

MRCOOL® TRAVELCOOL™ WIRED CONTROLLER

INSTALLATION & OWNER'S MANUAL

MODELS:

MRDCW



Read this manual carefully before installation and keep it where the operator can easily find it for future reference.

Due to updates and constantly improving performance, the information and instructions within this manual are subject to change without notice.

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Please visit www.mrcool.com/documentation to ensure you have the latest version of this manual.



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Safety Precautions

Read Before Using

Incorrect usage may cause serious damage or injury.

The symbols below are used throughout this manual to indicate instructions that should be followed closely or actions that should be avoided to prevent death, injury, and/or property damage.



Indicates the possibility of personal injury or loss of life.



Indicates the possibility of property damage or serious consequences.



WARNING

- This wired controller should only be installed by a licensed contractor. Users are strictly prohibited from installing this unit themselves.
- Before cleaning or maintenance, turn off power. Do not wash with water due to the risk of electric shock.
- Do not operate with wet hands due to the risk of electric shock.
- Do not spray insecticides, disinfectants, or flammable sprays directly onto the controller, as this may cause fire or deformation.
- Do not peel off the button or LCD cover by hand due to the risk of electric shock.

2 - Specifications

Rated Voltage	DC 12V input
Operating Ambient Temperature	5°F~109.4°F (-15°C~43°C)
Operating Humidity	40% RH ~ 90% RH
Electrical Safety Compliance	Complies with GB4706.32-2012 and GB/T7725-2004 standards.

Main Functions:

- Connects to the indoor unit display board via a 4-core cable.
- Allows the setting of operation modes via button operations.
- Features an LCD display.

Controller Usage: Please align the wired controller with the air conditioner indoor unit interface.

3.1 Parts List

! CAUTION

- Do not disassemble the unit randomly.
- Wiring must match the current rating of the wired controller.
- Use specified cables. Do not apply external force to connector terminals.
- The controller circuit is low voltage. It must not touch high voltage lines to be placed in the same conduit. Maintain a distance of at least 11.81~19.68in (300~500mm) between low and high voltage conduits.
- Do not splice or extend the controller connection cable in the middle.

Check if the following parts are contained in the package:

No.	Name	Qty.	Remark
1	Wired Controller	1	/
2	M4x25 Cross Pan Head Screws	2	For mounting to the electrical box
3	User & Installation Manual	1	/
4	Plastic Screw Columns	2	For mounting to the electrical box
5	Controller Cable Assembly	1	Connects the controller to the wall cable
6	Ferrite Core (Magnetic Ring)	1	To clip onto the cable (optional)
7	Main Board Cable	1	Connects to the indoor unit CN40

Parts should be prepared onsite:

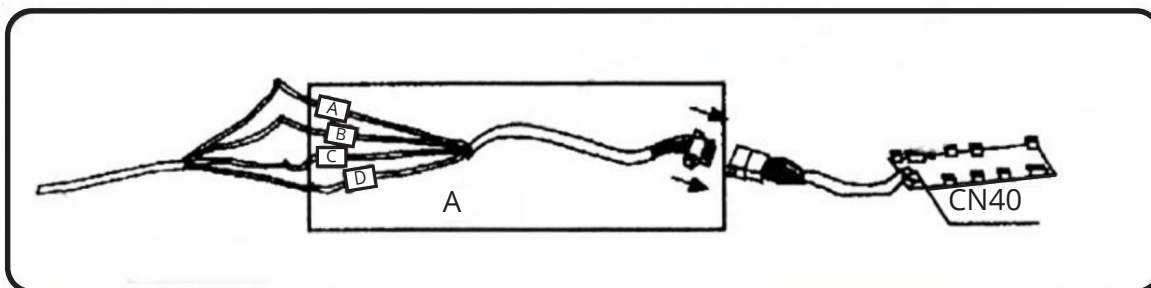
No.	Name	Qty.	Remark
1	Electrical Box	1	Standard size, pre-embedded in wall
2	4-Core Shielded Cable	1	RVVP-0.5mm2×4, pre-embedded in wall
3	Conduit (Installation Tube)	1	Pre-embedded, max length 49.21ft (15m)
4	Large Phillips Screwdriver	1	For mounting screws
5	Small Flathead Screwdriver	1	For removing the bottom cover

