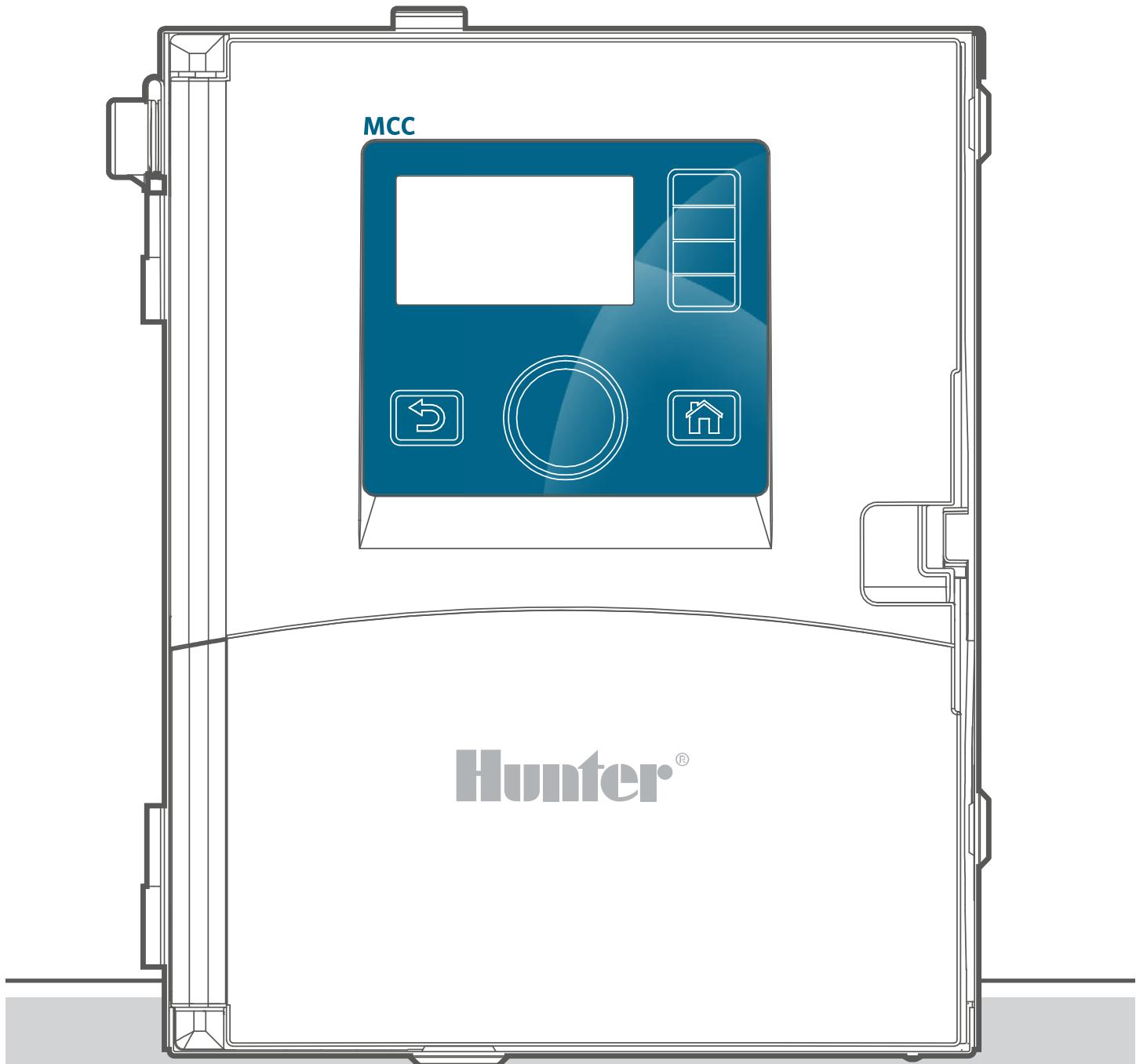


# MCC Controller



Quick Start Guide

**Hunter®**

# HUNTER MCC COMMERCIAL IRRIGATION CONTROLLER

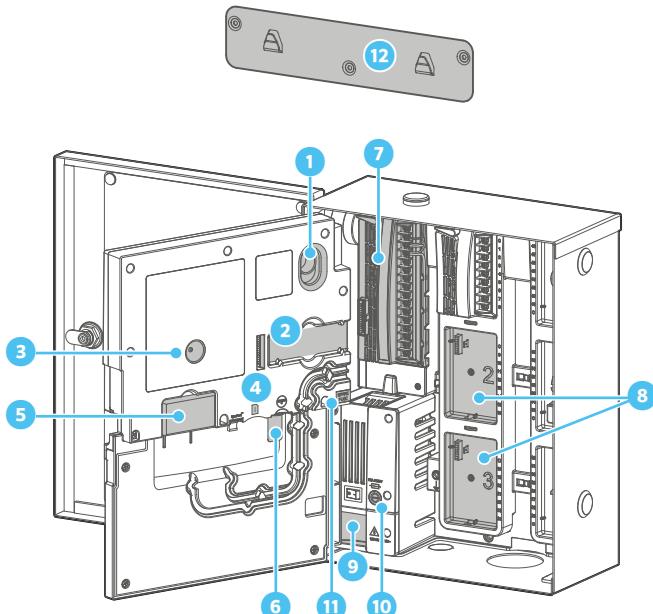
Commands up to 108 stations with conventional, EZ Decoder two-wire, and Wireless Valve Link control

Controller Components .....	2
Removing the Front Door .....	2
Wall Mounting .....	3
Connecting Power .....	3
Wiring Diagrams .....	4
Earth Ground (Lightning) .....	5
Power Module Wiring .....	6
Station Module Wiring .....	6
