

READ AND FOLLOW ALL SAFETY INSTRUCTIONS

IMPORTANT SAFEGUARDS

ALL SERVICING SHOULD BE PERFORMED BY QUALIFIED PERSONNEL

- This product is intended for use with lighting fixtures controlled by an Emergency panel. Any switching between Backup Power and Utility Power must be done upstream of device.
- All wiring connections and mounting styles must be in accordance with the National Electrical Code (NEC), National Fire Protection Association (NFPA), National Electrical Safety Code, state and local codes, and any other regulations set forth by the local Authority Having Jurisdiction (AHJ).
- Per NFPA 70E, the use of Personal Protective Equipment (PPE) may be required. Check state and local codes.
- The load's operating voltage must be the same as the Emergency Power Input voltage.
- To reduce the risk of electrical shock, fire, and injury to persons:
 1. Disconnect all sources of power before servicing,
 2. Mount this device in locations and at heights where it will not be readily accessible to tampering by unauthorized personnel,
 3. Do not mount near gas or electric heaters,
 4. Do not let any wires touch hot surfaces, and
 5. Do not use outdoors
- The use of accessory equipment not recommended by the manufacturer may cause an unsafe condition.
- Do not use this device for other intended use.

SAVE THESE IMPORTANT SAFETY INSTRUCTIONS

ELCR-U Series
6 AMP AUTOMATIC LOAD CONTROL RELAY



Electrical Specifications

Normal Power Supply Voltage Normal Power Current Draw Normal Power Operating Frequency	120-277Vac 6mA max 50/60Hz
Emergency Power Supply Voltage Emergency Power Current Draw Emergency Power Operating Frequency	120-277Vac 0mA max 50/60Hz
Remote Test Input (Class 2, Dry Contact)	ELCTB or other switching method ^{1,2}
Feedback/Dimmer Contact Switching Capability (Dry Contact Output 1, N/O - N/C)	1A Resistance @ 30Vdc
Relay Contact Ratings	6A General Purpose @120Vac 6A Electronic Ballast @ 120Vac 5A Electronic Ballast @ 277Vac 720VA Ballast @ 120-277Vac 720W Tungsten @ 120-277Vac

1: If not using ELCTB Remote Test Button (sold separately), switching methods should be rated for at least 24Vdc. External voltage should not be supplied to this input. No specific current rating is required.
2: To maintain Class 2, a maximum of 45 total test inputs can be wired in parallel per ELCTB

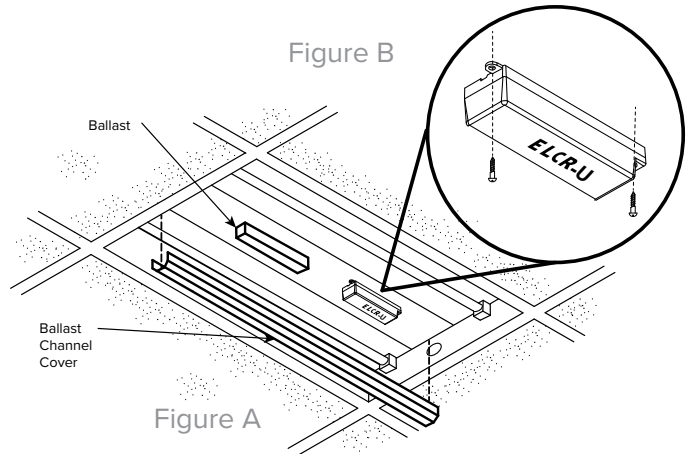
Mechanical Specifications

Housing	UL accepted for use in Plenum
Wire	16" 600V Rated
Operating Temperature	-30° to 140° F (-35° to 60° C)
Humidity Range	5 to 95% (non-condensing) Rated for dry and damp locations only
Approvals	UL listed, UL924, C-UL

Installation

ALL INSTALLATIONS AND WIRING SHOULD BE DONE BY QUALIFIED PERSONNEL

Figure B



STEPS

1. Remove all sources of power.
2. Remove ballast channel cover.
3. Mount ELCR-U as shown in Figures A and B.
4. Wire the ELCR-U using an illustration from the “typical applications” section on page 3 or similar setups for different applications.
5. Before applying power, review the Important Safeguards at the beginning of this document.
6. Finish installation as required by the NEC, NFPA, state, local, and other codes. Test the ELCR-U using the “Test Procedure” on page 4.

MAINTENANCE

No routine maintenance is required for the ELCR-U. Occasionally, this device should be tested to ensure that it works correctly in accordance with national and local codes.

