

Model: BD-65, BD-90, BD-90P BD-120, BD-120P

(220-240V~, 50Hz)

# Dehumidifier Owner's Manual



Read and save these instructions www.xpower.com | www.tx-5.com.hk

Index: EU-1-A44 Edition: 1.0.Final

# Safety Instructions

## WARNING - READ AND SAVE THESE INSTRUCTIONS BEFORE USING THIS PRODUCT.

The user of electrical products may create hazards that include, but are not limited to injury, fire, electrical shock, Failure to follow these instructions may damage and/or impair its operation and void the warranty.

- Before operating, remove all packaging material and check for any damage that may have occurred during shipping or any missing items.
- Check household power supply to ensure it matches the appliance's specification.
- 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.
- To reduce the risk of fire or electric shock, **DO NOT** use this appliance with any solid state speed control device.
- **DO NOT** touch this appliance or the plug with wet hands or while standing in water.
- **DO NOT** operate the appliance near any pooled water.
- DO NOT use the product in areas where gasoline, paint or other flammable goods and objects are used or stored.
- DO NOT insert or allow objects to enter any ventilation or exhaust opening as this may damage the appliance and void the warranty.
- **DO NOT** cover the air inlet or outlet on the appliance.
- 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.
- DO NOT direct the air flow at human faces or bodies.
- **DO NOT** allow children to play with this appliance.
- AUTOMATICALLY OPERATED DEVICE To reduce the risk of injury, disconnect from power supply before servicing.
- Remove the power cord from the electrical receptacle by grasping and pulling on the power cord plug-end only, **DO NOT** pull the cord directly.
- DO NOT attempt to repair or adjust any electrical or mechanical functions of this appliance, as this may cause danger and void the warranty.
- If the appliance is damaged or it malfunctions, **DO NOT** continue to use it. Unplug the product from the electrical outlet. Refer to troubleshooting guide or contact XPOWER.
- Store in a dry area, away from exposure to sunlight, extreme temperature and humidity, or other extreme environment, when not in use.
- **DO NOT** stack this appliance to more than three units.
- Always grip the trolley handle and keep the unit up when transporting from room to room. **DO NOT** tilt the product on its side or upside down.
- If the dehumidifier was transported tilted on its side or upside down, you must position it upright and wait at least 4 hours before using it again.

- An electronic instruction manual can be obtained through manufacturer's website www.xpowermfr.com
- 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.
- 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.
- The appliance **SHALL** be installed in accordance with national wiring regulations.
- The dimensions of the space necessary for correct installation of the appliance including the minimum permissible distances to adjacent structures.

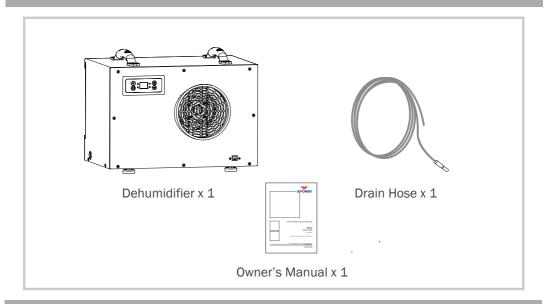
#### **WARNING:**

- **DO NOT** use means to accelerate the defrosting process or to clean, other than those recommended by the manufacturer.
- The appliance **SHALL** be stored in a room without continuously operating ignition sources (for example: open flames, an operating gas appliance or an operating electric heater.
- **DO NOT** pierce or burn.
- Be aware that refrigerants **MAY NOT** contain an odour.

