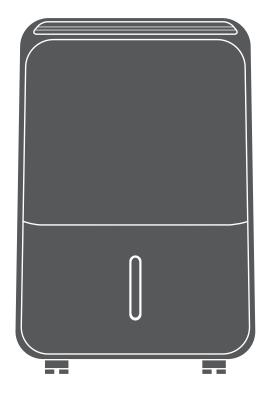


# **DEHUMIDIFIER**

USER'S MANUAL



MODELS: CF-ION-10L CF-ION-12L



# **LANGUAGES**

ENICLICH	2
EINGLISH	

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### Dear Consumer,

Congratulations on your choice!

Comfort dehumidifier series is an innovative device that ensures both dehumidifying and purifying capabilities thanks to the function of the Ionizer. With Comfort series you can enjoy a healthy & comfortable living and take advantage of all the extra benefits.

Please refer to this manual, to obtain full efficiency of the dehumidifier - air purifier, through the guidelines included in the following pages and make savings via clever use of this device.



Please read all the safety instructions carefully before use and keep this instruction manual for future reference.

# 1. SAFETY & WARNING INSTRUCTIONS

- No children under the age of 8 should be permitted to operate this electric device. Be certain, that children, handicapped people, or people with the lack of knowledge and experience, must be supervised, depending the situation, by persons responsible for their well-being and do not undertake procedures such as the cleaning or the maintenance of this device.
- It is important that adequate supervision is provided and no minors are left unattended with this device.
- This dehumidifier is for domestic and small office use only. Do not use this device for commercial, industrial or marine use, and in areas with wet surfaces such as restrooms or shower rooms.
- This device should always be kept in an upright position to avoid any damage.
- All house exits (windows doors etc) where the dehumidifier is operating, should be shut.
- If water leakage appears within the unit, turn the unit off and disconnect the power cord.
- Before moving, unplug the device and manage to keep it in a vertical position in order to safely be transferred from one area to another.
- Be sure to empty the water whenever the water tank is full or when the device will not be used for a prolonged time.
- Always empty the water tank before storing the unit.
- When unit has been switched off and instantly switched on, keep in mind that, for operational reasons, there is a 3 minute delay in order to regain normal operation.
- If the unit is misplaced or tipped, unplug the power cord immediately. Make sure the unit is completely dry before resuming operation.
- Disconnect the device, if abnormal sounds, odors or smoke occur.
- If the supply cord is damaged, it must be replaced by the manufacturer, its service agent or similarly qualified persons to avoid a hazard. Never attempt to dismantle, repair or modify the device.
- Do not attempt to repair, dismantle or modify this appliance. Contact your authorized service technician for repair or maintenance of this device.
- Do not operate or stop the unit by switching the power supply on or off.
- Do not insert any objects in the unit's air inlet and exhaust as this may cause damage to the device.
- Do not place heavy objects on the power cord. Make sure that the cord is not compressed.
- Do not place cord under any obstacles (carpets rugs or runners etc). Cord should be arranged away from areas where accidental tripping may occur.
- Casters should be able to move comfortably over any obstacle. Be extra cautious while
  moving over carpets, since any extra force may cause the tipping of the unit, or the spilling of
  any water collected in the bucket.
- Do not sit or climb on the device.
- Do not place the unit in direct sunlight or near other heating sources.
- Do not use the unit near heat sources, chemicals, radiators, flammable materials or fire.
- Do not remove the water tank while the device is in use.
- Do not use the device without the filter. Dirt and lint may clog the unit thus reducing performance.
- Do not drink or use the collected water of the unit for any purpose.
- Do not use the unit with wet hands.

• Upon first use, and for proper calibration, please allow unit to operate continuously for 24 hours.

### 2. ELECTRICAL INFORMATION

The nameplate, with all the electrical and technical data of this appliance, is located on the rear panel.

- The appliance should be installed in accordance with national wiring regulations.
- Be sure the device is grounded properly. Proper grounding is important as it minimizes the chance of electric shock or fire. The power cord is equipped with a grounding plug for protection against electric shock hazards.
- The device must be used in a properly grounded wall socket. If the specific socket you intend to use is not adequately grounded or protected by a time delay fuse or circuit breaker, have a qualified electrician install the proper receptacle.
- Ensure the wall socket is still accessible after the installation of the dehumidifier.
- Do not use extension cords or adapter plugs with this device. Do not connect the dehumidifier to a multiple socket outlet, which is also being used for other electrical appliances.
- To avoid personal injury, always disconnect the power supply of the device, before maintenance.
- The unit's circuit board (PCB) has an included safety fuse for overcurrent protection. You may find the specifications of the fuse, marked on the circuit board, for example: T 3.15A/250V (or 350V), etc.



Power off the dehumidifier before removing the plug.

# 3. SOCIABLE REMARKS ENVIRONMENTAL PROTECTION

Disposal of equipment no longer used:

Please follow the instructions below, when using this dehumidifier in European countries.

