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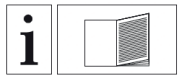
USER MANUAL

for Starings DYD Dehumidifiers

50L0430CH **50L**



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.

Recycle unwanted materials instead of disposing of them. All appliances and packaging should be sorted and tendered at a regional recycling centre and be processed in an ecological manner.

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.

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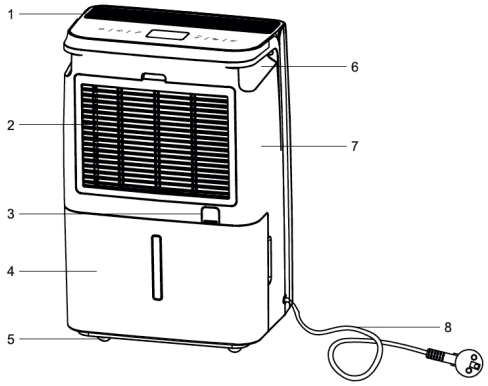
Figure1



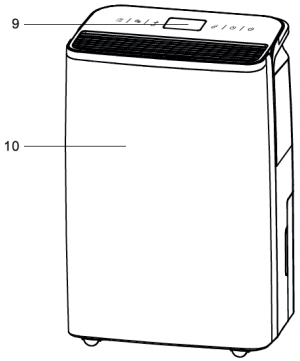


Figure2

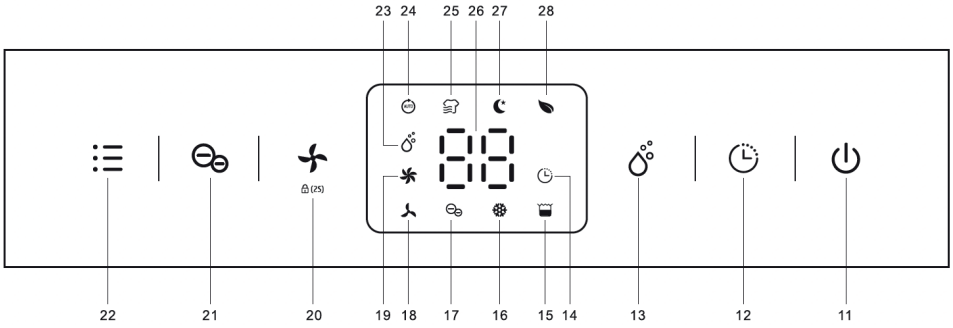
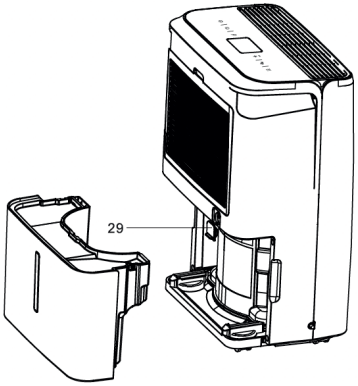
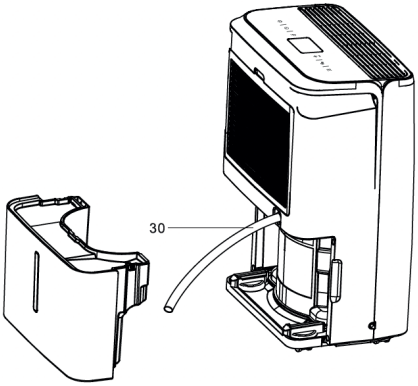


Figure3





Parts List

Components

1. AirOutlet
2. Air Inlet Grille
3. Drainage Outlet
4. WaterTank
5. Castors
6. Handle
7. Rear Cover
8. Power Cord
9. Control Panel
10. Front Cover

Control Panel

11. Power Button
12. Timer Off Button
13. Manual Dehumidifying Button
14. Time Indicator
15. Tank Full Indicator
16. Defrost Indicator
17. Anion Indicator
18. Low Fan Speed Indicator
19. High Fan Speed Indicator
20. Fan Speed Button / Child Lock Button
21 . Anion Button
22. Mode Button
23. Manual Dehumidifying Indicator
24. Auto Indicator
25. Laundry Drying Indicator
26. Humidity Reading
27. Sleep Indicator
28. Air Purifying Indicator

Drainage

29. Drainage Outlet Plug
30. Drainage Pipe

Product Instructions

The dehumidifier is used to remove excessive moisture from the air. The resulting reduction in relative humidity protects buildings and their contents from the adverse effects of excess humidity.