3 INSTALLATION

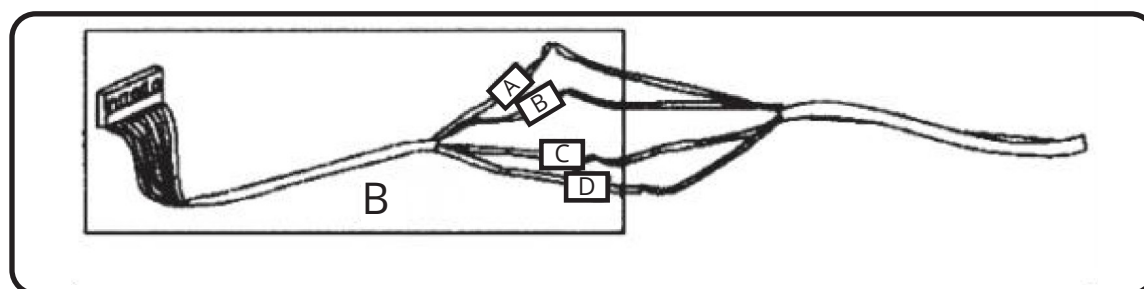
3.2 Installation Methods

Connection Cable Installation

Method A: The Wall Contains a Pre-Embedded Cable



1. Cut the supplied Controller Cable Assembly in the middle (at the unshielded section) into Segment A (with large 4-pin plug) and Segment B (with small 4-pin plug).
2. Plug the large 4-pin plug of Segment A into the 4-pin socket on the Indoor Unit Main Board (CN40).
3. Connect the cut end of Segment A to the pre-embedded 4-core cable in the wall. Ensure connections are firm and reliable.

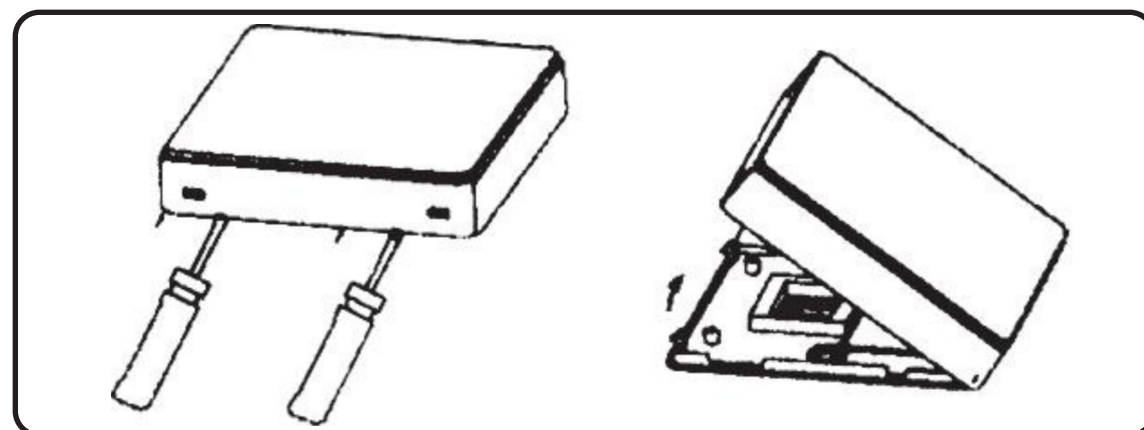


4. Connect the cut end of Segment B to the other end of the pre-embedded 4-core cable in the wall. Ensure connections are firm.

NOTE: Digital sleeves/markers on both ends must correspond one-to-one.