• This appliance requires special treatment for disposal. In the European Union, electronic equipment must not be treated as domestic waste, but must be disposed of professionally in accordance with Directive 2002/96/EC of the European Parliament and Council of 27th January 2003 concerning old electrical and electronic equipment.

The disposal of this unit should follow all legal requirements and should not be disposed as unsorted municipal waste.

The hazardous substances can leak into the ground water supply thus entering the food chain, endangering your health and the environment.

- ullet Fluorinated Greenhouse Gasses are contained in hermetically sealed equipment. For specific information regarding the type the amount and the CO<sub>2</sub> equivalent in tons, please refer to the relevant labels of the unit.
- There are several alternative solutions for disposal:



- A) Your local municipality has established free collection systems for electronic waste.
- B) Your local retailer upon purchase of a new product.
- C) The manufacturer may accept the old appliance for disposal.
- D) Old appliances sometimes contain valuable resources for scrap metal dealers.

# 4. SAFETY PRECAUTIONS

### **Read Safety Precautions before operation and installation**

To prevent 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 harm or damage.

• The seriousness is classified by the following indications.

WARNING	This symbol indicates the possibility of death or serious injury.
CAUTION	This symbol indicates the possibility of injury or damage to property or serious consequences.

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lacksquare	Meanings	01 20111	DOIS USE	a iii uiis	Hidiludi	i ai e as sii	own bei	OW.

Never do this.

! Always do this.



# WARNING

On not exceed the rating of the power outlet or connection device.

Otherwise, it may cause electric shock or fire due to excess heat generation.

On not operate or stop the unit by switching on or off the power supply.

It may cause electric shock or fire due to heat generation.

On not damage the power cord or use an unspecified power cord.

It may cause electric shock or fire.

On not modify power cord length or share the outlet with other appliances

It may cause electric shock or fire due to heat generation

On not insert or pull out plug with wet hands.

It may cause electric shock.

O Do not place the unit near a heat source.

Plastic parts may melt and cause a fire.

① Disconnect the power if strange sounds, smell, or smoke comes from it.

It may cause fire and electric shock.

O You should never try to take apart or repair the unit by yourself.

It may cause failure of machine or electric shock.

Before cleaning, turn off the power and unplug the unit.

It may cause electrical shock or injury.

O Do not use the machine near flammable gas or combustibles, such as gasoline, benzene, thinner, etc.

It may cause an explosion or fire.

On not drink or use the water drained from the unit.

It contains contaminants and could make you sick.

On not take the water bucket out during operation.

O Do not use extension cords.



On not use the unit in small spaces

On not place the device in areas where water may splash onto the unit.

It may cause an electric shock or fire.

Place the unit on a leveled and sturdy section of the floor.

O Do not cover the air intake or exhaust openings.

A lack of air flow can lead to overheating and fire.

Ocare should be taken when using the unit in a room with the following persons:

Infants, children, elderly people, and people not sensitive to humidity.

Oponot use in areas where chemicals are handled.

This will cause the unit deterioration due to chemicals and solvents dissolved in the air.

Never insert your finger or other objects into grills or openings. Take special care to warn children of these dangers.

It may cause electric shock or failure of appliance.

On not place heavy object on the power cord and take care so that the cord is not compressed.

There is danger of fire or electric shock.

O Do not climb or sit on the unit.

You may be injured if you fall or the unit could be damaged.

① Always insert the air filters securely. Clean the air filters at least once every two weeks.

Operation without filters may cause low performance and/or damage.

If water enters the unit, turn the unit off and disconnect the power, contact a qualified service technician.

Oponot place flower vases or other water containers on top of the unit.

Water may spill inside the unit, causing insulation failure and electrical Shock or fire



### **CAUTION**

- 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. (be applicable for the European Countries)
- This appliance is not intended for use by persons (including children) 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. Children should be supervised to ensure that they do not play with the appliance. (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.
- The appliance shall be installed in accordance with national wiring regulations.
- The appliance with electric heater shall have at least 1 meter space to the combustible materials.
- Contact the authorised service technician for repair or maintenance of this unit.
- Do not use the socket if it is loose or damaged.
- Do not operate your appliance in a wet room such as a bathroom or laundry room.

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- Do not use this product for functions other than those described in this instruction manual
- Contact the authorised installer for installation of this unit.
- If the dehumidifier 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.
- To reduce the risk of fire or electric shock, do not use this fan with any solid-state speed control device.
- 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 open the unit during operation.
- When the air filter is to be removed, do not touch the metal parts of the unit.
- Do not operate the unit with damaged cord. Dispose the unit or return it to an authorized service facility for proper checking and/or repair.
- Hold the plug by the head of the power plug when taking it out.

