

### INSTALLATION GUIDE



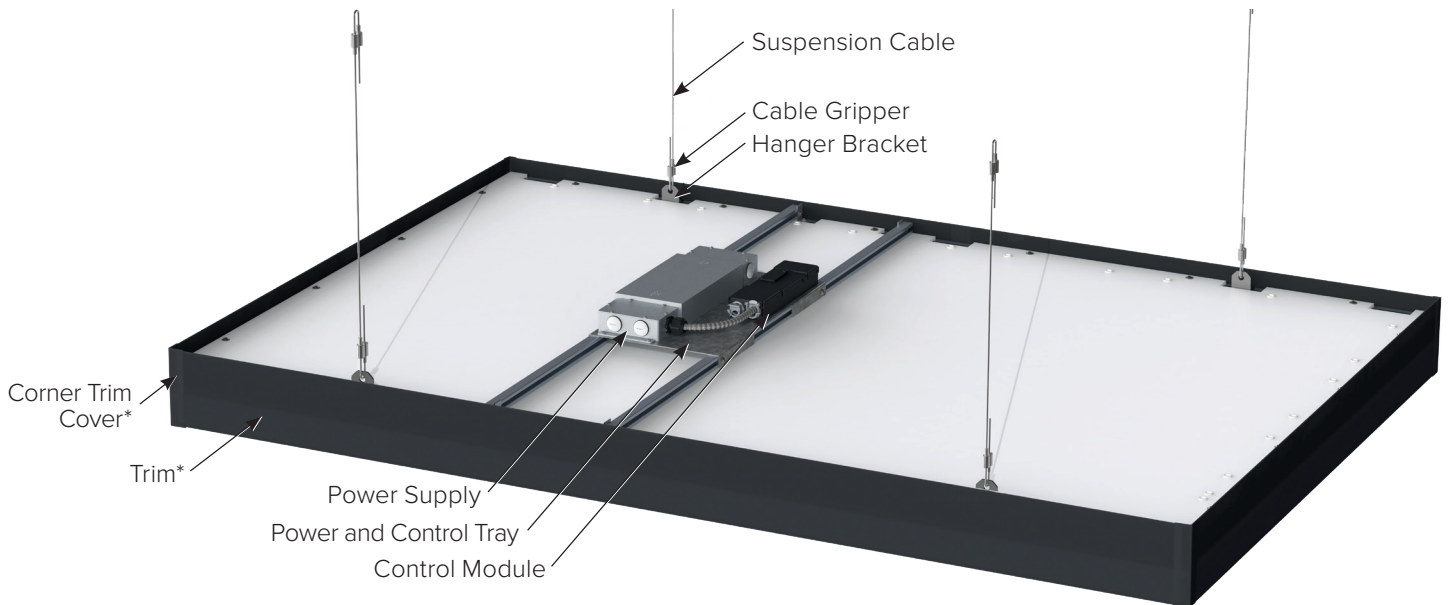
Cooledge **FABRIColor** is a simple, out-of-the-box way to incorporate the unique look and feel of a stretch fabric ceiling into your space. Bring the feeling of the outdoors inside: fill an open concept space with clouds of light that also absorb sound to deliver an environment that truly caters to people.

Suspended luminaires deliver immersive illumination and noise reduction for:

- Showrooms
- Lobbies
- Open-plan Offices
- Shop-in-shop Retail

Rectangle units features Cooledge's unique "Infinity Edge" design for uniform illumination from edge to edge.

### 1. COMPONENTS (AIRCRAFT CABLE MOUNTING)



\*Rectangle units only



**RoHS**

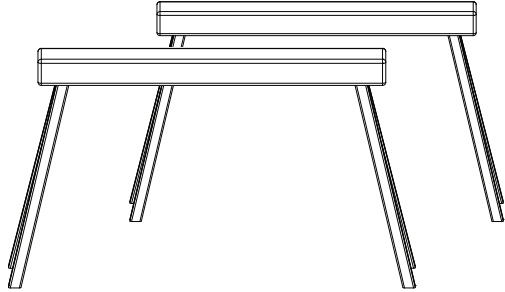


5 Year Limited Warranty:  
Parts and workmanship

## 2. TOOLS

**⚠ WARNING:** Wear clean cotton or latex gloves when handling Cooledge FABRIColor.  
Do not remove the plastic protective film until the point noted in this install guide.

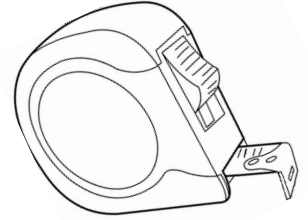
Saw Horses



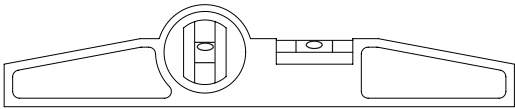
Gloves



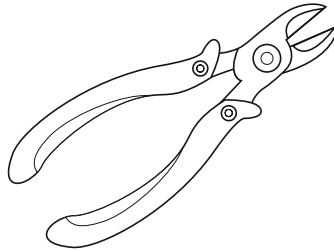
Measuring Tape



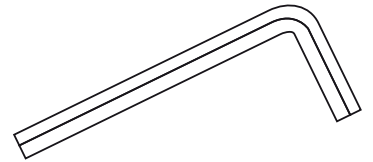
Level



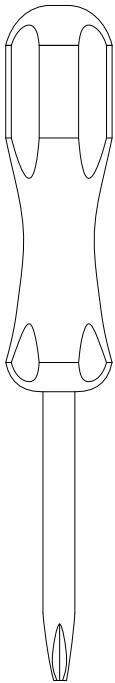
Cable Cutters



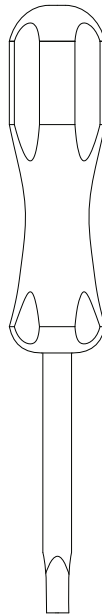
4mm Hex Key



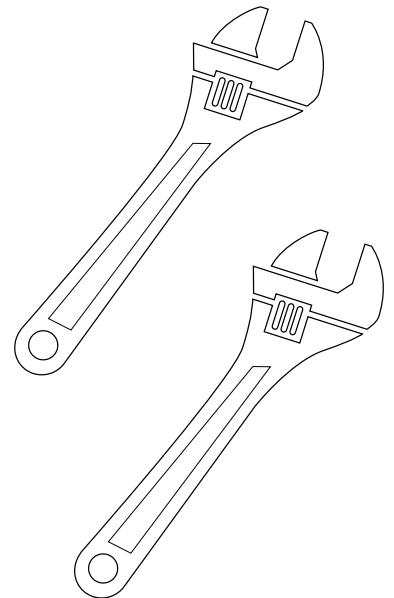
#2 Phillips Screwdriver



3mm Flat Head Screwdriver



2x wrenches (only required for threaded rod mounting)

