DESICCATOR CABINETS

3 YEAR WARRANTY

Operator's Manual

MechMaxx

www.mechmaxx.com

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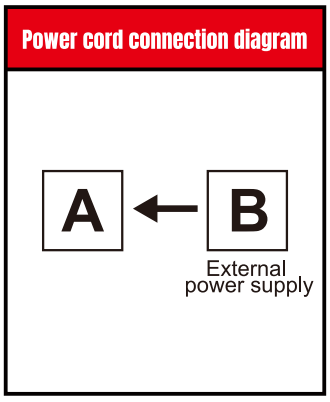
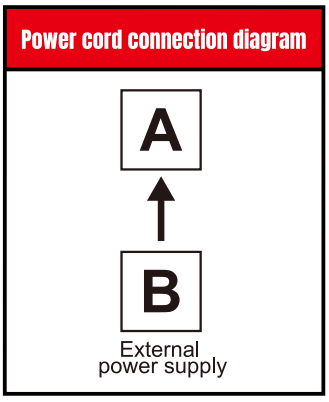
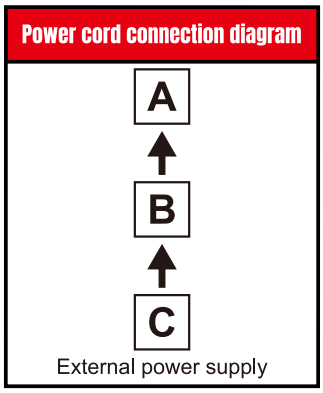
SAFETY SIGNS

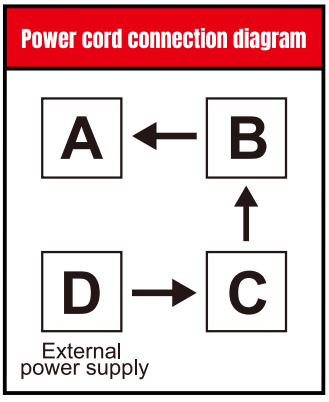
The rating plate on your machine may show symbols. These represent important information about the product or instructions on its use.

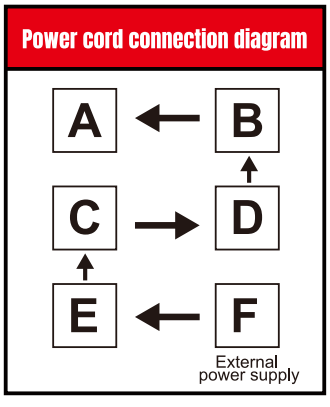
DESICCANT DRY CABINETS











⚠ WARNING

1. After electrifying, press the button "ON/OFF", the LED screen lights up, showing the current temperature and humidity.
2. Press the button▲/▼ to set the required humidity, the system discerns the setting value automatically within 5 seconds. Release the button, the showed values are current humidity and temperature. The temperature cannot be adjusted.
3. The distance between the cabinet and the wall must be greater than 12 inch (30 cm). After placing it steadily, brake it with the front wheel brake.
4. Keep away from heat source or high temperature places.
5. Keep far away from air conditioner.
6. Place it without direct sunlight or near the window.
7. Don't put water container on the top.
8. Corrosive, explosive, volatile, flammable goods are prohibited to be stored.

NITROGEN CABINETS

OPERATION INSTRUCTIONS FOR NITROGEN CONTROLLER

1. After connecting the air source, check for leaks at the air pipeline joints.
2. Connect to the power supply and turn on the power switch.
3. Turn on the nitrogen controller. Set the pressure regulator to approximately 29 psi (0.2 MPa) (Recommended).
4. Set the large flow meter to approximately 20 LPM and the small flow meter to 0.3-2 LPM (Recommended).

   - Large Flow Meter: Activates when internal humidity exceeds the set value for fast drying.

   - Small Flow Meter: Activates automatically to maintain humidity once the set value is reached, conserving nitrogen.
5. Use the LED control panel to set the required humidity.

⚠ WARNING ⚠

1. Do not open the controller cover unless you are a trained professional. Do not alter the air path or replace the air pipe connectors. Pneumatic components are sealed with special adhesive to prevent nitrogen leakage. Tampering may cause leaks.
2. Do not touch pneumatic components or air pipelines while under pressure. Ensure pressure is safely released before handling. Failure to do so may cause injury.
3. Opening the controller cover without authorization will void the warranty.

