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Ballast Module Warranty

Lutron warrants each new ballast module for a period of three years from the date of shipment, to be free from defects in materials or workmanship under conditions of normal use when installed and operated under Lutron product specifications and in accordance with the applicable National Electrical Code and Safety Standards of Underwriters Laboratories. Lutron shall, at its option, repair or replace any defective unit that, in its opinion, has been properly installed, wired, insulated, used and maintained, provided that Lutron shall not be required to remove, install or re-install any defective unit and provided that Lutron is promptly notified of said defect within the aforementioned warranty period. The foregoing warranty and optional remedies are exclusive and, except for the foregoing warranties, THERE ARE NO EXPRESS OR IMPLIED WARRANTIES OF MERCHANTABILITY OR OF ANY OTHER TYPE. In no event shall Lutron or any other seller be liable for consequential or special damages, nor for any repair work undertaken without its prior consent, nor shall Lutron's liability on any claim for damages arising out of or connected with the manufacture, sale installation, delivery or use of said unit ever exceed the price paid therefor. Lutron will not be responsible for any ancillary equipment not furnished by Lutron which is attached to or used in connection with the ballast module, or for operation of the ballast with any ancillary equipment and all such equipment is expressly excluded from this warranty. Furthermore, Lutron will not be responsible for any damage to the ballast module resulting from the use of ancillary equipment not furnished by Lutron for use with the ballast module.

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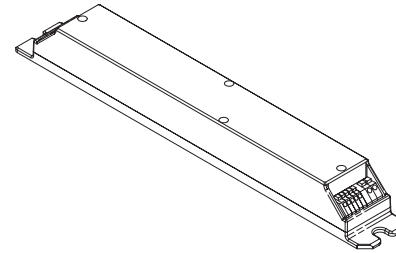
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Lutron, the sunburst design, Hi-lume, EcoSystem, PerSONNA, and Eco-10 are registered trademarks and Compact SE is a trademark of Lutron Electronics Co., Inc.

ATTENTION: Please read this guide before installing

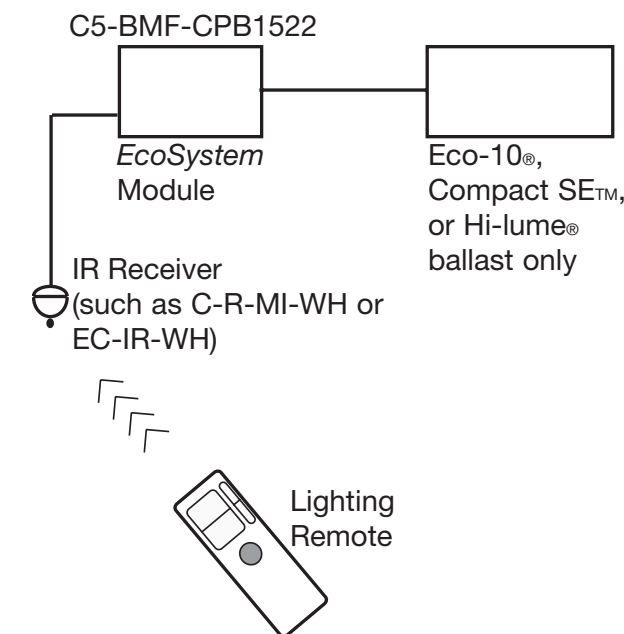
EcoSystem® C5-BMF-CPB1522

Custom ballast module with IR input for control of Lutron ballasts with a lighting fixture.



Overview

A C5-BMF-CPB1522 is a custom C5-BMF-2A with PerSONNA® functionality. It allows control of Lutron's 3-wire phase controlled dimming ballasts by a handheld transmitter (in conjunction with a C-R-M1-WH sensor for Eco-10®, Compact SE™, and Hi-lume® series only).



Custom Functionality

- Does not require *EcoSystem* Bus
- Control range: Low End to full on (cannot be turned off with IR remote)

Retained Features

- Continuous, flicker-free dimming from 100 % to minimum ballast level (10 % for *Eco-10*, 5 % for *Compact SE*, 1 % for *Hi-lume*)
- Powers and responds to one personal control input (infrared receiver)
- Universal voltage input: 120 / 240 / 277 V~ 50 / 60 Hz
- 100 % performance tested at factory
- Fixture mountable



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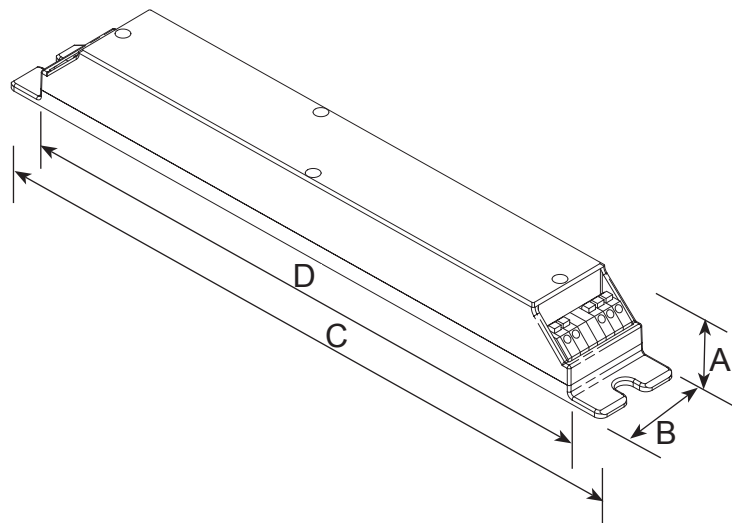
Step 1: Mount BMF

BMFs must be mounted in a UL®/NEC® recognized electrical enclosure, either a fluorescent lighting fixture or a suitable UL508 listed enclosure. Follow applicable local and national codes.

