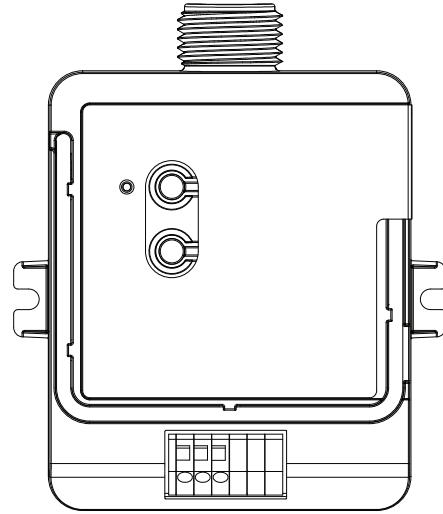


RF CCO Module

The RF CCO Module is a low-voltage radio frequency (RF) control that provides a single dry contact closure output based on input from RadioRA 2 and HomeWorks QS systems. It can be powered by 24 V~ or 24 V== for easy connection and integration into building management, HVAC, VAV, and other 3rd-party systems.

- Single contact closure output including both normally open (NO) and normally closed (NC) dry contacts
- Maintained or momentary output type
- Operates at 24 V~ or 24 V==
- Utilizes Lutron Clear Connect RF Technology – refer to model number chart below for frequency band data, and Lutron system compatibility
- Screw tabs provided for surface mounting (recommended); or mounts to an electrical junction box through a 1/2 in or 21 mm trade size knockout opening
- Complies with requirements for use in a compartment handling environmental air (plenum) per NEC® 2011 300.22(C)(3) (LMJ-model only)



Models

Model Number	Region	Operating Voltage	Frequency Band	Compatible Systems
LMJ-CCO1-24-B	U.S.A., Canada, Mexico	24 V~ or 24 V==	431.0 – 437.0 MHz	RadioRA 2, HomeWorks QS
LMK-CCO1-24-B	Europe, U.A.E.	24 V~ or 24 V==	868.125 – 868.850 MHz	

NOTE: Contact Lutron for frequency band compatibility for your geographic region if it is not indicated above.

