

# Installation Instructions

## RM4 LED Signals Rail – TRICOLOR / Wayside Colorlight



### BEFORE YOU BEGIN

Read these instructions completely and carefully.

### Prepare Electrical Wiring



#### Electrical Requirements

- Follow all National Electric Codes (NEC) and local codes.

### **⚠ WARNING / AVERTISSEMENT**

**Risk of Electric Shock.** Disconnect Before Servicing or installing product. The LED module must be installed into a signal head with adequate ingress protection for the location (protection from the weather).

**Risque de choc électrique.** Couper l'alimentation avant le dépannage ou avant l'installation du produit.

Le module DEL doit être installé dans une tête de signal avec une protection adéquate d'entrée pour l'emplacement (protection contre les intempéries).

### **Operating Specifications:**

### **10V Module Only**

Voltage Range:	8 to 16V DC
Input Voltage Range:	10V DC
Current Draw:	Minimum of 1.35 A

- Use only with approved microprocessor-based controllers (refer to label on module cover) as follows:
  - GETS: EL2, VHLC, EC4, EC5
  - US & S: MICROLOCK II VERSION 8
- Vital programmable control systems or relay flashers are the only approved means of flashing the LED signal.
- LED module fits into most standard railway signal heads.
- LED module is self-contained – no assembly is required.

### **Testing:**

- If testing before installation, be sure to use a **constant power source rated 10V / 2 A minimum** to ensure proper operation of the LED signal.

**NOTE:** Failure to do so will activate the light-out safety detection feature of the LED signal and disable the lamp's operation.

### **Installation Steps:**

**NOTE:** Failure to properly follow these instructions may cause signal to malfunction.

1. **Existing signal head in the field:** Remove lens and incandescent bulb assembly from housing.
2. **Existing in-line rheostat in the field:** Set rheostat (variable resistor) to zero "0" or remove completely.
3. **Voltage settings:** Check the label on the back of the LED module to ensure the voltage corresponds to the system voltage. The recommended voltage at the signal head is 10V.
4. **Wiring:** For wire installation, please follow guidelines specified on the next page
5. **Insertion of LED module into signal head:** Insert the LED module into lens slot and tighten metal tabs, or insert LED module into the external ring holder.

## Installation Instructions (cont'd)

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If the lamp is **NOT** inserted in the correct orientation, the light output of the lamp output will not meet specification.

**CAUTION**  
Risk of Electric Shock  
Install unit in enclosure tested to be suitable for wet locations only.

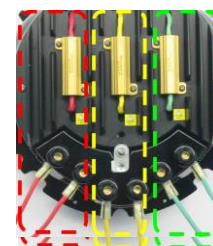
**CAUTION**  
Some surfaces may be hot



Ensure arrow “↑” points upward for proper beam



Check label for required voltage



Wire the terminals as shown, use shrink tubing color as a guide



Use wrench to tighten the brass hex nuts



Tighten plastic thumb-nuts by hand



To remove the terminal block, first pivot the latch



The terminal block can then be pulled by hand

As per AREMA guidelines, provisions should be made for periodic functional checks of safety devices and features incorporated into this product.

GE recommends that primary and secondary surge protection be added additional to the tertiary surge protection in the lamp. Arema 11.3.3

This product is intended solely for the use of rail signaling and is not intended for use in any other application.

NOTE: If you prefer to have this Installation Instructions document in **other languages**, visit our official website at: [www.currentbyge.com/transportation](http://www.currentbyge.com/transportation)

This device complies with part 15 of the FCC Rules. Operation is subject to the following two conditions: (1) This device may not cause harmful interference, and (2) this device must accept any interference received, including interference that may cause undesired operation. CAN ICES-005 (A)/NMB-005(A)  
NOTE: This equipment has been tested and found to comply with the limits for a Class A digital device, pursuant to part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference when the equipment is operated in a commercial environment. This equipment generates, uses, and can radiate radio frequency energy and, if not installed and used in accordance with the instruction manual, may cause harmful interference to radio communications. Operation of this equipment in a residential area is likely to cause harmful interference in which case the user will be required to correct the interference at his own expense.

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