

LED Linear High Bay - CCT Selectable

Instruction Number: P-INT-X-468

Product Series: MLHB1

Use these standard install instructions for the MLHB1 fixture.

Components

- 1 MLHB1 Fixture

Tools Required for Installation

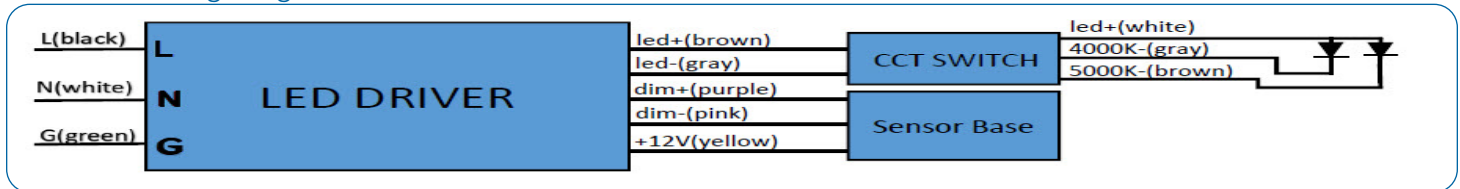
- Cordless drill or Philips Screwdriver and Flat Head Screwdriver
- Wirestripper/cutter



WARNING!

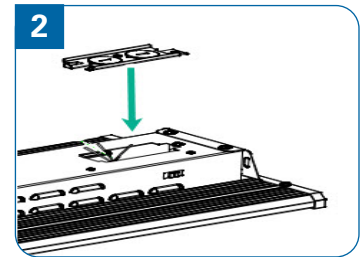
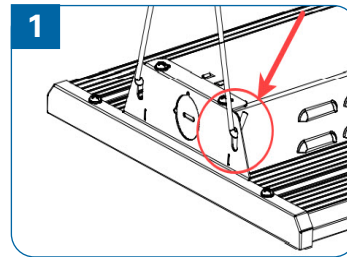
1. Field installers are responsible for recognizing specific site requirements and making adjustment to ensure a complete, functional installation.
2. Electrical connections must be made by a qualified electrician and in accordance with NEC and local codes.
3. Make all power connections using UL listed components.
4. Make sure the supply voltage is the same as the rated voltage of the luminaire.
5. Proper grounding is required to ensure safety.
6. Please wear gloves to avoid injury before installation.
7. Check if there is any damage during shipping. If so, contact manufacturer immediately.
8. Read the installation instruction carefully to check whether all the accessories are included. After confirmation, then install the fixture according to installation steps.
9. Appropriate safety equipment needed during installation, to be determined by installer and per applicable safety standards and precautions.
10. Risk of fire or electrical shock. DO NOT cover fixture with insulation or similar material.
11. DO NOT install on unstable or easily breakable surface.

Standard Wiring Diagram



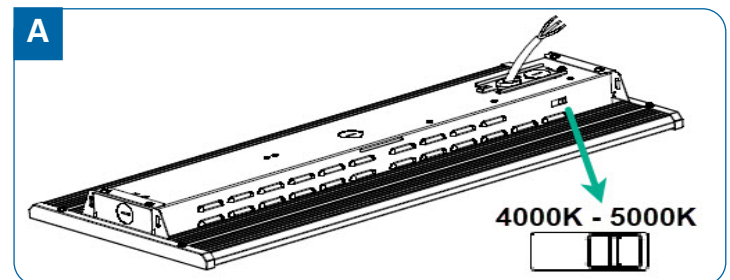
Standard Suspended Mounting Instructions

- 1 Turn off power supply before installation. Review product label for voltage and amperage load per fixture and use minimum 90°C supply wires.
- 2 Remove the fixture from packaging and inspect for any damages. Handle LED fixture with care.
- 3 Attach desired hanging method to the two mounting holes at fixture ends. Ensure hanging method is securely attached to each hole. (See Fig. 1)
- 4 Remove access plate (See Fig. 2). Make all electrical connections per NEC and local codes. For dimming wires, use class 1 wiring methods. Cap each dimming wires separately if not used (see wiring diagram).
- 5 Reinstall access plate and secure with access plate screw. Restore power to fixture and test.



Field Adjustable CCT

End users can adjust the color temperature to the desired level by the dip switch located on the side of the driver housing. The switch offers two options (4000K and 5000K). See Fig. A for switch location. Default Factory setting is 5000K.



FCC Statement: Any changes or modifications to this unit not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment.

NOTE: This equipment has been tested and found to comply with the limits for a Class A digital device, pursuant to part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference when the equipment is operated in a commercial environment. This equipment generates, uses, and can radiate radio frequency energy and, if not installed and used in accordance with the instruction manual, may cause harmful interference to radio communications. Operation of this equipment in a residential area is likely to cause harmful interference in which case the user will be required to correct the interference at his own expense.

LED Linear High Bay - CCT Selectable

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Product Series: MLHB1

Use these standard install instructions for installing battery back up in the field on the MLHB1 fixture.

