

nLight WIRED Technical Reference Guide

This nLight technical reference guide provides frequently asked questions for Peerless® and MARK Architectural Lighting™ linear fixtures. This guide also features nLight installation and line drawings for common installations. For specific questions please refer to individual specification sheets.

What components are included with nLight?

- Individual fixtures and runs could include:
 - One sensor (nES) and embedded nlight device (nIO or NEPS) or just an embedded nlight device. Consult fixture spec sheet for exact components used.
- All fixture runs can support additional sensors or nIO for multi-zone operation when needed.

Will any of these components require external installation?

- It will require CAT5 drop (one per zone) to communicate back to the nLight network. Slot recessed requires a CAT5 jumper per fixture to support a nIO in each fixture (by others).

What is the breakout nomenclature for nLight?

- nLight - indicates each fixture section of a run that is controlled by nLight wiring
- nLight/PP/xx - indicates nIO in the fixture, L or R at the end indicate left or right fixture location.

What are the options for sensors for nLight?

- There are five available options for sensors, check fixture spec sheets for what is applicable per series.
 - PIR = Occupancy sensing with passive infrared
 - PDT = Occupancy sensor with dual technology - passive infrared & microphonics
 - APIR = PIR occupancy & photocell
 - APDT = PDT occupancy sensor & photocell
 - ADC = Daylight dimming photocell
 - NS = No sensors, just nlight device

Is there a limit to the number of sensors or nIO's (nLight controller)?

- Yes, standard ordering allows for a max of two sensor/non-sensor zones and one non-sensor zone in a single run. Only one nLight sensor or module is provided per zone (with the exception of Slot recessed which has one nIO per fixture section).

Is there a limit for zone length per nLight sensor or control module?

- The nIO propagates the control signal from the nLight device to other drivers in the zone. Each nIO can accommodate up to 30 drivers. For multiple zones, each zone will have its own nLight sensor & nIO or just a nIO.

Can a zone be split in the middle of a fixture section?

- This is a custom option, consult factory for availability for your specific layout. Not available on all series.

Can a fixture run be used with a single feed for multiple zones?

- Mark: Separate zones will require separate power feeds and separate CAT5 feeds. Y- Splitters provided with CAT5 feeds.
- Peerless: Power feeds may be used across zones depending on the power consumption, each zone requires its own CAT5 feed. Y-Splitter is included with CAT5 mounting kit, daisy chain the Y splitter into the nLight network.

Can nLight be used with 347V?

- Only on certain series, see individual specification sheets for details.

How do emergency options work with nLight?

- Scenario 1- nIO is in a different fixture from the EC circuit. Emergency Circuit (EC) power will not be connected to a nIO modules. The sensor or nIO module must be connected to the normal circuit power, but EC driver will connected by EC power. The nIO module will open up the 0-10v dimming circuit when normal circuit goes out and EC driver will go full bright during emergency mode.
- Scenario 2 - nIO and EC in the same fixture
 - Peerless - same as above
 - Mark - Emergency nIO will be provided. An additional bus power supplying device must be powered from normal power.
- The E10WLCP/E10WCP option provides battery power directly to the LED's during the loss of normal power. Since the driver will not be powered, the sensor will not be able to limit the output, so the fixture section will go to full battery output. Lighting systems are designed to work with UL924 requirements.

Can fixtures be rezoned in the field?

- Generally, no because an nlight device is provided per zone. The exception would be the Slot recessed series which has a sensor per fixture.

How do I specify multiple sensors for occupancy coverage in a run?

- You can specify up to two sensors as two separate zones and program it as a single zone through commissioning. If additional sensors are required, it would need to be done as a modification.

