



Symphony

REMOTE DRIVER SYSTEM

Installation Guide/Owner's Manual

Technical Support: 313-259-6400, Press 5

1.0	Scope	2
2.0	Owner/User Responsibility	2
3.0	Safety & Important Information	2-3
4.0	Standards & Compliance	3
5.0	Electrical Requirements	3
6.0	Dimming Control Characteristics	4
7.0	Before You Begin	4
8.0	System Overview	5
9.0	Cabinet Installation	6-9
10.0	Downlight Fixture Installation	10-11
11.0	Surface Fixture Installation	12-15
12.0	12 x 4 Fixture Installation	16-18
13.0	Wall Bracket Fixture Installation	19-20
14.0	Output Cabling to Fixtures	21
15.0	Compatible 0-10V Dimmers & Controls	21-22
16.0	Inverter Connections	23
17.0	System Wiring Example	23
18.0	Troubleshooting	24



1.0 SCOPE

The KIRLIN Symphony 0-10V System is intended for installation and use in areas with large spaces and where servicing lights is difficult. The system includes a Symphony 0-10V Remote Driver Cabinet, Symphony 0-10V Remote Driver Module, and Symphony Luminaire (sold separately) that work in harmony to provide a quality lighting experience.

This manual provides general installation, use, and application guidelines. Specifications are subject to change without prior notice.

This lighting system is Class 2 low voltage and can be installed in plenum or non-plenum locations in accordance with required local, state, provincial, country and NEC/CEC regulations. Only output cables marked with "CMP" may be installed in plenum locations.

2.0 OWNER/USER RESPONSIBILITY

It is the responsibility of the contractor, installer, buyer, owner and user to install, maintain, and operate the KIRLIN Symphony 0-10V System in accordance with all applicable laws, regulations and local electrical safety authority requirements.

This product is only to be installed by a qualified electrician.

IMPORTANT!

Thoroughly read the entire instructions guide and warnings before beginning installation. The instructions provided are intended to assist in the installation and service of the corresponding product. Failure to follow the instructions may result in product malfunction, damage, injury or death. Contact your Kirlin service representative for replacement parts and procedures.

3.0 SAFETY & IMPORTANT INFORMATION



Risk of fire or electric shock. Ensure all power is turned off during installation process. Refer to wiring diagrams to prevent damages and malfunctions.



The Symphony 0-10V Remote Driver Module may only be connected and installed by a qualified electrician. This system requires knowledge of luminaires and electrical systems. If not qualified, do not attempt installation or maintenance. All applicable regulations, legislation, and building codes must be observed. Incorrect installation of the LED driver can cause irreparable damage to the Symphony Lighting System.

Pay attention when connecting the LEDs: polarity reversal results in no light output and often damages the LEDs.



Connecting fixtures with power **ON** will "hot plug" the LEDs and cause damage.



Must use Kirlin supplied driver modules and light fixtures to maintain warranty.



Requires #16 AWG minimum twisted pair shielded wire for all driver module wiring. All system wiring must have a UL electrical rating of 300V.

3.0 SAFETY & IMPORTANT INFORMATION (Continued)



The maximum total wire length from the cabinet to light fixture is 250 feet.



To prevent wiring damage or abrasion, do not expose wiring to edges metal or other sharp objects.

4.0 STANDARDS & COMPLIANCE (Per Installed DVR Module)

This Low Voltage Luminaire System complies with UL 2108	
UL Listed, Class P, Class 2	UL 1310 UL 8750
Conducted emissions	FCC title 47 CFR part 15 class B
Radiated emissions	FCC title 47 CFR part 15 class B
Electrostatic discharge	EN 61000-4-2
0-10V	IES/EN 60929 annex E NOTE: From 0.6V to 10V drivers comply with IEC/EN 60929 annex E. Below 0.6V SmartLED™ driver modules comply with ABL 0-10V. Design Spec v1.2 enabling standby mode.
Surge protection	ANSI 62.41 1991 category B1: 2.5kV DM, 2.5kV CB @ 30 Ohm 0-10V input 0.5kv DM, 1kV CM surge
Restriction of hazardous substances	RoHS3 (Directives 2011/65/EU-2015/863/EU)

5.0 ELECTRICAL REQUIREMENTS (Per Installed DVR Module)

Nominal input voltage range AC	120 - 277V
Absolute input voltage range AC	108 - 306V
Input frequency range	50 - 60Hz
Maximum wattage	50W (DVR-XXXXA) 75W (DVR-XXXXB)
Efficiency at full load	85%
Power factor at full load	> 0.95
THD at full load	< 20%
Maximum inrush current	< 200mA ² s @ 120V / 60Hz < 200mA ² s @ 277V / 60Hz
Surge protection	2kV differential mode (DM) 2kV common mode (CM)
Maximum standby power	0.5W

6.0 DIMMING CONTROL CHARACTERISTICS

Control protocol	0-10V
Dimming range	100% - 0.1%, off
Dimming curve	Linear

7.0 BEFORE YOU BEGIN

Before You Begin

- Shut **OFF** power at fuse box or circuit breaker before installation, inspection or removal.
- Properly ground cabinet to main earth ground.
- To reduce the risk of fire or electric shock, **NEVER** interconnect or short output terminations.

Electrical Requirements

- This driver cabinet is intended for connection to a 20A branch circuit and an appropriate disconnect device shall be provided as part of the building installation.
- All secondary output circuits are class 2 low voltage.

Mounting and Environmental Requirements

- This driver cabinet is rated for dry locations only and is designed to be wall mounted.
- This driver cabinet is rated for operation at a maximum ambient temperature of 25°C.
- Allow sufficient spacing around driver cabinet for convection air flow.

Environmental Conditions

Enclosure is intended for use in ambient temperature of 25°C max.

Module operating ambient temperature (Ta) range	-20°C to +50°C
Fixture acoustic noise	< 19dBa
Driver acoustic noise - steady state	< 24dBa (Class A)
All components	Dry location only

8.0 SYSTEM OVERVIEW: SYMPHONY 0-10V SYSTEM

SYM-CABNT: Driver Cabinet

- 24"x 18"x 4.5" carbon steel enclosure supports up to **8 Remote Driver Modules**.
- Wall mounted enclosure fabricated from 16 gauge steel. Includes flat, removable cover fastened with plated steel screws. Cover design permits easy removal without extracting cover screws. Mounting holes on back of cabinet. Removable knockouts on all four sides.
- Certifications and Compliance: NEMA 1 rating, UL Listed.



DVR-1400A: Driver Module

One module provides power and dimming control for:

- Up to two (2) **1500L Luminaires**
- One (1) **2500L Luminaire**
- 1/2 of a **5000L Luminaire** (use 2 modules)
- 1/2 of a **6500L Luminaire** (use 2 modules)

Order Number: DVR-1400A



DVR-1050A: Driver Module

One module provides power and dimming control for:

- One (1) **4000L Luminaire**

Order Number: DVR-1050A



DVR-1400B: Driver Module

One module provides power and dimming control for:

- Up to four (4) **1500L Luminaires**
- Up to two (2) **2500L Luminaires**
- One (1) **5000L Luminaire**

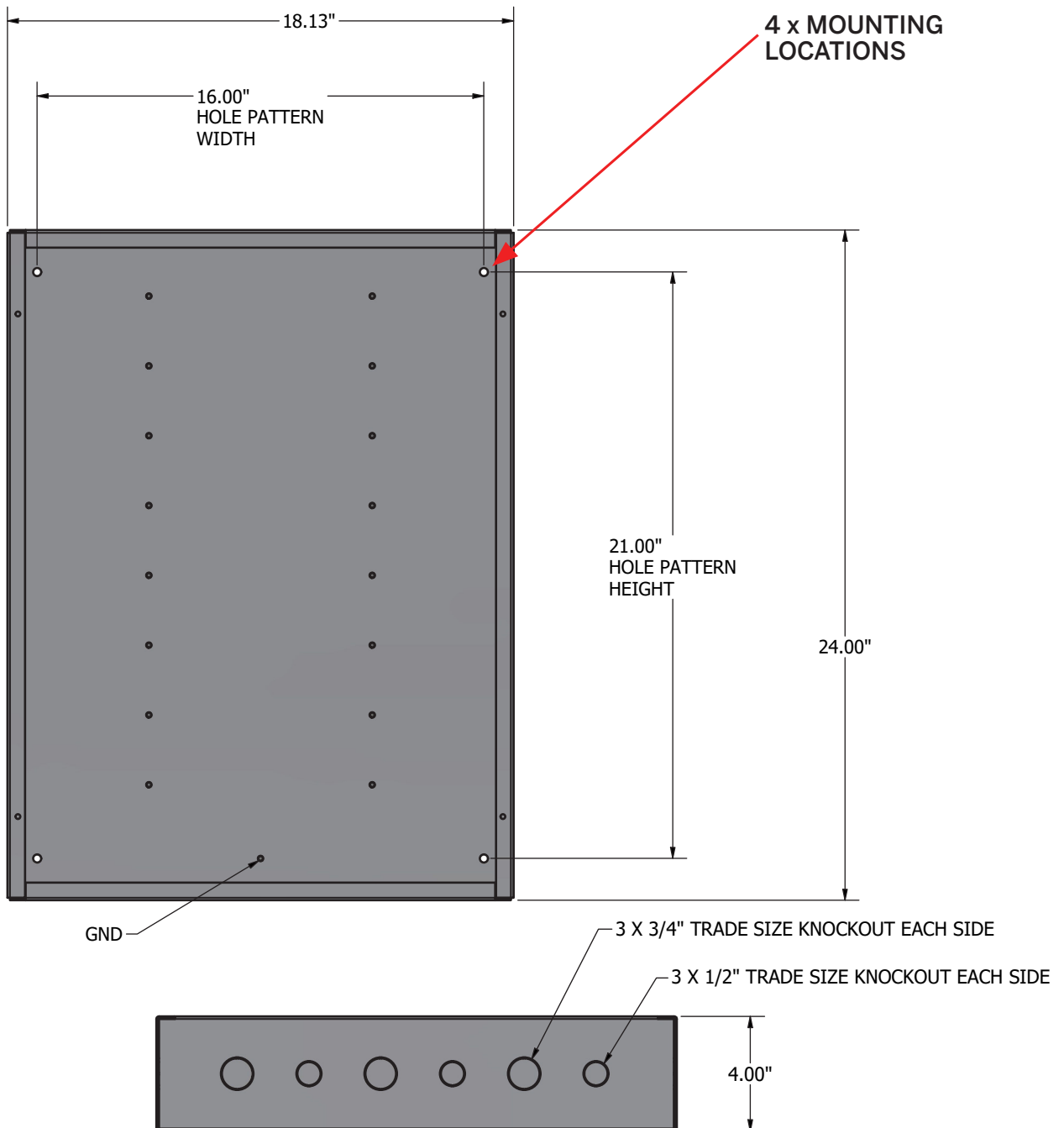
Order Number: DVR-1400B



9.0 CABINET INSTALLATION

Mounting

1. Loosen the 4 screws that mount the cover panel; lift cover to align key hole slots, remove and set aside.
2. Place the enclosure in the desired location and mount using the 4 designated mounting locations.
3. After system installation is complete, replace the cover panel and tighten the 4 mounting screws.