Tools Required for Installation

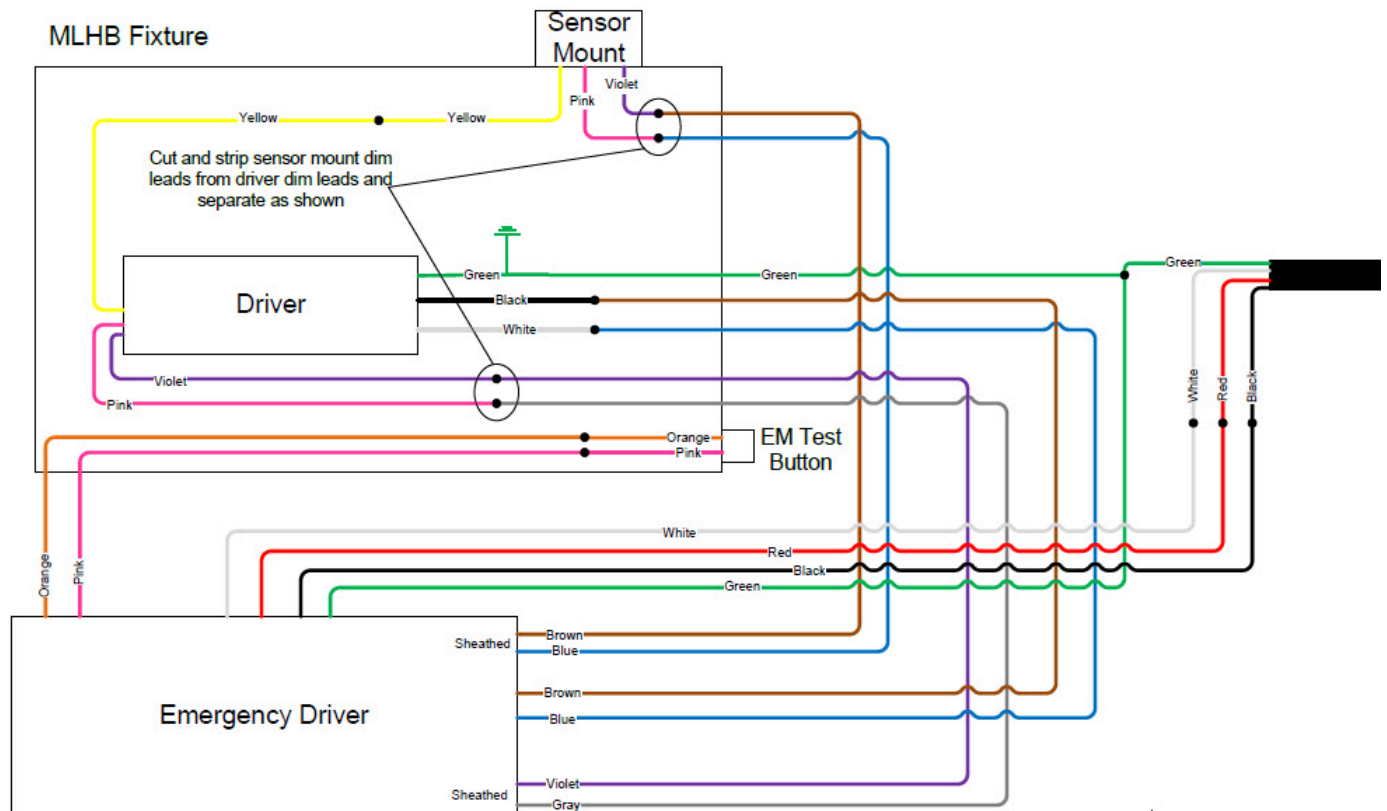
- Cordless drill or #2 Philips Screwdriver and Flat Head Screwdriver
- Wire stripper/cutter



WARNING!

1. Field installers are responsible for recognizing specific site requirements and making adjustments to ensure a complete, functional installation.
2. Electrical connections must be made by a qualified electrician and in accordance with NEC and local codes.
3. Make all power connections using UL listed components.
4. Make sure the supply voltage is the same as the rated voltage of the luminaire.
5. Proper grounding is required to ensure safety.
6. Please wear gloves to avoid injury before installation.
7. Check if there is any damage during shipping. If so, contact manufacturer immediately.
8. Read the installation instruction carefully to check whether all the accessories are included. After confirmation, then install the fixture according to installation steps.
9. Appropriate safety equipment needed during installation, to be determined by installer and per applicable safety standards and precautions.
10. Risk of fire or electrical shock. DO NOT cover fixture with insulation or similar material.
11. DO NOT install on unstable or easily breakable surface.

2', 3' and 4' Fixture Wiring Diagrams (MLHB-UNV-BB-KIT24L36L or MLHB-UNV-BBKIT-48L60L)

