Wattstopper®

MechoShade Systems/Wattstopper DLM
Integration Guide

10/2025

OVERVIEW

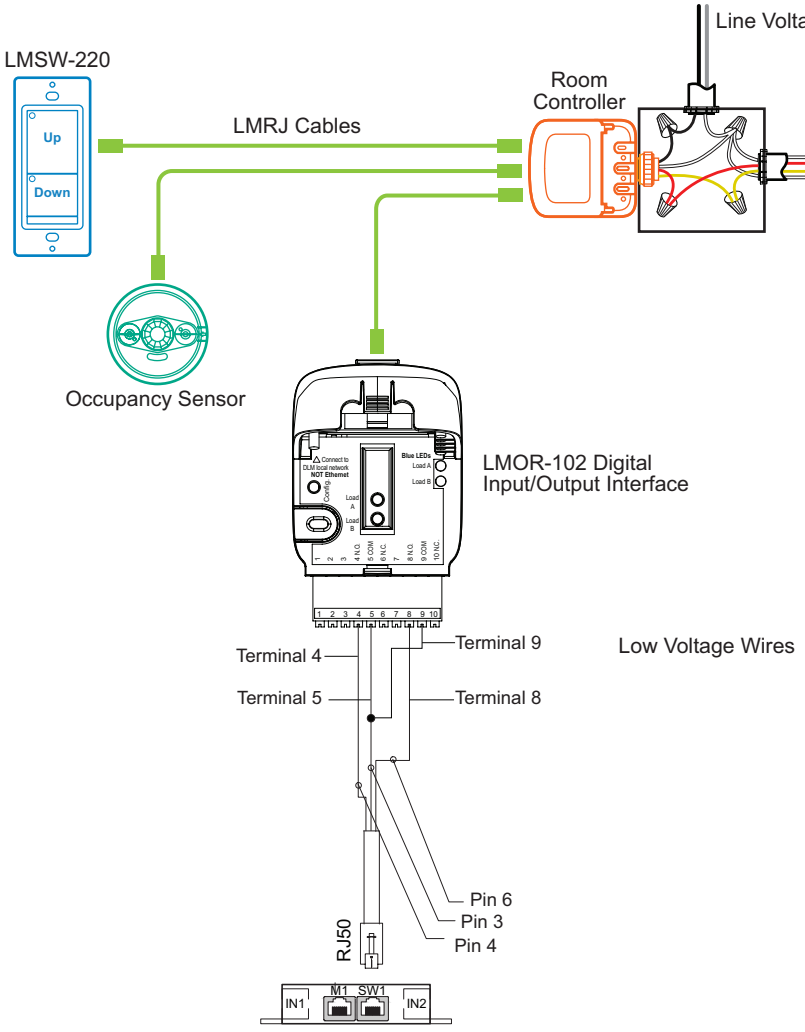
Wattstopper DLM Lighting Control systems can easily and reliably control iQ2 AC and DC motors found in Mecho® shades through a simple dry contact connection. The recommended method to integrate Wattstopper DLM with Mecho shades is to connect a DLM Low Voltage Dual Relay Interface (LMOR-102) to the “SW1” port on the Mecho iQ2+ Single Motor Splitter (for AC motors) or direct to the RJ45 connection for DC Motors (if control is coming from the DC panel).

- iQ2 motors support direct integration via a contact closure, however this is not supported for Mecho shades with iQ3 motors.
- Mecho supports grouping so that all shades in a room will respond to a single contact closure.
- This integration is 1-way communication.
- The DLM 1-Button and 2-Button Standard Switches (LMSW-210-x, LMSW-220-x) are the recommended switches for control.

NOTE: LMSH-SW2xx series switches are not supported.

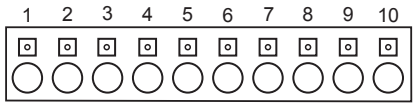
WIRING DIAGRAMS

Contact Closure Wiring Diagram with Connection to DLM Network



To iQ2+ SINGLE SPLITTER in an AC Shade System
OR
To RJ45 Coupler in a DC Shade System