AIR IN 6 MM (1/4")

AC110V 60HZ

⚠ WARNING

1. After electrifying, press the button "ON/OFF", the LED screen lights up, showing the current temperature and humidity.
2. Press the button▲/▼to set the required humidity, the system discerns the setting value automatically within 5 seconds. Release the button, the showed values are current humidity and temperature. The temperature cannot be adjusted.
3. The distance between the cabinet and the wall must be greater than 12 inch (30 cm). After placing it steadily, brake it with the front wheel brake.
4. Keep away from heat source or high temperature places.
5. Keep far away from air conditioner.
6. Place it without direct sunlight or near the window.
7. Don't put water container on the top.
8. Corrosive, explosive, volatile, flammable goods are prohibited to be stored.

IMPORTANT SAFETY WARNINGS

BEFORE USE

1. Please read the PRODUCT MANUAL carefully before operation. Improper use may cause damage or injury. Seller and manufacturer are not liable for injuries from disassembling the cabinet, and this will void all expressed warranties.

2. Choose a flat, stable location for installation.

3. Do not use the power socket in damp environments, as this may cause electric shock.

4. Do not place this cabinet in direct airflow such as under an air-conditioner, near an exhaust fan, in front of an electric fan, or in a doorway. Strong drafts, heavy smog, or steam will affect drying performance and may damage the cabinet.

5. Place the cabinet away from direct sunlight.

6. The distance between the cabinet and the wall must be greater than 12 inches (30 cm). After placing it steadily, brake it with the front wheel brake.

7. Place items with even weight distribution on the shelves and do not overload. Overloading may cause tipping or damage.

8. For the Desiccant Dry Cabinet, for first use or after long term idleness, run the machine unloaded for at least 12 hours first to ensure good condition.

9. For the Nitrogen Cabinet, you must install a nitrogen or carbon dioxide concentration alarm in the room, depending on the gas source being used. This is necessary to prevent asphyxiation hazards in case of a gas leak.

10. For the Nitrogen Cabinet, do not attempt to open the built-in nitrogen controller. Any modification or repair without the manufacturer's authorization may cause injury and will void the warranty.

PLACEMENT & BASIC KNOWLEDGE

1. While operating, keep the unit a certain distance from the wall and do not cover the exhaust vent. Leave adequate space for ventilation to ensure proper operation.

2. Stored items release humidity themselves. Drying typically takes 1–2 days for unpackaged items; items wrapped in paper or packed in wood will take longer. Minimizing door openings shortens drying time.

3. This unit is not intended for storing corrosive, explosive or flammable materials. If storage of items containing hydrochloric acid, sulfuric acid, or other corrosive chemicals is required, they must be securely packaged and sealed to prevent damage to the unit. For any other special storage requirements, please contact us.

4. If the RH value indicated on the machine differs from an external reference, adjustment is possible but not recommended unless necessary — the unit ships factory-calibrated.

5. The Desiccant Dry Cabinet can operate quietly when empty within the 1%–20% RH or 20%–60% RH ranges (Depending on the model). The 1% RH setting is the lowest achievable humidity.

