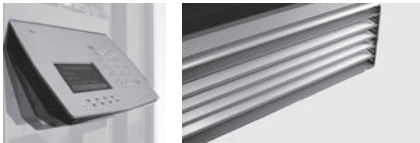


SC-UN-FT – Universal Source Controllers – Feed Through

Catalog#	Prepared by
Project	Date
Comments	Type



Overview

The Universal Source Controller – Feed Through (SC-UN-FT) line of lighting control panels provides feed-through wiring flexibility for both new and existing applications. Each Source Controller contains individual control cards that are the industry's only "true universal" by controlling most load types without interface or multiple cards. In addition, each panel has onboard Ethernet, A/V interface, Contact Closure, DMX input, voltage sensing, and real-time individual dimmer power metering.

Features

- 6, 12, and 24 dimmer variants
- No Internal Branch Circuit Breakers. External circuit breakers required. Maximum 16 Amp load per dimmer.
- Forward Phase triac slow rise-time dimmer engine. Capable of withstanding repetitive inrush current of 50 times operating current without impacting lifetime of dimmer or relay.
- Positive air-gap off per dimmer
- Bypass per dimmer for manual override and providing construction site lighting
- Voltage and frequency compensation to maintain light level during supply fluctuations
- Real-time power metering for each dimmer and total panel
- Constant live feed per dimmer, for battery powered emergency lighting connection

July 2015

Specifications

Mechanical	No regular maintenance requirements due to natural convection cooling, i.e. no fans or filters Single circuit dimmer card Wall mounted design
Programming	An LCD graphical user interface and keypad for ease of programming and configuration. The interface can be used for programming single area systems there is no need to use a PC. The GUI also allows programming of the astronomical timeclock.
Interfacing	All SC-UN-FT Source Controllers have RS485 and Ethernet over UDP connections to allow for control by third party systems (Building Management System, Audio/Visual, etc.) through the use of open protocol ASCII message commands Two contact closure inputs for integration with auxiliary equipment and emergency lighting input DMX512 input for control by entertainment systems Power metering information is available via Ethernet over UDP through the use of open protocol ASCII message commands

Standards

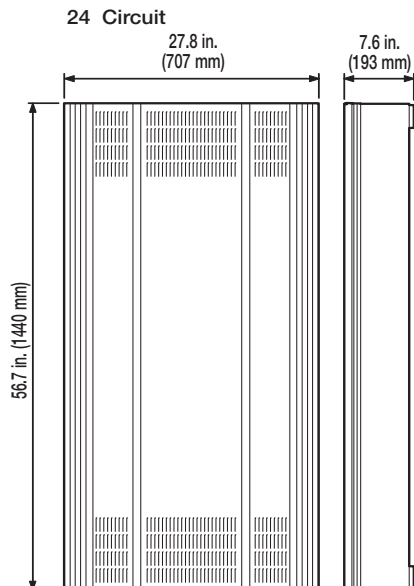
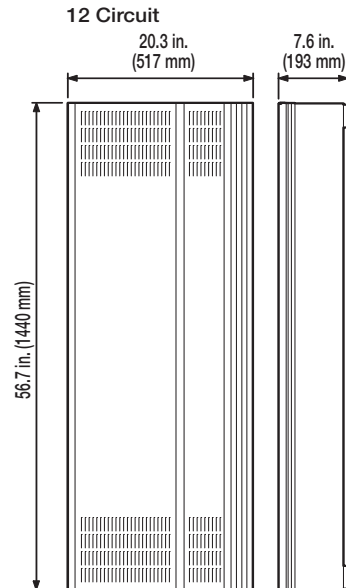
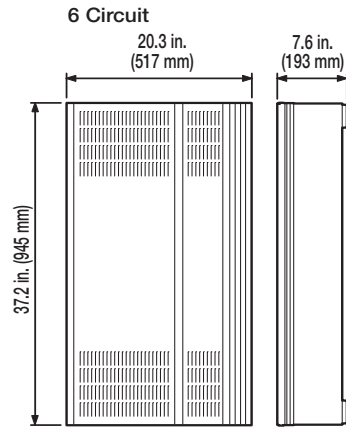


