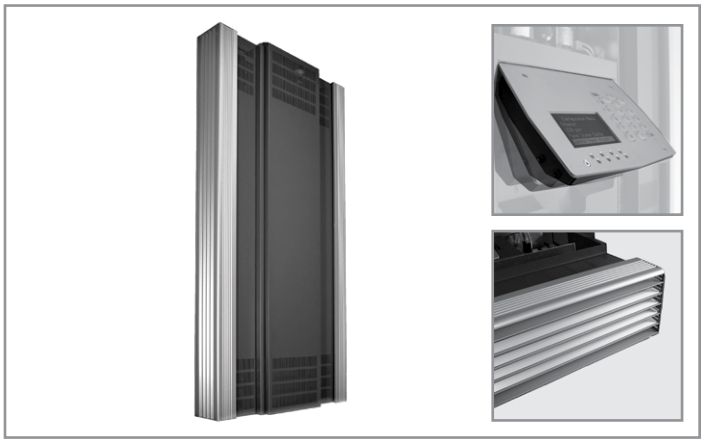
Project		Catalog #		Type	
Prepared by		Notes		Date	



WaveLinx Wired

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

Lighting control panel \ provides feed-through wiring flexibility for both new and existing applications
Available in 6, 12, and 24 circuit variants.

Typical Applications
Office • Education • Healthcare • Hospitality • Retail

Interactive Menu

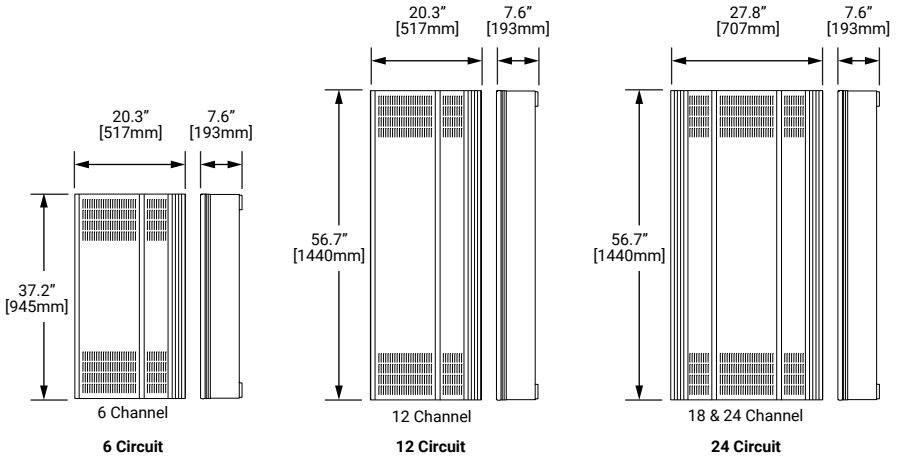
Product Certification

Product Features

Top Product Features

- 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
- Options to meet Buy American Act requirements

Dimensional and Mounting Details



additional product diagrams

Order Information

Catalog Number

Domestic Preferences (1)	Catalog Number (2)	Description	Product	Voltage	Number of Dimmers	Source Controller Type	Phase	Panel Feed
[Blank] =Standard **BAA** = Buy American Act **TAA** = Trade Agreements Act	**SC277-06-UN-1P-FT**	Universal 120 to 277V Cabinet with 6 dimmers for most loads, single phase, feed through, 16A per dimmer	SC	277V (supports 120 to 277V)	06	UN = All Loads	1P = Single Phase	FT = Feed Through
	SC277-12-UN-1P-FT	Universal 120 to 277V Cabinet with 12 dimmers for most loads, single phase, feed through, 16A per dimmer	SC	277V (supports 120 to 277V)	12	UN = All Loads	1P = Single Phase	FT = Feed Through
	SC277-24-UN-1P-FT	Universal 120 to 277V cabinet with 24 dimmers for most loads, single phase, feed through, 16A per dimmer	SC	277V (supports 120 to 277V)	24	UN = All Loads	1P = Single Phase	FT = Feed Through

Notes

(1) Only product configurations with this designated prefix are built to be compliant with the Buy American Act of 1933 (BAA). Please refer to DOMESTIC PREFERENCES website for more information. Components shipped separately may be separately analyzed under domestic preference requirements.

