

HB30 Series RGB/RGBW Installation Guide



120 AC & 24VDC Wiring Diagram

HB30R DOME Lens 120D Viewing



HB30 Flat Lens w/ Optical lenses



HB30 Flat Lens w/ Optical lenses w/ Louver



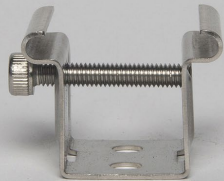
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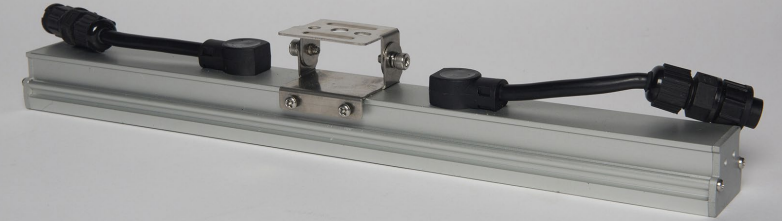
Flat Mounting Bracket

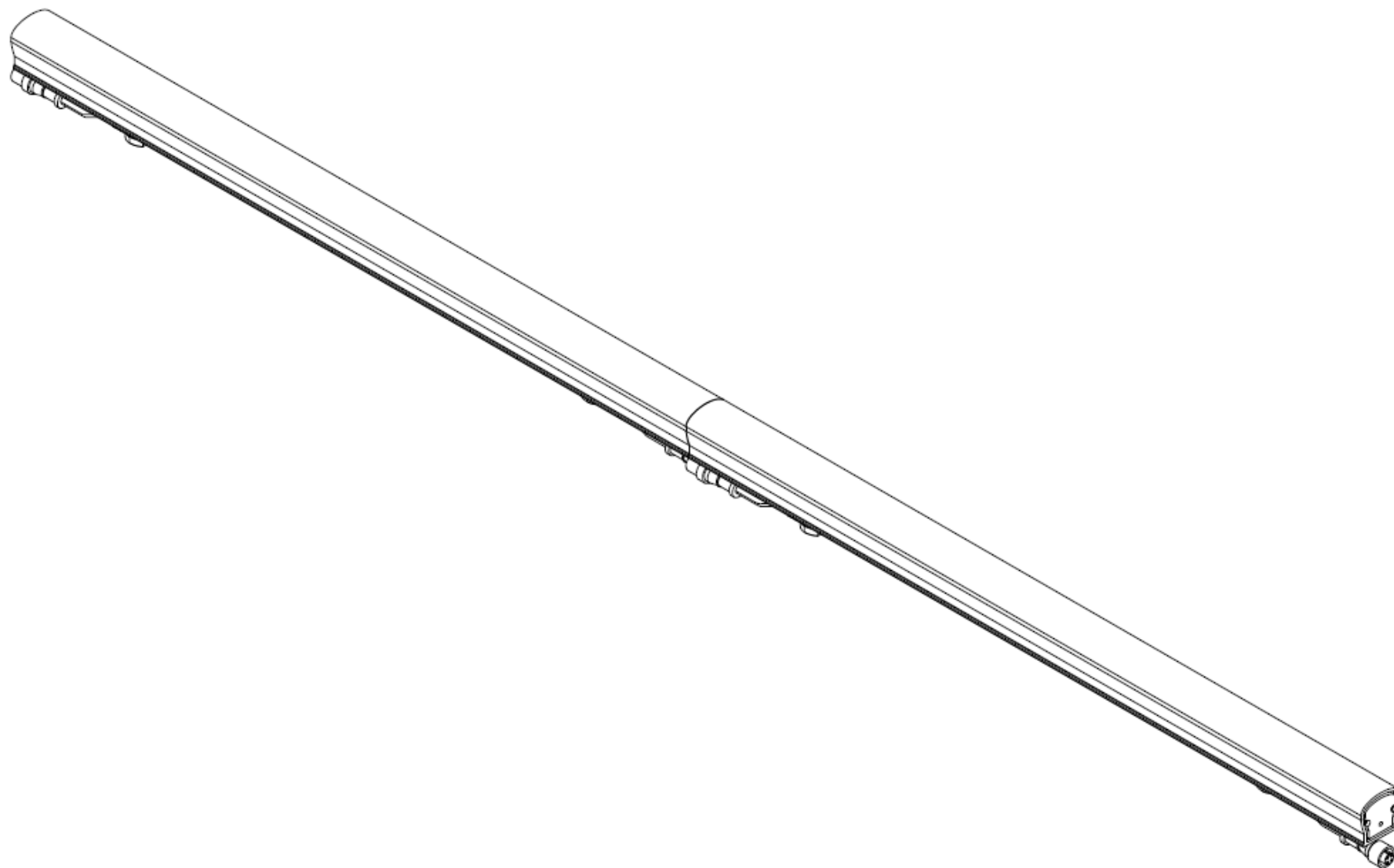


Bottom Wire Feed w/
Male/Female Connector



