

Wireless
LCM-1C09-RF
Lighting Controller

Wireless Lighting Controller ON/OFF & 0(1)-10V Dimming

Product Features

- RF, Cordless Control of Luminaires
- 2.4GHz, +8dBm RF transmit power
- ON/OFF and 0(1)-10V Analog Dimming Control, 100mA Sink
- Compatible with LED Drivers and Electronic Ballasts that comply with IEC60929 Annex E2, 1-10V Dimming.
- ON/OFF AC switching up to 277Vac
- Stores last dim setting even when powered off.

Environmental

1. Operating temperature: Tc Maximum 72 °C, Ambient -5 to +50°C Max.
2. Storage temperature range: -40 to +80°C
3. Humidity (non-condensing): 5% - 95%RH
4. Cooling: Convection
5. Vibration Frequency: 5-55Hz/2g, 30 minutes
6. Impact resistance: 1g/s

Safety and Compliance

1. UL916, CSA 22.2 No. 205 safety compliant
2. FCC, 47CFR Part 15 Class B compliant
3. ZigBee HA Certified
4. Compact, Lightweight.
5. US Patent Pending
6. EN61000-4-5: 2kV L-N, 8/20 µsec surge protection.

Electrical Specifications at 25°C

- Input voltage range: 100-277Vac
- Frequency: 47 - 63HZ
- AC Relay Resistive Switched Current: ≤9A, See Page 3 and Note (1) below for load ratings.
- Input current Module Power: ≤0.05A for Units power use



IP50

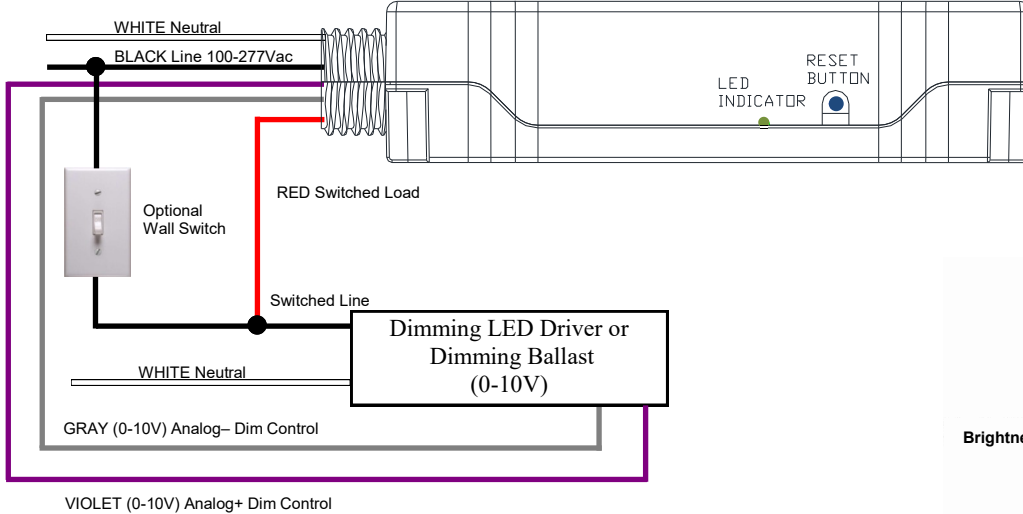


Part Numbers

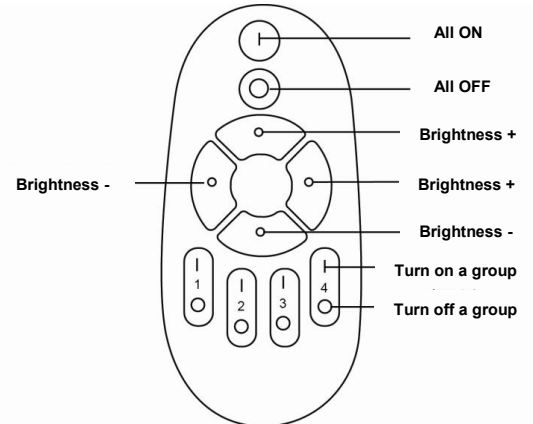
| Part Number | Dimming US Class 2 | Dimming CN Class 2 | Control | ON/OFF Control | 0(1)-10V Analog | AC Relay Voltage Range | AC Relay Maximum Current ⁽¹⁾ |
|-------------|--------------------|--------------------|---------|----------------|-----------------|------------------------|---|
| LCM-1C09-RF | YES | YES | RF | YES | YES | 100-277Vac | 9A |