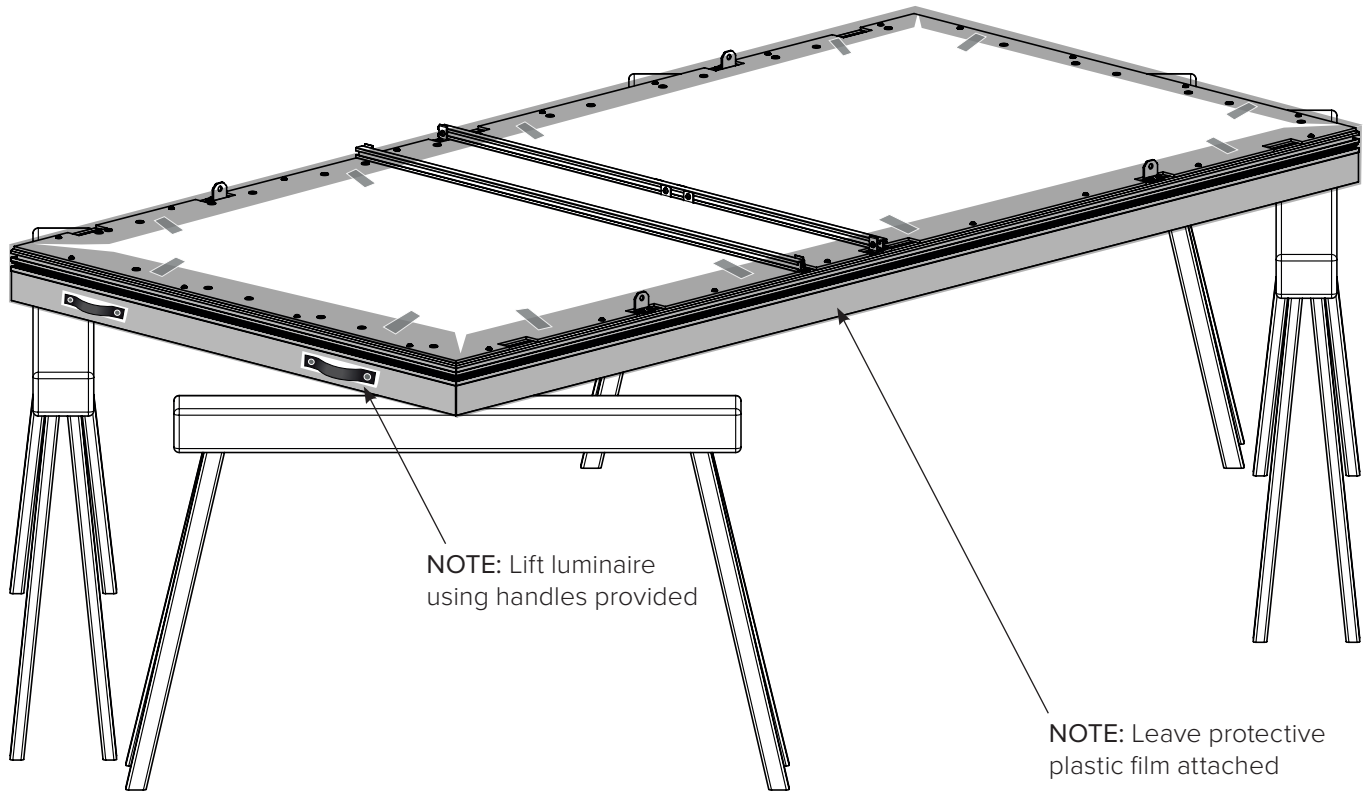


**⚠ CAUTION:** Observe precautions for handling electrostatic sensitive devices.

**⚠ CAUTION:** Use appropriate Personal Protective Equipment (PPE) to ensure safety at work.

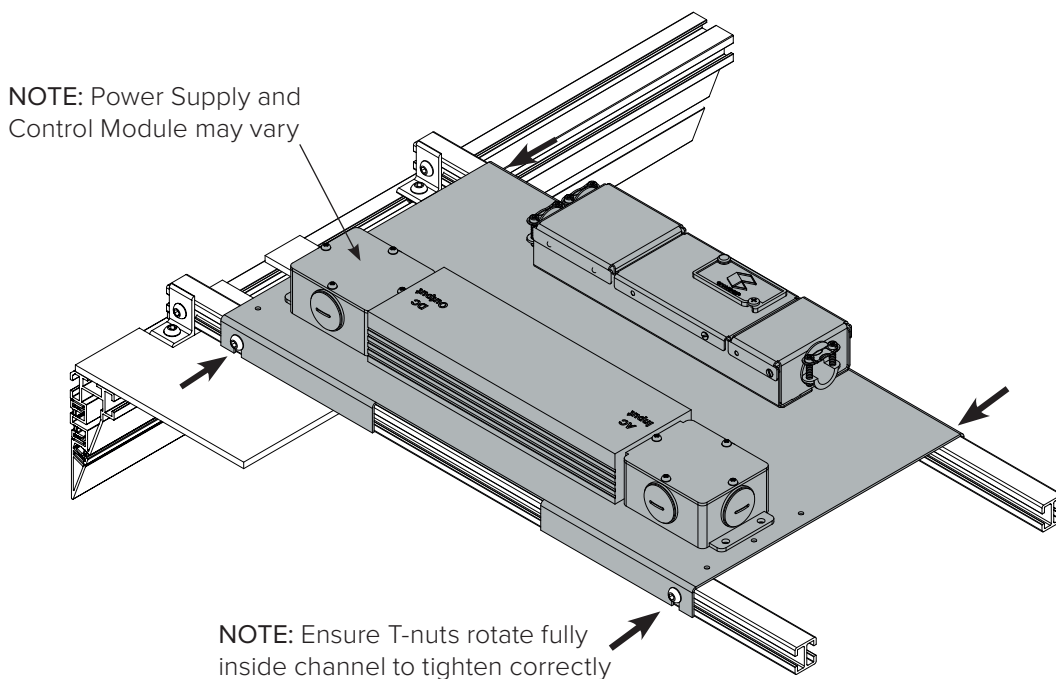
### 3. INSTALLATION PROCEDURE (AIRCRAFT CABLE MOUNTING)

#### 3.1. UNPACK LUMINAIRE AND PLACE FACE DOWN ON SAW HORSES AT CORNERS



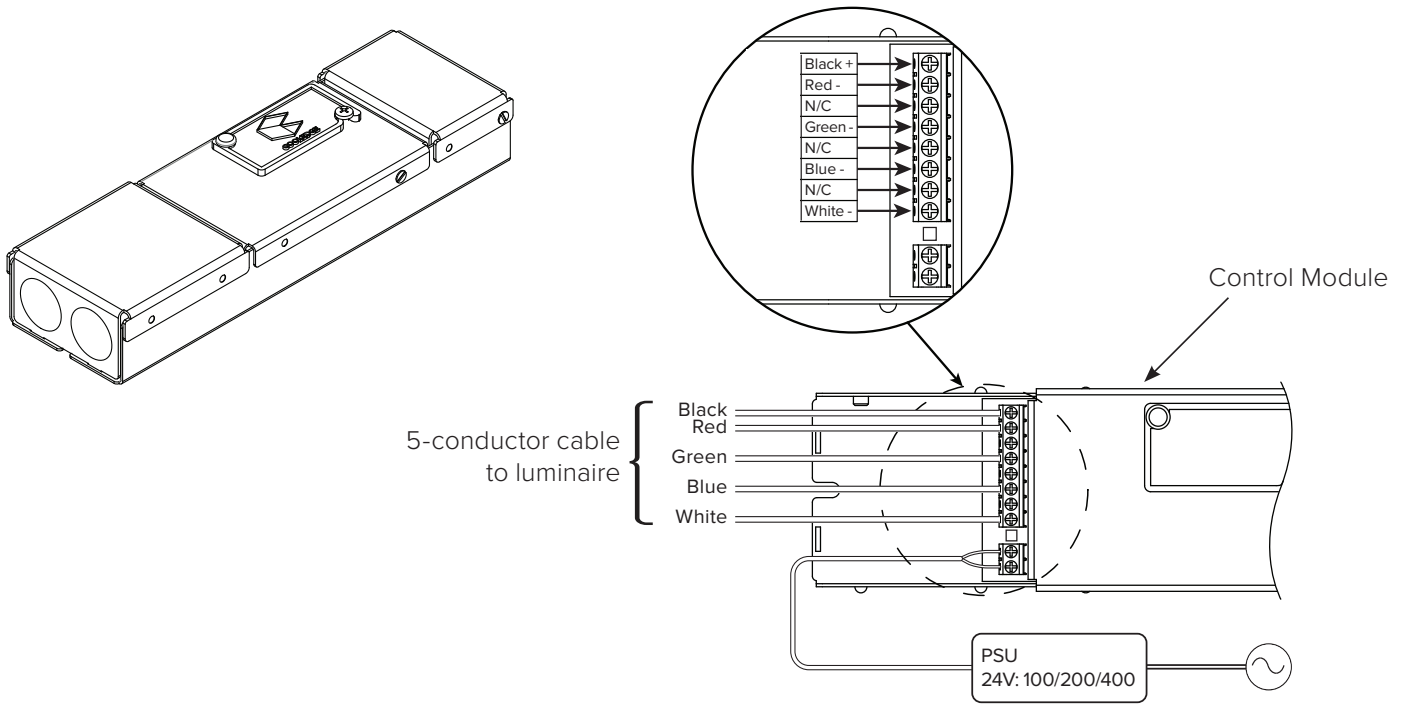
#### 3.2. ATTACH POWER AND CONTROL TRAY(S) TO STIFFENERS

NOTE: Trays may be mounted remotely. In this case, the DC power connections should be made to the Luminaire (section 3.3) with a suitable length of cable.  
Refer to Section 8. APPENDIX – DMX CONTROL for setting up the control module.



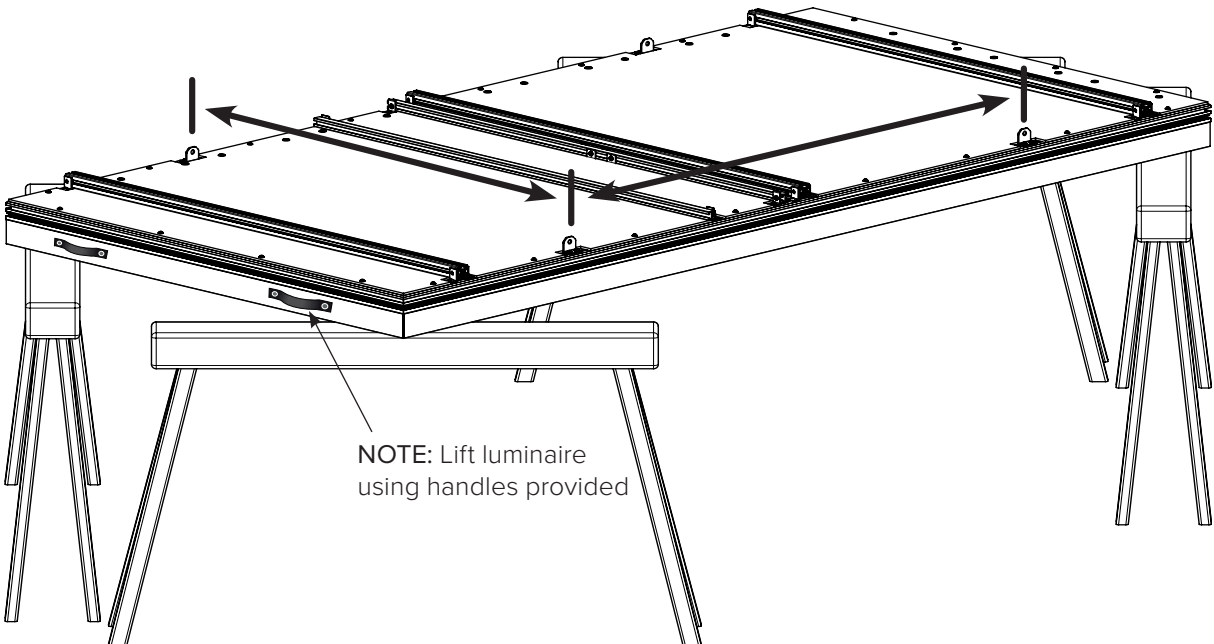
### 3.3. CONNECT POWER AND CONTROL TRAY TO LUMINAIRE

NOTE: The power and control tray type will vary depending on region and luminaire size.



