

BLACK+DECKER BDT50WTB

BLACK+DECKER 50-Pint Portable Dehumidifier (Model BDT50WTB) User Manual

Model: BDT50WTB

1. INTRODUCTION

Thank you for choosing the BLACK+DECKER 50-Pint Portable Dehumidifier, Model BDT50WTB. This appliance is designed to efficiently remove excess moisture from the air, improving comfort and air quality in your home or designated space. This manual provides essential information for the safe operation, installation, maintenance, and troubleshooting of your dehumidifier. Please read it thoroughly before use and retain it for future reference.

2. IMPORTANT SAFETY INSTRUCTIONS

To reduce the risk of fire, electric shock, or injury when using your dehumidifier, follow these basic precautions:

- Read all instructions before using this appliance.
- Plug into a grounded 3-prong outlet. Do not remove the grounding prong.
- Do not use an adapter. Do not use an extension cord.
- Do not operate any appliance with a damaged cord or plug.
- Do not operate if the appliance has malfunctioned or been damaged in any manner.
- Do not use in wet areas such as bathrooms or laundry rooms.
- Always turn off and unplug the dehumidifier before cleaning or servicing.
- Keep the air intake and exhaust grilles clear of obstructions.
- This product contains chemicals known to the State of California to cause cancer and birth defects or other reproductive harm.

3. PRODUCT OVERVIEW AND COMPONENTS

The BLACK+DECKER BDT50WTB is a portable dehumidifier designed for effective moisture removal in areas up to 4500 sq. ft. It features a compact design with casters for easy mobility and a user-friendly electronic control panel.



Figure 1: Front view of the BLACK+DECKER 50-Pint Portable Dehumidifier.

Included Components:

- BLACK+DECKER 50-Pint Portable Dehumidifier Unit
- Removable Water Bucket (14.3-pint capacity)
- Drain Hose (3.28 ft. length)
- Washable, Mesh Air Filter
- 4 Casters/Rollers (pre-installed)
- Power Cord (4.9 ft. length)

4. FEATURES

Your BLACK+DECKER dehumidifier is equipped with several features to enhance its performance and ease of use:

- **High Efficiency:** Extracts up to 50 pints of water per 24 hours, suitable for areas up to 4500 sq. ft. (2012 DOE standards).
- **Convenient Water Removal:** Features a detachable 14.3-pint bucket and includes a 3.28 ft. drain hose for continuous gravity feed drainage.
- **Energy Efficient:** UL listed and uses environmentally friendly R410A refrigerant.
- **Safety Features:** Includes automatic overflow shutoff protection, a full bucket indicator light, and an audible alert system.
- **Easy To Use:** Top-mounted electronic control panel with an adjustable humidistat and LED digital display for intuitive operation.
- **Portability:** Equipped with 4 casters for easy movement between rooms.
- **Auto Restart & Auto Defrost:** Ensures continuous operation and protects the unit in low temperatures.

Removes 50 pints of water daily



Figure 2: The dehumidifier can remove up to 50 pints of water daily, with an easily removable bucket.

Easy-to-Read LED display



Figure 3: The top-mounted electronic control panel features an

easy-to-read LED display.

Removable Reusable Filter



Figure 4: The dehumidifier includes a removable and reusable air filter for easy maintenance.

Includes a 3 ft. drain hose



Figure 5: A 3.28 ft. drain hose is included for continuous drainage.

Easy to move from room to room



Figure 6: Integrated casters allow for easy movement of the unit from room to room.

5. SETUP

Placement:

- Place the dehumidifier on a level surface.
- Ensure there is at least 8 inches (20 cm) of space around the unit for proper air circulation.
- Avoid placing the unit near heat sources or in direct sunlight.
- Do not block the air intake or exhaust grilles.

Power Connection:

- Plug the power cord into a grounded 3-prong electrical outlet (115V~/60Hz).
- Do not use an extension cord or adapter.



Figure 7: Dehumidifier dimensions for proper placement.

6. OPERATING INSTRUCTIONS

Control Panel Overview:

The electronic control panel is located on the top of the unit. It features an LED display and various buttons for setting desired humidity levels, fan speeds, and operating modes.