RF CCO Module

Specification

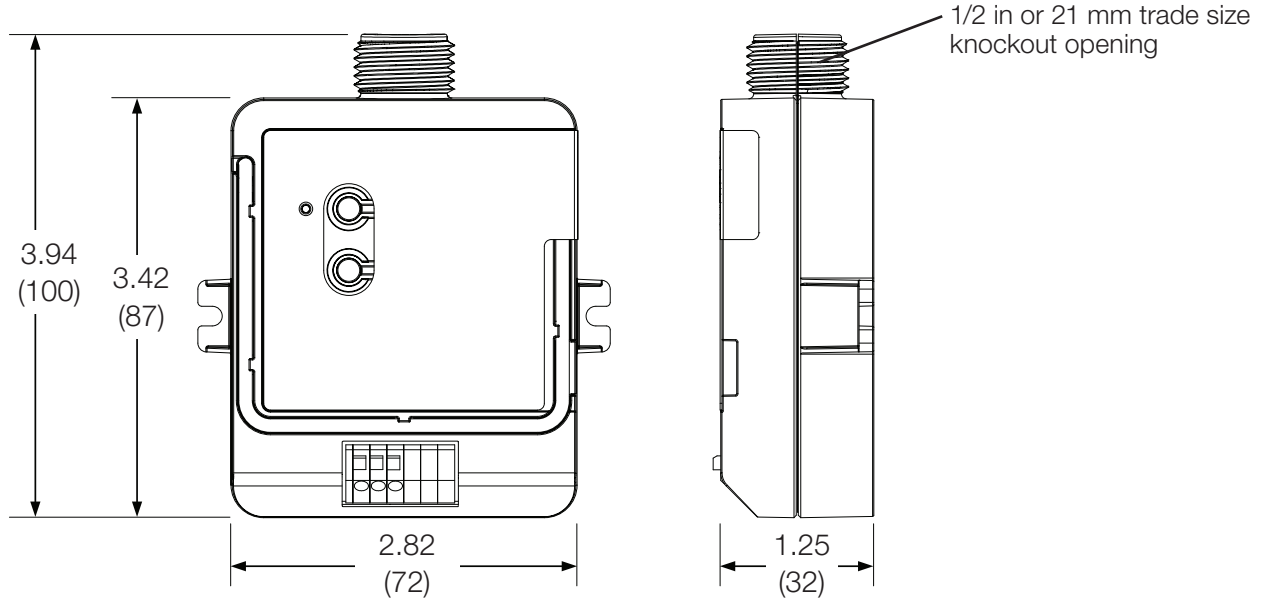
Model Number	LMJ-CCO1-24-B, LMK-CCO1-24-B
Power	IEC PELV/NEC® Class 2 Operating voltage: 24 V~ / 24 V== Operating current, nominal: 45 mA (24 V~), 35 mA (24 V==)
Typical Power Consumption	< 1.0 W Typical power test conditions: all loads off, CCO LED on
Regulatory Approvals	UL®, UL 2043 Plenum Rated, FCC Approved. Complies with the limits for a Class B device, pursuant to Part 15 of FCC rules, IC, (LMJ- model only), CE, TRA, CITC (LMK- model)
Environment	Ambient operating temperature: 32 °F to 131 °F (0 °C to 55 °C) Ambient operating humidity: 0% to 90% humidity, non-condensing. Indoor use only.
Communications	Operates using Clear Connect RF Technology for reliable wireless communication; refer to model number chart on Page 1 for frequency band details. RF range is 30 ft (9 m) from repeaters. Contact Lutron for applications using foil-backed or metallic ceiling tiles.
Contact Closure Output	Accepts input voltages of 0 to 24 V~ / 0 to 24 V== Resistive Load: 1.0 A (0 to 24 V==), 0.5 A (0 to 24 V~) Provides both normally open (NO) and normally closed (NC) dry contacts. Maintained or momentary output type. Output is latching. Minimum Close Time: 500 ms.
Mounting	Screw tabs provided for surface mounting (recommended); or mounts to a electrical junction box through a 1/2 in or 21 mm trade size knockout opening.
Low Voltage CCO Wiring	CCO terminals accept 20 to 16 AWG (0.5 to 1.5 mm ²) solid or stranded wire.
Warranty	www.lutron.com/TechnicalDocumentLibrary/Warranty.pdf www.lutron.com/TechnicalDocumentLibrary/Intl_Warranty.pdf

⚠️ WARNING – Entrapment Hazard – To avoid the risk of entrapment, serious injury, or death, these controls must not be used to control equipment that is not visible from every control location or that could create hazardous situations if operated accidentally or through malfunction (for example, motorized gates, garage doors, industrial doors, microwave ovens, heating pads, fireplaces, space heaters, etc.). It is the installer’s responsibility to ensure that these controls are connected only to suitable loads and equipment types and that such equipment is visible from every control location. Failure to do so could result in serious injury or death.

