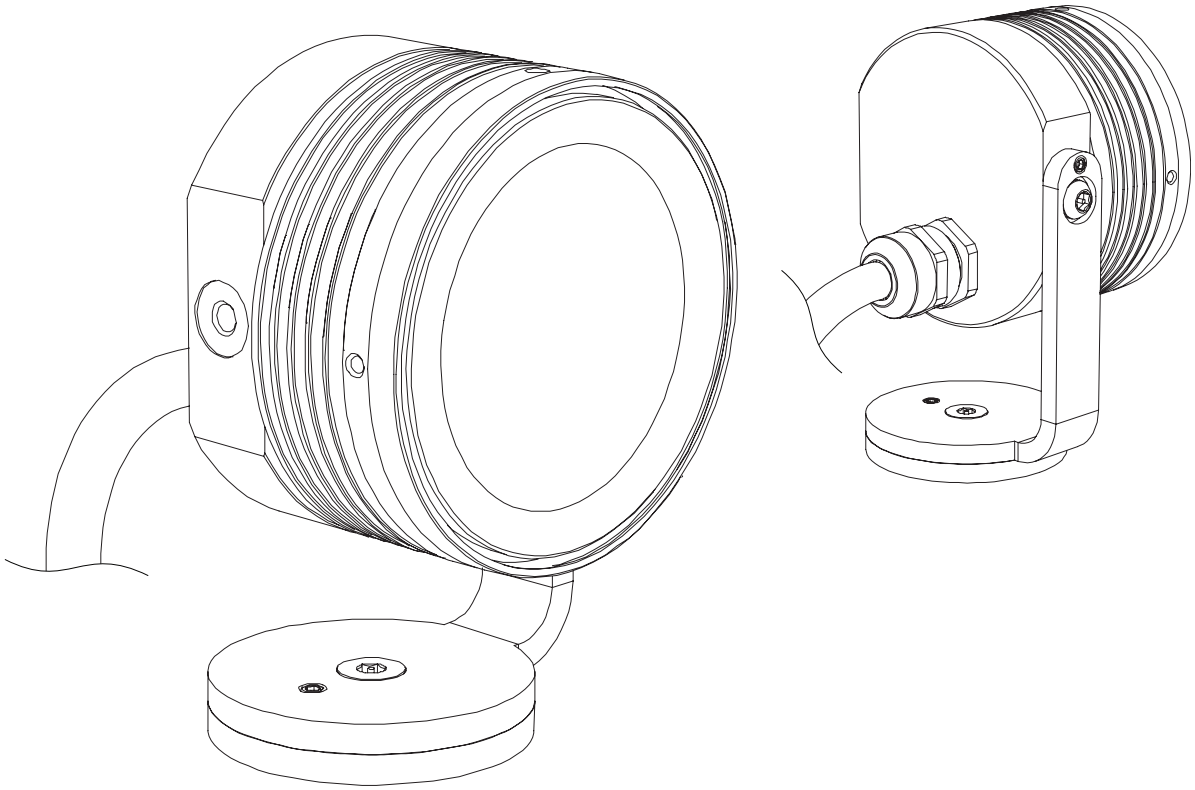
LIRA™

Architectural Spot & Flood Light

INSTALLATION GUIDE



⚠ WARNING	⚠ CAUTION
Do not attempt to install or use Luminaire(s) until you have read and understand this guide and all safety labels. Luminaire(s) must be installed by a qualified professional. Luminaire(s) must be installed in accordance with all national and local electrical and construction regulations. Ensure that main power supply is OFF before installing or wiring luminaire(s). Do not exceed specified voltage and current input. Do not use luminaire(s) with a damaged lens, body, or cable. Failing to install luminaire(s) according to warnings may result in a hazardous situation which can cause equipment and property damage, personal injury, or death.	Do not exceed the maximum number of specified luminaires in a light run. Doing so will result in a current overload. GVA Luminaires have no serviceable parts. Do not attempt to open the units. Do not hot swap. Ensure power supply is off before connecting or disconnecting fixtures. Do not stare into beam or view directly with optical instruments. Unauthorized feild repairs will void warranty.

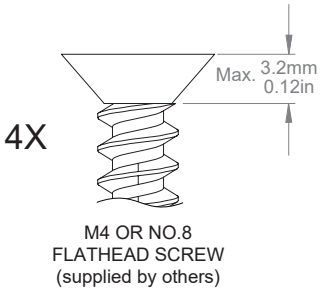
1 LUMINAIRE INSTALLATION

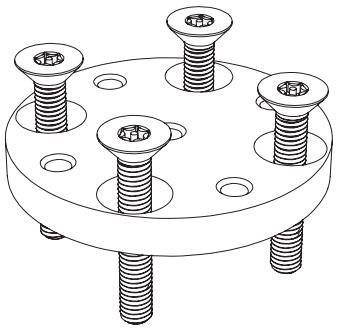
1.1 MOUNTING PLATE

WARNING Use mounting hardware suitable for the mounting surface. Use of innappropriate hardware may result in dismounting of the plate and can result in equipment damage, personal injury, or death.