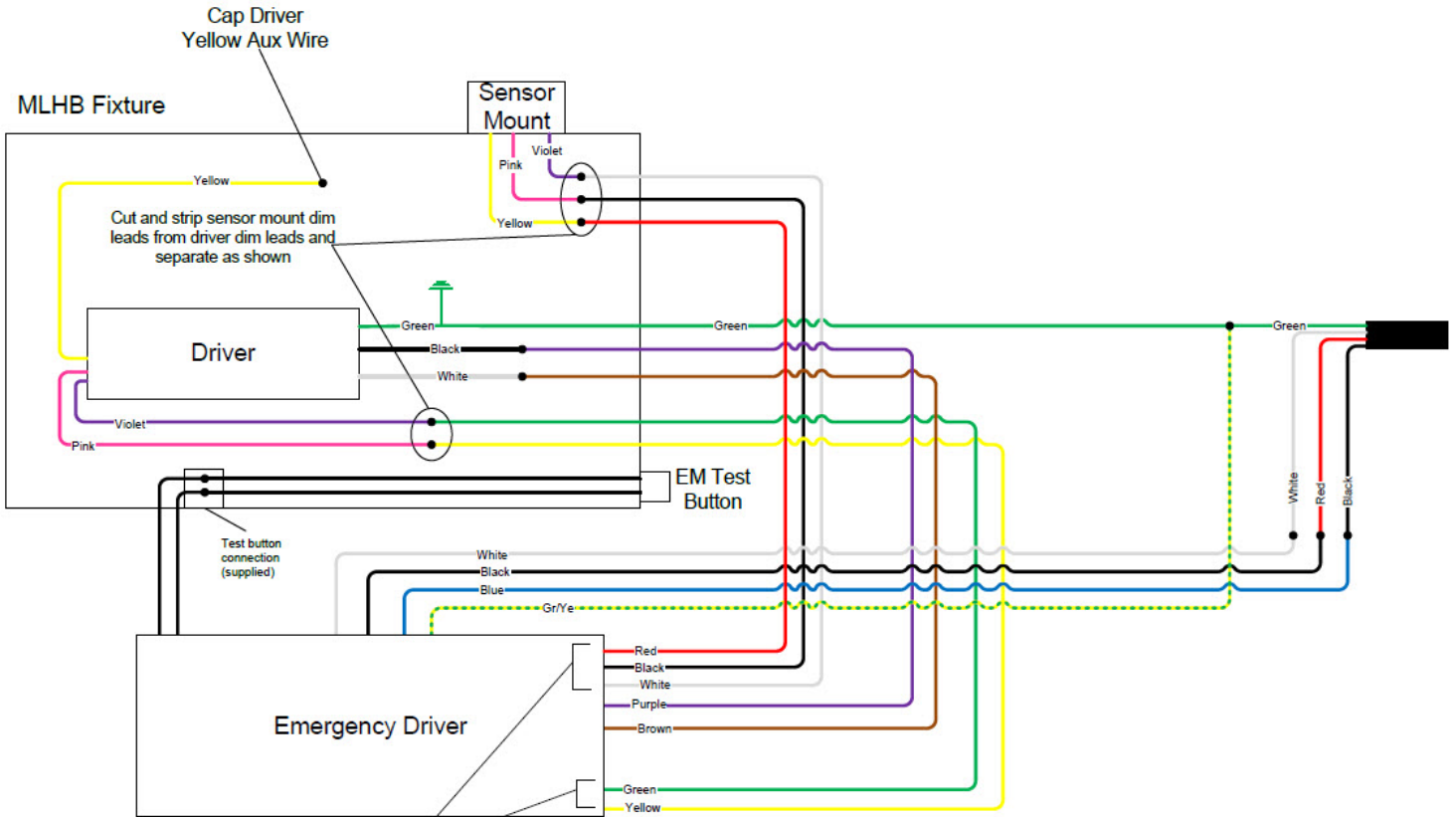


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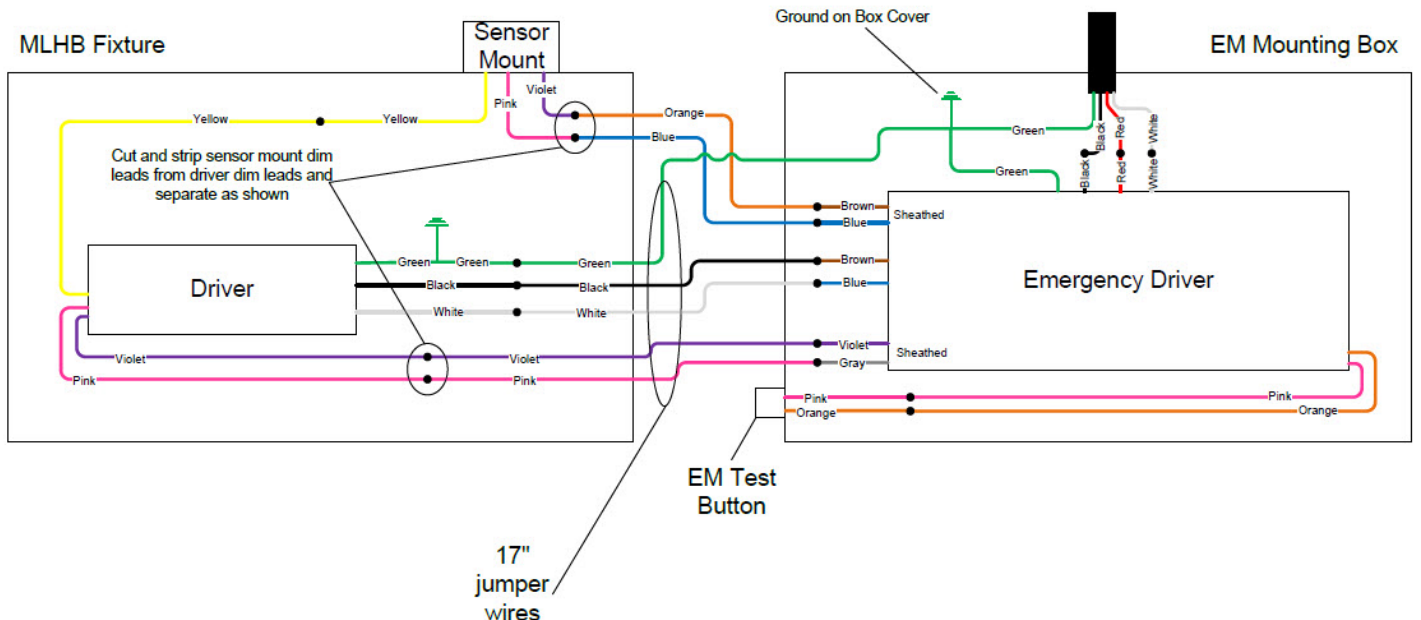
Product Series: MLHB1