9.0 CABINET INSTALLATION (Continued)

Install Modules

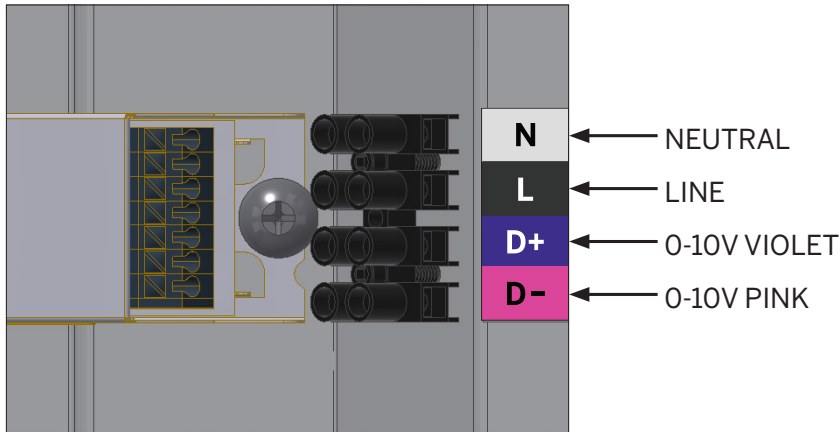
1. Each module is mounted in the cabinet via two threaded studs. Remove the keps-nuts installed on each stud, insert module, and replace both keps-nuts.
2. Repeat for each module to be installed.



9.0 CABINET INSTALLATION (Continued)

Line Voltage Input Connections

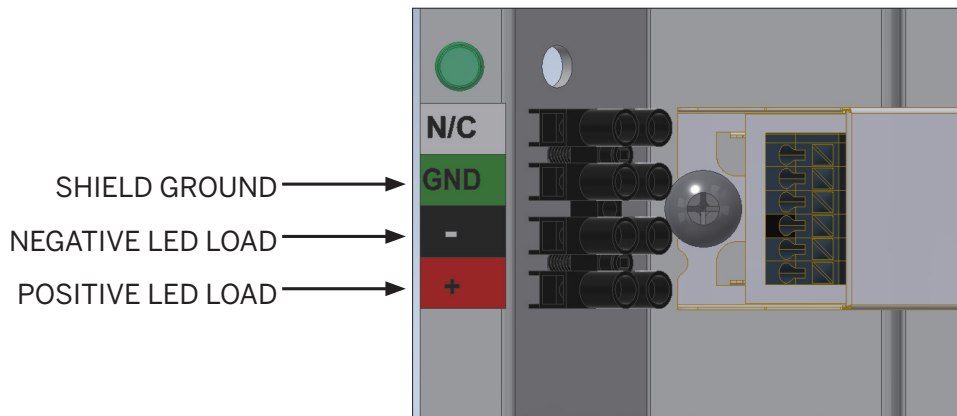
NOTE: Each enclosure ships with a jumper wire kit to allow fast & easy installation. The kit allows installer to customize dimming & switching zones by daisy chaining modules as needed. All system wiring must have a UL electrical rating of 300V minimum.



1. Install the AC line through the desired knock-out in the cabinet.
2. Install the 0-10V dimming wires in the desired knock-out in the cabinet.
3. Connect the AC Line and neutral wires to the terminal block as shown.
4. Connect the AC Ground wire to the supplied green ground wire located in the cabinet.
5. Connect the 0-10V violet and pink dimming wires.

Output Connections

NOTE: Requires #16 AWG minimum twisted pair shielded wire. All system wiring must have a UL electrical rating of 300V minimum. See section 14.0 for cabling recommendations.

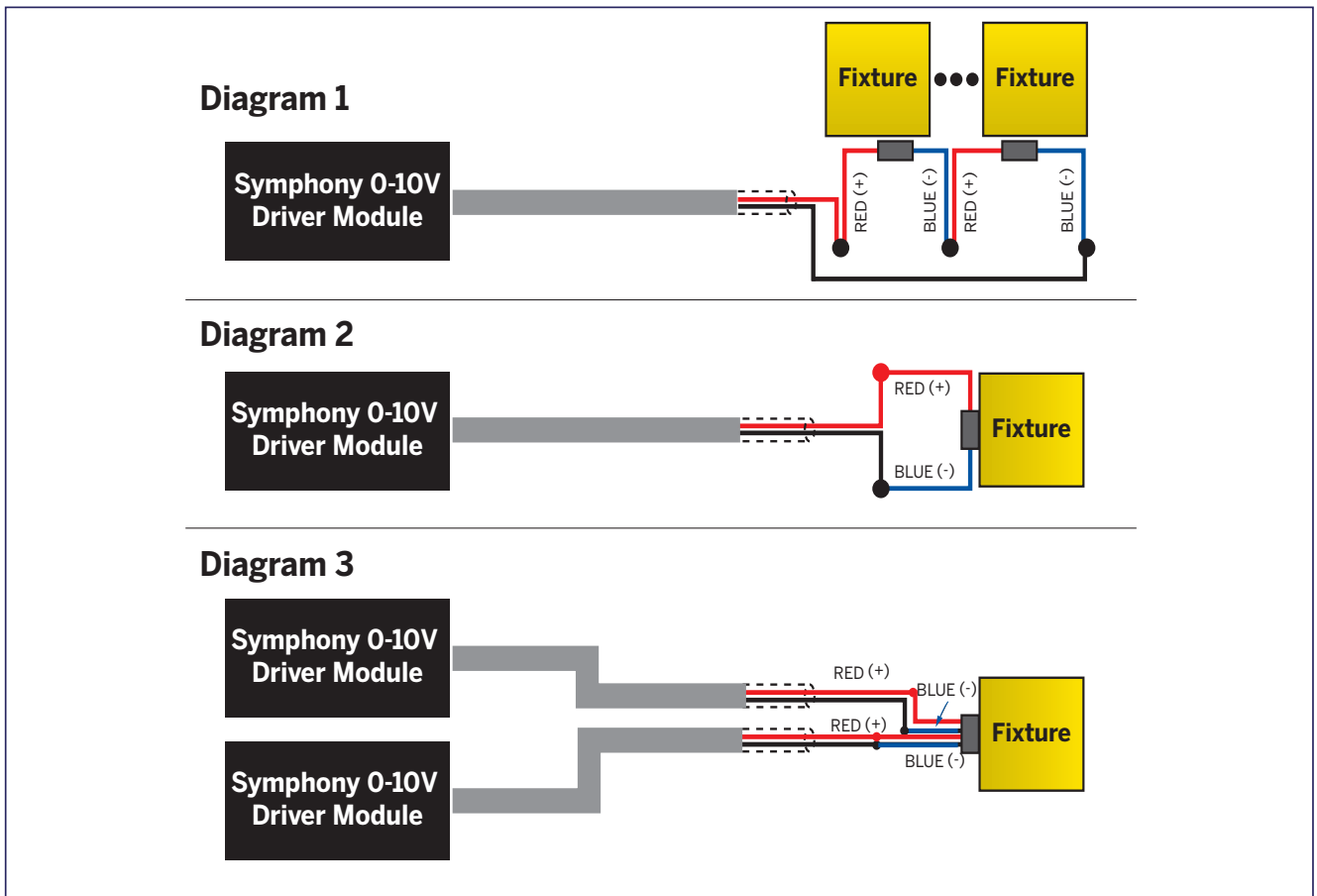


1. Install the LED load wires through the desired knock-out in the enclosure.
2. Connect the twisted shielded pair wires to the terminal block as shown. Each fixture has a Light Description Value (ie. -2500L) that can be used in conjunction with the table below to determine wiring and drive current connection. **DO NOT** connect shield wire from driver cabinet to external ground bar. Make sure the fixture is connected to the proper drive current.

9.0 CABINET INSTALLATION (Continued)

LED Load Configurations

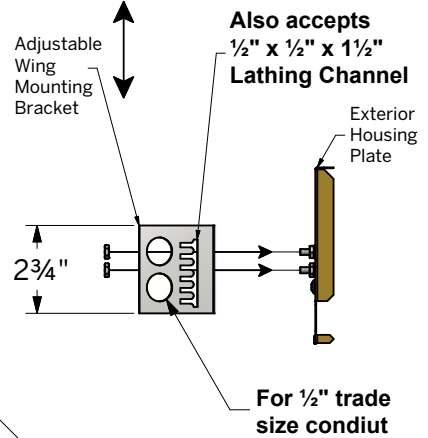
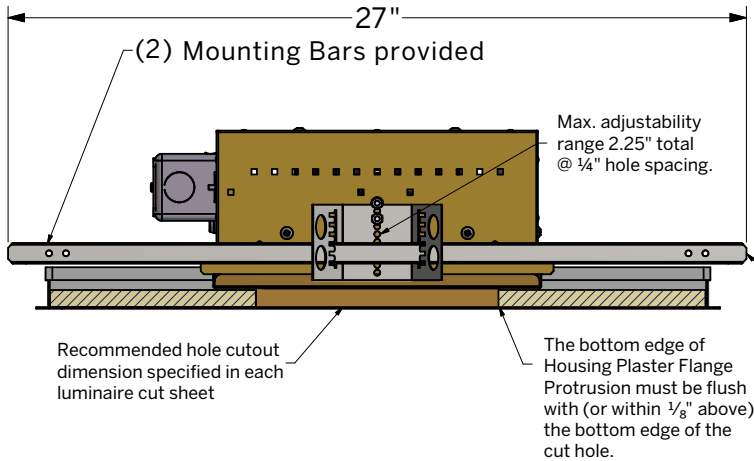
Description	LED Driver Module		
	DVR-1400A	DVR-1050A	DVR-1400B
-1500L Luminaire	Up to 2 in series (diagr 1)		Up to 4 in series (diagr 1)
-2500L Luminaire	1 fix per driver (diagr 2)		Up to 2 in series (diagr 1)
-4000L Luminaire		1 fix per driver (diagr 2)	
-5000L Luminaire	2 drivers per fix (diagr 3)		1 fix per driver (diagr 2)
-6500L Luminaire	2 drivers per fix (diagr 3)		



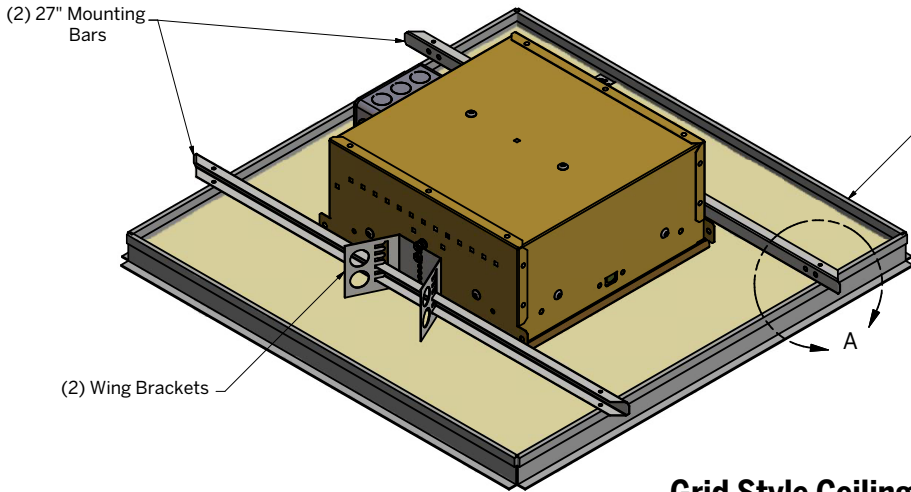
10.0 DOWNLIGHT FIXTURE INSTALLATION

Standard Mounting Hardware Installation Instructions

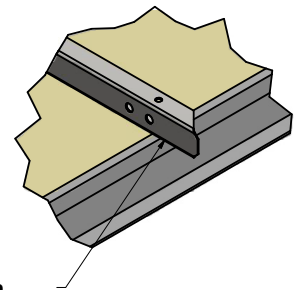
(2) 27" Mounting Bars & (2) Wing Brackets with combined vertical adjustability of 4.0"