6. During operation, the outer panel may warm slightly — this is normal.

7. Remove all stored items before moving the cabinet to prevent damage.

ADDITIONAL TIPS

1. Make sure the set RH value is lower than the ambient humidity; otherwise the unit will not run.

2. To increase internal humidity quickly, open the door briefly and then close it.

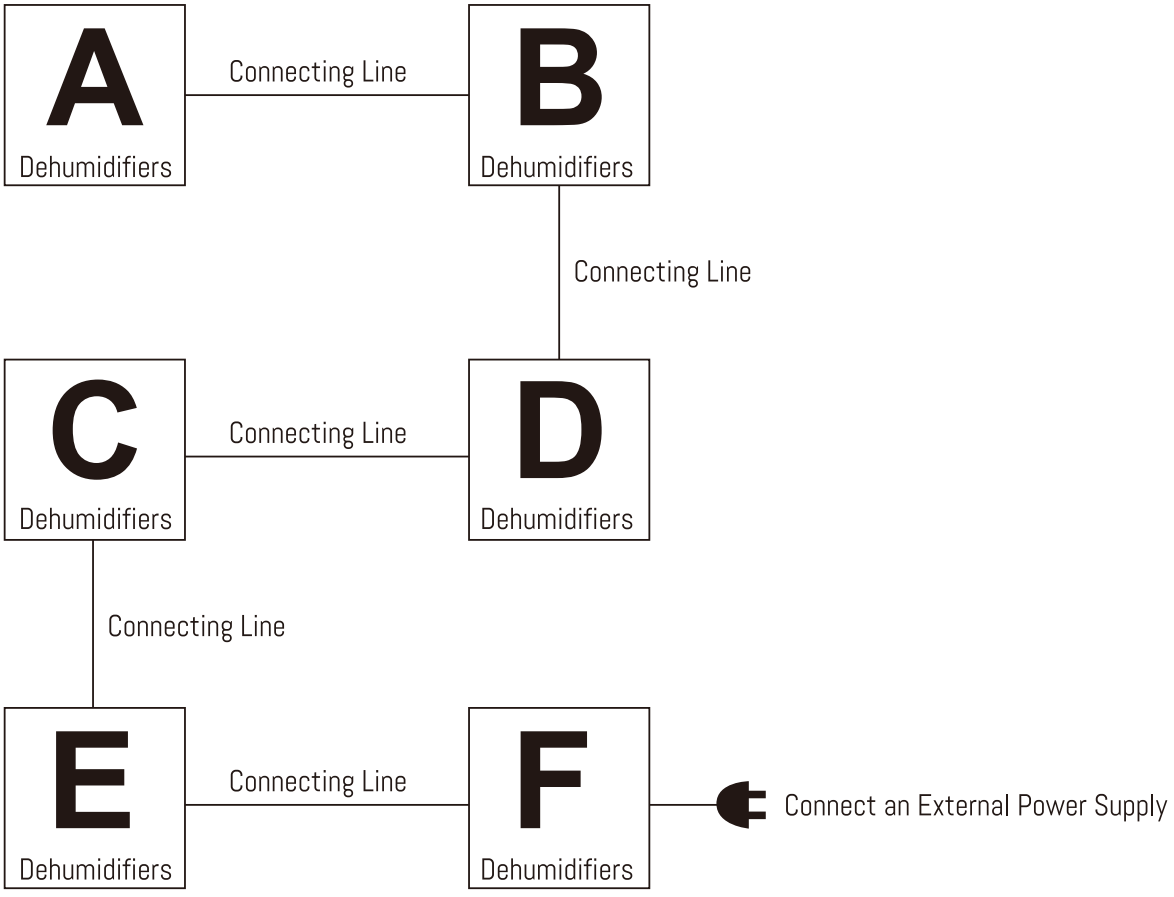
3. This machine can only REMOVE moisture from the air according to the desired RH level set, but it cannot ADD moisture into the cabinet.

4. This dry cabinet performs best when ambient temperature is below 30°C and RH is under 60% RH.

5. The integrated humidity sensor is a high-precision Honeywell sensor (typical accuracy ±3% RH; annual error ~±0.3% RH).

POWER LINE CONNECTION DIAGRAM

(Example: EDC1430C-6 with six dehumidifiers)



Note: If your machine has more than two dehumidifier cores, connect the cores in series according to the manufacturer's wiring diagram before plugging into external power. Always follow the wiring diagram provided with your specific model to avoid damage.