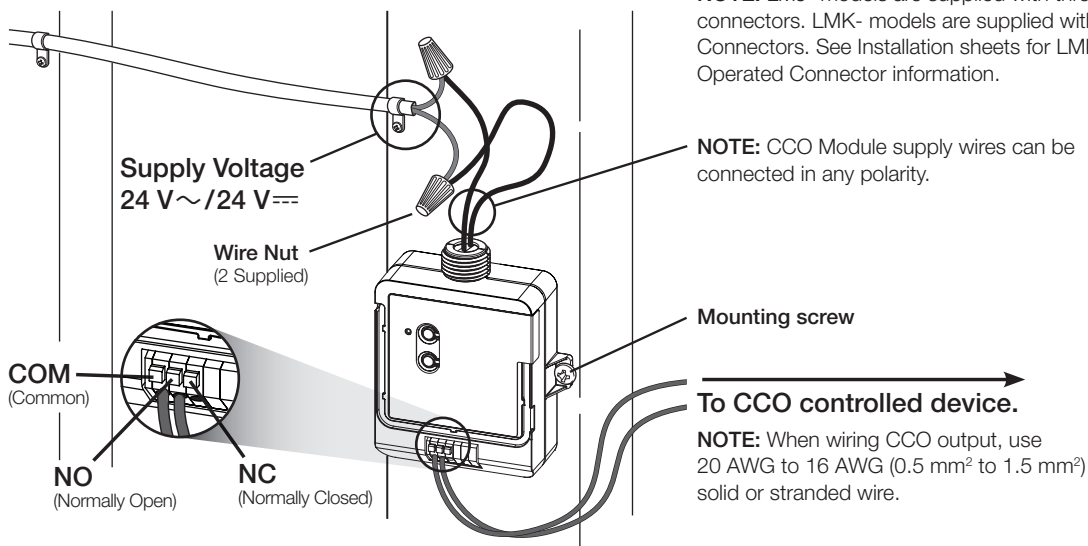
RF CCO Module

Dimensions

Dimensions are shown as: in (mm)



Wiring Diagram (Recommended)



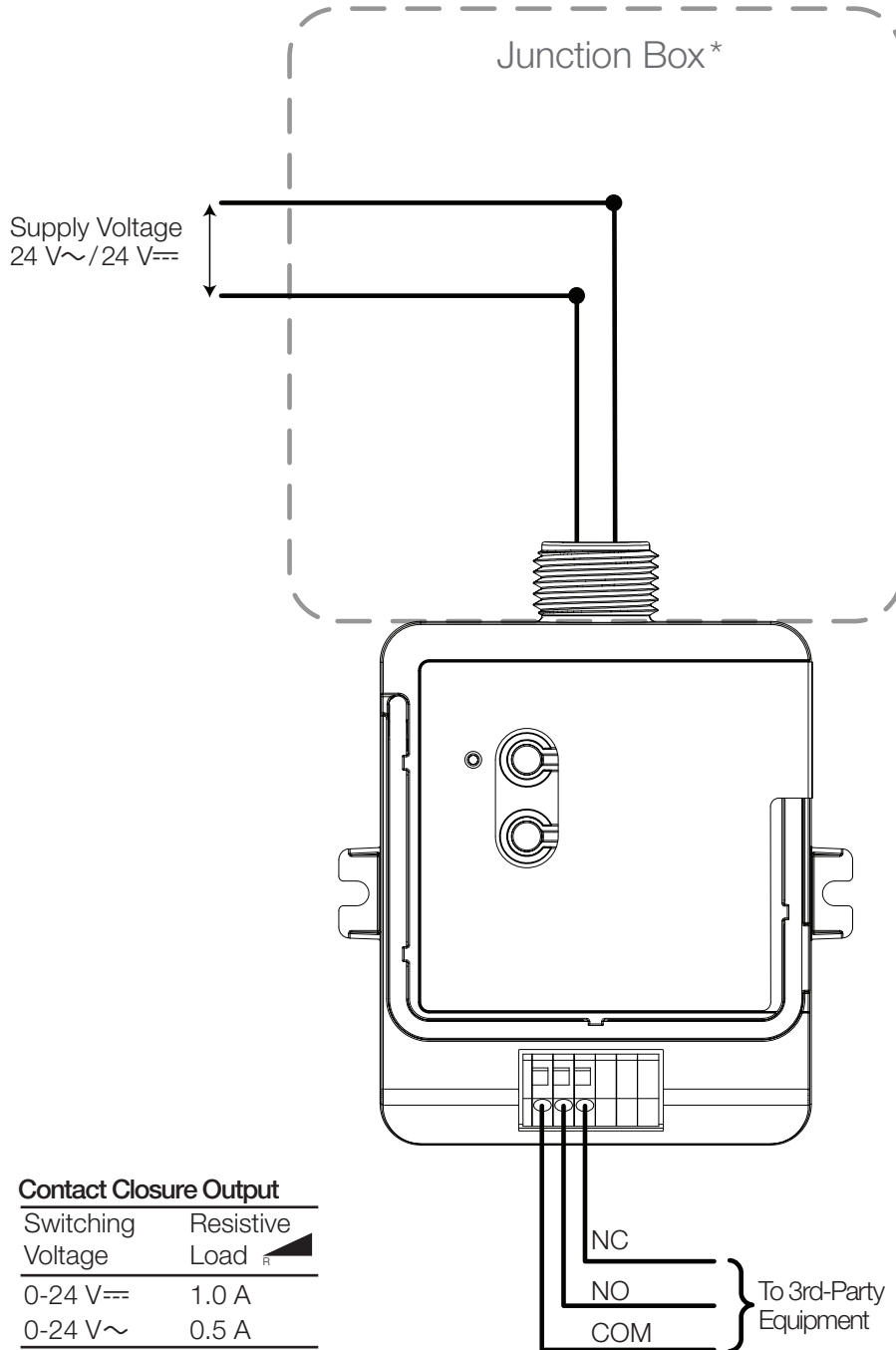
NOTE: LMJ- models are supplied with three twist-on wire connectors. LMK- models are supplied with Lever Operated Connectors. See Installation sheets for LMK- models for Lever Operated Connector information.

