# SCM-DLC-3CH
## 3 CHANNEL DIGITAL LIGHT CONTROLLER

**shadow-caster**®
LED LIGHTING

▶ **THEORY OF OPERATION**

The 3-channel DLC can communicate with three separate digital LED strips simultaneously to produce unique, independent patterns. Through the "Light Commander" interface, each channel can be assigned to a lighting zone and configured separately. To provide noise immunity and allow the DLC 3CH to be mounted in a central location, the signal is transmitted through a proprietary two-wire protocol. It ships with a small converter to convert the signal to a standard "WS" type at the digital lighting device.

**FAULT DETECTION**

The Shadow-Caster® Digital Light Controller is designed to self protect from over-current conditions. In the event that a fault is detected, the SC backlight will flash, and the output power will be disabled. **The unit can be reset by cycling power to the unit.**

**SCM-DLC PROGRAM INDEX**

The following programs are available through the Shadow-Caster® Light Commander Interface.

**Programs:**

- Bounce
- Clouds
- Addition
- FIFO
- Middle OUT
- Sparkle

- Hailstorm
- Shadow Rider
- Frequency
- Frequency Middle OUT
- Fireworks
- Fireworks with White Tail

MADE IN USA

**Designed & Manufactured in Clearwater, FL**
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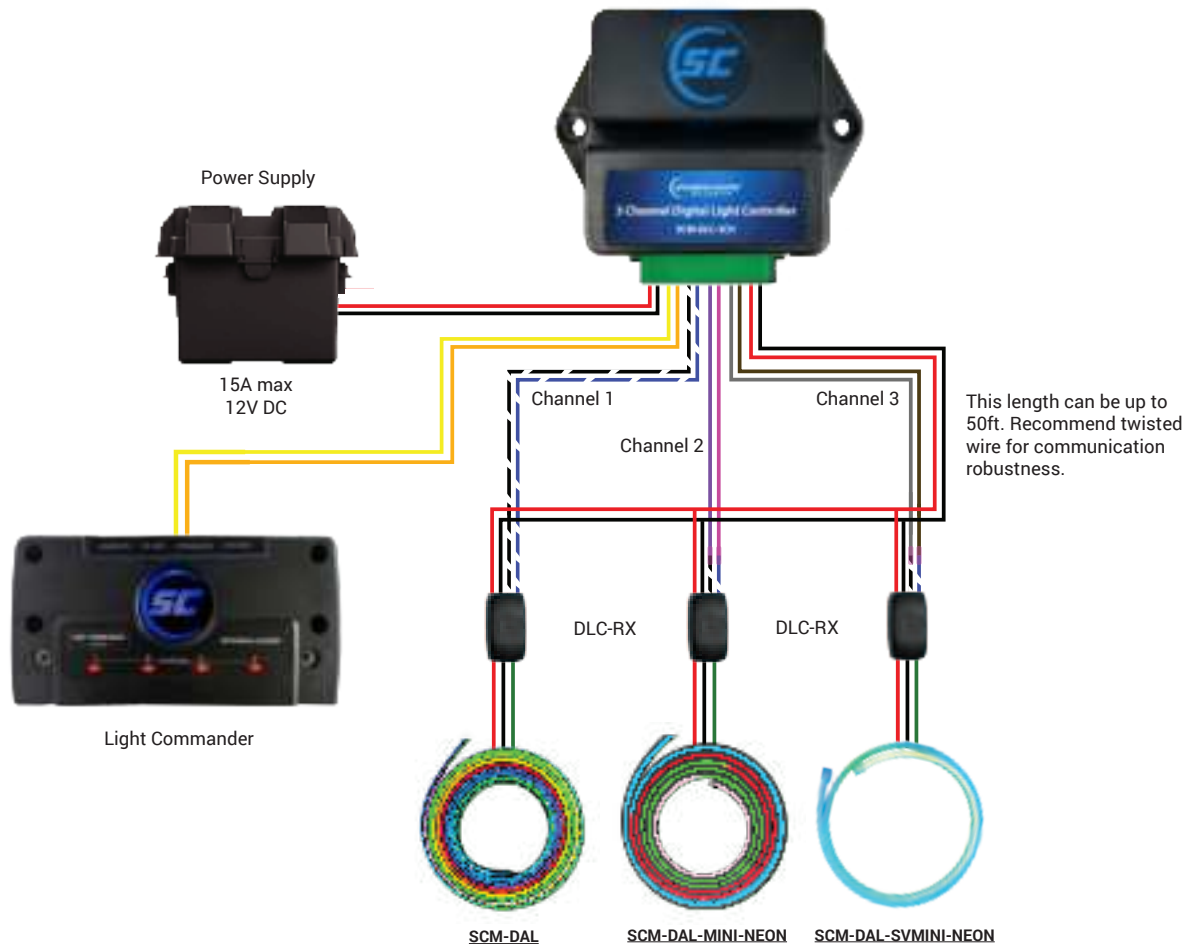**Shadow-Caster® LED Lighting | 2060 Calumet Street | Clearwater, FL 33765**
**p: +1 727.474.2877   e: info@shadow-caster.com   w: shadow-caster.com**

2025.04

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## ▶ WIRING USE & SCHEMATIC



Power Supply

15A max
12V DC

Light Commander

Channel 1

Channel 2

Channel 3

This length can be up to 50ft. Recommend twisted wire for communication robustness.