SPECIFICATIONS

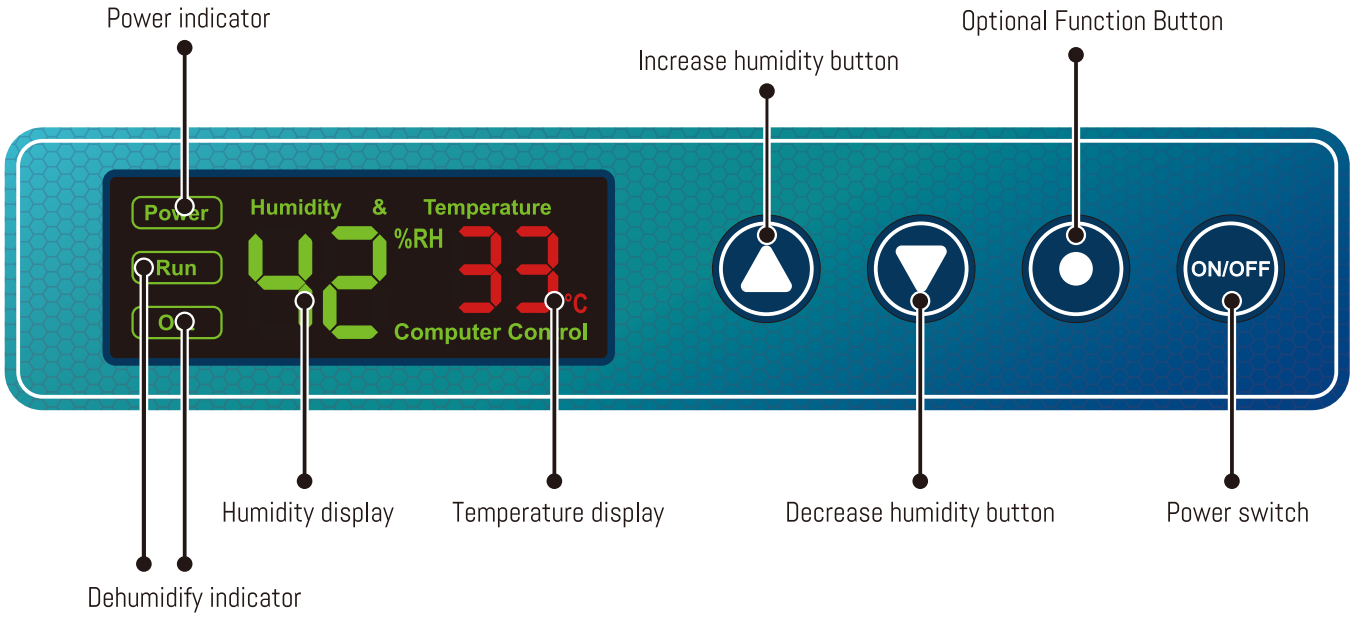
Model	EDC210A EDC210AW	EDC320A EDC320AW	EDC540A EDC540AW	EDC730A EDC730AW	EDC880A EDC880AW	EDC1430A-6 EDC1430AW-6
Humidity Range	20-60% RH					
Humidity and Temperature Accuracy	±3% RH, ±1℃					
Voltage	110V 60Hz					
Power	11W	15W	23W	26W	33W	55W
Capacity	7.4 cu. ft. (210L)	11.3 cu. ft. (320L)	19.1 cu. ft. (540L)	25.8 cu. ft. (730L)	31.1 cu. ft. (880L)	50.5 cu. ft. (1430L)
External Size (WxDxH)	22.8 x 26.4 x 26 in	35.4 x 17.7 x 39.8 in	23.6 x 27.2 x 58.5 in	23.6 x 27.2 x 72.1 in	35.4 x 23.6 x 73.2 in	47.2 x 27.2 x 72.1 in
Internal Size (WxDxH)	20.9 x 25.4 x 17.7 in	33.7 x 16.5 x 33.1 in	21.9 x 25.2 x 51.8 in	21.9 x 25.2 x 65.4 in	33.7 x 21.7 x 66.1 in	45.5 x 25.2 x 65.4 in
Structure	1-1.2 mm High-grade Steel with ESD Coating					
Dehumidifiers (pcs)	1	1	1	1	2	2
Shelves (pcs)	2	3	3	5	5	5
Doors (pcs)	1	2	2	3	4	6
Casters (pcs)	N/A	4	4	4	4	4
ESD Protection	10^6~10^9 Ω (Surface Resistance)					
Grounding Wire	1MΩ.					

