

AUTENS AD-80L

AUTENS AD-80L Dehumidifying Dry Cabinet Box Instruction Manual

Model: AD-80L

1. INTRODUCTION

The AUTENS AD-80L Dehumidifying Dry Cabinet Box is designed to protect sensitive items such as camera lenses, electronic equipment, and other valuables from moisture, dust, and oxidation. Utilizing advanced microprocessor and TE Cooling technology, this cabinet maintains a stable and controlled humidity environment, ensuring the longevity and optimal condition of your stored items. It features digital control, energy-efficient operation, and a noiseless design, making it suitable for various environments.

2. SAFETY INFORMATION

- Ensure the cabinet is placed on a stable, level surface to prevent tipping.
- Do not block the ventilation openings on the cabinet.
- Keep the cabinet away from direct sunlight, high temperatures, and heat sources to maintain optimal performance and prevent damage.
- This dry cabinet operates with low power consumption (8W) and is designed to be radiation-free and without leakage risks, ensuring safety for placement in living areas.
- Always ensure the power cord is properly connected and not damaged. Disconnect power before cleaning or moving the unit.
- The cabinet is equipped with a lock and keys. Keep keys in a safe place and ensure the cabinet is locked if storing valuable or sensitive items, especially around children.

3. PACKAGE CONTENTS

Verify that all components are present upon unpacking:

- AUTENS AD-80L Dehumidifying Dry Cabinet Box
- Adjustable Shelves (quantity may vary based on model, typically 3-4 for 80L)
- Power Adapter
- Keys (2) for the cabinet lock

- Wave Sponge (for lens placement)

Product details

2 Keys



Wave sponge



LED lights



Movement



Adjustable feet



Crystal shelf



Figure 3.1: Included accessories such as keys, wave sponge, and adjustable feet.

4. PRODUCT OVERVIEW

The AD-80L dry cabinet features a robust design with a high-quality steel plate and aluminum alloy frame. The magnetic cabinet door is made of durable toughened glass, ensuring a tight seal for effective humidity control. The unit includes a digital display for real-time temperature and humidity monitoring, adjustable shelves for flexible storage, and internal LED lighting.

Key Features:

- **Digital Control:** Microprocessor and TE Cooling system for precise temperature and humidity detection and control.
- **Stable Humidity:** Automatically starts dehumidification when humidity exceeds the set value and stops when it falls below, maintaining a consistent environment.
- **Energy Saving:** Operates with only 8W of power, making it highly energy-efficient.

- **Noiseless Operation:** Designed for silent performance, suitable for any room.
- **High Accuracy:** Humidity control accuracy of $\pm 1\%RH$ (laboratory data).
- **Adjustable Shelves:** Allows customization of internal space for various item sizes.
- **LED Lighting:** Internal LED lights can be turned on or off.
- **Security:** Comes with a lock and keys for added security.



Figure 4.1: Front view of the AD-80L dry cabinet with items stored.



Figure 4.2: Angled view of the empty AD-80L dry cabinet, showing internal shelves.

5. SETUP

1. **Unpack the Cabinet:** Carefully remove the dry cabinet from its packaging. Inspect for any damage during transit.
2. **Choose a Location:** Place the cabinet on a flat, stable surface. Ensure it is away from direct sunlight, high temperatures, and heat sources.
3. **Adjust Leveling Feet:** The cabinet is equipped with adjustable feet. For models $\geq 50L$, there are two front

adjustable leveling feet. If the ground is uneven, adjust these feet to ensure the cabinet is level and stable.

4. **Install Shelves:** Insert the adjustable shelves into the desired positions within the cabinet. The shelves slide out for easy viewing and access.
5. **Initial Operation:** It is recommended to run the cabinet empty for more than 8 hours when first using it or after a long period of disuse. This allows the internal humidity to stabilize and reach a lower level.
6. **Connect Power:** Plug the power adapter into the cabinet and then into a suitable power outlet. The digital display will illuminate.

Product Size



Figure 5.1: Product dimensions for placement planning.

6. OPERATING INSTRUCTIONS

The AD-80L dry cabinet features a user-friendly digital control panel to manage the internal humidity.

1. **Power On:** Once plugged in, the digital display will show the current internal temperature and relative humidity (RH%).

2. **Setting Humidity:** Use the 'SET' button and the up/down arrows on the control panel to adjust the desired relative humidity level. The control range is typically 25% to 60% RH.
3. **Dehumidification Process:** The cabinet will automatically begin dehumidifying if the measured humidity exceeds your set value. It will stop once the humidity drops below the set value.
4. **LED Lights:** The internal LED lights can be turned ON or OFF using the dedicated button on the control panel. Turning them off helps save energy.
5. **Loading Items:** Place your items inside the cabinet, ensuring they are not blocking the dehumidifying unit or ventilation. The wave sponge can be used for securely holding lenses.



WARM TIPS

1. It is ideal to run more than 8 hours with empty container when first using this electronic dry cabinets or unused for a long time until the humidity has moved down to lower level.
2. This dry cabinets takes at least 3 hours to reach to the set point when storing a large quantity of items or high moisture in them when first time using
3. The internal temperature of the digital control humidity dry box can be monitored but can't be controlled
4. Keep the dry case away from sunlight, high temperature, and heat source
5. In order to make sure the best dehumidification result, please ensure that the dryer cabinet's door seals tightly
6. It is normal that the internal humidity level has increased when the cooling air goes into the dry box after door opened. The longer time the door opened, the higher humidity will be increased

Figure 6.1: Digital control panel for setting humidity and monitoring conditions.