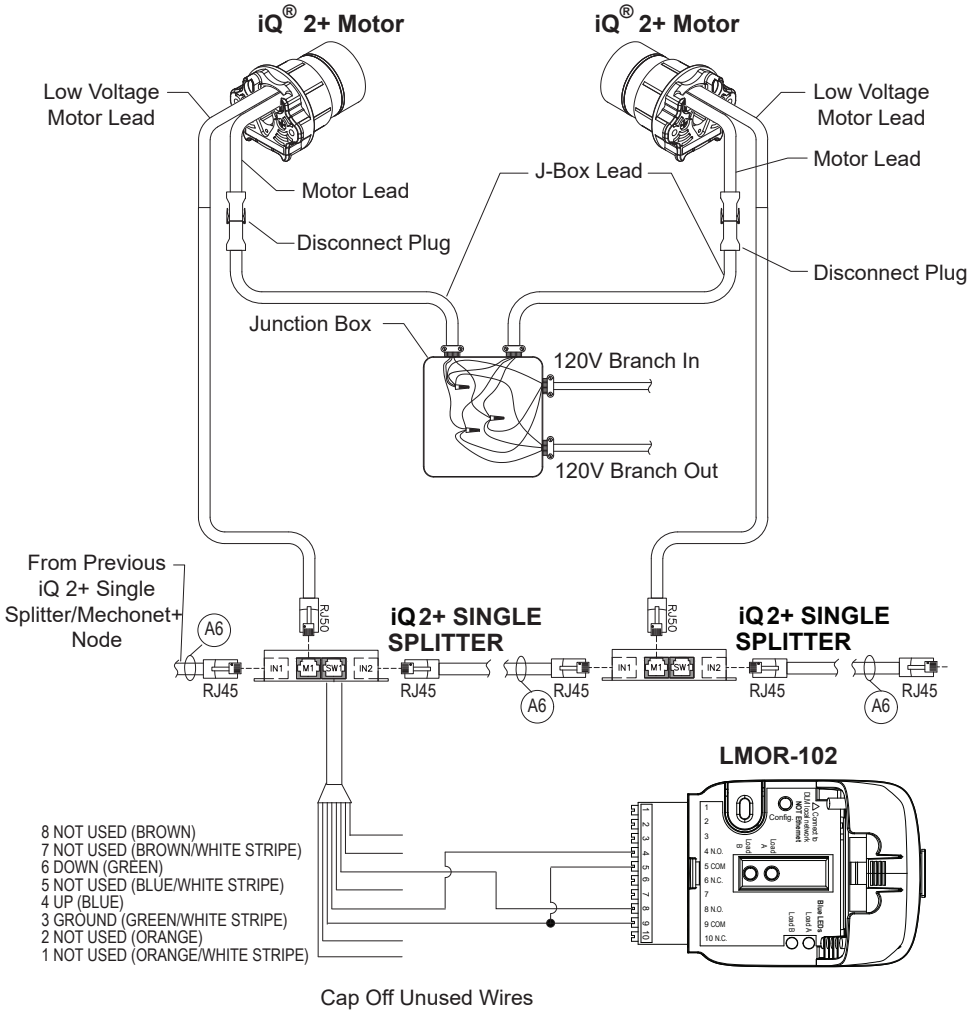
LMOR Terminal Block



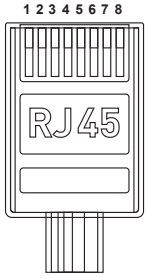
Position (L-R)	Description
1	Not Used
2	Not Used
3	Not Used
4	Relay 1 Normally Open (N/O)
5	Relay 1 Common
6	Relay 1 Normally Closed (N/C)
7	Not Used
8	Relay 2 Normally Open (N/O)
9	Relay 2 Common
10	Relay 2 Normally Closed (N/C)

Mecho® INNOVATIVE DESIGN. TRUSTED PERFORMANCE.

