NEXLIGHT

RC SERIES ROOM CONTROL PANELS

OVERVIEW

The NexLight® RC Series room control panels provide distributed control of lighting and are available in both ON/OFF and 0-10V Dimming versions. These lighting control panels come in a NEMA/Type 1 enclosure and are factory wired in NexLight's UL508A shop. NexLight RC Series panels function in an auxiliary capacity to a main panel and can also be accessed through the Graphic User Interface (GUI) for real-time programming, monitoring and override. A NexLight main panel (R Series, D Series, or Custom Panel) is required for the RC Series panel to operate.

SPECIFICATIONS

Physical

NEMA/Type:	1 (suitable for Plenum Mount)
Mounting:	Surface Mount
Operating Temperature:	14° to 113°F (-10°C to 45°C)

Electrical (Control Wiring)

Input Signal:	24VAC, Class II

Relays

UL/cUL Listed:	10A 277 VAC Resistive
	10A 120 VAC (1200W) Tungsten
	10A 240 VAC (2400W) Tungsten
	10A 277 VAC (2400W) Standard Ballast
	10A 277 VAC Electronic Ballast

Dimming Channels

0-10V Sinking Current:	100 mA per dimming channel
Transmission Frequency:	9.6 kHz ± 0.2 kHz
High Trim:	100% down to 50%
Low Trim:	0% up to 50%

FEATURES

- **Up to (4) Zones of control per RC Series Panel**
- **Utilizes 10A Hybrid Relays**
- **100mA of Sinking Current per 0-10V Dimming Channel**
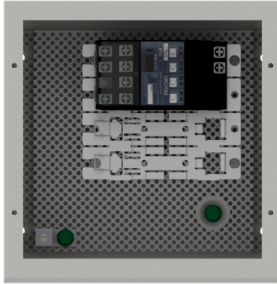- **Scheduling, programming, monitoring and override through a Main Panel GUI**

ADDITIONAL PANELS

**See individual accessory specification sheet for more information

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NXL-R Series	NexLight R Series Relay Panels
NXL-D Series	NexLight D Series Dimming Panels
NXL-OPC:	Outdoor Photocell Integration Panel, Remote Mounting (8"H x 8"W x 4"D)
NXL-00P5:	Dimming Expansion, (8) Channels of 0-10 Dimming (100mA Sinking per Channel) (8"H x 8"W x 4"D)
NXL-AVI:	A/V Integration, (8) Dry Contact Inputs (8"H x 8"W x 4"D)
NXL-BMS:	BACnet Protocol Conversion Panel for Building Management System (BMS) Integration (12"H x 12"W x 6"D)
NXL-AMP:	Amplifier Panel for NexLight Data Bus, Supports an additional 485 mA of system devices (12"H x 12"W x 6"D)

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NXL-RC4

Included Components

1	CRC2150 10 Amp Relay Module (4 Relays)
1	PA-80-1 Panel Assembly

Physical Specifications

NEMA/Type:	1
Mounting:	Surface Mount
Dimensions:	8.00"H x 8.00"W x 4.00"D
Weight:	6 lbs 3.2 oz
Addresses Available:	N/A (Requires Main Panel)
Addresses Used:	4
mA Available:	N/A (Requires Main Panel)
mA Draw:	4 mA
Operating Temperature:	14° to 113°F (-10°C to 45°C)