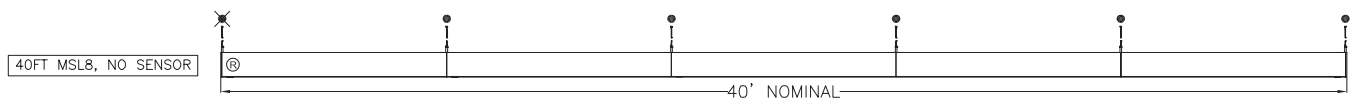
LEGEND

- - CABLE SUPPORT
- ✕ - CABLE WITH FEED
- Ⓡ - nIO DEVICE
- Ⓢ - NES7 SENSOR
- EMER - EMERGENCY CIRCUIT SECTION
- BATT - 4FT EMERGENCY CIRCUIT (INTEGRAL BATTERY PACK)

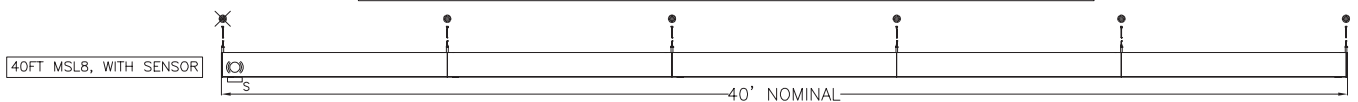
***For specific sensor/nIO locations please refer to individual specification sheet**

SINGLE ZONE RUNS

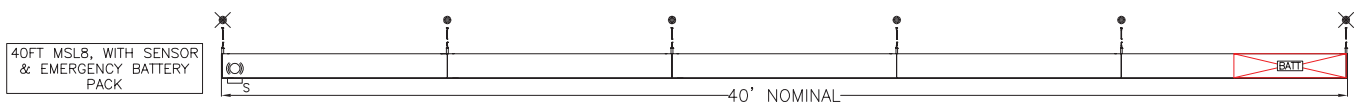
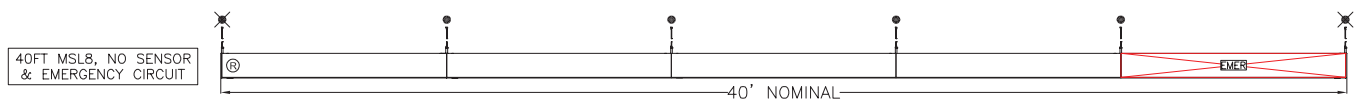
Ⓡ = (1) nIO DEVICE TO CONTROL ENTIRE RUN. POWER PACK CAN HANDLE UP TO 30 DRIVERS



Ⓢ = (1) NES7 SENSOR TO CONTROL ENTIRE RUN. POWER PACK CAN HANDLE UP TO 30 DRIVERS



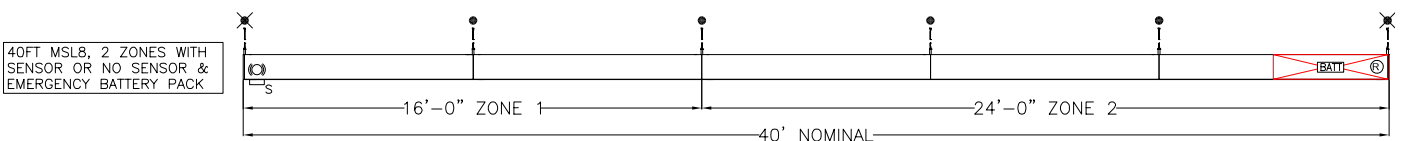
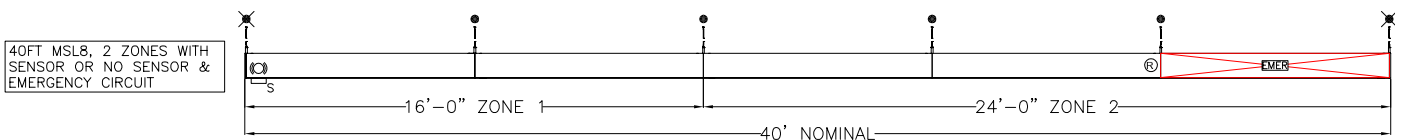
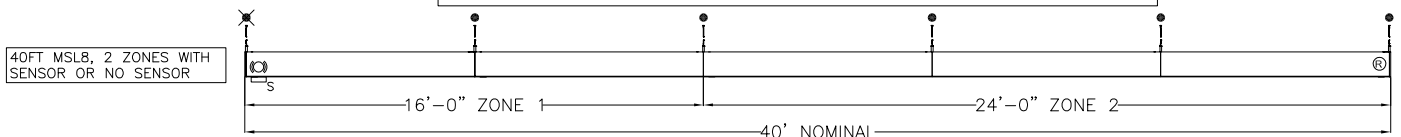
- (1) nIO DEVICE OR NES7 DEVICE TO CONTROL ENTIRE RUN. POWER PACK CAN HANDLE UP TO 30 DRIVERS
- NLIGHT/PP IS NOT ALLOWED IN THE SAME FIXTURE SECTION WITH EMERGENCY CIRCUIT