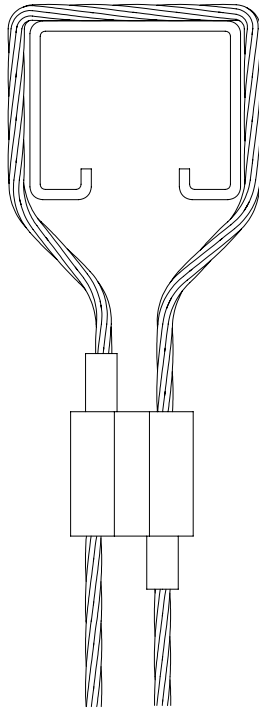
### 3.4. ESTABLISH THE REQUIRED POSITIONS FOR SUSPENSION CABLES

Either measure between the suspension points or refer to TABLE 1, PAGE 17.



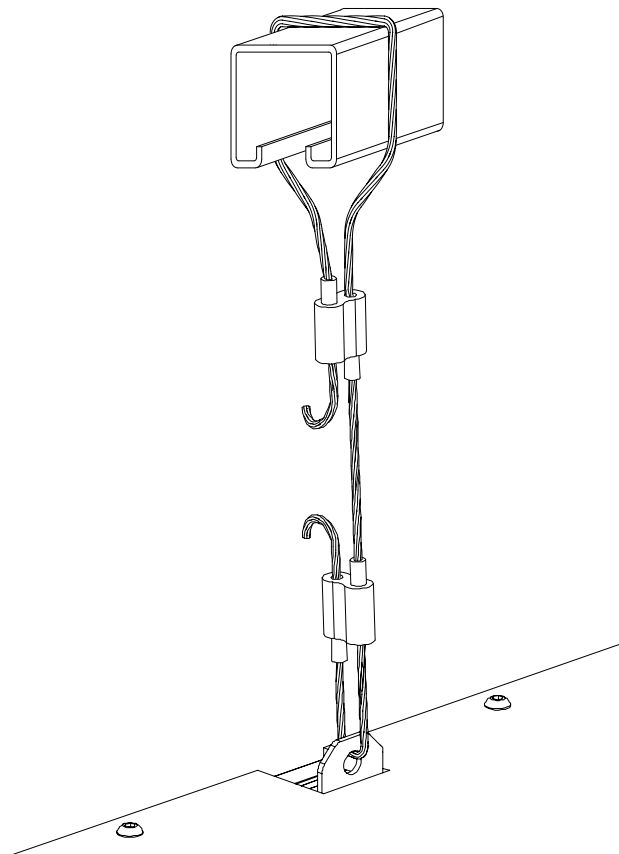
### 3.5. ATTACH CABLES TO CEILING ANCHOR POINTS AT REQUIRED POSITIONS

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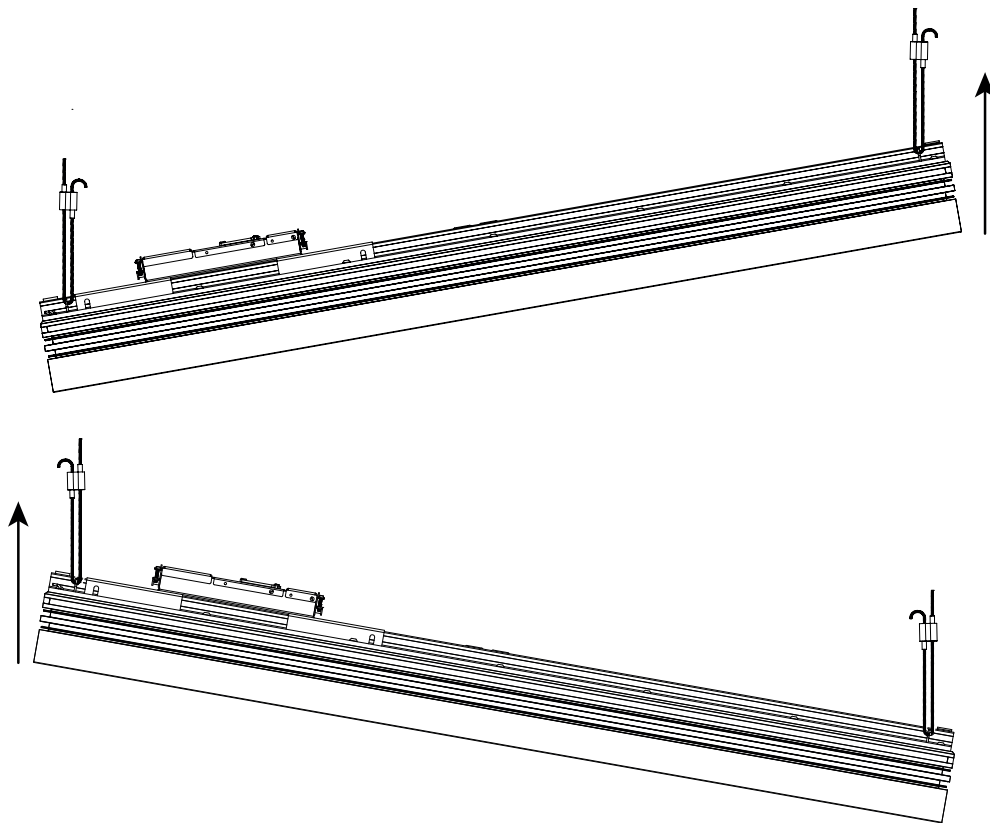
### 3.6. ATTACH CABLES TO HANGER BRACKETS WITH GRIPPERS

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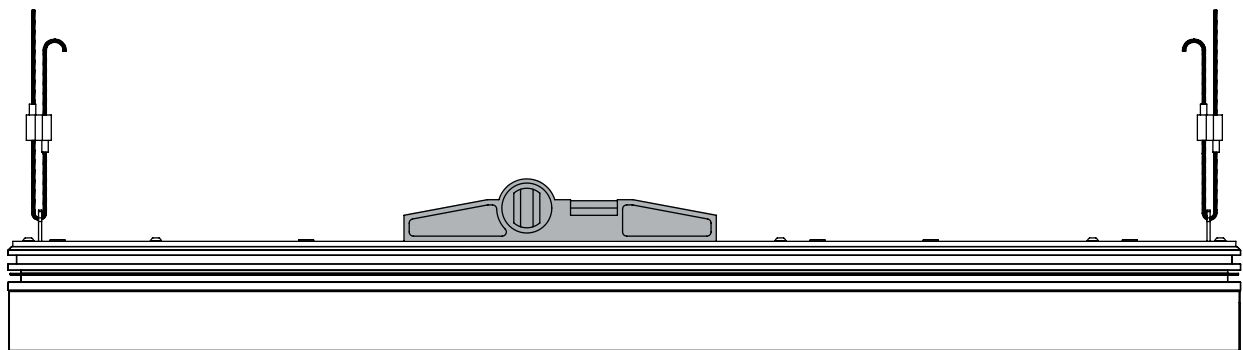
### 3.7. RAISE LUMINAIRE TO REQUIRED HEIGHT

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### 3.8. LEVEL THE LUMINAIRE

