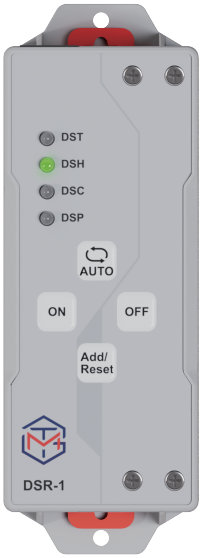
# 25Amps Relay Device Station (DSR-1)
# User Manual




## OVERVIEW

The TrolMaster DSR-1 Relay Device Station is a high-current output module compatible with Hydro-X, Aqua-X, Tent-X, Carbon-X, and Green-X control systems. The DSR-1 can be configured as a temperature (DST), humidity (DSH), CO2 (DSC), or timer (DSP) device module. It is designed with overload protection, a local override function, and a local alarm for relay contact adhesion. The DSR-1 supports up to 25 amps, ensuring reliable operation of connected equipment.

## PACKAGE CONTENTS

- 1x 25Amps Relay Device Station (DSR-1)
- 1x 0.5ft RJ12 Cable
- 1x 4ft RJ12 Cable

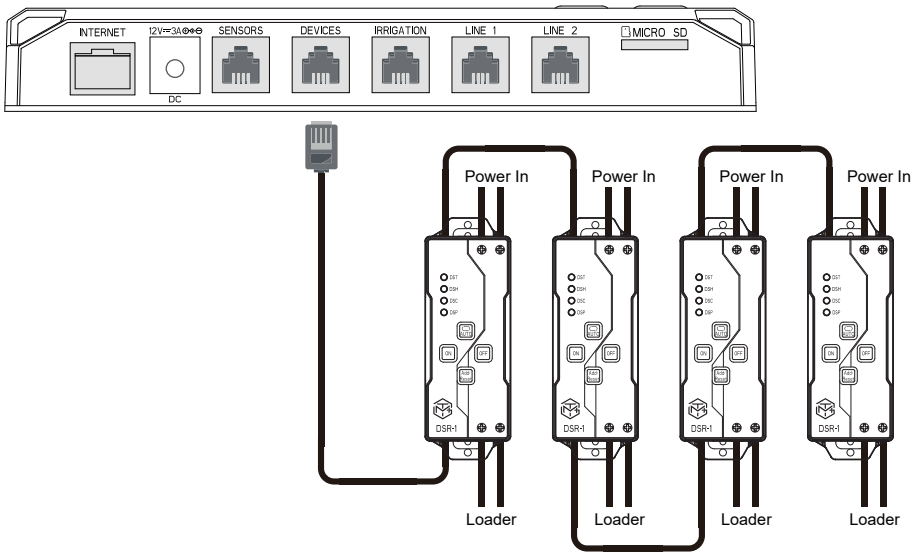
# SPECIFICATIONS

| | |
|---|---|
| Input Voltage | 100-277V~, 50/60Hz |
| Output Current | 25A |
| Output Voltage | 100-277V~, 50/60Hz |
| Package Dimensions | 121mm(L) x 43mm(W) x 79mm(H) |
| Ambient Temperature | 32~104°F (0~40°C) |
| Relative Humidity | ≤90%RH |