The environmentally friendly R290 is used as the refrigerant. R290 has no damaging influence on the ozone layer (ODP), a negligible greenhouse effect (GWP) and is available worldwide. Because of its efficient energy properties, R290 is high ly suitable as a coolant for !his application. Special precautions must be taken into consideration due to the coolant's high flammability.

Safety Instructions

- 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.
- The unit is designed only for use with R-290(propane) gas as the designated refrigerant.
- THE REFRIGERANT LOOP IS SEALED. ONLY A QUALIFIED TECHNICIAN SHOULD AT TEMPT TO SERVICE!
- Do not discharge the refrigerant into the atmosphere.
- R-290 (propane) is flammable and heavier !han air.
- It collects firs! 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 thai a propane leak has occurred.
- Do not let any persons back into the store until the qualified service technician has arrived and thai technician advises thai it is safe to return to the store.
- 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.
- 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 du ring maintenance.
- Ensure the unit is far away from fire, inflammable, or explosive objects.
- Do not use means to accelerate the defrosting processor to clean, other than those recommended by the manufacture.

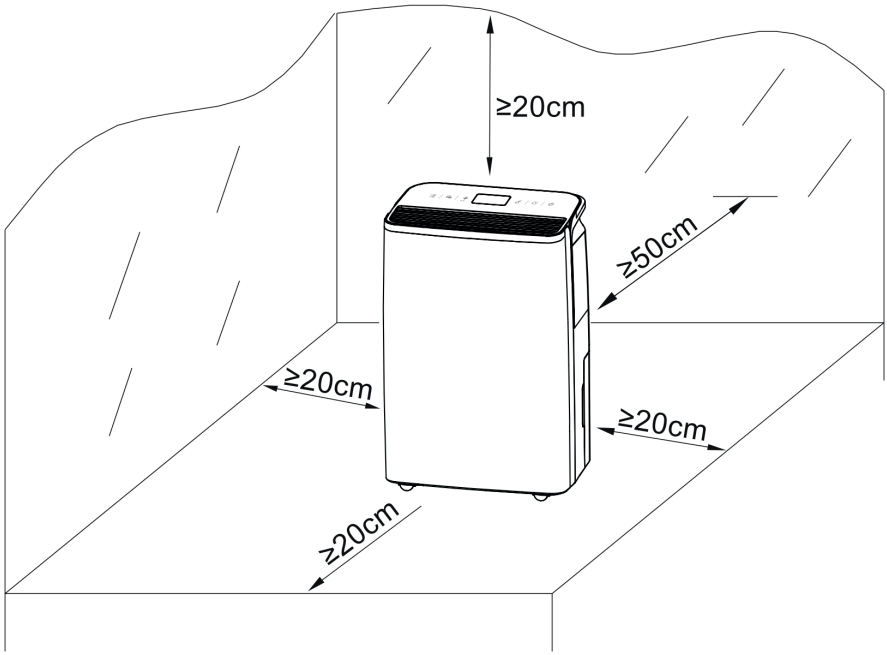
Safety Instructions

- The appliance shall be slored in a room without continuously operation sources (for example: open flames, an operating gas appliance or an operating eleclric healer).
- The appliance shall be stored so as to prevent mechanical damage from occurring.
- Do not piece or burn, even atter use.
- Pipe-work shall be protecled from physical damage and shall not be installed in an unvenlilaled space, if thai space is smaller !han 8 m2.
- Compliance wilh national gas regulations shall be observed.
- Keep any required ventilation openings clear of obstruction.
- The appliance shall be stored in a well-ventilaled area where the room size corresponds to the room area as specified for operation .

Warning

- Failure to abide by !his warning could result in an explosion, death, injury and property damage.
- Any person who is involved with working on or breaking into a refrigerant circuit should hold a current valid certificate from an industry-accrediled assessment authority, which authorizes lheir competence to handle refrigerants safely in accordance wilh an industry, recognized assessment specification.
- 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 ofthe person competent in the use offlammable refrigerants.

