

## What is WaveLinx Wired ?

WaveLinx Wired is Cooper Lighting Solutions wired connected lighting system that provides total lighting control by trying the most complete set of features to support relays, 0-10V dimmers, line voltage dimmers, 2 wire addressable and DMX, while also integrating with BACnet, AV, OpenADR and Ethernet.

WaveLinx Wired is perfect for new construction as well as retrofit applications and can easily scale from a single area to a building or campus with many buildings.

## What does WaveLinx Wired do?

WaveLinx Wired was created to solve today's challenge of combining energy management with architectural and entertainment lighting control in today's building requirement.

- Robust energy management engines to ensure the lighting is at the lowest level.
- Scene based controls with real time zone and scene adjustments when setting levels.
- DMX input and DMX output from the same system to provide flexible and impactful lighting effects.

## What components do I need to implement WaveLinx Wired?

- WaveLinx Wired Area Controllers or WaveLinx Wired Source Controllers
- WaveLinx Wired local bus addressable controls and sensors
- Ethernet Gateway (EG2) for connectivity and integration
- WaveLinx Wired Software (Soft-ILP)

## What is the WaveLinx Wired wiring architecture?

Because WaveLinx Wired is so versatile there are several possible different network architectures. However, for best results we recommend using the WaveLinx Wired local bus for all low voltage switches, sensors and direct controlled luminaires, while using the WaveLinx Wired network communications bus to communicate between area controllers and source controllers.

## What software comes with WaveLinx Wired?

The WaveLinx Wired software suite should be provided with each project and is used for setup and configuration. The Trellix Core Pro or Enterprise server can be used to provide Connected Applications like the Trellix Lighting application to provide floor plan control, centralized scheduling and alarms and events as well as BACnet and API integration.

## How many devices can the WaveLinx Wired network support?

The WaveLinx Wired five wire communications network is extremely robust and can support up to 65,000 addressable control modules within area controls or source controllers.

Assuming all 65,000 of those modules are the SCMD4 module that includes four local buses, that would provide the ability to connect over 13 million two wire devices to the WaveLinx Wired network.

## Can WaveLinx Wired be installed on existing projects with Greengate network lighting control panels?

While WaveLinx Wired and Greengate can and often do co-exist on the same installation there is no communications between systems.

However if both systems provide access to the BMS system, the BMS system can coordinate and control both WaveLinx Wired and Greengate.

## **Can WaveLinx Wired be installed on existing projects with WaveLinx?**

Yes, WaveLinx Wired and WaveLinx can be installed on the same installation. However cross communication is not currently available.

Both the WaveLinx Wired and WaveLinx Wireless systems can be connected to the same Trellix Core system, which would allow both systems to be accessible via the same floor plan, BACnet and API connections. The two systems however can not currently cross communicate.

## **Does WaveLinx Wired provide power measurement data?**

Power measurement data is available through the directly controlled luminaires on the two wire communications bus. However the visualization tool supporting this will not be released until the end of 2020.

## **Where should we use WaveLinx Wired?**

WaveLinx Wired should be used on any installation looking for a wired solution to the energy code compliant requirements.

- Commercial Office
- Healthcare
- Education campuses
- Industrial space
- Data Centers

## **Is WaveLinx Wired secure?**

Yes, WaveLinx Wired connects to the building LAN using the Cooper Lighting Solutions Cybersecurity Center of Excellence (CCOE) tested and approved EG2 product. This ensure the EG2 product is free from vulnerabilities.

## **Does WaveLinx Wired support DMX control?**

Yes, WaveLinx Wired supports DMX input from a DMX system or console at several points in either the area controllers or source controllers. The DMX input capabilities include software features that support DMX point mapping and DMX take control features, locking out other manual controls when a DMX input is present.

WaveLinx Wired also supports DMX output using our SCD96 and SCDServer products. The SCD96 provides 96 DMX addresses on one universe per SCD96 controller. The SCDServer provides four full universes with RDM and ACN control as well as many other sophisticated DMX features. Any number of SCD96 and SCDServer controllers can be installed on the WaveLinx Wired network providing ultimate network flexibility

## **Can I mix WaveLinx Wired with legacy iLumin source controllers?**

Yes, WaveLinx Wired supports both the new area controllers as well as the legacy iLumin and iLumin Plus source controllers.

## **Does WaveLinx Wired support VividTune or white tuning?**

Yes, WaveLinx Wired controls are very flexible and controls any two channel 0-10V driven white tuning fixture. This can be done by using two 0-10V channels from an area controller or two DAC's on the WaveLinx Wired local bus.

## How can you control VividTune or a white tuning fixture?

Once connected to the WaveLinx Wired area controller, the VividTune fixture can be programmed to respond to the following commands:

- A local wallstation for separate light intensity and CCT control (ie. White tuning)
- A local wallstation for coordinated light intensity and CCT control (ie. Dim to warm)
- Touchscreen control either separate or coordinated
- Occupancy based intensity control with schedule based CCT control
- Schedule based intensity with CCT offset controls (ie. Circadian Rhythm)

## How Does WaveLinx Wired support UL924?

WaveLinx Wired supports UL924 using several different methods to meet your specific application needs.

- Individual fixture control using the DAC
- Branch circuit control using the CEPC-2 or CEPC-2-D
- Area relay control using the RRU-X-UNV

## Does WaveLinx Wired support partitioning?

Yes, WaveLinx Wired supports both simple and complex partitioning. Simple partitioning (3 walls) can be achieved by using the UIM or UIG product and program accordingly. Complex partitioning with more than 3 walls or multiple room joins can be achieved by using the SI-2-NA-CP product with custom programming from an Eaton field technician.

## Does WaveLinx Wired support High bay and outdoor sensors?

Yes, WaveLinx Wired includes a high bay sensor with mounting heights up to 49 feet. The MTSHB provides occupancy and daylighting and is installed on the WaveLinx Wired two wire controls bus. The MTSHB also includes a gasket that provides an IP65 rating.

## Does WaveLinx Wired support touchscreens?

Yes, WaveLinx Wired supports high resolution 5.5" and 8" PoE powered field programmable touchscreens. Using the TSI-1-NA accessory the WaveLinx Wired system can support up to 25 touchscreens per TSI-1-NA. You can have multiple TSI-1-NA accessories per WaveLinx Wired network. Each touchscreen supports the following features: multiple areas, scenes, zone control, password protection, save scene capabilities, customized graphics.