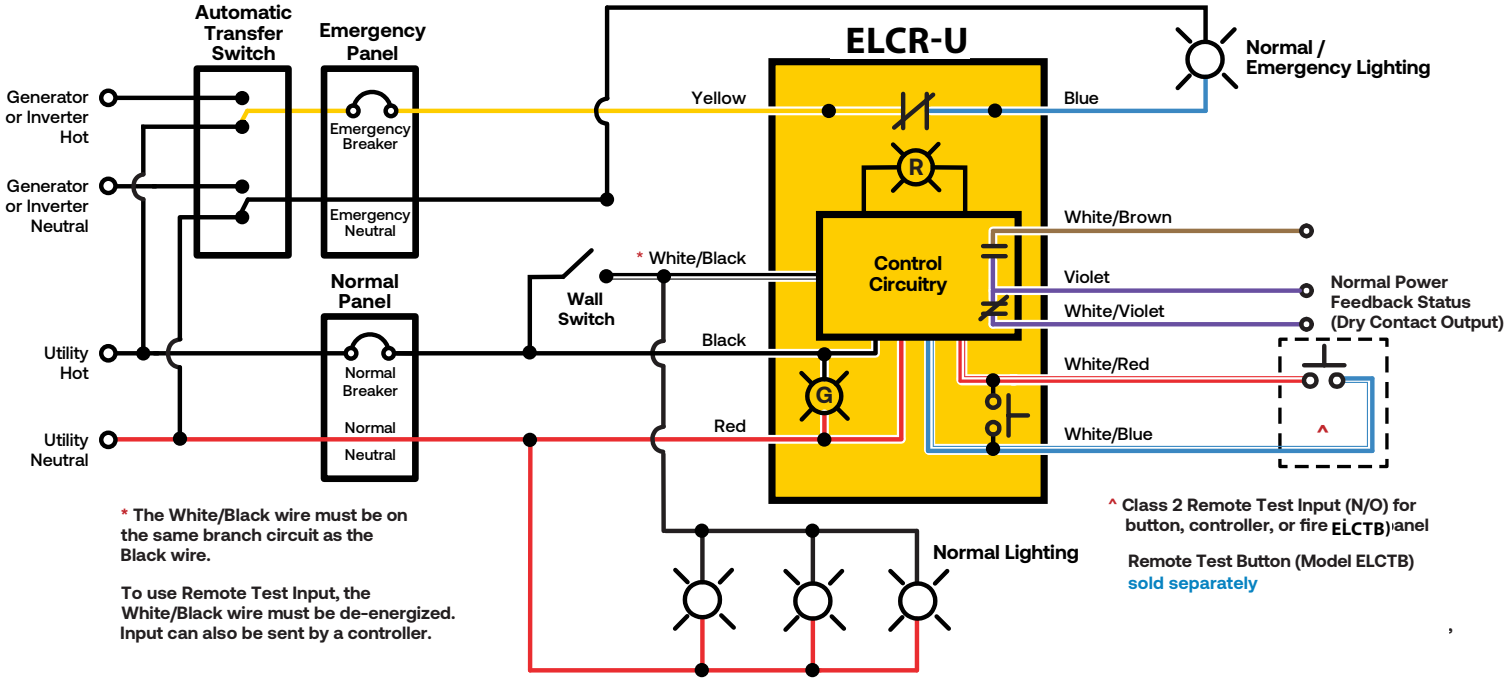
OPERATION

The ELCR-U will activate an Emergency lighting load automatically upon the loss of Normal Power. If Normal Power is absent, the status of the load cannot be overridden. However, if the Normal Power is present, the Emergency lighting load can be controlled by other means in order to use it as a Normal Lighting load, depending on the wiring setup. When Normal Power is present, the N/C status contact will automatically close. Therefore, when Normal Power is absent, the N/C status contact will open (perfect for 0-10V dimming controls). The N/C contact will operate opposite of N/O. A Green LED indicates that Normal Power is present. The Red LED shows the Main Relay (N/C) status; if the load is on, the LED should be off.

