

L3I

INDIRECT PENDANT

Installation Guide



Model

L3I-BT - Ketra L3I Indirect Pendant

⚠ Warning

Risk of electric shock. Use in dry locations only.

Turn power OFF at circuit breaker or remove fuse. Damage to this product caused by wiring with power on voids the warranty.

Due to the risk of electric shock, a licensed electrician should install this power supply unit in strict compliance with the National Electrical Code and any state or local code which may apply.

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. Maintain at least 6 ft (1.8m) of spacing between any KetraNet Mesh product and Wi-Fi routers and access points.



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

This device contains licence-exempt transmitter(s)/receiver(s) that comply with Innovation, Science and Economic Development Canada's licence-exempt RSS(s). Operation is subject to the following two conditions:

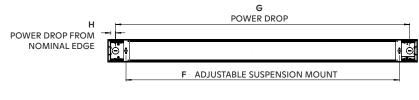
- This device may not cause interference.
- This device must accept any interference, including interference that may cause undesired operation of the device.

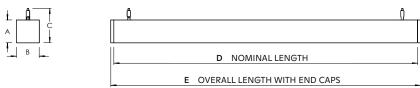
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Product Overview

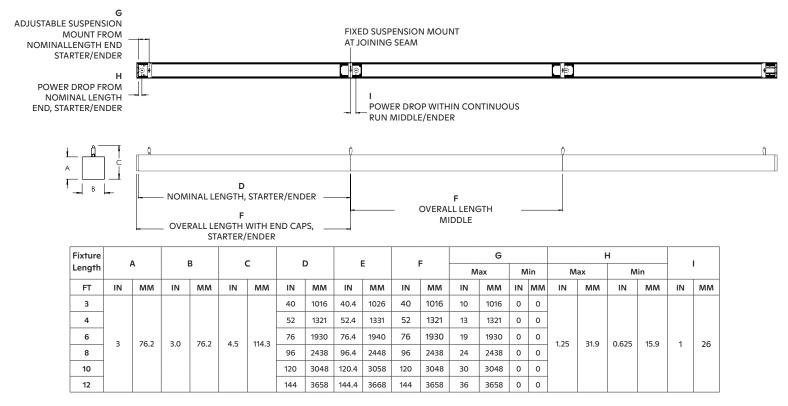
Standalone





| Fixture | | | | | - | F | | | | G | | | | н | | | | | | | | |
|---------|----|--------|-----|------|----------|-----------|-----|------|-------|---------|------|-------|------|------|------|------|-------|------|------------------|------|-------|------|
| Length | | 4 | ' | в | ' | L | | DE | | Max Min | | Max | | Min | | Max | | Min | | | | |
| FT | IN | мм | IN | мм | IN | мм | IN | мм | IN | мм | IN | мм | IN | мм | IN | мм | IN | мм | IN | мм | IN | мм |
| 3 | | | | | | | 40 | 1016 | 40.8 | 1036 | 40 | 1016 | 20 | 508 | 37.5 | 953 | 38.75 | 984 | | | | |
| 4 | | | 2.0 | | 76.2 4.5 | 4.5 114.3 | 52 | 1321 | 52.8 | 1341 | 52 | 1321 | 26 | 660 | 52 | 1321 | 52 1 | 1321 | - - 1.25 - | 31.9 | 0.625 | 15.9 |
| 6 | | 76.0 | | | | | 76 | 1930 | 76.8 | 1950 | 76 | 1930 | 38 | 965 | 76 | 1930 | 76 | 1930 | | | | |
| 8 | 3 | 76.2 3 | 3.0 | 76.2 | | | 96 | 2438 | 96.8 | 2458 | 96 | 2438 | 48 | 1219 | 96 | 2438 | 96 | 2438 | | | | |
| 10 | 1 | | | | | | 120 | 3048 | 120.8 | 3068 | 120 | 3048 | 60 | 1524 | 120 | 3048 | 120 | 3048 | | | | |
| 12 |] | | | | | | | | | 144 | 3658 | 144.8 | 3678 | 144 | 3658 | 72 | 1829 | 144 | 3658 | 144 | 3658 | |

Continuous Run



Included Components

Starter

- Canopy
- Cable coupler
- Aircraft cable
- J-box strap
- T-bar clip (optional, t-grid)
- Hanger bolt (optional, hard ceiling)
- Crimps for aircraft cable
- Strain relief bushing

Individual Fixture

- (2) Cable grippers
- (1) Power in cable, attached
- (1) Power out cable, attached (optional)

