

MRDRC TravelCool RV Inverter Remote Control

Technical Specification & Installation Sheet

1. Product Overview

The **MRDRC TravelCool RV Inverter Remote Control** is a surface-mounted or flush-mounted digital interface designed for comprehensive off-grid power management. It enables secondary monitoring and execution of inverter cycles remotely from the living compartment of recreational vehicles, service trucks, or marine vessels.

2. Core Technical Specifications

Parameter	Specification Details
Model Configuration	MRDRC-TC-RC2026
Operating Voltage	Nominal 12V DC (Powered via communication bus)
Current Draw (Active)	< 45 mA
Current Draw (Standby)	< 5 mA (Power-save mode)
Communication Protocol	RS485 Differential Signaling
Connector Interface	Standard RJ45 (8P8C modular jack)
Display Screen	Backlit LCD Panel with status icons
Operating Temperature	-20°C to 60°C (-4°F to 140°F)

3. Harness & Wire Assembly Specifications

The remote control unit relies on an engineered tethered connection to prevent signal dropping over long-distance chassis routing:

Harness Attribute	Standard Wire Layout
Default Length	5 Meters (Approx. 16.4 feet)
Conductor Size	24 AWG Multi-strand Pure Copper
Shielding Type	Aluminum Mylar Foil Shield with 100% Coverage

Drain Wire	Tinned Copper Ground Drain Wire
Outer Jacket Material	Flame-Retardant PVC (VW-1 Rated, UV Resistant)
Maximum Route Length	15 Meters (Upgraded premium shielded lines required)

4. RV Installation Protocols

Step 1: Main System Power-Off

Completely isolate the RV house battery bank and disconnect shore power hookups prior to running communication cables behind interior panels.

Step 2: Inverter Toggle Mode Configuration

Flip the physical rocker switch located on the main inverter chassis to the '**Remote**' position. The unit will fail to respond to the remote console if kept in the static 'ON' or 'OFF' switch configurations.

Step 3: Panel Housing Mount

Utilize the included cutout template to trace wall boundaries. Confirm the hollow cavity is free of pre-existing internal plumbing lines, high-voltage AC romex runs, or structural metal frame studs.

Step 4: Cable Management Routing

Map safe paths behind dry cabinet frames, avoiding sharp metallic corners. Use insulated zip-ties to bundle the line away from heavy engine harnesses to mitigate Electromagnetic Interference (EMI).