

Owner's Manual Revolution LGR Dehumidifier

Model F413-115V

DRI-EAZ PRODUCTS, INC.

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The Dri-Eaz® Revolution LGR Dehumidifier reduces humidity in enclosed environments by removing water vapor from the air. The Revolution is ideal for water damage restoration, structural drying, construction, and many other applications requiring temporary, high-performance dehumidification.

Patents: <http://www.LBpatents.com>

SAVE THESE INSTRUCTIONS

⚠ WARNING

Read and understand manual before operating.



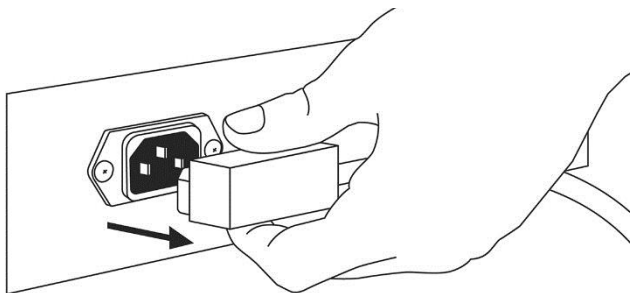
SAFETY INSTRUCTIONS

WARNING! Do not alter or modify your unit in any way. Use only replacement parts authorized by Dri-Eaz Products, Inc. Modifications or use of unapproved parts could create a hazard and will void

CORRECT PLUG REMOVAL

Grasp IEC plug and pull straight out

IMPORTANT: Damage to IEC receptacle or dehumidifier resulting from improper removal of the power cord is not covered by warranty. The IEC power cord is a wear item and is not covered by warranty.



your warranty. Contact your authorized distributor for assistance.

WARNING! Electric shock hazard, rotating fan, hot surface hazards. **Unplug unit before opening cover for cleaning or servicing. Unit must be grounded.**

- Inspect the power cord before use. If cord is damaged, do not use. Always grasp the plug (not the cord) to unplug.
- Insert three-prong plug on power cord into a matching electrically grounded outlet. Do not use adapter. Never cut off third prong. Do not use an extension cord.
- The unit must be operated on a 115V/60Hz circuit protected by a Ground Fault Circuit Interrupter (GFCI) device.
- Keep motor and wiring dry.
- Do not attempt to repair the unit. For Authorized Service Centers, contact Dri-Eaz.

BEFORE YOU BEGIN

Warranty registration

Visit warranty.drieaz.com to register your purchase. Registration allows us to better assist you with using, maintaining or servicing your equipment and to contact you in case we have important safety information concerning your Dri-Eaz product. If you determine service is required, have your equipment model, serial number and original proof of purchase available and call your distributor for assistance with obtaining a return material authorization (RMA).

INTRODUCTION

The Revolution Dehumidifier reduces humidity in enclosed structural environments by removing water vapor from the air. With proper use, the Revolution can help to dry out damp structural materials, insulation, and contents, and maintain a healthy level of humidity. Using the Revolution may also prevent secondary damage caused by high humidity.

How the Revolution works

The Revolution refrigerant dehumidifier uses a fan to draw moist air in and condenses it into water that collects in a tray and is automatically pumped out through a drain hose. The unit can be set to operate continuously or the user may select Humidistat Mode. In Humidistat Mode, the Revolution will turn on and off automatically to maintain the inlet humidity level the user has selected.

CONTROLS AND OPERATING INSTRUCTIONS

Set unit upright

NOTICE: Always store, transport, and use the unit in a horizontal position. If the unit is ever placed in a vertical position, return it to the horizontal position and let it stand for at least 30 minutes before turning it on.

Positioning a Dehumidifier

For best results, operate your dehumidifiers in an enclosed area. Close all doors and windows that open to the outside to maximize water removal efficiency. Place your dehumidifier away from obstructions, and keep it away from anything that could block airflow into and out of the unit. For more information about creating an optimum drying environment, contact Dri-Eaz at 800-932-3030.

Set up drain hose

The Revolution condensate pump connects to a plastic drainage hose. This hose is equipped with a quick-connect fitting for quick attachment to the provided 40 ft. (12 m) drain hose. Unwrap the entire hose and place the unattached end in a sink, drain, bucket or outdoors – anywhere that water can drain out safely. If you use a bucket or other container for water collection, check it regularly to prevent overflows.

NOTICE: Uncoil and straighten the entire drain hose. Do not leave any part of the hose coiled and do not place the end of the hose higher than 20 ft. (6 m) above the bottom of the unit. Also check for kinks or other obstructions that might restrict the flow of water. Obstructions may cause a water backup and result in overflows.