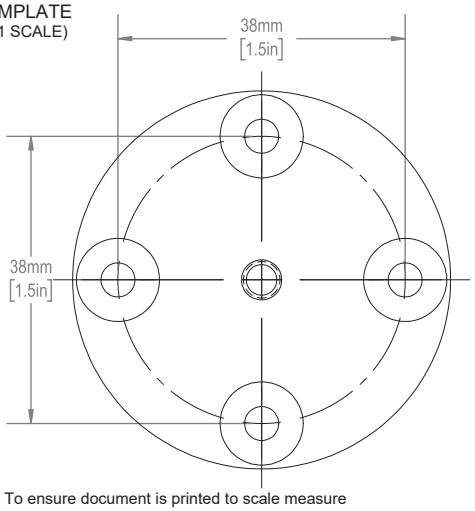
Using 4 x M4 or No.8 Flathead Screws (supplied by others) suitable for the mounting surface, install the mounting plate in desired location. See "MOUNTING HOLE TEMPLATE" to mark holes prior to installation, if required.

REQUIRED HARDWARE:





MOUNTING HOLE TEMPLATE
(1:1 SCALE)

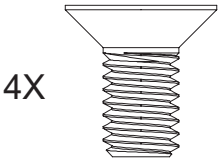


NOTE: To ensure document is printed to scale measure dimensions prior to use of template.

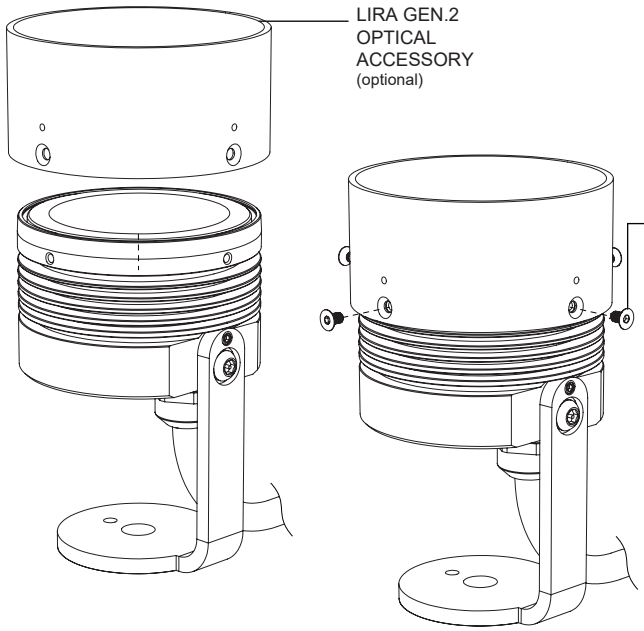
1.2 OPTICAL ACCESSORY INSTALLATION

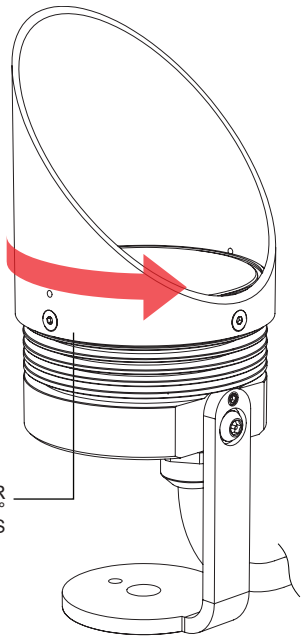
Using 4 x M3x0.5x5mm Flathead Screws (supplied), install LIRA optical accessory to luminaire as shown. If not installing LIRA optical accessory skip to Step 1.3.

REQUIRED HARDWARE:



241622
2MM ALLEN KEY
(supplied)





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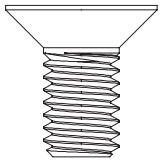
1.3 MOUNTING

Using the 1 x No.10-32x0.375in Flathead Screw (supplied) and the 4mm Pin-in-Hex Security Allen Key (supplied), fasten the luminaire to the mounting plate.