2', 3' and 4' Fixture Wiring Diagrams
(MLHB-HMV-BBKIT-24L36L or MLHB-HMV-BBKIT-48L60L)



Note:
All the dimming lead wires are sheathed together. Leave unused wires capped.

1' Fixture Wiring Diagram
(MLHB-UNV-BBKIT-09L18L)

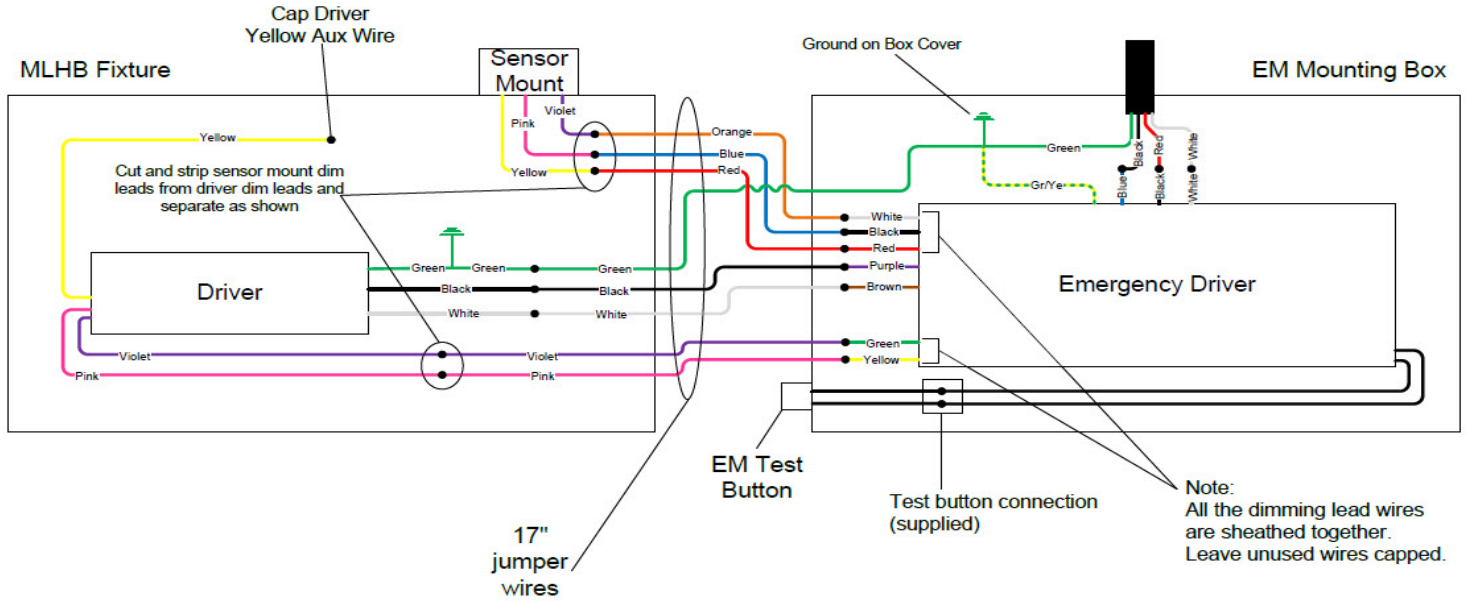


LED Linear High Bay - CCT Selectable

Instruction Number: P-INT-X-468.1

Product Series: MLHB1

1' Fixture Wiring Diagram
(MLHB-HMV-BBKIT-09L18L)



2', 3' and 4' Fixtures

Use these standard install instructions for installing battery back up its in the field on the MLHB1 fixture.