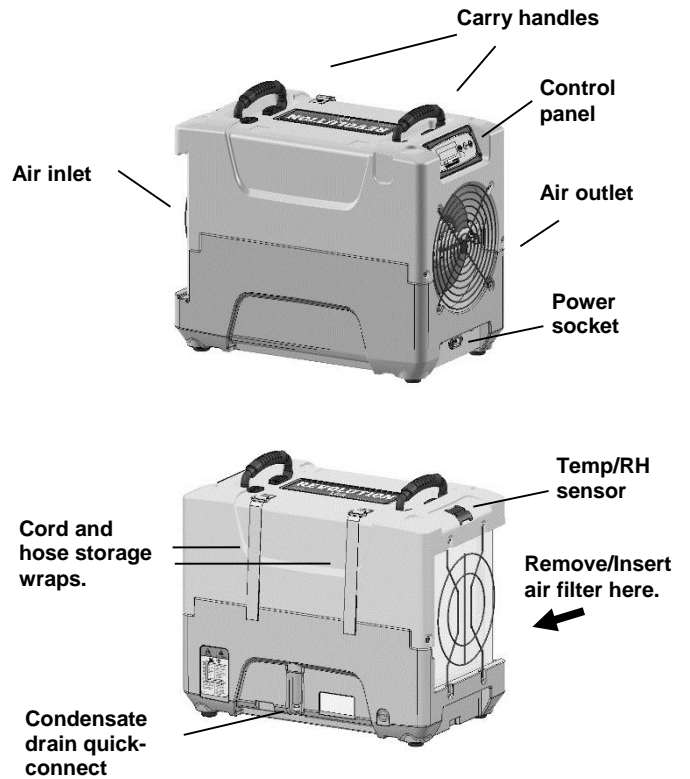
Plug in electrical cord

The Revolution should be plugged into a GFCI-protected 115 volt outlet rated for at least 15 amps. Always plug the cord firmly into the unit first, and then plug the other end into a suitable outlet.


Startup display and normal display modes

When unit is first plugged in to AC power, the control panel display will briefly cycle through a series of readouts. This is part of the unit's self-diagnosis procedure and no user intervention is required.

Fig. A: Parts Identification



Turn the unit on




The control panel on the Revolution dehumidifier has a display and a touchpad with four keys. Press the  ON/OFF to turn the unit on. The unit will now go through a compressor delay countdown (up to sixty seconds in duration) and a self diagnostics process.

Once the compressor delay countdown and self-diagnostics are complete, the display will switch to normal display mode.



The **first line** of the display shows the total number of hours the unit has been in operation. This value may be reset to zero to track job hours (see "Job Hours Reset" below). The **second line** of the display alternates between inlet temperature and inlet humidity.

User Settings Menu

A number of display settings may be changed by the user. System information can also be displayed. These items are accessed by pressing  DISPLAY MENU. Each press of the key will display the next parameter. When you reach the parameter you wish to adjust, press  MENU SELECTION to increase the value. Press  DISPLAY MENU again to accept the setting and re-start the display cycle.

Note that only menu items followed by a greater-than symbol (>) may be adjusted.

All settings and modes are discussed in detail in Control Panel Guide, below.

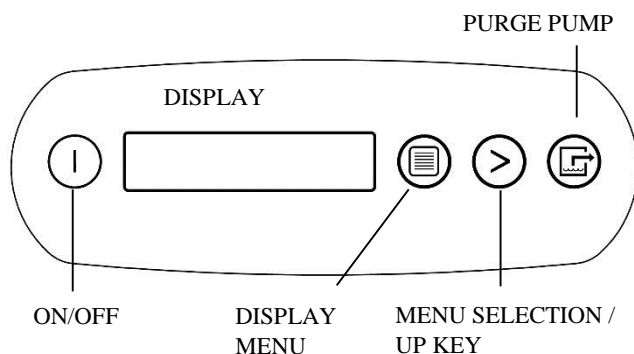
Error messages

If the Revolution onboard diagnostics discover a problem, the unit will display an error message. See "System Messages" for an explanation of each message.

Control Panel Guide

ON/OFF. Press to turn the unit on or off. When the machine is turned on, the display normally reads PLEASE WAIT COMP. DELAY and performs a numeral countdown for a maximum of 60 seconds to 0. This delay allows time for refrigerant pressures to equalize for easier starting. Once the unit completes the compressor delay, the display shows UNIT ON XX HRS and cycles between INLET XX°F and INLET XX%. NOTE: If no compressor delay countdown is displayed, a delay is not

CONTROL PANEL



ON/OFF	Press and release to turn unit on or off.
DISPLAY MENU	Press to select next item in menu. Menu item will show in display.
MENU SELECTION / UP KEY	Press to toggle or select values in menu displayed.
PURGE PUMP	Press and release to start purge. Display will count down seconds remaining until purge is complete.

necessary and the machine will begin operation immediately.