(2) All catalog numbers support either 120V or 277V power input.

Product Specifications

Key Features

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.

- 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

Mechanical

Enclosure Size:

- 6 Circuit cabinet: 20.3" W X 37.2" H X 7.6" D (517mm x 945mm x 193mm)
- 12 Circuit cabinet: 20.3" W X 56.7" H X 7.6" D (517mm x 1440mm x 193mm)
- 24 Circuit cabinet: 27.8" W X 56.7" H X 7.6" D (707mm x 1440mm x 193mm)

Weight:

- 6 Circuit Cabinet
  - Packed: 100 lbs (45 Kg) / Unpacked: 88 lbs (40 Kg)
- 12 Circuit Cabinet
  - Packed: 160 lbs (72 Kg) / Unpacked: 132 lbs (60 Kg)
- 24 Circuit Cabinet
  - Packed (24): 220 lbs (100 Kg) / Unpacked: Unpacked (24): 200 lbs (90 Kg)

Environment:

- **Operating temperature:** 32°F to 104°F (0°C to 40°C)
- **Relative humidity operating:** 0 to 95% non-condensing
- For indoor use only

Mounting: Wall mounted design

- No regular maintenance requirements du to natural convection cooling, i.e. no fans or filters
- Single circuit dimmer card

Electrical

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

Software Specifications

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.

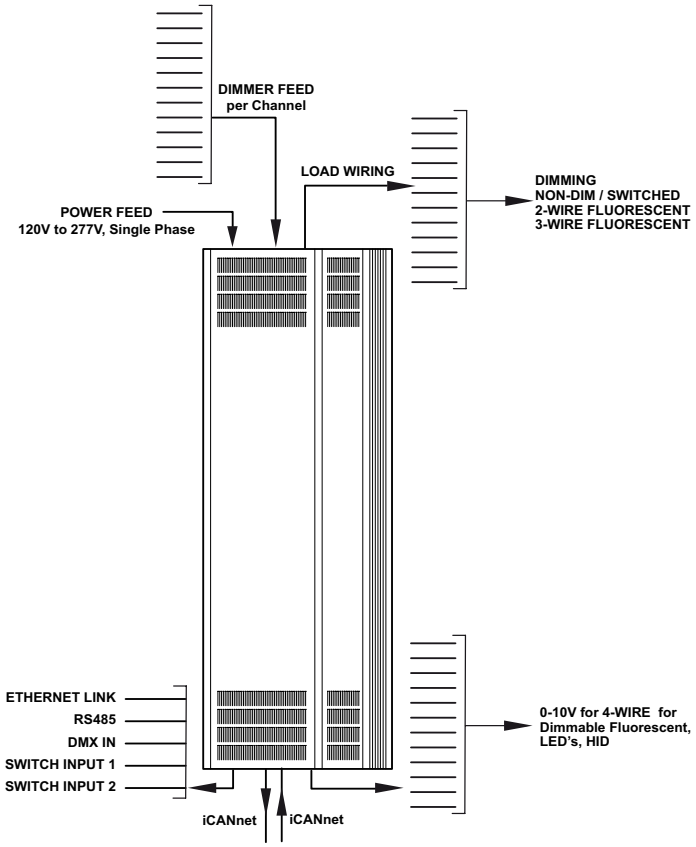
Interfacing

- 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

Warranty

Consult website for warranty information

Wiring Diagrams



iCANnet cable type - Cooper 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.

