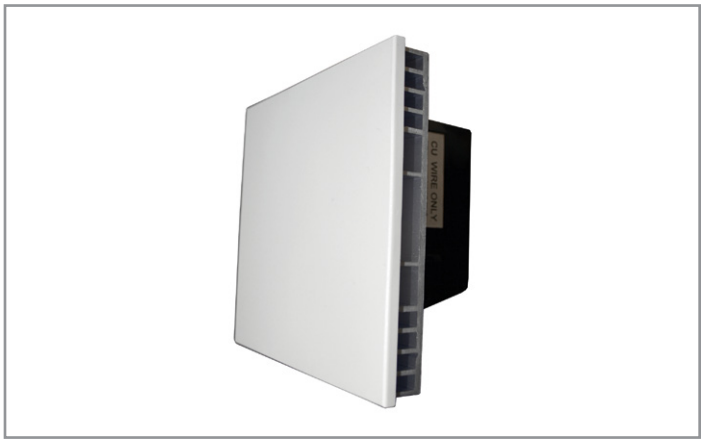
Project		Catalog #		Type	
Prepared by		Notes		Date	



WaveLinx Wired

PE400-1 Power Extender

Forward Phase to ELV Power Extender

Typical Applications
Office • Education • Healthcare • Hospitality • Retail
Industrial • Manufacturing

Interactive Menu

Product Certification

Part 15

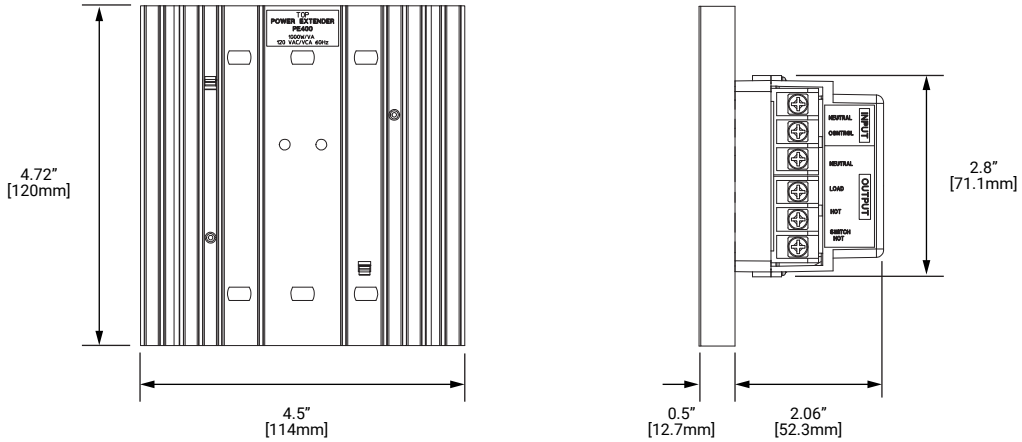
Product Features

WaveLinx Wired Local Bus

Top Product Features

- Allows a dimmer's power handling capacity to be extended to a full 1000W/VA on 120V input power
- Allows a dimmer to dim or switch a fully loaded circuit of electronic low voltage and incandescent loads only
- Works with electronic low voltage and incandescent
- Emulates the characteristics of the dimmer that it is connected to in terms of dimming range and resolution

Dimensional Details



Order Information

Catalog Number

Catalog Number	Description
PE400-1	Power Extender

Product Specifications

Key Features

- Works with electronic low voltage and incandescent
- Emulates the characteristics of the dimmer that it is connected to in terms of dimming range and resolution

Mechanical

Size: 4.72" x 4.5" x 0.5" (120mm x 114mm x 12.7mm)

Environment:

- **Operating temperature:** 32°F to 104°F (0°C to 40°C)
- **Storage temperature:** -50°F to 185°F (-10°C to 85°C)
- **Relative humidity :** 20%–90%, non-condensing
- For indoor use only

Mounting:

- All Power Extenders must have 4-1/2" spacing above and below each unit for proper ventilation and heat dissipation
- Line voltage wiring should be at least 6ft away from sound or electronic equipment wiring

Housing: Aluminum clear anodized extruded heat sink with a snap-on molded white cover

Electrical

Input Requirements:

- Range input voltage: 120V, 50/60 Hz
- Electronic low voltage and Incandescent loads only

Load Output Power: Phase independent of control device

Load Rating: 1000W/VA

Dimmer Input: 120V, 50/60 Hz

Standards/Ratings

- UL Listed
- FCC Part 15

Warranty

Consult website for warranty information

Mounting

All Power Extenders must have 4-1/2" spacing above and below each unit for proper ventilation and heat dissipation (refer to Figure 3). Line voltage wiring should be at least 6ft away from sound or electronic equipment wiring. Mount Power Extender to wall box with "TOP" facing up as follows: For Wall Box Mounting (refer to Figure 1), for Flush Mounting (refer to Figure 2) and for Panel Mounting (not shown), proceed as follows:

A. The enclosure must be in accordance with all local and national electrical codes.

B. Cooper Lighting Solutions DOES NOT recommend using a door to enclose the front of a panel, since this restricts airflow to the controls.