Components

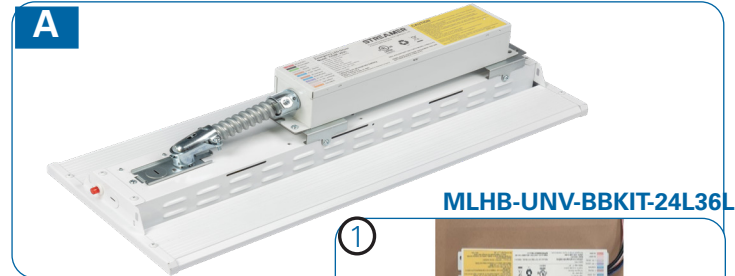
- Battery Back up
- Mounting Brackets
- Wago Wire Connectors
- Screws
- Optional: 18/4 cord and cover plate (ordered separately)

Assembly Instructions for MLHB-UNV-BBKIT-24L36L

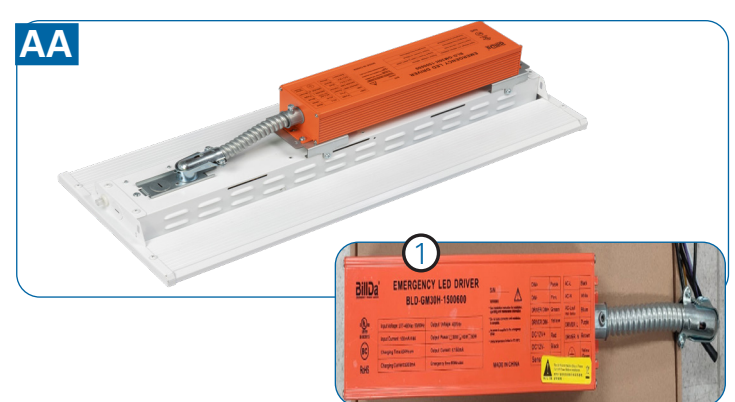
Note: The emergency battery in the **MLHB-UNV-BBKIT-24L36L** is shipped unassembled (See Fig A.1), flexible conduit components need to be assembled to the battery back up.

- 1 Route wires into the flex conduit starting at fitting end. Slide all the way to battery back up housing.
- 2 Press firmly and snap the conduit fitting into battery back up hole.
- 3 Route wire into 90deg elbow fitting and attach elbow to flex conduit using clamp and screws.

MLHB-UNV-BBKIT-24L36L or MLHB-UNV-BBKIT-48L60L



MLHB-HMV-BBKIT-24L36L or MLHB-HMV-BBKIT-48L60L



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Product Series: MLHB1

2', 3' and 4' Fixtures

Battery Back Up Attachment

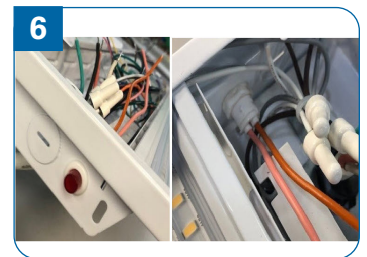
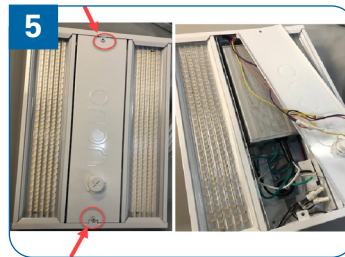
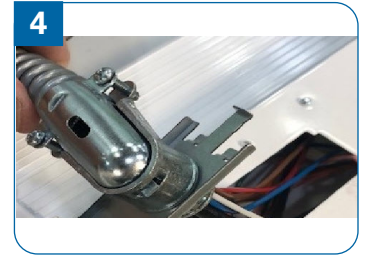
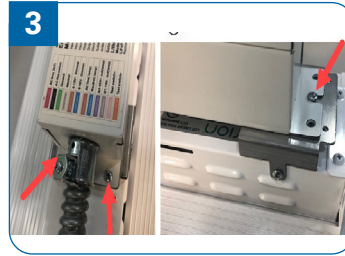
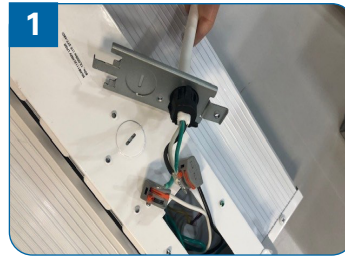
- 1 Unpack all components.
- 2 Place fixture, lens side down, on a clean work surface.
- 3 Remove fixture electrical wiring cover plate and disconnect each wire (Black, White, Green). Remove 3 wire cord & strain relief from cover plate. Keep cover plate to re-use for 4 wire power entry, if the optional 18/4 cord & cover kit was not ordered. (See Fig. 1)
- 4 Place mounting brackets (2x) provided to back of fixture. Place in direction shown, hole toward outside. (See Fig. 2)
- 5 Align bracket to holes on side of fixture and use screws (2x) provided for each bracket. (See Fig. 2)
- 6 Place Battery back up onto brackets; conduit end toward the electrical wiring access plate. Align with holes in brackets. (See Fig. 3)
- 7 Secure Battery back up with (3x) screws provided. (See Fig. 3)
- 8 Remove knockout from access plate in step 3 above.
- 9 Route battery back up wires thru access plate hole and snap on 90deg elbow fitting. (See Fig. 4)
- 10 Turn Fixture and Battery back up assembly over, with lens side up.
- 11 Open fixture housing by removing (2x) screws and remove cover. (See Fig.5)

Test Switch/Indicator Light

- 12 Remove small knockout on fixture endcap close to wiring access end. (See Fig. 6)
- 13 Remove plastic nut, insert Test Switch / Indicator Light into knocked out hole and secure with nut. (See Fig. 6)
- 14 Connect Test Switch / Indicator Light wires to Battery back up wires. Per wiring diagram on page 1/page 2.