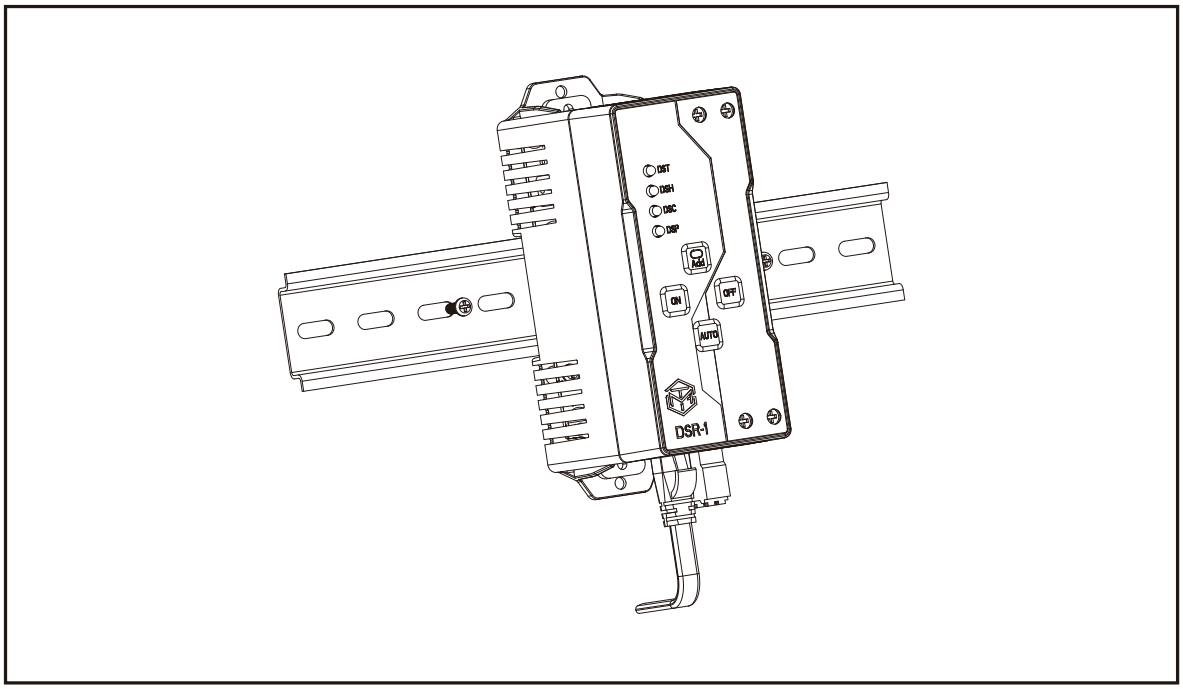
RECOGNIZED COMPONENT
C ETL CM US LISTED
Intertek
5008191

Conforms to UL STD.
No.61010-1&NO.61010-2-201
Certified to CSA STD.C22.2
No.61010-1&NO.61010-2-201

# INSTALLATION




1. Pull the 2 tabs outward to release the bracket from the unit, mount the bracket to the electric control cabinet. Place the unit back on the bracket and press the tabs back in to lock the unit in place.
2. Connect the unit to the power supply.
3. Connect the DSR-1 to the main controller using a RJ-12 cable.
4. Press the [Add/Override] button on the module to address the DSR-1 to the controller.
5. Press the [Mode/Reset] button to select and register the DSR-1 as a temperature (DST), humidity (DSH), CO2 (DSC), or timer (DSP) device module. Hold it for 3 seconds to confirm your configuration.




**Mounting:**

The DSR-1 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.

**Interface Connections:**

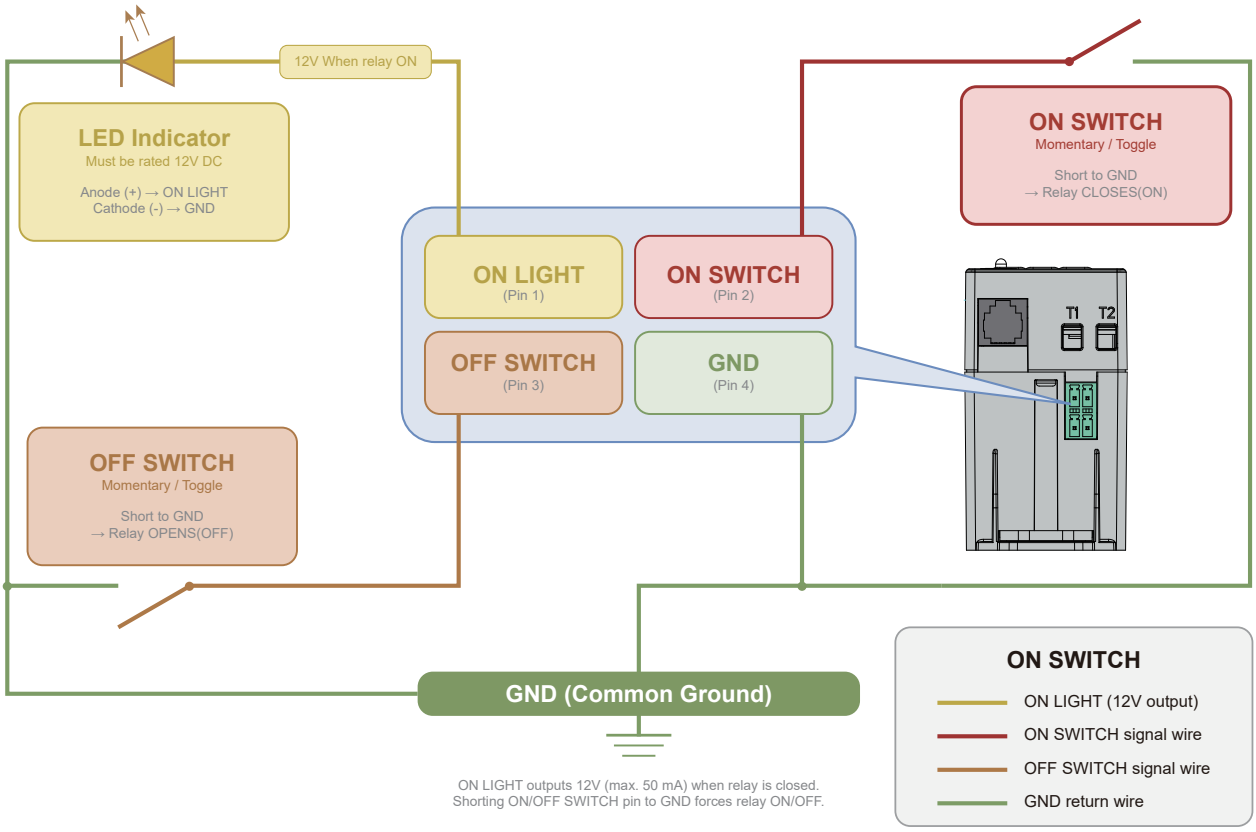
Use a standard RJ-12 cable to connect the DSR-1 to your main TrolMaster controller. The device can be configured in the controller interface to operate in DST (Temperature), DSH (Humidity), DSC (CO2), or DSP (Timer) modes, depending on your specific needs.