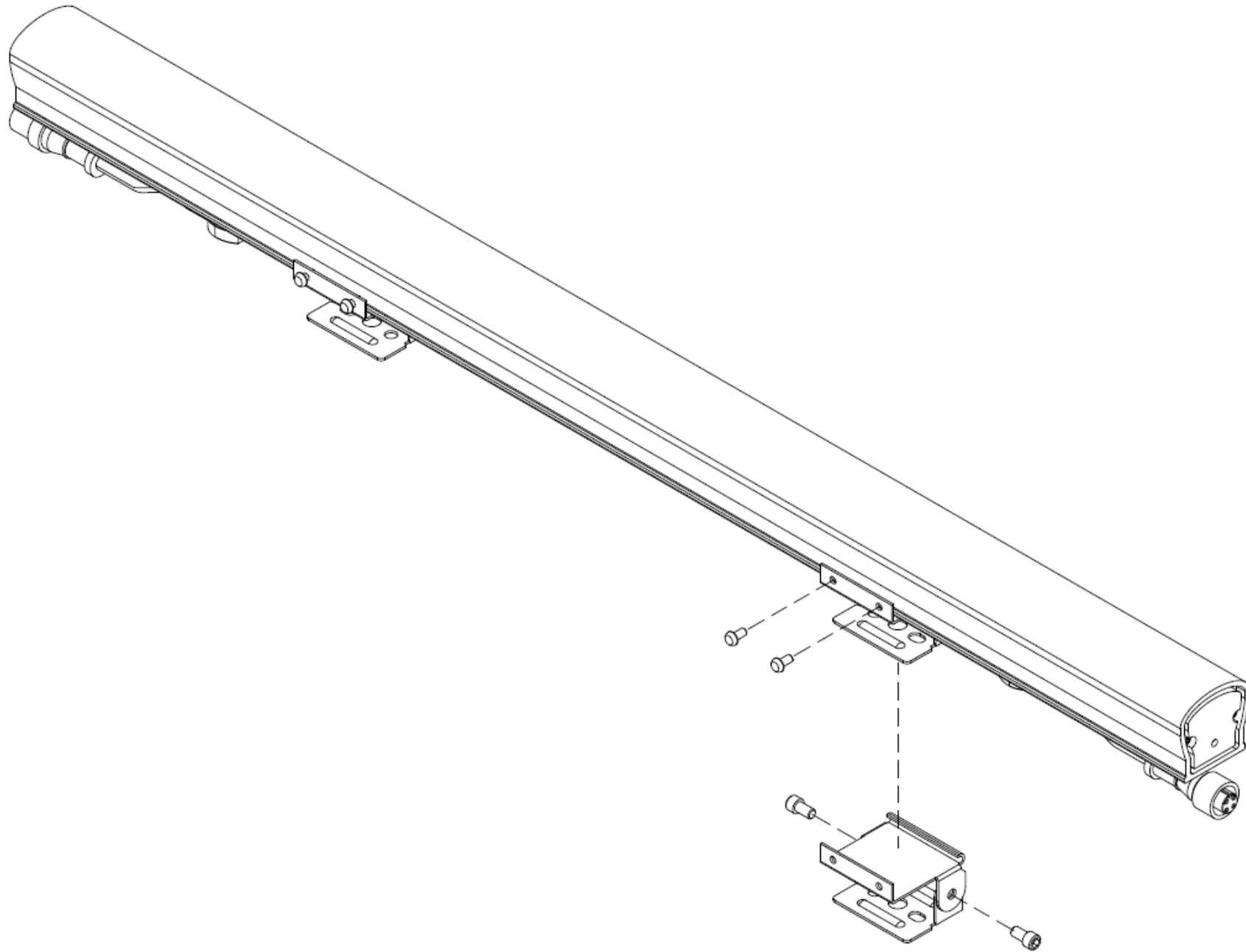
Adjustable Mounting Bracket





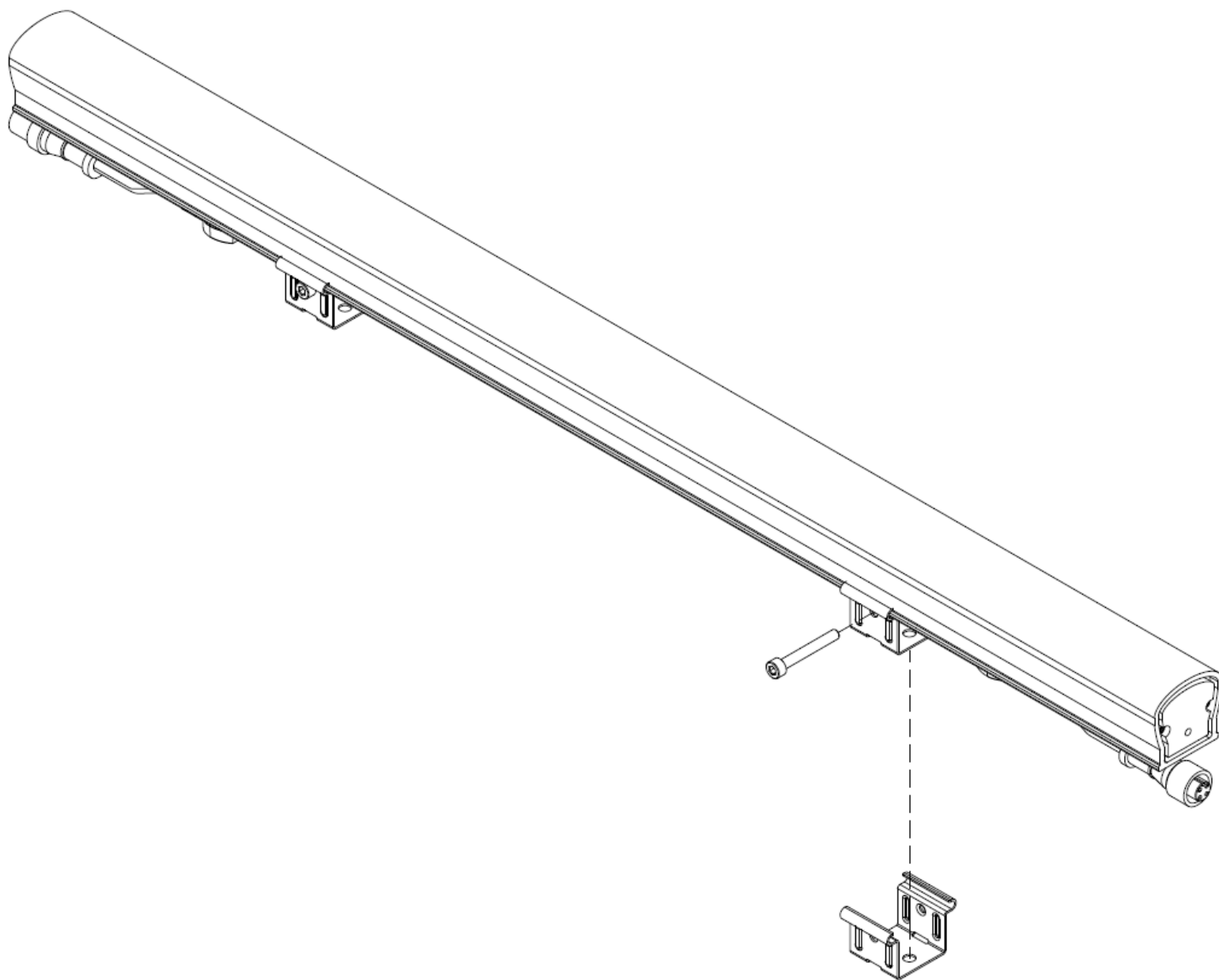
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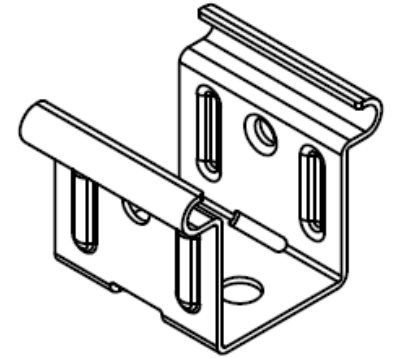