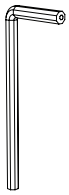
REQUIRED HARDWARE:

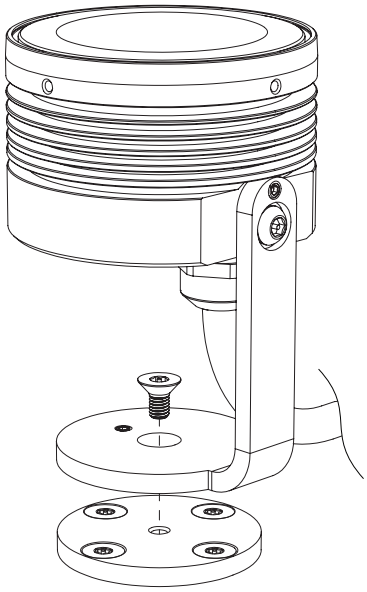
1X



NO.10-32X0.375IN
FLATHEAD SCREW
(supplied)

241620
4MM PIN-IN-HEX
SECURITY ALLEN KEY
(supplied)



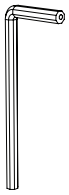


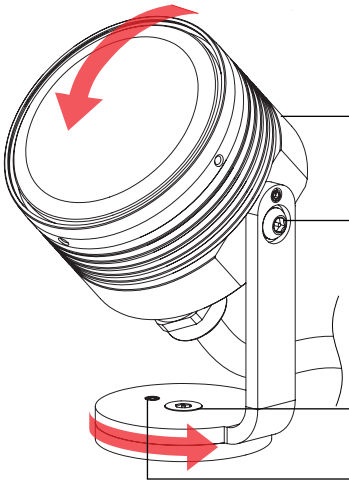
1.4 ADJUSTMENT

Bracket is preinstalled on luminaire. Rotate luminaire to desired horizontal and vertical orientation. Torque the set screws to 1.5Nm to lock the luminaire in place using 2mm Allen Key (supplied). If required, use 4mm Allen Key (supplied) to remove bracket screw. Ensure bracket screw is torqued to 2Nm after adjustments have been made.

241622
2MM ALLEN KEY
(supplied)

241620
4MM PIN-IN-HEX
SECURITY
ALLEN KEY
(supplied)





SET SCREW
NOTE: TORQUE SCREW TO 1.5NM

BRACKET PREINSTALLED ON LUMINAIRE
NOTE: BRACKET SCREW CAN BE REMOVED.
AFTER ADJUSTMENTS HAVE BEEN MADE TORQUE TO 2NM

FLATHEAD SCREW
NOTE: TORQUE TO 2NM

SET SCREW
NOTE: TORQUE SCREW TO 1.5NM

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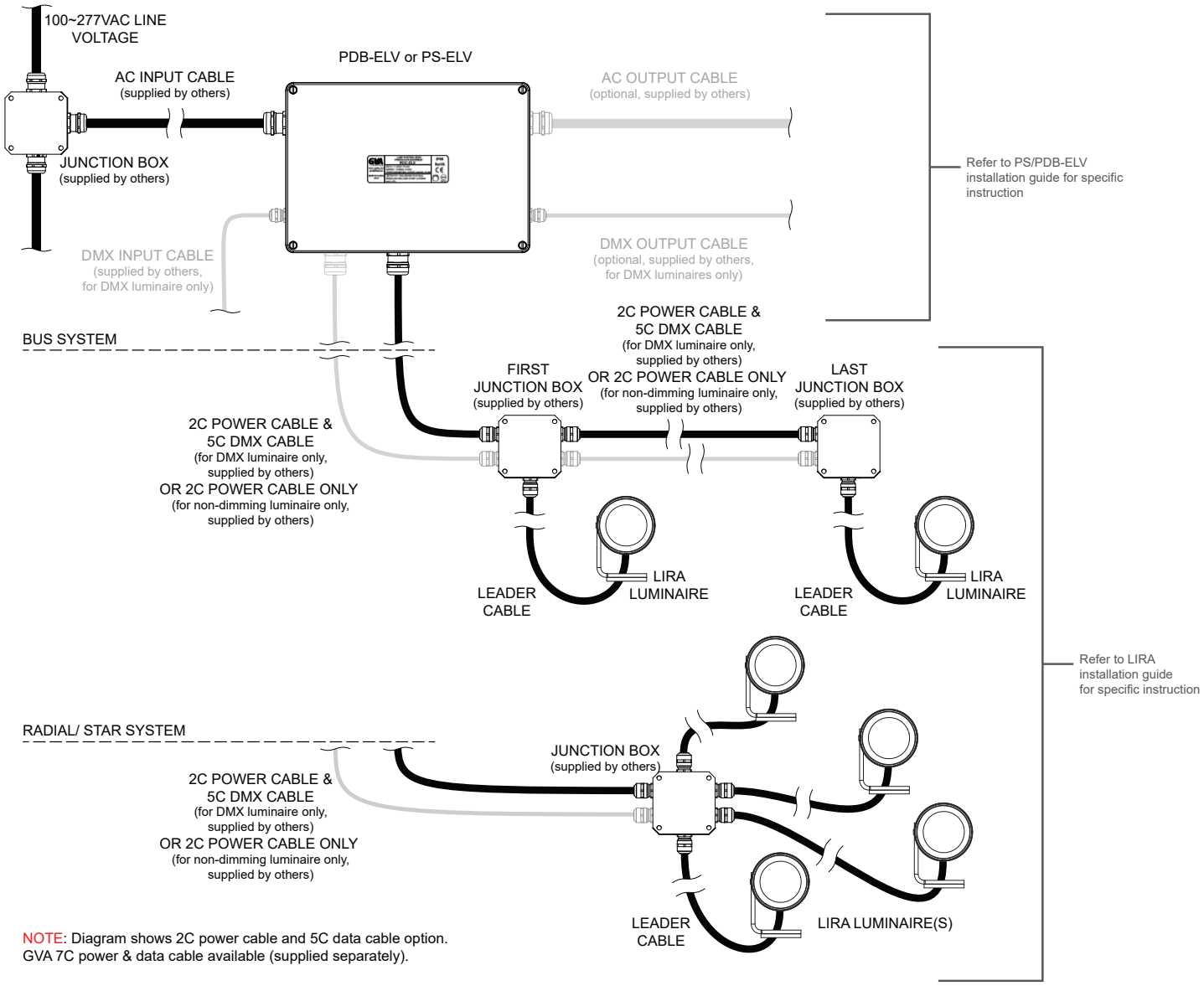
2 CONNECTION DIAGRAMS