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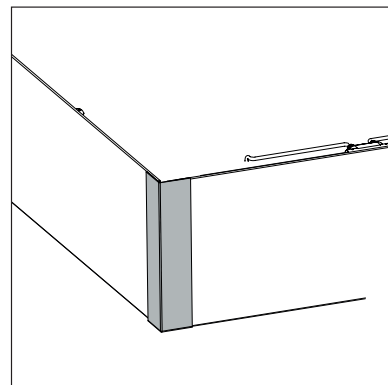
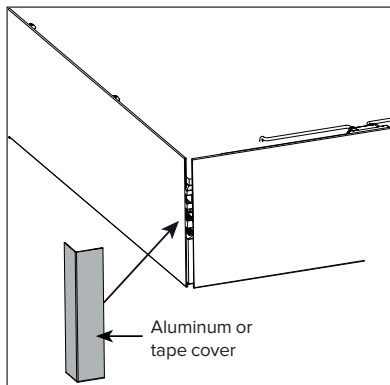
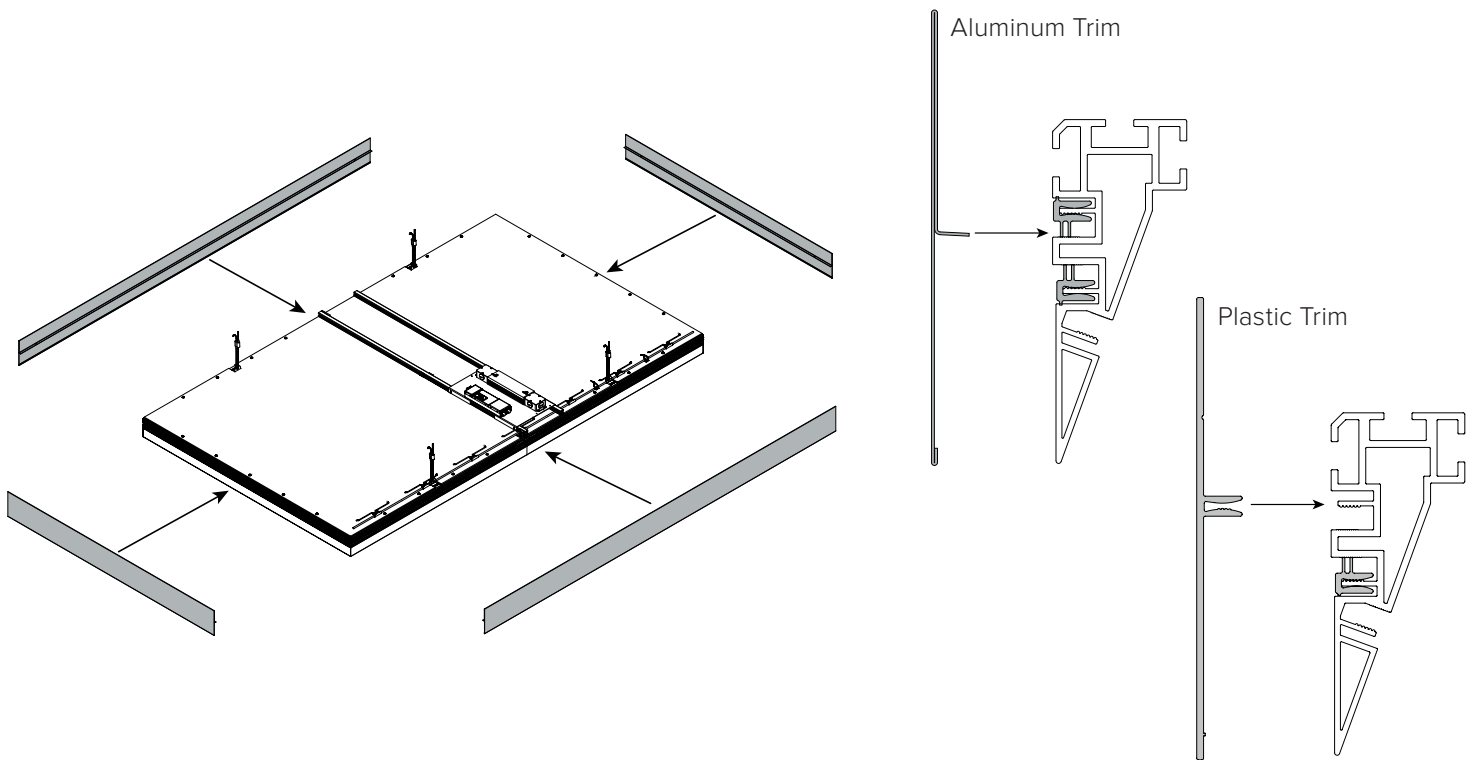


### 3.9. REMOVE THE PROTECTIVE PLASTIC WRAPPING AND LIFTING HANDLES

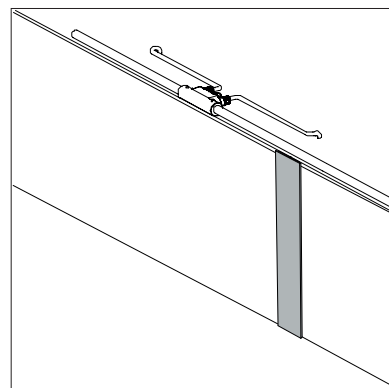
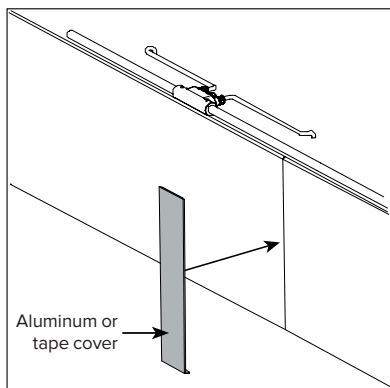
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Remove the lifting handles using a 4mm Hex Key.  
Ensure you wear gloves from this point forward to prevent marks on the fabric.

### 3.10. ATTACH THE TRIM (FASCIA) (RECTANGLE UNITS ONLY)



Remove adhesive liner from corner trim cover or tape and apply to corner.  
Aluminum Trim only: Make sure the bottom flange of the cover is touching the bottom of the trim.



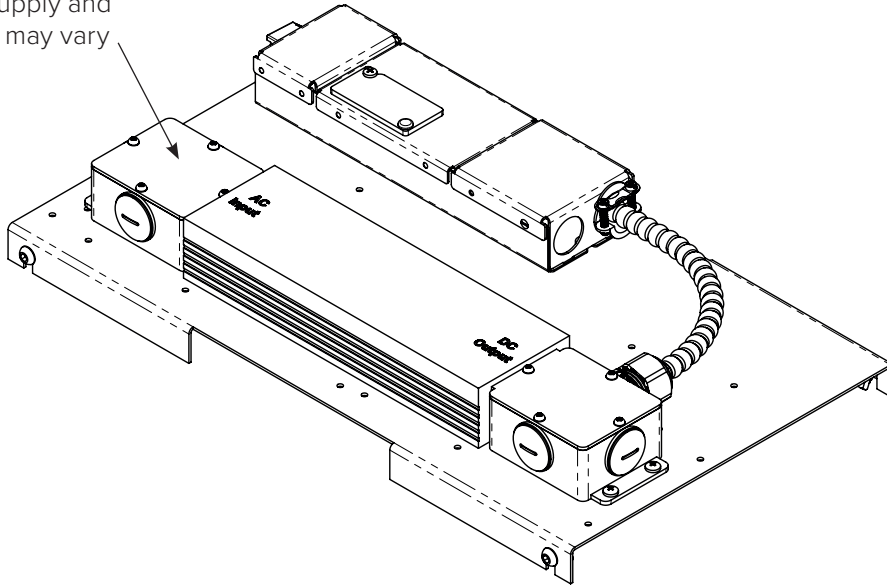
Remove the adhesive liner from trim cover (or tape) and apply to the trim joint.  
Aluminum Trim only: Make sure the bottom flange is touching the bottom of the trim.

### 3.11. CONNECT THE ELECTRICAL POWER

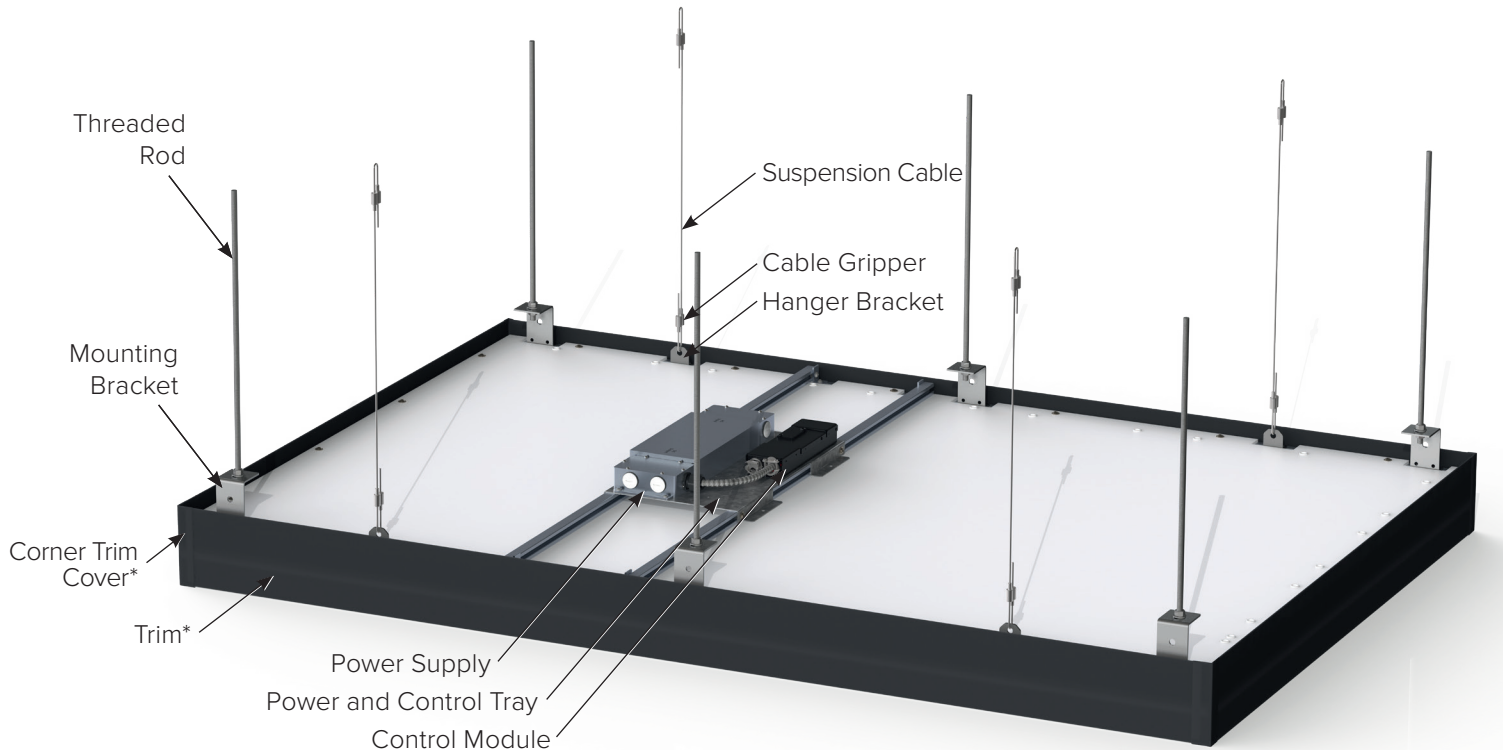
The electrical power connections should be made by a qualified electrician in accordance with all national and local electrical and construction codes.