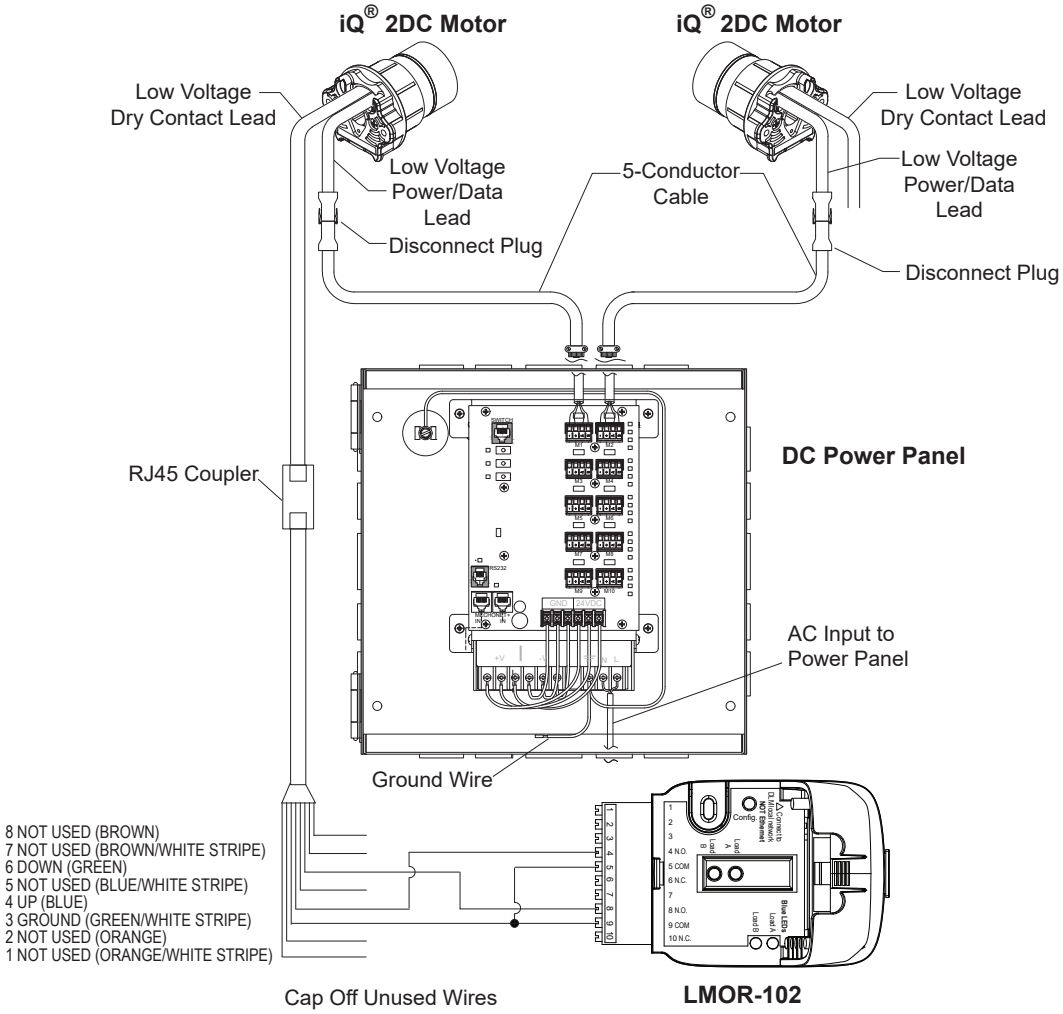
MechoShade AC System Integration with Wattstopper LMOR-102



Cap Off Unused Wires

EIA 568B Crimping Instructions – 8-Conductor Cables For SW1 Port Connections on iQ2+ Single Splitter			
Low Voltage Cable (CAT5/CAT5e/CAT6 Cable) 8-Position, 8-Contact, Modular Plug Assembly RJ45  Straight-Through Cable Termination 1 & 2 (Same)	**CATX Crimp**		
	Pin	**Color Code**	**Function**
	1	Orange/White Stripe	Not Used
	2	Orange Solid	Not Used
	3	Green/White Stripe	Ground
	4	Blue Solid	Up
	5	Blue/White Stripe	Not Used
	6	Green Solid	Down
	7	Brown/White Stripe	Not Used
	8	Brown Solid	Not Used

MechoShade DC System Integration with Wattstopper LMOR-102



BUTTON PERSONALITIES & PROGRAMMING REQUIREMENTS

Mecho shades have preset 'button personalities' that determine how the shades will respond to a contact closure. These button personalities are programmed into the iQ2 motors.

- The switch input on the motor can be programmed to a specific motor group.
- Motors can be assigned to multiple motor groups to support the desired control scheme in the space.
- Motors need to be programmed with one of the maintained button personalities (from the table below).
- Motors in a room need to be programmed to respond to the switch command.
- Motors can be programmed to multiple switch inputs.

Depending on the button personality chosen, different behaviors are expected. The table below lists two recommended button personalities, along with examples of the expected button behavior.

MECHO BUTTON PERSONALITY	DESCRIPTION	# OF BUTTONS REQUIRED PER SHADE/ GROUP	EXAMPLE OF EXPECTED BUTTON BEHAVIOR
1A (Wired to the UP button, RJ45 pins 3 = COM and 4 = UP only)	Garage Door button behavior	1	Tap the Button, shade will move up. Tap the Button while the shade is moving and it will stop. Tap the Button again and the shade will move down.
3T	Up/Down - Tap	2	Tap the Up Button, shade will move up. Tap either button while the shade is moving and it will stop. Tap the Down Button, shade will move down. Shade will automatically stop after moving fully up or down.