Wiring 2', 3', 4'

- 15 Separate and review Battery back up wires per diagram on page page 1/page 2.
- 16 Connect wires between the Battery back up and the fixture per diagram on page 1/page 2.
- 17 Close housing cover and tighten (2x) screws. (See Fig. 5)
- 18 Route supply wires into fixture thru wiring cover plate saved in step 3 above or use new 4 wire, cord, and cover plate kit ordered separately. A separate un-switched AC power source is required for charging the battery.
- 19 Complete the power source wiring per NEC and local codes.
- 20 Install wiring cover plate and secure with screw. Restore power to fixture and test.



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Product Series: MLHB1

1' Fixtures

Use these standard install instructions for installing battery back up its in the field on the MLHB1 fixture.

Components

- Battery Back up
- Box
- Box Cover
- Box Mounting Brackets
- Wiring Side Cover
- Wiring Cover Plate
- Wire protection grommets
- Wago Wire Connectors
- Screws
- Wires 17" long - 18awg Solid
- Optional: 18/4 cord and cover plate (ordered separately)

Dis-Assembly Instructions for MLHB-HMV-BBKIT-09L18L

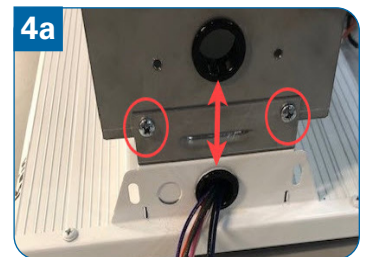
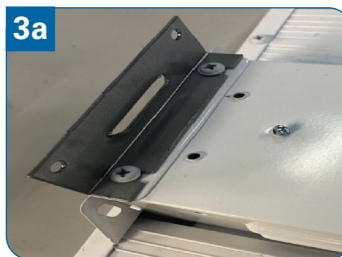
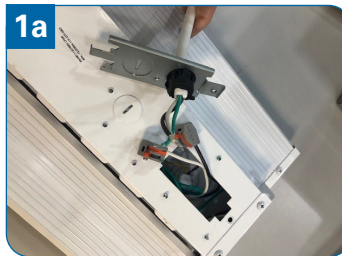
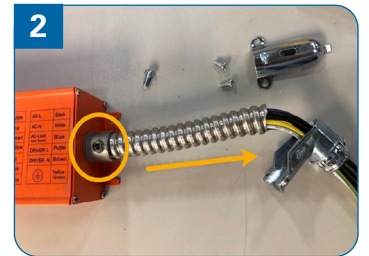
Note: The emergency battery in the **MLHB-HMV-BBKIT-09L18L** is shipped assembled (See Fig A.2), flexible conduit components need to be unassembled for the 1' battery back up box.

- 1 Loosen (2x) screws to remove 90deg Elbow fitting. Slide off 90deg Elbow fitting from wires and discard. (See Fig. 1)
- 2 Remove (1x) screw from Straight conduit fitting to remove flex conduit. Slide off flex conduit and discard. (See Fig. 2)
- 3 Unscrew and remove Straight conduit fitting, discard. This fitting needs to be removed for Battery to fit properly inside box. (See Fig. 2)

Battery Back Up Attachment

- 1 Unpack all components.
- 2 Place fixture, lens side down, on a clean work surface.
- 3 Remove fixture electrical wiring cover plate and disconnect each wire (Black, White, Green). Remove 3 wire cord & strain relief from cover plate. Keep cover plate, to use for Battery Box cover plate, if the optional 18/4 cord & cover kit was not ordered. (See Fig. 1a)
- 4 Install new blank (no holes) cover plate (provided with kit-use provided #14 screw).
- 5 Remove Fixture center knockout, located on end closest to cover plate. Install wire protection grommet provided. See (Fig. 2a)
- 6 Place small Mounting Brackets (2x) provided on back of fixture. Loosen (2x) screws and slide Bracket in place. Tighten (2x) screws. One bracket at each end of fixture. (See Fig. 3a)
- 7 Slide the Battery Box in place between the two brackets. Place Battery Box wiring hole end toward the fixture wiring hole from step 5. Assemble and tighten using (2x) screws on each bracket. (See Fig. 4a)
- 8 Install wire protection grommet provided in box wiring hole. (See Fig. 4a)

MLHB-UNV-BBKIT-09L18L or MLHB-HMV-BBKIT-09L18L



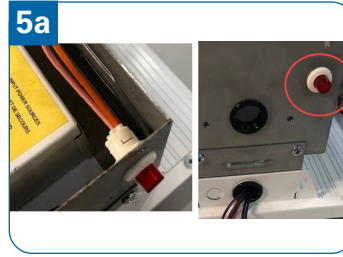
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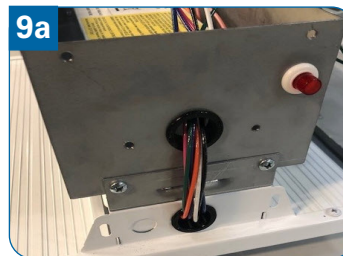
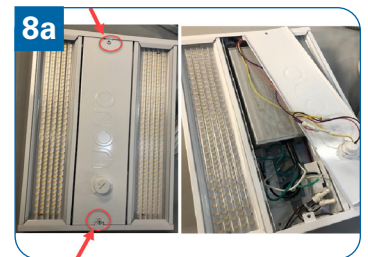
Test Switch/Indicator Light