DISPLAY MENU. Press to cycle through the display of additional dehumidifier conditions and User Settings. To return to the main menu, press the ON/OFF key once.

MENU SELECTION. Press to change the values of the "User Defined" settings. The MENU SELECTION

key acts as the UP key for adjusting the setpoint for Humidistat mode operation. See User Settings Menu (below) for details.

PURGE. Press to empty water from the condensate pump reservoir. The display will read PUMP PURGING with a numeral countdown. NOTE: During normal operation, the pump purges automatically.

Changing settings and viewing system information

Display setting changes and system information can be accessed by pressing **DISPLAY MENU**. Each press of the key will display the next parameter (see list below). When you reach the parameter you wish to adjust, press **MENU SELECTION** to increase the value. Press **DISPLAY MENU** again to accept the setting and re-start the display cycle.

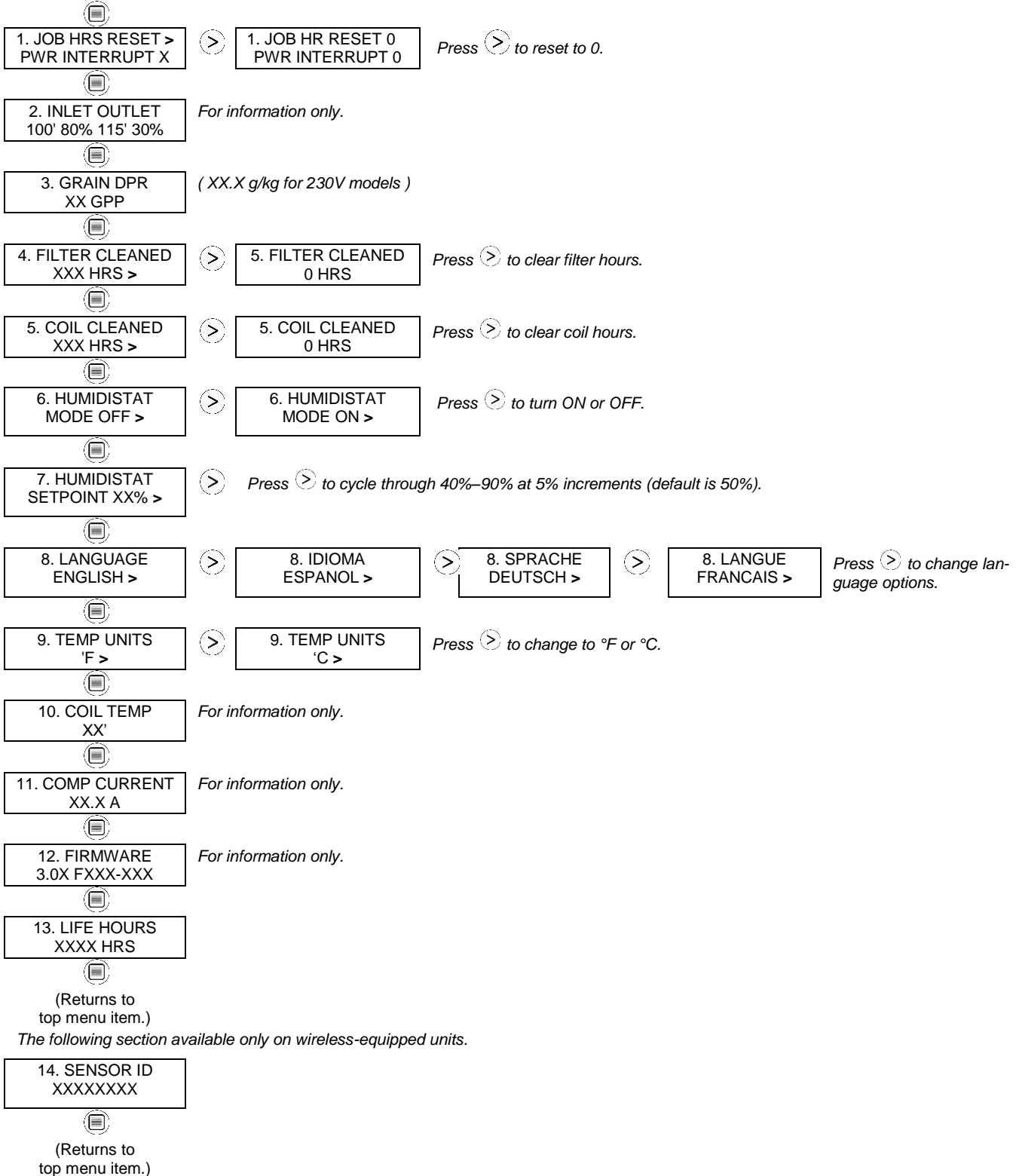
Note that only menu items followed by a greater-than symbol (>) may be adjusted.