Note: BMF must be mounted within 200 feet of the ballast(s) it is controlling.

- A. DO NOT INSTALL WHILE ENERGIZED. Do not connect any electrically live circuits to the BMF prior to installation.
- B. Use the notched tabs on the end of the BMF for mounting.
- C. Use the dimensioning guide below to properly mount the BMF:
 - A = 1.0 in. (25 mm)
 - B = 1.18 in. (30 mm)
 - C = 9.3 in. (236 mm)
 - D = 8.9 in. (226 mm) mounting centers
- D. Tighten screws/bolts onto BMF's tabs.

BMF Dimensions



Step 2: Wire BMF to Ballast

Two wires are used between the BMF and an Eco-10®, Compact SE™, or Hi-lume® ballast. The wires are color coded as follows:

ORANGE = dimmed hot output (DH)

WHITE = neutral (N)

Lutron ballasts must be selected for appropriate input voltage. Verify that a 120 V~ ballast is used only with 120 V~ mains, and a 277 V~ ballast is used only with 277 V~ mains. BMFs and some ballasts may be used at either voltage.

Note: This product can only support up to 20 ballasts.

Use the following steps to wire a BMF to a ballast.

- A. DO NOT WIRE LIVE. Interrupt power via breaker before wiring between the BMF and a ballast.
- B. Use 16 or 18 AWG (1.0 or 1.5 mm²) solid conductors to wire between the BMF and the *Hi-lume* or *Eco-10* ballast.
- C. Wire the BMF's dimmed hot (DH) (ORANGE) output to the ballast's Dimmed Hot input (ORANGE)

If multiple ballasts are being driven by a BMF, wire the ORANGE wire to each ballast.

Do not use different voltage ballasts with the same BMF.

Step 3: Wire Mains to the BMF

Hot and neutral from a distribution panel are required for the BMF. Verify that the mains voltage matches the voltage rating of the ballasts that the BMF is controlling.

Use the following guidelines for wiring mains voltage to the BMF.

- A. DO NOT WIRE LIVE. Interrupt power via breaker before wiring and servicing the BMF.
 - B. BMF terminals only accept solid wire. Join mains input hot (HOT) and neutral (NEU) to 16 or 18 AWG (1.0 or 1.5 mm²) solid wire before connecting to a BMF.
 - C. Wire the hot input to the black terminal on the BMF and to the ballast.
 - D. Wire the neutral input to the white terminal on the BMF and the ballast.
 - E. Make sure ballasts are correctly connected to BMF (step 2).
 - F. Turn on breaker to energize the BMF.
 - G. Attached ballasts and lamps will turn on to full light output.
- If multiple ballasts are being driven by a BMF, wire the black and white wires to each ballast.

Note: if lamp(s) do not turn on, verify that 120 V~ or 277 V~ is present at the input of the BMF and at the input of each ballast.

Step 4: Wire Sensor to the BMF

- A. The IR sensor (such as C-R-MI-WH or EC-IR-WH) is PELV (Class 2: USA) low voltage. Do not combine any sensor wiring with mains wiring. Follow all national and local electrical code restrictions when wiring PELV (Class 2: USA) devices.
- B. Wire sensors as instructed by its instruction sheets.
- C. Only one solid 22 AWG wire may be used in each low voltage terminal on the BMF.

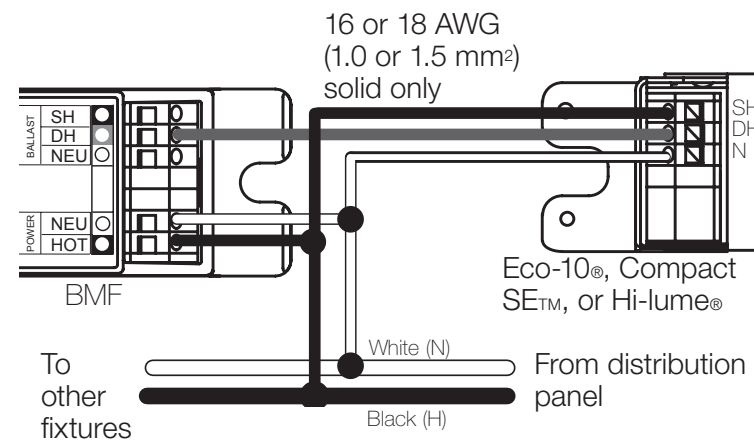
Setup Warning

Do not use an *EcoSystem* handheld programmer (C-PDA-CLR) on this custom BMF. Doing so could change the custom default settings and require a field service visit at your expense.

Step 5: Final Check

- A. Energize circuit to the BMF.
- B. Use IR handheld transmitter (such as C-FLRC-WH) to raise and lower the lights.

Wiring to a Single Ballast



Wiring to Multiple Ballasts