Load Types

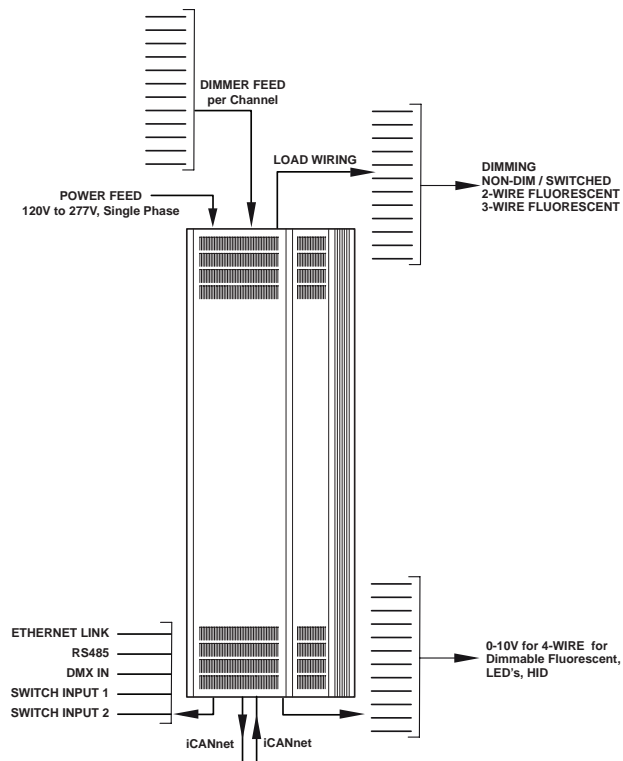
- Incandescent
- Magnetic and Forward Phase electronic low voltage - Factory Approved Transformer only.
- Neon / cold cathode
- Non-dim (switched)
- Analog fluorescent ballast control
 - 2-wire fluorescent loads
 - 3-wire fluorescent loads (Lutron ECO-10 and Hi-Lume)
 - 4-wire fluorescent loads, 0-10 VDC Isolated (40 µA max per circuit leakage to line)
- Each 0-10V output supports up to 50 ballasts/drivers that draw the standard 2mA each

Dimensions

(Inches/mm)



Wiring Diagram



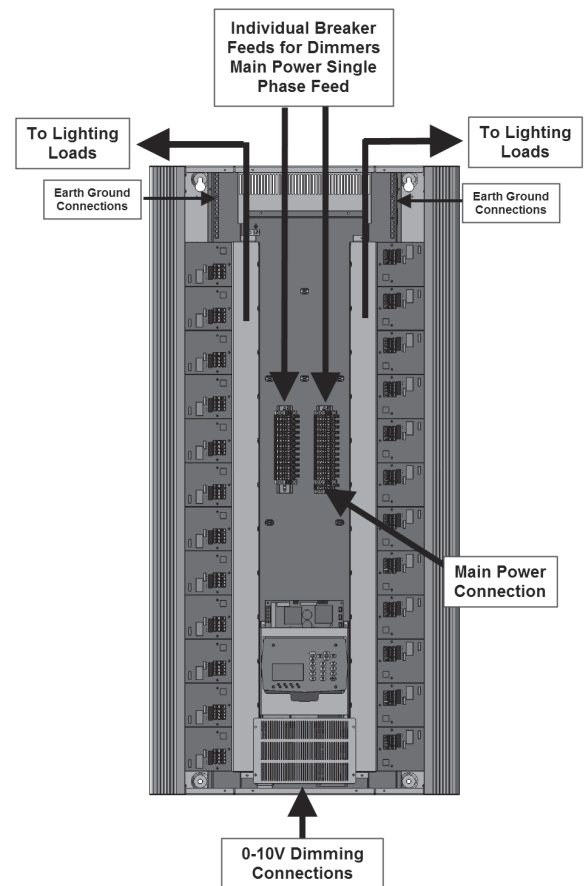
iCANnet cable type - Cooper Lighting Solutions LCCNP (Non Plenum) Cable or LCCP (Plenum) or Belden™ 1502R (Non Plenum) or 1502P (Plenum)

Each Source Controller can power up to 10 wallstations/devices. For more than 10 wallstations/devices per Source Controller add a 15 VDC External Power Supply. Wallstations/devices must be within 1,000 ft. of the Source Controller.

For wallstations/devices further from a Source Controller add a 15 VDC External Power Supply. 100 Devices per physical segment on iCANnet, maximum segment distance of 1000m/3200ft. A BN-2-NA can be added to combine more than 100 devices together (up to 65,000 total) and to extend network cable distance.

