

WaveLinx Industrial Standalone Sensor Kit (SWPD2 / SWPD3 KIT) Installation Instructions

Trousse de détecteur autonome pour luminaire industriel WaveLinx (TROUSSE SWPD2 / SWPD3) Instructions d'installation

Kit de sensor independiente industrial WaveLinx (KIT SWPD2/SWPD3) Instrucciones de Instalación

www.cooperlighting.com

General Information Overview

The WaveLinx Industrial Standalone Sensor Kit is an integral part of the WaveLinx Connected Lighting (WCL) System and offers 120-277VAC 8 amp zero crossing daylight control and continuous 0-10V dimming control of LED and non-LED loads. The intended use of the Industrial Standalone Sensor Kit is to provide daylight dimming and control for industrial luminaires that do not support the WaveLinx integrated sensor. Alternatively, the WaveLinx Industrial Standalone Sensor Kit can provide occupancy inputs to the WaveLinx system when not directly connected to loads. The Industrial Standalone Sensor Kit is powered by the 120-277VAC circuit it is controlling and allows simple electrical junction box (not included) mounting via 1/2" knock out. The WaveLinx Industrial Standalone Sensor Kit operates on a wireless mesh network based on IEEE 802.15.4 standards and is controlled by the WaveLinx Wireless Area Controller.

Specifications

Technology: WaveLinx industrial standalone sensor for downlight fixtures control based on IEEE 802.15.4. Compatible only with Cooper Lighting Solutions Lighting WaveLinx Wireless Systems.

Power	Input power: 120/277VAC Connections: Hot, Neutral
Indicators	LED functionality • Indication of wireless network connection • Indication of daylight hold-off
Environmental Specifications	Operating temperature: -40°F to 131°F (-40°C to 55°C) Sensor passive infrared (PIR) performance may become exceedingly sensitive below -4°F (-20°C) Note: Wireless Area Controller should be installed in an indoor conditioned environment, preferably with line of sight through a window to one or more WaveLinx wireless devices. Storage temperature: -40°F to 158°F (-40°C to 70°C) Relative humidity operating: 0% to 95% non-condensing For indoor use only
Standards	cULus Listed - Energy Management Equipment (UL916) FCC Part 15/ECES-003 Meets latest ASHRAE Standard 90.1 requirements Meets latest IECC requirements Meets latest CEC Title 24 requirements
Wireless Specifications	Radio 2.4GHz Standard IEEE 802.15.4 Transmitter Power: + 8dBm Range: Sensor to sensor, 160ft (49m) LOS (best practice)
Mounting Height	SWPD2-KIT: 7-15ft (1.2 -4.5m) SWPD3-KIT: 15-40ft (4.5-12.1m)

⚠ WARNING



Risk of Fire, Electrical Shock, Cuts or other Casualty Hazards- Installation and maintenance of this product must be performed by a qualified electrician. This product must be installed in accordance with the applicable installation code by a person familiar with the construction and operation of the product and hazards involved. For continued protection against shock hazard replace all covers and guards after field wiring is completed.



Risk of Fire and Electric Shock- Before installing or performing any service, the power MUST be turned OFF. All installations should be in compliance with the National Electric Code and all state local codes.



Risk of Burn- Disconnect power and allow product to cool before handling or servicing.

Risk of Personal Injury- Due to sharp edges, handle with care.



Failure to comply with these instructions may result in death, serious bodily injury and property damage.

DISCLAIMER OF LIABILITY: Cooper Lighting Solutions assumes no liability for damages or losses of any kind that may arise from the improper, careless, or negligent installation, handling or use of this product. IMPORTANT: Read carefully before installing product. Retain for future reference.
NOTICE: Product may become damaged and/or unstable if not installed properly.
Note: Specifications and dimensions subject to change without notice.
ATTENTION Receiving Department: Note actual product description of any shortage or noticeable damage on delivery receipt. File claim for common carrier (LTL) directly with carrier. Claims for concealed damage must be filed within 15 days of delivery. All damaged material, complete with original packing must be retained.

NOTICE: Designed for indoor installation and use only. Dry location rated. Must not exceed 20 drivers connected to a single Tilemount sensor dimming wires. Must not exceed 70 °C operating environment. Blue wire switches to Line voltage. Do not handle while powered. Dimming luminaires should not connect 0-10V wires from different line powered circuits.

Warranties and Limitation of Liability

Please refer to www.cooperlighting.com for our terms and conditions.

FCC Statement

Note: This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses, and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation.

If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

- Reorient or relocate the receiving antenna.
- Increase the separation between the equipment and receiver.
- Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
- Consult the dealer or an experienced radio/TV technician for help.

FCC Part 15 Clause 15.21 Changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment.