# Whole House Dehumidifier Introduction

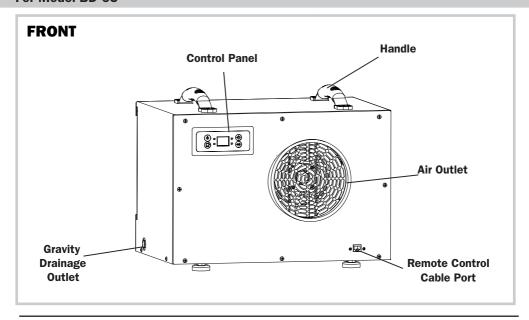
- XPOWER whole house dehumidifiers are designed to effectively remove excess moisture from the air and maintain proper humidity levels with their high performance and efficiency.
- The standard environmentally friendly refrigerant and auto defrost function make it
  operate efficiently in temperatures as low as 1°C. You can choose a gravity drain or
  pump drain according to the working environment. It works well to keep your place
  mold and moisture-free throughout the seasons.
- Compact size and installation flexibility make these dehumidifiers ideal for almost any application. Perfect for any household, crawl space, basement, storage area, garage, office, or commercial place.

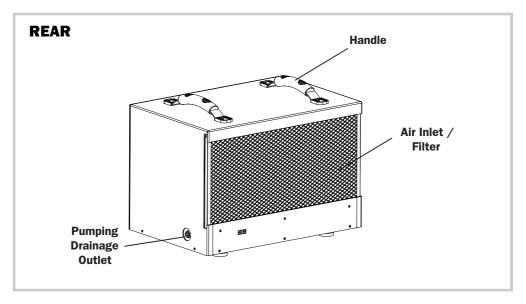
# **Items Included**

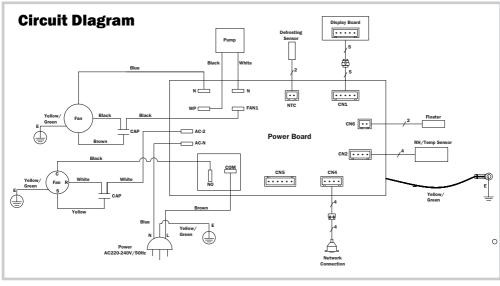


# **Parts Description**

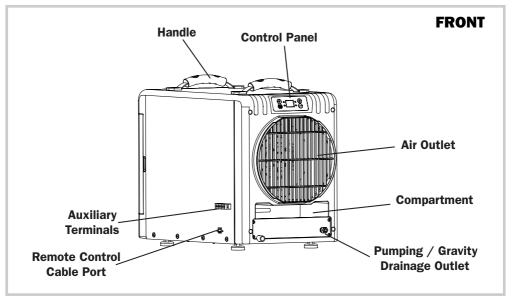
#### For Model BD-65

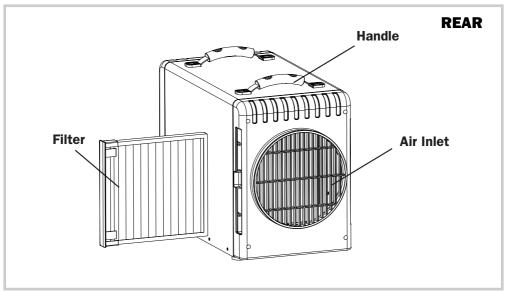






## For Model BD-90, BD-90P and BD-120P





# **Installation and Operation Guide**

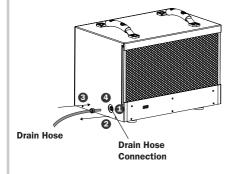
#### **Selecting a Location (Important)**

- **Positioning:** Before using the dehumidifier, place the unit **UPRIGHT** for at least 1 hour before use to allow the refrigerant to stabilize. If the unit was tilted on its side or upside-down during transportation, set the unit **UPRIGHT** for at least 4 hours before use. The dehumidifier must be positioned **UPRIGHT** on a level surface during use.
- **Enclosed Area:** For optimal efficiency, the dehumidifier must be operated in an enclosed area. Keep all doors, windows and other outside entrances to the room closed. Turn off the air conditioning.
- Air Circulation: It's suggested to have a constant efficient air circulation inside the
  area that you are going to work in, for example, setting up a circulation with Air Mover
  combinations.
- · Inserting the air filter

**Note:** Do not operate the device without an air filter inserted into the air inlet! Without the air filter, the inside of the device will be heavily contaminated. This could reduce the performance and result in damage to the device. Make sure that the air filter is installed before switching the device on.

