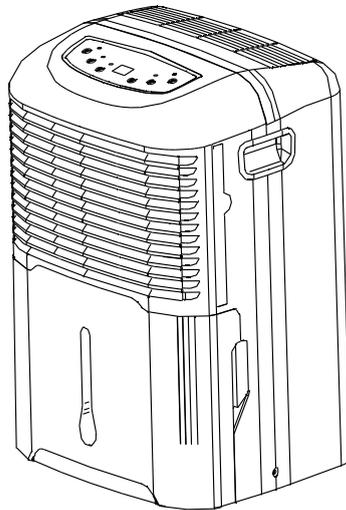


# DEHUMIDIFIER

# Alen

MDF-50AE  
MDF-70AE  
MDF1-30AE

## **OWNER'S MANUAL**



Before operating this product, please read the instructions carefully and save this manual for future use.

## ATTENTION

Before you use your dehumidifier, please read this instruction manual carefully.

## SAFETY NOTES

1. Do not connect unit to any AC electrical socket that is damaged.
2. Ensure filter and removable water tank are correctly installed before turning on unit.
3. Always turn off the dehumidifier at the control panel when not in use and before unplugging.
4. Do not use in the following locations:
  - I. Next to source of heat e.g. a radiator or heater, tumble dryer etc.
  - II. An area where oil or water is likely to splash.
  - III. An area exposed to direct sunlight.
  - IV. Near a bath, shower or a swimming pool (ie where the unit could get wet).
- V. In a greenhouse.
5. Never insert your finger or other foreign objects into grills or openings. Take special care to warn children of these dangers.
6. Always store the unit upright in order to maintain the compressor in a proper working condition. Leave the unit upright for at least 24 hours before operating.
7. Always unplug the unit before cleaning.
8. Do not cover the unit.
9. Do not spray insecticides or any other flammable sprays on the machine.
10. Do not spray water on the dehumidifier.
11. There are no user serviceable parts, should the unit or supply cord of this appliance become damaged, the unit must be returned to the manufacturer or service agent.
12. Empty the water tank before moving the dehumidifier.
13. The unit is fitted with an auto defrosting operation and starts when the evaporator generates frost. This function ensures continuous running when the temperature is down to 41F.

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## SAFETY PRECAUTIONS

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.

|  |  |
|--|--|
|  <b>WARNING</b> | This symbol indicates the possibility of death or serious injury.      |
|  <b>CAUTION</b> | This symbol indicates the possibility of injury or damage to property. |

■ Meanings of symbols used in this manual are as shown below.

|   |                        |
|---|------------------------|
|  | <b>Never do this.</b>  |
|  | <b>Always do this.</b> |

### **WARNING**

Ⓢ Do not exceed the rating of the power outlet or connection device.

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

Ⓢ Do not operate or stop the unit by switching on or off the power.

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

Ⓢ Do not damage or use an unspecified power cord.

● It may cause electric shock or fire.

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

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

Ⓢ Do not insert or pull out plug with wet hands.

● It may cause electric shock.

Ⓢ Do not place the unit near a heat source.

● Plastic parts may melt and cause a fire.

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

● It may cause fire and electric shock.

Ⓢ 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.

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

● It may cause an explosion or fire.

Ⓢ Do not drink or use the water drained from air conditioner.

● It contains contaminants and could make you sick.

Ⓢ Do not open the unit during operation.

● It may cause electric shock.

### **CAUTION**

Ⓢ When using in closets or other small spaces, be sure to keep doors open.

● Lack of ventilation can cause overheating and fire.

Ⓢ Do not put in places where water may splash onto the unit.

● Water may enter the unit and degrade the insulation. It may cause an electric shock or fire.

Ⓢ Place the unit on a level, sturdy section of the floor.

● If the unit falls over, it may cause water to spill and damage belongings, or cause electrical shock or fire.

## SAFETY PRECAUTIONS

### ⚠ CAUTION

⊘ Do not cover the intake or exhaust openings with cloths or towels.

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

⊘ When the unit is to be cleaned, switch off, and turn off the circuit breaker.

- Do not clean unit when power is on as it may cause fire and electric shock, it may cause an injury.

⊘ Always insert the filters securely. Clean filter once every two weeks.

- Operation without filters may cause failure.

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

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

⊘ Do 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.

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

- It may cause failure of appliance or accident.

⊘ Do not use in areas where chemicals are handled.