C. If mounting multiple controls in an enclosure:

- Ambient timperature within an enclosure "MUST REMAIN BETWEEN" 32º-104º F (0º-40º C).
- If not mounting in a metal enclosure, all units "MUST" be mounted in a wall box.

D. To improve heat dissipation of controls, remove the faceplate from the unit.

Figure 1: Surface Mounting

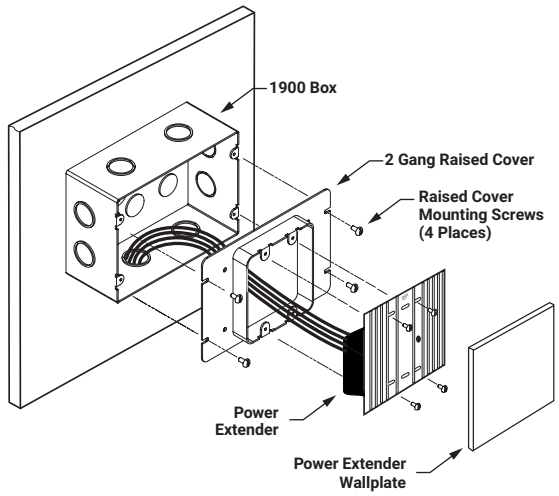


Figure 2: Flush Mounting

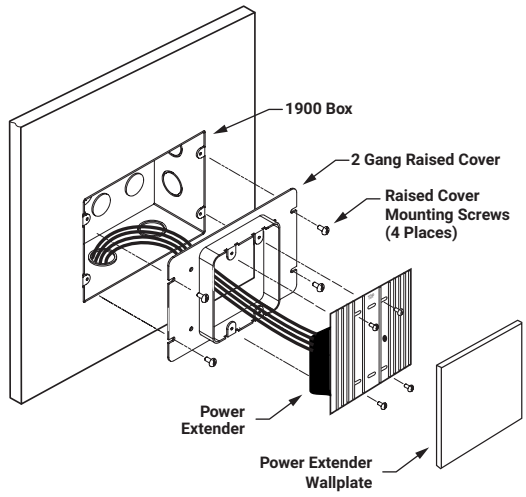
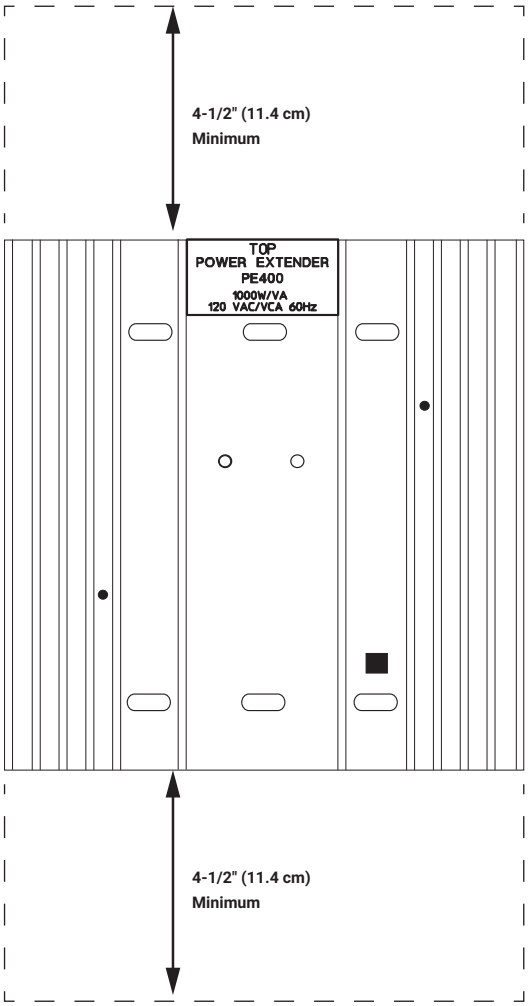
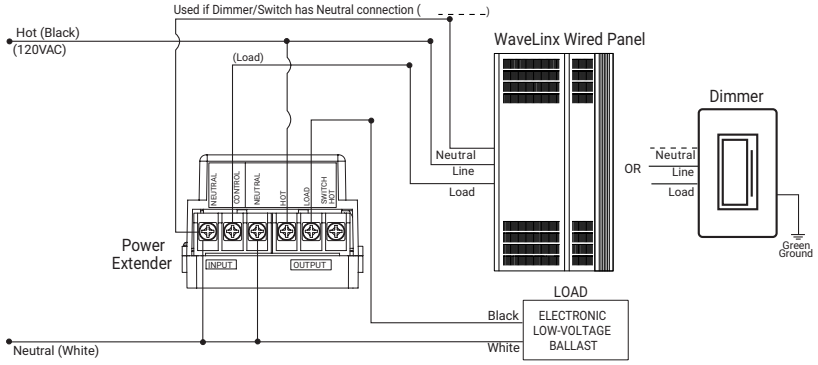