FCC Part 15.19a This device complies with part 15 of the FCC Rules. Operation is subject to the following two conditions: (1) This device may not cause harmful interference, and (2) this device must accept any interference received, including interference that may cause undesired operation.
FCC 2.1091/RSS-102 In order to comply with FCC/ISED RF Exposure requirements, this device must be installed to provide at least 20 cm separation from the human body at all times.

ISED RSS

This device complies with Industry Canada's licence-exempt RSSs. Operation is subject to the following two conditions:
(1) This device may not cause interference; and (2) This device must accept any interference, including interference that may cause undesired operation of the device. CAN ICES-3 (B)/NMB-3(B)

⚠ AVERTISSEMENT



Risque d'incendie, de décharge électrique, de coupure ou d'autres risques – L'installation et l'entretien de ce produit doivent être effectués par un électricien qualifié. Ce produit doit être installé conformément aux règles d'installation en vigueur par une personne familière avec la construction et le fonctionnement du produit ainsi qu'avec les risques inhérents. Pour une protection continue contre les décharges électriques, réinstallez tous les couvercles et protecteurs en place une fois le câblage terminé.



Risque d'incendie et de décharge électrique – Assurez-vous que l'alimentation électrique est HORS TENSION avant de commencer l'installation ou de tenter d'en faire l'entretien. Mettez l'alimentation électrique hors tension au niveau du fusible ou du disjoncteur. Toutes les installations doivent être conformes au Code national de l'électricité, ainsi qu'à tous les codes nationaux et locaux.



Risque de brûlure – Débranchez la source d'alimentation et laissez refroidir le luminaire avant de procéder à son entretien ou à sa manipulation.



Risque de blessures – À cause des arêtes tranchantes, manipulez ce produit avec précaution. La désobéissance aux instructions suivantes représente un risque de blessures (y compris la mort) et de dommages matériels.

EXONÉRATION DE RESPONSABILITÉ : Cooper Lighting Solutions n'assume aucune responsabilité pour les dommages ou pertes de quelque nature que ce soit pouvant découler d'une installation, d'une manipulation ou d'une utilisation inappropriée, imprudente ou négligente de ce produit.

IMPORTANT : Lire attentivement avant d'installer le luminaire. À conserver pour consultation ultérieure.

AVIS : Ce produit peut s'endommager ou devenir instable s'il n'est pas installé correctement.

Remarque : Les caractéristiques techniques et les dimensions peuvent changer sans préavis.

ATTENTION Service de la réception : Veuillez fournir une description de tout élément manquant ou de tout dommage constaté au bordereau de réception. Soumettez une réclamation de transporteur public (chargement partiel) directement auprès du transporteur. Les demandes pour les dommages cachés doivent être présentées dans les 15 jours suivants la livraison. Tout matériel endommagé doit être conservé avec tout l'emballage d'origine.

AVIS : Produit conçu uniquement pour une installation et un usage à l'intérieur. Produit conçu pour un endroit sec.

Ne doit pas dépasser 20 pilotes connectés à un seul fils de gradation du capteur pour montage sur carreaux.

Ne doit pas dépasser la température de 70 °C du milieu de fonctionnement.

Fils bleus d'interrupteurs vers tension de secteur. Ne manipulez pas lorsque sous tension.

Les luminaires à intensité variable ne doivent pas être raccordés aux fils de 0 à 10 W provenant de différents circuits d'alimentation secteur.

Garanties et limitation de responsabilité

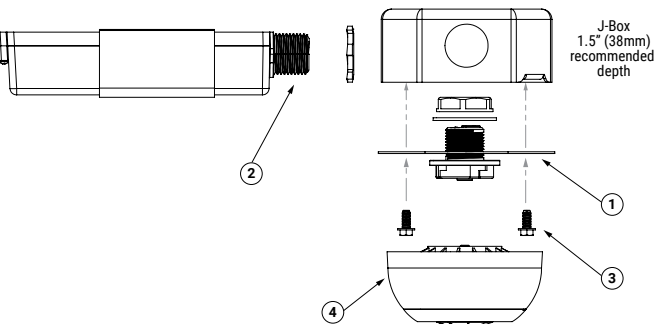
Veuillez consulter le site www.cooperlighting.com pour obtenir les conditions générales.

ISED RSS

Le présent appareil est conforme aux CNR d'Industrie Canada applicables aux appareils radio exempts de licence. L'exploitation est autorisée aux deux conditions suivantes :

- 1) l'appareil ne doit pas produire de brouillage;
- 2) l'appareil doit accepter tout brouillage radioélectrique subi, même si le brouillage est susceptible d'en compromettre le fonctionnement.

CAN ICES-005 (B)/NMB-005(B)



Out-of-the-box functionality (if connected to loads)

Fixture operates via the onboard occupancy sensor.

- Occupancy turns fixture ON to 100%
- Fixture will dim to 10% within 20 minutes when space is vacant

Note: Daylighting is disabled until the fixture is assigned to an area using the WaveLinx Mobile Application.

