IMPORTANT SAFEGUARDS

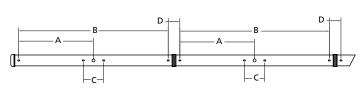
When using electrical equipment, basic safety precautions should always be followed, including the following:

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 THE HAZARDS INVOLVED. DISCONNECT POWER TO ALL CIRCUITS BEFORE WIRING FIXTURE. INSTALL IN ACCORDANCE WITH ALL NATIONAL, STATE, AND LOCAL CODES. DO NOT CONNECT TO AN UNGROUNDED SUPPLY. READ ALL FIXTURE MARKINGS AND LABELS TO ENSURE CORRECT INSTALLATION OF FIXTURE. SUPPLEMENTAL INSTRUCTIONS MAY BE LOCATED ON THE FIXTURE, IN ADDITION TO THIS INSTRUCTION SHEET, REGARDING ORIENTATION, OR MOUNTING RESTRICTIONS.

SAVE THESE INSTRUCTIONS

WALL OR CEILING SURFACE MOUNT INSTRUCTIONS

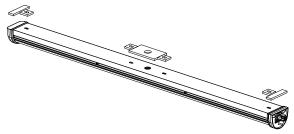
Prepare surface by locating and drilling mounting pilot holes in surface as well as installing i-box(es) as needed. Fixture(s) can be wired via conduit (using liquid-tight 1/2-inch conduit fitting, not supplied) so the use of j-box(es) is not a requirement. Consult factory for installation drawings if run consists of different length fixtures.



Nominal Length	A	В	С	D	
2-Foot	2.500	20.000	-	5.182	
3-Foot	16.000	32.000	-	5.182	
4-Foot	22.000	44.000	6.000	3.432	
6-Foot	30.000	60.000	8.000	11.182	
8-Foot	42.000	84.000	20.000	7.682	

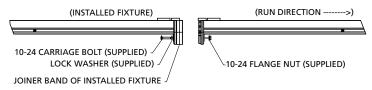
- 2. Prepare each fixture for mounting by installing supplied pad gaskets (not included if Damp Location option ordered): small gaskets over mounting oblongs & smaller rectangular gaskets at ends of fixture.
- 3. Determine which fixture(s) in run is/are to have power feed(s).
- 4. If wiring to fixture is to be direct from installed j-box, install large rectangular gasket over 7/8-inch diameter wiring feed hole.
- 5. If wiring to fixture is to be via conduit, a 1/2-inch liquid-tight fitting should be used.
 - If conduit feed is to hole in top of fixture, large gasket can be omitted.
 - If conduit feed is to endcaps (removed from inside of endcap and using appropriate tools), large gasket should be installed over hole in top of fixture to ensure fixture ratings.
- 6. All non-power feed fixtures should have large rectangular gasket installed over hole in top of fixture to ensure fixture ratings.

Fixtures are supplied with thru-wiring quick-disconnects. Runs that have multiple power feeds **MUST** have the supplied quick-disconnects between the fixtures that are to be on different circuits removed and the thru-wiring capped appropriately (by others).



(Beginning of run fixture shown)

- 7. Locate Beginning-of-Run fixture. Fixture description will have "Bxx" (xx = fixture length) as the second designator: example MLHA3S-**B48**-...
- 8. Remove diffuser and LED module wireway (see page DIFFUSER/WIREWAY REMOVAL INSTRUCTIONS).
- 9. Secure fixture to mounting surface using 1/4-20 hardware and anchors suitable for the mounting surface (supplied by others). Mount such that open end of fixture (with joiner band) is in the direction of the fixture run.
- 10. Locate Middle-of-Run fixture(s). Fixture description will have "Mxx" (xx = fixture length) as the second designator: example MLHA3S-**M48**-...
- 11. Remove diffuser and LED module wireway (see page DIFFUSER/WIREWAY REMOVAL INSTRUCTIONS).
- 12. Firmly insert end of fixture WITHOUT joiner band into end of mounted fixture; loosely secure fixture to mounting surface using 1/4-20 hardware and anchors suitable for the mounting surface (supplied by others). Join fixtures together using 10-24 carriage bolt, washer, and flange nut (supplied). After tightening, finish securing fixture to mounting surface.



