

Motor Control Dry Contact Station (RMC-1) User Manual



OVERVIEW

The RMC-1 (Motor Control Dry Contact Station) is a specialized peripheral driver designed to provide precise ON/OFF control for terminal equipment within the Green-X Greenhouse Control System (GCS-1) ecosystem. Equipped with two internal relays, RMC-1 provides a dry contact output only; it functions solely as an isolated switch with a contact rating of 1A.

The RMC-1 allows for manual and automated management of external circuits, facilitating functions such as forward rotation, reverse rotation, and stopping of motors. RMC-1 also supports the integration of a maximum of two Position Switches (TPS-1).

PACKAGE CONTENTS

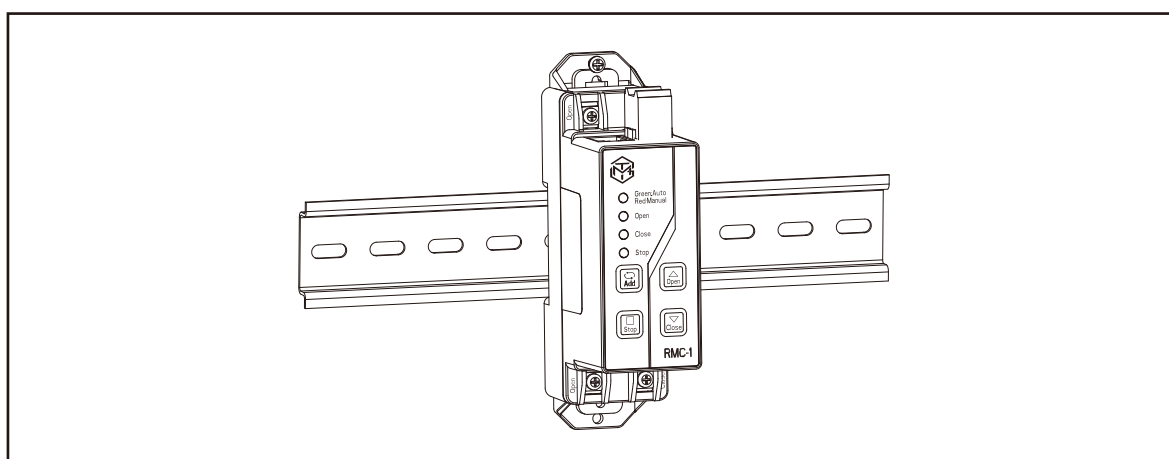
- 1x Motor Control Dry Contact Station (RMC-1)
- 1x 4ft RJ12 Cable
- 1x 0.5ft RJ12 Cable
- 1x 2EDGKNH-3.5mm_2x3P
- 1x LC89+LZ4R-3.5mm_2x3P

SPECIFICATIONS

Input Voltage	12V $\pm$ 0.1A
Dry Contact	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	0.49lbs / 0.22kg
Package Dimensions (L*W*H)	170mm x 90mm x 54mm / 6.69" x 3.54" x 2.13"

