

Dry Contact Station (DSD-3) User Manual



OVERVIEW

The DSD-3 Relay Device Station is a highly versatile peripheral driver designed to control the ON/OFF state of your terminal devices. Seamlessly integrating with TrolMaster's advanced ecosystem.

The DSD-3 allows for precise, automated environmental control. Featuring a single relay with both a normally open (NO) and a normally closed (NC) contact, the DSD-3 gives you the flexibility to easily switch between two channels, ensuring your grow room remains clean, reliable, and automated from day one.

DSD-3 provides a dry contact output only; it functions solely as an isolated switch with a contact rating of 1A.

PACKAGE CONTENTS

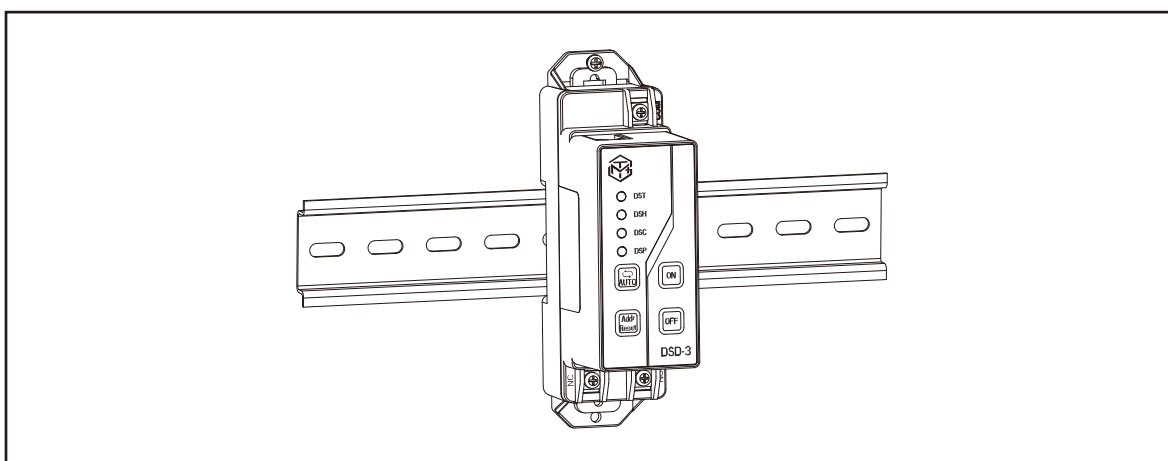
- 1x Dry Contact Station (DSD-3)
- 1x 4ft RJ12 Cable
- 1x 0.5ft RJ12 Cable
- 1x 2EDGKNH-3.5mm_2x2P

SPECIFICATIONS

Input Voltage	12V $\pm$ 0.1A
NC/NO	1A@250VAC, 1A@30VDC
Operating Humidity	$\leq$ 90%RH
Operating Temperature	32~104°F (0~40°C)
Ambient Temperature	32~104°F (0~40°C)
Weight	0.44lbs / 0.20kg
Package Dimensions (L*W*H)	140mm x 90mm x 50mm / 5.51" x 3.54" x 1.97"