Typical Commercial Installations



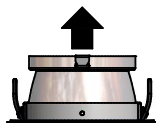
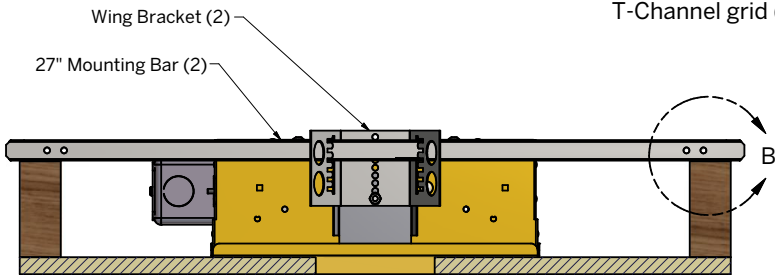
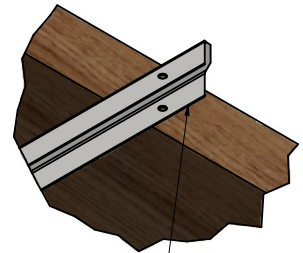
Detail A



Grid Style Ceiling Installation

Be sure to adjust vertical position of mounting bars within the bracket so that they rest on adjacent T-Channel grid (secure to grid as required).

Detail B



Install trim assembly after installing luminaire housing

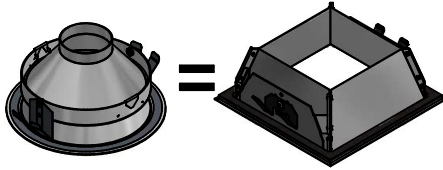
Housing Plaster Fange Protrusion. Align with bottom of ceiling material.

Drywall/Plaster Ceiling Installation

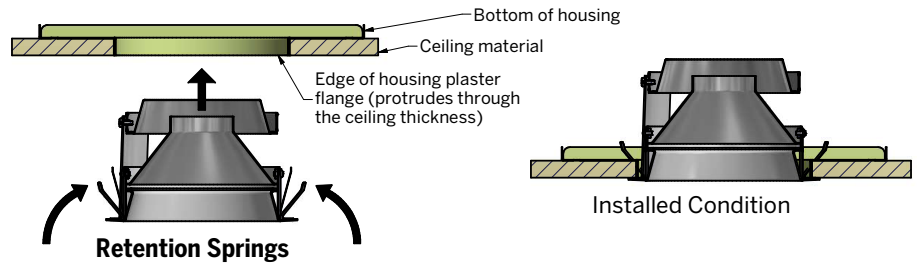
Be sure to adjust vertical position of mounting bars within the bracket so that they rest on adjacent ceiling joists (secure to joists as required).

10.0 DOWNLIGHT FIXTURE INSTALLATION (Continued)

Trim Installation Guide

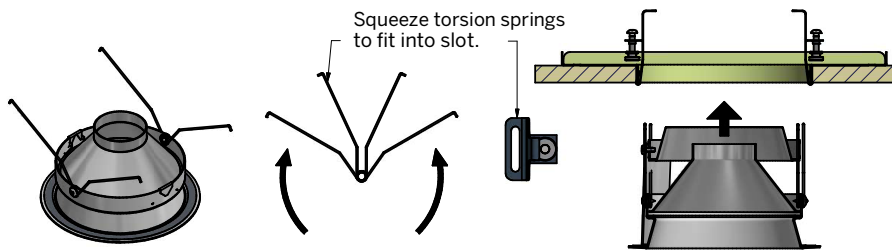


All installation methods shown are the same for round trims and square trims.
(Round trims shown for reference)

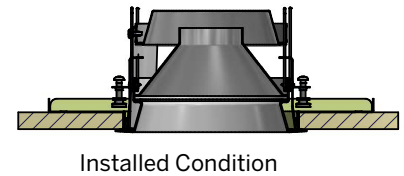


Retention Springs

Installed Condition

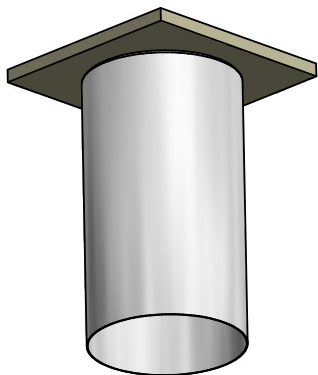
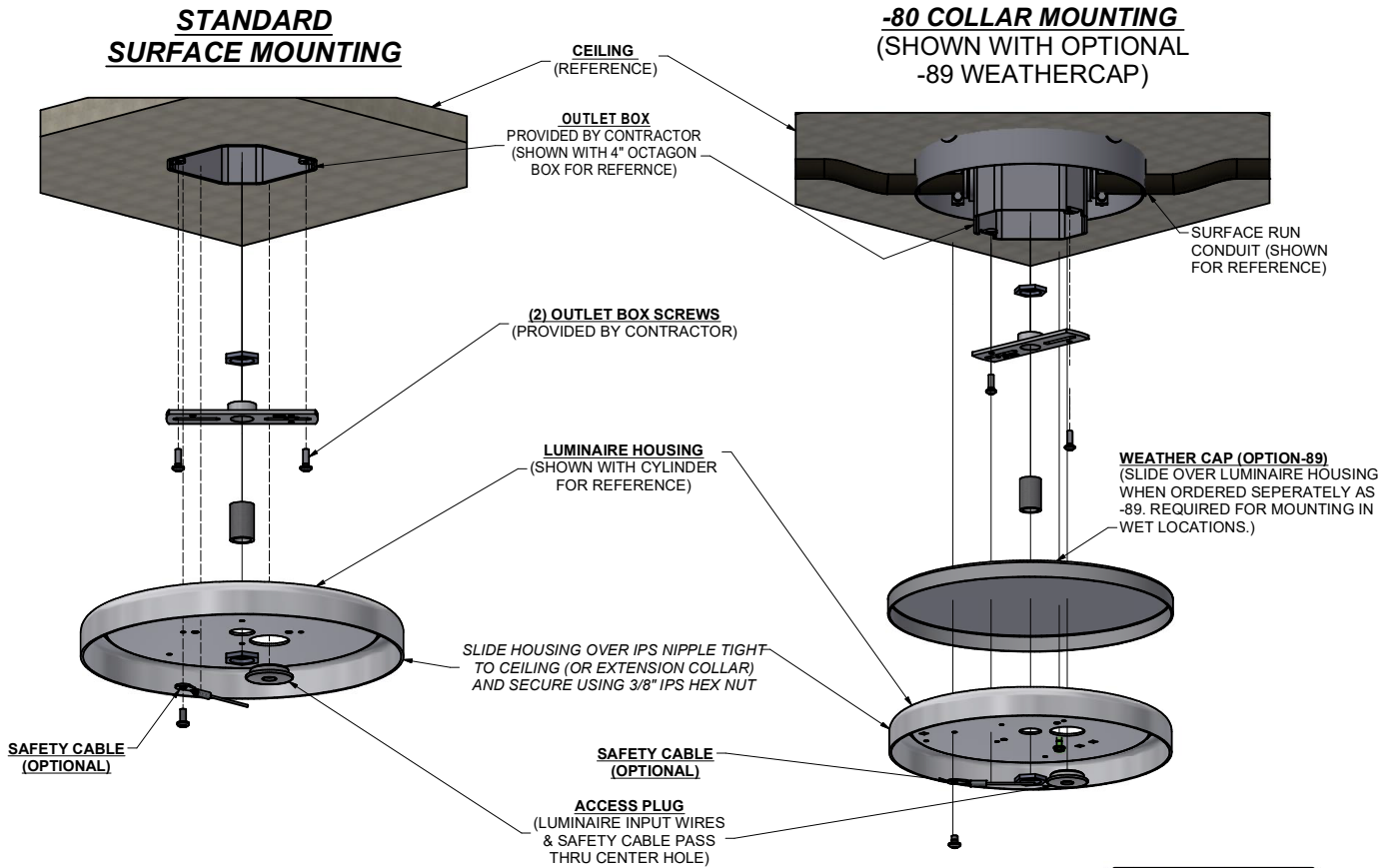


Torsion Springs

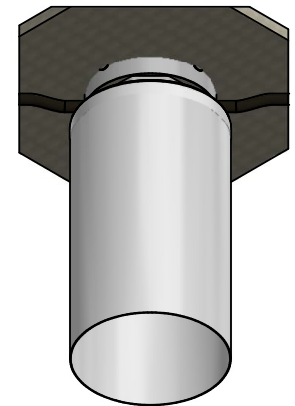


Installed Condition

11.0 SURFACE FIXTURE INSTALLATION

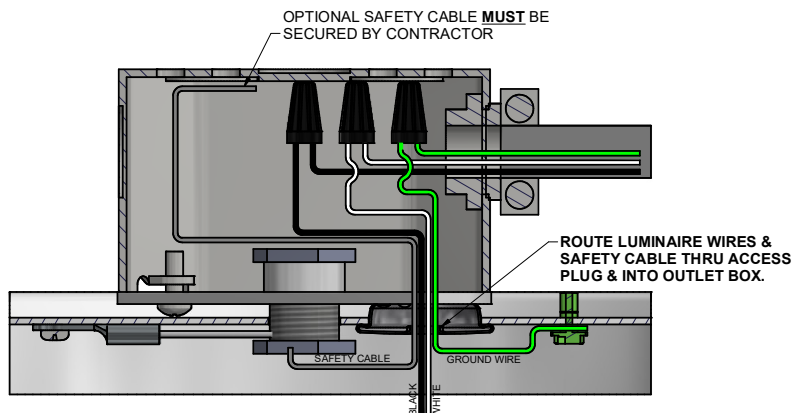


FULLY ASSEMBLED
(REFERENCE)



FULLY ASSEMBLED
(REFERENCE)

