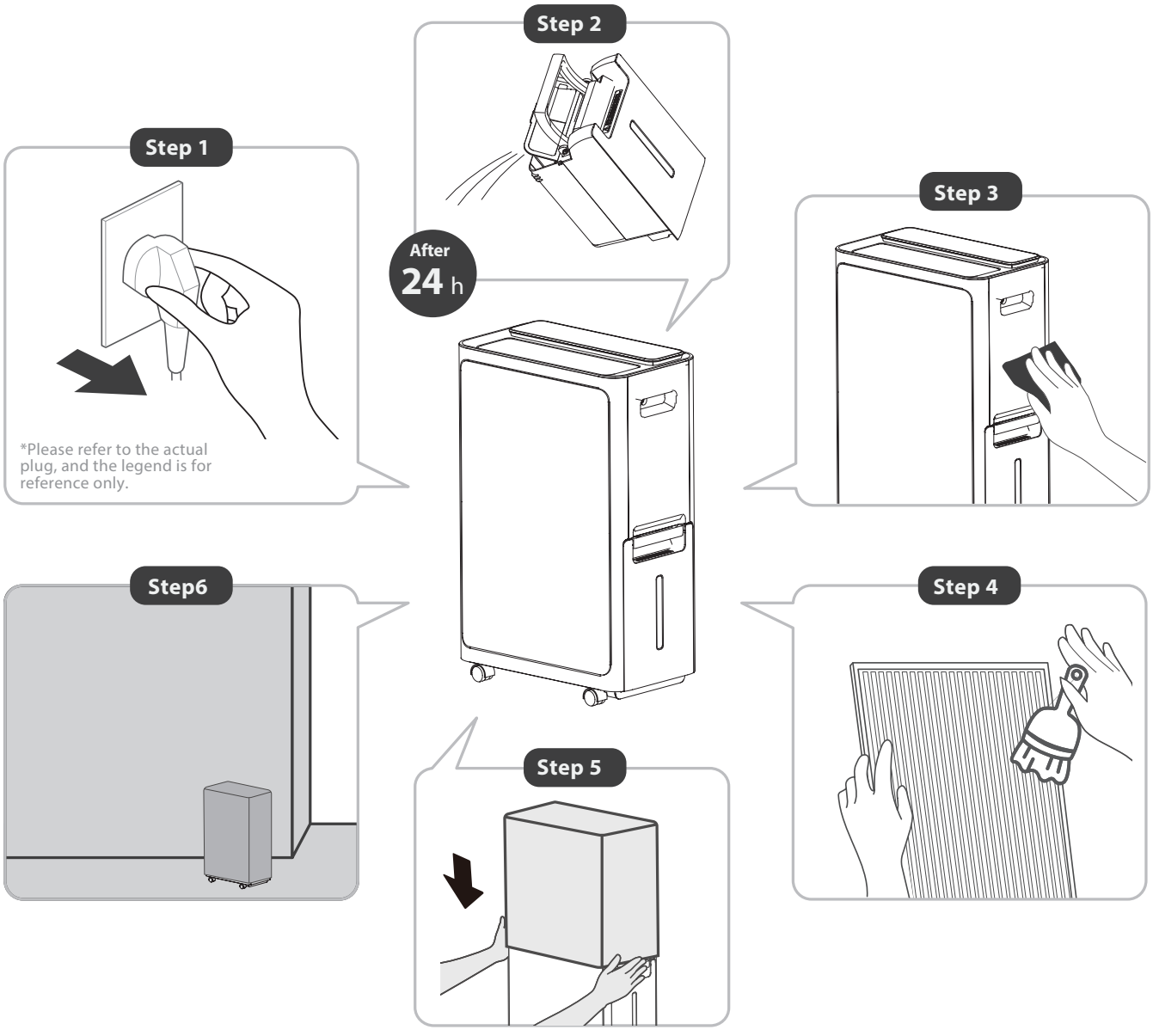
Clean the bucket drain



Clean the permanent drain

- Insert a straw brush with a diameter smaller than 10 mm into the drain, scrape up and down to prevent dirt from accumulating inside the hole.
- The outside of the drain can be wiped with a cotton cloth.