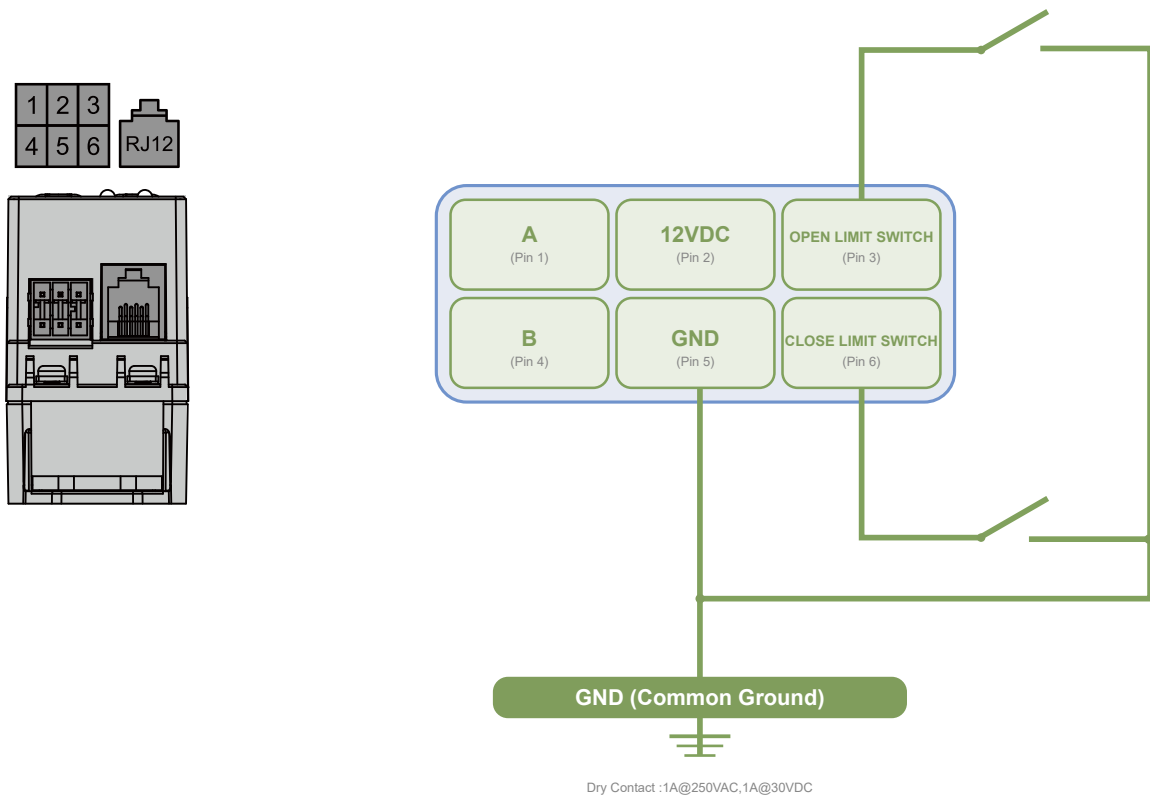
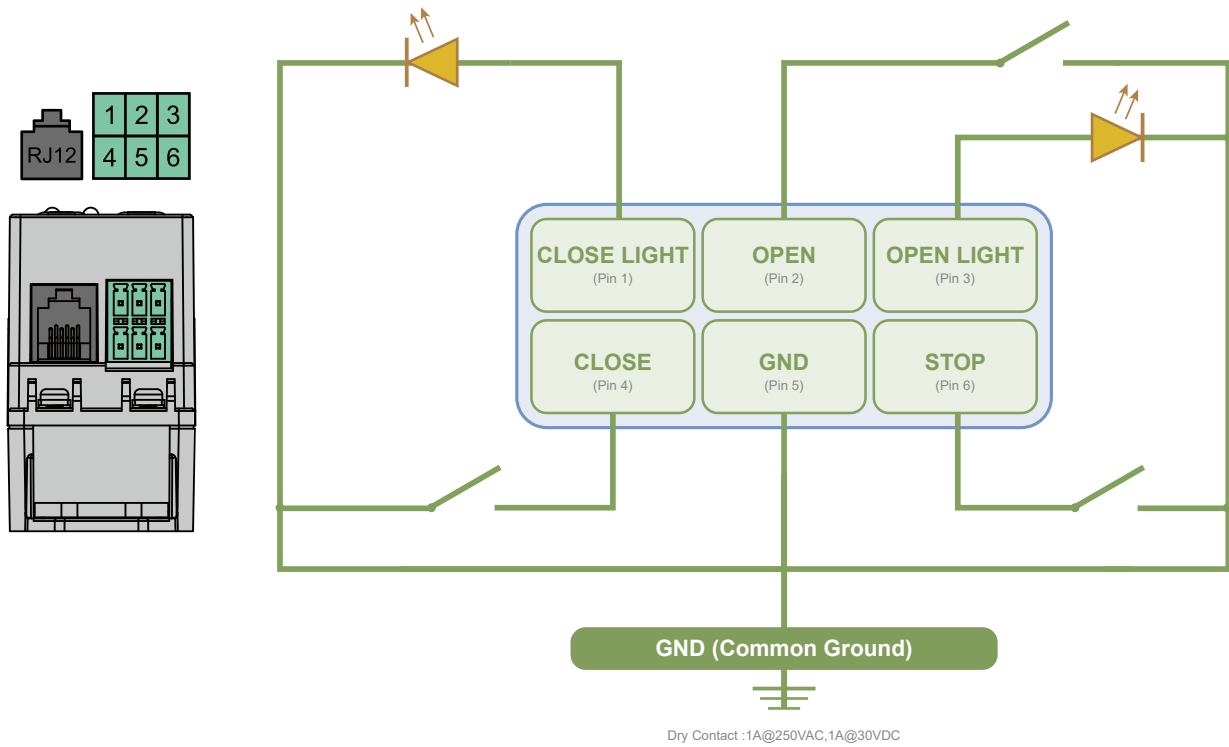