- Power Cord and Drain Hose: The power cord has a length of 5.5 m and the drain hose has a length of 6.1 m. Select a location where the power cord can reach the power source and the drain hose can reach the area you want. Please do not lift the drainage hose higher than 5.0 m above the machine.
- Inlet and Outlet Orientation: Also pay attention to the orientation of the air inlet and air outlet. Make sure the airflow won't influence any object nearby the dehumidifier.
- **IMPORTANT:**The effectiveness of the dehumidifier can be influenced by different factors. You should keep any new moisture-laden air away from the working area and allow sufficient enclosed air circulation in the room. You may also find that installing multiple dehumidifiers may be required for larger enclosed areas.

#### For model BD-65



#### **Gravity Grain Model**

- (1) Remove and save the drain cap on the left side of the machine
- (2) Attach the garden hose (Inner diameter:13mm, excluded) to the gravity drain outlet of the machine.

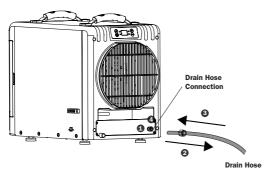
The machine's gravity drain outlet can be found as the graph. (See Page 5 Parts Description )

#### **Water Pump Model**

- (1) Remove the nut from the pump drain outlet of the machine.
- (2) Connect the nut to the pump drain hose (Included)
- (3) Attach the drain hose to the pump drain outlet of the machine
- (4) Tighten the nut with a wrench to secure the drain hose

The machine's pump drain outlet can be found as the graph. (See Page 7 Parts Description)

#### For model BD-90 \ 90P \ 120P

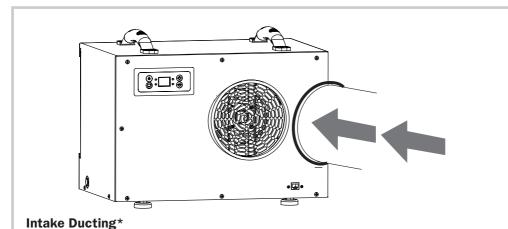


- (1) Unscrew the nut at the Drain Hose Connection.
- (2) The Drain Hose passes through the nut.
- (3) Insert the Drain Hose into the connection.
- (4) Screw the nut back to the Drain Hose Connection.



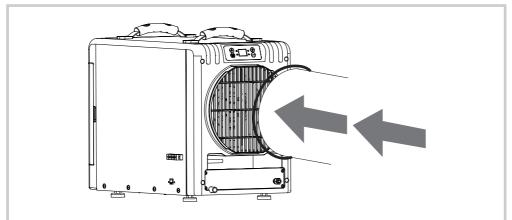
Please have a separate container to collect the water coming from the other end of the drainhose. Avoid kinking or pinching the hose

## **Extension Setup (Optional)**



Attach the ducting hose to the intake adapter.

\* Ducting Diameter: For BD-65: over 16.5 cm; For BD-90 series: over 25.0 cm;

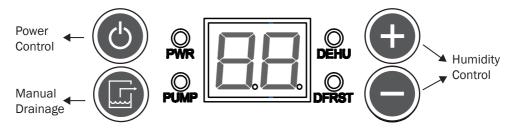


## Exhaust Ducting\* (Lay Flat)

Attach the ducting hose to the exhaust adapter.

\* For BD-90 Series and BD-120 Series only. Ducting Diameter: For BD-90 series: over 25.0 cm;

#### **Control Panel**



#### **Buttons**



Press to switch the dehumidifier ON or OFF.



Press to drain manually. Manual drain will last for 45 seconds.



Tap "+"/"-" to increase/decrease the desired humidity level by 1% increments. Touch and hold to increase/decrease the setting humidity level by 5% per second. The adjustable range is 36% to 90%.

#### Information

# Relative Humidity Display

This will show the relative humidity level of the setting or environment. As default, it displays the environment humidity. When adjusting humidity, it will display the setting humidity and blink. After 60 seconds from the last adjustment, it will display the environment humidity again.

#### **Indicators**

# Power Light OR

When this light is red indicates the machine is connected to power source and it is 10 turned on. When the power light is flashing, the device is in standby mode (When the environment humidity drops below the set value, the dehumidifier's compressor stops working, and the fan shuts down after a short delay.).