When not using the unit for long time periods



- Step 1: Unplug the product, after turning off the unit.
- Step 2: Empty the bucket after 24 hours of unplugging.
- Step 3&4: Clean the main unit, water bucket and air filter.
- Step 5: Cover the unit with a plastic bag.
- Step 6: Store the unit upright in a dry, well-ventilated place.

SPECIFICATIONS AND PURIFICATION DATA

Specifications

Model	RAD-DIA28SG
Color	Black
Product Dimensions(W*D*H)(mm)	420*265*662
Capacity	28L/day(RH80%)
Power	AC 220V/50Hz
IEF(L/kWh)	3.5
Plug Type	13A/250V
Control Type	Digital Control

Purification data

ITEM	Purification
Test laboratory	Intertek Testing Services Shenzhen Ltd. Guangzhou Branch
test method	Based on ANSI/AHAM AC-1-2020
suppression method	More negative ions are produced than positive ones, which can trap dust and bacteria
suppression target	Smoke、Dust、Pollen、PM2.5
test results	Smoke CADR(FT3/Min)：51 Dust CADR(FT3/Min)：64.2 Pollen CADR(FT3/Min)：97.1 PM2.5 CADR(FT3/Min)：57.2
report number	230921139GZU-001

ITEM	Sterilisation
Test laboratory	Intertek Testing Services Shenzhen Ltd. Guangzhou Branch
test method	Based on：GB/T 18801-2022 GB 21551.3-2010 Technical Standard For Disinfection (2002 Ministry of Health P.R.China)-2.1.3
suppression method	Positive and negative ions produce positive and negative ions, positive and negative ion neutralization discharge has a certain bactericidal ability
suppression target	Staphylococcus albicans 8032、Staphylococcus aureusATCC 6538、Escherichia coli 8099
test results	Staphylococcus albicans 8032 Killing Rate：99.95% Staphylococcus aureusATCC 6538 Killing Rate：99.95% Escherichia coli 8099 Killing Rate：99.95%
report number	230921139GZU-002

ITEM	Disinfection
Test laboratory	Intertek Testing Services Shenzhen Ltd. Guangzhou Branch
test method	Based on：GB/T 18801-2022 GB 21551.3-2010 Technical Standard For Disinfection (2002 Ministry of Health P.R.China)-2.1.3
suppression method	Positive and negative ions produce positive and negative ions, positive and negative ion neutralization discharge has a certain bactericidal ability
suppression target	H1N1(A/PR/8/34)
test results	H1N1(A/PR/8/34) Killing Rate：99.99%
report number	230921139GZU-002

TROUBLESHOOTING

Before calling for service, review the chart below first yourself.

Problem	What to check
Unit does not start	Make sure the dehumidifiers plug is pushed completely into the outlet. Check the house fuse/circuit breaker box. Dehumidifier has reached its preset level or bucket is full. Water bucket is not in the proper position.
Dehumidifier does not dry the air as it should	Do not allow enough time to remove the moisture. Make sure there are no curtains, blinds or furniture blocking the front or back of the dehumidifier. The humidity control may not be set low enough. Check that all doors, windows and other openings are securely closed. Room temperature is too low , below 5 ^{o}C (41 ^{o}F). There is a kerosene heater or something giving off water vapor in the room.
The unit makes a loud noise when operating	The air filter is clogged. The unit is tilted instead of upright as it should be. The floor surface is not level.
Frost appears on the coils	This is normal. The dehumidifier has Auto defrost feature.
Water on floor	Hose to connector or hose connection may be loose.
EH(xx), EL(xx), EC(xx), PH(xx), PL(xx), PC(xx) appear in the display	These are error codes and protection codes. See the CONTROL PANEL FEATURES section.

#DetailsMatter

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