EZ Decoder Output Module .....	6
Wireless Valve Output Module .....	6
Centralalus™ Communication .....	7
Updates .....	7
Programming .....	7
Compliance .....	7
FCC Notice .....	7



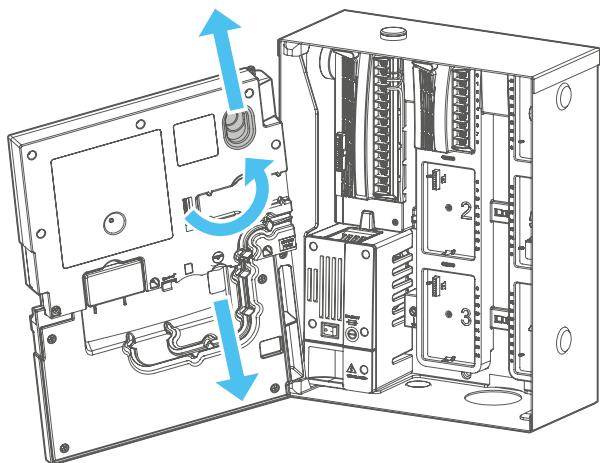
hunter.help/MCC

## Controller Components



1. Door Latch
2. Ribbon Cable
3. Reset Button
4. SD Card Reader
5. Communication Module Slot
6. Battery Tab
7. Power Module (MCC-PM)
8. Output Module Slots
9. Transformer Wiring Compartment
10. Fuse
11. Spare Fuses
12. Wall Mount Bracket