2.1 TYPICAL SYSTEM DIAGRAM

WARNING Ensure power supply is turned OFF before making any connections. Connecting the luminaire while the power is turned ON may result in equipment damage.

Make connections to junction boxes (supplied by others) and to the luminaires.

NOTE: LIRA luminaire 24VDC power conductors and DMX Common should be connected in parallel.
NOTE: DMX I/O must be connected in series.
NOTE: Total load shall not exceed power rating of PDB-ELV/PS-ELV and should be under 100W to remain Class 2.
NOTE: Follow labels & markings on terminal blocks & cables for correct polarity.
NOTE: Luminaire configuration and length of leader/ jumper cables directly affects the maximum number of luminaires allowed in a single run. Minimum working voltage of LIRA luminaire is 18VDC.



NOTE: Diagram shows 2C power cable and 5C data cable option.
GVA 7C power & data cable available (supplied separately).

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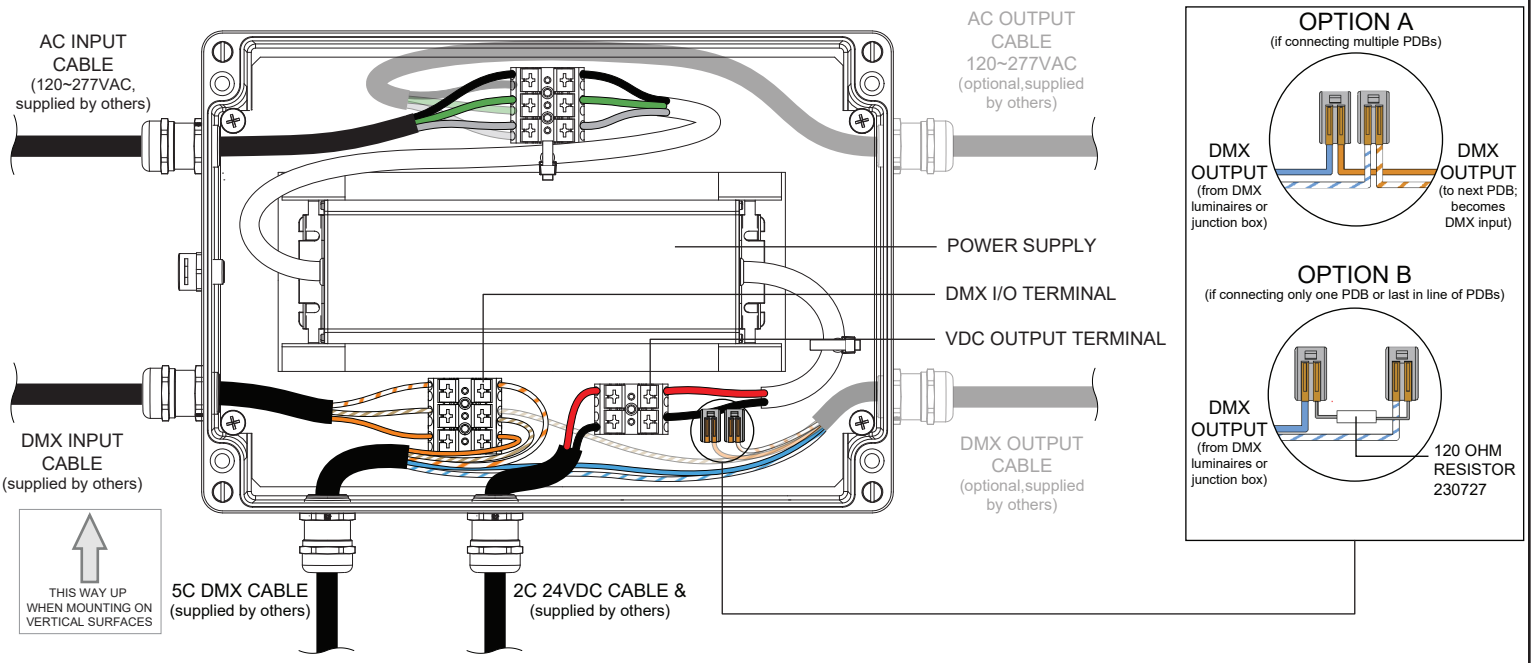
2.2 PDB-ELV & PS-ELV WIRING DIAGRAMS