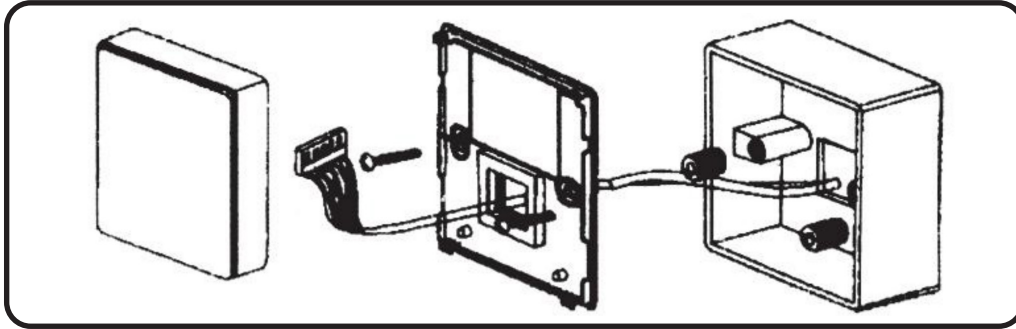
Method B: The Wall Does Not Have a Pre-Embedded Cable

- Refer to Method A. Use the 4-core shielded cable and connect it point-to-point in accordance with the wiring diagram.



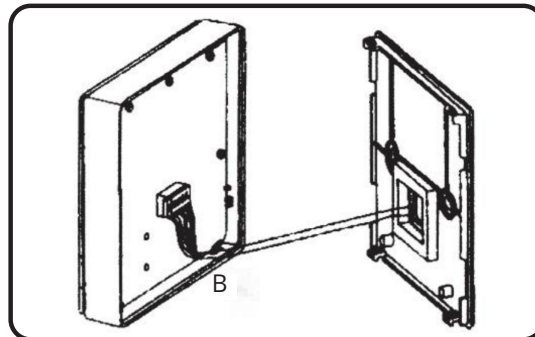
3.3 Mounting the Controller

1. Insert a small flathead screwdriver into the slot at the bottom of the controller to pry open and remove the bottom cover.
2. Adjust the length of the two supplied plastic screw columns so that when installed in the electrical box, they sit flush with the wall surface.
3. Remove the PVC protective film. Pass the Segment B signal cable through the wire hole in the controller backplate.



4. Use the supplied cross pan head screws to fix the controller base to the electrical box via the screw columns. Ensure the base sits flat.

NOTE: Do not over-tighten the screws. This may deform the case or crack the LCD.



5. Plug the small 4-pin plug of Segment B into the 4-pin socket on the controller PCB.
6. Snap the controller's front panel back onto the base.
7. Fix the ferrite core (magnetic ring) onto the cable near the controller end.