# Drainage Indicator Light PUMP

When this light is green indicates the pump is turned on.

## Dehumidification Light DEHU



When this light is red, it indicates the machine is now preparing for dehumidification (This process takes about 3 minutes). When this light is green, it indicates the machine is now dehumidifying.

# Defrosting Light DFRST

When the compressor stops working to defrost, the defrosting light turns red, indicating that the machine is in automatic defrost mode. The defrosting light turns green, indicating that the machine will enter into constant dehumidification mode.

Error Codes		E3,	E4,	
These are erro	or code	s Pleas	se refer	

to Troubleshooting Guide for more information.

## **Constant Dehumidification**

At the humidity level setting of 36%, if humidity control button "-" is pressed, will blink on the humidity display. The machine will enter into constant dehumidification mode and won't stop dehumidification as environment humidity changes.

#### **Remote Control Instructions (Optional)**

XPOWER BD Series Dehumidifiers can be controlled using an optional remote accessory. The dehumidistat connects to your BD Series Dehumidifier via a 8.0 m CAT5e cable. The dehumidistat contains an integrated sensor which gives you multiple options for remotely controlling your unit, in addition to monitoring the conditions surrounding the dehumidifier.

One application for the dehumidistat is to install the dehumidifier in one room with the conditioned air ducted into a second room that contains the remote. For example, the dehumidifier could be installed in a laundry room and ducted into a living room. The dehumidistat would then be mounted in the living room so the dehumidistat can control the humidity and provide easy controls for the user.

Another useful application for the dehumidistat is if the dehumidifier is in the area that's difficult to access on a regular basis. For instance, if your dehumidifier is installed in your crawl space, the remote could be mounted in your living space or garage. This provides you with an easy way to monitor the dehumidifier.

#### Remote Control Instructions (Optional, Continued)

## 1.Power Control 也

Press to switch the dehumidifier ON or OFF.

## 2.Humidity Control ▲ ▼

#### 3. Mode M

Use the Mode button to switch between dehumidification and a ducted application.

- •The **( )** symbol on the display board indicates the sensor on the remote control is being uilized.
- •The ♠ symbol on the display board indicates the sensor on the dehumidifier is being utilized.

#### 4. Fahrenheit/Celsius Scale Switch F/C

Press to switch the display of the temperature in Fahrenheit or Celsius scale. Press the button again to turn off the display.

#### 5. Continuous C

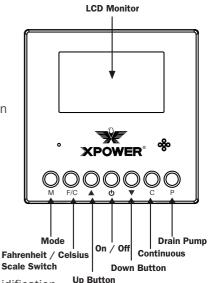
Press this button to switch the unit into constant dehumidification, it will appear on the display to indicate constant dehumidification.

Press 

to exit the constant dehumidification.

### 6.Drain Pump P

Use this button if the unit will not be in use for an extended period of time. Pressing the drain pump button will remove water from the pump reservoir, so the unit can be safely moved or stored.



#### **Start Your Job**

#### Turn on the dehumidifier

Press the Power Control button to switch on the machine. You may see the dehumidification light is flashing. Please wait for 3 minutes (180 seconds) until the machine completes the startup.

#### Set the desired humidity level

- Tap the humidity control button to adjust the setting humidity level. The default humidity setting is 36%. The adjust range is from 36% to 90% (See Page 10: Humidity Control). The machine will try to match the setting humidity level and maintain it.
- If you want the machine to work constantly, please adjust the humidity level down to 36%, and then press "-" (See Page 11: Constant Dehumidification). Tap "+" to exit constant dehumidification mode.
- The dehumidifier is designed with an auto-restart feature. When a power outage occurs, the dehumidifier will turn off. Upon power restoration, the dehumidifier will automatically turn back on and resume dehumidifying at the previously set configuration.