Refer to Section 8. APPENDIX – DMX CONTROL for setting up the control module.

Connect AC to Power Supply  
**NOTE:** Power Supply and Control Module may vary



## 4. COMPONENTS (THREADED ROD MOUNTING)

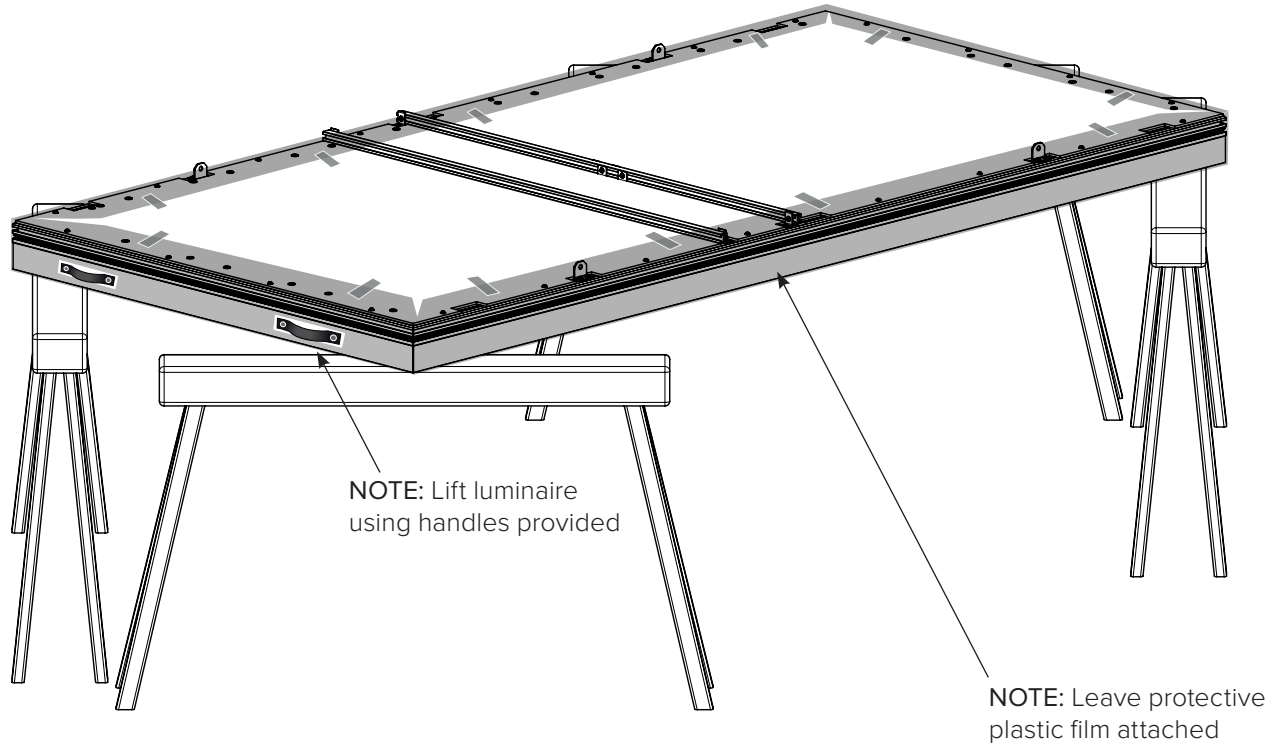


\*Rectangle units only



## 5. INSTALLATION PROCEDURE (THREADED ROD MOUNTING)

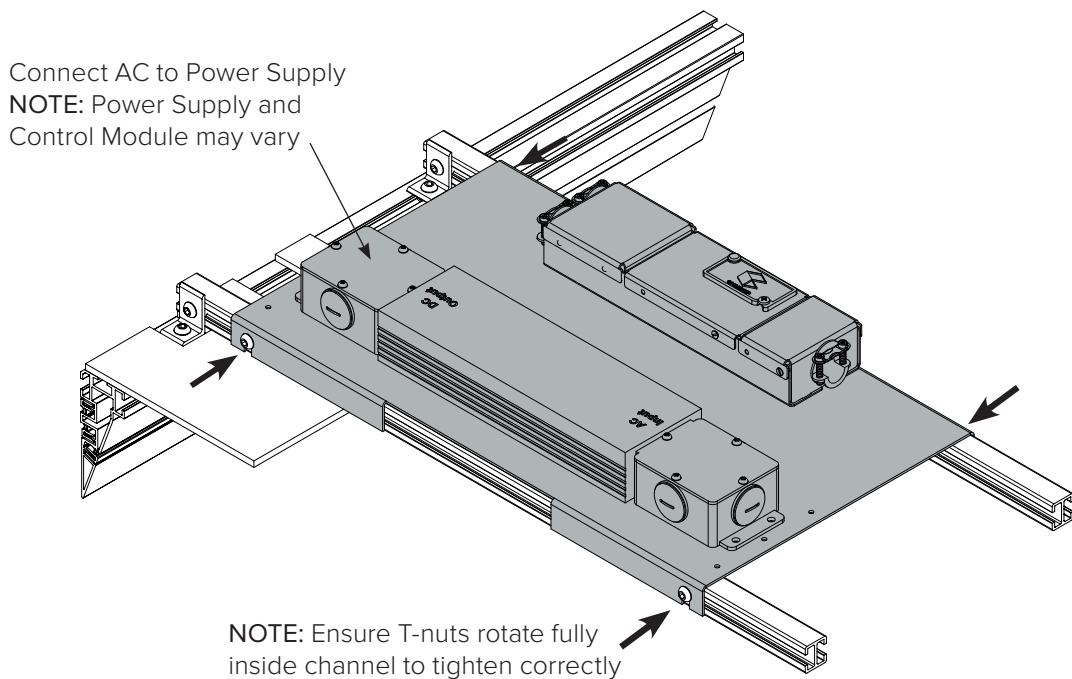
### 5.1. UNPACK LUMINAIRE AND PLACE FACE DOWN ON SAW HORSES AT CORNERS



### 5.2. ATTACH POWER AND CONTROL TRAY(S) TO STIFFENERS

NOTE: Trays may be mounted remotely. In this case, the DC power connections should be made to the Luminaire (section 3.3) with a suitable length of cable.

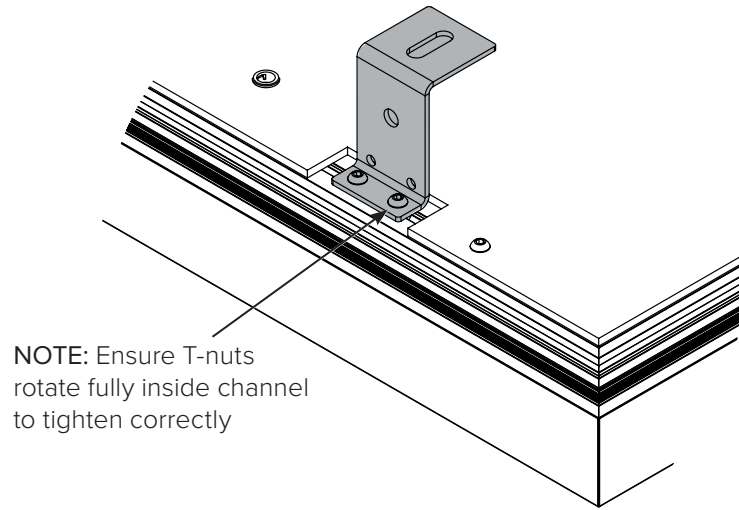
Refer to Section 8. APPENDIX – DMX CONTROL for setting up the control module.



