DRY BOX BY REDUX

Hearing Care System

Manual

Rev 1.0
Part # 530-0028

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Hearing Care System

INTRODUCTION

The DRYBOX by Redux Hearing Care System is a self-contained vacuum dryer, which can also be referred to as an Ultra-Efficient Evaporator (UEE). The DRYBOX provides a guaranteed-dry solution for hearables, hearing aids, and cochlear implants in as little as 30 minutes. The DRYBOX removes 100% of moisture in hearables at a temperature setpoint of 99˚F. While drying, the DRYBOX displays the length of dry time and the total quantized amount of moisture removed in microliters (µL) via the free Redux App.

SYMBOLS USED IN THIS DOCUMENT


CAUTION: Hot surface


CAUTION: Refer to the text that follows for more information about this feature


CAUTION: Possibility of electric shock

SPECIFICATIONS

ELECTRICAL

Power Supply Input: 100-240 VAC Single Phase
Dryer Input: 12VDC, 18 W

MOISTURE & DRYING TIME CALCULATION

Removal: 0.1 µL – 150 µL
Drying Time: 30 minutes minimum

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ENVIRONMENTAL

The DRYBOX is intended only for dry, clean, indoor use.

Operating Temperature Range:	15˚C - 29˚C (60˚F - 85˚F)
Operating Relative Humidity Range:	20% - 80%
Storage Temperature for Unit:	0˚C - 70˚C (32 ˚F - 160˚F)
Storage Relative Humidity:	0% - 90%
Altitude:	Operating: ≤3048 m (≤10,000 ft) Storage: ≤15240 m (≤50,000 ft)
Pollution Degree:	2 (as defined by IEC 61010-1 Ed:3)

GENERAL

Weight:	0.9 kg (2 lbs)
Overall Width:	112 mm (4.4 inch)
Overall Depth:	127 mm (5 inch)
Overall Height:	107 mm (4.2 inch)
Enclosure Material:	Polycarbonate
Noise Level:	70dBA (maximum) @ 3 feet. 62dBA typical.

COMMUNICATIONS

USB: Internal Redux Use Only

Bluetooth: Low Energy, v5.0, 2.4 GHz

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OPERATING NOTES

The following paragraphs are intended to familiarize the user with the DRYBOX. The user should read these instructions before attempting to operate the dryer.

DRYER LIMITATIONS

The DRYBOX dryer is constructed of highly durable plastic and is suitable for drying hearing aids, earbuds, and cochlear implants. The DRYBOX dryer does NOT charge batteries and is NOT capable of charging batteries of devices in any way.

When using the dryer, observe the following precautions to prevent damage to the dryer:

1. Do not pour or dispense any water into the chamber.
2. Do not put any part of the dryer or power supply in water or any other liquid.



CAUTION: To avoid electrical shock, do not use this dryer in an area where there is running water, a risk of accidental dropping in water, or outdoors where the dryer could be subjected to rain.



CAUTION: Long-term exposure of the DRYBOX to extremely high humidity or corrosive environments can lead to deterioration of the control electronics. If the equipment is used in a manner that is outside of the specifications in this document, the protection provided by the equipment may be impaired.

3. Do not attempt to disassemble or service the DRYBOX.

For questions or concerns regarding the operation of this dryer or for technical assistance, contact Redux Support:

E-mail: Support@redux.com
Web: redux.com
Mail: Redux
9715 Kincaid Drive, Ste 1200
Fishers, IN 46037

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OPERATION

The DRYBOX can be used straight out of the box with almost no additional setup.

1. Connect the Redux-supplied power block cord into the back of the dryer. Connect the power block to a wall outlet. The DRYBOX will power on automatically. Position the DRYBOX on a stable, flat surface in such a manner that it does not prevent access to the power connection on the back of the dryer. Lights will illuminate on boot up. The POWER light on the switch panel will illuminate once ready. (See Figure 1).



Figure 1

CAUTION: Only use the Class II power supply provided with the dryer. Use of another power supply could cause damage to the dryer.