Prior to Operation



- Place the dehumidifier in an upright position on a stable, flat surface.
- Ensure the dehumidifier is at a safe distance at least 50cm away from a wall or furniture.
- Supply power should be in correspondence with the value on the nameplate, power outlet needs to be grounded.
- Ensure the tank is correctly fitted, if the tank is full or not in place, the tank full light comes on and the dehumidifierwill stop working.

Continuous Drainage:

In general, water will be collected by tank, if you want continuous drainage, please do steps as follows: (refer to figure 3) :

1. Unplug the drainage outlet plug.
2. Insert the drainage pipe with 14mm inner diameter into water outlet. Please always make sure the pipe is going downhill, is not blocked or kinked.

Operation Instructions

- *Connect the power plug to the correct power supply; the machine will enter into standby with “beeping” sound.*
- *Desired setting will be confirmed 3s after the operation.*

Switch On/ Switch Off The Unit [Power button]

Press the power button once to turn on the unit, the unit runs by default mode on manual continuous dehumidifying with high fan speed.

- *Press the power button to turn off the unit, it will stop working, fan will work for some seconds to blow out the hot air inside the unit.*

Auto Shut-off Timer Function [Timer button]

Press the timer button to select your preferred timer hour from 00h-24h-00h cancel for automatic shutoff by each press.

- *Auto timer off setting will be canceled if press timer button for 2 limes in 3 seconds.*
- *Auto timer off setting will be canceled if switch off the unit and switch on again.*

Manual Dehumidifying Mode [Manual button]

Press the manual button to select your preferred humidity from CO-30%-35%-40%-45%-50%-55% -60%-65%-70%-75%-80%-CO. CO means continuous dehumidifying regardless of ambient humidity.

- *At manual mode, all buttons are valid.*

Operation Instructions

Fan Speed Option [Fan Speed button]

Press the fan speed button to select your preferred fan speed setting of low and high to meet the different usage requirements.

••• *Fan speed button is invalid at laundry drying mode, auto mode and defrost mode.*

Anion Function [Anion button]

Press the anion button to activate the anion function to fresh up the air quality.

••• *Anion function will be off automatically when the fan stops working.*

Multifunction Optional [Mode button] - Auto Dehumidifying Mode

Press the mode button once to select the auto dehumidifying mode, the unit runs automatically accordance to the ambient humidity detected below.

Ambient RH% detected	Indicator	Compressor	Compressor
RH%>65%	Red	Working	High
55%≤RH%≤65%	Green	Working	Low
RH%<55%	Blue	Stop working	Low

••• *Fan speed button is invalid.*

Operation Instructions

Multifunction Optional [Mode button] - Laundry Drying Mode

Press the mode button 2 times to select Laundry Drying mode, the unit runs in continuous dehumidification with high fan speed for 6 hours then switch off automatically.

••• *Fan speed button is invalid.*

Multifunction Optional [Mode button] - Sleep Mode

Press the mode button 3 times to select Sleep mode, the unit runs with a designated humidity selling of 55% along with low fan speed. All indicators will be off Ss after the selling is completed. Touch any button to activate the light, and to operate as usual.

••• *Fan speed button is valid.*

••• *With no further operation after activate the light for 30s, lights will be off again.*

••• *When the water tank is full on sleep mode, water tank full indicator will always be on.*

Multifunction Optional [Mode button] - Air Purifying Mode

Press the mode button 4 times to select Air Purifying mode, the unit runs with high fan speed without dehumidifying.

••• *Fan speed button is valid.*

Operation Instructions

Safety Childlock Function [Fan Speed button-2 seconds]

Press the fan speed button for 2s to lock all the buttons with a beeping sound, the same operation can unlock it.

••• *Safety child lock function can be set at standby mode and working mode.*

Low Temperature Defrost Mode

When the ambient temperature is too low, dehumidifier will enter into the defrost mode, the unit runs with high fan speed without dehumidifying.

••• *Fan speed button is invalid.*

Auto Shut off with Water Tank Full Indicator

The unit will go into standby mode when water tank is full or the water tank is not installed properly. After emptying the tank or install the water tank properly, the unit will go on to the previous mode.