### Electrical Information

- The manufactures nameplate is located on the rear or side 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(the fuse or circuit breaker needed is determined by the maximum current of the unit. The maximum current is indicated on the nameplate located on unit), have a qualified electrician install the proper receptacle.
- Ensure the receptacle is accessible after the unit installation.
- Do not use extension cords or an adapter plugs with this unit. However, if it is necessary to use an extension cord, use an approved Dehumidifier extension cord only (available at most local hardware stores).
- To avoid the possibility of personal injury, always disconnect the power supply to the unit, before installing and/or servicing.
- All wirings must be performed strictly in accordance with the wiring diagram located on the middle baffle of the unit (behind the water bucket).

# Take note the fuse specifications

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: T 3.15A/250V (or 350V), etc. **NOTE:** All the pictures in the manual are for explanation purposes only. The actual shape of the unit you purchased may be slightly different, but the operations and functions are the same.

# 5. WARNINGS (for using R290 refrigerant only)

- -Do not use any other means other than the recommended to expedite the defrosting process or to perform a cleaning of the unit, other than those recommended by the manufacturer.
- This device should never be stored in an area in combination with other ignition sources (for example: a gas appliance an electrical heater, open flames etc.)
- Do not attempt to penetrate the unit with a tool or try to burn
- Be extra cautious as refrigerant gas may be odorless.
- -Appliance should be installed, operated and stored in a room with a floor area larger than 4m<sup>2</sup>.
- It is necessary to always comply with national gas regulations.
- Keep air ventilation clear of any obstructions
- The unit should be placed in storage in such a manner as to prevent any mechanical damage from occurring.
- Always operate this unit in a well-ventilated area, where the room size corresponds to the specifications of the device for optimal performance.
- -Any persons involved with the operation and handling of the refrigerant circuit of this unit, should be certified by the related accredited industry, and authorized as competent to handle refrigerants, safely, and in accordance to the safety standards of the industry.
- Servicing should be performed only by a certified technician as per the Mnaufacturers reccomendations. Any maintenance or repair required, should be performed by skilled personnel who are competent in the use of flammable refrigerants.
- The appliance should not be stored in a room with open flames (for example operating gas appliances such as stoves) and ignition sources ( such as electric heaters)



Caution: Risk of fire/ flammable materials (Required for R290 units only)



IMPORTANT NOTE: Please read this manual carefully prior to installing and operating your device! It is recommended to keep this manual for future reference.

### Description of displayed Symbols (\*Only applicable to units with R290 Refrigerant)

	WARNING	This symbol indicates the use of a flammable refrigerant. If any leakage occurs, or if exposed to an external ignition source, a fire risk is possible.
	CAUTION	This symbol indicates that the user's manual should be read carefully.
	CAUTION	This symbol indicates that a professional service technician should handle this unit with reference to the user's manual
[]i	CAUTION	This symbol indicates the presence of a user's or installation manual



# Warnings (for using R290 refrigerant)

# 1. Transport of equipment containing flammable refrigerants

Determined by local regulations.

# 2. Marking of equipment using signs

See local regulations

## 3. Disposal of appliances supplied with flammable refrigerants

See National Regulations.

## 4. Storage of equipment/appliances

The storage of equipment should be in accordance with the manufacturer's instructions.

## 5. Storage of packed (unsold) equipment

Storage package protection should be constructed such 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.

# 6.Information on servicing

### 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 in the system.

### 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.

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

### 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. nonspeaking, adequately sealed or intrinsically safe.

### 5. Presence of fire extinguisher

If any work is to be conducted on the refrigeration equipment or amy associated parts,

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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.

### 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.

#### 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.

### 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 check 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 any refrigerant. Any markings to the equipment must be visible and readable. Markings and signs that are unrecognizable must 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.

### 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:

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

# 7. Repairs to sealed components

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.

Particular attention shall be paid to the following to ensure that by working in electrical components, the casing is not altered in such a way that level of protection is affected. This shall include damage to cables, excessive numble of connection, terminals not made to original specification, damage to seals, incorrect fitting of glands, etc.

Ensure that seals or sealing materials have not degraded such that they no longer serve the purpose of preventing the ingress of flammable atmospheres. Replacement parts shall be in accordance with the manufacturer's specifications,

**NOTE** The use of silicon sealant may inhibit the effectiveness of some types of leak detection equipment. Intrinsically safe components do not have to be isolated prior to working on them.

### 8. 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 are the only types that can be worked on while live in the presence of a flammable atmosphere. The test apparatus shall be at the correct rating. Replace components only with parts specified by the manufacturer. Other parts may result in the ignition of refrigerant in the atmosphere from a leak.

### 9. 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 leaks. A halide torch (or any other detector using a naked flame) shall not be used

### 10. 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.

### 11. Leak detection methods

The following leak detection methods are deemed acceptable for systems containing flammable refrigerants.

Electronic leak detectors shall be used to detect flammable refrigerants, but the sensitivity may not be adequate, or may need re-calibrated. (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 suitable for use with most refrigerants but the use of detergents containing chlorine shall be avoided as the 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 both before and during the brazing process.