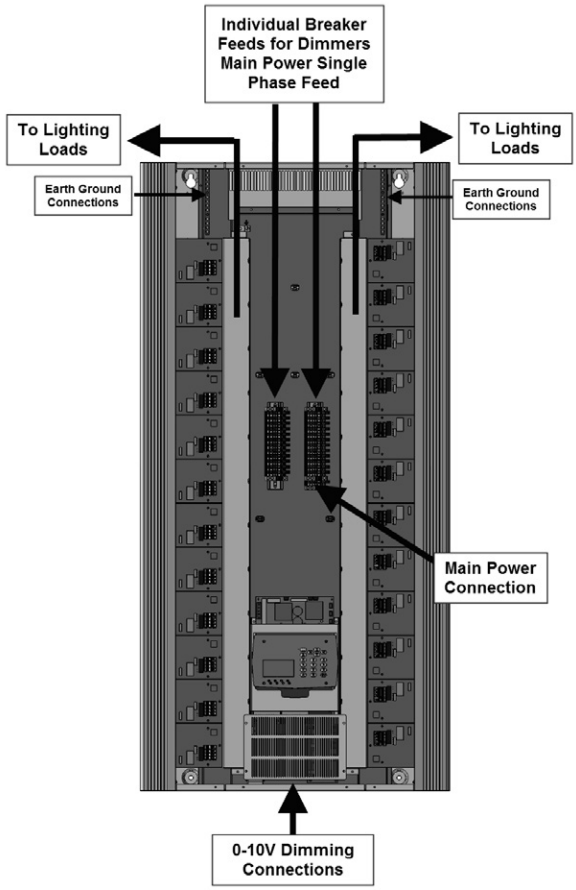
For wallstations/devices further from a Source Controller add a 15 VDC External Power Supply. 100 Devices per physical segment on iCANnet, maximum segment distance of 1000m/3200ft. A BN-2-NA can be added to combine more than 100 devices together (up to 65,000 total) and to extend network cable distance.

Maximum BTU Dissipation

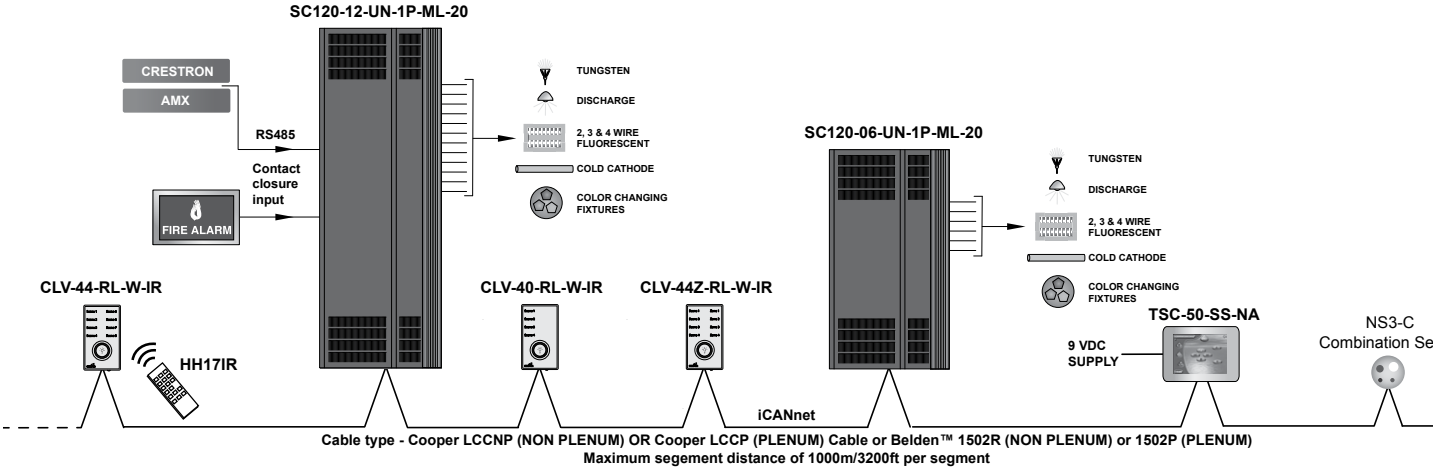
6 Dimmer Unit	1050 BTU @ 100%
12 Dimmer Unit	2100 BTU @ 100%
24 Dimmer Unit	4200 BTU @ 100%

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.



System architecture



Sample System Topology:

This diagram shows the main components of the WaveLinx wired and PRO wireless connected lighting system.