Wireless setup

1. Upon power up, the WaveLinx Industrial Standalone Sensor Kit will search for an Cooper Lighting Solutions WaveLinx wireless network while powering connected luminaires to 100% when occupied.
2. When the WaveLinx Industrial Standalone Sensor Kit locates and successfully joins a WaveLinx wireless network, the connected luminaires will dim to 10% (if using 0-10V wiring)
3. This feature is used to visually inspect which sensors successfully join the wireless network.
4. Industrial standalone sensors that did not pair correctly will remain at 100% (0-10V) or 100% (no 0-10V).
5. When the pairing is complete all industrial standalone sensors become part of the default area and dimmable zone.

Note: Please refer to WaveLinx manual to complete configuration.

LED Indicator Definitions

There are two major LED patterns for the WaveLinx Industrial Standalone Sensor:

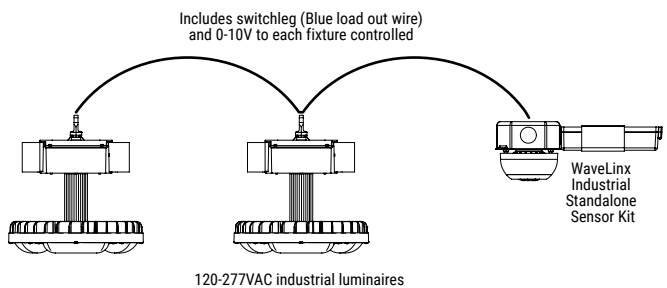
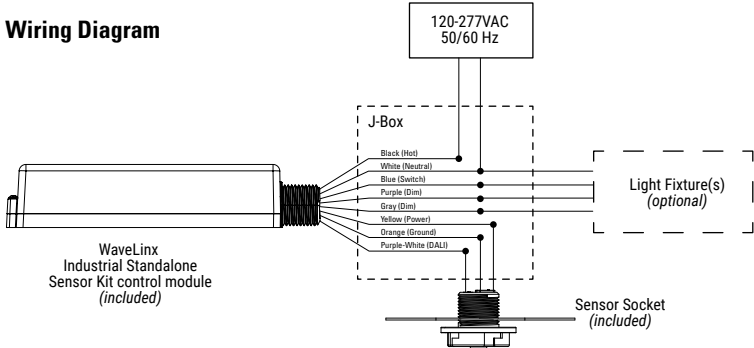
- When the industrial standalone sensor is not connected to the WaveLinx wireless network the LED in the sensor will blink Green.
- When the industrial standalone sensor is connected to the WaveLinx network the LED in the sensor will blink White.

Troubleshooting

Issue	Possible Causes	Suggestions
Sensor LED will not blink	Power Interruption	Check incoming voltage and/or wiring
Sensor cannot join WaveLinx Network and/or communication not reliable	Communication Issue	Check that the WaveLinx Industrial Standalone Sensor is within range of Wireless Area Controller (WAC) without obstacles and can establish reliable communications with the WAC. Check the Wireless Area Controller Installation Instructions for additional details.
Lights do not dim	Sensor connection issue	Check the wiring between the sensor and the control module. Ensure that the connection is not loose on the sensor or the control module.
0-10V Dimming doesn't function correctly	0-10V connection issue	Check wiring connections for Purple and Gray 0-10V wires.
	Sensor not placed close enough to light source and is not daylight harvesting	Place the sensor into tile nearest to the controlled luminaires.
	Wall accent lights causing the system to dim to minimum brightness	Move the sensor away from accent lighting to ensure the majority of light is coming from the controlled fixtures. It may be necessary to use only fixtures of the same type within the desired control area.
Lamp is causing system to dim to minimum brightness	Remove any direct light source from the controlled area. Alternatively, locate the sensor away from the direct light source but still receiving a majority of its light from the controlled luminaires.	
Sunlight is causing the fixture to dim all the time	Move the sensor a minimum of 5ft away from the window and over the desired surface to regulate.	
Controlled fixtures are not contributing the majority of light into the sensor. This causes the fixture to be at maximum brightness or minimum brightness	Adjust the sensor location away from other light sources that are not under the control of the Wavelinx Industrial Standalone Sensor. If the installation is using multiple luminaire types, ensure that the sensor is only receiving light from a single fixture type.	
Relay doesn't function correctly	Communication Issue	Check that the WaveLinx Industrial Standalone Sensor is within range of Wireless Area Controller (WAC) without obstacles and can establish reliable communications with the WAC. Check the WAC Installation Instructions for additional details. Check that the sensor wire connection is not loose on either the switchpack or the sensor.
	Relay not toggling	If communication is established, check for a 'clicking' sound of the relay indicating that it is opening and closing.
	Wiring Issues	Check to see if power and load wires are wired correctly according to the wiring section.

If still having trouble, call Technical Services at 1-800-553-3879

Wiring Diagram



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Printed in Mexico
Publication No. IB503105ML
February 2021

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