Remote Power & Control of LED Illumination
THINK OUTSIDE THE BOX. LOCATE YOUR DRIVER OUTSIDE THE ROOM.

C3 Lighting is a unique company that designs, engineers, and manufactures LED-based lighting products. C3 considers the LED fixture simply one component in a building’s digital lighting system. Unlike traditional lighting, which is made up of fixtures wired to switched AC circuits, C3 believes that an LED lighting solution requires that power supplies, dimming controls, power management devices, fixtures, and the LED itself each be viewed as components that combine to create a building’s digital lighting network.

The typical lighting fixture has a ballast or driver in each unit. It is powered by AC, and its ballast or driver converts AC power to DC power to start and drive the lamps or LEDs. C3’s technology utilizes “driverless” LED fixtures that are smaller in size and less expensive to ship because they do not require integrated power supplies and/or dimming controls as part of the fixture.

C3’s integrated digital lighting network is based on remote Intelligent Power Distribution Modules (PDMs) that distribute power to a virtually unlimited number of fixtures through Class 1 or Class 2 DC wiring. PWM dimming, current limiting, and energy monitoring are all integral to C3’s Intelligent Power Distribution Modules. C3’s Wall Dimmers and Programmable touch panels can control individual rooms or zones of lighting and simultaneously function as a remote hub for occupancy and daylight-harvesting sensors.
FEATURES & BENEFITS OF C3 REMOTE POWER

Centrally Located Power Distribution Module
- One unit controls multiple fixtures
- Ability to locate power supply for maintenance without accessing fixtures
- Heat load located outside the air conditioned space
- Battery backup in central location for multiple fixtures

Radically Reduced Carbon Footprint
- Smaller gauge and fewer wires required
- No conduit required for most commercial applications (when Class 2 outputs specified)
- Significantly reduced energy consumption as compared to fluorescent lighting
- Lighting system is 97% efficient
- Products are 99% recyclable at end-of-life

Smaller Fixture Design
- Smaller fixture housings reduce material and packaging / shipping costs

OTHER FEATURES
- Power Distribution Module can be located up to 200 feet from fixture (when Class 2 outputs specified)
- No conduit required for most commercial installations (when Class 2 outputs specified)
- Dimming controls can be located up to 200 feet from power supply
- Pyxis dimming module provides PWM dimming
- Operates with other manufacturers’ 0 - 10V controls and sensors
- Controls connect to Power Distribution Module
- Sensors connect to controls or Power Distribution Module
- Accepts power input from solar, wind, central battery or generator
- Open architecture allows interfacing with building management systems
- Power Distribution Modules can be controlled by virtually any DMX controller, 0 - 10V controls or C3 Pyxis wall controls.

Low Voltage System
- 24VDC Class 2 wiring is inherently safe
- No conduit required for most commercial installations (when Class 2 outputs specified)

Dimming Technology Centrally Located
- No separate control wires to fixtures for dimming

Pulse Width Modulation (PWM) Dimming
- Dimming 100% to 0%
- No color shift or flicker
- Energy savings are directly proportional to light levels

Lower Installed Costs
- No conduit to install for most commercial applications (when Class 2 outputs specified)
- Less wiring for controls
- Thinner, lighter fixtures
The Helius Power Distribution Module will output 6, 12, 18 or 24 Class 2, 24VDC circuits depending on the wattage and design of the system. The outputs connect directly to the LED fixtures. Class 2 power can be run with two conductor cable and no metal conduit for most commercial installations.

The Pyxis wall controls or DMX controller connects to the Power Distribution Module via Cat5e cable. Occupancy and daylight-harvesting sensors can be connected directly to the wall controls. No additional wiring between the Helius and the luminaire is required for dimming. Dimming to 0% can be achieved.
The above figure shows the simplicity of the wiring required when using C3’s Intelligent Power Distribution technology. Compared to other manufacturers’ power and control, C3’s technology not only significantly decreases installation costs, but also provides a greatly reduced carbon footprint for the installed system.

As shown in the above figure, in order to avoid multiple long runs of Class 2 power it may be advantageous to run Class 1 power from the Helius Power Distribution Module to C3’s Revo or Revolt intelligent current limiter and from there run multiple Class 2 circuits to the fixtures. One Helius can drive up to four Revos or Revolts.