Model	EDC210C EDC210CW	EDC320C EDC320CW	EDC540C EDC540CW	EDC730C EDC730CW	EDC880C EDC880CW	EDC1430C-6 EDC1430CW-6
Humidity Range	1-10% RH					
Humidity and Temperature Accuracy	±3% RH, ±1℃					
Voltage	110V 60Hz					
Power	19W	29W	42W	56W	70W	98W
Capacity	7.4 cu. ft. (210L)	11.3 cu. ft. (320L)	19.1 cu. ft. (540L)	25.8 cu. ft. (730L)	31.1 cu. ft. (880L)	50.5 cu. ft. (1430L)
External Size (WxDxH)	22.8 x 26.4 x 26 in	35.4 x 17.7 x 39.8 in	23.6 x 27.2 x 58.5 in	23.6 x 27.2 x 72.1 in	35.4 x 23.6 x 73.2 in	47.2 x 27.2 x 72.1 in
Internal Size (WxDxH)	20.9 x 25.4 x 17.7 in	33.7 x 16.5 x 33.1 in	21.9 x 25.2 x 51.8 in	21.9 x 25.2 x 65.4 in	33.7 x 21.7 x 66.1 in	45.5 x 25.2 x 65.4 in
Structure	1-1.2 mm High-grade Steel with ESD Coating					
Dehumidifiers (pcs)	1	2	2	3	4	6
Shelves (pcs)	2	3	3	5	5	5
Doors (pcs)	1	2	2	3	4	6
Casters (pcs)	N/A	4	4	4	4	4
ESD Protection	10^6~10^9 Ω (Surface Resistance)					
Grounding Wire	1MΩ.					

Model	NC1430B-6 NC1430BW-6	NC1430BSS-6
Humidity Range	1-60% RH	
Humidity and Temperature Accuracy	±3% RH, ±1℃	
Voltage	110V 60Hz	
Power	12W	
Capacity	50.5 cu. ft. (1430L)	
External Size (WxDxH)	50.4 x 27.2 x 72.1 in	
Internal Size (WxDxH)	45.5 x 25.2 x 65.4 in	
Structure	1-1.2 mm High-grade Steel with ESD Coating	1-1.2 mm SUS 304 Stainless Steel
Flowmeter	Dual Flowmeter Auto Control 0.5-5 LPM & 5-50 LPM	
Shelves (pcs)	5	
Doors (pcs)	6	
Casters (pcs)	4	
ESD Protection	10^6~10^9 Ω (Surface Resistance)	/
Grounding Wire	1MΩ.	1MΩ.

FUNCTIONS AND FEATURES

LED PANEL FUNCTIONS

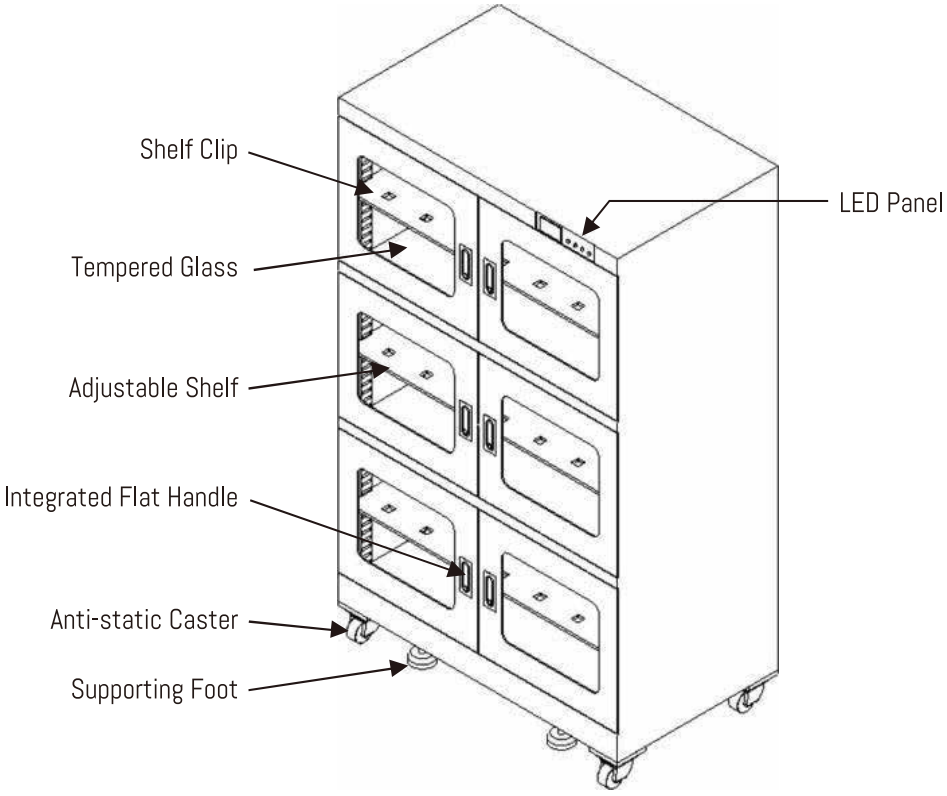


INDICATOR STATE MEANINGS

- RUN ON and OUT OFF — the dehumidifier core releases the moisture it has absorbed.
- RUN ON and OUT ON — the dehumidifier core is actively working.
- OUT ON and RUN OFF — the internal RH is below the set value. The dehumidifier core stays off until RH reaches the setpoint, then OUT turns off.
- Both OUT and RUN OFF — inner RH has reached the setpoint.