Oxygen free nitrogen (OFN) shall then be purged through the system both before and during the brazing process.

#### 12. Removal and evacuation

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

remove refrigerant;

purge the circuit with inert gas;

evacuate;

purge again with inert gas;

open the circuit by cutting or brazing;

The refrigerant charge shall be recovered into the correct recovery cylinders. The system shall be "flushed" with OFN to render the unit safe. This process may need to be repeated several times. Compressed air or oxygen shall not be used for this task.

Flushing shall be achieved by breaking the vacuum in the system with OFN and continuing to fill until the working pressure is achieved, then venting to atmosphere, and finally pulling down to a vacuum. This processing shall be repeated until no refrigerant is within the system. When the final OFN charge is used, the system shall be vented down to atmospheric pressure to enable work to take place. This operation is absolutely vital if brazing operations on the pipe-work are to take place. Ensure that the outlet for the vacuum pump is not close to any ignition sources and there is ventilation available.

## 13. 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 minimize the amount of refrigerant contained in them.

- -Cylinders shall be kept upright.
- -Ensure that the refrigeration 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 refrigeration system.

Prior to recharging the system is shall be pressure tested with OFN. 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.

### 14. 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 is case analysis is required prior to re-use of reclaimed 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;

Mechanical handling 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 manufacturer's 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 refrigeration system unless it has been cleaned and checked.

# 15. Labeling

Equipment shall be labeled stating that it has been de-commissioned and emptied of refrigerant. The label shall be dated and signed. Ensure that there are labels on the equipment stating the equipment contains flammable refrigerant.

# 16. Recovery

When removing refrigerant from a system, either for servicing or decommissioning, it is recommended good practice that all 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 are available. All cylinders to be used are designated for the recovered refrigerant and labeled 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.

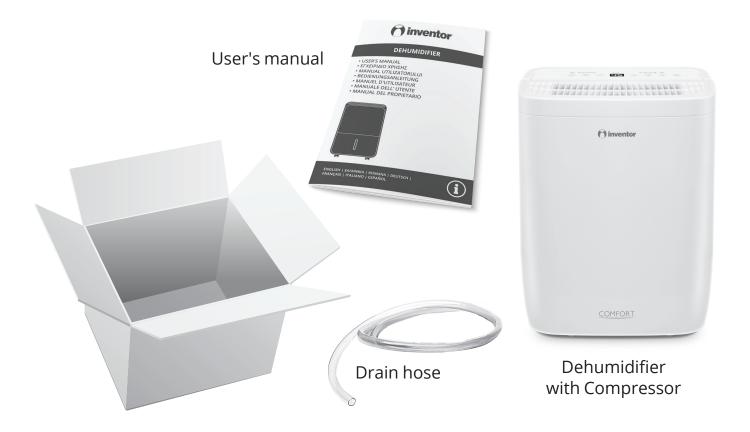
The recovery equipment shall be in good working order with a set with a set of instructions concerning the equipment that is at hand and shall be suitable for the recovery of flammable refrigerants.

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 good condition. Before using the recovery machine, check that it is in satisfactory working order, has been properly maintained and that any associated electrical components are sealed to prevent ignition in the event of a refrigerant release. Consult manufacturer of in doubt.

The recovered refrigerant shall be returned to the refrigerant supplier 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 evacuation process shall be carried out prior to returning the compressor to the suppliers. Only electric heating to the compressor body shall be employed to accelerate this process. When oil drained form a system, it shall be carried out safely.

# **6. STEPS BEFORE USE**



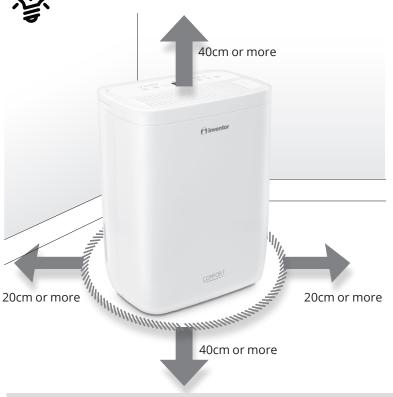
Please refer to the electronic warranty instructions, in the last page (English section) of this manual.





For warranty purposes, please note the SN (serial number). The SN is labeled opposite the device.

# - INSTALLATION TIPS



- 1) Do not block or restrict the airflow around the unit. Make sure the air inlet exhaust grills are not obstructed. Allow 20cm of clearance around the unit and 40cm above.
- 2) Place the unit in an area where the temperature levels will not fall bellow 5°C (41°F) There is a possibility the coils will collect frost at temperatures that are under 5°C (41°F), which may result in low performance. (Working conditions: 5°C-32°C, 30%RH–80%RH).

