Litenode™ wireless node
Single load RME-GEN

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Installation instructions
IL42-5047A

Description

Part of the DimOnOff wireless control technology, Litenode relays are suitable for general purpose lighting control applications that add intelligent functions and networkability to any light fixture. The relay provides continuous retroactive 0 V to 10 V (sink/source) for all types of ballasts and drivers and provide power to external sensors (optional).

- intelligent distributed control, metering, and monitoring

- NEMA C136-41

- 5- and 7-pin with continuous retroactive 0 V to 10 V dimming

Operation

Unless otherwise programmed, the relay will turn on the fixture approximately 10 seconds after power is restored to the relay.

The yellow LED will blink when power is properly applied.

Using DimOnOff software, test the communications link with the relay.

Before you install

- This device is to be installed and/or used in accordance with appropriate electrical codes and regulations.

- If you are unsure about any part of these instructions, consult a qualified electrician.

- Use this device only with NEMA C136-41 or C136-10 certified receptacles.

- You will need the DimOnOff Android app loaded on a handheld or tablet device.

⚠ WARNING

Use authorized utility procedures to install or service this device. Dangerous voltages are present. Disconnect power at the circuit breaker or fuse when servicing, installing, or removing the light fixture. Equipment damage, personal injury, or death may result if safety precautions are not followed.

Installation

⚠ WARNING

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⚠ CAUTION

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⚠ CAUTION

The node input and output are low voltage (24 VDC). Consult local building codes and regulations for information regarding low-voltage installation.

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1 To avoid fire, shock, or death, be sure to turn off power at the circuit breaker or fuse. Verify that power is off before proceeding.

2 Using the Android app, scan the device ID.

3 Connect lead wires according to the wiring diagram as follows:

- Line voltage wiring: Remove 5/8-inch (1.6 cm) of insulation from each circuit conductor. Make sure that the ends of the conductors are straight. Connect lead wires from relay to line per the appropriate wiring diagram as follows. Twist strands of each lead tightly and, with circuit conductors, push firmly into the appropriate wire connector. Screw connectors on clockwise making sure that no bare conductor shows below the wiring connectors. Secure each connector with electrical tape.

- Class II warning: Connect low-voltage wires from relay to fixture per appropriate wiring diagram as follows. Twist strands of each lead tightly, and with circuit conductors, push firmly into appropriate wire connector. Screw connectors on clockwise, making sure that no bare conductor shows below the wire connectors. Make sure to cap-off unused low-voltage wires. Secure each connector with electrical tape.

4 Restore power at circuit breaker or fuse.

RME-GEN wiring		
Line wires on C-136 socket supplied by others		
	Color	Gauge
Line in	Black	14
Neutral/line 2	White	14
Line out	Red	14
DC control wires on C-136 socket supplied by others		
0 V to 10 V+ out	Purple	18
0 V to 10 V- ground out	Gray	18
Digital in 13 VDC to 30 VDC	Orange	18
VCC 24 VDC 50 mA	Brown	18

Antenna location and installation

The antenna for the model ELIR1 Lightnode relay is integral to the unit and is contained wholly within the device itself. It is not accessible to the user and may not be modified in any way.

To satisfy FCC RF exposure requirements for mobile transmitting devices, a separation of 20 cm or more should be maintained between the antenna of this device and persons during device operation. To ensure compliance, operations at closer distance than 20 cm is not recommended.

Troubleshooting

General

• Make sure the wires are connected according to the wiring diagram.

• Make sure the wires have proper contact and are securely connected.

• If no LEDs are lit, then check the power.

Lights won't turn on when relay is being powered:

• Make sure the wires are properly connected.

• Make sure the yellow LED is blinking.

Light won't turn off after command has been sent:

• Make sure that relay is receiving communication (red LED blinks)

Relay doesn't respond to commands:

• Make sure no obstacle (concrete, metal, etc.) is present between relay antenna and the emitter.

LED indicators:

• Yellow: blinks every 3 seconds to indicate that relay is powered and functioning normally

• Red: flashes to indicate message reception

• Green: flashes to indicate message transmission by the relay.

If there is no message reception/transmission, then possible causes are antenna positioning and distance from another relay or the gateway.

Specifications

- Model: ELIR1

- IC: 4557A-ELIR1

- FCC ID: QZC-ELIR1

- Operating range: 110 VAC to 480 VAC 50 Hz or 60 Hz

- Max output: 8 A (2 A at 480 V)

- Inputs: 1 digital (0 VDC to 30 VDC), optional

- Output: 24 VDC 50 mA max

- Continuous retroactive 0 V to 10 V dimming

See the product data sheet for complete details

WARNING (PART 15.21)

Changes or modifications not expressly approved by Elster could void the user's authority to operate the equipment.

This device complies with Part 15 of 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.

COMPLIANCE STATEMENT (FCC PART 15.19 AND INDUSTRY CANADA)

This device complies with Industry Canada licence-exempt RSS standard(s). Operation is subject to the following two conditions: (1) this device may not cause interference, and (2) this device must accept any interference, including interference that may cause undesired operation of the device.

ÉNONCÉ DE CONFORMITÉ

Le présent appareil est conforme aux CNR d'Industrie Canada applicables aux appareils radio exempts de licence. L'exploitation est autorisée aux deux conditions suivantes : (1) l'appareil ne doit pas produire de brouillage, et (2) l'utilisateur de l'appareil doit accepter tout brouillage radioélectrique subi, même si le brouillage est susceptible d'en compromettre le fonctionnement.

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