#### **Dehumidification**

- When the machine is dehumidifying, the dehumidification light is green.
- When the dehumidifier reaches the set humidity level, the power indicator typically flashes, indicating that the compressor has stopped and the machine is in standby mode. When the machine detects that the environment humidity is greater than set humidity level, the machine restarts, and the power indicator light becomes a solid red light.
- The dehumidifier will control the fan speed according to the environment temperature and humidity.

#### **Defrosting**

- When the evaporator coil or the environment temperature is too low, frost may appear
  on the evaporator. This will cause a lower effectiveness of the dehumidification. The
  machine will start defrosting until the temperature goes back to normal.
- When the device is defrosting, and the compressor and evaporator fan are temporarily turned off. Both dehumidification light and the defrosting light are red.
- Do not turn off the machine during defrosting process.

#### **Start Your Job (Continued)**

#### **Drainage (Important)**

- Press the Manual Drainage button to process drainage manually. It will last for 45 seconds and won't stop dehumidification or defrosting process.
- If the water tank is full or not positioned horizontally, the drainage indicator light is green Any dehumidification or defrosting process will pause and the machine will automatically process drainage for 45 seconds. Afterwards, if the water tank is still detected full, an error code will be displayed (See Page 11: Error Codes or Page 16: Troubleshooting Guide).
- When turned off, the machine will automatically process drainage for 45 seconds. Please wait until this process completes.
- Please do not lift the drainage hose higher than 5.0 m above the machine.

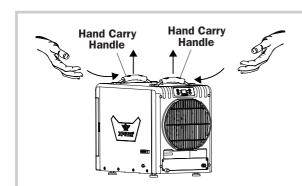
#### Turn off the dehumidifier

Press the Power Control button to switch off the machine. When turned off, the machine will automatically process drainage for 60 seconds. Please wait until this process completes.

## **Transportation**

## Before transportation, you should always:

- Process a drainage manually. Otherwise the water may spill and enter in core parts of the machine during transportation. This may also void the warranty.
- Disconnect the machine from the power source.
- Remove all the extension setup and uninstall the power cord and drain hose.



## **Lift with Hand Carry Handles**

- Lift the dehumidifier with the two hand carry handles on the top.
- Be aware of the weight of the machine.

# **User Maintenance Instructions**

Frequent maintenance is recommended on this appliance. Failure to follow the maintenance instructions may cause failure of the appliance and void the warranty.

#### Before maintenance or storage, you should always:

- · Process a drainage manually.
- Disconnect the machine from the power source.
- Remove all the extension setup.

#### Clean the surface

- Use a damp cloth to wipe the surface of the housing. Do not clean the unit with water directly.
- Do not clean the fins of the evaporator and condenser by yourself.

## Cleaning the air filter

- **Note**: Ensure that the air filter is not worn or damaged. The corners and edges of the air filter must not be deformed orrounded. Before reinserting the air filter, make sure that it is undamaged and dry!
- The air filter has to be cleaned when it is dirty.
  - 1. Remove the air fiter from the device.
  - 2. For the filter of BD-65, it is not washable. Use a vacuum to remove loose debris.
- For the filter of BD-90, BD-90P, BD-120, BD-120P, clean and wash the filters with water.

#### Store the machine

- Store the appliance in a dry and cool indoor place, away from direct sunlight as well as chemicals and out of reach of children.
- **IMPORTANT:**make sure the machine is levelly positioned.
- If you want to stack this appliance, stack them on their tops with the same orientation.
- Do not stack more than three units of this appliance.

# **Troubleshooting Guide**

PROBLEM	POSSIBLE CAUSE	SOLUTION	
Dehumidifier	No electricity.	Check for power supply.	
does not start	The power cord is not properly plugged in.	Remove and reconnect the power cord.	
Dehumidifier runs but humidity level does not decrease	The dehumidification system is within startup process.	Wait for 3 minutes (180 seconds) until the dehumidification light stops blinking.	
	The humidity level setting is too high.	Decrease the humidity level setting.	
	The working area is not enclosed.	Make sure the area is tightly sealed.	
	There are other sources of humidity in the room.	Remove these sources or wait until they completely volatilize.	
	The humidity level has reached the setting level.	Decrease the humidity level setting, set to constant dehumidification mode, wait until the humidity level rises up again.	
Dehumidifier runs but humidity level does not decrease	The machine was tilted and wasn't positioned upright for enough time before use.	Position the machine upright on a level surface and wait for at least 4 hours before next use.	
	The air filter or air inlet/outlet is blocked.	Remove blockage.	
	The environment temperature is too low/high or the humidity level is too low.	The dehumidifier is designed to work in an environment with a temperature of 1°C to 40°C and relative humidity level of 36% and higher. Make sure the room temperature/humidity does not exceed this range.	