VIEW OF WIRES IN THE JUNCTION BOX



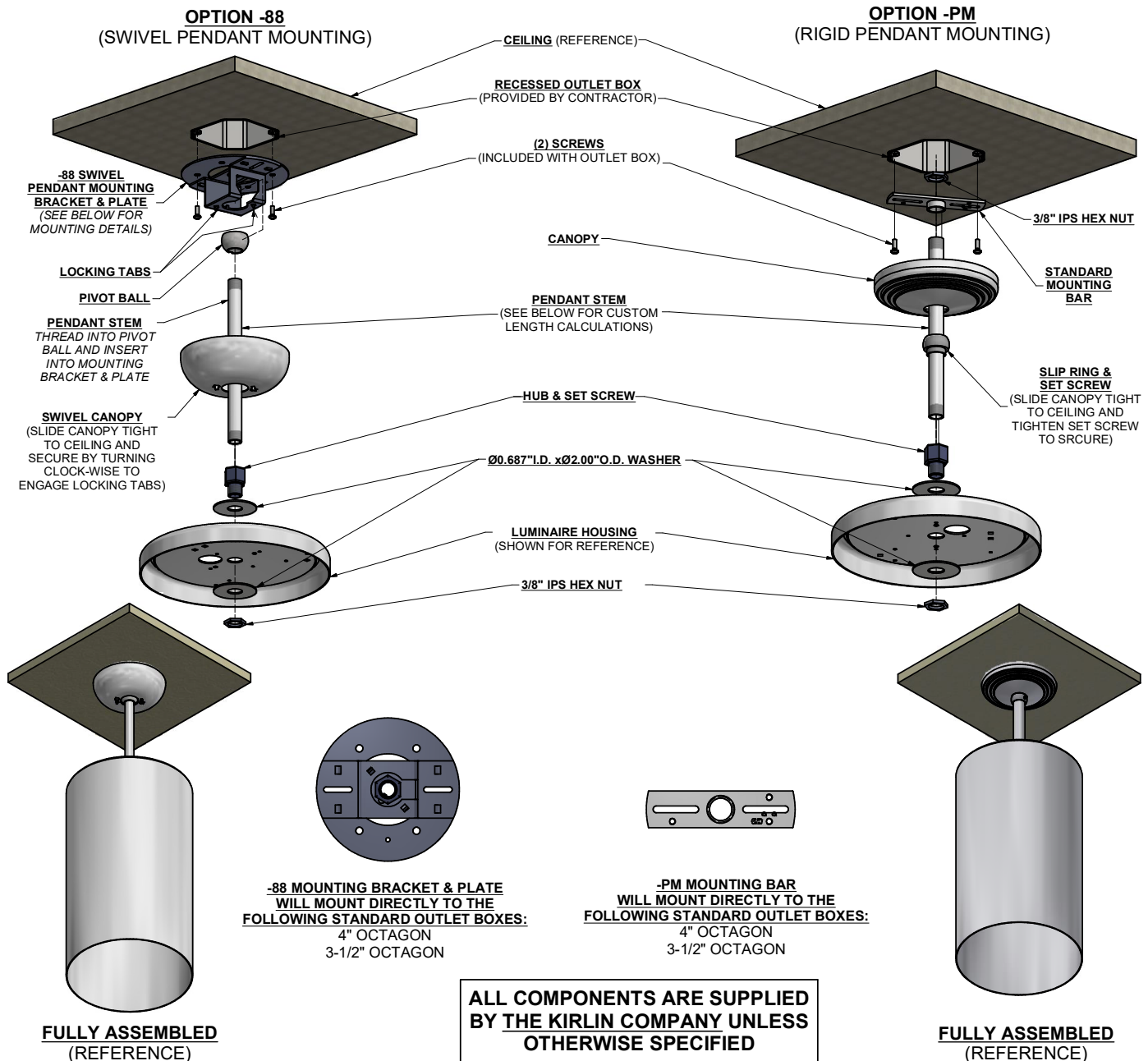
STANDARD MOUNTING BAR WILL MOUNT DIRECTLY TO THE FOLLOWING STANDARD OUTLET BOXES:
4" OCTAGON
3-1/2" OCTAGON

!!CAUTION!!
DO NOT BRING BUILDING WIRE INTO LUMINAIRE.

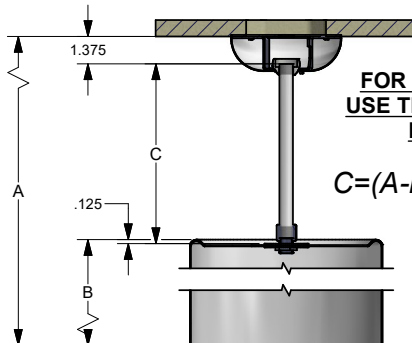
LUMINAIRE LEADS **MUST** TERMINATE IN OUTLET BOX MOUNTED IN CEILING ABOVE AS SHOWN

ALL COMPONENTS SUPPLIED BY THE KIRLIN COMPANY UNLESS OTHERWISE SPECIFIED

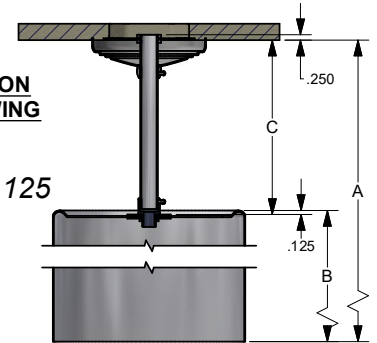
11.0 SURFACE FIXTURE INSTALLATION (Continued)



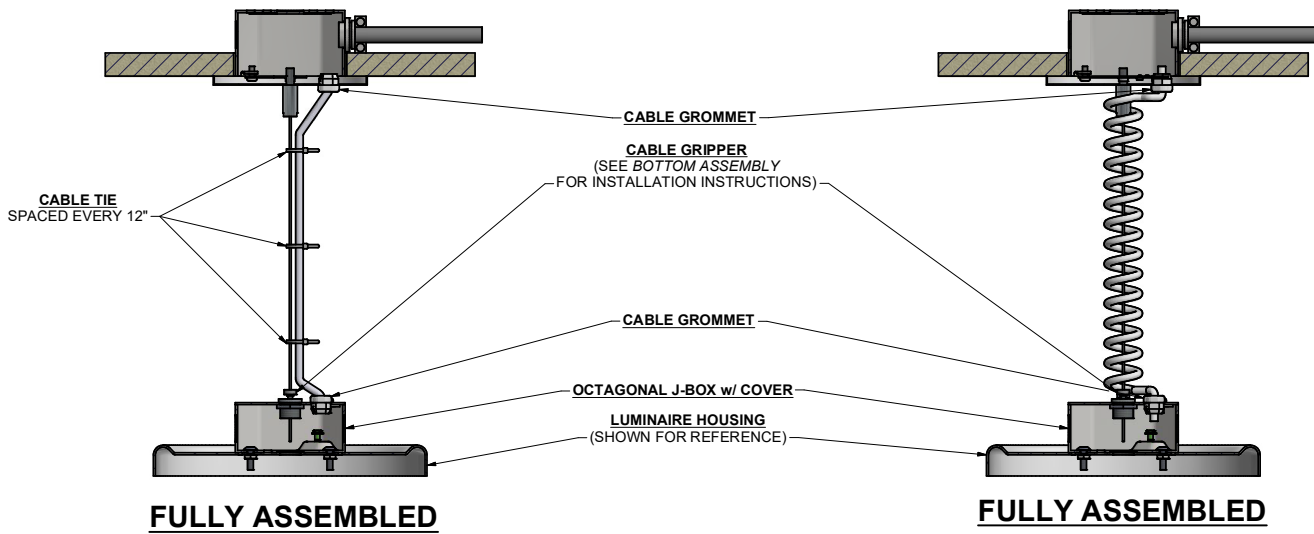
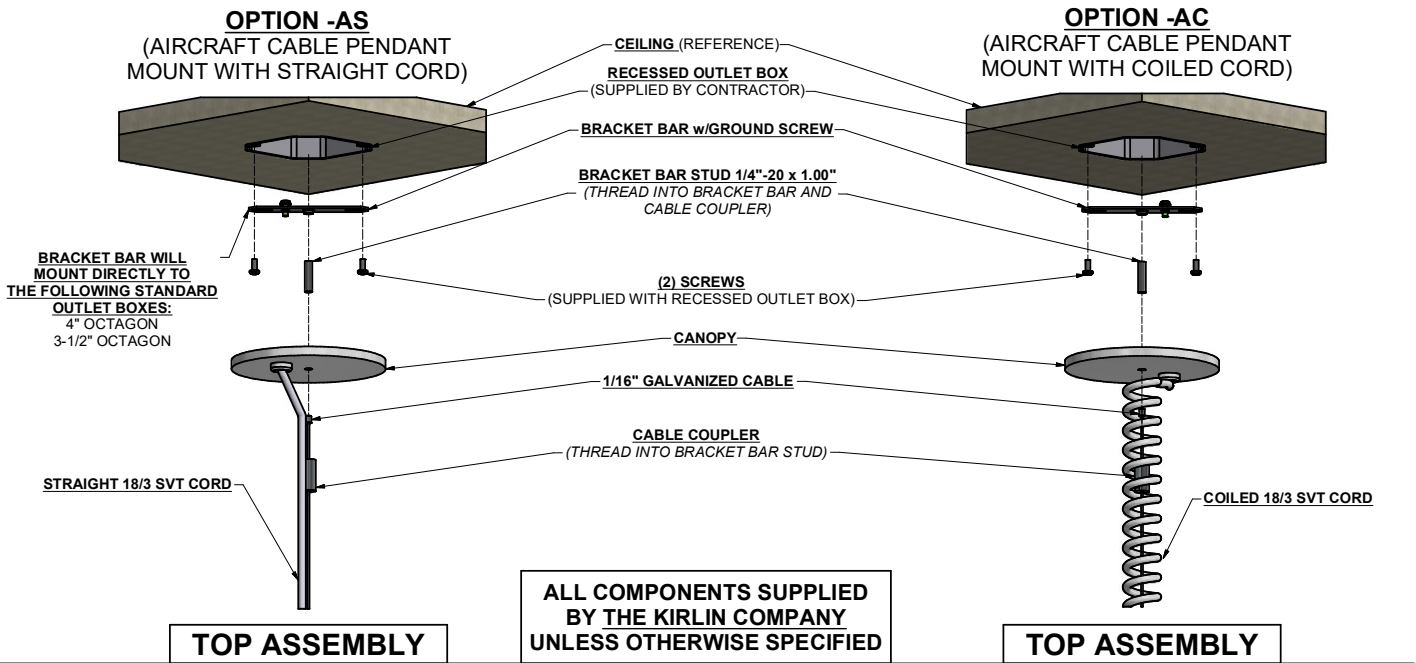
USE TO DETERMINE CUSTOM PENDANT LENGTH FOR THE -87 OPTION