NXL-RC4D
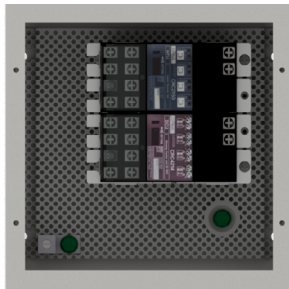
Included Components

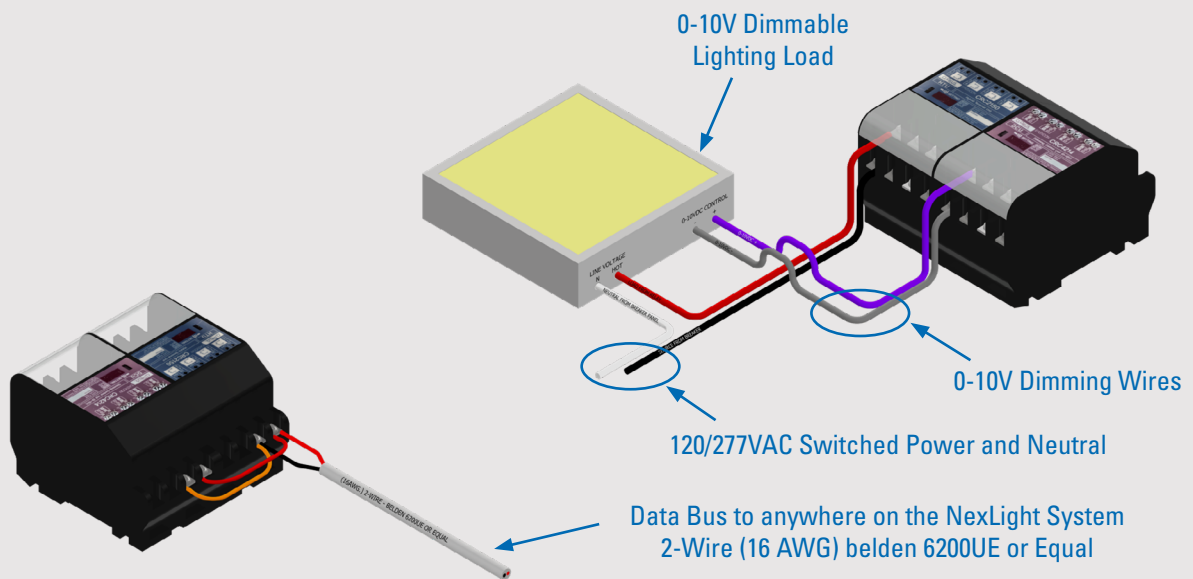|	
1	CRC2150 10 Amp Relay Module (4 Relays)
1	CRC4214 Dimming Control Units (4 Channels each)
1	PA-80-1 Panel Assembly

Physical Specifications

NEMA/Type:	1
Mounting:	Surface Mount
Dimensions:	8.00"H x 8.00"W x 4.00"D
Weight:	6 lbs 9.6 oz
Addresses Available:	N/A (Requires Main Panel)
Addresses Used:	8
mA Available:	N/A (Requires Main Panel)
mA Draw:	15 mA
Operating Temperature:	14° to 122°F (-10°C to 55°C)

WIRING DIAGRAM

0-10V Dimmable Lighting Load

0-10V Dimming Wires

120/277VAC Switched Power and Neutral

Data Bus to anywhere on the NexLight System
2-Wire (16 AWG) belden 6200UE or Equal

**All wiring colors are for illustrative purposes only. Please adhere to local code and ordinance when selecting appropriate wire insulation colors.
***Disregard 0-10V Dimming Wires when using NXL-RC4 Panel.

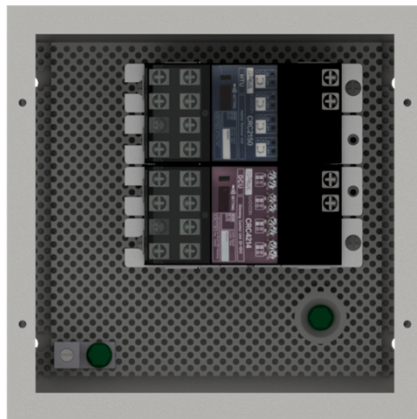**NexLight, Inc.** | 7877 College Road, Suite 105, Baxter, MN 56425
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PANEL NAME:		IP ADDRESS:	N/A	NEXLIGHT
MOUNTING LOCATION:		SUBNET MASK:	N/A	
TRANSFORMER FEED:		DEFAULT GATEWAY:	N/A	
PANEL TYPE:	NXL-RC4	PANEL DIMENSIONS:	8.00"H x 8.00"W x 4.00"D	

LOAD DESCRIPTION	SOURCE	ADDRESS		DEVICE
			-1	CRC2150
			-2	
			-3	
			-4	
SPACE				
SPACE				
INSTALLING CONTRACTOR TO USE: 16 AWG, BELDEN 6200 UE OR EQUAL; REFERENCE 2-WIRE DATA BUS WIRING DETAIL				

RC SERIES
ROOM CONTROL PANEL

0-10V Dimmable Lighting Load

0-10V Dimming Wires.