WARNING Ensure that AC line voltage is disconnected before making connections to PDB/PS-ELV.

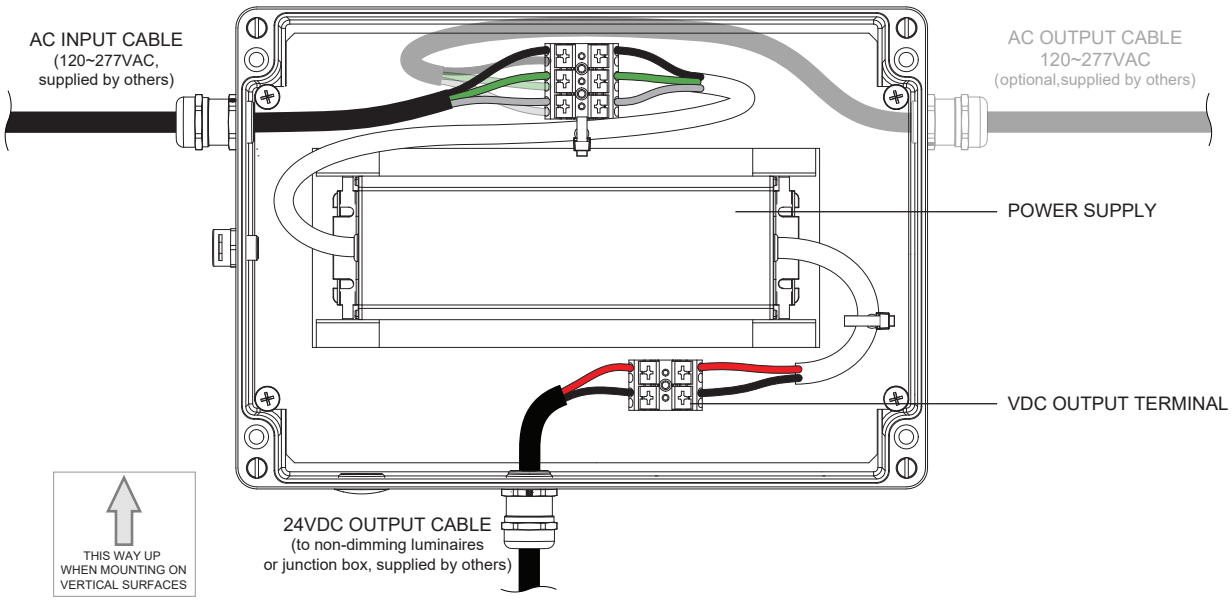
2.2.A PDB-ELV Wiring Diagram

NOTE: Terminate return DMX output (+) and (-) with 120 OHM resistor (GVA PN. 230727).