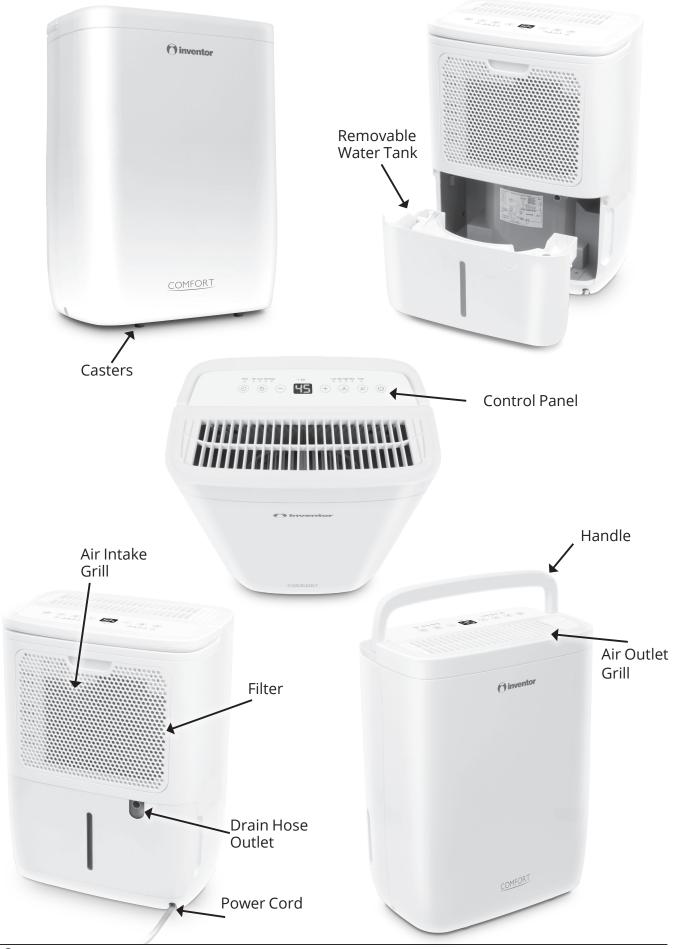
- 3) Place the unit away from clothes dryer, heater or radiator
- 4) Ensure the filter is clean.
- 5) Place unit in vertical operating position and allow 2 hours before initial use in order to avoid malfunctions.





- 6) Prior to initial use, please remove the water bucket and check if any packaging parts (for example: the draining hose) are included. Remove and re-position the water bucket firmly into place.
- 7) Do not connect the dehumidifier to a multiple socket outlet, which is also being used for other electrical appliances.

# 7. GETTING TO KNOW YOUR DEHUMIDIFIER



# 8. CONTROL PANEL • FUNCTIONS





By pressing the "POWER" button the dehumidifier turns on or off. The "POWER" button and Display will turn on and off as well.

- When the set humidity is reached, the Energy Savings function is automatically activated during which the digital control display of the device may show increased humidity levels. This is because the fan is not operating. After the predetermined timeframe and if the humidity levels have increased, the device will resume dehumidification.
- In the event of a power failure the unit has an Auto Restart function. Once power is restored, the appliance will automatically restart at the preselected settings prior to the power failure.



In case of a power failure the dehumidifier will resume the previously set operation after a time period of 3 minutes.



#### **MODE**

By pressing the "MODE" button, various operations may be selected (Set, Dryer, Cont., Smart). While changing operation modes, device will make a short beep.

**Dryer mode:** Press the mode button  $\[ \cap \]$ , until the drying clothes function is selected. A light indicator marked "Dryer" will be activated on the control panel. The fan speed cannot be adjusted in this mode and will be set automatically to high fan speed level. After operating for approximately 2 hours the unit will check the room's humidity. If under 45%RH, only the fan will operate for two hours. After the 2 hours, the unit will quit dryer mode. If over 45%RH, the unit will operate in Turbo fan Speed for 1 hour before checking the room's humidity again. The maximum operation time set by this mode is 10 hours and can be reduced depending on the room size and the dampness of the clothes.

- For drying clothes: place the dehumidifier in a small room and set nearby the clothes rack. Keep doors shut and allow the dehumidifier to dry the clothes.
- For optimal results manual wringing of the clothes is suggested.
- Allow 30-50cm distance from the moist clothes.
- Thick and heavy fabrics may require more time for more effective results.

**Continuous mode (Cont.):** Press the mode button (a), until the continuous dehumidification function is selected. A light indicator marked "Cont." will be activated on the control panel. The dehumidifier operates continuously when the drainage pipe is attached, or until the water tank is full, extracting humidity from the air. When this function is activated the indicator will turn on and the device will work constantly, disregarding the relative humidity of the room. Under the continuous mode the desired humidity level cannot be adjusted.

This mode is suggested for special humidity conditions where big amounts of condensation need to be extracted, such as extremely moist rooms.

**Smart Dehumidification (SMD):** Press the mode button (a), until the smart dehumidification function is selected. A light indicator marked "SMD" will be activated on the control panel. The desired humidity levels cannot be adjusted under this mode.