# Troubleshooting Guide (Continued)

PROBLEM	POSSIBLE CAUSE	SOLUTION
Water on the floor	The drain hose is loose.	Tighten the connection of the drain hose.
Sudden noise	The machine starts drainage process.	The water pump can create sounds during operation. This is a normal sound.

## **Error Codes**

ERROR CODES	POSSIBLE CAUSE	SOLUTION	
E2	Failure of the temperature sensor.	The dehumidification can function but you won't be able to see the temperature/	
E3	Failure of the humidity sensor.	humidity on the screen. Contact XPOWER for more assistance.	
E4	Failure of the water pump	Contact XPOWER for more assistance.	
	The machine is not positioned levelly.	Position the machine on a level surface.	
	The drain hose is blocked.	Remove blockage.	
E5	Failure of the defrost sensor.	The dehumidification can function but will defrost for 5 minutes every half an hour. Contact XPOWER for more assistance.	

If troubleshooting does not resolve your problem, please contact XPOWER or other parties authorized by XPOWER for further instructions.

# **Technical Specification**

MODEL NUMBER	BD-65	BD-90	BD-90P	BD-120	BD-120P
Voltage / Frequency	220-240V~, 50Hz				
Power	600W	950W 1300W			OOW
Operation Temperature/Relative Humidity Requirement	1 °C to 40 °C / 36% RH or higher				
Rated Airflow	180 CFM			336 CFM	
Speed Control	Automatic				
Water Removal Efficiency 26.7 °C/ 60% RH	30L / day	40 L /day		60 L / day	
Water Removal Efficiency 30°C√ 80%RH	50L / day	85L / day		95L / day	
Refrigerant	R454C/ 360 g	R454C / 520 g R454C / 75		/ 750 g	
Compartment Feature	No	Yes			
Built-In Pump	Yes	No	Yes	No	Yes
Filter Type	Polyester Filter	Stainless Steel Filter			
Cord Length	5.5 m				
Drain Hose Length	6.1 m				
Unit Dimension (L) x (W) x (H)	45.3 x 33.2 x 36.8 cm	60.0 x 31.5 x 45.6 cm 60.0 x 38.5 x 46.8		5 x 46.8 cm	
Unit Weight	25.0 kg	30.0 kg 31.4 kg 37.3 kg		kg	
Safety Certification	CE				

If your product(s) is not listed above, please visit <a href="www.xpowermfr.com">www.xpowermfr.com</a> for more information.

# **XPOWER Limited Warranty**

#### **1 YEAR LIMITED WARRANTY**

XPOWER-branded products purchased in the U.S. from authorized distributors include a 1-year limited warranty. Contact XPOWER to confirm warranty information about your product(s).

This limited warranty covers defects in materials and workmanship in your XPOWER-branded products. Contact an XPOWER Distributor in your region for warranty service and parts replacement.

#### Items mentioned but not limited to below are not covered by warranty:

- (1) Power cord, carbon, brush, filters or any other components considered as a "consumable parts" by XPOWER.
- (2) Normal wear and tear.
- (3) Problems that result, directly or indirectly, at XPOWER's sole discretion, from:
- (3.1) External causes such as accident, abuse, misuse or problems with electrical power
- supply.
- (3.2) Disassembling, servicing or modification not authorized by XPOWER.
- (3.3) Usage that is not accordant with product instructions stated in Owner's Manual.
- (3.4) Failure to follow the product instructions or lack of necessary maintenance stated in Owner's Manual.



# **XPOWER Manufacture, INC.**

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