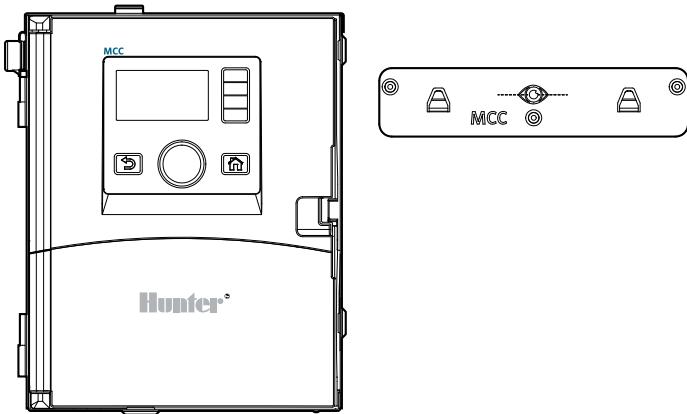
## Removing the Front Door



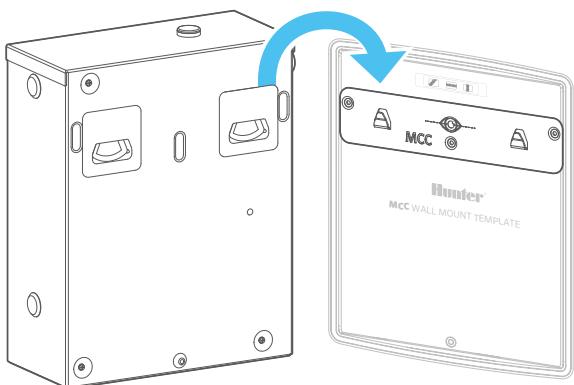
1. Disconnect the ribbon cable.
2. Pull the door latch down and tilt the door out.
3. Reverse the process after installation is complete, and reattach the ribbon cable.
4. Pull the battery tab to activate date/time backup.

## Wall Mounting

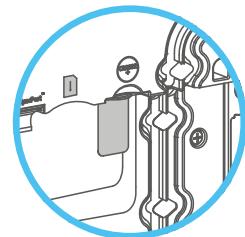
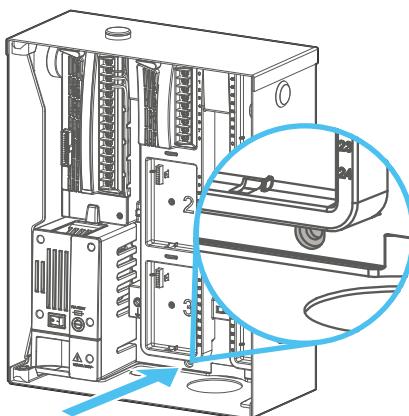
1. Choose a location for the outdoor controller. Avoid direct sprinkler spray and high-voltage electrical devices. Shaded locations are recommended.
2. Locate the wall bracket and paper template.



3. Tape the template in place, drill mounting holes, and install anchors.



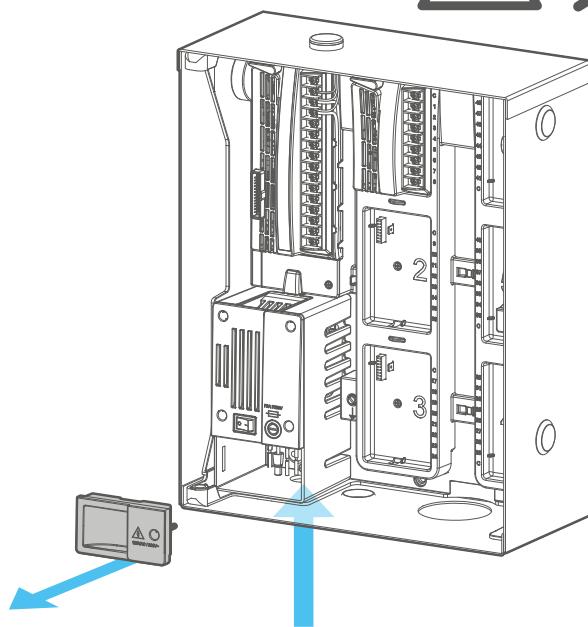
4. Mount the wall bracket with the supplied hardware so the bottom sits at eye level with the display.
5. Hang the controller on the wall bracket hooks.
6. Open the door and install the bottom center screw into the wall.



7. Remove the tab on the internal battery to enable date/time backup during power outages.
8. Proceed with connecting power.