### 5.3. ATTACH MOUNTING BRACKETS

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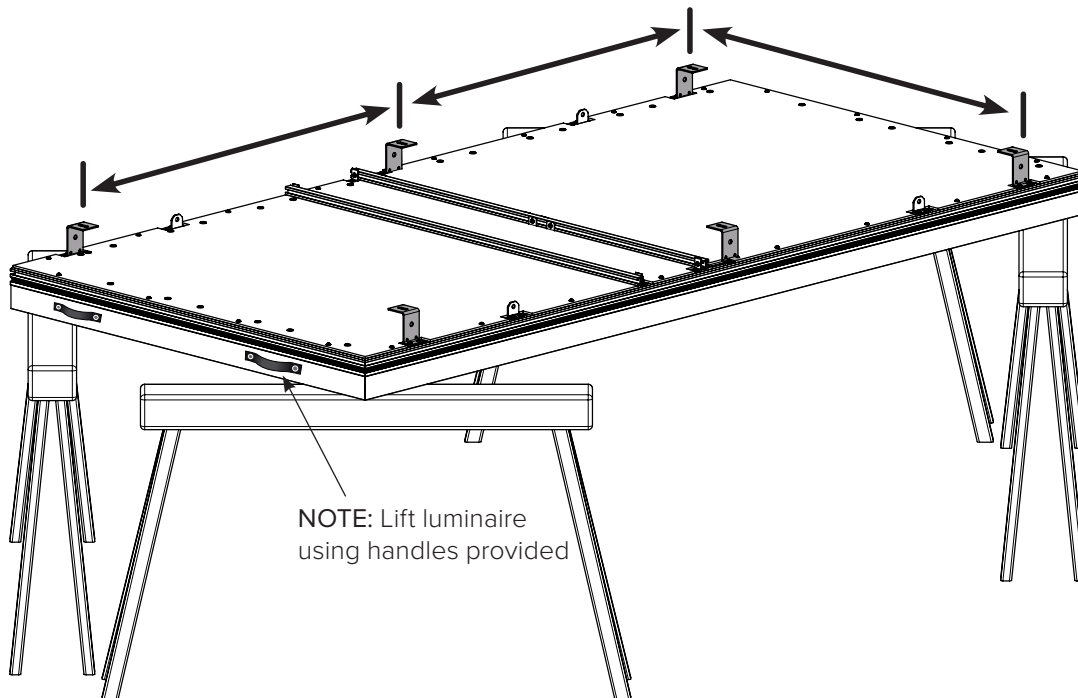
NOTE: Smaller sizes require four brackets; larger sizes require six or eight brackets (see TABLE 2, PAGE 18).



### 5.4. ESTABLISH THE REQUIRED POSITIONS FOR THREADED RODS

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Either measure between the suspension points or refer to TABLE 2, PAGE 18.



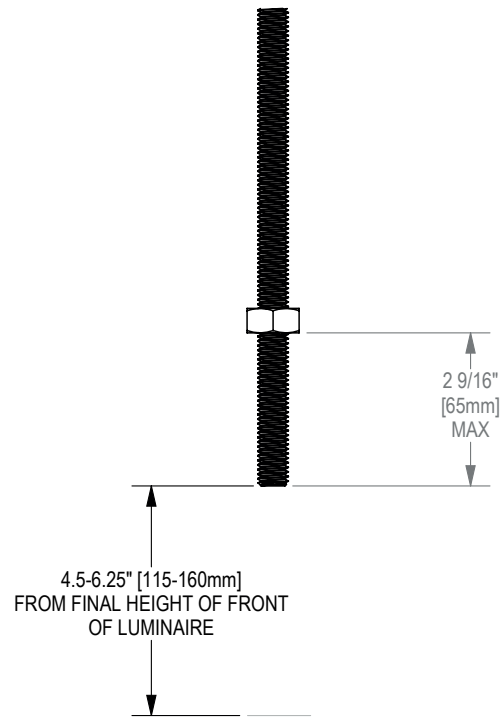
## 5.5. MOUNT THREADED RODS TO CEILING STRUCTURE AT REQUIRED POSITIONS

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**Note:** Threaded rods and associated hardware are not supplied by Cooledge.

Recommended size of threaded rod is 3/8"-16 or M10.

The lower end of the threaded rods must be 4.5" to 6.25" [115mm to 160mm] above the desired level of the fabric surface of the luminaire.

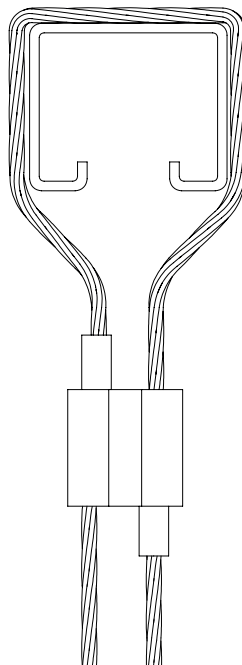


Install one nut on each rod at the desired height.

## 5.6. ATTACH FOUR CABLES TO THE CEILING ALONGSIDE THE THREADED RODS

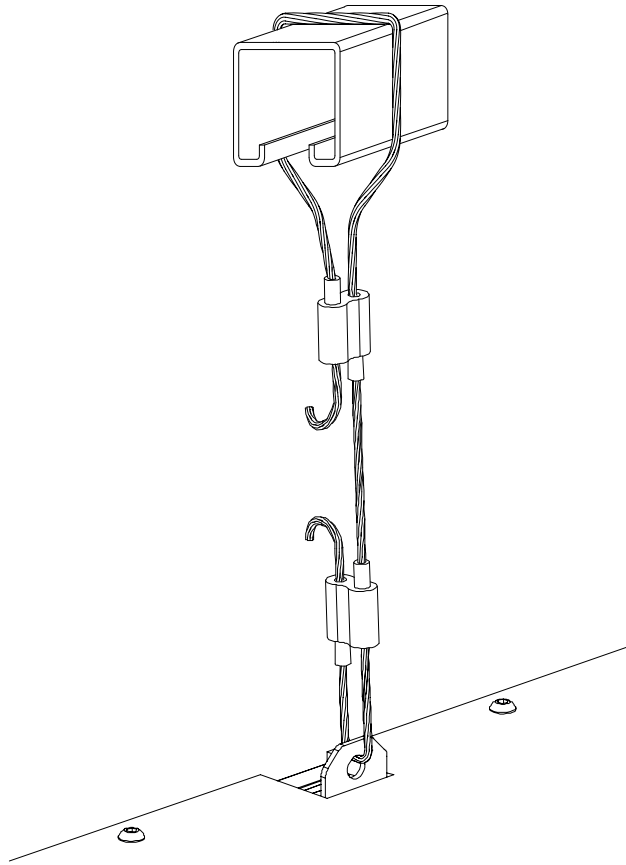
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**NOTE:** Cables are used to assist in installation but may be left in place if desired.