Feed Wiring

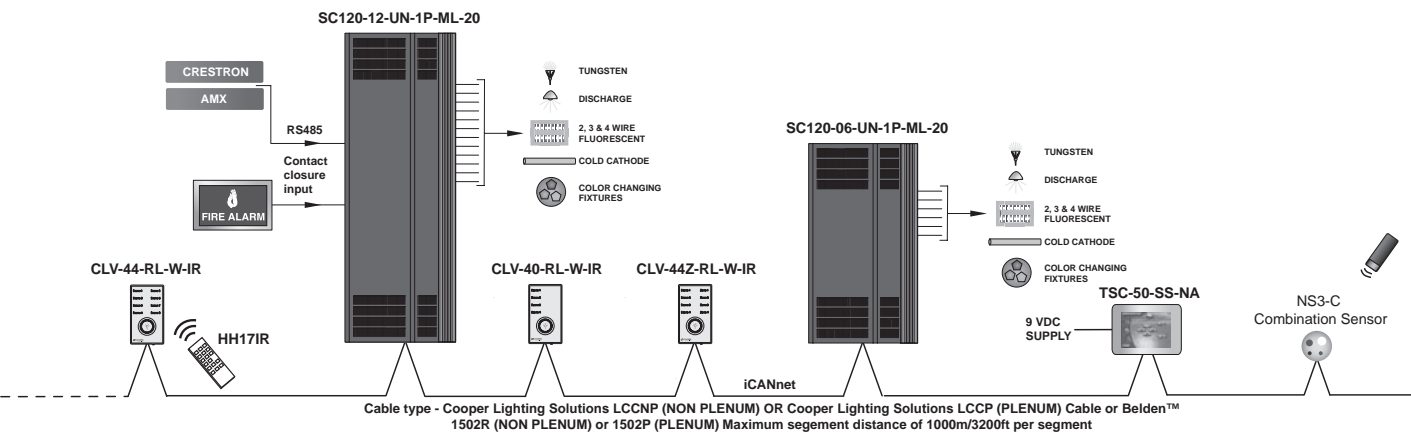
- Each dimmer to be fed from a dedicated circuit breaker.
- Maximum load should not exceed 16 Amps per dimmer.
- Terminal blocks allow for connection of feed and neutral from each breaker for each controlled load.
- Power Supply should be fed from a dedicated breaker sized for at least 3 Amps.
- Maximum recommended wire gauge is 10 AWG for circuit breaker connections and power feed.
- Universal voltage 120V - 277V panel. Do not mix voltages within a single panel.



Maximum BTU Dissipation

6 Dimmer Unit	1050 BTU @ 100%
12 Dimmer Unit	2100 BTU @ 100%
24 Dimmer Unit	4200 BTU @ 100%

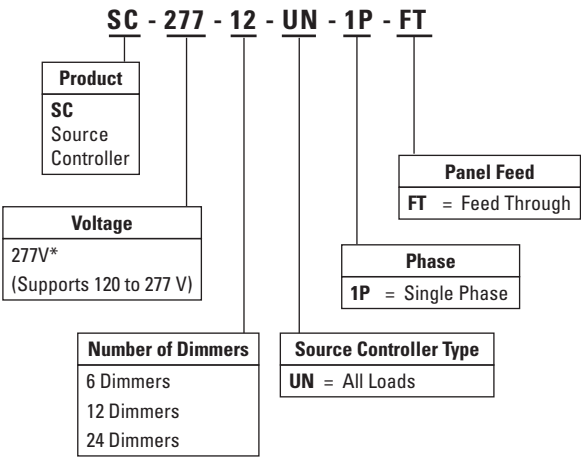
Sample System Topology



Ordering

Catalog #	Description
SC277-06-UN-1P-FT	Universal 120 to 277V Cabinet with 6 Dimmers for Most Loads, Single Phase, Feed Through, 16A per Dimmer
SC277-12-UN-1P-FT	Universal 120 to 277V Cabinet with 12 Dimmers for Most Loads, Single Phase, Feed Through, 16A per Dimmer
SC277-24-UN-1P-FT	Universal 120 to 277V Cabinet with 24 Dimmers for Most Loads, Single Phase, Feed Through, 16A per Dimmer

*All catalog numbers support either 120V or 277V power input



Cooper Lighting Solutions
1121 Highway 74 South
Peachtree City, GA 30269
P: 770-486-4800
www.cooperlighting.com

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Printed in USA
Publication No. TD503023EN
July 10, 2015

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