

OWNER'S MANUAL



MLC-RW

Marine Lighting Controller

Thank you for purchasing a JL Audio Marine Lighting Controller for your sound system.

This product has been designed and manufactured to exacting standards in order to deliver years of enjoyment. For maximum performance, we highly recommend that you have your MLC-RW installed by an authorized JL Audio dealer. Your authorized dealer has the training, expertise and installation equipment to ensure optimum performance from this product. Due to the complexity of modern electrical systems, we do not recommend self-installation unless you have extensive experience in automotive and marine electrical systems. Should you decide to install this product yourself, please take the time to read this manual thoroughly to familiarize yourself with its installation requirements and setup procedures.

If you have any questions regarding the instructions in this manual or any aspect of the product's operation, please contact your authorized JL Audio dealer for assistance. If you need further assistance, please submit a request to the JL Audio Technical Support Department at www.jlaudio.com/support or call (954) 443-1100 during business hours.



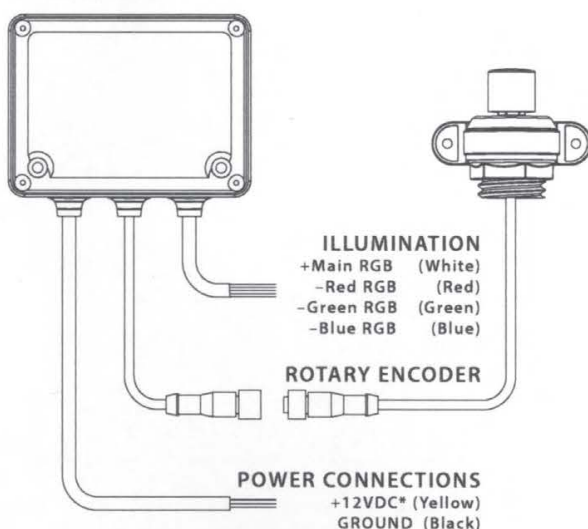
FCC Compliance Statement

This equipment has been tested and found to comply with the limits of 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 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, the user is encouraged to try to correct the interference by one or more of the following measures:

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

Any changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate this equipment.

Connections

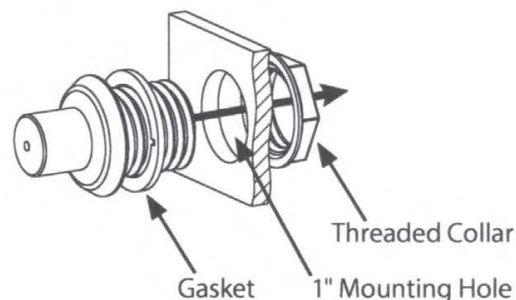


* Install a fuse at the +12VDC Power Wire (Yellow) connection point that is appropriate for the total current draw of all LED circuits.

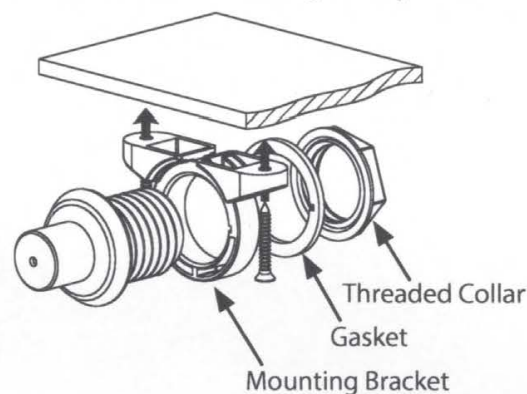
Safety Considerations

- Install the controller module in a dry, well-ventilated location that does not interfere with factory-installed systems. Do not install where it will be directly exposed to the elements.
- Do not mount this product in an engine compartment or areas of extreme heat. Areas exposed to a heater or hot air should also be avoided.
- Securely mount this product so that it does not come loose in the event of a collision, sudden jolt or as a result of repeated vibrations during normal use.
- Check before drilling to make sure that you will not be drilling into an exterior panel/hull, fuel tank, gas/brake line, wiring harness or other vital system.
- Do not run system wiring outside or underneath the vehicle/vessel. This is an extremely dangerous practice, which can result in severe damage/injury.
- Protect all system wires from sharp edges and wear by carefully routing them, tying them down and using grommets and loom where appropriate. Secure all wiring using cable ties or wire clamps, as needed.

Panel-Mounting Rotary Encoder



Under-Dashboard Mounting Rotary Encoder



Product Description

The MLC-RW is an advanced controller designed for managing RGB LED lighting circuits. Outfitted with PWM technology and high-capacity circuitry, the MLC-RW produces up to 30 amps (400 watts) of continuous output to power modern, multi-LED networks.

All LED functions are easily controlled with the included rotary encoder or using your handheld device via built-in WiFi connection. Note: Wireless functionality requires your compatible iOS® or Android® device and the LiteWave ITI app (see WiFi Functionality section for more info).

The MLC-RW also includes a suite of onboard safety features, including automatic over-current and short-circuit protection, as well as voltage and temperature monitoring.