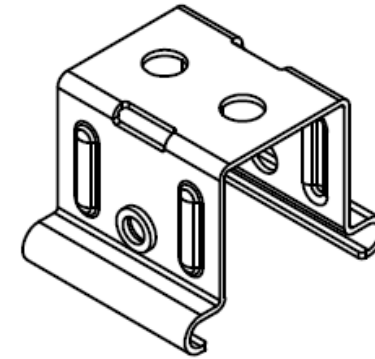
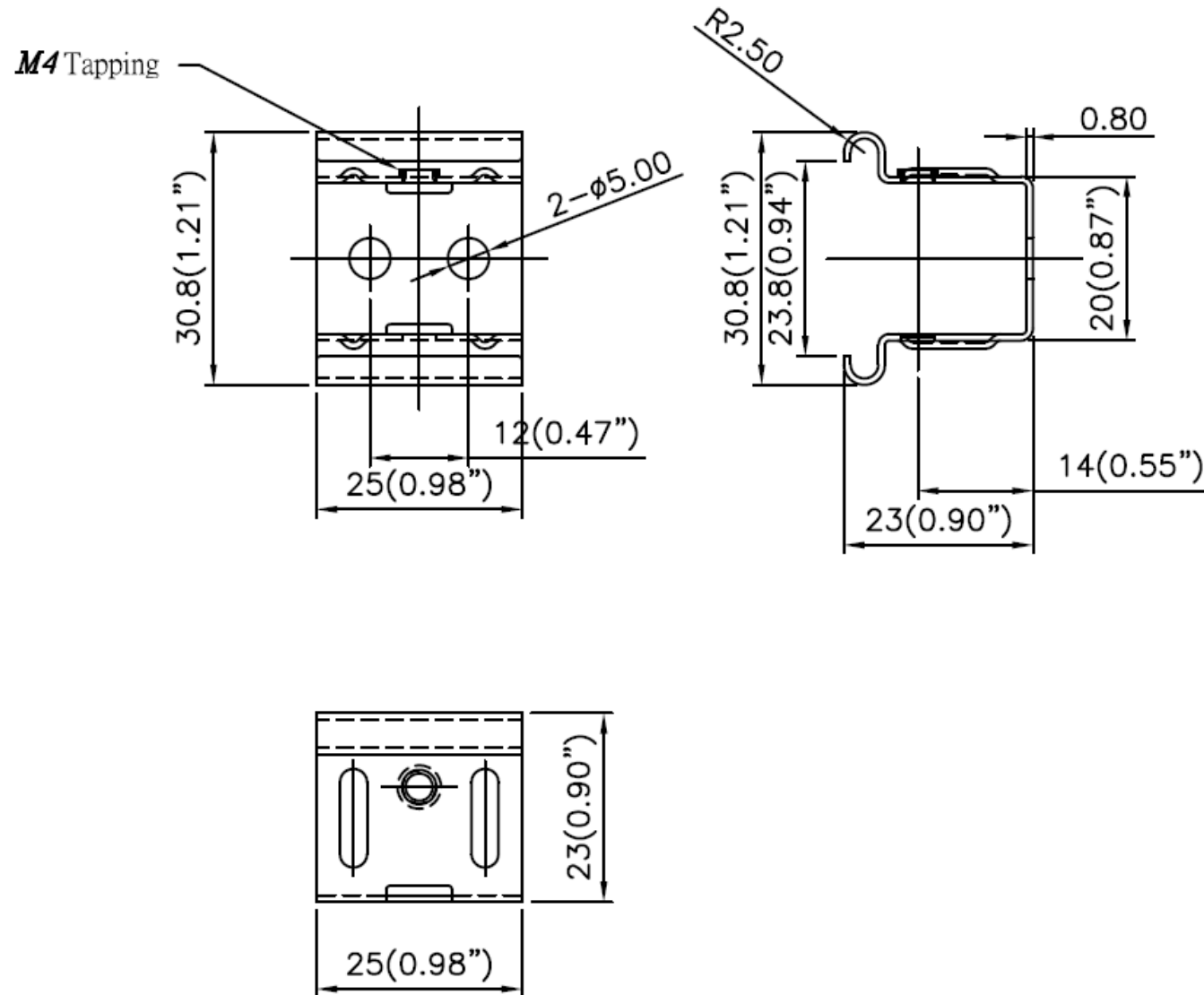
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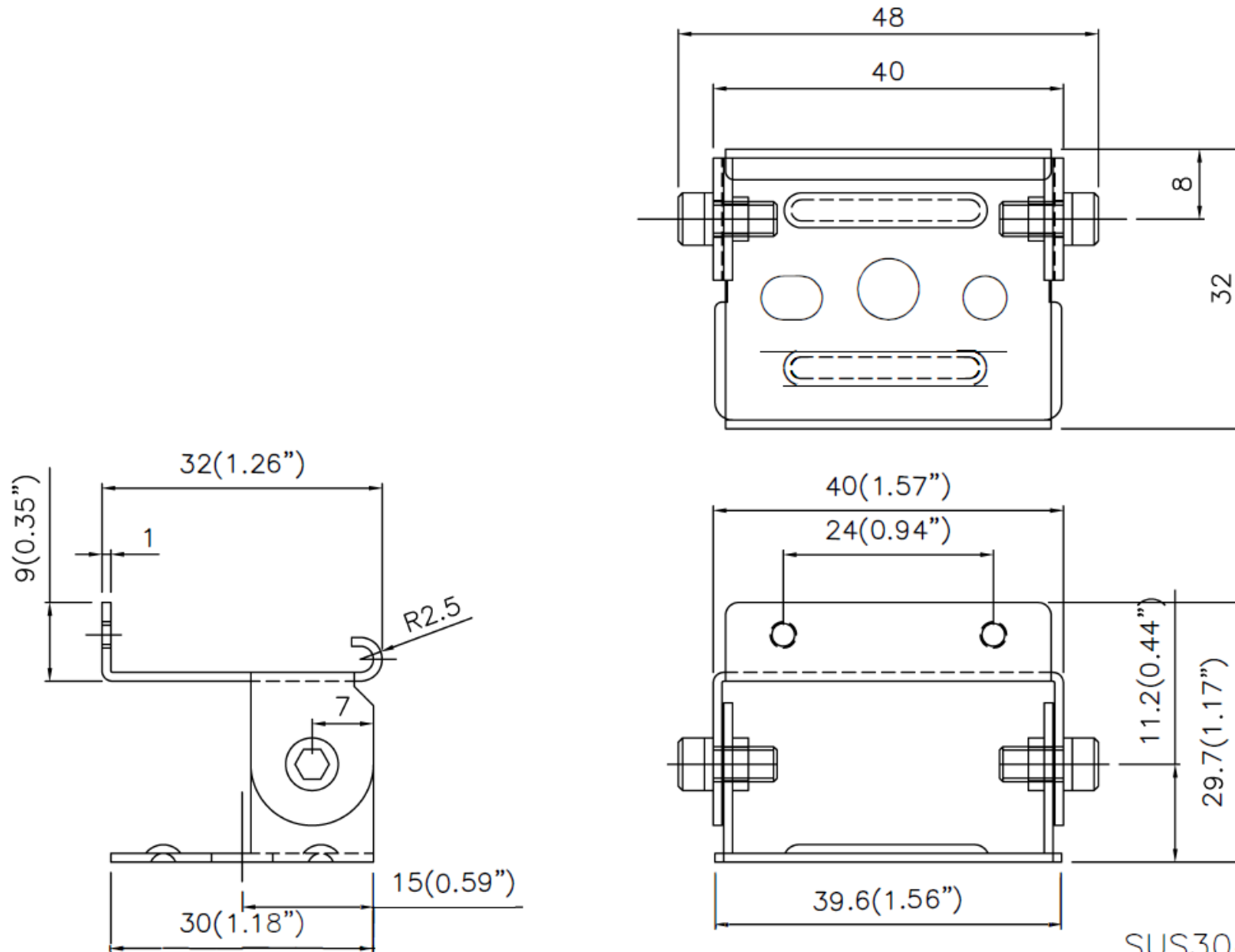
HB30 Flat Mounting Bracket