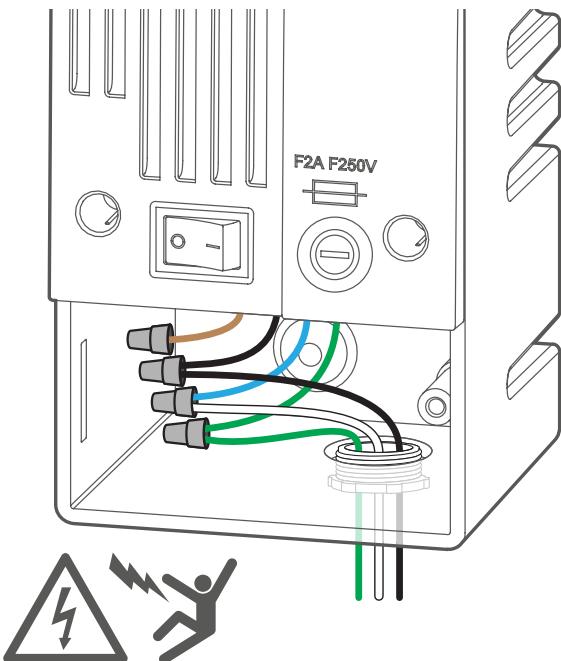
## Connecting Power

1. Verify the power source is off.
2. Remove the Wiring Compartment Cover.
3. Route the AC power wires through the approved conduit into the wiring compartment.
4. Make power connections with terminal block or wire nuts in accordance with local codes.

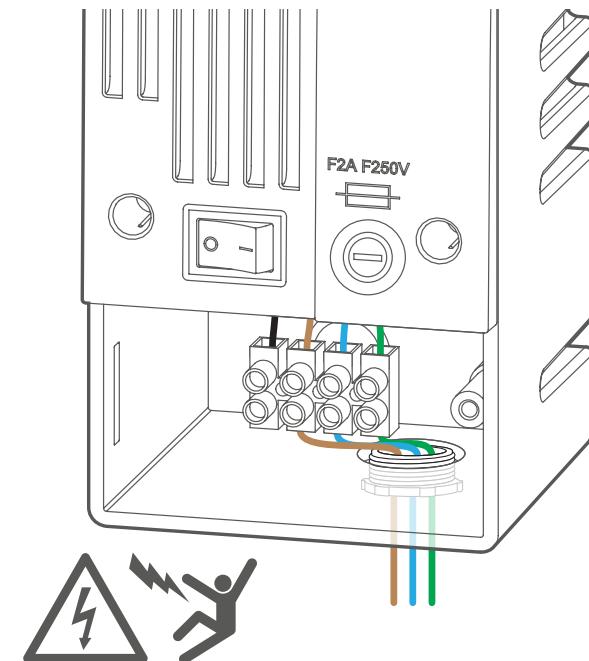


## Wiring Diagrams

### 120 V WIRE NUT



### 230 V TERMINAL BLOCK



#### 120 VAC POWER (NORTH AMERICA)

Insulate any unused wires with taped wire nut or terminal block.

	Transformer Wire		Power Source	
1	Black	120 V Hot	Black	120 V Hot
2	Blue	Neutral	White	120 V Neutral
3	Brown	Not Used (230 V)	--	--
4	Green or Yellow	Safety Ground	Green or Yellow	Safety Ground