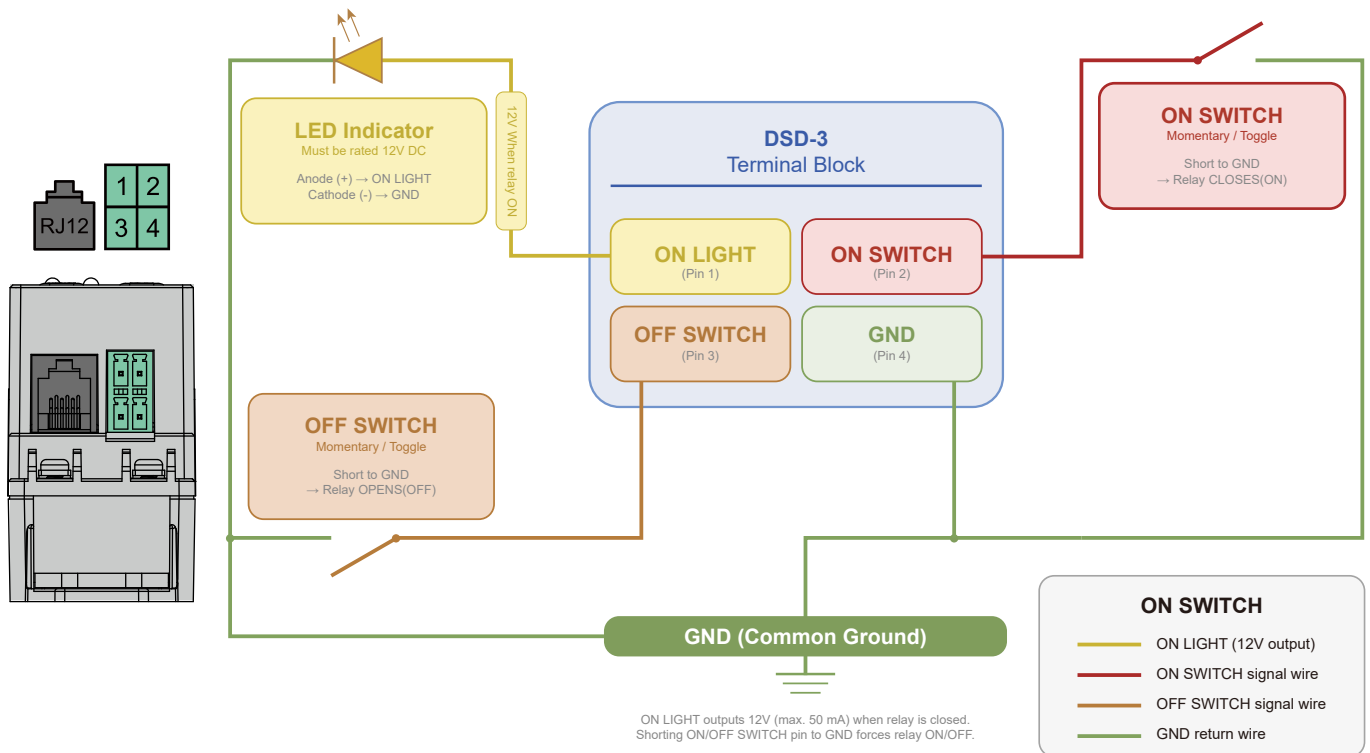


INSTALLATION & WIRING



Mounting:

The DSD-3 is designed for DIN rail installation. Align the card slots on the top and bottom of the device with the rail and push inward until the unit snaps securely into place.



OPERATION INSTRUCTIONS



Manual Operation:

Users can control the relays directly using the physical buttons on the face of the DSD-3: **Auto, Add/Reset, On, and Off.**

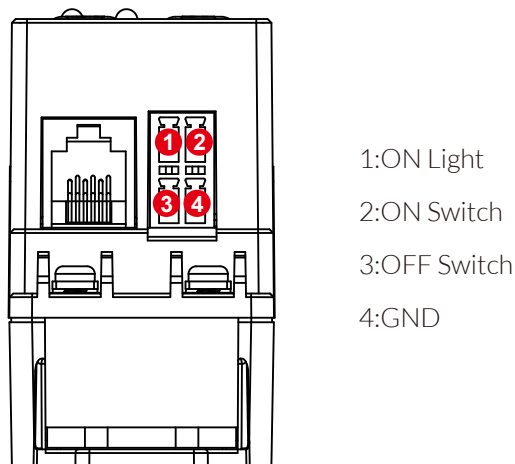
Interface Connections:

Use a standard RJ-12 cable to connect the DSD-3 to your main TrolMaster controller. The device can be configured in the controller interface to operate in DST (Temperature), DSH (Humidity), DSC (CO2), or DSP (Timer) modes, depending on your specific needs.

External Switch Wiring (Sampling Interface):

The DSD-3 allows you to sample external switch signals for manual control. Wire your external switches to the provided terminal block based on the following pin definitions:

- 1.ON SWITCH:** Short-circuiting this pin with the GND pin will forcefully close the relay.
- 2.OFF SWITCH:** Short-circuiting this pin with the GND pin will forcefully disconnect the relay.
- 3.ON LIGHT:** Connect an indicator light to this pin. It outputs 12V when the relay is closed, providing a visual cue of the device's status.
- 4.GND:** Ground connection for switches.



Addressing (Linking to TrolMaster Controllers):

To integrate the DSD-3 into the automated system, it must be "addressed":

1. Connect the device to the Controller Device Port via the RJ-12 cable.
2. Press the **Add** button on the DSD-3.
3. A pop-up screen confirming successful addressing will appear on the controller.

Automation via Controller:

Once linked, the DSD-3 can be programmed to respond to environmental triggers such as **Temperature, Humidity, CO2 or a timer device.**

TROUBLESHOOTING

Device Not Responding to Controller: Check the **RJ-12 communication cable** for any cuts or loose connections. Ensure the **main controller is powered on and that the DSD-3 has been properly addressed** in the system menu.

Relay Not Closing Manually: If using external switches, verify that the wiring between the **ON SWITCH / OFF SWITCH** and the **GND** terminal is securely fastened and that the **switch is successfully completing the short-circuit**.

Indicator Light Not Working: Ensure the **custom LED is properly rated for 12V** and is correctly wired to the **ON LIGHT** and **GND** terminals. Verify that the **relay is actually in the closed (ON) position**.

MAINTENANCE AND SAFETY

- **Cleaning:** Keep the unit clean and dry. Wipe the surface with a **dry towel** only; do not use water or solvents.
- **Safety Precautions:** Always disconnect power before performing any maintenance. Do not operate if power cords are damaged or deformed.
- **Environmental Limits:** Ensure the room temperature does not exceed **40°C (104°F)**, as excessive heat can shorten the device's lifespan.
- **Integrity:** Do not open the housing or attempt to modify the device, as this will **void the warranty** and risk electrical shock.

 **WARNING:** **DO NOT** allow DSD-3 to be exposed to water or excessive heat, **DO NOT** open or attempt to repair or disassemble the DSD-3, as there are no user-serviceable parts inside. Opening the DSD-3 will void the warranty. If the surface of DSD-3 is dirty, wipe it with a dry towel. The DSD-3 operates under natural ventilation conditions.

 **AVERTISSEMENT:** **N'exposez PAS** le régulateur de zone DSD-3 à de l'eau ou à une chaleur excessive. **NE l'ouvrez PAS, NE tentez PAS de le réparer ou de le démonter**, car il ne contient aucune pièce réparable par l'utilisateur. Louverture du régulateur entraîne l'annulation de la garantie. Si la surface du DSD-3 est sale, essuyez-la à l'aide d'un chiffon sec. Le DSD-3 fonctionne sous des conditions de ventilation naturelle.

For any issues or concerns with our products, **DO NOT** return them to the store. Please contact our tech support department at **support@trolmaster.com** or call **877-420-9876**.