Typical Application Circuit

LCM-1C09-RF



Typical -RF Version Control
Required LCM-RF-REMOTE remote control is purchased separately



(1) Max Rated AC Relay Loads (RED Wire):

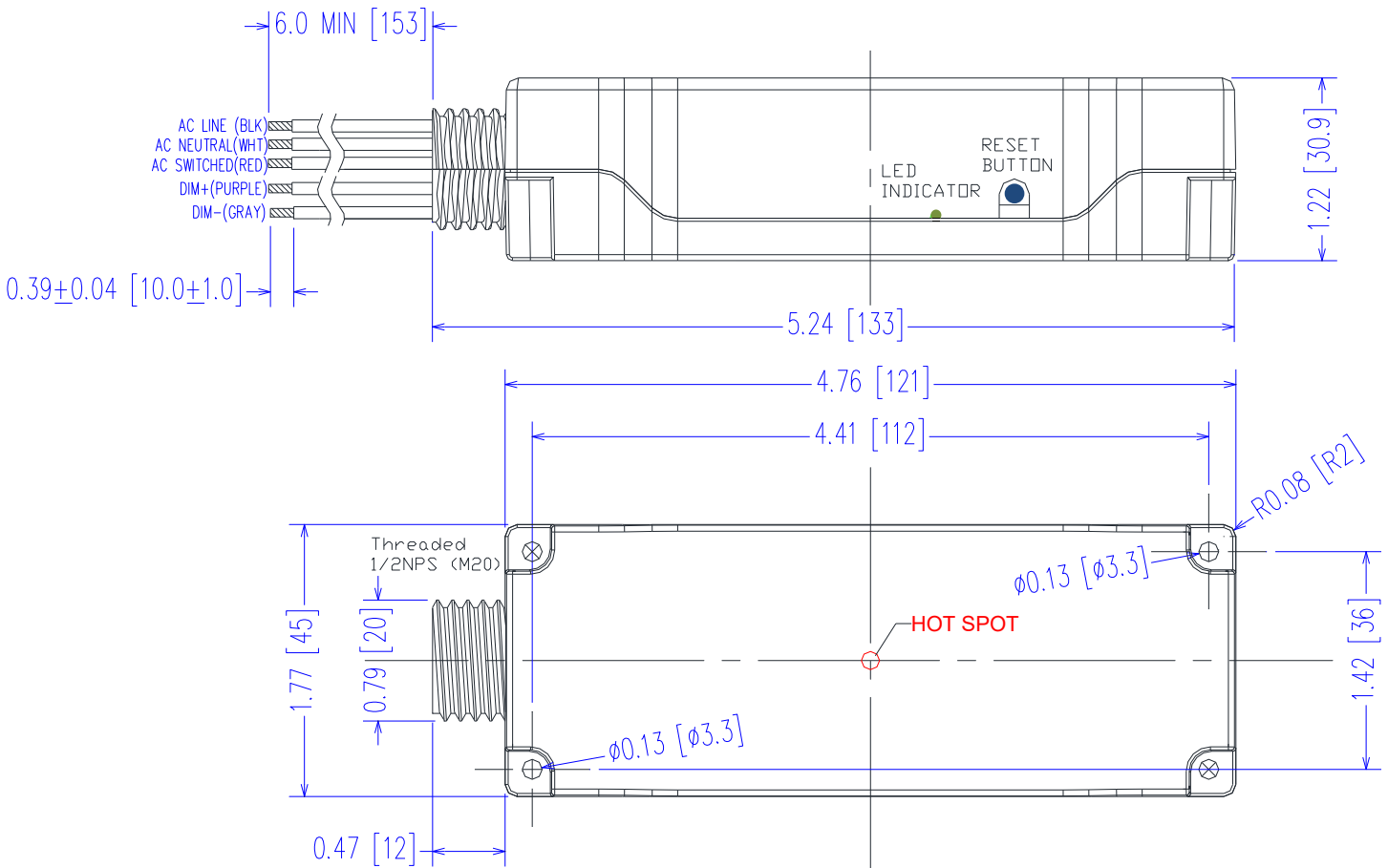
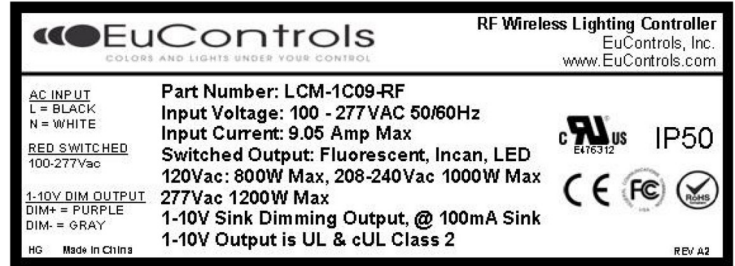
LED Driver, Electronic Ballast, Incandescent & Inductive Load: 1200W @ 277VAC, 1000W @ 208-240VAC, 800W @ 120VAC
AC Resistive Load: 100-277Vac 50/60Hz, 9A Maximum.