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HB30 Adjustable Mounting Bracket



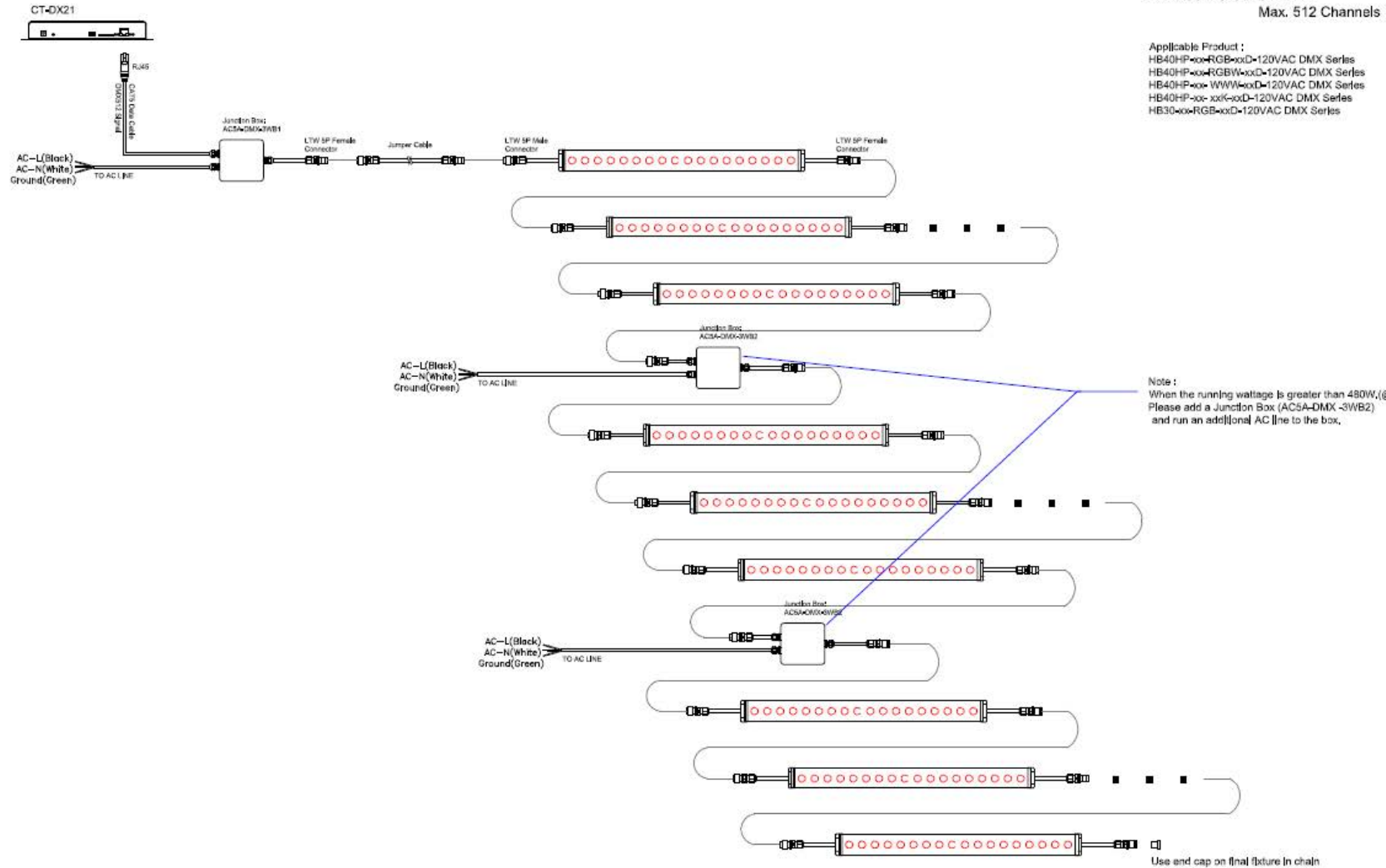
UNITS:MM

SUS304 1.0t m/m

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120 AC wiring Diagram: pre-wired DMX/AC Power Junction box to DMX Controller

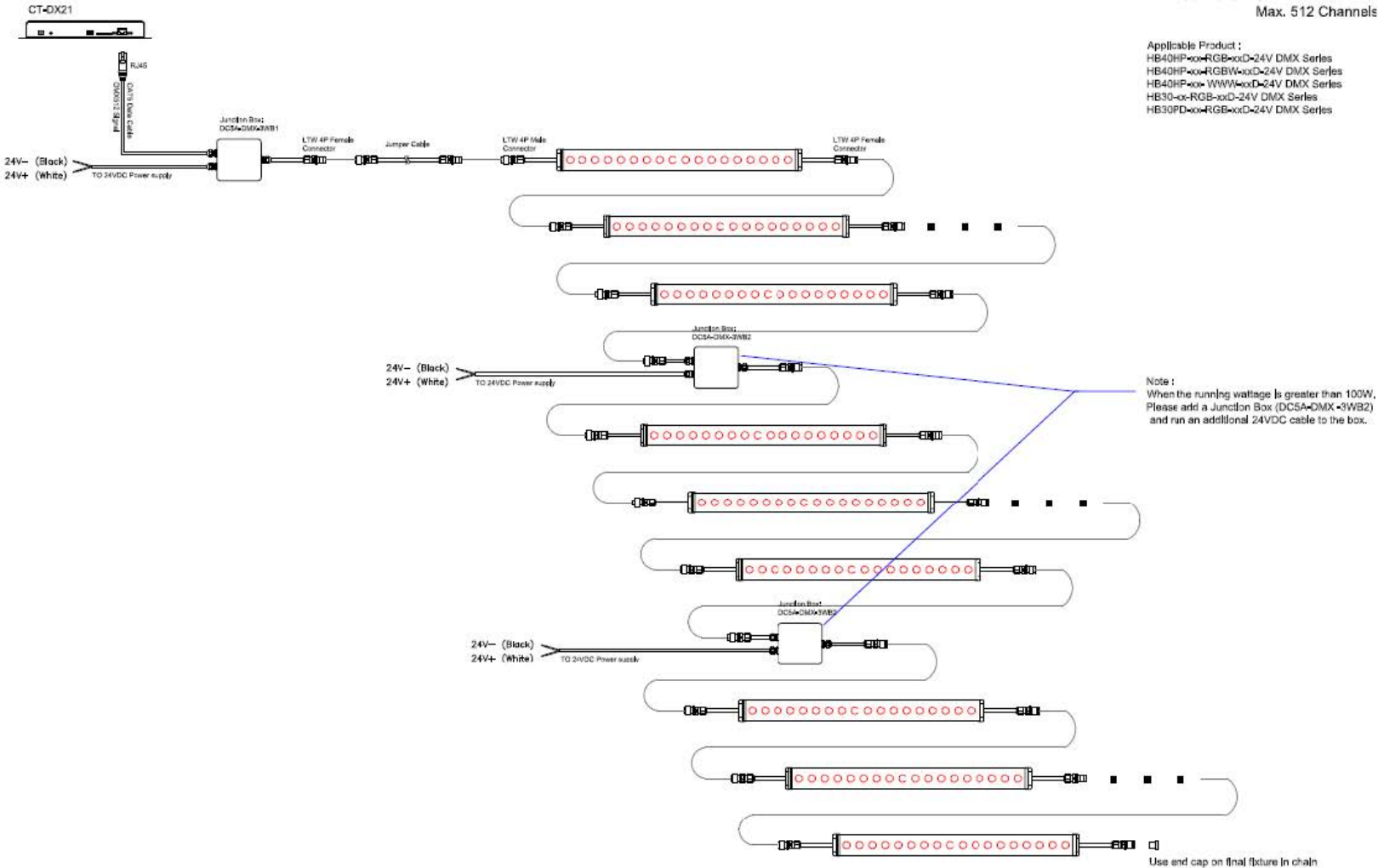


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DRAWING NO.	DRAWN BY	DATE	DESCRIPTION	REMARK
CT-DX21- AC5A		2018/10/25	System Wiring Diagram	