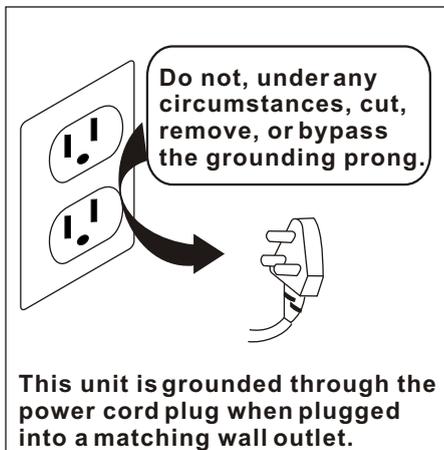
- This will cause the unit deterioration due to chemicals and solvents dissolved in the air.

⊘ Do not climb up on or sit on the unit.

- You may be injured if you fall or if the unit falls over.

⊘ Do not place flower vases or other water container on top of the unit.

- Water may spill inside the unit, causing insulation failure and electrical shock or fire.



### Electrical Information

- The manufacturer's nameplate is located on the rear panel of the unit and contains electrical and other technical data specific to this unit.
- Be sure the air conditioner 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 air conditioner 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, 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 plug with this unit.** However, if it is necessary to use an extension cord, use an approved "air conditioner" 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.

## CONTROL PADS ON THE DEHUMIDIFIER

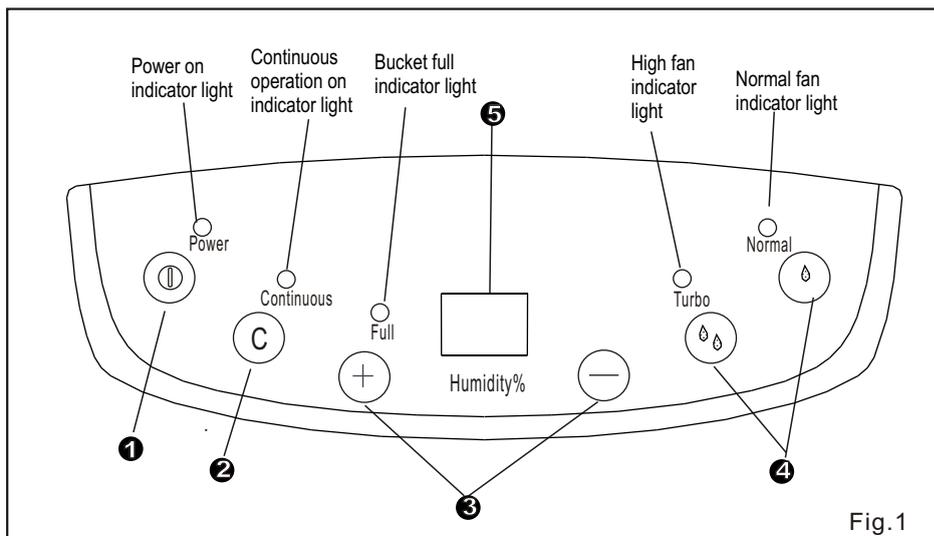


Fig.1

### Control pads

#### ❶ POWER Pad

Press to turn the dehumidifier on and off.

#### ❷ Continue Pad

Select for the dehumidifier to operate continuously for maximum dehumidification until the bucket is full. The Humidity set control pads cannot be used when Continuous operation is on.

#### ❸ Humidity Set Control Pads

The humidity level can be set within a range of 35%RH(Relative Humidity) to 80%RH(Relative Humidity) in 5% increments.

For drier air, press the ⊖ pad and set to a lower percent value(%).

For damper air, press the ⊕ pad and set a higher percent value(%).

#### ❹ Fan speed Pads

Control the fan speed. Press to select either High or Normal fan speed. Set the fan control to High for maximum moisture removal. When the humidity has been reduced and quiet operation is preferred, set the fan control to Normal.

#### ❺ Display

Shows the set % humidity level while setting, then shows the actual(±5% accuracy) room % humidity level.

Error Codes:

E1- Humidity sensor error--Unplug the unit and plug it back in. If error repeats, call for service.

E2- Temperature sensor error-- Unplug the unit and plug it back in. If error repeats, call for service.

P1- Unit is defrosting-- Allow the unit time to automatically defrost. The error will clear after the unit self defrosts.