Figure 3: Front View Spacing

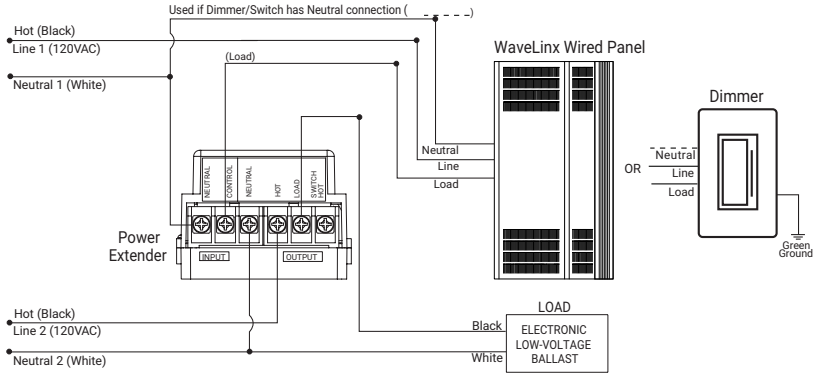


Wiring Diagrams

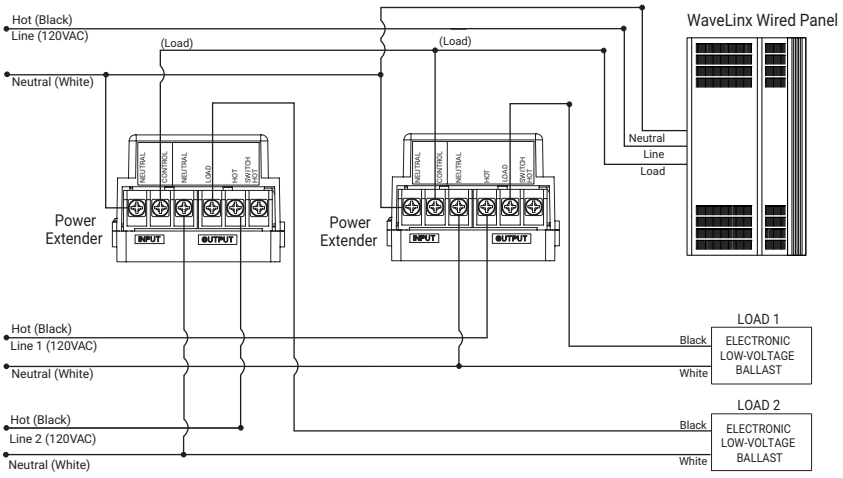
Wiring Diagram 1: Single Feed Wiring Application