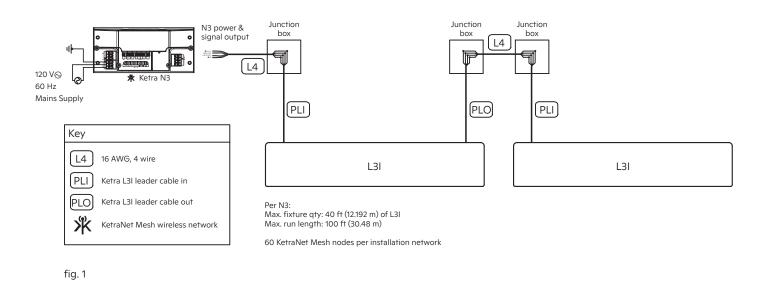
Continuous Run

(parts packaged per run of n fixtures, n-1)

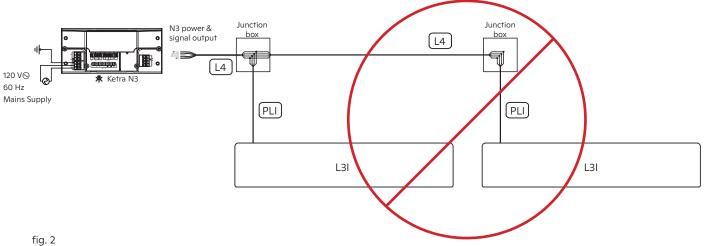
- (n + 1) Cable grippers
- (1 per end-to-end attachment) Adjustable mounting bracket
- (2 per end-to-end attachment) Joining wedge bracket (+screws)
- (1) Power in cable, attached (to first fixture in run)
- (1) Power out cable, attached (optional, to last fixture in run)
- (1) Power in cable, not attached (optional, for intermediate power drops in runs >40 ft/ 12.192 m)

Pre-Installation

Note: The L3I is required to be wired in series. As such, input/output orientation is critical. Power in and out sides are clearly labeled on the ends of the luminaire.



Not allowed: Home run wiring not supported



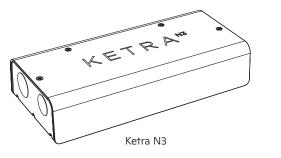
* Contact Ketra for thicker ceiling types.

Important Note: N3 Satellite

Warning: Turn off power to the N3 Satellite before any installation.

- N3 Satellite is required An N3 Satellite is required for use of the L3I Indirect Pendant. Never connect the pendant directly to building power.
- LEAD-OUT from N3 For an N3 Satellite mounted in the plenum, use 4-conductor building wire, gauge 16 or lower, as a LEAD-OUT cable.
- Maximum run length One N3 can power no more than a maximum 100 feet of total run length, including a total fixture length not to exceed 40 ft (12.19 m). If a fixture causes the total run length to exceed 100 feet or the fixture run length to exceed 40 ft (12.19 m), it will require a power drop from a new N3.

For N3 installation instructions, refer to our N3 Installation Guide.



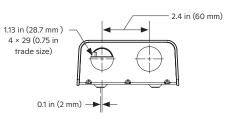
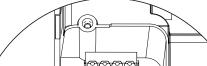
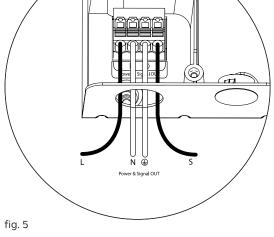




fig. 3



N3 wiring out to L3I leader cable



Warning: Signal wire (red) should not be connected to line voltage (black). The signal wire transmits data between the N3 and the fixture(s).

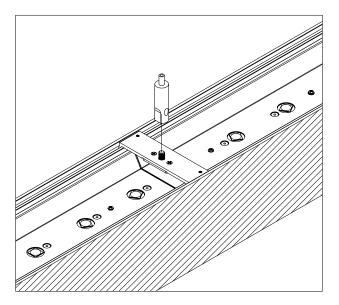
Installation

Installing the L3I

Warning: Turn off power to the N3 Satellite before any installation.

STEP 1:

Prepare the L3I for installation





- 1. Position the suspension mount(s) per the drop locations at the ceiling. See suspension mounts diagram (see fig. 7).
- 2. Lock the mount(s) by tightening the set screws. Use a 0.05 in (1.27 mm) hex drive.
- 3. Thread a cable gripper (provided) onto the stud.