P2- Bucket is full-- Empty the bucket and replace in the right position.

### Other features

#### Bucket Full Light

Glow when the bucket is ready to be emptied, or when the bucket is removed or not replaced in the proper position.

#### Auto Shut Off

The water level control switch shuts off the dehumidifier when the bucket is full, or when the bucket is removed or not replaced in the proper position. When the setting humidity is reached, the unit will be shut off automatically.

#### Auto Defrost

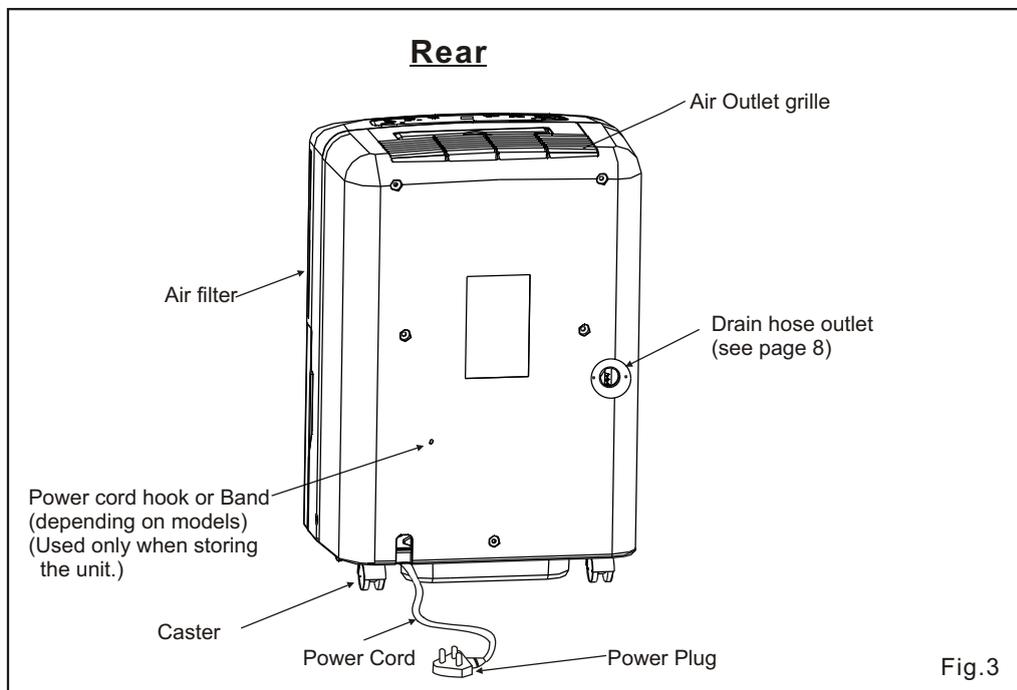
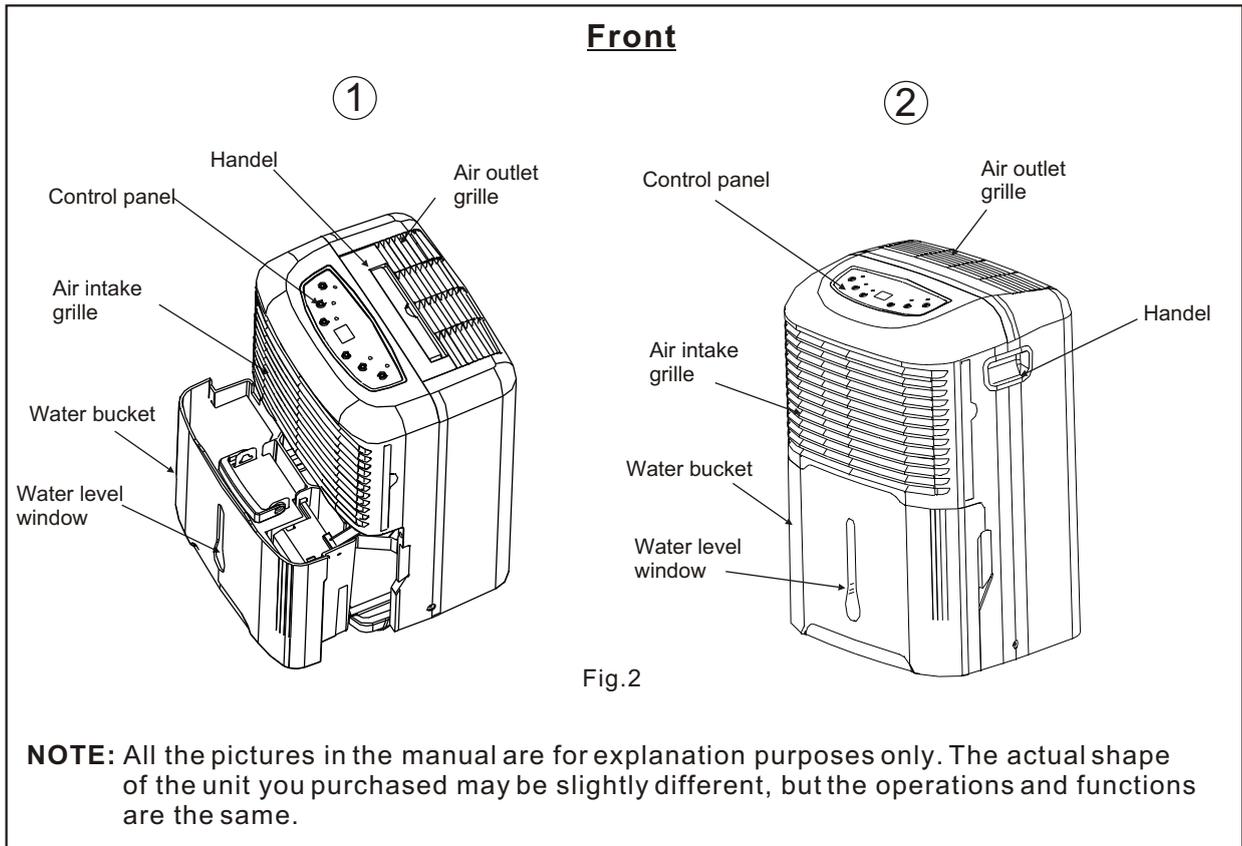
When frost builds up on the evaporator coils, the compressor will cycle off and the fan will continue to run until the frost disappears.