• While operating in this mode the manual humidity settings function is unavailable.



When none of the above MODE functions are selected (Dryer, Cont., Smart) and all indication lights are off the desired humidity levels can be set manually by pressing the (+) (-) buttons.

### **Manual Dehumidification (Set)**

Press the mode button in until the manual setting of the dehumidifier is selected. A light indicator marked "Set" will be activated on the control panel. The humidity level can be set within a range of 35%RH (Relative Humidity) to 85%RH (Relative Humidity) in 5% increments each time one of the relative buttons are pressed, as long as no other modes (Dryer, Cont. or Smart) are selected.

- For drier air press the descending arrow (-) button to set a lower percent value (%)
- For damper air, press the ascending arrow (+) pad to set a higher percent value.



The humidity set control buttons are inactive while Dryer or Cont. or Smart modes are selected.



#### **TIMER**

Press the "TIMER" button to initiate the auto START or auto STOP function in combination with the PLUS (+) and MINUS (-) buttons. The "TIMER" light indicator on the control panel will turn on.

- When unit is on, press the Timer button to activate the auto STOP function. When the unit is off, press this button to activate the auto START function.
- Press the (+) or (-) buttons to change the time by 0.5 hour increments, up to 10 hours or by 1 hour increments up to 24 hours. The control panel will then count down time remaining until START or STOP.
- The time selected will be stored within 5 seconds and the main display will automatically return to its previous state.
- Turning the unit ON or OFF at any time or changing the timers setting to 0.0 will terminate the Auto Start/Stop function.
- When the code "P2" appears on the led display, the Auto Start/Stop function will be terminated.



The timer function can either be set to ON or OFF. Setting ON and OFF simultaneously is not possible.



### **FAN**

Press the FAN button to select among the Low, Med or High fan speed. A light indicator will illuminate separately for each fan speed selected.

- Low fan speed: When activated the indicator marked "Low" is turned on. Select the
- low fan speed for guite operation in order to enjoy ideal conditions.
- Medium fan speed: When activated the indicator marked "Med" will be turned on. Select this mode for normal operation.
- High fan speed: When activated the indicator marked "High" is turned on. Select this mode when immediate dehumidification is necessary, such as areas or rooms that are unused for an extended period of time.



### **FRESH**

Press the FRESH button  $\varnothing$  to activate the ionizer of the dehumidifier. A light indicator will illuminate to inform that this function has been selected. Ions will be released in the atmosphere to purify the air and remove unpleasant and unhealthy particles.

### **INDICATIONS**

#### P2 - Bucket Full Indicator

The indicator "P2" will appear on the led display when bucket is full, removed, or misplaced. A light indicator marked "Full" will be activated over the led screen and will remain lit until the water tank is emptied or placed in the proper position.

• The dehumidifier will shut down automatically when the water tank is full.

#### Clean filter reminder

A light indicator marked as "Filter" will be activated on the control panel to remind the need to clean the air filter of the dehumidifier. To eliminate the reminder press for 3 seconds the fan button %.

The filter clean reminder will appear on the control panel each time 250 working hours have been completed. To maintain a good performance for your dehumidifier make sure to check and clean the air filter approximately every 15 days.

#### **Auto Defrost**

When frost builds up on the evaporator coils, the compressor will cycle off and the fan will continue to run until the frost disappears.

• This function not only ensures the safe and appropriate operation of the dehumidifier but is also more efficient and economical in its performance



- When Auto Defrost is operating, the unit may cause some noise of the refrigerant fluids flowing, this is normal.
- Do not turn the dehumidifier off when auto defrost is operating.

### 9. WATER TANK & DRAIN HOSE

There are two ways to remove collected water. Before proceeding ensure that you have switched off and unplugged the unit.

### 1. Usage of the water tank

When unit is OFF and the tank of the dehumidifier is full, the full indicator will be lit. Additionally, when the unit is on and the tank is full, the compressor stops operation followed by the fan a few minutes later. The full indicator will flash.

- Slowly remove the bucket. Grip the handle with caution and carefully pull outwards so the water does not overflow. Do not place the tank on the floor because the bottom of the tank is uneven. Doing so the tank will fall and the water will be spilled on the floor.
- Empty the water from the tank and place it again in to the device. The water tank, must be securely and properly placed, for the dehumidifier to operate.
- When the water tank is re-installed the unit will automatically restart.