- 9 Remove plastic nut, insert Test Switch / Indicator Light into Battery Box hole and secure with nut. (See Fig. 5a)
- 10 Place Battery Back up inside Battery Box. Align with holes inside Battery Box and secure with screws provided. Battery back up wires should be facing away from wire grommet hole in box. (See Fig. 6a)



Wiring 1'

- 11 Separate and review Battery Back up wires per diagram on page 2/ page 3.
- 12 Begin wiring by connecting each 18awg solid wires (17" long), provided, from Battery Back up. Use Wago connectors (2 pole) provided. (See Fig. 7a)
- 13 Connect Test Switch / Indicator Light wires to Battery Back up, per wiring diagram on page 2/3.
- 14 Turn Fixture and Battery Back up assembly, with lens side up.
- 15 Open fixture housing by removing (2x) screws and remove cover. (See Fig. 8a)
- 16 Route all wires from Battery Back up thru Battery Box hole into Fixture end cap hole . (See Fig. 9a)
- 17 Proceed with connecting wires on Fixture side per wiring diagram on page 2/3.
- 18 Close housing cover and tighten (2x) screws. (See Fig. 8a)
- 19 Turn Fixture and Battery Back up assembly over, with lens down on table.
- 20 Add Wiring Cover to protect wires between the Fixture and Battery box. Using (2x) screws provided. (See Fig. 10a)
- 21 Add ground wire to Box Cover using #8x3/8(1x) screw provided. (See Fig. 11a)
- 22 Route supply wires into Battery Box thru Box Cover and wiring cover plate saved in step 3 above or use new 4 wire cord & cover plate kit ordered separately.
- 23 Complete the power source wiring per NEC and local codes. (See Fig. 12a). A separate un-switched AC power source is required for charging the battery.
- 24 Close Battery Box Cover, using (4x) screws provided. (See Fig. 12a)
- 25 Install wiring cover plate and secure with screw. Restore power to fixture and test.



LED Linear High Bay - CCT Selectable Surface Mount Kit

Instruction Number: P-INT-X-468.2

Product Series: MLHB1

Use these instructions to surface mount the MLHB1 fixture.

Components

1 MLHB-SFM01-KIT (Kit Includes: 1 Surface Bracket for 1' and 2' fixtures)

MLHB-SM02-KIT (Kit Includes: 2 Surface Brackets for 3' and 4' fixtures)

Hardware: 10-24 x 4" screws, 10-24 Nylon Lock Nuts

Tools Required for Installation

- Cordless drill
- 3/8" Open Wrench
- Philips Screwdriver and Flat Head Screwdriver
- Wire nuts
- Wirestripper/cutter

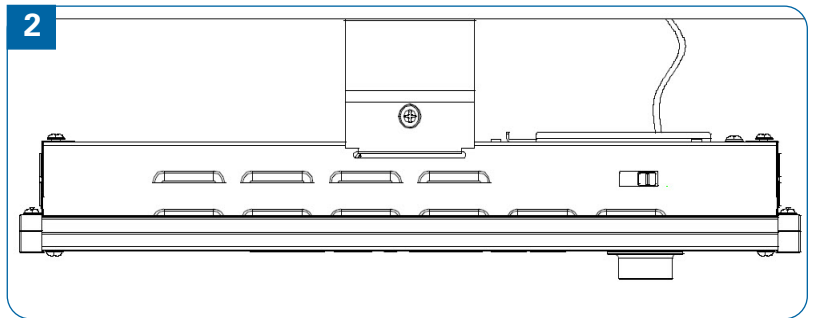
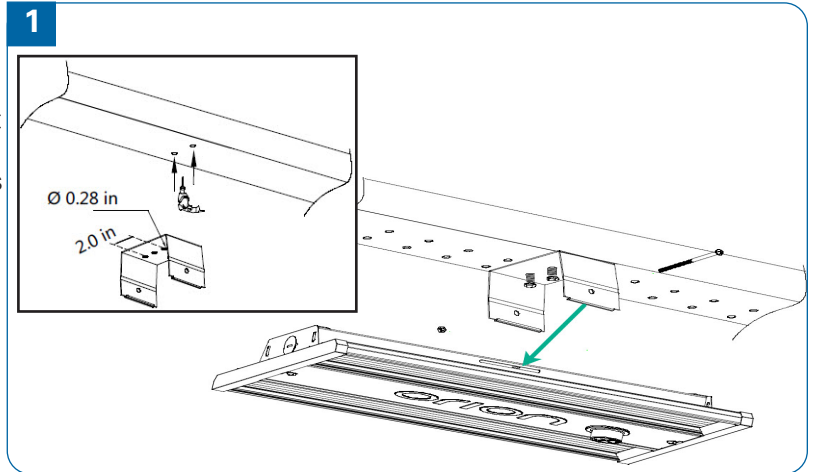
Step by Step Instructions