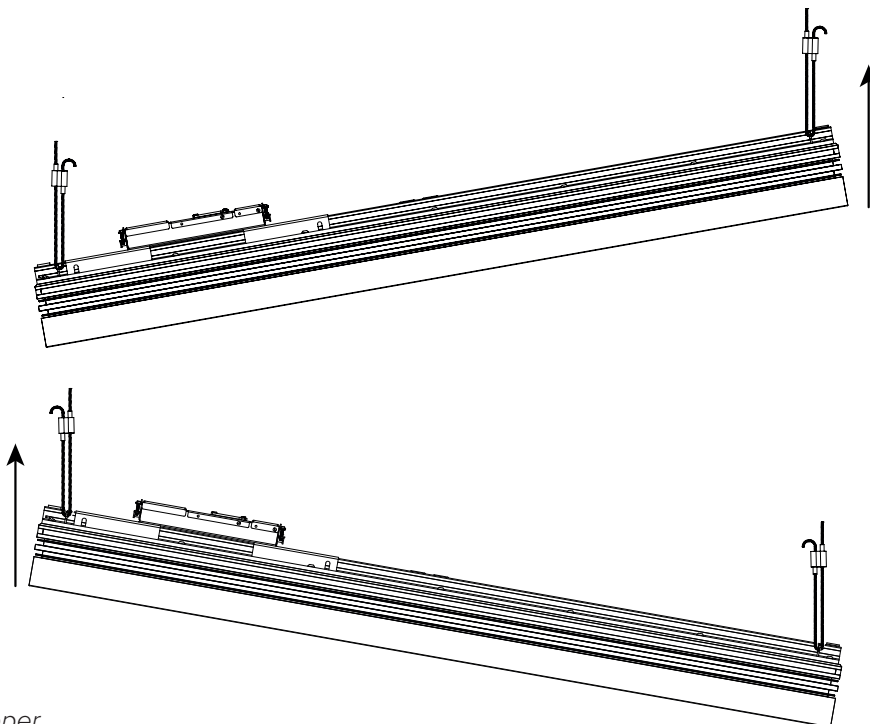
## 5.7. ATTACH CABLES TO HANGER BRACKETS WITH GRIPPERS

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## 5.8. RAISE LUMINAIRE TO JUST BELOW THREADED RODS

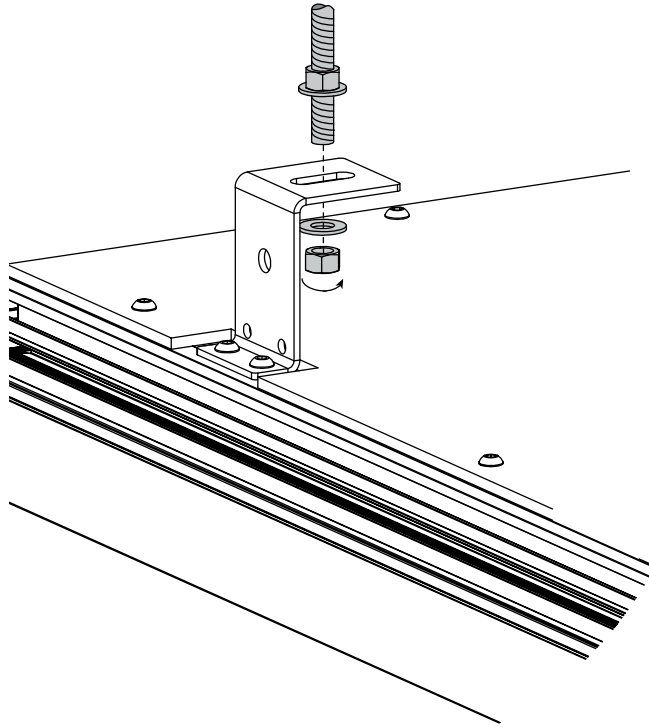
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*\*Example with cable gripper.*

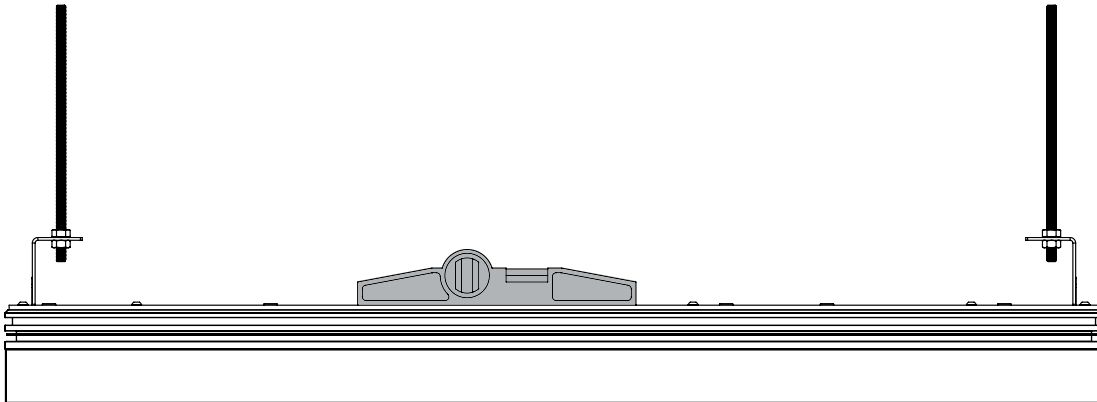
## 5.9. INSERT THREADED ROD INTO LUMINAIRE BRACKET

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## 5.10. LEVEL THE LUMINAIRE AND TIGHTEN THE FASTENERS ON THE THREADED ROD

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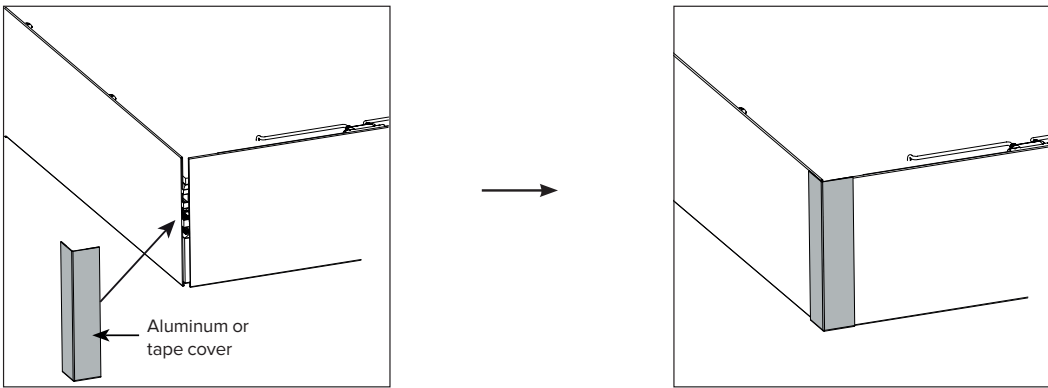
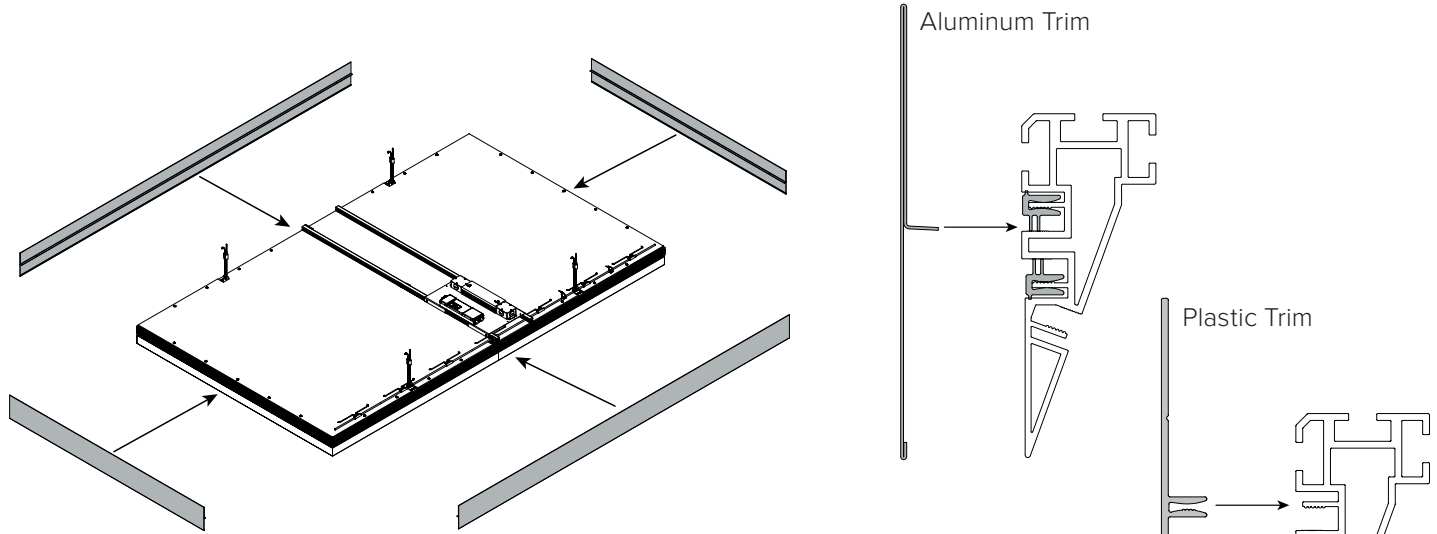


If cables are to be left in place, tighten to remove slack. Otherwise, remove cables.

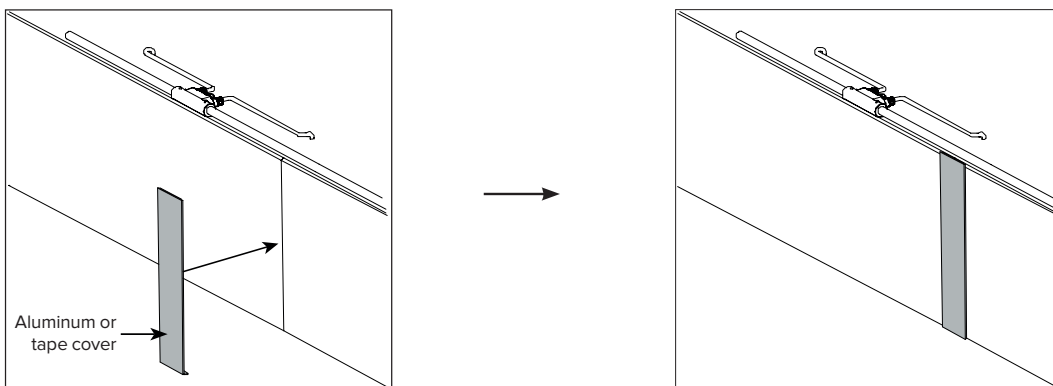
## 5.11. REMOVE THE PROTECTIVE PLASTIC WRAPPING AND LIFTING HANDLES

Remove the lifting handles using a 4mm Hex Key.  
Ensure you wear gloves from this point forward to prevent marks on the fabric.

## 5.12. ATTACH THE TRIM (FASCIA) (RECTANGLE UNITS ONLY)



Remove adhesive liner from corner trim cover or tape and apply to corner.  
Aluminum Trim only: Make sure the bottom flange of the cover is touching the bottom of the trim.