- 13. Continue installing middle fixture(s) and end fixture (fixture description will contain Exx as the second designator: example MLHA3S-**E48**-...) in the above manner until run is completed.
- 14. Connect fixture leads to power supply leads using connectors (supplied by others) suitable for the gauge and number of wires being used. Use the appropriate temperature rated wire if supply connections are made in the fixture see product label. Black fixture lead connects to the supply conductor, white fixture lead connects to neutral supply conductor, and the grounding wire must be connected to a suitable ground. If used, purple and pink fixture leads connect to suitable 0-10V dimmer (DIM1) or purple and purple/white leads connect to suitable DALI system (DALI). Use Class 1 wiring, rated 600VAC, for connections to 0-10V dimming leads.

Fixtures are supplied with thru-wiring quick-disconnects. Runs that have multiple power feeds **MUST** have the supplied quick-disconnects between the fixtures that are to be on different circuits removed and the thru-wiring capped appropriately (by others).

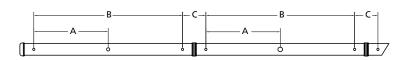
- 15. Connect supplied thru-wiring guick disconnects.
- 16. Reconnect LED module wires and install LED module wireways. Make sure all wires are tucked back into wireways before fastening into place.
- 17. Reinstall diffusers.



PENDANT MOUNT INSTRUCTIONS

Do not mount fixture from pendant supports unless -PM option has been ordered.

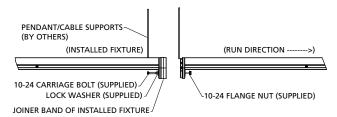
1. Lay out and install appropriate pendant/cable system (supplied by others) per manufacturer's instructions. Fixture(s) supplied with (2) 5/8-in diameter pendant/cable mounting holes. Consult factory for installation



Nominal Length	А	В	С	
2-Foot	2.500	20.000	5.182	
3-Foot	16.000	32.000	5.182	
4-Foot	20.500	41.000	6.432	
6-Foot	32.500	65.000	6.182	
8-Foot	42.000	84.000	7.682	

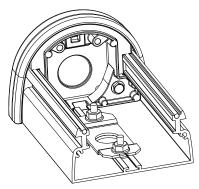
drawings if run consists of different length fixtures.

- 2. Locate Beginning-of-Run fixture. Fixture description will have "Bxx" (xx = fixture length) as the second designator: example MLHA3S-**B48**-...
- 3. Remove diffuser and LED module wireway (see page DIFFUSER/WIREWAY REMOVAL INSTRUCTIONS).
- 4. Secure fixture to pendant/cable system per manufacturer's instructions. Mount such that open end of fixture (with joiner band) is in the direction of the fixture run.
- 5. Locate Middle-of-Run fixture(s). Fixture description will have "Mxx" (xx = fixture length) as the second designator: example MLHA3S-**M48**-...
- 6. Remove diffuser and LED module wireway (see page DIFFUSER/WIREWAY REMOVAL INSTRUCTIONS).
- 7. Firmly insert end of fixture WITHOUT joiner band into end of installed fixture. Secure fixture to pendant/cable system per manufacturer's instructions. Join fixtures together using 10-24 carriage bolt, washer, and flange nut (supplied) this is required for grounding continuity.



8. Continue installing middle fixture(s) and end fixture (fixture description will contain Exx as the second designator: example MLHA3S-**E48**-...) in the above manner until run is completed.

9. Connect wiring conduit to fixture(s) using 1/2-inch conduit fitting. (1) feed hole is supplied in top of each fixture; optional feed locations are in beginning and end fixture endcaps (7/8-inch diameter knockouts). If using end feed location, remove knockout(s) from inside endcaps using appropriate tools and plug feed hole in top of fixture (supplied by others).



10. Connect fixture leads to power supply leads using connectors (supplied by others) suitable for the gauge and number of wires being used. Use the appropriate temperature rated wire if supply connections are made in the fixture – see product label. Black fixture lead connects to the supply conductor, white fixture lead connects to neutral supply conductor, and the grounding wire must be connected to a suitable ground. If used, purple and pink fixture leads connect to suitable 0-10V dimmer (DIM1) or purple and purple/white leads connect to suitable DALI system (DALI). Use Class 1 wiring, rated 600VAC, for connections to 0-10V dimming leads.