Just like the Helius, the Revolt Programmable PWM Current Limiter can provide pulse width modulation dimming and monitor energy usage in each room or zone. The Revolt Current Limiter is microprocessor controlled and can be addressed by C3’s Pyxis Intelligent Wall Controls, 0-10VDC or virtually any DMX controller.
SINGLE COLOR WHITE, TUNABLE WHITE, RGB, RGBA, and RGBW

CONTROLS

There are several options for controls. For single color applications, while not required, dimming is recommended to adjust brightness and optimize illumination. Control options include 0-10VDC, C3’s Pyxis Wall Switch, and DMX controls. Control interfaces can range from simple wall switches or touch panels to sophisticated programmable lighting control systems. All C3 systems interface with Building Management Controls.

RGBX

RGB, RGBA, and RGBW provide deep rich variable colors to meet a designer’s requirements. Millions of colors are achievable. RGB or RGBA can be used for static colors or for dynamically changing “scenes”. RGBW will provide millions of colors in addition to a better white than RGB or RGBA.
C3 has developed a breakthrough technology (patents pending) that provides DC power, Class 1 or Class 2 current limiting, pulse width modulation dimming (PWM), total lighting control and energy monitoring in one device. This technology is integrated into the Helius™ Remote Power Distribution Module. Designed as part of an overall digital lighting system, Helius™ products are microprocessor controlled and can be addressed by C3’s intelligent wall controls or via wireless remote. Helius™ Remote Power Distribution Modules can be used with C3’s or other manufacturers’ driverless LED fixtures. Controlled by DMX 512, 0-10VDC commands or BACnet.

SPECIFICATIONS

HOUSING: Multiple K.O.s for input/output wiring. Indoor dry use only.
FINISH: Black Powder Coat.
WARRANTY: Refer to www.c3lighting.com/warranty.html
Meets OSHPD Seismic Requirements.

DIMENSIONS

COMPATIBILITY

Active on-board control circuitry allows dimming of one or multiple zones (channels) using C3 Lighting’s DMX Intelligent Wall Dimmers or other IEC 60929 compliant 0-10V dimmers. Lutron Diva® is compatible. Consult factory for a list of tested dimmers or to submit a dimmer for testing.
## ORDERING INFORMATION

### SMALL

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<th>SIZE</th>
<th>WATTS</th>
<th>OUTPUT VOLTAGE</th>
<th>CLASS 1 OUTPUTS</th>
<th>CLASS 2 OUTPUTS</th>
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*COMBINED TOTAL OF CLASS 1 AND CLASS 2 OUTPUT CANNOT EXCEED 4

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*COMBINED TOTAL OF CLASS 1 AND CLASS 2 OUTPUT CANNOT EXCEED 6

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*COMBINED TOTAL OF CLASS 1 AND CLASS 2 OUTPUT CANNOT EXCEED 8
PRODUCT DESCRIPTION

The Revolt Programmable PWM Current Limiter is a stand-alone device that can be placed anywhere in a building’s lighting circuit. This unique device limits DC current to Class 1 or Class 2 levels, serves as a branch for LED wiring allowing easy distribution of DC lighting circuits, provides PWM dimming, and monitors energy usage in each room or zone. The Revolt Current Limiter is microprocessor controlled and can be addressed by C3’s Intelligent Wall Controls, wireless through WiFi® or by DMX controls. The technology (patent pending) employed in the Revolt is a first in the LED lighting industry.

SPECIFICATIONS

FINISH: White Powder Coat
WARRANTY: Refer to www.c3lighting.com/warranty.html

ORDERING INFORMATION

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<td>RV Revolt 6 4 Amp</td>
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PRODUCT DESCRIPTION

The Revo Current Limiter is a stand-alone device that can be placed anywhere in a building's lighting circuit. This unique device will reduce high current DC to Class 1 or Class 2 levels and serves as a hub allowing easy distribution of DC lighting circuits. The Revo is a passive version of C3's Revolt Programmable PWM Current Limiter, used when PWM dimming and energy monitoring are not a requirement.

SPECIFICATIONS

FINISH: White Powder Coat
WARRANTY: Refer to www.c3lighting.com/warranty.html
CERTIFICATION:

ORDERING INFORMATION

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<tr>
<td></td>
<td>6 Six Outputs</td>
<td>04 4 Amp</td>
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Specifications subject to change without notice. Contact factory for custom configurations. All referenced company and product names are registered trademarks of their respective holders.
All of C3 Lighting's Touchpad Switches use capacitive-sense technology. Styles available for specific lighting applications in addition to custom programming. Outputs both DMX 512 and 0-10 VDC commands. Interfaces directly with C3's Remote Power Distribution modules via CAT5e cable or virtually any DMX 512 or 0-10 VDC controllable device.