**External Switch Wiring (Sampling Interface):**

The DSR-1 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:

- **ON SWITCH:** Short-circuiting this pin with the GND pin will forcefully close the relay.
- **OFF SWITCH:** Short-circuiting this pin with the GND pin will forcefully disconnect the relay.
- **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.
- **GND:** Ground connection for switches.

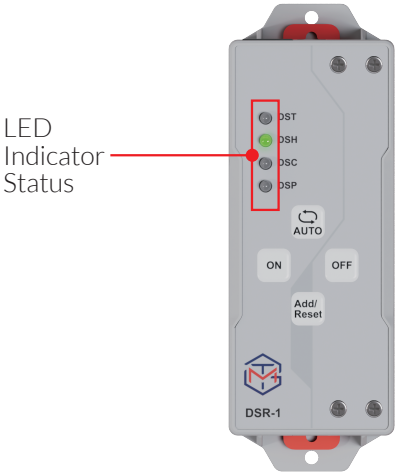
# TERMINAL BLOCK




# OPERATION INSTRUCTIONS

| Name | Press Duration | Result |
|---|---|---|
| AUTO | [Mode] - Quick Press | Select and register the DSR-1 as a (DST), (DSH), (DSC), or (DSP) module. |
| Add/Reset | [Add] - Quick Press | Address and Register the DSR-1 to thecontroller. |
| | [Reset] - Hold 3 Seconds | Reset the DSR-1. Remove its connection from the controller(Except for HCS-2 / NFS-2). [Can also be reset in the controller's menu] |
| ON | Hold 2 Seconds | Forcefully turn the device ON. This override status will automatically revert to AUTO mode after 30 minutes. To cancel the override and restore AUTO mode immediately, hold the button again for 2 seconds. |
| ON | Hold 2 Seconds | Forcefully turn the device OFF. This override status will automatically revert to AUTO mode after 30 minutes. To cancel the override and restore AUTO mode immediately, hold the button again for 2 seconds. |

# LED INDICATOR STATUS




| LED Indicator | Module Status |
|---|---|
| **Fast Blinking Green** | Module is not addressed to the main controller, OR module does not have a good connection to the main controller.<br>***Note:** Press the Add/Override button on the module when first installed. |
| **Slow Blinking Green** | Module is addressed and connected to the main controller, in the power off status. |
| **Solid Green** | Module is addressed and connected to the main controller, in the power on status. |
| **(DSC) Slow Blinking Red** | DSR-1 relay contacts failed to disconnect. Please contact TrolMaster Tech Support for further troubleshooting. |
| **(DSP) Slow Blinking Red** | Module is overloaded. Reset it by pressing the"Add/Override" button. |

**WARNING:** **DO NOT** allow DSR-1 to be exposed to water or excessive heat, DO NOT open or attempt to repair or disassemble the DSR-1, as there are no user-serviceable parts inside. Opening the DSR-1 will void the warranty.
If the surface of DSR-1 is dirty, wipe it with a dry towel.
The DSR-1 operates under natural ventilation conditions.

**AVERTISSEMENT:** **N'exposez PAS** le régulateur de zone DSR-1 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 entraine l'annulation de la garantie.
Si la surface du DSR-1 est sale, essuyez-la à l'aide d'un chiffon sec. Le DSR-1 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**.

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