Fixtures are supplied with thru-wiring quick-disconnects. Runs that have multiple power feeds **MUST** have the supplied quick-disconnects between the fixtures that are to be on different circuits removed and the thru-wiring capped appropriately (by others).

- 11. Connect supplied thru-wiring quick disconnects.
- 12. Check for fit/seal of feed-hole plugs on non-power feed fixtures.
- 13. Reconnect LED module wires and install LED module wireway. Make sure all wires are tucked back into wireway before fastening into place.
- 14. Reinstall diffusers.

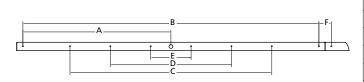


CORNER MOUNT BRACKET INSTRUCTIONS

1. Prepare surface by locating and drilling CORNER MOUNT BRACKET pilot holes in surface as well as installing j-box(es) as needed. Fixture(s) can be wired via conduit into fixture endcaps (using 1/2-inch conduit fitting, not supplied) so the use of j-box(es) is not a requirement.

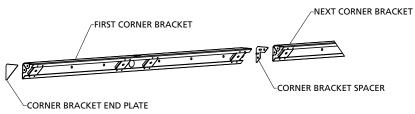
NOTE: Due to material thickness discrepancies beyond manufacturer's control, it's recommended to drill pilot holes for maximum (5) BRACKETS at a time. Although fixtures have oblongs for mounting to CORNER MOUNT BRACKET, recommended best practice is to install CORNER MOUNT BRACKETS & FIXTURES in groups of (5) and adjusting future pilot hole locations if needed.

2. CORNER MOUNT BRACKET has (2) 1-1/2inch diameter knockouts for wire-thru; one located on mounting surface, and one located on opposite surface for flexibility in j-box location. Remove knockouts as required.



Nominal Length	А	В	С	D	E	F
2-Foot	11.50	23.00		7.00		2.182
3-Foot	13.00	26.00		10.00		11.182
4-Foot	20.00	40.00	26.00	12.00		7.432
6-Foot	34.00	68.00	36.00	12.00		3.182
8-Foot	44.00	88.00	36.00	12.00	60.00	3.682

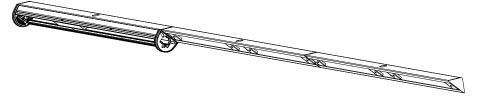
- 3. Locate Beginning-of-Run CORNER MOUNT BRACKET (description will have "Bxx" with xx = fixture length. Example KIT; SA; CMB-MLHA3S-**B48**...). Secure to wall or ceiling surface using appropriate 1/4-20 hardware and anchors suitable for the mounting surface (supplied by others).
- 4. NOTE: CORNER MOUNT BRACKET is universal and mounting holes can be used to secure BRACKET to wall or ceiling surface.
- 5. If needed, relocate corner bracket END PLATE and corner bracket SPACER. End plate should be at beginning-of-run end and spacer at end where next bracket will attach.



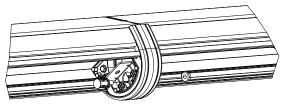
- 6. Locate Middle-of-Run CORNER MOUNT BRACKET(S); description will have "Mxx" with xx = fixture length. Example KIT; SA; CMB-MLHA3S-<u>M</u>48.... If needed, relocate corner bracket SPACER to appropriate end (in direction of next bracket to be installed). Place BRACKET tightly against end of installed BRACKET and secure to mounting surface.
- 7. Continue in this manner for maximum (5) BRACKETS or until End-of-Run CORNER MOUNT BRACKET (contains description Exx) is installed whichever is first.
- 8. Locate Beginning-of-Run fixture. Fixture description will have "Bxx" (xx = fixture length) as the second designator: example MLHA3S-**B48**-...
- 9. Remove diffuser and LED module wireway (see page DIFFUSER/WIREWAY REMOVAL INSTRUCTIONS).



10. Secure fixture to CORNER MOUNT BRACKET using supplied ½-20 hardware. Mount such that open end of fixture (with joiner band) is in the direction of the fixture run.