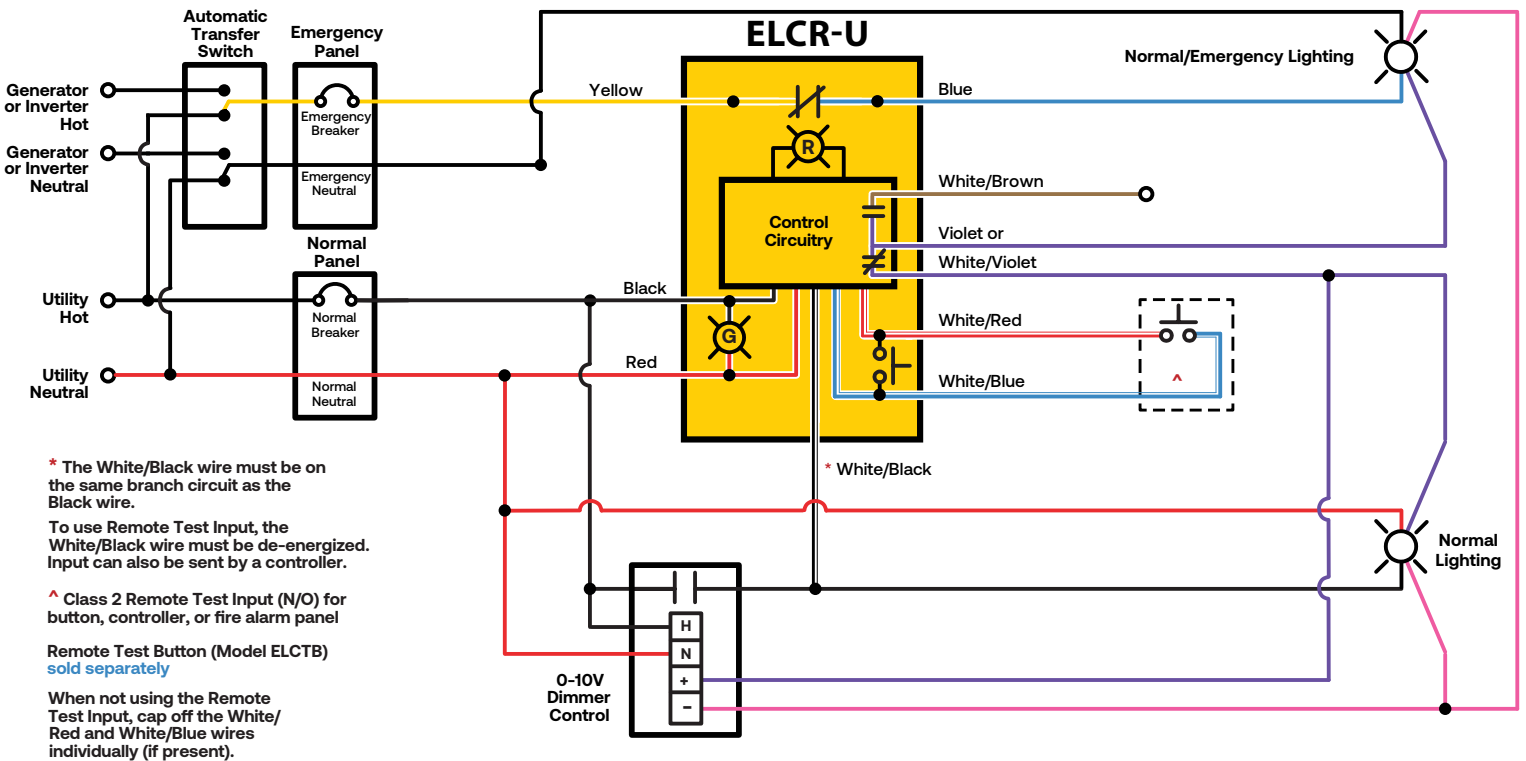


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6 AMP AUTOMATIC LOAD CONTROL RELAY

Using Emergency Lighting as Normal Lighting



Overriding a 0-10Vdc Dimmer



ELCR-U Series

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Wiring Descriptions

Wire Color	Description
BLACK	Normal Hot
RED	Normal Neutral (or other phase)
WHITE/BLACK ¹	Wall Switch Input
BLUE ²	Emergency Hot switched to Load
YELLOW	Emergency Hot
WHITE/BLUE ³	Remote test Input (Class 2, Dry Contact Input)
WHITE/RED	
WHITE/VIOLET (N/C) VIOLET (C) WHITE/BROWN (N/O) ⁴	Feedback/Dimmer Contact (Dry Contact Output)

To test the ELCR-U periodically, repeat the appropriate Test Procedure above in accordance with national and local codes.

Notes:

1. Must be fed from same branch circuit as Black and Red.

2. Switches out the voltage put in on Yellow.

3. When wiring multiple units together, White/Blue must be a shared common.

Test is performed when Input is CLOSED.

4. N/O is CLOSED when Normal Power is Absent or Remote Test Input is CLOSED.

N/C opposite. N/O is OPEN when Normal Power is present or Remote Test Input is OPEN. N/C opposite.

Testing Procedures

Three Options to test the ELCR-U after Installation

Initial Test for Correct Wiring

Apply Emergency Power to the Emergency Power Input and Normal Power to the Normal Power Input. (If using the Wall Switch Input [Wht/Blk wire], apply Normal Power to the switch also, but keep the switch OFF/OPEN.)

- The Green LED (Normal Power available) should be ON.
- The Red LED (Relay Status) should be ON
- The Load should be OFF.
- The Feedback/Dimmer Contact (N/O) should be closed.

Local Test Button

- Turn switched circuit OFF. Emergency light should be OFF.
- Press and hold "Local Test Button"
- Emergency light should turn ON.
- Release "Local Test Button" and emergency light should turn OFF.

Remote Test Button

(Model ELCTB - sold separately)

- Turn switched circuit OFF. Emergency light should be OFF.
- Press and hold "Remote Test Button"
- Emergency light should turn ON.
- Release "Remote Test Button" and emergency light should turn OFF.

Troubleshooting

Condition	Action
Green LED is OFF	Check Normal Power Input wiring (Black and Red wires) and voltage
Red LED is OFF but Load is OFF	- Check bulbs and ballast - Check Load wiring (Blue wire and Load's neutral) - Verify Load's operating voltage is the same as the Emergency Power Input Voltage - Replace unit
Load is ON but Red LED is OFF	Replace Unit
Load does not turn on when being tested	- Check bulbs and ballast - Check wiring connections if using a remote test option - Press local test button on the unit - Replace unit
Load will not turn OFF	- Verify status of Normal Power Input - Open Wall Switch Input - Verify that no test inputs are stuck closed. (i.e. Remote Test is not closed).