NOTE: Diagram shows 2C power cable and 5C data cable option. GVA 7C power and data cable available (supplied separately)



2.2.B PS-ELV Wiring Diagram



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2.3 JUNCTION BOX DIAGRAM: DMX

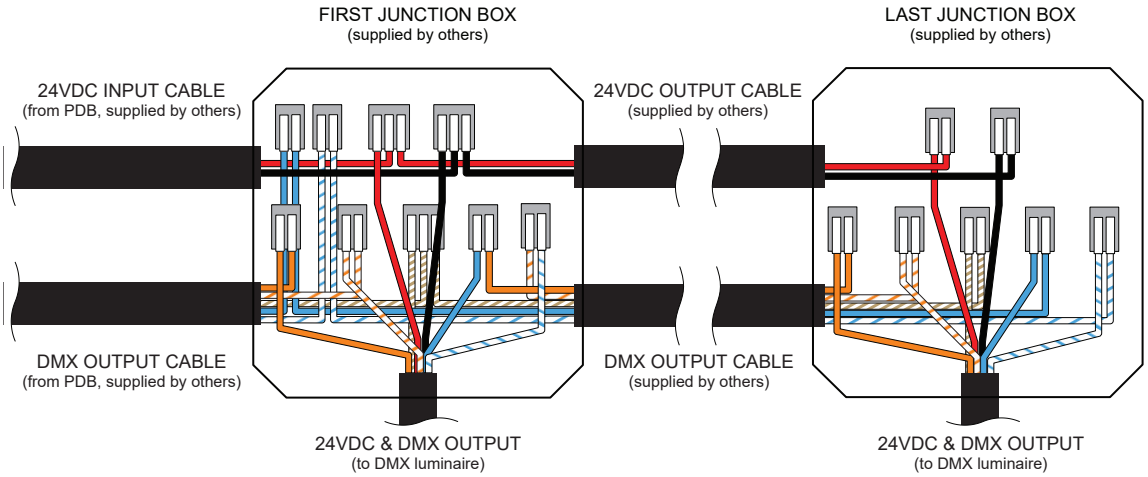
WARNING Ensure power supply is turned OFF before making any connections. Connecting the luminaire while the power is turned ON may result in equipment damage.

Connect Class 2, 24VDC output to power conductors of ELV LIRA luminaire : red(+), black(-). Connect DMX I/O to DMX conductors of luminaire.

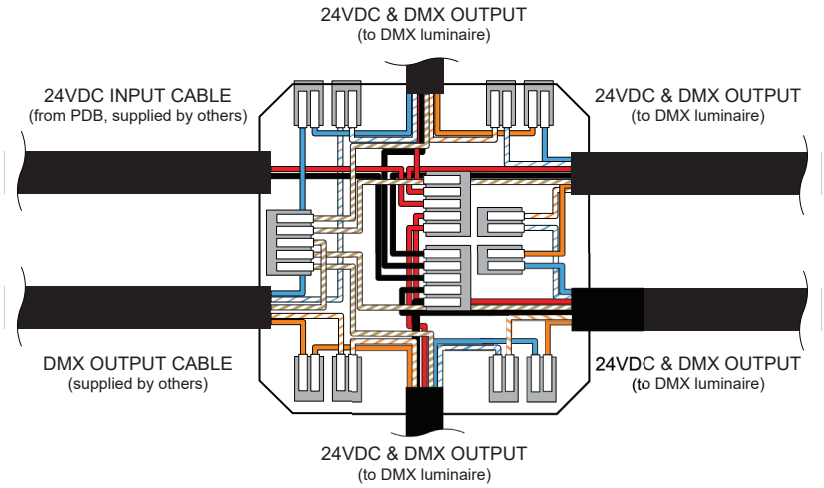
NOTE: LIRA luminaires require 24VDC Class 2 power supply. Total load shall not exceed power rating of PDB-ELV/PS-ELV and should be under 100W to remain Class 2. If PSU is other than Class 2, provisions must be made to create Class 2 outputs.

NOTE: Diagram shows 2C power cable and 5C data cable option. GVA 7C power and data cable available (supplied separately). See specification sheet for ordering information.

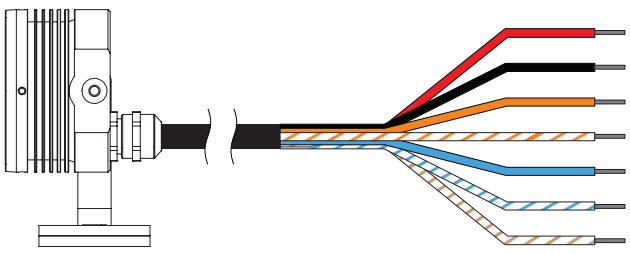
2.3.A Junction Box Wiring Diagram: **DMX Bus**