NOTE: CCO Module supply wires can be connected in any polarity.

NOTE: The CCO output may be wired using either the NO or NC terminal.

RF CCO Module

Wiring Diagram (Junction Box Optional)



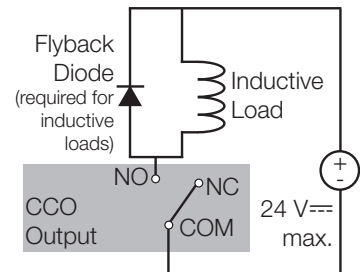
Contact Closure Output

Switching Voltage	Resistive Load
0-24 V==	1.0 A
0-24 V~	0.5 A

*** NOTE:** Some applications (in USA) require the CCO module to be installed inside an additional junction box. For information about how to perform this installation, please visit www.lutron.com, Application Note #423 (P/N 048423). Please consult all local and national electric codes for proper installation methods.

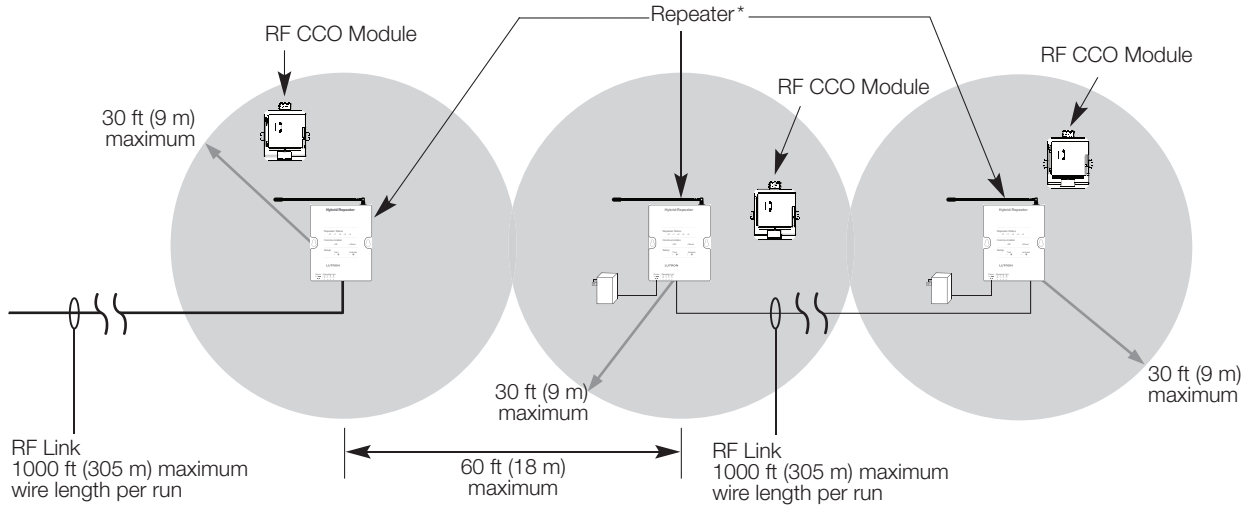
NOTE:

The CCO is not rated to control unclamped, inductive loads. Inductive loads include (but are not limited to): relays, solenoids, and motors. To control these types of equipment, a flyback diode must be used (DC voltages only). For more information, please see Application Note #434 (P/N 048434)



RF CCO Module Communications

Wired and RF Configuration (RadioRA 2 and HomeWorks QS)



* In HomeWorks QS systems, use Hybrid Repeaters for range extension. In RadioRA 2, the repeater shown may be either a main repeater (1 required) or auxiliary repeater (up to 4 permitted).

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