24VDC wiring Diagram: pre-wired DMX/24vdc Power Junction Box to DMX Controller



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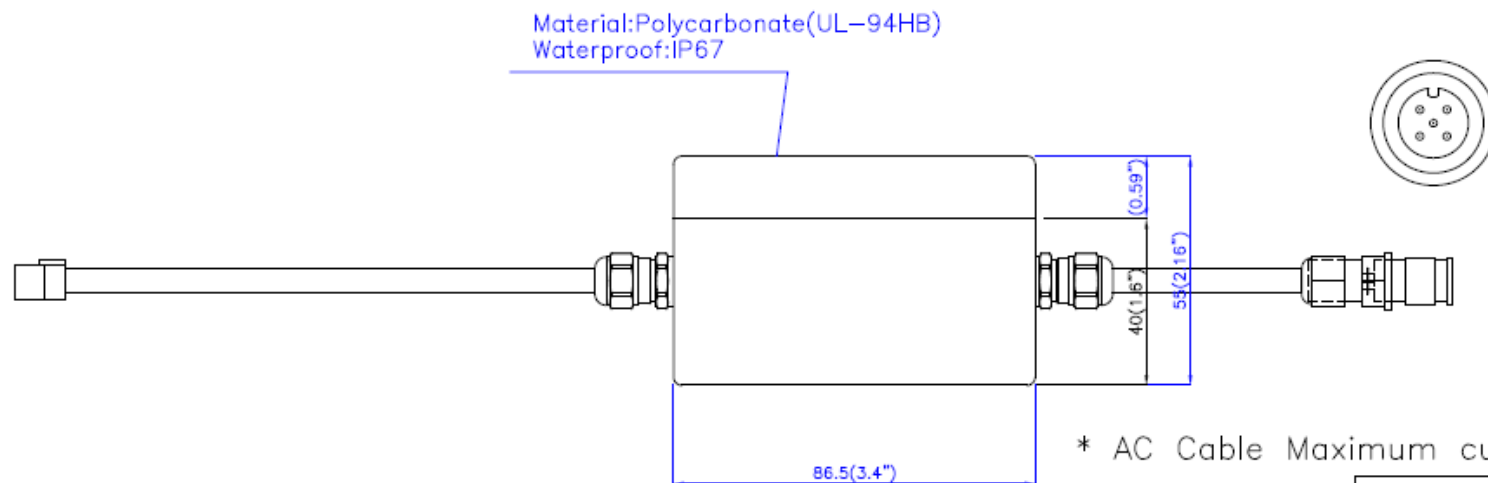
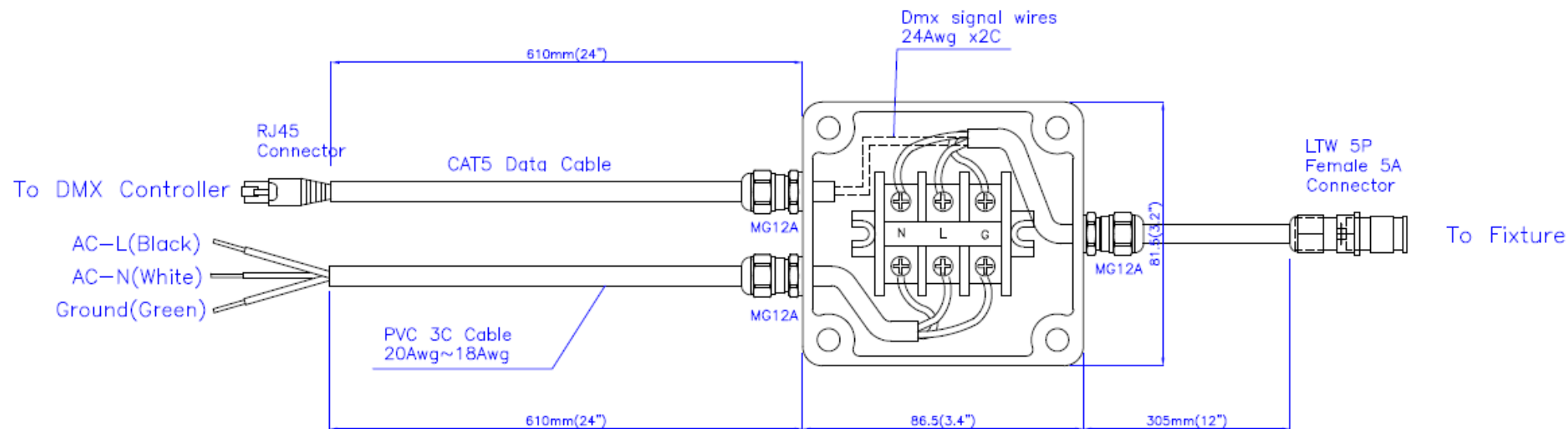
DRAWING NO.	DRAWN BY	DATE	DESCRIPTION	REMARK
CT-DX21- DC5A		2018/10/25	System Wiring Diagram	