NOTE: Consult individual product spec sheets for specifics on the length of the emergency section(s).

DUAL ZONE RUNS

- (1) nIO DEVICE OR NES7 SENSOR NEEDED PER ZONE.
- (1) POWER PACK NEEDED PER ZONE. CAN HANDLE UP TO 30 DRIVERS
- NLIGHT/PP IS NOT ALLOWED IN THE SAME FIXTURE SECTION WITH EMERGENCY CIRCUIT



NOTE: Consult individual product spec sheets for specifics on the length of the emergency section(s).

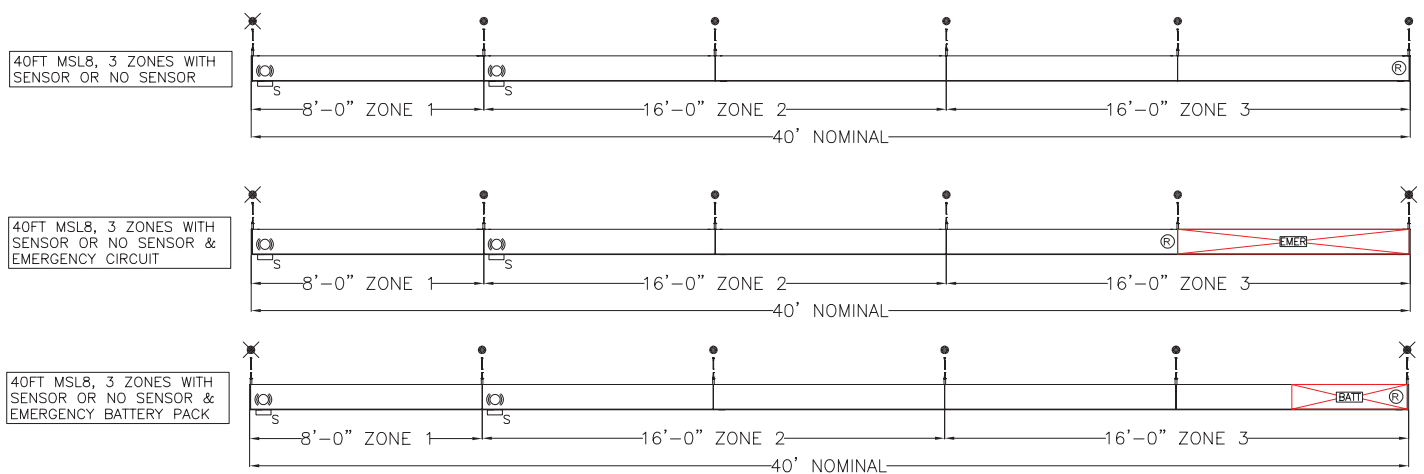
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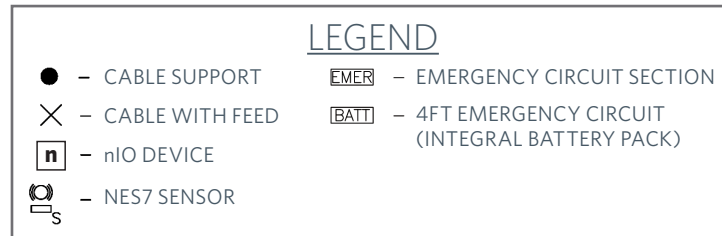
3 ZONE RUNS