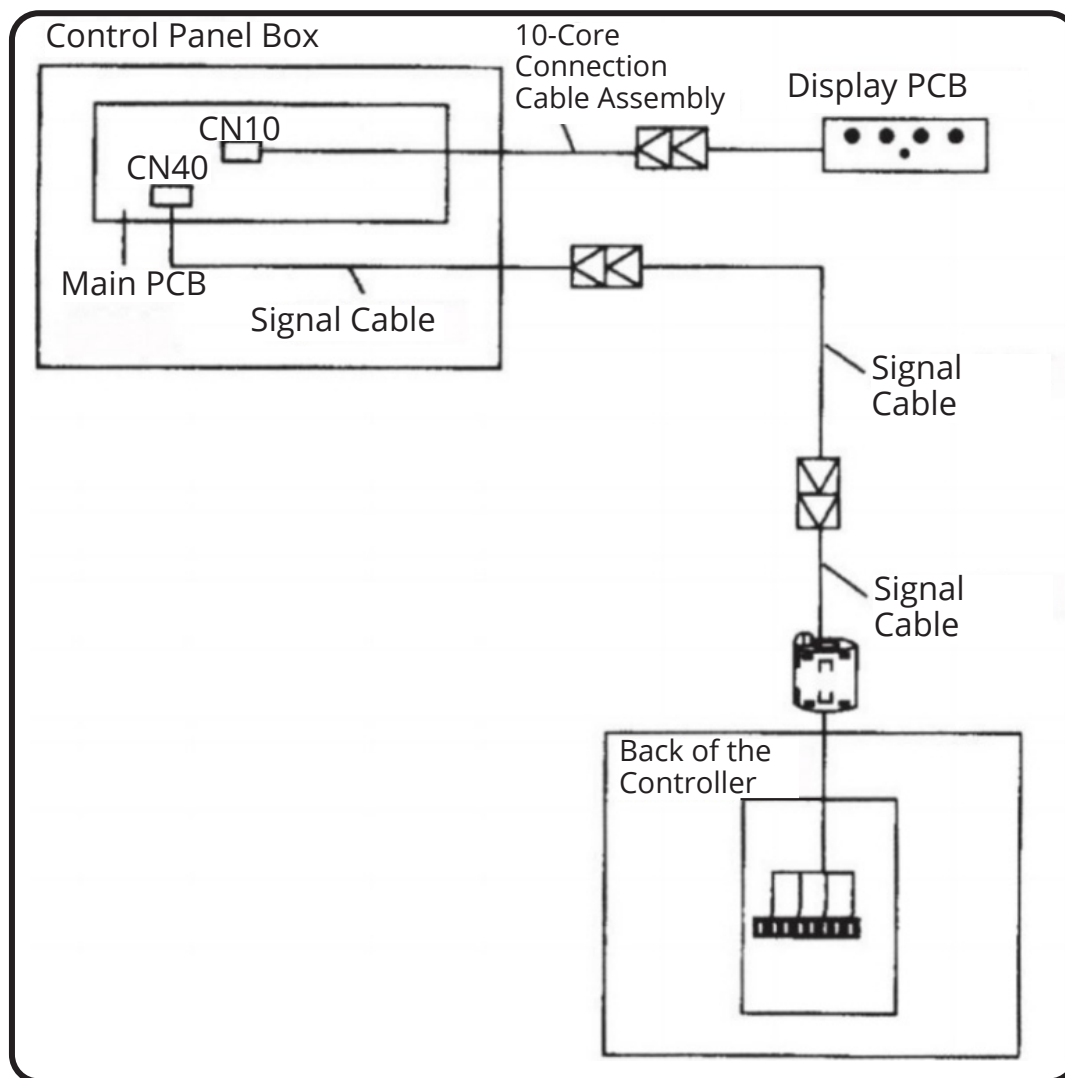
NOTE:

- Leave some slack in the connection cable inside the box to allow for future removal/maintenance.
- Ensure the controller remains level and undistorted after mounting.

3 INSTALLATION

3.4 Wiring Diagram

- Indoor unit control box: contains the main board and display board
- Connections:
 - Main Board (CN40) <--> 4-Core Cable <--> Wall Cable <--> 4-Core Cable <--> Controller
- Signal flow: controller <--> indoor display board <--> indoor main board



4.1 Operation

1. When the power is on, the 8-segment display will scroll for 6 seconds. The unit will enter normal display mode after successful system communication.
2. In standby mode, the screen shows room temperature. "TIMER ON" appears if the timer is enabled and the Wi-Fi icon will be displayed when the Wi-Fi is properly connected.
3. Button Explanation:
 - Press "ON/OFF" to power on and off.
 - Press "MODE" to select the operation mode.
 - Press "FAN" to adjust the fan speed.
 - Press "^" or "v" to adjust the temperature.
 - While the unit is powered on, press and hold the "^" and "v" buttons simultaneously to switch between °F and °C.
 - Press "FUN" to access these functions:
 - a. "TIMER OFF" flashes (powered on) or "TIMER ON" flashes (powered off).
 - b. Use "^" or "v" to adjust timer duration.
 - c. Timer is confirmed if there is no activity for 7 seconds or by pressing "OK".
 - While the unit is powered on, press "FUN" repeatedly to cycle through the various functions: TIMER OFF > SLEEP > TURBO > ECO
 - Press "OK" to activate, "CANCEL" to exit the selected function.