INSTALLATION & WIRING



Mounting:

The RMC-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.



OPERATION INSTRUCTIONS



Manual Operation:

Users can control the relays directly using the physical buttons on the face of the RMC-1: Add/Mode, Open, Close, and Stop.

Addressing (Linking to GCS-1):

To integrate the RMC-1 into the automated system, it must be "addressed":

1. Connect the device to the GCS-1 via the RJ-12 cable.
2. Press the **Add** button on the RMC-1.
3. On the GCS-1, navigate to the **Motor Setting** menu.

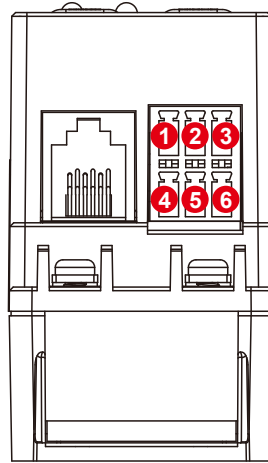
MOTOR 1 ADVANCED SETTING	
	PRIORITY
RADIATION	NIL
WIND	5
RAIN	1
TEMP	3
HUMID	4

Automation via GCS-1:

Once linked, the RMC-1 can be programmed to respond to environmental triggers such as **Radiation (PPFD)**, **Wind speed**, **Rain**, **Temperature**, and **Humidity**. Priorities (1–5) can be assigned to these triggers to ensure the greenhouse remains protected during extreme weather.

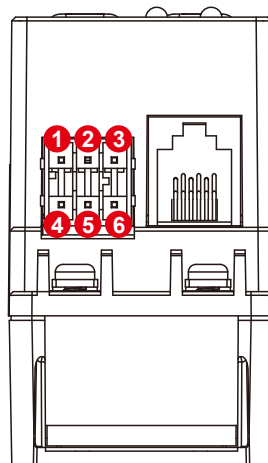
Interface Connections:

- **Communication (RJ-12):** Use a standard RJ-12 cable to connect the RMC-1 to the DEVICES port on the GCS-1 controller.



1. Close Light
2. Open
3. Open Light
4. Close
5. GND
6. Stop

- **Sampling Interface (6-pin Green):** Used for manual external overrides.
 1. **OPEN/CLOSE/STOP:** Shorting these pins to GND will force the corresponding relay action.
 2. **OPEN/CLOSE LIGHT:** Provides a 12V output to power user-installed status LED indicators.



1. A
2. 12V+
3. Open limit switch
4. B
5. GND
6. Close limit switch

- **Limit Switch / TPS Interface (6-pin Black):**
 1. **Open Limit Switch / Close Limit Switch:** Connect external limit switches here. When a switch closes to ground, the corresponding relay (Open or Close) will disconnect to prevent over-travel.
 2. **A/B/12V+/GND:** Used for connecting and powering up to two TPS-1 units.

TROUBLESHOOTING

ISSUE	POSSIBLE CAUSE	SOLUTION
GCS-1 shows "Offline"	Loose or damaged RJ-12 cable.	Check and secure the connection.
Relay does not trigger	Limit switch (SW1/SW2) is engaged.	Check the position of your mechanical limit switches.
Buttons are unresponsive	External sampling pins are shorted to GND.	Inspect the 6-pin green connector for accidental shorts.
Signal interference	Signal interference Communication cable exceeds 500m.	Ensure total cable length is within the RS-485 specification.

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

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