#### Power Outage

In the case of a power outage or interruption, the unit will automatically re-start, in the settings last used, after the power is restored.

# IDENTIFICATION OF PARTS

## Identification of parts



## **OPERATING THE UNIT**

### **Positioning the unit**

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 dehumidifier is intended for indoor residential applications only. This dehumidifier 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.
- 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 effective.
- Close all doors, windows and other outside openings to the room.

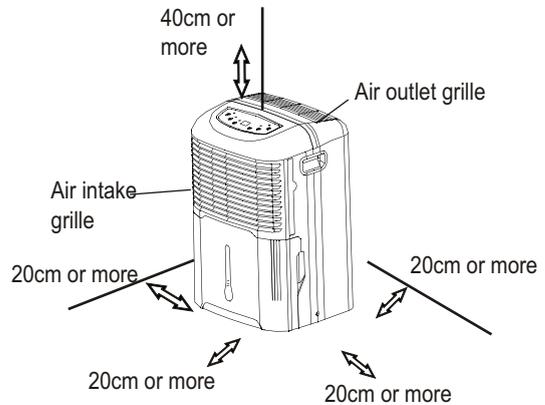


Fig.4

#### **Casters(At four points on the bottom of unit)**

- Casters can only move laterally.
- 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.)

### **When using the unit**

- When first using the dehumidifier, operate the unit continuously 24 hours.
- This unit is designed to operate with a working environment between 5°C and 35°C.
- 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 115V~ 60Hz electrical socket-outlet with earth connection.
- Make sure the Water bucket is correctly fitted otherwise the unit will not operate properly.

## Removing the collected water

There are two ways to remove collected water.

### 1. Use the bucket

- When the bucket is full, the unit will automatically stop running, and the Full indicator light will flash.
- Slowly pull out the bucket. Grip the left and right handles securely, and carefully pull out straight so water does not spill. Do not put the tank on the floor because the bottom of the bucket is uneven. Otherwise the bucket will fall and cause the water to spill.
- Throw away the water and replace the bucket. The bucket must be in place and securely seated for the dehumidifier to operate.
- The machine will re-start when the bucket is restored in its correct position.

### NOTES:

- When you remove the bucket, do not touch any parts inside of the unit. Doing so may damage the product.
- Be sure to push the bucket gently all the way into the unit. Banging the bucket against anything or failing to push it in securely may cause the unit not to operate.