What Is Included

- (1) MLC-RW Control Module
- (1) Rotary Encoder
- (2) #8 x 1-1/2-inch Phillips-head stainless-steel screws for control module mounting
- (2) #8 x 1/2-inch Phillips-head stainless-steel screws for rotary encoder mounting
- (1) Owner's manual

WiFi Functionality

The MLC-RW is outfitted with built-in WiFi network capabilities enabling wireless control using your compatible iOS® or Android® device running the LiteWave ITI app. (Note: LiteWave ITI is a third party app available for download on the App Store and Google Play.) Refer to the instructions below to connect the MLC-RW with the LiteWave ITI app.

1. Download the LiteWave ITI app from the App Store or Google Play.
2. Make sure that the MLC-RW is connected and powered on.
3. In your device's WiFi settings, connect your device to the "LiteWave_XXXX" network name. (The default password is: **password**)
4. Launch the app on your device. When prompted, update your password and install new firmware, if available.

Control Module Placement & Connection

While the MLC-RW control module can be mounted in any orientation, its installation location and distance should be considered when selecting a mounting position for the rotary encoder and making connections. Use the two #8 x 1-1/2-inch phillips-head stainless-steel screws to mount the control module to a flat surface. Refer to the table below for wire connection info.

	Wire Color	Connection
Power	Yellow	+12VDC (Install a fuse at this connection point that is appropriate for the total current draw of all LED circuits.)
	Black	GROUND
Illumination	Red	Red RGB LED Negative (-)
	Green	Green RGB LED Negative (-)
	Blue	Blue RGB LED Negative (-)
	White	Main RGB LED Positive (+12V)

Rotary Encoder Installation

The rotary encoder uses a threaded-collar mounting design that can accommodate installations in flat panels up to 0.625 inches (16 mm) thick. An adaptor bracket is also included to accommodate under dashboard installations. Refer to the diagrams on page 2 for your specific mounting application.

Rotary Encoder Functions

The knob of the rotary encoder is used to activate and control all functions of the MLC-RW. Located in the center of the knob is an LED that will display corresponding changes in color and brightness of the output. Refer to the table below for operation and control mode info.

Command	Function/Mode
Press & Hold for 2 seconds	Power ON
Press & Hold for 5 seconds	Power OFF
Press & Hold for 10 seconds	WiFi Reset: Restores wifi "password"
Press once to advance through each Mode	Color Spectrum (default): Rotate to scroll colors
	Brightness : Rotate to adjust LED intensity
	Color Cycle : Rotate to adjust color change rate

Specifications	
Operating Voltage	10 - 17.6V DC
Operating Temperature	-4 F to +167 F (-20 C to +75 C)
Output Capacity	30 A (continuous)
Auto Protection Modes	Over-Current, Short-Circuit
Monitoring Modes	Voltage, Temperature
WiFi Band Compatibility	B, G, N

LIMITED WARRANTY - ELECTRONICS (USA)

JL AUDIO warrants this product to be free of defects in materials and workmanship for a period of two (2) years from the original date of purchase.

This warranty is not transferable and applies only to the original purchaser from an authorized JL AUDIO dealer. Should service be necessary under this warranty for any reason due to manufacturing defect or malfunction, JL AUDIO will (at its discretion), repair or replace the defective product with new or remanufactured product at no charge.

Damage caused by the following is not covered under warranty: accident, misuse, abuse, product modification or neglect, failure to follow installation instructions, unauthorized repair attempts, misrepresentations by the seller. This warranty does not cover incidental or consequential damages and does not cover the cost of removing or reinstalling the unit(s). Cosmetic damage due to accident or normal wear and tear is not covered under warranty.

Products installed as original equipment by boat manufacturers are covered by the boat manufacturer's warranty, not JL Audio, Inc.

Warranty is void if the product's serial number has been removed or defaced.

Any applicable implied warranties are limited in duration to the period of the express warranty as provided herein beginning with the date of the original purchase at retail, and no warranties, whether express or implied, shall apply to this product thereafter. Some states do not allow limitations on implied warranties, therefore these exclusions may not apply to you. This warranty gives you specific legal rights, and you may also have other rights which vary from state to state.

If you need service on your JL AUDIO product:

All warranty returns should be sent to JL AUDIO freight prepaid through an authorized JL AUDIO dealer and must be accompanied by proof of purchase (a copy of the original sales receipt.) Direct returns from consumers or non-authorized dealers will be refused unless specifically authorized by JL AUDIO with a valid return authorization number. Warranty expiration on products returned without proof of purchase will be determined from the manufacturing date code. Coverage may be invalidated as this date is previous to purchase date. Return only defective components. If one speaker fails in a system, return only that speaker component, not the entire system. Non-defective items received will be returned freight-collect. Customer is responsible for shipping charges and insurance in sending the product to JL AUDIO. Freight damage on returns is not covered under warranty.

For Service Information in the U.S.A. please call

JL Audio Customer Service: (954) 443-1100

9:00 AM – 5:30 PM (Eastern Time Zone)

JL Audio, Inc

10369 North Commerce Pkwy.

Miramar, FL 33025

International Warranties:

Products purchased outside the United States of America are covered only by that country's distributor and not by JL Audio, Inc.