4.2 Display Panel Operation

Basic Controls

- ON/OFF: Power on/off
- MODE: Select operation mode
- FAN: Adjust fan speed
- ^ or v: Adjust desired temperature
- ^ or v (hold): Switch between °F and °C when the unit is powered on
- ECO: Choose eco mode
- TURBO: Choose turbo mode

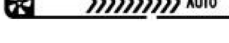
Timer Setting:

- Press TIMER to show the timer value
- Use ^ or v to adjust the time
- Confirm by pressing "TIMER" again or by not operating the unit for 5 seconds

Wi-Fi Configuration (when powered on):

- Press and hold "MODE" for 5 seconds

4.3 Icons

- | | | |
|---|---------------------------------------|---|
| 1.  AUTO : Auto Mode Icon | 6. SLEEP : Sleep Mode Icon | 11.  : Wi-Fi Icon |
| 2.  COOL : Cooling Icon | 7. TURBO : Turbo Mode Icon | 12.  : Temperature Display |
| 3.  DRY : Dehumidifying Icon | 8. ECO : Eco Mode Icon | 13.  : Fan Speed Icon |
| 4.  HEAT : Heating Icon | 9. TIMER ON : Timer On Icon | |
| 5.  AIR : Fan Mode Icon | 10. TIMER OFF : Timer Off Icon | |

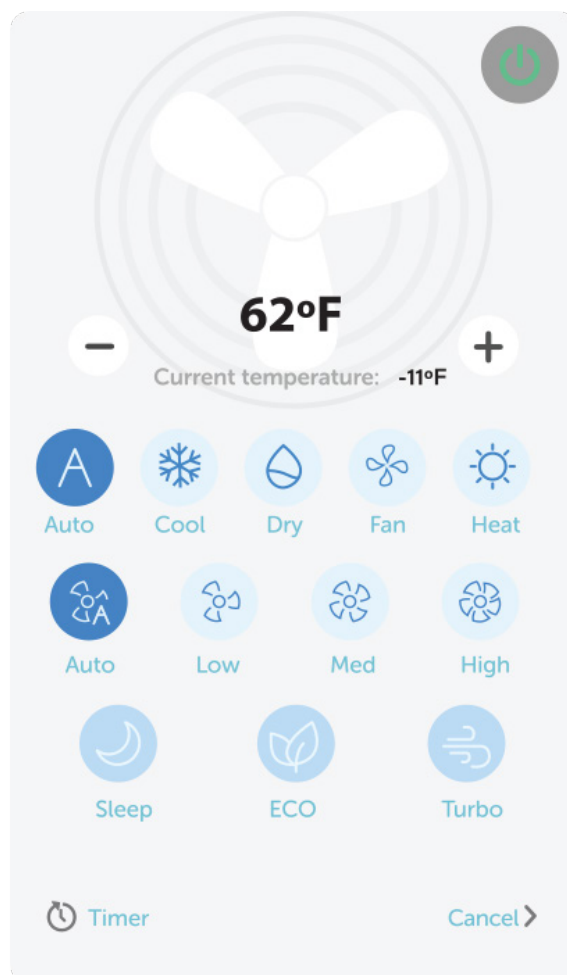
4 FUNCTIONS

4.4 App Operation

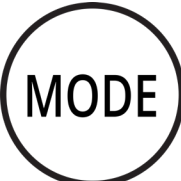
1. Scan the QR code below with your smart device to download the MRCOOL® Connect app.



2. Press and hold "MODE" on the display panel for 5 seconds until the Wi-Fi icon flashes.
3. Open the app and follow instructions to connect and configure Wi-Fi network compatibility.
4. The app interface appears as shown below once the Wi-Fi connection is successful.