DLC-RX

DLC-RX

SCM-DAL

SCM-DAL-MINI-NEON

SCM-DAL-SVMINI-NEON

### PIN CHART

| DT06-12SC | PIN | GAUGE | JACKET COLOR | LABEL | FUNCTION |
|---|---|---|---|---|---|
| | Pin 1 | 16 | RED | x | V-IN |
| | Pin 2 | 16 | Black | GND IN | GROUND |
| | Pin 3 | 18 | Blue/White | Ch 1 + | DIGITAL-1 HIGH |
| Pin 1      Pin 6 | Pin 4 | 18 | Pink | Ch 2 + | DIGITAL-2 HIGH |
| | Pin 5 | 18 | Brown | Ch 3 + | DIGITAL-3 HIGH |
| | Pin 6 | 16 | Black/RED Stripe | V-OUT | V-OUT (15AMP PROTECTED) |
| | Pin 7 | 16 | Black | GND OUT | GROUND |
| Pin 12      Pin 7 | Pin 8 | 18 | Slate | Ch 3 - | DIGITAL-3 LOW |
| | Pin 9 | 18 | Purple | Ch 2 - | DIGITAL-2 LOW |
| | Pin 10 | 18 | Black/White | Ch 1 - | DIGITAL-1 LOW |
| | Pin 11 | 18 | Yellow | SC-NET + | SHADOW-NET HIGH (YELLOW) |
| | Pin 12 | 18 | Orange | SC-NET - | SHADOW-NET LOW (ORANGE) |

# SCM-DLC-3CH

## 3 CHANNEL DIGITAL LIGHT CONTROLLER

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▶ **MOUNTING INSTRUCTIONS**

1. Find a flat spot to mount the SCM-DLC-3CH Digital Light Controller.
2. Print the mounting template below and tape to your preferred mounting location.
3. Drill the pilot holes and center hole.
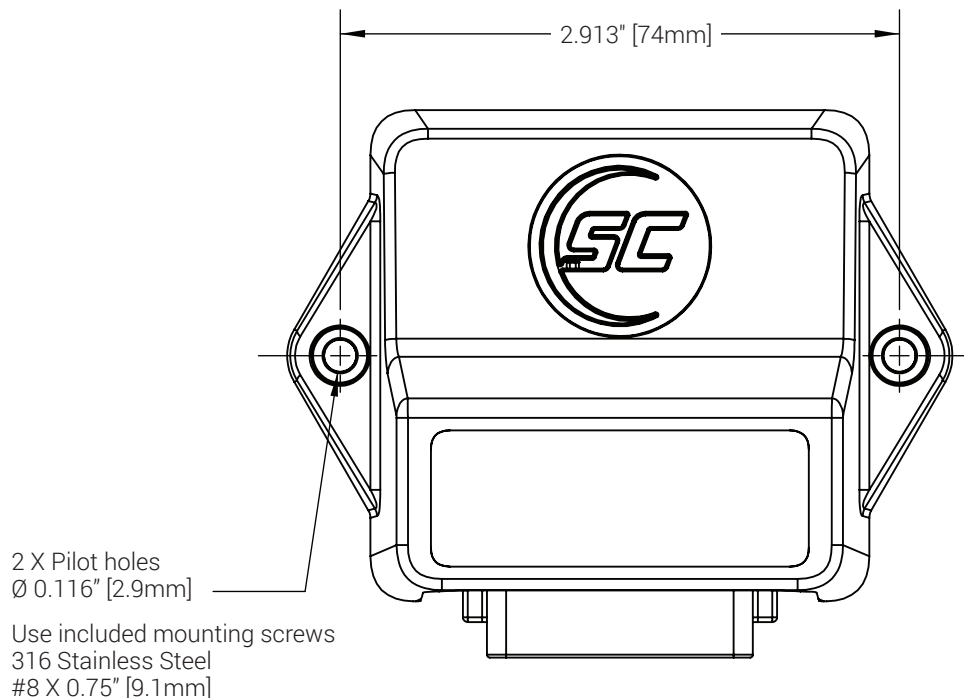4. Use Perma-Seal connectors for the wiring.

**WARNING! PRINT @ 1:1 SCALE**

▶ **MOUNTING TEMPLATE**

**IMPORTANT!**

When printing installation templates, please ensure your printer is set to print at 'Actual Size' and double check all printed dimensions exactly match the specified dimensions.

## SCALE 1:1

2.913" [74mm]

2 X Pilot holes
Ø 0.116" [2.9mm]

Use included mounting screws
316 Stainless Steel
#8 X 0.75" [9.1mm]

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