Junction Box: AC5A-DMX-3WB1

Input: 24" Cat5 Cable for DMX Data

24" PVC Cable (3 leads) for AC Power

Output: 12" Cable w/ LTW 5P Female 5A Connector



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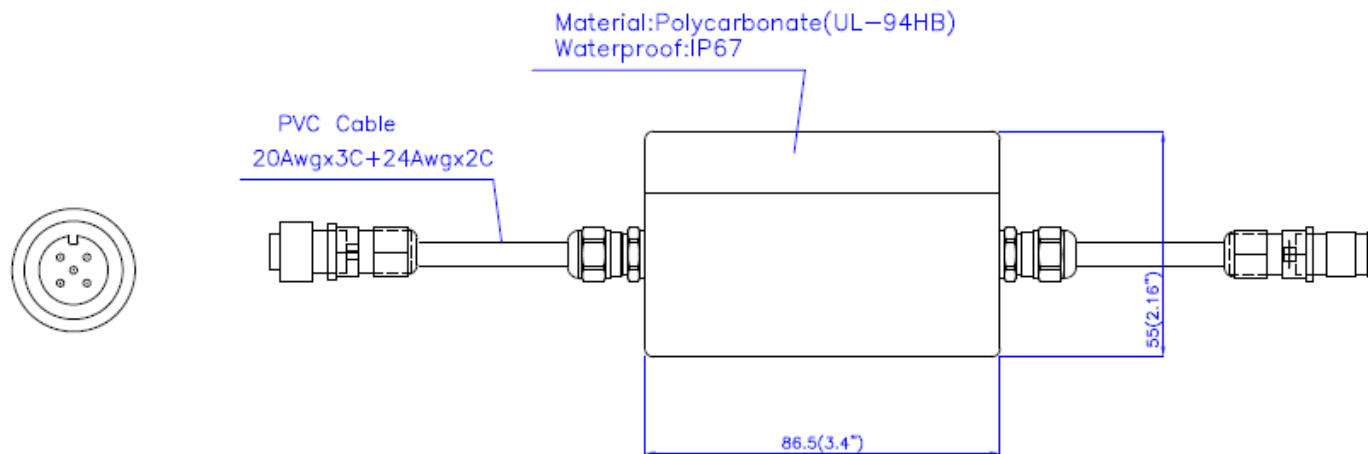
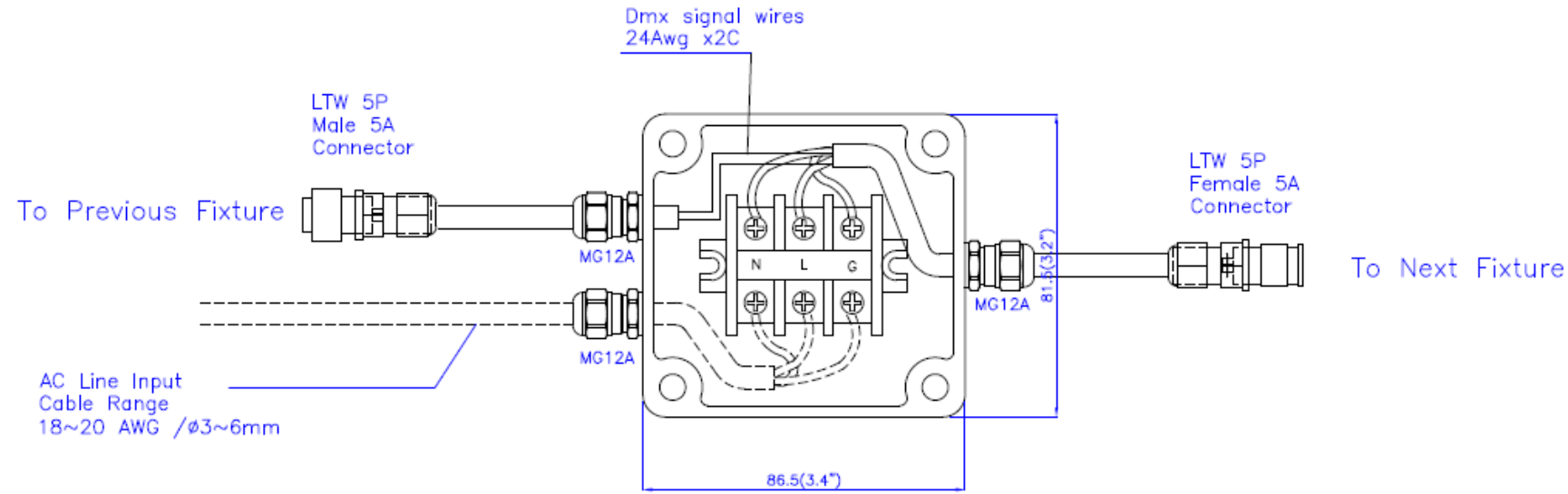
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Junction Box: AC5A-DMX-3WB2

Input: 12" PVC Cable w/ LTW 5P Male 5A Connector

Output: 12" PVC Cable w/ LTW 5P Female 5A Connector



* AC Cable Maximum current 5Amp

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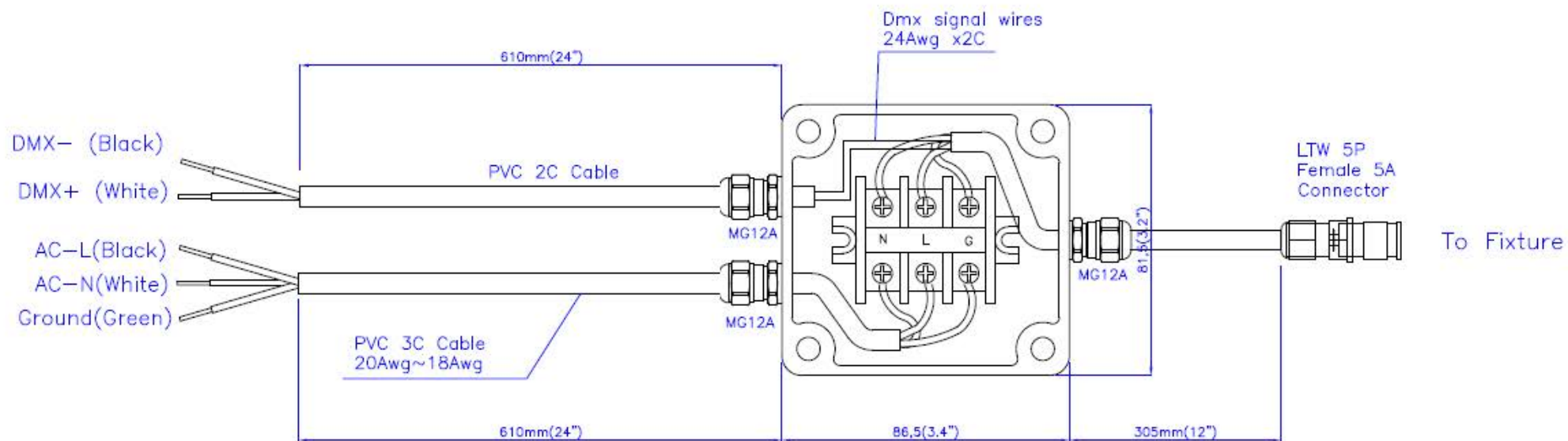
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Junction Box: AC5A-DMX-3WB3