Wireless Lighting Controller ON/OFF & 0(1)-10V Dimming

Mechanical Dimensions: Inches [mm]

Material: Gray 5VA PC ABS Plastic Case
Weight: 105 Grams (3.7 oz.) Typical

Labeling Example



INSTALLATION & MOUNTING INSTRUCTIONS

Case can be mounted using the 2 mount holes provided.
2 each #4 x 1" Round Head Screws or equivalent.

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Input Specifications

| Parameter | Min. | Typ. | Max. | Notes/Conditions |
|---------------------------|--------|------|---------|--|
| Input Voltage | 90 Vac | — | 277 Vac | 120, 230, 240, 277 Vac Nominal Values |
| Input Frequency | 47 Hz | — | 63 Hz | 50/60Hz Nominal |
| Relay AC Current | — | — | 9.0 A | Measured at 120Vac/60Hz Input |
| RF Control Transmit Power | — | — | +8dBm | ON/OFF and 0-10V dimming, 2.4GHz GFSK Modulation |

Output Specifications

| Parameter | Min. | Typ. | Max. | Notes/Conditions |
|---|--------|------|--------|---|
| AC Relay Switch ON/OFF (Vac) | 0 | — | 277Vac | Relay N/O Contacts |
| AC Relay Load @120VAC (W) | 0 | — | 800W | Fluorescent, LED Drivers, Incandescent & Inductive Loads |
| AC Relay Load @ 208-240Vac (W) | 0 | — | 1,000W | Fluorescent, LED Drivers, Incandescent & Inductive Loads |
| AC Relay Load @ 277Vac (W) | 0 | — | 1,200W | Fluorescent, LED Drivers, Incandescent & Inductive Loads |
| AC Relay Load Resistive @ 120-277Vac (A) | 0 | — | 9A | Resistive Loads |
| Sink Current on 0-10V (+) Purple Wire | 0mA | — | 100mA | IEC60929 Annex E2 |
| Relay Inrush Current (Peak) | — | — | 68A | Measured at 120Vac/60Hz Input, 10% I _{peak} duration ~0.75msec |
| | — | — | 60A | Measured at 277Vac/60Hz Input, 10% I _{peak} duration ~0.75msec |
| Absolute Voltage Range on 0-10V (+) Purple Wire | -20.0V | — | +20V | IEC60929 Annex E2 |
| Dimming Range | 0.9V | — | +10V | Ballast or Led Driver provides Dim Voltage & Current per IEC60929 Annex E2, 0(1)-10V Analog Dimming |

Environmental Specifications

| Parameter | Min. | Typ. | Max. | Notes/Conditions |
|---|--------|------|--------|---|
| Case Temperature (T _c) | — | — | +72 °C | Measured at location specified on case. |
| Operating Temperature (T _a) | -5 °C | — | +50 °C | Operating temperature range. |
| Storage Temperature (T _s) | -40 °C | — | +85 °C | Non operating temperature range. |
| Operating Humidity | — | — | 95% RH | Relative Humidity, non-condensing. |
| Vibration | 5 Hz | — | 55 Hz | 2G, 10 minutes/1 cycle, period 30 minutes, each along X, Y, Z axis. |

Safety & EMC Compliance

| Safety | Notes/Standards |
|------------------------------------|--|
| cULus Listed | UL916, CSA 22.2 No. 205 |
| CE | EN61347-1, EN61347-2-13 |
| Withstand Voltage Relay | Input to Output Across Relay Contacts: 700 Vac |
| Withstand Voltage AC In to Dim Out | Input to DIM: >1750 Vac |
| Dimming Circuit | UL & cUL Isolated Class 2, Dim+ Purple/Dim- Gray |
| FCC | Compliant Class B |
| EN 61000-4-5 | Part 4-5: Surge Immunity test, 2 kV L-N |

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