2.3.B Junction Box Wiring Diagram: **DMX Radial/ Star**



2.3.C Luminaire Connections: **DMX**



INPUT/OUTPUT
RED = +24VDC
BLACK = -24VDC
ORANGE = DMX (-) INPUT
ORANGE/WHITE = DMX (+) INPUT
BLUE = DMX (-) OUTPUT
BLUE/WHITE = DMX (+) OUTPUT
BROWN/WHITE = DMX COMMON

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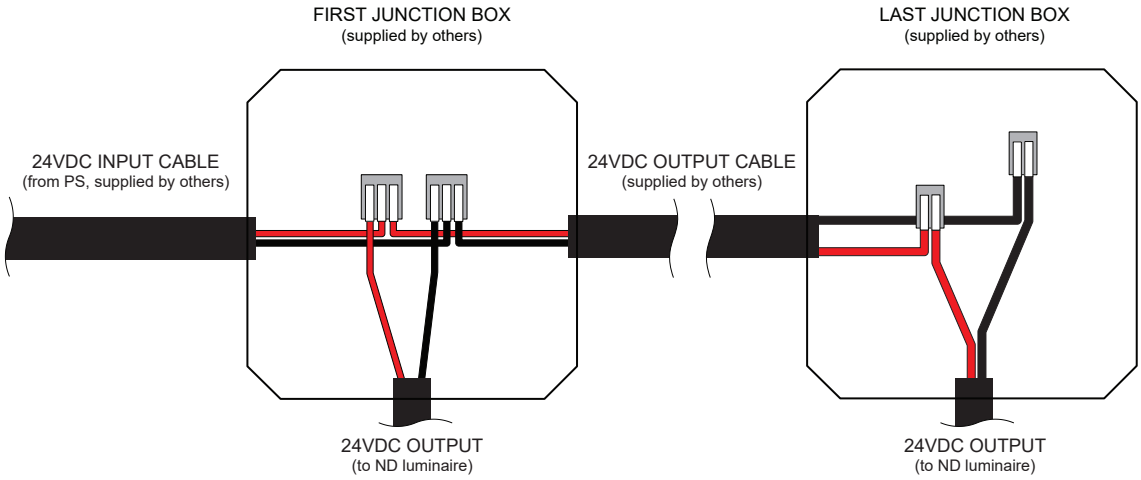
2.4 JUNCTION BOX DIAGRAM: NON-DIMMING

WARNING Ensure power supply is turned OFF before making any connections. Connecting the luminaire while the power is turned ON may result in equipment damage.

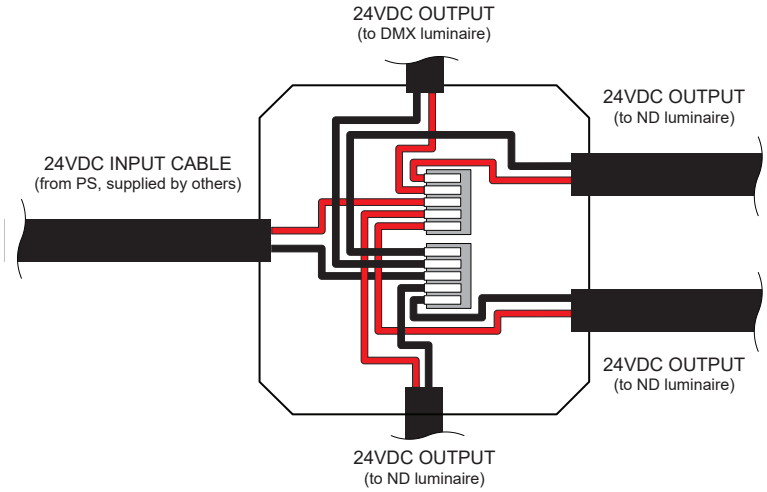
Connect Class 2, 24VDC output to power conductors of ELV LIRA luminaire : red(+), black(-).

NOTE: LIRA luminaires require 24VDC Class 2 power supply. Total load shall not exceed power rating of PDB-ELV/PS-ELV and should be under 100W to remain Class 2. If PSU is other than Class 2, provisions must be made to create Class 2 outputs.