A = OVERALL HEIGHT
B = LUMINAIRE HEIGHT
C = CUSTOM PENDANT LENGTH



11.0 SURFACE FIXTURE INSTALLATION (Continued)



BOTTOM ASSEMBLY
(SOME COMPONENTS HAVE BEEN REMOVED FOR CLARITY)
PLEASE REFERENCE FULLY ASSEMBLED VIEW FOR ALL COMPONENTS



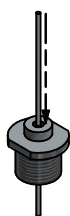
VIEW A

LOOSEN GRIPPER LOCK NUT TO UNLOCK



VIEW B

DEPRESS GRIPPER LOCK NUT



VIEW C

INSERT CABLE INTO GRIPPER TO DESIRED HEIGHT WHILE DEPRESSING GRIPPER LOCK NUT



VIEW D

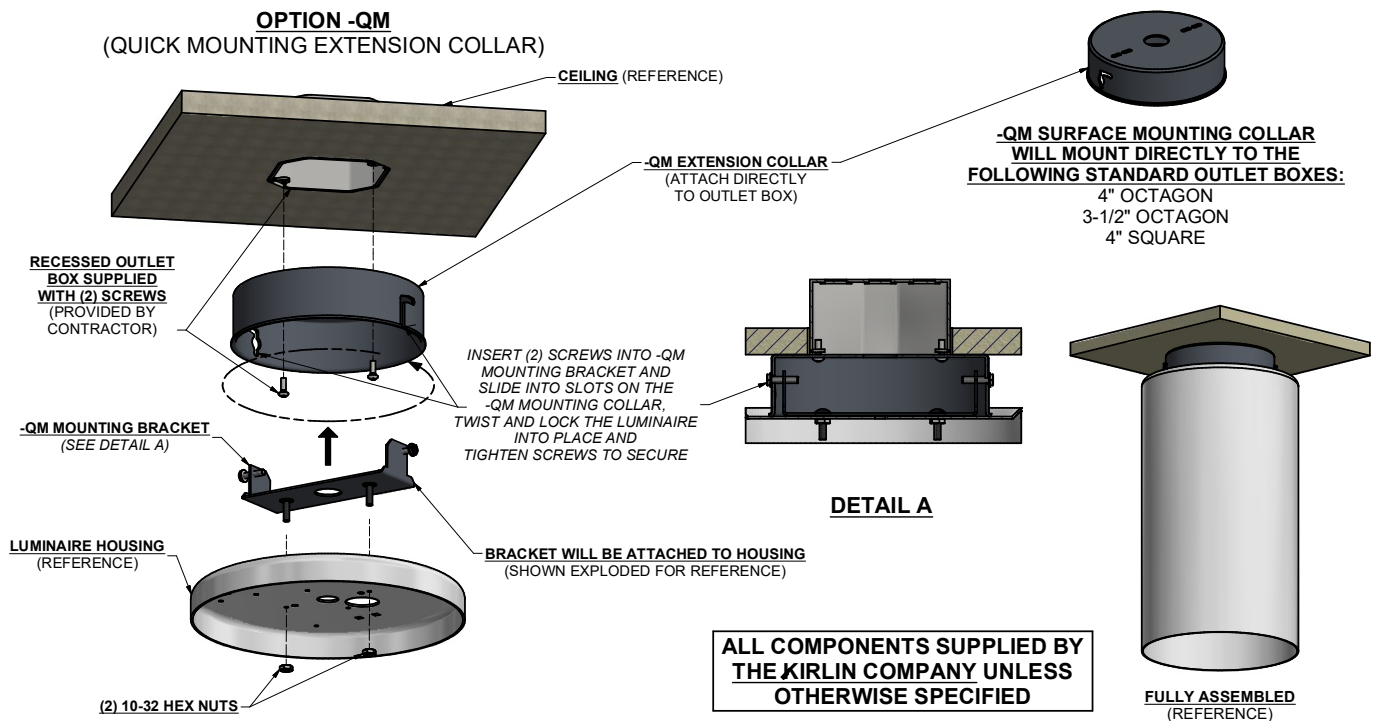
RELEASE GRIPPER LOCK NUT WHEN DESIRED HEIGHT IS ESTABLISHED



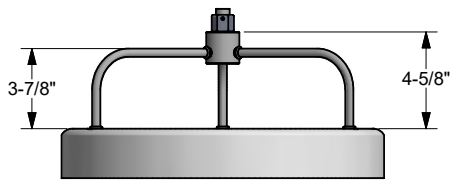
VIEW E

TIGHTEN GRIPPER LOCK NUT TO LOCK INTO POSITION

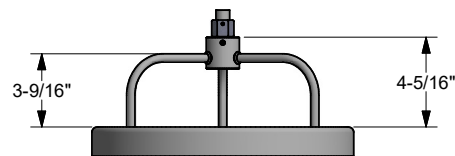
11.0 SURFACE FIXTURE INSTALLATION (Continued)



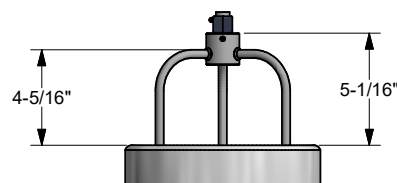
MOUNTING OPTIONS FOR DIRECT / INDIRECT INDOOR LUMINAIRES



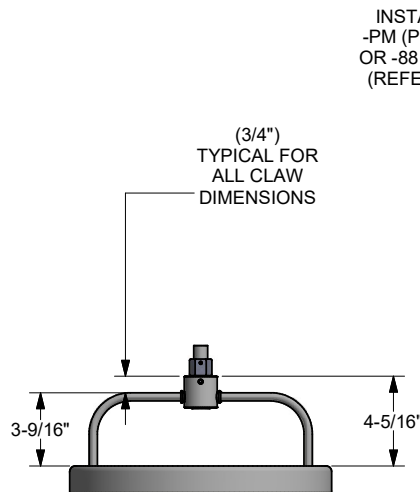
TRIPOD CLAW DIMENSIONS FOR A STANDARD 14.5" x 24.5" CYLINDER



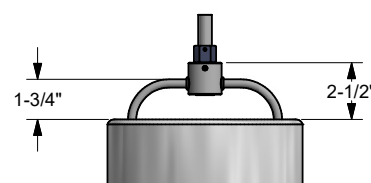
TRIPOD CLAW DIMENSIONS FOR A STANDARD 12" x 16" CYLINDER



TRIPOD CLAW DIMENSIONS FOR A STANDARD 9" x 13.5" CYLINDER

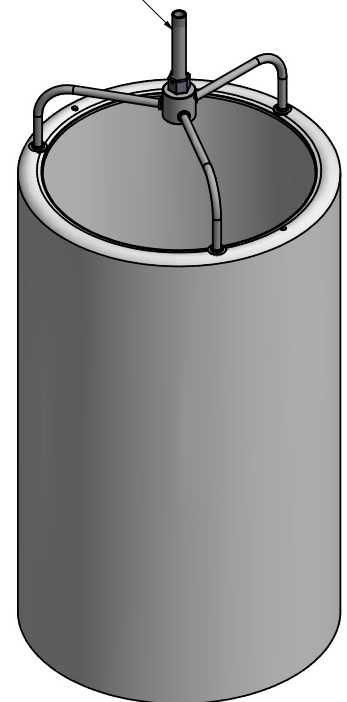


BIPOD CLAW DIMENSIONS FOR A STANDARD 12" x 16" CYLINDER



BIPOD CLAW DIMENSIONS FOR A STANDARD 9" x 13.5" CYLINDER

INSTALL AS TYPICAL -PM (PENDANT MOUNT) OR -88 (SWIVEL MOUNT) (REFER TO SHEET # 2)

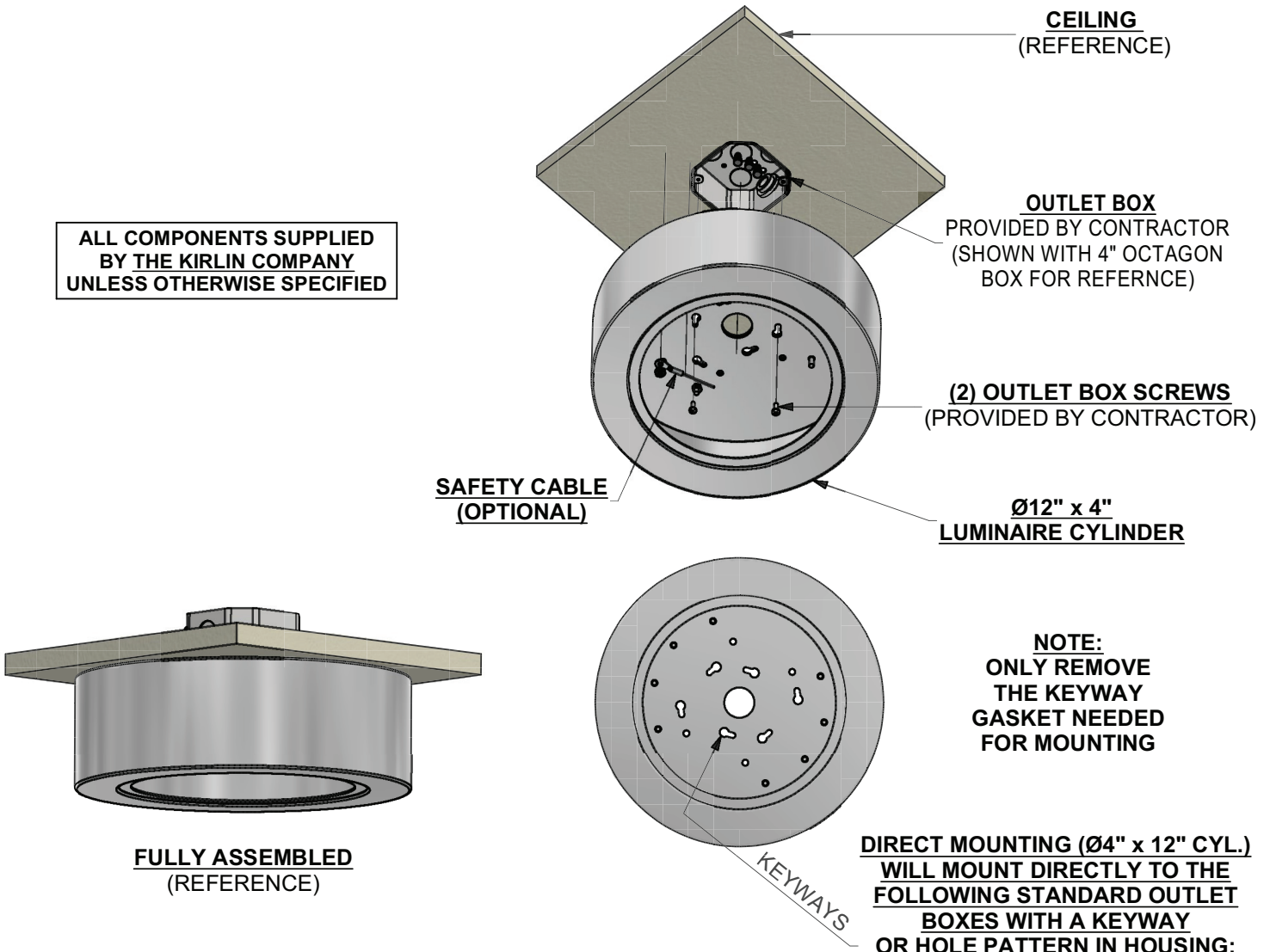


DIRECT / INDIRECT MOUNTING CYLINDER REFERENCE

12.0 12 x 4 FIXTURE INSTALLATION

DIRECT RECESSED MOUNTING OUTLET BOX

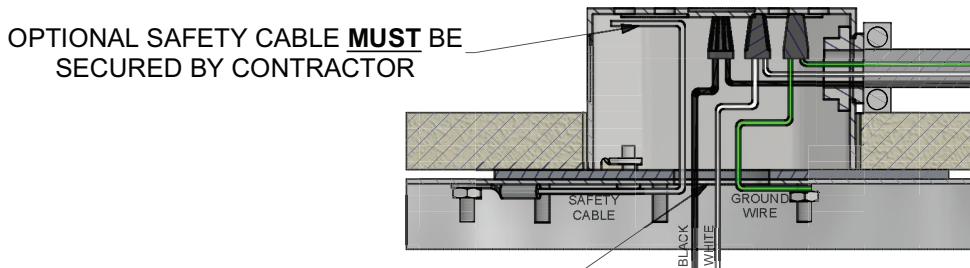
ALL COMPONENTS SUPPLIED
BY THE KIRLIN COMPANY
UNLESS OTHERWISE SPECIFIED



DIRECT MOUNTING (Ø4" x 12" CYL.) WILL MOUNT DIRECTLY TO THE FOLLOWING STANDARD OUTLET BOXES WITH A KEYWAY OR HOLE PATTERN IN HOUSING:

- 4" OCTAGON
- 3-1/2" OCTAGON
- 4" SQUARE
- 4-11/16" SQUARE

VIEW OF WIRES IN THE JUNCTION BOX



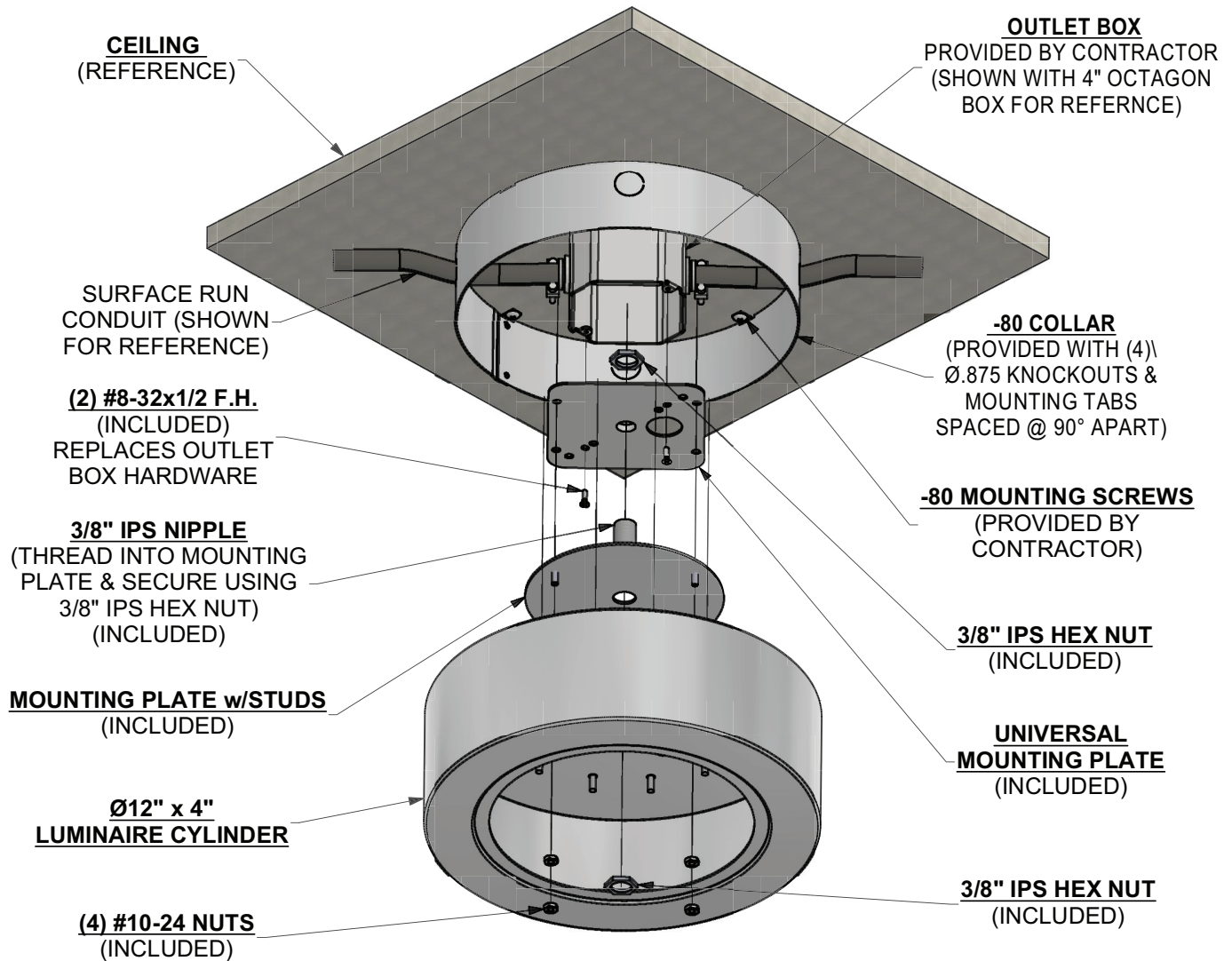
ROUTE LUMINAIRE WIRES & SAFETY CABLE THRU CENTER HOLE & INTO OUTLET BOX.

!!CAUTION!!
DO NOT BRING BUILDING WIRE INTO LUMINAIRE.

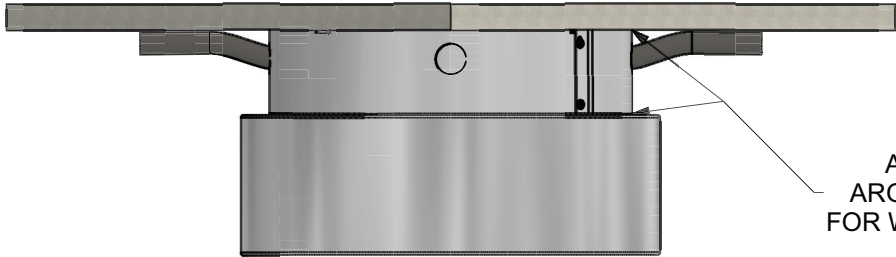
LUMINAIRE LEADS **MUST** TERMINATE IN OUTLET BOX MOUNTED IN CEILING ABOVE AS SHOWN

12.0 12 x 4 FIXTURE INSTALLATION (Continued)

DIRECT SURFACE MOUNTING OUTLET BOX WITH OPTION -80



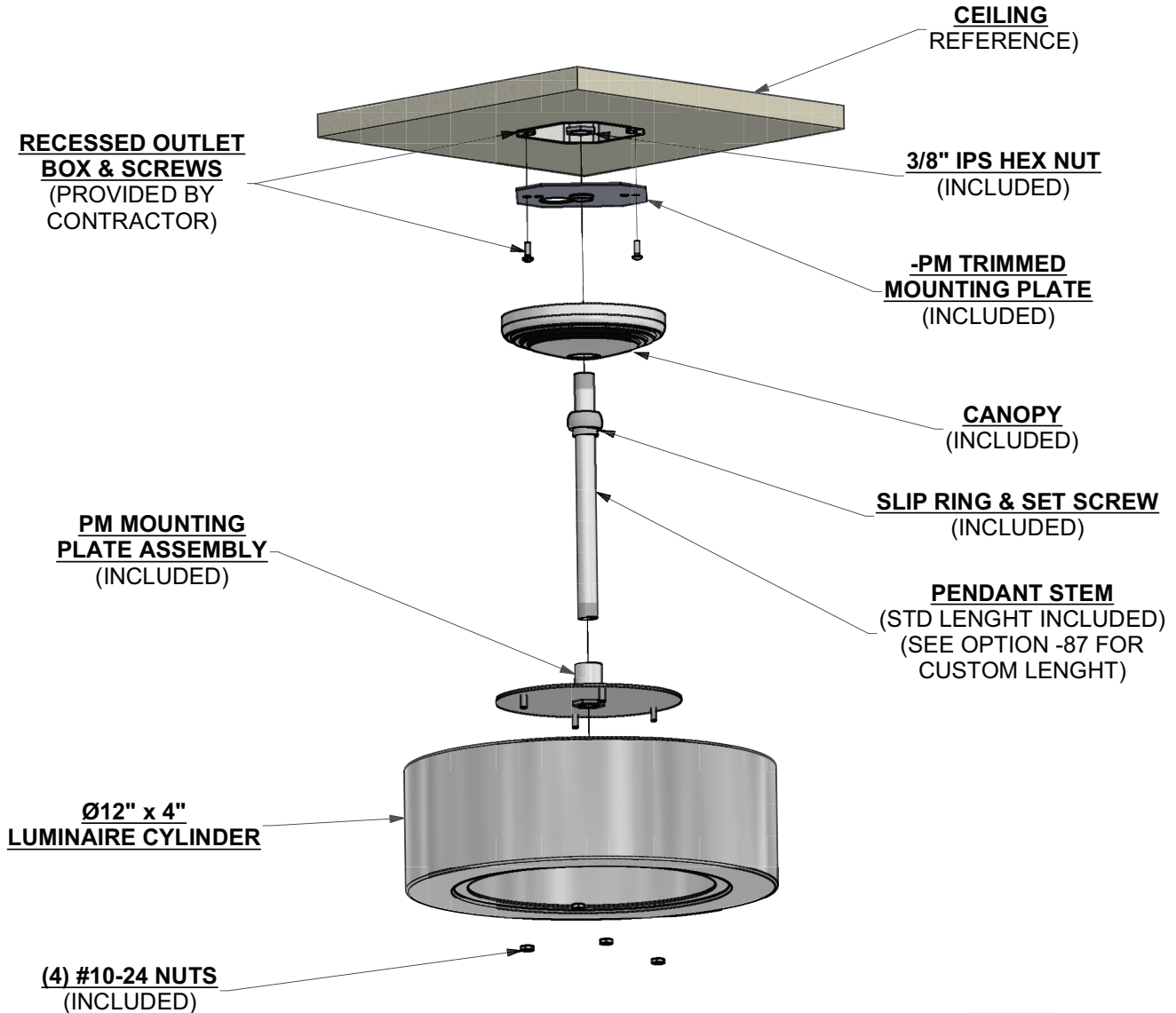
**ALL COMPONENTS SUPPLIED
BY THE KIRLIN COMPANY
UNLESS OTHERWISE SPECIFIED**



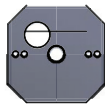
**FULLY ASSEMBLED
(REFERENCE)**

12.0 12 x 4 FIXTURE INSTALLATION (Continued)