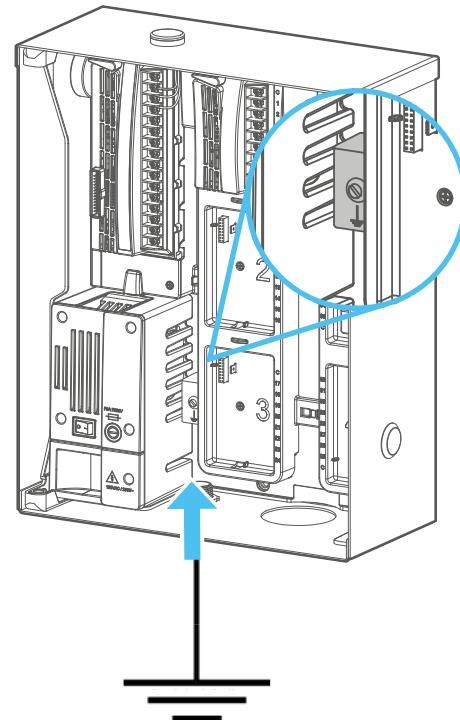
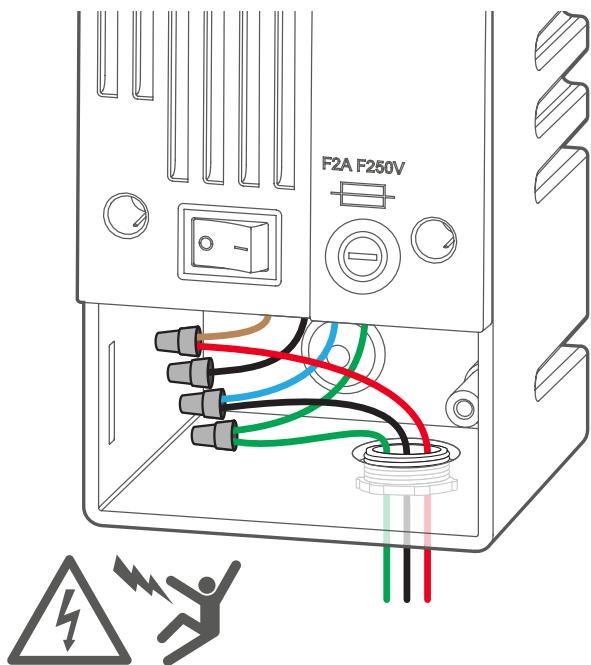
#### 230 VAC POWER (INTERNATIONAL)

Insulate any unused wires with taped wire nut or terminal block.

	Transformer Wire		Power Source	
1	Black	Not Used (120 V Hot)	--	--
2	Blue	230 V Neutral	Blue	230 V Neutral
3	Brown	230 V Hot	Brown	230 V Hot
4	Green or Yellow	Safety Ground	Green or Yellow	Safety Ground

## Earth Ground (Lightning)

### 240 V WIRE NUT



#### 240 VAC POWER (NORTH AMERICA)

Insulate any unused wires with taped wire nut or terminal block.

Transformer Wire		Power Source	
1 Black	Not Used, Cap Off	--	--
2 Blue	240 V L1 Input	Black	240 V L1
3 Brown	240 V L2 Input	Red	240 V L2
4 Green or Yellow	Safety Ground	Green or Yellow	Safety Ground
		White (Neutral)	Not Used



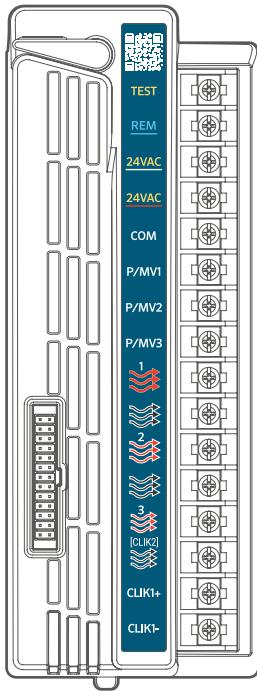
A licensed electrician is strongly recommended for this connection.

North American 240 V wiring typically involves connecting to both hot lines (L1 and L2) of the split-phase system. Neutral (white) is not used.

The controller is not designed for direct connection to three-phase circuits.

1. Route the heavy-gauge, solid-copper wire (minimum 10 AWG (6 mm<sup>2</sup>)) through the conduit into the low-voltage opening (remove the knockout in plastic versions).
2. Connect tightly to the copper ground lug.
3. Connect the wire to the 8' (2.5 m) copper-clad steel ground rods or suitable copper plates to 10 Ω resistance or less at a minimum of 8' (2.5 m) away from the controller.