Mount Spacing

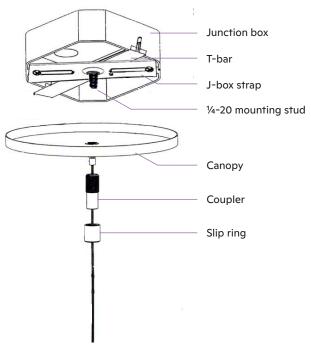
Standalone or starter: Two mounts, both ends Joiner or ender: One mount, OUT end

| | | | = |
|----------------------|---------------|----------------------|---|
| Standalone / Starter | Starter | Joiner / Ender | |
| | First Fixture | Consecutive Fixtures | |

fig. 7

STEP 2: Install the suspension mount hardware to the ceiling

Hanging from a junction box





- 1. Thread the ¹/₄-20 stud onto the J-box strap. Fasten the J-box strap to the junction box using the correct screws according to the junction box type.
- 2. Mount the aircraft cable to the J-Box strap using the aircraft cable coupler.
- 3. Remove the slip ring from the aircraft cable coupler.
- 4. Slide the canopy up the aircraft cable and secure in place with the slip ring.
- 5. For multiple junction box suspension locations, repeat steps 1-4.

continued on next page

Hanging from a T-Grid Support (non-power-feed only) (see fig. 9)

- 1. Install the T-grid support clip onto the T-grid.
- 2. Mount the aircraft cable to the T-grid support clip using the aircraft cable coupler.
- 3. Remove the slip ring from the aircraft cable coupler.
- 4. Slide the canopy up the aircraft cable and secure in place with the slip ring.

Hanging from a hard ceiling (non-power-feed only) (see fig. 10)

- 1. Install the hanger bolt into the ceiling stud.
- 2. Mount the aircraft cable to the hanger bolt using the aircraft cable coupler.
- 3. Remove the slip ring from the aircraft cable coupler.
- 4. Slide the canopy up the aircraft cable and secure in place with the slip ring.

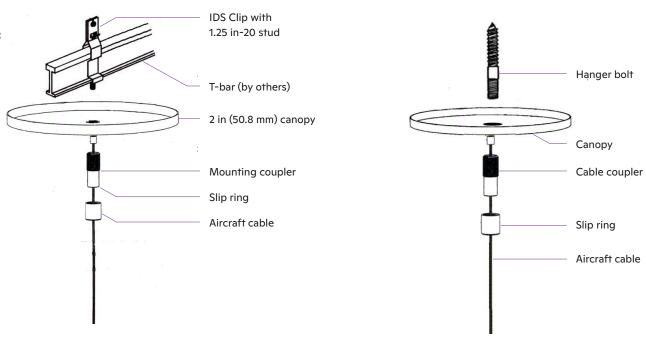


fig. 9

fig. 10

STEP 3: Mount the L3I

Standalone and Starter

- 1. While supporting the fixture, thread the aircraft cables into the cable grippers. The cable grippers will lock automatically to secure the aircraft cables (see fig. 11).
- 2. Adjust the height of the fixture by compressing the spring lock mechanism at the top of the gripper (see fig. 12).

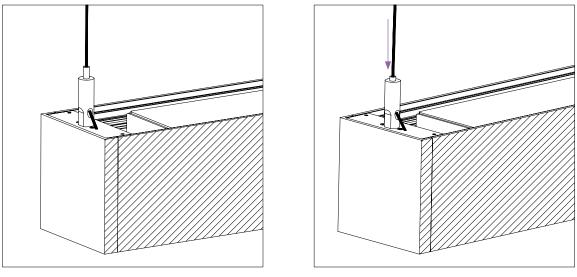


fig. 11



Warning: Compressing the spring lock will release the aircraft cable. Be sure to support the weight of the fixture while adjusting the height.

3. Use a level to ensure that the fixture is suspended correctly.

Joiner / Ender

1. Connect the previous fixture's male joint to this fixture's female joint. Slide the male joint's four pins into place in the female joint (see fig. 13).

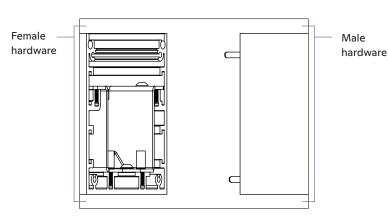
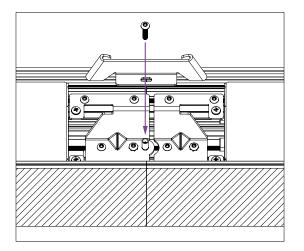


fig. 13



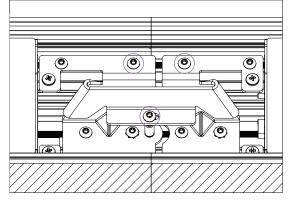


fig. 15

fig. 14

2. Secure the joints using the provided wedge brackets. Slide the wedge brackets onto the ramps (see fig. 14). Then, use a #1 Phillips drive with the provided M3 screws to secure the wedge brackets (see fig. 15).

Note: Be sure not to pinch any wires when applying the wedge brackets.