- (1) nIO DEVICE OR NES7 SENSOR NEEDED PER ZONE.
- (1) POWER PACK NEEDED PER ZONE. CAN HANDLE UP TO 30 DRIVERS
- NLIGHT/PP IS NOT ALLOWED IN THE SAME FIXTURE SECTION WITH EMERGENCY CIRCUIT

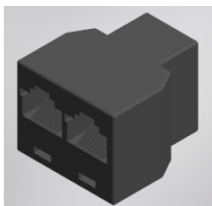
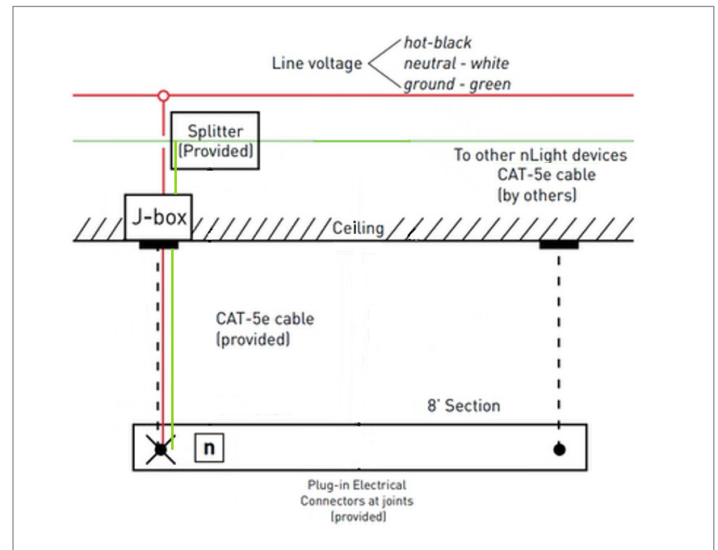
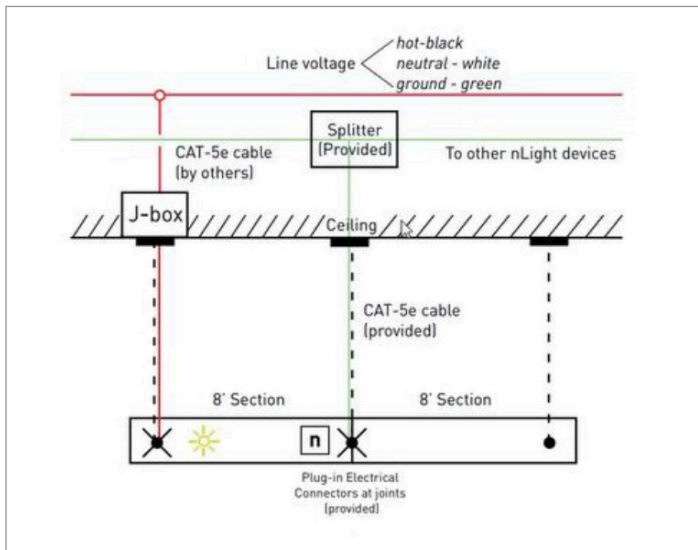


NOTE: Consult individual product spec sheets for specifics on the length of the emergency section(s).

These layouts are representative only and may not apply to the exact layout for your specific job. Please consult your factory rep for help with specific layouts for your application and series.



***For specific sensor/nIO locations please refer to individual specification sheet**



RJ45 splitter (provided on each CAT5 drop)

CAT5 drop will be required for any additional zone.