## Power Module Wiring



Terminal	Description	Notes
TEST	Constant 24 VAC for testing wires or other low-power needs	750 mA max
REM	Wiring terminal for SmartPort® Wiring Harness	Blue wire, data only
24VAC (white)	Terminal for SmartPort, other low-power needs	750 mA max
24VAC (red)	Terminal for SmartPort, other low-power needs	750 mA max
COM	Common terminal for P/MV power	P/MVs only
P/MV1	Pump/Master Valve output 1	800 mA max
P/MV2	Pump/Master Valve output 2	800 mA max
P/MV3	Pump/Master Valve output 3	800 mA max
Flow 1+	Flow Sensor 1 positive	
Flow 1-	Flow Sensor 1 negative	
Flow 2 +	Flow Sensor 2 positive	
Flow 2 -	Flow Sensor 2 negative	
*Selectable +	Selectable Sensor positive (Flow 3, Clik 2, or Solar Sync®)	
*Selectable -	Selectable Sensor negative (Flow 3, Clik 2, or Solar Sync)	
Clik 1+	Clik 1 positive	
Clik 1-	Clik 1 negative	

## Station Module Wiring

1. Insert the module tabs into the slot and tip into place. (ICM-2200 will only work in slots 5 and 6.)
2. Close the locking lever.
3. Press the RESET button on the back of the facepack after any module changes.
4. Verify new station count in the run times dial position.



Note: Only the following output modules are compatible with the MCC: ICM-800 and ICM-2200 Output Modules; EZ-DM Decoder Output Modules that say "Enhanced" or "MCC Compatible" on the box; all Wireless Valve Output Modules.

ICM-400 Output Modules are not compatible with the MCC.

All enhanced modules are still backward-compatible with the ICC2. For a complete list of compatible module date codes, see the MCC support page at [hunter.help/MCC](http://hunter.help/MCC).

Output Module Options: Sold separately.

### EZ DECODER OUTPUT MODULE

Connect the field devices as shown in their respective installation guides.



### WIRELESS VALVE OUTPUT MODULE

Connect the field devices as shown in their respective installation guides.



## Centralus™ Communication

For Centralus communication modules, connect field devices as shown in their respective installation guides. For wireless connections, the addition of the Hunter Universal Antenna Extension Kit (ANT-EXT-KIT) is strongly recommended.



[hunter.help/centralus](http://hunter.help/centralus)

## Updates

The controller and all of its internal modules can be updated with an SD card (included in the card reader in the back of the facepack). Visit the MCC Controller product page at [hunter.info/MCC](http://hunter.info/MCC) and download the firmware update file from the Documents section onto the SD card. Reinsert the card into the controller, then use the Firmware Update function on the Advanced Features menu to update the controller.

## Programming

Refer to the included door card for an overview of programming functions and menus. For complete operating instructions in multiple languages, visit our web support page:



[hunter.help/MCC](http://hunter.help/MCC)

## Compliance

### FCC NOTICE

This equipment has been tested and found to comply with the limits for a Class B digital device pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses, and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, you are encouraged to try to correct the interference by taking one or more of the following measures:

- Reorient or relocate the receiving antenna.
- Increase the separation between the equipment and receiver.
- Connect the equipment into an outlet on a circuit different from that of which the receiver is connected.
- Consult the dealer or an experienced radio/TV technician for help.

Changes or modifications not expressly approved by Hunter Industries could void the user's authority to operate this device. If necessary, consult a representative of Hunter Industries Inc. or an experienced radio/television technician for additional suggestions.



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Helping our customers succeed is what drives us. While our passion for innovation and engineering is built into everything we do, it is our commitment to exceptional support that we hope will keep you in the Hunter family of customers for years to come.

A handwritten signature in black ink, appearing to read "G.R. Hunter".

**Gregory R. Hunter, CEO of Hunter Industries**

A handwritten signature in black ink, appearing to read "Denise Mullikin".

**Denise Mullikin, President, Landscape Division**

**HUNTER INDUSTRIES | Built on Innovation®**

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