### 2. Continuous draining

Water can be automatically emptied into a floor drain by attaching the unit with a water hose (not included).

- Remove the water bucket from the front of the unit, you will find a section of hose located above the bucket.
- Remove the rubber plug from the back of the unit and store it in a safe location(see Fig.8).
- Insert the water hose through the hole in the back of the unit and securely press it onto the connector on the front of the unit(see Fig.9). Then lead the water hose to the floor drain or a suitable drainage facility.
- Replace the bucket in the unit. The bucket must be in place and securely seated.

**NOTE:** When the continuous drain feature is not being used, remove the drain hose from the connector and attach the back drain hole with the rubber plug shown in Fig.1.

1. Pull out the bucket a little.

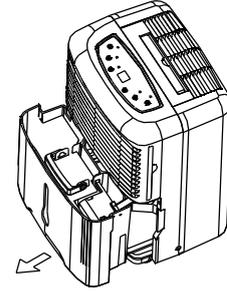


Fig.5

2. Hold both sides of the bucket with even strength, and pull it out from the unit.

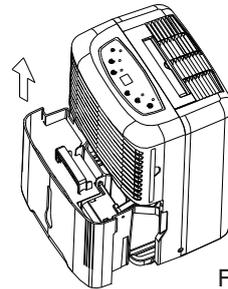


Fig.6

3. Pour the water out.

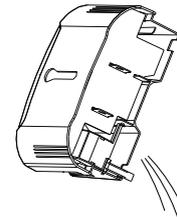


Fig.7

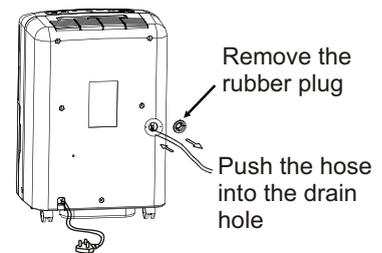


Fig.8

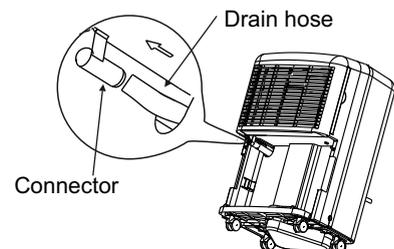


Fig.9

## CARE AND MAINTENANCE

### Care and cleaning of the dehumidifier

**Turn the dehumidifier off and remove the plug from the wall outlet before cleaning.**

#### 1. Clean the Grille 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.

#### 2. Clean the bucket

Every few weeks, clean the bucket to prevent growth of mold, mildew and bacteria. Partially fill the bucket with clean water and add a little 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.

#### 3. Clean the air filter

The air filter behind the front grille should be checked and cleaned at least every 30 days or more often if necessary.

**NOTE: DO NOT RINSE OR PUT THE FILTER IN AN AUTOMATIC DISHWASHER.**

##### To remove:

- Grip the tab on the filter and pull it out as shown in Fig.A.
- 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 into the unit from the side and push it in. See Fig.C

##### CAUTION:

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

#### 4. When not using the unit for long time periods

- After turning off the unit, wait one day before emptying the tank.
- Clean the main unit, bucket and air filter.
- Wrap the cord and bundle it with the band or twist the excess cord onto the power cord hook (depending on models).
- Cover the unit with a plastic bag.
- Store the unit upright in a dry, well-ventilated place.

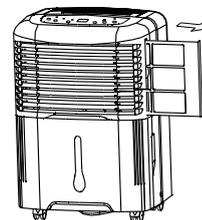
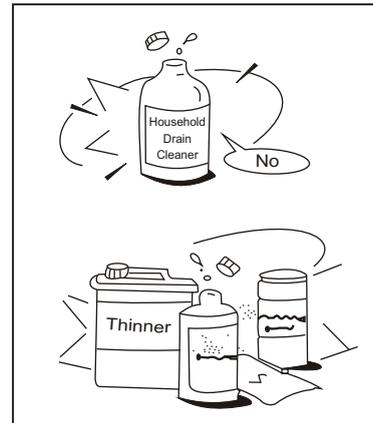