- 1** Turn off power supply before installation. Review product label for voltage and amperage load per fixture and use minimum 90°C supply wires.
- 2** Remove the LED fixture from packaging and inspect for any damage. Handle new LED fixture with care.
- 3** Drill holes to mounting surface, 2 inch apart on center. Repeat for a second bracket needed with 3ft, 4ft fixtures. See **W** dimension table.
- 4** Attach surface mount bracket(s) to structure using hardware (not provided) rated for the fixture weight.
- 5** Support the fixture while snapping fixture housing into surface mount bracket.
- 6** Insert the 10-24 x 4" screws through the surface mount bracket. Properly tighten the nuts on each of the screws to secure the brackets on both side slots on the fixture center channel (See Fig. 1 and 2). See Fig. 3 and Fig. 4 for 3' or 4' finished installation.
- 7** Make all electrical connections per NEC and local codes. See wiring diagram in standard assembly instructions.
- 8** Reinstall access plate and secure with access plate screw. Restore power to fixture and test.

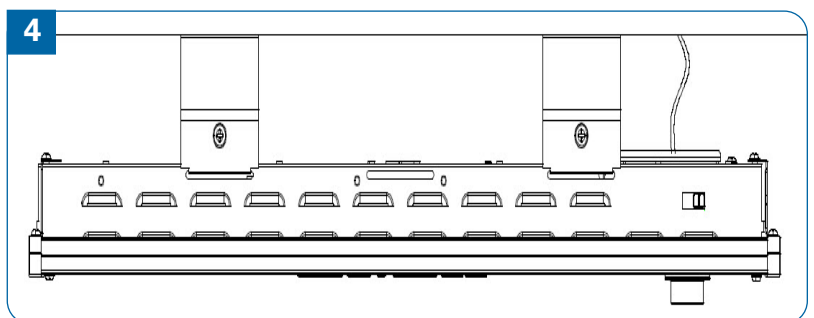
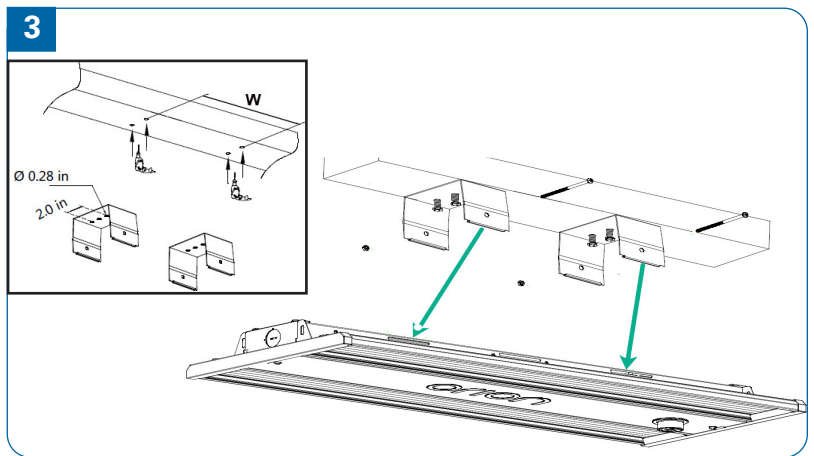
W

SIZE	LUMENS	W-Dimension
3'	30L(HMV)-36L	19.7"
4'	48-60L	26.8"

1' and 2' Fixtures



3' and 4' Fixtures



LED Linear High Bay - CCT Selectable Pendant Mount Kit

Instruction Number: P-INT-X-468.3

Product Series: MLHB1

Use these instructions to pendent mount the MLHB1 fixture.

Components

1 MLHB-PMR01-KIT

Kit Includes:

- (1) Pendant Bracket
- (1) access plate
- (1) Pipe Hub 3/4" Thread
- (1) 1/2" Cordgrip with 1/2" Conduit Nut
- (3) wire connectors
- (1) 10-24 x 4" screw
- (1) 10-24 nylon lock nut
- (1) 8-32 x 1/4" screw

Tools Required for Installation

- Cordless drill
- Philips Screwdriver and Flat Head Screwdriver
- 3/8" Open Wrench
- Wire nuts
- Wirestripper/cutter

Step by Step Instructions

- 1** Turn off power supply before installation. Review product label for voltage and amperage load per fixture.
- 2** Remove the LED fixture from packaging and inspect for any damages. Handle new LED fixture with care.
- 3** Attach Pendant Bracket (item 1) to threaded Pendant/conduit (not supplied) using the 3/4"- 14 NPT THREAD HUB (item 2) and nut (supplied) (See Fig. 1)
- 4** Support the fixture while snapping fixture housing into Pendant bracket.
- 5** Insert 10-24 x 4" screw (item 3) through Pendant bracket. Properly tighten nut to secure bracket on both side slots on fixture center channel (See Fig. 2). Ensure fixture is balanced.
- 6** Cut and strip fixture cord and route into pendent bracket using cordgrip and nut provided (item 8) through access plate (item 4). Make all electrical connections inside pendent bracket per NEC and local codes wire connectors (item 9). See standard assembly instructions for wiring diagram.
Note: Make sure no wires are pinched and are tucked inside the pendent bracket.
- 7** Install side access plate (item 4) and secure with access plate 8-32 screw. (See Fig. 3) Restore power to fixture and test.