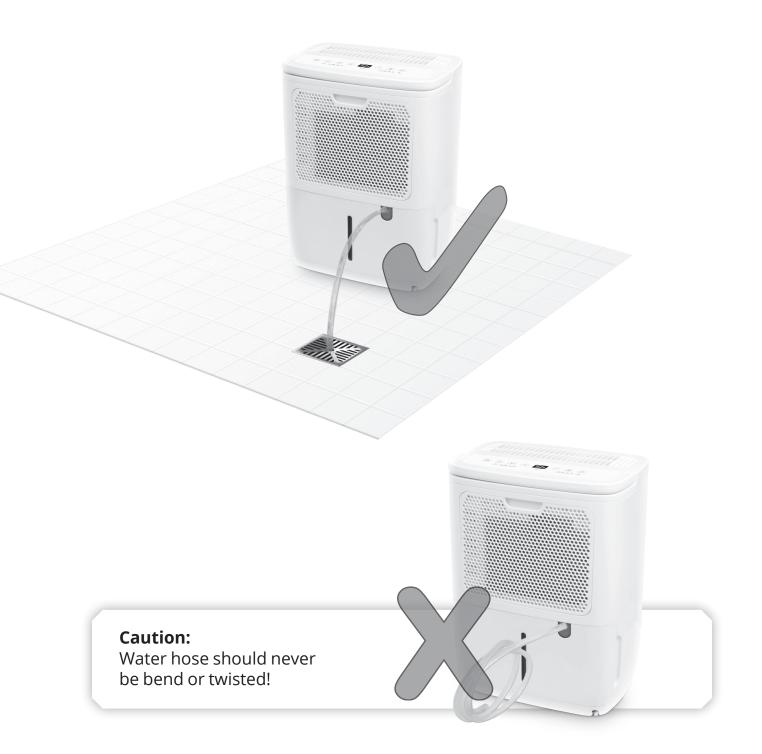
- When you remove the tank, do not touch any parts inside the unit, as you may damage the device.
- Be sure to gently place the tank into the dehumidifier.
- Do not drink or use the collected water from the device.
- Wipe any excess water on or in the unit when removing the tank.

### 2. Continuous draining

Water automatically can be emptied into a floor drain by attaching the unit with a water hose.

- Remove the plastic cover located opposite the unit.
- Insert the water hose into the drain outlet and make sure all connections are firmly tightened in order to avoid any possible leaks.
- The dehumidifier should be placed on a flat surface in an upright position.
- Lead the water hose towards a suitable drainage facility and be certain that the water flows naturally. For correct drainage, make sure the hose stays below the level of the drain hose outlet.







When the continuous drainage feature is not being used, remove the drain hose from the drain hose outlet and re- install the plastic cover.

# 10. MAINTENANCE & CLEANING

Before performing any maintenance or cleaning of the dehumidifier, make sure that it is unplugged.

# Cleaning the Filter:

Use water and mild detergent to clean the filter.

- Do not use abrasive cleaning agents or solvents; use a brush or vacuum attachments for cleaning.
- Do not use a dishwasher to clean the filter.
- Do not apply any water directly on or into the device while cleaning, as it may cause rust, insulation deterioration or electrical shock.
- To remove the air filter, grip the tab and pull the filter outwards.
- Clean the filter with warm and soapy water for more effective results. Rinse carefully.
- Allow the filter to completely dry before re-installing.



# • Cleaning the tank:

Partially fill the tank with clean water adding a minimal amount of mild detergent. Clean thoroughly empty and rinse.

- Clean the tank every 2 weeks to prevent mold, mildew and bacteria growth.
- After cleaning, make sure the tank is placed back securely for the dehumidifier to operate.

# Cleaning the unit

- Clean the unit by using a damp sponge, and dry it with a clean, soft cloth.
- Never use alcohol or any product containing solvents.
- Do not immerse the unit in water.



### 11. STORAGE

When unit is inactive for an extended period of time, please make sure you follow the instructions below, for the appropriate storage of your appliance:

- Turn unit off allowing one day before storage.
- Remove drain hose (if attached).
- Clean the removable parts of the device, water tank and air filter.
- Position and secure the power cord with its band opposite the dehumidifier.
- Cover the device.
- Store the dehumidifier in upright position, in a dry, well ventilated area and avoid direct sunlight.

# 12. FREQUENTLY ASKED QUESTIONS & TROUBLESHOOTING

	Are dehumidifiers costly?	For about the first month of use, the dehumidifier operates intensively. This will gradually decrease within time, since the dehumidifier will have been calibrated in its working environment. Condensed households may sometime be significantly expensive to heat. The use of a dehumidifier may lower energy costs.
	Where should the dehumidifier be placed ideally?	For optimal results, it is suggested that the dehumidifier is placed in a central area. Doors within the household should be open in order for the dehumidifier to enhance its operation.
	Can the filter be replaced by another type of filter?	The dehumidifier's filter cannot be replaced by any other type of filter since it is specifically designed to operate with this unit.
	Which is the appropriate room	Maintaining a proper home humidity level is essential for your well-being and that of your household. Extreme

humidity level?

fluctuations cause adverse effects on both; low humidity may cause respiratory problems and damage on wooden doors, windows, and furniture, and make you vulnerable to electric shocks due to increased static electricity. On the other hand, high humidity may promote mold growth, serving as breeding grounds for various bacteria and resulting in poor health and also a damaged home. The ideal humidity levels fluctuate between 40% to 50%.