No more water will drip during operation. If there are any issues with the display, please contact us — we can assist you in troubleshooting using the indicator lights.
NOTE: The RUN and OUT indicators shown on the display of Nitrogen Cabinets have no practical function. Only pay attention to the RH values.

DESICCANT DRY CABINETS – OPERATING TIPS



1. Place the cabinet on a firm, level surface and keep about 12 inch (30 cm) clearance from the wall. Engage the two brake wheels to secure it and set bottom feet to ground if applicable.

2. If the model is equipped with two or more dehumidifier cores, connect the cores in series first, and then plug the power cord into a 110V outlet.

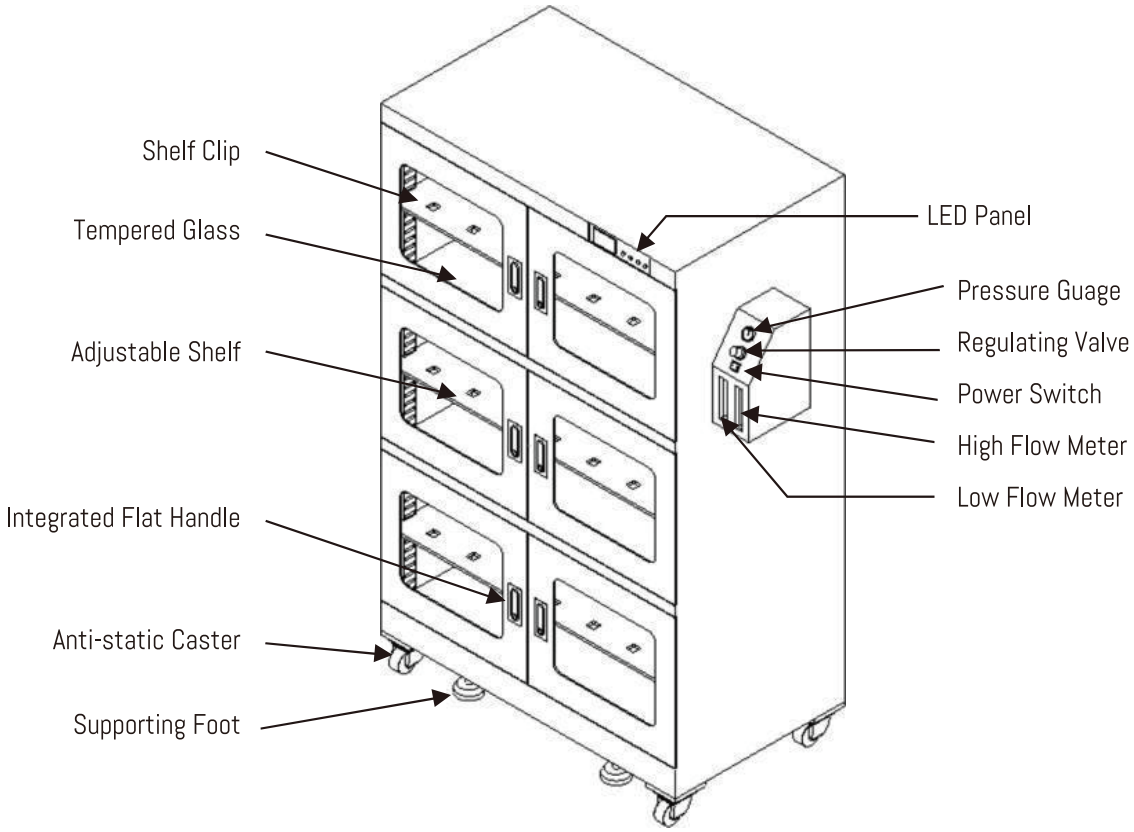
3. After startup, the screen displays two figures: left green = current humidity (adjustable); right red = current temperature (not adjustable). Press ▲ and ▼ to set humidity; each press changes RH by 1%. On releasing the buttons the display returns to show actual humidity. Adjust the display to the desired RH value.