USER SETTINGS

Only menu items followed by a greater-than symbol (>) may be adjusted. If no keys are selected for 5 minutes on screens: INLET OUTLET, GRAIN DPR (INLET-OUTLET for 230V models), the display will return to normal display mode. In all the other menu items, the display will return to the normal display mode after 20 seconds. Items without the symbol (>) are for information only and cannot be changed or reset.

Press  **DISPLAY MENU** to proceed to the next menu item. ↓

Press  **MENU SELECTION** to change the setting. →



AT THE END OF THE JOB

To reduce the possibility of drips when moving the unit, follow these additional steps to ensure that all water is removed from the unit.

NOTICE: To ensure all water is removed from the dehumidifier, the unit will complete the defrost cycle even if the unit is turned off. If the unit is unplugged during the defrost cycle, excessive water may accumulate in the unit and may drip out when you move the unit.

NOTICE: To ensure the condensate tank empties completely while purging, make sure the unit is placed upright on a horizontal surface.

1. If the unit is in a defrost cycle, wait until the unit has returned to normal operating mode before proceeding. To check, review the control panel. The control panel will show one of the following:

Defrost in progress:

**UNIT ON 00 HRS
DEFROST XX**

Display mode when unit is in defrost mode. XX indicates the seconds remaining on the defrost cycle.

Shutdown sequence

**WAIT FOR
DEFROST XX**

Display mode when unit in defrost and unit is powered down (shut off by user). Unit will complete the defrost cycle to remove any built-up ice then purge the pump. XX indicates the seconds remaining on the defrost cycle.

Drying sequence


**WAIT FOR
UNIT DRYING XX**

Display mode when unit not in defrost and unit is powered down (shut off by user). Unit will complete the 5 minute drying cycle then purge the pump. XX indicates the seconds remaining on the drying cycle.

Normal display:

**UNIT ON 00 HRS
INLET XX° C**

Wait until the control shows the normal display before proceeding.

- 2. Gently rock the machine to ensure any water remaining on interior surfaces falls into the sump area.**
- 3. Press the  PURGE key. When the purge cycle is complete, turn the unit off.**
- 4. Remove the external drain hose, drain it carefully, coil it and secure it with one of the straps provided on the side of the unit.**

TRANSPORTATION AND STORAGE

NOTICE: Handle the unit carefully. Do not drop, throw, or place the unit where it could fall. Rough treatment can damage this equipment and may create a hazardous condition or void warranty.

- Do not expose the control panel to moisture, snow or rain.
- Protect from freezing.
- Store and transport securely to avoid any damaging impact to internal parts.
- Secure during transport to prevent sliding and possible injury to vehicle occupants.

MAINTENANCE SCHEDULE

WARNING! ELECTRIC SHOCK HAZARD. Unplug unit before cleaning or servicing.

WARNING: Risk of dust and contaminants exposure. Use of respirator mask and gloves is recommended. If unit has been exposed to potentially dangerous contaminants, clean thoroughly and sanitize before reuse.

NOTICE: The unit is fitted with sensitive electronic sensors. Protect the sensors and their lead wires from damage and do not expose them to water or cleaning solution.

The following tools and supplies are needed to complete the maintenance procedures described in this manual:

Philips screwdriver
10 mm wrench
6 mm hex bit
¼ in. nut driver
Cleaning cloths
HEPA vacuum cleaner with soft brush nozzle and crevice nozzle.

Recommended

Cordless drill, small knife, small-jaw pliers, coil cleaning solution, rotomolded housing cleaning solution.

Before each use

Inspect the electrical cord for damage. Look for fraying, cuts, etc. Replace the cord if you find any damage.

Inspect, vacuum or replace filter. The Revolution is provided with a 3M™ HAF High Air Flow filter (part no. F372). HAF filters **may be vacuumed clean and re-used up to three times before replacement.** Use a HEPA vacuum and brush tool to remove any dust or debris. Do not use compressed air or expose the filter to any liquids, as may damage the filter.

Monthly

Inspect coils. Clean when dust accumulation is visible. In normal use, dust can accumulate and can restrict airflow, reducing performance and causing the unit to overheat. Use a vacuum cleaner with a brush tool and a soft