NOTE: Button personalities can be modified by Mecho technicians. Additional button personalities exist, however the button personalities listed above are recommended based on ease, popularity, and DLM compatibility.

SWITCH EXAMPLES

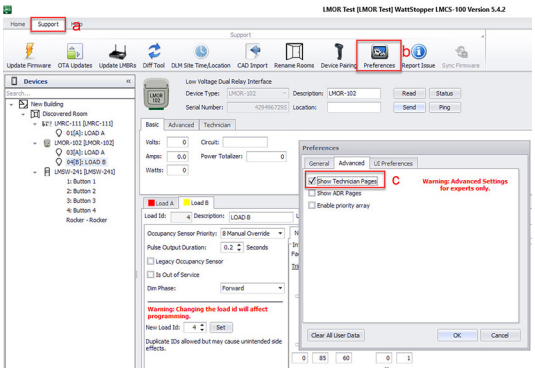
Type	Description	Example
1-Button Switch	The DLM 1-Button Standard Switch (LMSW-210-x) supports the 1A button personality. The single button will be designated for moving the shades up and down. **NOTE:** Example shown uses custom labeling.	
2-Button Switch	The DLM 2-Button Standard Switch (LMSW-220-x) supports the 3T button personality. The top button will be designated for moving the shades up and the bottom button for moving the shades down. **NOTE:** Example shown uses custom labeling.	

MOTOR ADDRESS GROUPING

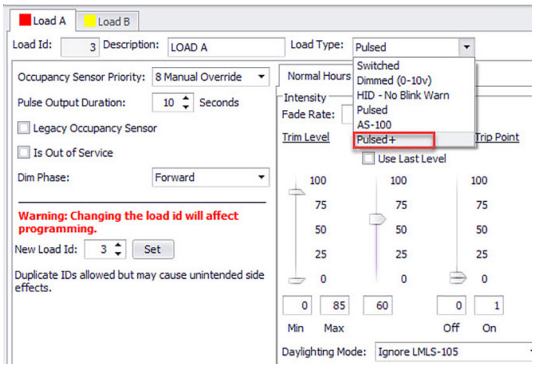
1. Each motor can belong to multiple address groups, allowing them to respond to various commands.
2. Each motor has a switch address, which is the address that switch commands (connected to the motor via the splitter) will be sent.
   - For a motor to respond to a switch command, one of its addresses should match the address of the switch command that is received from one of the motors.

LMCS CONFIGURATION

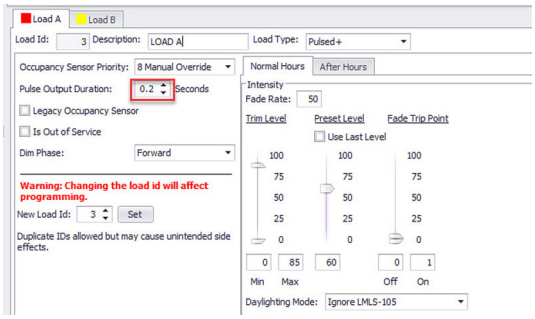
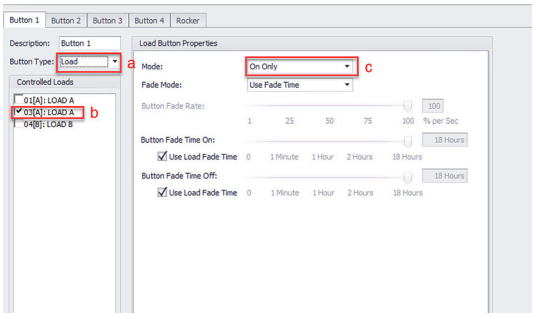
1. To configure a sub-second pulsed output, Technician Pages need to be enabled, by navigating to the Support tab > Preferences > Advanced > Show Technician Pages.



2. For both relays on the LMOR (A = Up and B=Down) set the Load Type to Pulsed+.



3. For both relays on the LMOR, in the Technician Tab, set the Pulse Output Duration to 0.2 Seconds.



4. For each button being used to control an LMOR relay:
   a. Set the button type to Load.
   b. Set the controlled load to the appropriate LMOR Relay.
   c. Set the Mode to On Only.