3. Mount the fixture's OUT end using aircraft cable.

continued on next page

4. Wire the two fixtures together.

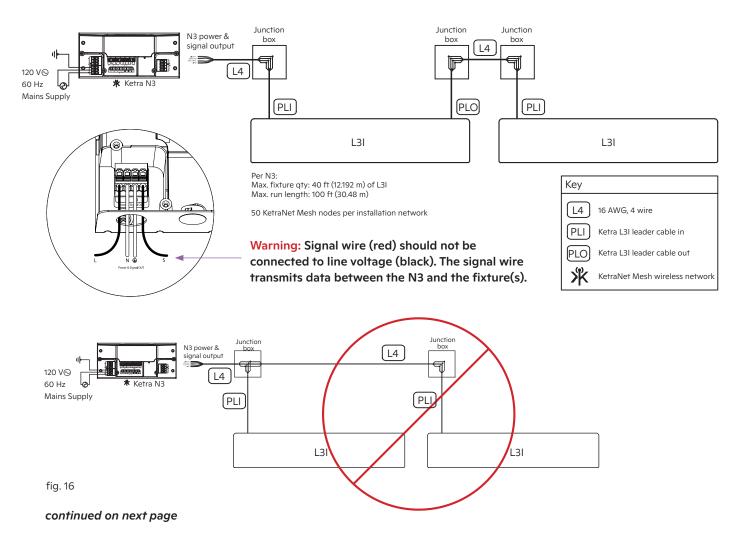
Warning: Skip this step—i.e. do not wire the fixtures together—if the current joiner/ender requires a power drop. It requires a power drop if it causes the total run length to exceed 100 feet or the fixture run length to exceed 40 feet.

- a. Make the wiring connections. Pull the two sets of wires out (you will have about six inches of slack on each) and make the connections, being sure to match wire colors.
- b. Tuck the connected wires back into the compartment.
- c. Cover the compartment with the wiring compartment bracket.
- 5. Reposition the previous fixture's OUT suspension mount to span the joint.
- 6. Re-level the fixtures as necessary.

STEP 4:

Wire the fixture(s) as necessary

Note: The L3I does not support multi-drop or home-run wiring. See fig. 16.



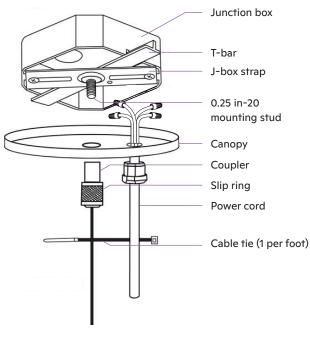
- 1. Remove the canopy from the junction box by unthreading the coupler. This will not release the aircraft cable from the junction box.
- 2. Thread the L3I leader cable through the power feed hole in the canopy.
- In the junction box, make electrical connections. Connect the appropriate cable conductors to their matching partners:
 Black conductor to Line / Hot wire
 White conductor to Neutral wire
 Green conductor to Ground wire
 Red conductor to Signaling wire

Warning: Signal wire (red) should not be connected to mains voltage (black).

4. Restore the canopy to the junction box. Secure in place with the coupler.

Note: Make sure that the green plated grounding screw is positioned in order to ground the canopy.

- 5. Clamp the strain relief bushing on the leader cable and secure it to the canopy.
- 6. If applicable, tie the leader cable to the aircraft cable using the provided zip ties. Place one cable tie for each foot of cable. Trim any excess tie.



Power Feed System

STEP 5:

Finish the installation

- 1. Remove the shrink wrap around the lenses.
- 2. Clip any excess aircraft cable. Leave at least a quarter inch of cable coming out of the gripper's side exit.
- 3. Using isopropyl alcohol, clean and sides of the fixture to remove dust and fingerprints.
- 4. Restore power to the circuit. The fixture will illuminate at a default white state ready for programming. If the fixture is any other color, please refer to our troubleshooting table below.

Trouble Shooting Table

| Color | Condition | Correction |
|----------------------------|---|--|
| Red | Low input voltage on the power line | Ensure that the input voltage is 120 V or 277 V, + or - 10% |
| Magenta | Signaling wire connection not detected | Cut power and reconnect the red conductor of the leader cable to the N3's "S" port |
| Red-Green- Blue Pattern | Line and neutral wiring switched | Cut power, and reverse line and neutral wiring |
| Red-Green Pattern* | Line and neutral wiring switched | Cut power, and reverse line and neutral wiring |
| Yellow | Multiple runs of linear product detected | Cut power and disconnect all but one run of L3I. Only one run can be connected to a satellite |
| Turquoise | More than 40 ft of linear product detected | Remove the turquoise linears and reboot the satellite |
| Green Dark Blue | More than 100ft total run length detected (including | Remove excess cabling and/or fixtures, and reboot the satellite |
| | cables & fixtures) | |

* For product ordered in 2019

Warranty & Tech Support

Limited warranty terms can be found at:

www.ketra.com/warranty

For questions and technical support please contact: (844) 588-6445 ketrasupport@lutron.com

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