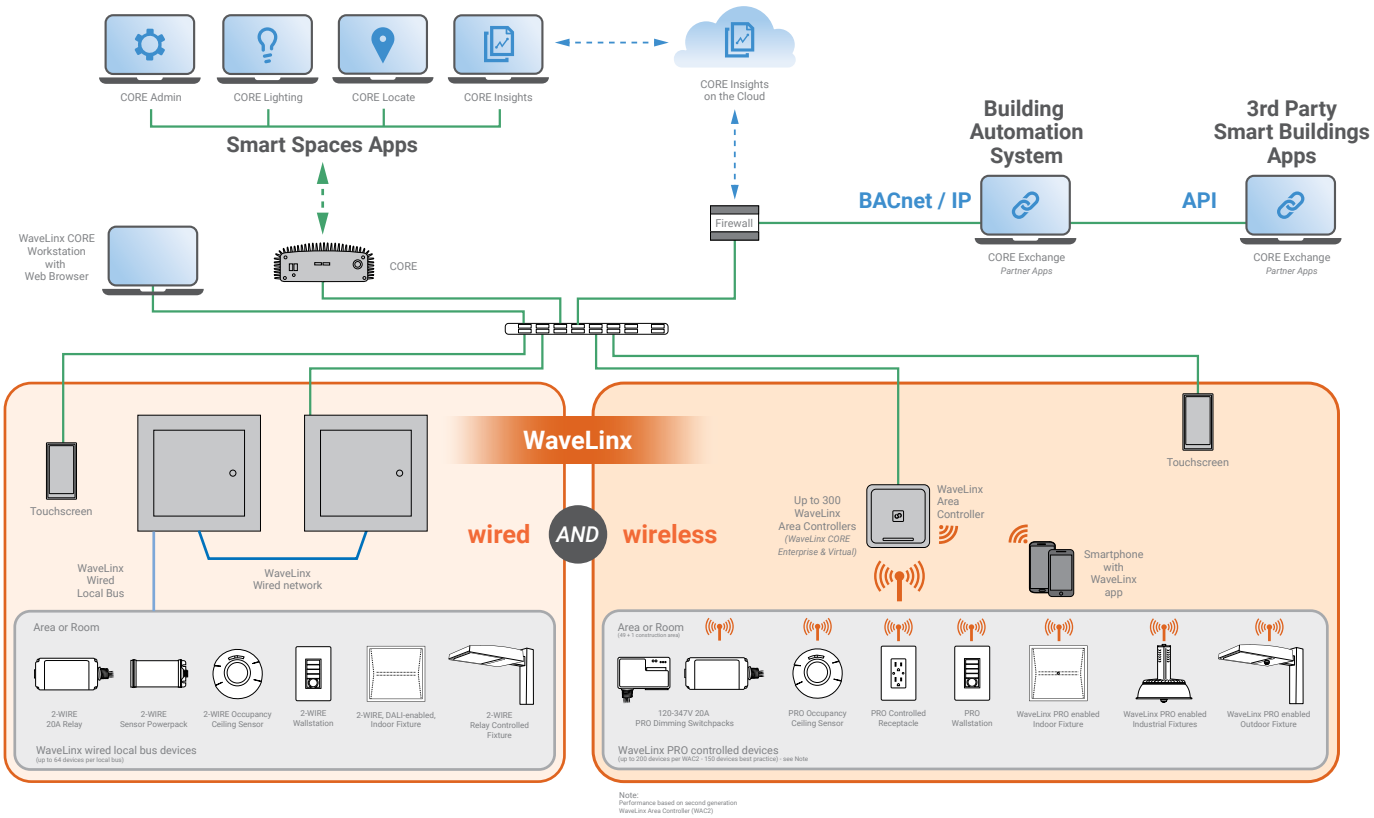
The **WaveLinx PRO wireless system** communicates using wireless mesh technology based on the IEEE 802.15.4 standard. A PoE LAN connection for each WaveLinx Area Controller (WAC) is required for power and data access to the building lighting network.

The **WaveLinx wired system** controls the devices using relay, 0-10V, DMX and the WaveLinx wired digital local bus. The WaveLinx wired system connects to the building LAN using the EG2 module. Each WaveLinx wired area controller communicates on the WaveLinx wired network.

WaveLinx Area Controllers (WAC) and WaveLinx Ethernet Gateways (EG2) communicate with WaveLinx CORE over the Ethernet network.

Please refer to the WaveLinx PRO Wireless Network and IT Guidance Technical Guide and WaveLinx Wired Network and IT Guidance Technical Guide for more information.

View WaveLinx Network and IT Guidance Technical Guide



Control Systems

- WaveLinx
- WaveLinx wired
- VividTune

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