120/277VAC Switched Power and Neutral.

Data Bus to anywhere on the NexLight System 2-Wire (16AWG) Belden 6200UE or Equal

NXL-RC4D Shown
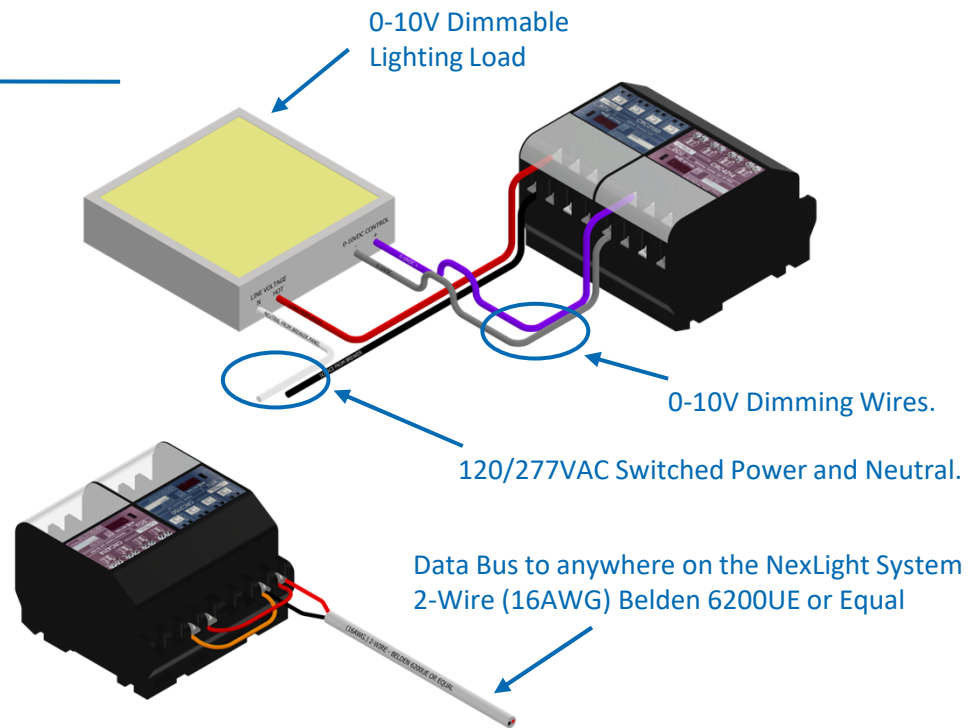
APPLICATION OVERVIEW

The RC Series Panels are an Auxiliary Panel for use in distributed system designs connected to the NexLight Lighting Control System. The small enclosure can easily be mounted in the controlled space to run smaller lighting Loads (10A or less per zone). The distributed network approach reduces the need for line voltage home runs to the main lighting control panel. There is no transformer for control power, the only control power required is supplied by the NexLight 2-Wire Data Bus. The RC Series provides up to 4 Zones each in either On/Off or Dimming applications.

APPLICATION HIGHLIGHTS

- Easily Expand the control capacity of a NexLight Lighting Control System.
- Use as an auxiliary panel for an R Series, D Series or a Custom Panel.
- Programming, Monitoring and Remote Override available through Main Panel Graphic User Interface (GUI).

TYPICAL DATA BUS CONNECTIONS

Data Bus Terminal Block located in a NexLight Panel

Screw Terminals located on Panel devices

Screw Terminals located on a nearby switch