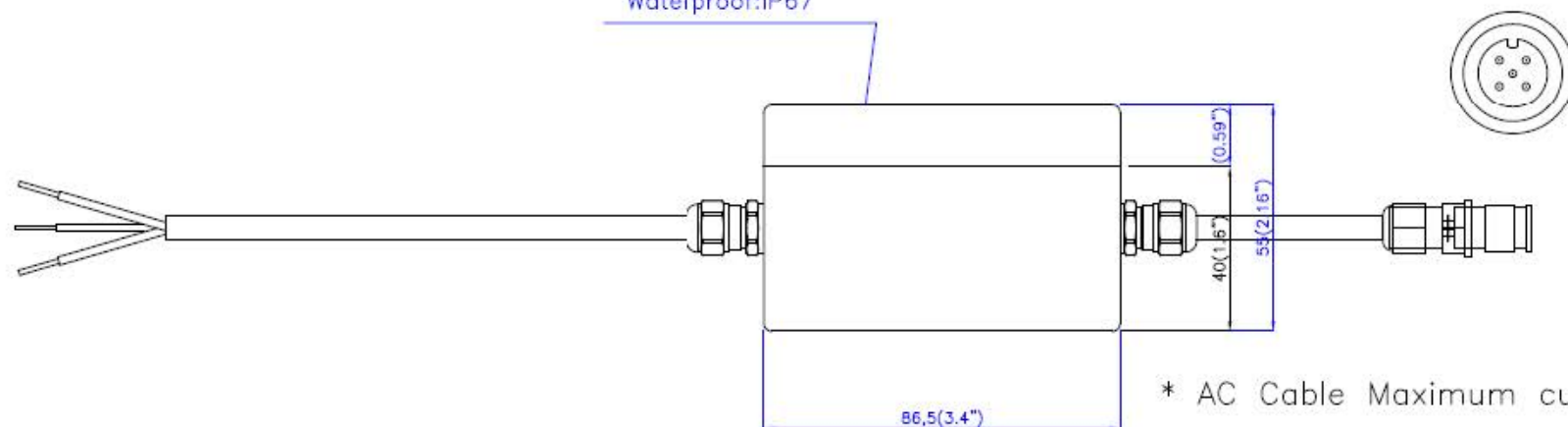
Input: 24" PVC Cable (2 leads) for DMX Data

24" PVC Cable (3 leads) for AC Power

Output: 12" Cable w/ LTW 5P Female 5A Connector



Material: Polycarbonate (UL-94HB)
Waterproof: IP67



* AC Cable Maximum current 5Am

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HB30 120VAC Series



BEFORE YOU BEGIN

Read these instructions completely and carefully.

WARNING: TO REDUCE THE RISK OF FIRE, ELECTRICAL SHOCK OR INJURY, OBSERVE THE FOLLOWING:

- A.** *Use these fixtures only in the manner intended by the manufacturer. If you have any questions, contact the manufacturer.*
- B.** Before servicing or cleaning unit, switch power off at the service panel and follow appropriate lock out/tag out safety procedures.
- C.** Turn Power Off before inspection, installation or removal.
- D.** Properly ground power supply enclosure.
- F.** Use only UL approved wire for input/output connections. Minimum wire size 18 AWG (0.82mm²)
- G.** Follow all NEC and local codes

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.

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.

Prepare Electrical Wiring

Electrical Requirements

- Do not use in wet locations.
- The grounding and bonding of the LED Driver shall be done in accordance with National Electric Code (NEC) Article 600.
- Follow all National Electric Codes (NEC) and local codes.

FOR YOUR SAFETY

Read and observe all CAUTIONS and WARNINGS shown throughout these Instructions. While performing Installation described, gloves, safety glasses or goggles should be worn.

PREPARE ELECTRICAL WIRING

Electrical Requirements

- This lighting system unit must be supplied with 120V, 60Hz. and connected to an individual properly grounded branch circuit, protected by a 15 or 20. Amp circuit breaker or time delay fuse. The HB LED Light Bar is a line voltage luminaire and must be used with an appropriate. Failure to connect this lighting system correctly will violate all warranty claims.
- Wiring must be 2 wires with ground and rated for 75°C (176°F).

NOTE: Consult local building codes and guidelines on selecting wires. Wires must be UL Listed.

Grounding Instructions-Cable Direct

This lighting system must be connected to a grounded metal, permanent wiring system, or an equipment grounding conductor must be run with the circuit conductors and be connected to the equipment grounding terminal.

Quick Troubleshooting Recommendations

SYMPTOM	SOLUTION
All Lights are OFF	<ul style="list-style-type: none">• Check AC input connection and/or check circuit breaker.• Check wire connection(s) at the LED System and power supply for improper termination(s) or short circuits. Properly terminate or replace the wire connection(s).• Check that connections are the (+) wire of the LED panel to the red wire (+) of the power supply and (-) wire of the LED pucks to the blue wire (-) of the power supply.
Some LEDs appear dim	<ul style="list-style-type: none">• Ensure the overall length of the LED System does not exceed the maximum load.• Ensure the length of supply wire is equal to or below the recommended remote mounting distance.
Some of the LEDs are illuminated	<ul style="list-style-type: none">• Check wire connection(s) at the LED System and power supply for improper termination(s) or short circuits. Properly terminate or replace the wire connection(s).• Check that connections are the (+) wire of the LED panel to the red wire (+) of the power supply and (-) wire of the LED pucks to the blue wire (-) of the power supply.
Shadows	<ul style="list-style-type: none">• Re-route supply wire and secure to the back of the sign box with silicone. Adjust wire connector orientation so that it does not cover any LEDs.• Adjust LED layout to ensure uniformity of illumination on the face of the sign or letter.

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Tips

- These LED systems are rated for damp location use by UL, and should be protected from direct exposure to moisture (i.e., rain & snow).
- For optimal light uniformity in halo-lit applications the LED panel should be mounted on UL recognized plastic and the light output from the LED system should be directed back into the sign enclosure box. This will allow for uniform backlighting or edge lighting of the sign and will provide simple mounting for the LED system.
- When mounting LED panel for halo-lit applications the clear acrylic should be recessed into the body of the sign or a bead of silicone should be applied to provide a barrier against the elements.
- A best practice for the supply wire at the point at which it is brought into the sign is to have a drip loop on the inside to prevent water from collecting on the LED panel.

This product is intended solely for the use of non-residential signage lighting and is not intended for use in any other applications. Conforms to the following standards:

IP66 rated: separate enclosure required for outdoor use, UL damp location rated



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