4.5 Button Functions

	- Press to turn the air conditioner On/Off. - When off, this will turn off SLEEP, Turbo, Eco, and Follow Me® functions.
	Press sequentially to select Auto, Cool, Dry, Heat, and Fan modes.
	- In Auto, Cool, Dry, or Heat modes, adjust the temperature. Range: 62.6°F~86°F (17°C~30°C) - In Fan mode, the room temperature will be displayed and cannot be adjusted.
	Child Lock: Long-press the "Function" button for 3 seconds to enable/disable the child lock.
	- In Heat or Auto (Heating) mode, auxiliary heat is on by default. Press the heat button to toggle the function On/Off. - When the "Filter Full" indicator is lit, long-press this button for 3 seconds to reset and clear the display.
	Child Lock: Long-press the function button for 3 seconds to enable/disable the child lock.
	Sleep Mode: - In Cool or Heat mode, press "Function" to select "Sleep", then press "Confirm" to activate. - To cancel, select "Sleep" and press "Cancel". <i>Logic: The system sets an 8-hour sleep cycle. The temperature adjusts automatically every hour for the first 2 hours, remains constant for the next 6 hours, and adjusts once more upon waking.</i>

4 FUNCTIONS

	Turbo Mode: 1. In Cool or Heat mode, press "Function" to select "Turbo" and then "Confirm" to activate the mode. 2. To cancel, select "Turbo" and press "Cancel".
	Eco Mode: 1. In Auto, Cool, or Heat mode, press "Function" to select "Eco", then press "Confirm" to activate. 2. To cancel, select "Eco" and press "Cancel". <i>Logic: For the first 2 hours, the set temperature adjusts every hour, and fan speed is set to Auto. After 2 hours, the temperature remains constant.</i>
	Follow Me® (available on some models): 1. When powered on, press "Function" to select "Follow Me®", then press "Confirm" to activate. 2. The controller senses the ambient temperature around itself and adjusts the AC operation accordingly. <i>Note: If unsupported, the icon cannot be selected.</i>
	Timer: 1. Press "Function" and use the "▲/▼" button to select "Timer Off" or "Timer On", press "Confirm". 2. Use the "▲/▼" button to adjust the time, press "Confirm" to save. 3. Set time to 0 to cancel the timer. <i>Note: Timer On/Off must be set while the unit is respectively OFF/ON. Range: 0-24 hours. Power loss before the scheduled time will cancel the timer; it must be reset after power restoration.</i>
	Dry/Bold (likely refers to post-heating blow dry): Used to manage residual moisture after heating operations.

Static Pressure Setting Method (for units with adjustable static pressure fans)

1. In standby mode, press the power and mode buttons simultaneously for 8 seconds.
2. The buzzer will produce a long beep and the display will show "nA".
3. Short-press the confirm button.
4. Short-press "▲" or "▼"
 - Display shows 1: Represents 0.04 in w.c. (10 Pa) static pressure.
 - Display shows 2: Represents 0.12 in w.v. (30 Pa) static pressure.
5. Press "Confirm" to save the selection.
6. Press "Cancel" twice to return to the normal interface.

5 - Troubleshooting

If the following codes appear on the display during operation, a fault may have occurred.

Troubleshooting Steps:

1. Turn off the unit and cut off the power.
2. Wait 10 seconds, restore power, and turn on.
3. If the code disappears, continue using.
4. If the code persists, turn off the unit, cut the power, and contact maintenance.

Code	Fault Description
Eb	Communication fault between the wired controller and main board or the LCD and main board. (Reports fault if no communication for 6s after power-up, or 150s during operation).
E0	Indoor EEPROM fault.
E1	Indoor/outdoor communication fault
E3	Indoor fan motor stall fault
E6	Water full fault (drain pump issue)
E7	Outdoor fan motor stall fault
E11	Neutral and live wires reversed
E12	Phase sequence reversal fault
E13	Compressor low pressure fault
E51	Outdoor EEPROM fault
E52	Outdoor condenser sensor (T3) fault
E53	Outdoor ambient temperature sensor (T4) fault
E54	Outdoor discharge sensor fault
E60	Indoor ambient temperature sensor fault
E61	Indoor evaporator temperature sensor (T2) fault
E6A	Indoor evaporator temperature sensor (T2B) fault
P43	Phase loss protection
P81	Outdoor overcurrent protection
PB	Compressor low pressure protection
PC	Compressor high pressure protection
PL	Refrigerant leak fault



MRCOOL®
COMFORT MADE SIMPLE

TravelCool™ Wired Controller

The design and specifications of this product and/or manual are subject to change without prior notice.
Consult with the sales agency or manufacturer for details.