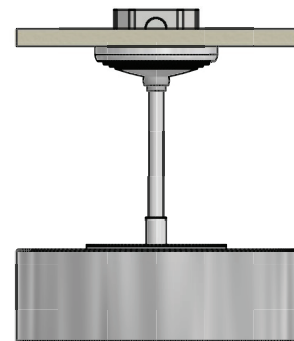
DIRECT RECESSED MOUNTING OUTLET BOX WITH OPTION -PM



**ALL COMPONENTS SUPPLIED
BY THE KIRLIN COMPANY
UNLESS OTHERWISE SPECIFIED**



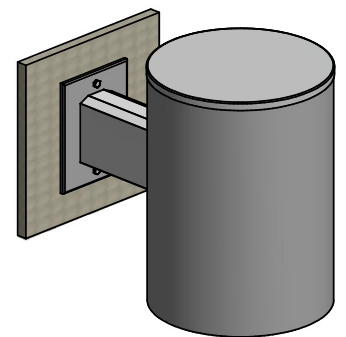
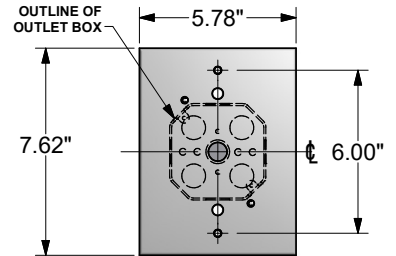
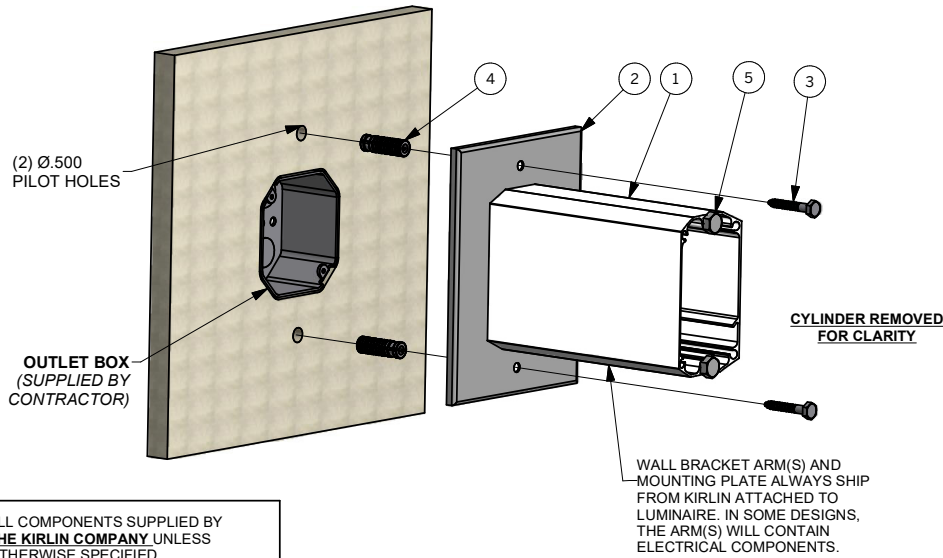
-PM TRIMMED MOUNTING PLATE
WILL MOUNT DIRECTLY TO THE
FOLLOWING STANDARD OUTLET BOXES:
3-1/2" OCTAGON
4" OCTAGON



FULLY ASSEMBLED
(REFERENCE)

13.0 WALL BRACKET FIXTURE INSTALLATION

MOUNTING STYLE #1 (WALL ANCHOR MOUNT - SINGLE ARM) LUMINAIRES MOUNTED IN THIS STYLE ARE **HEAVY!!** DO NOT ATTEMPT TO MOUNT DIRECTLY TO J-BOX!!!

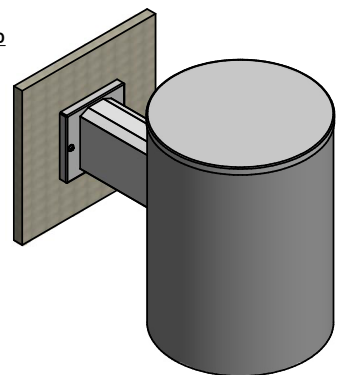
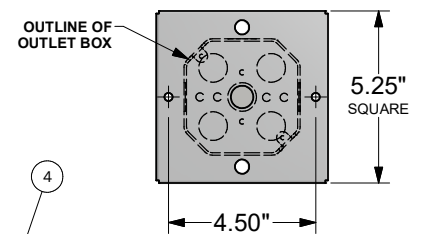
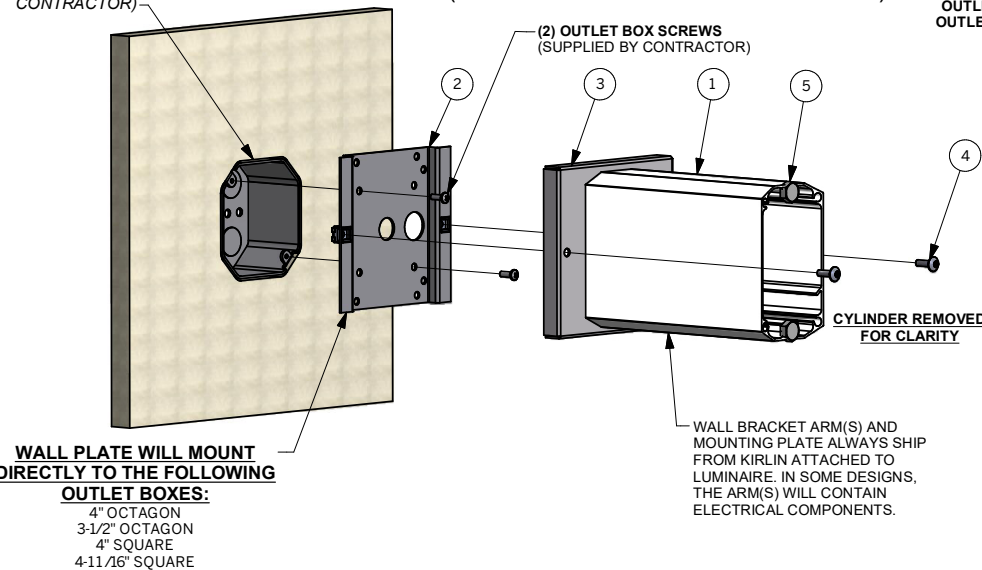


ALL COMPONENTS SUPPLIED BY THE KIRLIN COMPANY UNLESS OTHERWISE SPECIFIED

Parts List		
ITEM	QTY	DESCRIPTION
1	1	WALL BRACKET ARM
2	1	WALL MOUNTING PLATE
3	2	LAG BOLT 1/4 X 1.75
4	2	LAG SHIELD (ANCHOR)
5	4	SCREW: 3/8-16 x 1"

OUTLET BOX (SUPPLIED BY CONTRACTOR)

MOUNTING STYLE #2 (OUTLET BOX MOUNT - SINGLE ARM)



ALL COMPONENTS SUPPLIED BY THE KIRLIN COMPANY UNLESS OTHERWISE SPECIFIED

Parts List		
ITEM	QTY	DESCRIPTION
1	1	WALL BRACKET ARM
2	1	OUTLET BOX MOUNTING PLATE
3	1	WALL PLATE COVER
4	2	SCREW: 10-24 X .625
5	4	SCREW: 3/8-16 x 1"

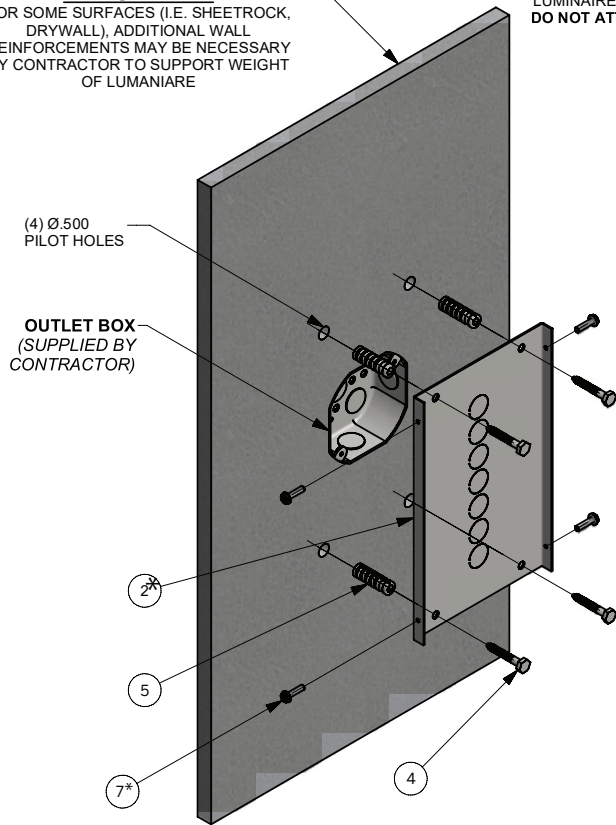
13.0 WALL BRACKET FIXTURE INSTALLATION (Continued)

IMPORTANT

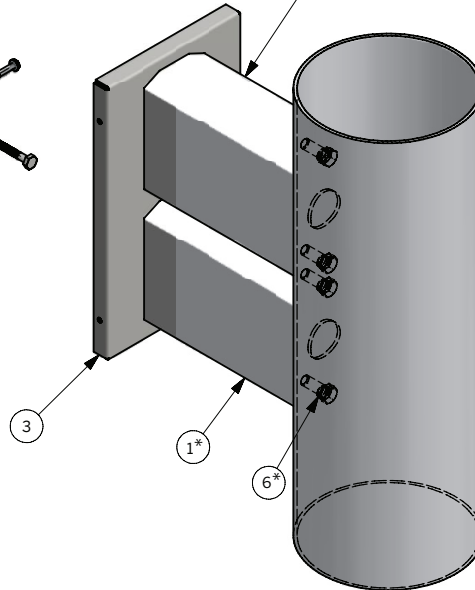
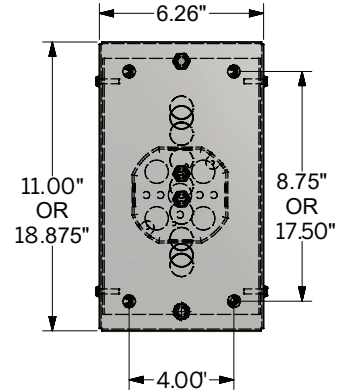
FOR SOME SURFACES (I.E. SHEETROCK, DRYWALL), ADDITIONAL WALL REINFORCEMENTS MAY BE NECESSARY BY CONTRACTOR TO SUPPORT WEIGHT OF LUMINAIRE

MOUNTING STYLE #3

LUMINAIRES MOUNTED IN THIS STYLE ARE **HEAVY!!**
DO NOT ATTEMPT TO MOUNT DIRECTLY TO J-BOX!!!



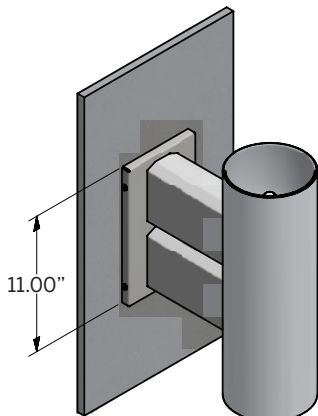
WALL BRACKET ARM(S) AND MOUNTING PLATE ALWAYS SHIP FROM KIRLIN ATTACHED TO LUMINAIRE. IN SOME DESIGNS, THE ARM(S) WILL CONTAIN ELECTRICAL COMPONENTS.