••• *Except for the power button, all other buttons are invalid.*

Memory

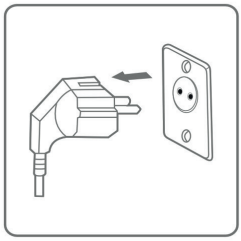
a. *When unplugged directly or power cut, then reconnected to the power supply, the dehumidifier will run with the mode prior to the shutdown. The timer setting will be kept.*

b. *Press the power button to switch off the dehumidifier, and then press the power button to switch it back on. The dehumidifier will run with the mode prior to the shutdown. The timer setting will be canceled.*

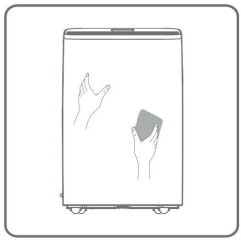
c. *Switch off the device and unplug the power cord, then reconnect the power supply and switch on the dehumidifier. It will run as factory preset mode the first time you received the dehumidifier.*

Cleaning

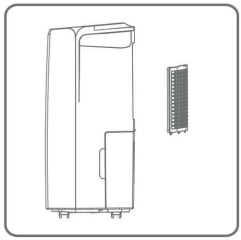
When used regularly , the filter may become clogged with dust and particles. Therefore the filter should be cleaned at least every two weeks. Follow these steps:



1. Switch the device off and remove the plug from the socket before cleaning.



2. Clean the housing with soft, dry cloth. If the device is extremely dirty, use a mild cleaning agent. Wipe the dehumidifier with a slightly damp cloth. Never spray the device with water.



3. Remove the filter, clean the filter with a vacuum cleaner or soapy water no hotter than 40°C.

4. Rinse and dry the filter completely before installing back to the device.

Storage

If the dehumidifier will not be used for a long period of time, take the following steps:

1. Remove the plug from the socket and empty the tank, make the tank and the dehumidifier dry completely, this may take a couple of days.

2. Clean the air filter.

3. Check the dehumidifier for perfect condition to ensure a safe use of it after a long period of storage.

4. Pack the device with the suitable packaging.

5. Store the dehumidifier in a dust-free and out of direct sunlight location, preferably covered with a sheet of plastic.

Display Error Codes

Please contact local distributor if any of the error codes below appears.

Display Code	E1	E2	L3	L4
Error	Temperature sensor error	Humidity sensor error	Air inlet temperature is too high>42”C	Air inlet temperature is too low<0’C
Display	Flash every 30 seconds	Flash every 30 seconds	Slowly flash L3	Slowly flash L4
What is happening	Machine works normally	Machine works normally, but can’t set the humidity	Compressor stop working, fan works at low fan speed. 10mins later, if the temperature decrease to below 40°C, machine will work normally.	Compressor stop working, fan works at low fan speed. 10mins later, if the temperature increase to above 2°C, machine will work normally.

Safety Precautions On Servicing

Please follow these warnings when to undertake the following when servicing a dehumidifier with R290.:

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.

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.

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 workspace shall be sectioned off. Ensure that the conditions within the area have been made safe by control of flammable material.

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.

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 CO^2 fire extinguisher adjacent to the charging area.

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.

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.

Safety Precautions On Servicing

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.

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.

Releasing refrigerant into atmosphere is strictly forbidden!

Trouble Shooting

PROBLEM	POSSIBLE CAUSE	SOLUTION
The device does not work	The power is not connected	Insert the plug into the wall outlet
	The water tank is full	Empty the tank
	The tank has not been replaced correctly	Replace the tank
Water removal capacity is too low	Runtime is too short	Be patient and wait
	Ambient temperature or humidity is too low	It is normal that the device does not dehumidify in these conditions
The device works, but reduces the relative humidity insufficiently	The room is too big	We recommend using a dehu-midifier with a greater capacity
	There is too much ventilation	Reduce ventilation(e.g. close windows and shut doors)
	The air filter is clogged	Clean the air filter
	Set humidity is higher than the ambient humidity	Set the humidity lower than ambient humidity
Dehumidifier is blowing out warm air	The dried air is passed over heating coils before it is blown into the room as part of the dehumidifying process	This is normal, a dehumidifier is not an air cooler
The display is not showing the humidity set point	The display shows the room relative humidity not the set point	Press the humidity control button once to see the target relative humidity
Water on floor	There is residual water in tank, and the device is lurched too much by moving	Be careful when move the tank
The dehumidifier is noisy	The air filter is blocked or the device is on an uneven surface	Clean the filter or put the device on a flat surface

Dehumidifiers for workplace and homespace
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The EC Declaration of Conformity can be obtained by contacting staring.dk