2. Access the chamber by lifting up and out on the latch on the front of the machine. The lid will open and pivot to the rear of the machine.

3. Place the aid(s) in the vacuum chamber. They will rest on a soft pad. This thermal pad will help conduct a gentle heat into the aid(s).

4. Close the lid; the latch will make a slight snap sound which allows the chamber to stay closed.

CAUTION: Ensure there is nothing in or on the chamber seal that will prevent the dryer from achieving full vacuum. Do not put anything in the chamber that will hit the domed top of the chamber as this will prevent a seal on the vacuum chamber.

5. Press DRY on button pad

6. The vacuum pump will start, and the drying process will start. The green light below DRY will flash and remain flashing until the cycle has completed. The dryer will automatically stop when the aid(s) are 100% dry and the Dry Complete green light will turn solid.

- Note: if the CANCEL button is pressed before the DRYBOX is finished with its cycle, the aid(s) may not be completely dry.

7. Remove the aid(s) from the chamber.

8. If desired, the DRYBOX can be unplugged when not in use for long periods of time.

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BLUETOOTH CONNECTIVITY

The DRYBOX by Redux is a standalone dryer and does not require connectivity. To connect, download the Redux Dryer app and connect according to your device. The DRYBOX can only connect to one device at a time. To sever the connection press the restart button in the back of the unit or reboot by unplugging the machine.

BUTTON PAD LEGEND

Flashing green light: drying in process
Solid green light: dry complete
Solid blue light: connected to app
Flashing red light: see app for more information

TROUBLESHOOTING

When troubleshooting a potential issue with your DRYBOX, Redux Customer Service may ask you to reset your machine. The Reset button is small and round and can be found on the rear of the machine, in between the power cord and the USB port. The tip of a pen can be used to lightly press the Reset button. The Reset button will cause the DRYBOX to reboot which should take less than 30 seconds.

MOISTURE REMOVAL SOURCES OF ERROR

To detect moisture removal, the dryer runs cyclically with each cycle allowing ambient air to enter the vacuum chamber. This air is naturally laden with humidity from the surrounding environment; this ambient humidity is factored into the moisture calculation. This “background” humidity will cause slight errors in moisture removed that is reported. In addition, all plastics absorb water. The moisture removed calculation considers this effect on plastics.

CALIBRATION

The DRYBOX by Redux is equipped with a calibration feature which allows for greater accuracy in reporting moisture removal. It helps by accounting for local ambient humidity conditions. Calibration enables reporting below 0.5 µL. The Redux Dryer App will indicate if the DRYBOX is calibrated. Using calibration is not required and does not affect complete moisture removal.

1. Connect your Redux DRYBOX through the Redux Dryer App.
2. Go to the Machine Info section of the App.
3. Make sure the chamber is completely empty and the lid is closed.
4. Press the “Calibrate” button in the App.
5. After completing the calibration, the Machine Info screen will indicate the machine is calibrated.

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GENERAL MAINTANENCE

CLEANING

1. The DRYBOX thermal pad should be periodically wiped down with a 70% (or greater) concentration of isopropyl alcohol (IPA).

- Never spray or pour any liquid directly into the chamber or onto the thermal pad.
- Unplug the dryer unit for cleaning.
- Dampen a soft cloth with IPA or use a disposable IPA wipe. Then gently wipe any debris or contaminates from the thermal pad.
- If the thermal pad is missing or damaged enough to expose the green surface underneath, discontinue use and email support@redux.com

2. The outside of the DRYBOX and button pad can be cleaned with a clean dry cloth.
3. The button pad on the lid can be cleaned in a manner similar to that of a mobile phone or tablet screen.

- Do not use IPA or other solvents to clean the button pad.
- Never pour liquids directly onto the button pad.
- Never use sharp objects to clean the button pad.
- Never use excessive force to clean or operate the button pad.
- Never use abrasive cleaners or solvents to clean the button pad.
- Unplug the unit (to prevent any screen buttons from being pressed during cleaning).
- Use a mist spray bottle of screen cleaner to lightly dampen a clean microfiber cloth.
- Gently wipe the button pad with the damp cloth.