4. For first use or after long term idleness, run the machine unloaded for at least 12 hours first to ensure good condition.

5. If factory default RH is very low, press ▲ to increase to desired level.

6. Because opening the door affects RH, set the RH target at least 2% lower than the intended value to compensate for door openings.

NITROGEN CABINET (SMART DUAL-FLOW CONTROL) – OPERATING TIPS



1. Place the cabinet on a firm, level surface and keep about 12 inch (30 cm) clearance from the wall. Engage the two brake wheels to secure it and set bottom feet to ground if applicable.

2. Connect the gas source to the nitrogen control box on the right using a gas tube.

3. After connecting the air source, check for leaks at the air pipeline joints.

4. Connect to the power supply and turn on the power switch.

5. Turn on the nitrogen controller. Set the pressure regulator to approximately 29 psi (0.2 MPa) (Recommended).

6. Set the high flow meter to approximately 20 LPM and the low flow meter to 0.3-2 LPM (Recommended).

(Tips for Adjusting Gas Flow with the Smart Dual-Flow Power-Saving Nitrogen Controller: When the internal RH is approximately 5% higher than the set value, the high flow meter activates automatically to rapidly lower the RH until it reaches the target level. Once achieved, the low flow meter takes over for maintenance and maintain the RH at the set value. Compared to traditional systems, this dual-flow approach is more efficient, saving at least 50% of nitrogen and energy.)

7. After startup, the screen displays two figures: left green = current humidity (adjustable); right red = current temperature (not adjustable). Press ▲ and ▼ to set humidity; each press changes RH by 1%. On releasing the buttons the display returns to show actual humidity. Adjust the display to the desired RH value.

8. Please use pure and clean gas. Dirty, moist, or impure gas may affect performance and damage the nitrogen control system.

9. You must install a nitrogen or carbon dioxide concentration alarm in the room, depending on the gas source being used. This is necessary to prevent asphyxiation hazards in case of a gas leak.

10. Do not attempt to open the built-in nitrogen controller. Any modification or repair without the manufacturer's authorization may cause injury and will void the warranty.

TROUBLESHOOTING

Before contacting support, check basic items: power, fuses, wiring, gas supply (for N2 models), and verify that doors are fully closed.

Problem	Solution
Display is blank	1. Check that all power cords are connected correctly. 2. Check the fuses and replace them if needed. 3. Restart the system.
Abnormal display / unresponsive	1. Check whether the connections between the temperature and humidity sensor and the display are secure. 2. Restart (turn off, wait about 10 seconds, then turn on). If the problem persists, contact service.
RH drops slowly or fails to drop	1. Check that all power cords are connected correctly and that all dehumidifiers are working normally. 2. Make sure the machine is not exposed to direct airflow, such as from an air conditioner. Strong drafts, heavy smog, or steam will affect drying performance. 3. For first use or after long periods of idleness, run the machine unloaded for at least 12 hours to ensure proper condition. 4. Reduce the load or extend the drying time — items with high moisture content require longer drying. 5. Ensure the door is fully closed and the seal strips are intact. 6. Confirm the set RH value is lower than the ambient RH.
RH reading differs from external hygrometer	1. Check whether the connections between the temperature and humidity sensor and the display are secure. 2. Leave the unit empty for 24 hours to stabilize before comparing readings.

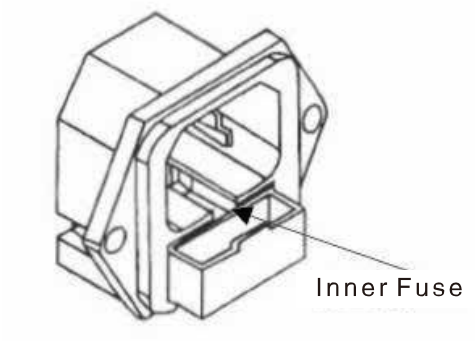


Diagram of Replacing Fuse

NOTE: Do not open the machine without authorization — unauthorized repairs may cause injury and void the warranty. Contact support first; we can often guide basic fixes remotely.

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