Wiring Diagram 2: Dual Feed Wiring Application

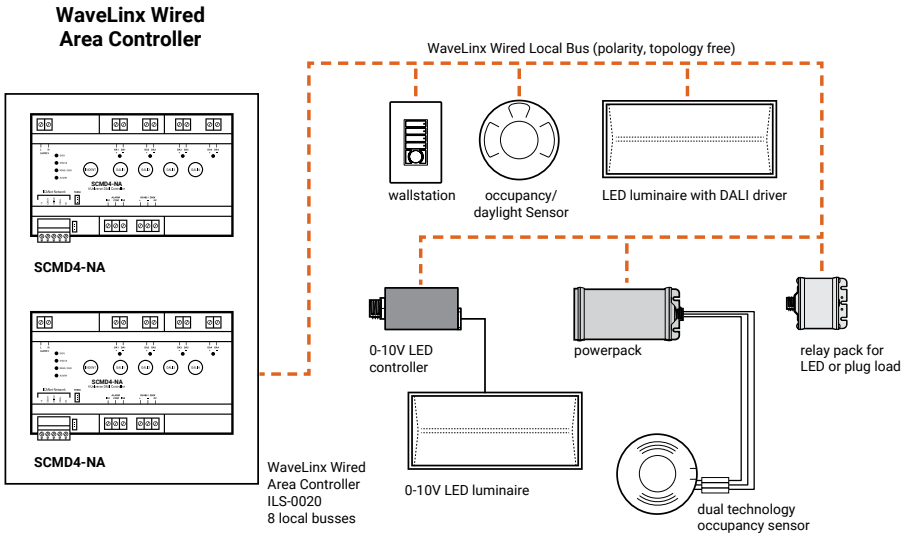


Wiring Diagram 3: Dual Feed Wiring Application w/Controller and Two Power Extenders

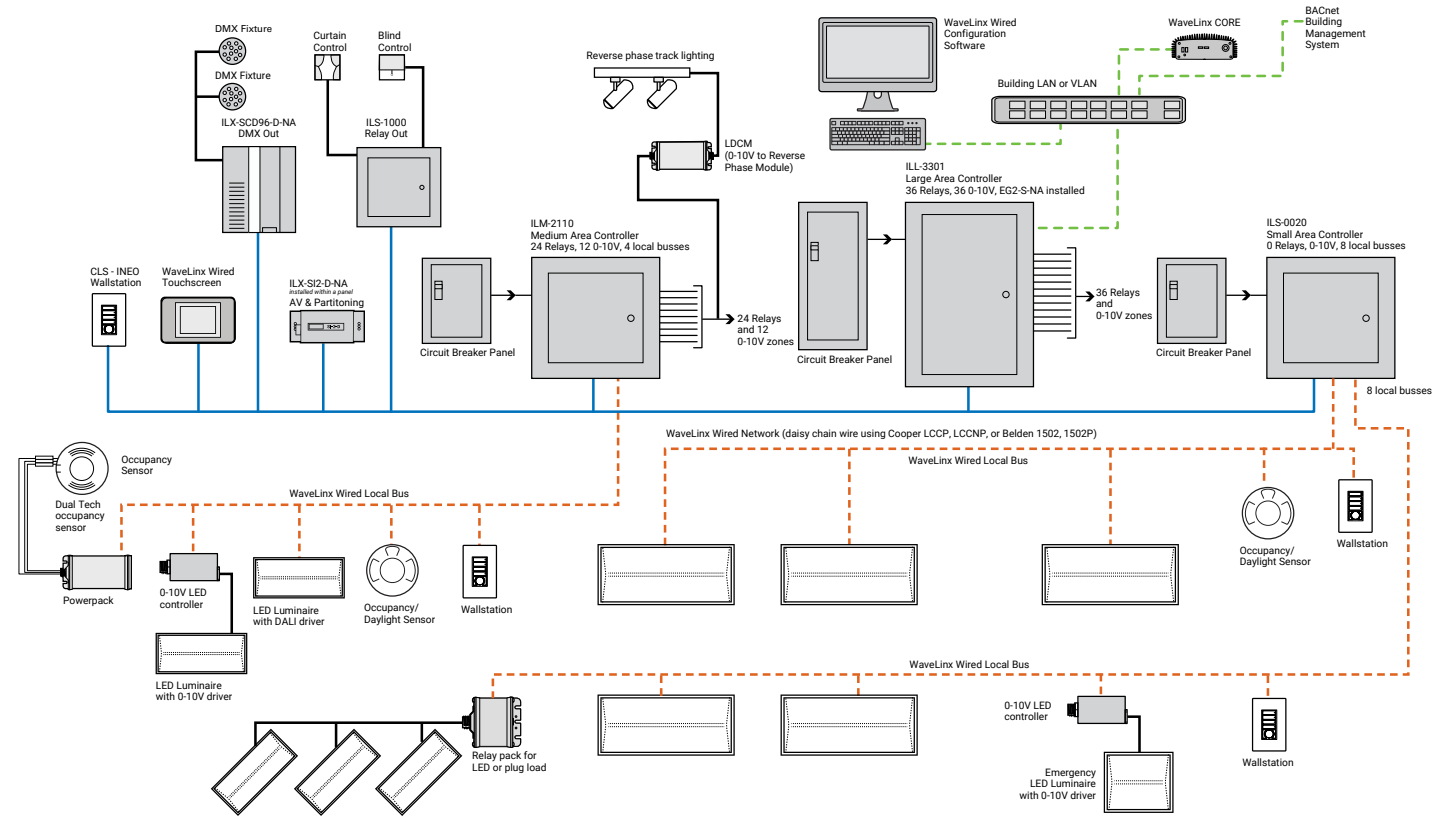


System architecture

Simple WaveLinx wired system



Complete WaveLinx wired system



Sample System Topology:

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

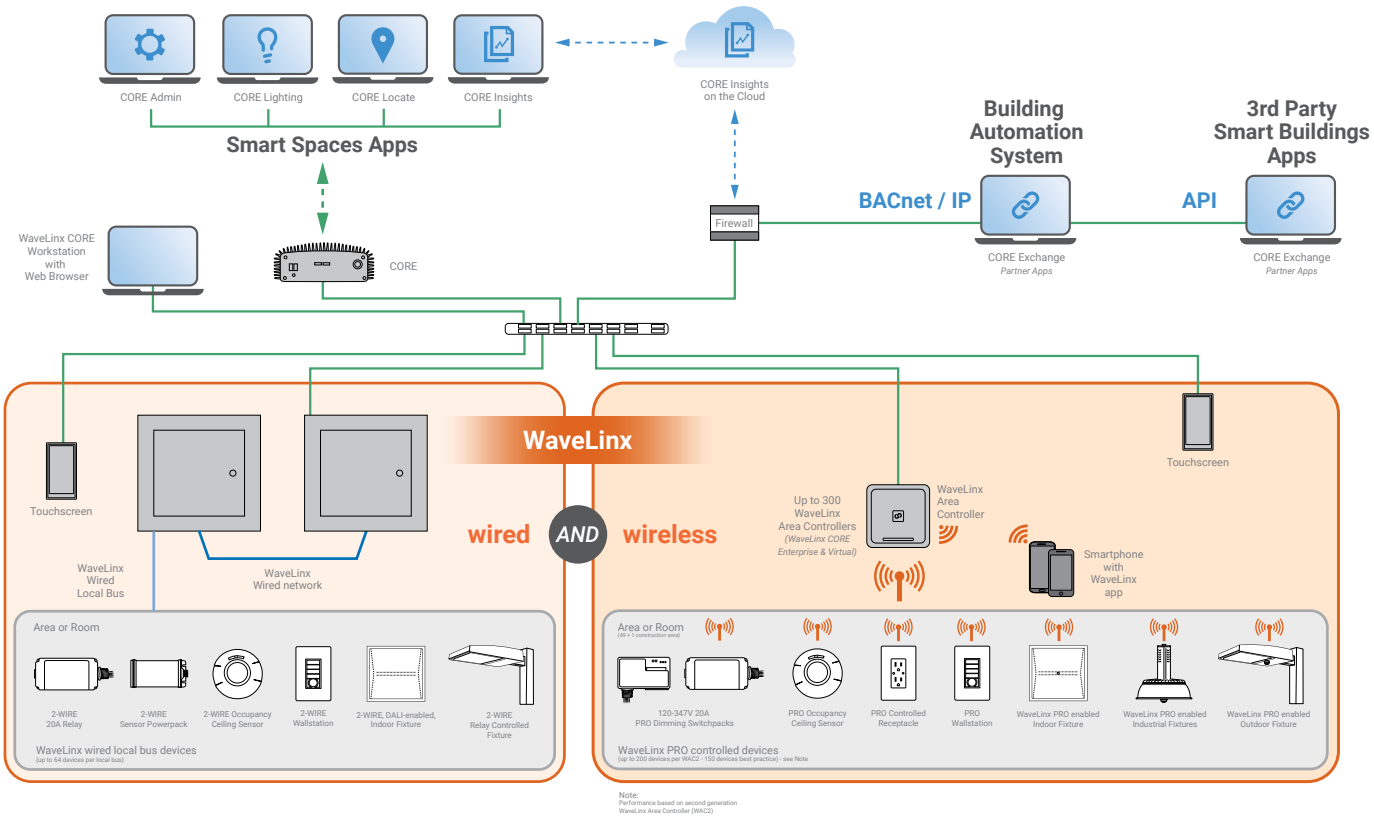
The **WaveLinx PRO wireless system** communicates using wireless mesh technology based on the IEEE 802.15.4 standard. A PoE LAN connection for each WaveLinx Area Controller (WAC) is required for power and data access to the building lighting network.

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