- **Power Button:** Turns the unit ON or OFF.
- **Humidity Setting Buttons:** Adjust the desired humidity level (e.g., 30% to 80% relative humidity).
- **Fan Speed Button:** Selects between Low and High fan speeds.
- **Mode Button:** Cycles through different operating modes (e.g., Continuous, Auto).
- **Timer Button:** Sets a timer for automatic shut-off or turn-on.
- **Filter Light:** Illuminates when it's time to clean the air filter.
- **Full Bucket Indicator:** Illuminates and sounds an alert when the water bucket is full.

7. WATER REMOVAL

Emptying the Water Bucket:

When the water bucket is full, the unit will automatically shut off, the Full Bucket indicator light will illuminate, and an audible alert will sound. To empty:

1. Gently pull out the water bucket from the front of the unit.
2. Carefully carry the bucket to a sink or drain.
3. Pour out the collected water.
4. Replace the empty bucket firmly into the dehumidifier until it clicks into place. The unit will resume operation.

Continuous Drainage:

For continuous operation without emptying the bucket, you can use the included drain hose for gravity drainage.

1. Locate the drain outlet on the back of the dehumidifier.
2. Remove the drain cap.
3. Attach the included 3.28 ft. drain hose to the outlet, ensuring a secure connection.
4. Route the other end of the hose to a floor drain or suitable receptacle, ensuring the hose is sloped downwards to allow for gravity flow. Avoid kinks or blockages in the hose.

8. MAINTENANCE

Cleaning the Air Filter:

The washable mesh filter should be cleaned regularly (approximately every 250 hours of operation, or when the filter light illuminates) to maintain optimal performance.

1. Turn off and unplug the dehumidifier.
2. Locate the filter access on the side/back of the unit.
3. Gently pull out the air filter.
4. Wash the filter with warm, soapy water. Rinse thoroughly.
5. Allow the filter to air dry completely before reinstalling. Do not use a dryer or direct heat.
6. Reinsert the dry filter into the unit.

Storage:

If the unit will not be used for an extended period:

- Empty the water bucket and ensure it is clean and dry.
- Clean the air filter.
- Store the power cord and drain hose neatly.
- Cover the unit to protect it from dust.
- Store in a cool, dry place.

9. TROUBLESHOOTING

Review the following table for common issues and their solutions. If the problem persists, contact customer support.

Problem	Possible Cause	Solution
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Problem	Possible Cause	Solution
Dehumidifier does not turn on.	No power; Power cord not fully plugged in; Full water bucket; Room temperature too low.	Check power outlet; Ensure cord is secure; Empty water bucket; Ensure room temperature is above 41°F (5°C).
Unit runs but does not dehumidify.	Air filter clogged; Room humidity already low; Unit size too small for space; Doors/windows open.	Clean air filter; Check desired humidity setting; Close doors/windows; Consider unit placement.
Water bucket is full, but indicator is off.	Bucket not seated correctly; Float switch malfunction.	Ensure bucket is fully inserted; Contact customer support if issue persists.
Unit is noisy.	Loose parts; Unit not on a level surface; Fan obstruction.	Check for loose components; Place on a firm, level surface; Ensure no obstructions near fan.
Error Code E3 displayed.	Internal sensor error or malfunction.	Unplug the unit for 5 minutes, then plug back in. If E3 persists, contact customer support.

10. SPECIFICATIONS

Feature	Specification
Brand	BLACK+DECKER
Model Name	50-Pint Portable Dehumidifier
Model Number	BDT50WTB
Dehumidification Capacity	50 Pints per Day (2012 DOE Standard)
Coverage Area	Up to 4500 Square Feet
Water Tank Volume	1.8 Gallons (14.3 Pints)
Product Dimensions (D x W x H)	11.6" x 15.7" x 24.8"
Item Weight	41.1 Pounds
Color	White
Number of Speeds	2 (Low/High)
Wattage	540 Watts
Refrigerant Type	R410A (7.41 oz.)
Power Cord Length	4.9 ft.
Drain Hose Length	3.28 ft.
Operation Mode	Continuous
Special Feature	Portable, Auto Restart, Auto Defrost

11. WARRANTY AND CUSTOMER SUPPORT

For warranty information or to obtain customer support, please refer to the warranty card included with your product or visit the official BLACK+DECKER website. Please have your model number (BDT50WTB) and purchase date available when contacting support.

Online Support: www.blackanddecker.com/support