**SPECIFICATIONS**

**Features**
- DMX 512 output.
- Status indicator LEDs.
- Daisy chain connection of multiple Touchpads.
- Connection method: RJ45 cable by others.
- Rear mounted electronics.
- Two 0-10VDC analog dimming outputs.
- Retains program memory after power loss.
- Operating temperature -25C to +80C.
- No electrolytic capacitors.
- Single or multi-gang J-box mounting with factory Decora-style face plate.
- Input Voltage 12-48VDC.
- 10 position Phoenix Connector available for special applications.
- Requires custom Decora-style face plate provided - white only.

**CERTIFICATION:**
- ETL
- CE
- RoHS

**ORDERING INFORMATION**

Continue for full list of controls

*Specifications subject to change without notice. Contact factory for custom configurations. All referenced company and product names are registered trademarks of their respective holders.*
PRODUCT DESCRIPTION

All of C3 Lighting’s Digital Controls are available for specific lighting applications, and fit a factory provided Decora style wallplate. Interfaces directly with C3’s Remote Power Distribution modules via CAT5e cable and sends a digital signal via DMX 512 protocol.

SPECIFICATIONS

Features

- DMX 512 output.
- Daisy chain connection of multiple switches.
- Connection method: RJ45 cable by others.
- Rear mounted electronics.
- Retains program memory after power loss.
- Operating temperature -25°C to +80°C.
- Single or multi-gang J-box mounting with factory Decora-style face plate.
- Input Voltage 12-48VDC.

CERTIFICATION:

Ordering Information

Continue for full list of controls

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**Distributed Power**

**C³ DMX Dimming 2400W 24VDC Intelligent Power Supply**

- 4 channels, **600** Watts per channel
- **Total 2400** Watts of dimmable power
- (no additional controllers required)

- 6 channels @ 100 Watts each
- 24VDC Dimmable power
- (no additional controllers required)

- 24 channels @ 100 Watts each
- 24VDC Dimmable power
- (no additional controllers required)
**Tunable-White Distributed Power**

**C3 DMX Dimming 2400W 24VDC Intelligent Power Supply**

- **AC in**
- **DMX in**
- **0-10V in**

2 channels, **600** Watts per channel
High CCT Tunable-White
*Total 1200 Watts of Tunable-White*

2 channels, **600** Watts per channel
High CCT Tunable-White
*Total 1200 Watts of Tunable-White*  
(no additional controllers required)

- 600W 24VDC High CT Tunable-White out
- 600W 24VDC High CT Tunable-White out
- 600W 24VDC Low CT Tunable-White out
- 600W 24VDC Low CT Tunable-White out

**Revolt Dimmable Current Limiter**

12 channels @ 100 Watts each
24VDC Low CCT Tunable-White
&
12 channels @ 100 Watts each
24VDC Dimmable High CCT Tunable-White
(no additional controllers required)

12 channels @ 100 Watts each
24VDC Low CCT Tunable-White
&
12 channels @ 100 Watts each
24VDC Dimmable High CCT Tunable-White
(no additional controllers required)
**RGB, RGBA and RGBW Distributed Power**

**C3 DMX Dimming**

- **2400W 24VDC Intelligent Power Supply**

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**DMX in**

- **0-10V in**

---

**AC in**

---

4 channels, **600** Watts per color
- **RGB, RGBA, or RGBW**
- **Total 2400 Watts**
- **of dimmable color**
- **(no additional controllers required)**

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**600W 24VDC Red out**

**600W 24VDC Green out**

**600W 24VDC Blue out**

**600W 24VDC Amber/White out**

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6 channels @ **100** Watts each
- **24VDC Dimmable**
  - **Red**
  - **Green**
  - **Blue**
  - **Amber/White**
- **(no additional controllers required)**

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**C3 DMX Dimming**

- **2400W 24VDC Intelligent Power Supply**

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**DMX in**

- **0-10V in**

---

**AC in**

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6 channels @ **100** Watts each
- **24VDC Dimmable**
  - **Red**
  - **Green**
  - **Blue**
  - **Amber/White**
- **(no additional controllers required)**

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**Revolt Dimmable Current Limiter**

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**LIGHTING**