Fig. A



Fig. B

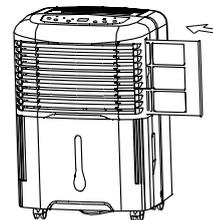
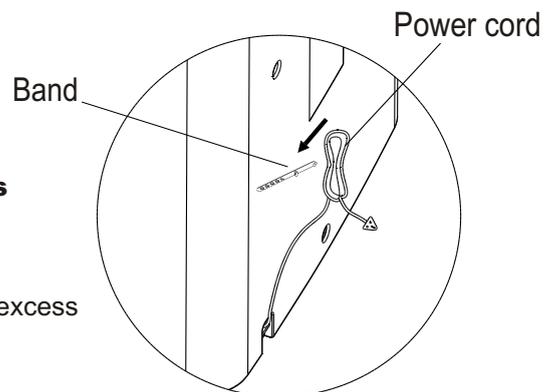


Fig. C



## TROUBLESHOOTING TIPS

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

| Problem  | What to check  |
|--|--|
| Unit does not start                            | <ul style="list-style-type: none"><li>● Make sure the dehumidifier's plug is pushed completely into the outlet.</li><li>● Check the house fuse/circuit breaker box.</li><li>● Dehumidifier has reached its preset level or bucket is full.</li><li>● Tank is not in the proper position.</li></ul>   |
| Dehumidifier does not dry the air as it should | <ul style="list-style-type: none"><li>● Did not allow enough time to remove the moisture.</li><li>● Make sure there are no curtains, blinds or furniture blocking the front or back of the dehumidifier.</li><li>● The humidity control may not be set low enough.</li><li>● Check that all doors, windows and other openings are securely closed.</li><li>● Room temperature is too low, below 5°C(41°F).</li><li>● There is a kerosene heater or something giving off water vapor in the room.</li></ul> |
| The unit makes a loud noise when operating     | <ul style="list-style-type: none"><li>● The air filter is clogged.</li><li>● The unit is tilted instead of upright as it should be.</li><li>● The floor surface is not level.</li></ul>  |
| Frost appears on the coils                     | <ul style="list-style-type: none"><li>● This is normal. The dehumidifier has Auto defrost feature.</li></ul>   |
| Water on floor                                 | <ul style="list-style-type: none"><li>● Hose to connector or hose connection may be loose.</li><li>● Intend to use the bucket to collect water, but the back drain plug is removed.</li></ul>  |
| E1, E2, P1 or P2 appear in the display         | <ul style="list-style-type: none"><li>● These are error codes. See the <b>CONTROL PADS ON THE DEHUMIDIFIER</b> section.</li></ul>  |



## **One Year Limited Warranty**

### **General**

The Alen Corporation dehumidifiers are warranted for a period of one year from the date of original purchase. Alen will, at its option, either furnish a replacement part or replace your dehumidifier provided the product is determined to be defective as a result of faulty material or workmanship while in normal use. Replacement parts or units will be either new or refurbished. Alen's sole obligation under this warranty is to replace, or at Alen's discretion, to repair, free of charge, all defective parts, for a period of one (1) year from date of original purchase.

The replacement will be warranted for the unexpired portion of the original warranty. This warranty will be valid only for units in possession of the original purchaser. Proof of purchase must be presented to Alen's warranty service representative. All parts or units that are replaced become the property of Alen. To obtain warranty service, the defective product or part must be shipped or delivered to: Alen's authorized service center. All postage, insurance and shipping charges are the responsibility of the Purchaser and are not included in this warranty.

### **Exceptions**

This warranty will not apply:

1. To malfunctions or damage other than caused by a defect in material or workmanship.
2. To any damage, abuse, accident, neglect or acts of nature.
3. To any filters or consumable parts
4. To damage as a result of misuse, tampering, or failure to follow any safety rules or operating instruction.
5. To damage caused by repairs or alterations to the unit by anyone other than Alen
6. To any shipping or insurance costs related to the warranty service

For service please visit: [www.alencorp.com](http://www.alencorp.com)

### **Miscellaneous**

No one is authorized to make any other warranties on behalf of Alen. It is expressly understood that the replacement warranty of Alen shall be in lieu of any and all other warranties, express or implied, including warranties of merchantability or fitness for a particular use or purpose, and further that Alen shall not be liable for any loss or damage directly or indirectly arising from the use of the dehumidifier, or for any consequential damages arising from such use including damages from water leakage. Alen's sole liability with respect to any defect shall be for the replacement of the defective part(s). Some states do not allow such limitations and exclusions, so the above may not apply to you. This warranty gives specific legal rights. You may also have other rights which vary from state to state.

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