Recommended Humidity Levels for Storage:

Relative Humidity (RH%) Level	Recommended Items
50%-60%	Books, antique documents, paper, copies, prints
40%-50%	Camcorders, cameras, lenses, telescopes, microscopes, endoscopes, compact discs, film negatives, film transparency/slides, microfilm, disk drives, audio and video tapes
30%-40%	Mental and metal powder products, electrical equipment, semiconductors, capacitors, printed circuit boards, IC, batteries and other electronic equipment, precision measuring tools, spectrometers, optics, lenses
25%-30%	Pharmaceutical raw materials, spices, powder coating, adhesives, seeds, pollen, dry flour

Table 6.1: Recommended humidity levels for various items.

7. MAINTENANCE

- **Door Seal:** Regularly check the magnetic door seal to ensure it is clean and free from debris. A tight seal is crucial for effective dehumidification.
- **Cleaning:** Wipe the exterior of the cabinet with a soft, dry cloth. For the interior, use a slightly damp cloth if necessary, ensuring no moisture enters the electronic components. Do not use abrasive cleaners or solvents.
- **Shelf Cleaning:** The shelves can be removed and cleaned with mild soap and water, then thoroughly dried before reinserting.
- **Long-Term Storage:** If the cabinet will not be used for an extended period, unplug it and ensure it is clean and dry before storing.

8. TROUBLESHOOTING

- **Humidity not reaching target level:**
 - Ensure the cabinet has been running for at least 8 hours empty for initial stabilization.
 - When storing a large quantity of items or items with high moisture content for the first time, it may take at least 3 hours (or longer) to reach the set humidity.
 - Check that the cabinet door is fully closed and the magnetic seal is intact.
 - Verify that the cabinet is not placed near a heat source or in direct sunlight, which can affect internal conditions.
- **Internal temperature cannot be controlled:**
 - The internal temperature of this digital control humidity dry box can be monitored but cannot be actively controlled or adjusted by the user. It will generally reflect the ambient room temperature.
- **Humidity increases after opening the door:**
 - This is normal. When the door is opened, ambient air with higher humidity can enter the dry box. The longer the door is open, the more the humidity will increase. The cabinet will resume dehumidification to the set level once the door is closed.
- **Display not working:**
 - Check if the power adapter is securely plugged into both the cabinet and the power outlet.
 - Try plugging the cabinet into a different power outlet to rule out an issue with the power source.

Recommend Humidity for storing different items.

Relative humidity (RH%) Level	Recommended Items
50%-60%	Books、 antique documents、 paper of fax, copy, print
40%-50%	Camcorders, cameras, lenses, telescopes, microscopes, endoscopes. compact discs, film negatives, film transparency/slides, microfilm, disk drives, audio and video tapes
30%-40%	Mental and mental powder products, electrical equipment, semiconductors, capacitors, printed circuit boards, IC, batteries and other electronic equipment, precision measuring tools, spectrometers, optics, lenses
25%-30%	Pharmaceutical raw materials, spices, powder coating, adhesives, seeds, pollen, dry flour

Figure 8.1: Important tips for optimal dry cabinet performance.

9. SPECIFICATIONS

Feature	Detail
Brand	AUTENS
Model Number	AD-80L
Capacity	80 liters (Tank Volume)
Product Dimensions (D x W x H)	16.5"D x 11.41"W x 12.6"H (41.9cm D x 29cm W x 32cm H)
Material	Aluminum, Glass, Metal
Color	Black
Special Feature	Digital Display
Wattage	8 watts
Operation Mode	Sleep
Upper Temperature Rating	25 °C
Dehumidification Capacity	80 liters per day (This value typically refers to the capacity of the cabinet, not daily dehumidification rate for this type of product. It's likely a mislabeling in the source data, but kept as per source.)

Feature	Detail
Included Components	Dry Box

10. WARRANTY INFORMATION

Specific warranty details for the AUTENS AD-80L Dehumidifying Dry Cabinet Box are not provided in the available product information. Please refer to the product packaging or contact the retailer/manufacturer directly for warranty terms and conditions.

11. SUPPORT INFORMATION

For technical support, troubleshooting assistance, or inquiries regarding your AUTENS AD-80L Dehumidifying Dry Cabinet Box, please contact AUTENS customer service through their official website or the retailer from whom the product was purchased. Specific contact details are not provided in the available product information.

© 2023 AUTENS. All rights reserved.

ASK A QUESTION ABOUT THIS MANUAL

Ask about setup, troubleshooting, compatibility, parts, safety, or missing instructions. Manuals+ will review the question and use this page’s manual context to help answer it.

Name

Anonymous

Email

you@example.com

After a successful submission, we securely hash the supplied account or form email before sending it to Microsoft Advertising for conversion attribution. [Privacy details](#).

Question

Example: How do I reset this device or fix this error?

Details

Model number, symptoms, what you tried, or the section of the manual you are using.

Submit question