- 11. Locate Middle-of-Run fixture(s). Fixture description will have "Mxx" (xx = fixture length) as the second designator: example MLHA3S-**M48**-...
- 12. Remove diffuser and LED module wireway (see page DIFFUSER/WIREWAY REMOVAL INSTRUCTIONS).
- 13. Firmly insert end of fixture WITHOUT joiner band into end of mounted fixture. Secure to CORNER MOUNT BRACKET using supplied 1/4-20 hardware being sure to center fixture over mounting holes. Join fixtures together using 10-24 carriage bolt, washer, and flange nut (supplied) this is required for grounding continuity.



- 14. Continue installing middle fixture(s) and end fixture (fixture description will contain "Exx" as the second designator: example MLHA3S-**E48**-...) in the above manner until all installed CORNER MOUNT BRACKET(S) have fixtures installed.
- 15. As needed, drill pilot holes for additional CORNER MOUNT BRACKET(S) and continue to install BRACKETS and fixtures in the manner described above. As needed for each set, adjust spacing of CORNER MOUNT BRACKET(s) such that fixtures will be mounted in center of BRACKETS.
- 16. If wiring to fixture is to be direct from installed j-box, connections to be made in fixture or j-box, not in CORNER MOUNT BRACKET.
- 17. If wiring to fixture is to be via conduit, a 1/2-inch fitting should be used. Fitting to be connected to fixture, not to CORNER MOUNT BRACKET.
- 18. Fixture is supplied with (3) feed locations: feed hole in back of fixture; optional feed locations are in fixture endcaps (7/8-inch diameter knockouts).
 - If conduit feed is to hole in back of fixture, ensure that fitting and conduit will fit inside CORNER MOUNT BRACKET without pinching.
 - If using end feed location, remove knockout(s) from inside fixture using appropriate tools and plug feed hole in back of fixture to minimize debris entering fixture (supplied by others).
- 19. Connect fixture leads to power supply leads using connectors (supplied by others) suitable for the gauge and number of wires being used. Connections to be made in fixture or in j-box, not in CORNER MOUNT BRACKET. Use the appropriate temperature rated wire if supply connections are made in the fixture see product label. Black fixture lead connects to the supply conductor, white fixture lead connects to neutral supply conductor, and the grounding wire must be connected to a suitable ground. If used, purple and pink fixture leads connect to suitable 0-10V dimmer (DIM1) or purple and purple/white leads connect to suitable DALI system (DALI). Use Class 1 wiring, rated 600VAC, for connections to 0-10V dimming leads.

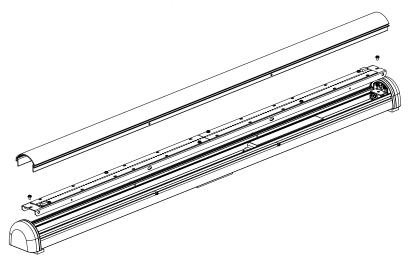


Fixtures are supplied with thru-wiring quick-disconnects. Runs that have multiple power feeds **MUST** have the supplied quick-disconnects between the fixtures that are to be on different circuits removed and the thru-wiring capped appropriately (by others).

- 20. Connect supplied thru-wiring quick disconnects.
- 21. Reconnect LED module wires and install LED module wireways. Make sure all wires are tucked back into wireway before fastening into place.
- 22. Reinstall diffusers.

DIFFUSER/WIREWAY REMOVAL INSTRUCTIONS

- 1. Remove diffuser by backing out diffuser screws approximately 3/8-inch. Slide diffuser toward one end and lift out. Remove screws from LED module wireway. Disconnect wire connectors from LED module assembly. Set diffuser and LED module assembly in a location they will be safe from accidental damage and debris.
- 2. If ordered with CDF option: DO NOT USE POWER TOOLS TO LOOSEN FASTENERS. Loosen fasteners by hand and when resistance is felt, stop. DO NOT FORCE. Additional turning of fasteners will cause the hardened fastener to enlarge the thread in the aluminum housing. The captive screws should not be removed.



CUSTOMER SERVICE

For technical assistance, call 1-800-4KENALL (1-800-453-6255). For additional instructions, go to www.kenall.com/Installs

WARRANTY

For warranty information visit www.kenall.com/Resources/Certified-Performance-Warranties