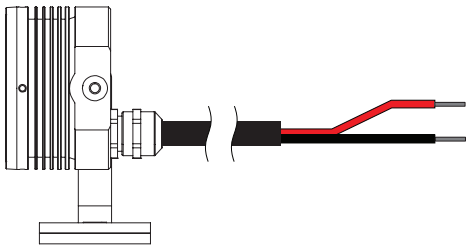
2.4.A Junction Box Wiring Diagram: **Non-Dimming Bus**



2.4.B Junction Box Wiring Diagram: **Non-Dimming Radial/ Star**



2.4.C Luminaire Connections: **Non-Dimming**



INPUT/OUTPUT
RED = 24VDC
BLACK = 24VDC

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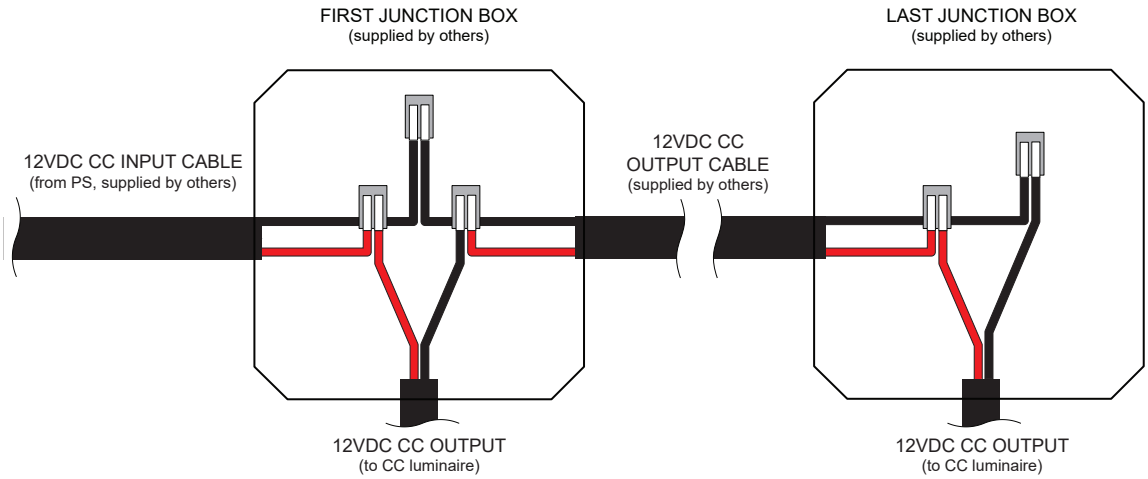
2.5 JUNCTION BOX DIAGRAM: CONSTANT CURRENT

WARNING Ensure power supply is turned OFF before making any connections. Connecting the luminaire while the power is turned ON may result in equipment damage.

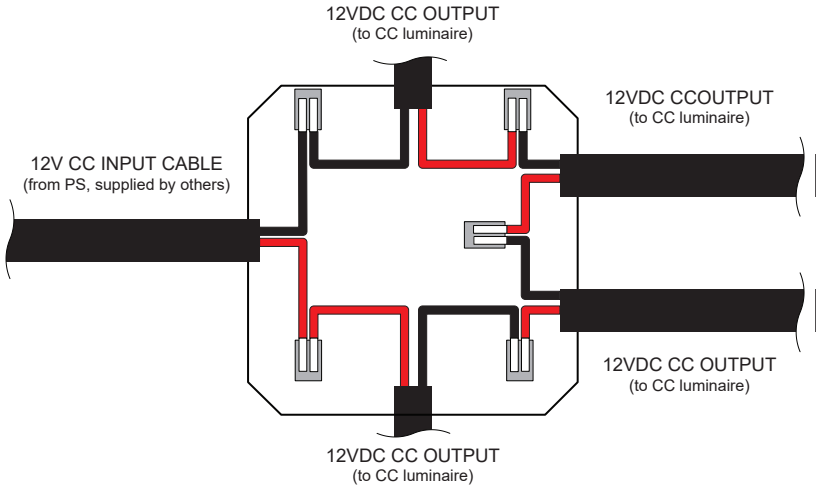
Connect Class 2, 12V Constant Current output to power conductors of LIRA luminaire : red(+), black(-).

NOTE: LIRA Constant Current Luminaires require at lease 12VDC constant current, maximum 60VDC, Class 2 power supply with Class 2 outputs. If PSU is other than Class 2, provisions must be made to create Class 2 outputs.

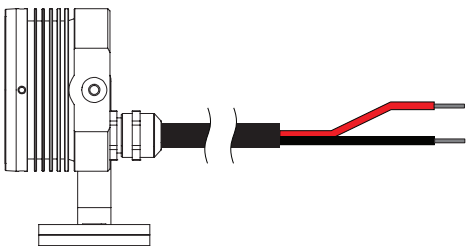
2.5.A Junction Box Wiring Diagram: **Constant Current Bus**



2.5.B Junction Box Wiring Diagram: **Constant Current Radial/ Star**



2.5.C Luminaire Connections: **Constant Current**



INPUT/OUTPUT
RED = +12VDC CONSTANT CURRENT
BLACK = -12VDC CONSTANT CURRENT

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