26 ΕN Why does When the desired humidity level is reached, there is a condensation possibility of partial humidity formation on windows. This occurs due to the temperature variation between the window persist on windows and the external weather conditions. even with Operating the dehumidifier should significantly reduce dehumidifier's condensation formation on windows. use? How much time is The exact time needed to dry clothes depend on many factors, needed to dry my the room's temperature, the humidity level, the moisture of the clothes etc., so there is no standard time since of these clothes? variable factors mentioned above. Why does the When the set humidity is reached, the Energy Savings function dehumidifier not is automatically activated during which the digital control operate while display of the device may show increased humidity levels. This is because the fan is not operating. After the predetermined the humidity of timeframe and if the humidity levels have increased, the the room has increased? device will resume dehumidification. The dehumidifier The dehumidifier operates by intaking condensed air is not a chilling removing any moisture and sending it back in the area it device. What operates. If you are standing near the dehumidifier while could be the operating you may feel that the air coming out of the fan is cause of cold air cooler due to the diffusion. In reality, it is at the same roombeing extracted? temperature but with less humidity.

### The unit does not start

- Make sure the dehumidifier's plug is placed completely into the socket.
- Check the house fuse/circuit breaker box.
- Check whether the power cord is damaged.
- Check the water tank, if it is full, empty it.
- Check if the dehumidifier has reached its preset level.
- Make sure the water tank is positioned properly.
- Room temperature is lower or higher than the advised operational range.
- Check whether the humidity level has been set in high levels.

# Dehumidifier does not dry the air as efficient

- Make sure that the dehumidifier has been operating 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 selector may not be set low enough.
- Make sure you have cleaned the filter as suggested. Clogged filter may result in reduced performance.
- All house exits (windows doors etc) where the dehumidifier is operating, should be shut.
- Room temperature is below the advised operational range.

- There is a kerosene heater or something giving off water vapor in the room.
- The room that the device is placed is bigger than suggested.
- The humidity level is too high.

# The unit makes a loud noise when operating

- The air filter is clogged.
- The device is tilted instead of being in an upright position.
- The floor surface is not flat.

# Frost build up on coils

• This is normal. This unit is supplied with an Auto defrost feature.

# Drain hose water leakage

- Check the correct installation of the drain hose.
- Check for any blockage or damage of the drain hose.

## **Understanding Error code indications**

**EH60-**Humidity sensor error- Unplug the unit and plug it back in. If error repeats, call for service;

**EH61-**Tube Temperature sensor of the evaporator error-- Unplug the unit and plug it back in. If error repeats, call for service;

EH02-Zero-crossing signal detection error; If error repeats, call for service;

EH03-Indoor fan speed malfunction; If error repeats, call for service;

EH0b-Indoor PCB and display board communication error; If error repeats, call for service;

All the pictures in the manual are for explanatory purposes only. The actual shape of the unit you purchased may be slightly different, but the operations and functions are the same. The company may not be held responsible for any misprinted information. The design and the specifications of the product for reasons, such as product improvement, are subject to change without any prior notice.

Please consult with the manufacturer at +30 211 300 3300 or with the Sales agency for further details. Any future updates to the manual will be uploaded to the service website, and it is advised to always check for the latest version.



Scan here to download the latest version of this manual. www.inventorappliances.com/manuals

# Activate your Warranty

Follow the next quick steps to activate your warranty:

### STEP 1

Visit our website via the link:

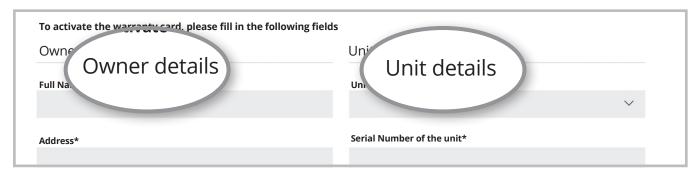
https://www.inventorappliances.com/warranty-card

or by scanning the QR code, as follows:



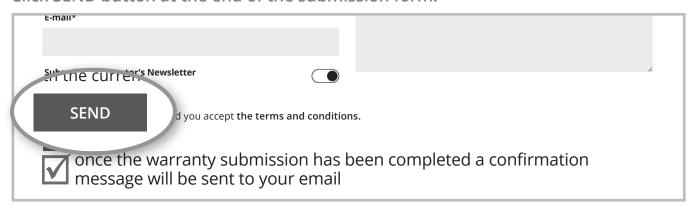
### STEP 2

Fill in the obligatory fields as requested in the "Owner's details" and "Unit's details":



### STEP 3

Click SEND button at the end of the submission form:



### STEP 4

Wait for the confirmation email you will receive at the email address you have filled in - please also check your spam folder.

#### STEP 5

Inventor warranty is now valid!



# **DEHUMIDIFIER**



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