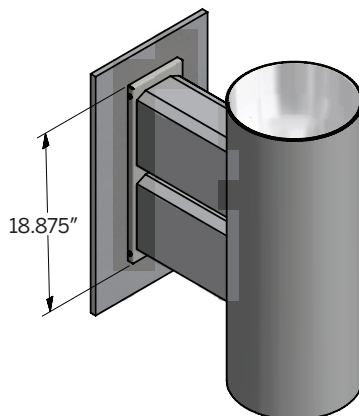
ALL COMPONENTS SUPPLIED BY THE KIRLIN COMPANY UNLESS OTHERWISE SPECIFIED

Parts List		
ITEM	QTY	DESCRIPTION
1 *	2	WALL BRACKET ARM
2 *	1	WALL MOUNTING PLATE
3	1	WALL PLATE COVER
4	4	LAG BOLT: 1/4 x 1.75
5	4	LAG SHIELD (ANCHOR)
6 *	8	SCREW: 3/8-16 x 1"
7 *	4	SCREW: 10-32 x .750

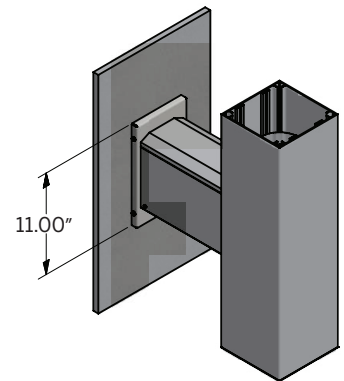
* = ACTUAL PART MAY DIFFER IN SIZE/QUANTITY



DOUBLE SMALL ARM ASSEMBLY
(AS SHOWN ABOVE)



DOUBLE LARGE ARM ASSEMBLY



SINGLE LARGE ARM ASSEMBLY

FULLY ASSEMBLED VIEWS

(SHOWN WITH VARIOUS DESIGNS FOR REFERENCE)

14.0 OUTPUT CABLING TO FIXTURES

Output cabling must be #16 AWG (minimum) twisted pair shielded wire to minimize cross talk between channels and minimize Electromagnetic Interference (EMI). Total cable length must not exceed 250'.

Output Wire Requirements and Recommendations

ALL WIRES MUST BE: #16 AWG minimum, twisted pair shielded with drain wire, UL rated for 300V

RECOMMENDED WIRE					
CMP Versions (PLENUM)			CM Versions (OPEN AIR)		
Belden	#16 AWG	Part # 83702	Belden	#16 AWG	Part # 8719
ADC	#16 AWG	Part # 911602SD			

15.0 COMPATIBLE 0-10V DIMMERS & CONTROLS

COMPATIBLE 0-10V DIMMERS and SWITCHES		
Dimmer Manufacturer	Type	Dimming Curve
Busch-Jaeger	2112U-101	Logarithmic
Jung	240-10	Logarithmic
Leviton Lighting Controls	IllumaTech - IP710-DLZ / IP710-LFZ	Logarithmic
Lightolier Controls	ZP600FAM120	Logarithmic
Lutron Electronics	Diva: DVTV, DVSTV, NFTV /Nova-T; NTSTV	Linear
Merten	5729	Logarithmic
Pass & Seymour	CD4FB-W	Logarithmic
WattStopper	DCLV2	Logarithmic
Sensor Switch	n O EZ	Linear
Synergy	ISD BC	Logarithmic

15.0 COMPATIBLE 0-10V DIMMERS & CONTROLS (Continued)

COMPATIBLE DIMMING CONTROL SYSTEMS	
Control Manufacturer	Type
Lutron Electronics	GraphicEye - GRX-TVI w GRX3503, Linear Energy Savr Node - QSN-4T16-S, TVM2 Module
Crestron	GLX-DIMFLV8, GLXP-DIMFLV8, GLPAC-DIMFLV4-*, GLPAC-DIMFLV8-*, GLPP-DIMFLVEX-PM, GLPP-1DIMFLV2EX-PM, GLPP-1DIMFLV3EX-PM, DIN-AO8, DIN-4DIMFLV4, CLS-EXP-DIMFLV, CLCI-1DIMFLV2EX
ABB	SD/S 2.16.1

NOTE: Some dimmers may cause reduced stability at the lowest dim level setting; this is normal and maybe resolved by increasing the lowest dim level setting if your selected dimmer allows.

16.0 INVERTER CONNECTIONS

EMI-03120

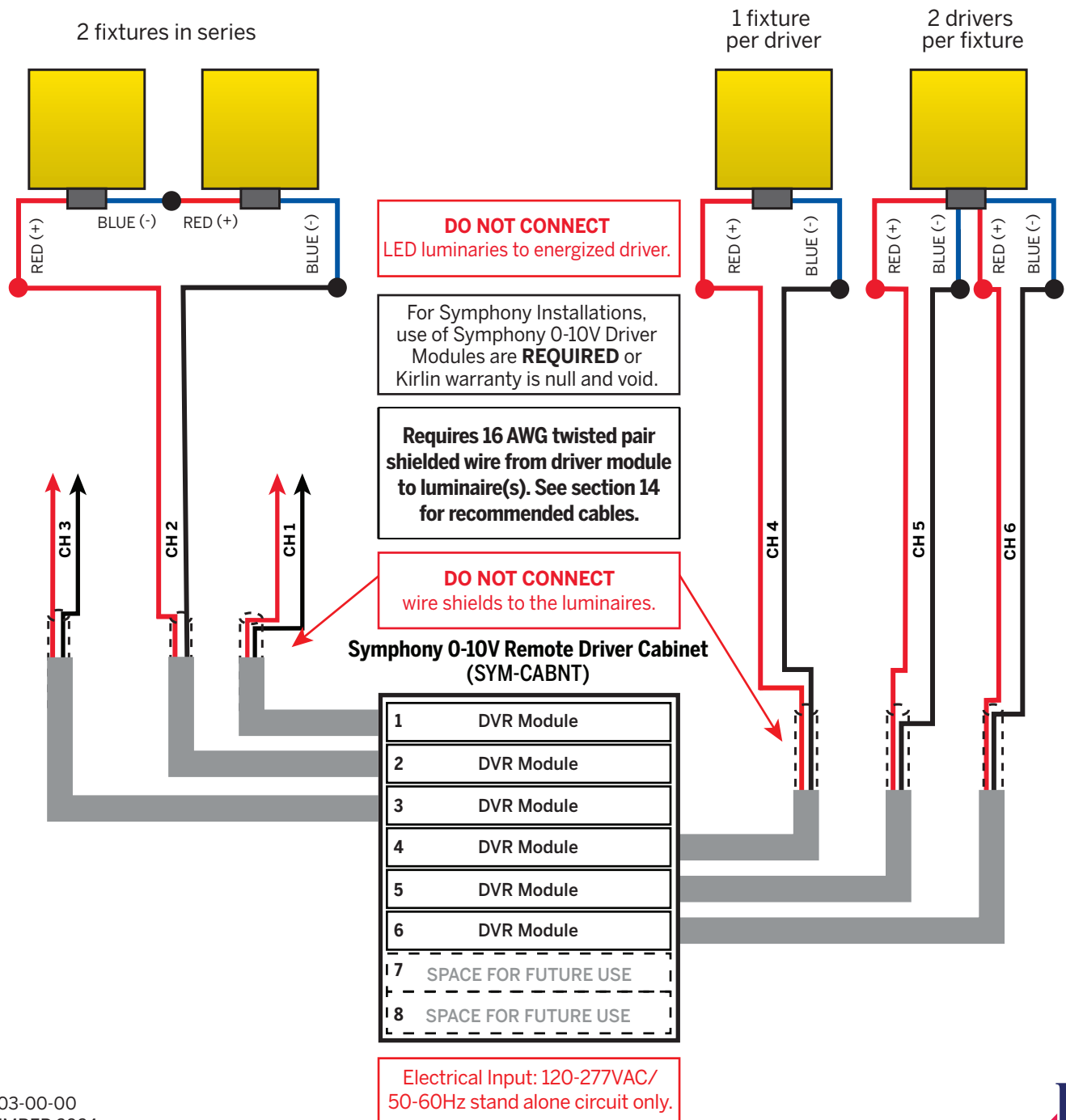
The **EMI-03120** will power up to (3) 50W DVR modules or (2) 75W (DVR-XXXXB) DVR modules during a power failure. Please see the installation manual supplied with the **EMI-03120** for its specific wiring diagrams.

EMI-21220

The **EMI-21220** will power up to (8) 50W (DVR-XXXXA) DVR modules or (5) 75W (DVR-XXXXB) DVR modules during a power failure. Please see the installation manual supplied with the **EMI-21220** for its specific wiring diagrams.

17.0 SYSTEM WIRING EXAMPLE

Light Description	LED Driver Module		
	DVR-1400A	DVR-1050A	DVR-1400B
-1500L Luminaire	Up to 2 fixtures in series per driver		Up to 4 fixtures in series per driver
-2500L Luminaire	1 fixture per driver		Up to 2 fixtures in series per driver
-4000L Luminaire		1 fixture per driver	
-5000L Luminaire	2 drivers per fixture		1 fixture per driver
-6500L Luminaire	2 drivers per fixture		



18.0 TROUBLESHOOTING

Fixtures Do Not Illuminate

1. Check to make certain that the dimmer is not set to its lowest position (depending on dimmer module, the system may dim to "off").
2. Verify that the cabinet is powered on. Each module has an LED indicator that will illuminate continuously when power is applied.
3. Confirm that all input and output connections are correct and secure. All wiring from the driver module to the LED fixture(s) is polarized; reversed connections may result LED light failure.
4. Verify that the number of fixtures per module and wiring connections are correct per diagram located on panel cover or section 17.0 of this manual.
5. Disconnect the LED fixture(s) not illuminating at the fixture junction box. Use a DC volt meter to measure the voltage at the fixture and driver module. Voltages should be approximately 55VDC. Lower voltages may indicate a short in the wiring or a failed driver module.

Fixtures Are Pulsing, Strobing or Flickering

1. Confirm the installed parts are approved Kirlin parts.
2. Check all wire connections. The most common reason for pulsing/strobing fixtures is a loose wire connection.
3. Verify that #16 AWG (minimum) twisted pair shielded wire is used and properly grounded.
4. Verify the installed 0-10V dimmer is approved for use in section 15.0 of the owner's manual. **Note:** Some dimmers may cause reduced stability at the lowest dim level setting; this is normal and maybe resolved by increasing the lowest dim level setting if your selected dimmer allows.
5. Confirm that the supply line to the cabinet is a dedicated circuit (all fixtures flickering at the same time).

Fixtures Do Not Dim (Full Output Only)

1. Verify the installed 0-10V dimmer is approved for use in section 15.0 of the owner's manual. **Note:** Some dimmers may cause reduced stability at the lowest dim level setting; this is normal and maybe resolved by increasing the lowest dim level setting if your selected dimmer allows.
2. Check all dimming wire connections for a disconnected splice or open connection.

Fixtures Are Stuck in Dim (Low Output Only)

1. Verify the installed 0-10V dimmer is approved for use in section 15.0 of the owner's manual. **Note:** Some dimmers may cause reduced stability at the lowest dim level setting; this is normal and maybe resolved by increasing the lowest dim level setting if your selected dimmer allows.
2. Check all dimming wire connections for a short between the violet and gray wire or a reversed connection.

For additional assistance, contact factory at 313.259.6400.