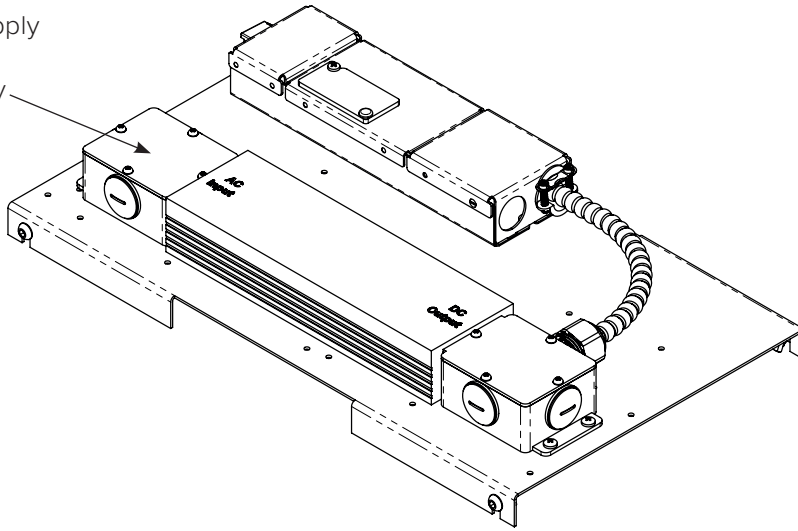
Remove the adhesive liner from trim cover (or tape) and apply to the trim joint.  
Aluminum Trim only: Make sure the bottom flange is touching the bottom of the trim.

### 5.13. CONNECT THE ELECTRICAL POWER

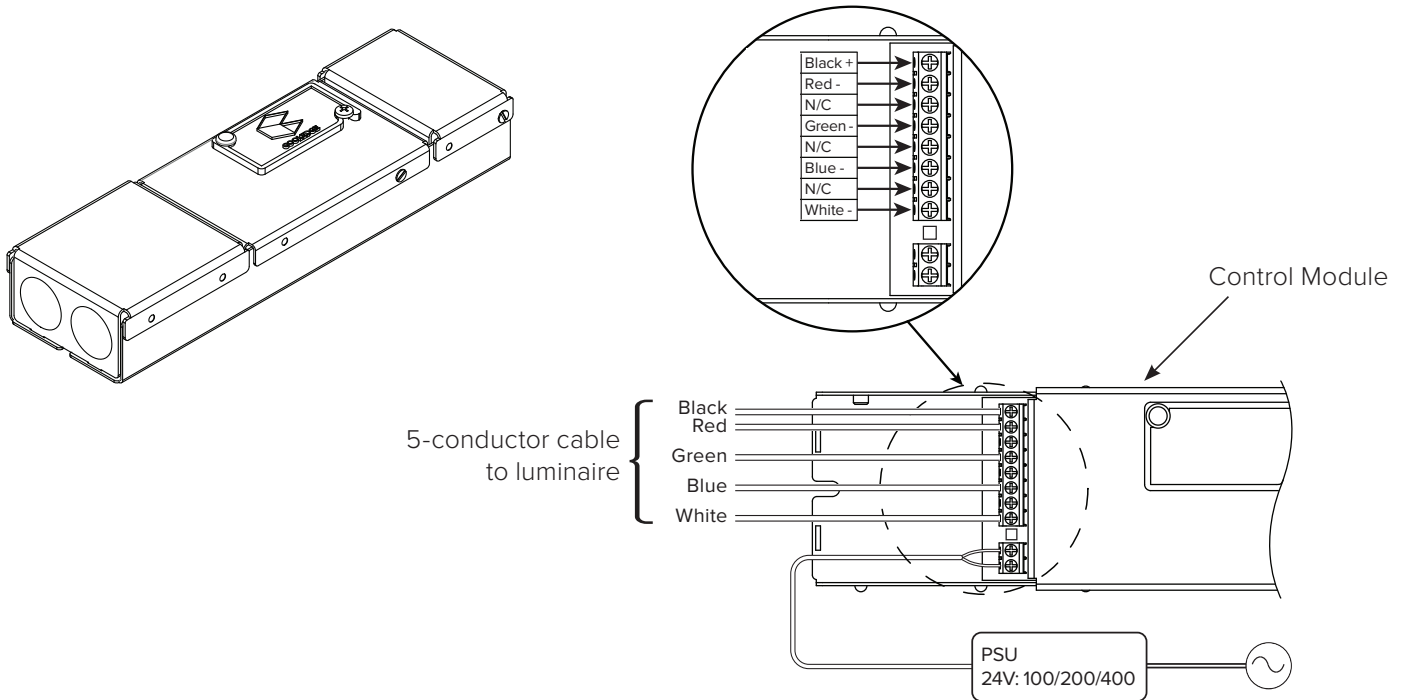
The electrical power connections should be made by a qualified electrician in accordance with all national and local electrical and construction codes.

Refer to Section 8. APPENDIX – DMX CONTROL for setting up the control module.

Connect AC to Power Supply  
**NOTE:** Power Supply and Control Modules may vary



### 5.14. CONNECT POWER AND CONTROL TRAY TO LUMINAIRE



## 6. HANDLING & MAINTENANCE

In general, Cooledge FABRIColor require little or no maintenance; however, if there is a need to handle or clean the luminaires, Cooledge recommends the following procedures.

### Handling:

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- Always handle the luminaire from the sides and avoid touching the diffuser to prevent fingerprints, oil, or dirt from marking the fabric.
- Always use cloth gloves if handling the fabric diffuser.

### Cleaning:

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#### Fabric Diffuser

Over time there may be some accumulation of dust from the environment. To remove dust there are several methods available including:

- Brush gently with a clean, micro fiber cloth or “magic eraser” (if available in your region)
- Vacuum with a clean brush-tip vacuum nozzle
- Blow with compressed air (ensure there is no oil or grease)
- Use an adhesive lint-roller (recommended to test a small area in case the specific type of roller leaves a residue)

For minor stains, spots or streaks, Cooledge recommends gently wiping the fabric with isopropyl alcohol, “IPA”, (99% or higher) applied to a clean, soft cloth and allow to dry.

**Note:** use of liquids other than IPA to clean the fabric diffuser may result in permanent stains. FABRICated Luminaires are rated for dry locations only and should not be exposed to moisture or direct contact with water.

#### Trim/Fascia

- Wipe trim with a clean, soft cloth



## 7. APPENDIX – POSITIONS OF SUSPENSION POINTS

### 7.1. CABLE ATTACHMENT POINTS

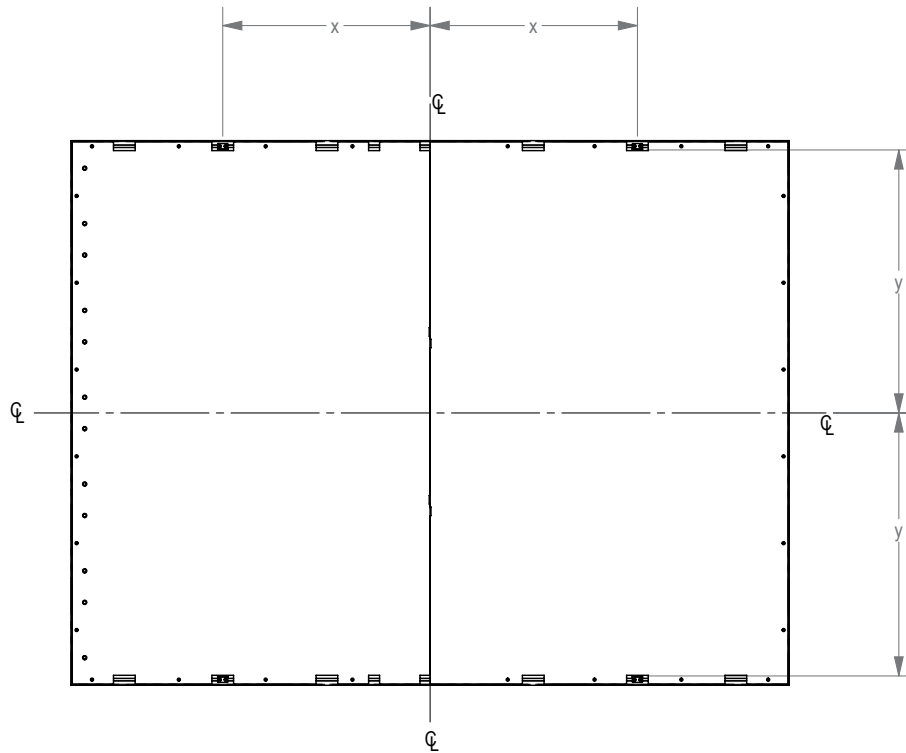


TABLE 1a - RECTANGLES

NOMINAL SIZE	# SUSPENSION POINTS	DIM "X"	DIM "Y"
4' X 4' (1200mm X 1200mm)	4	20 5/8" [525mm]	21 7/8" [555mm]
4' X 6' (1200mm X 1800mm)	4	21 5/8" [550mm]	21 7/8" [555mm]
4' X 8' (1200mm X 2400mm)	4	26 3/4" [680mm]	21 7/8" [555mm]
6' X 6' (1800mm X 1800mm)	4	16 1/2" [420mm]	36" [915mm]
6' X 8' (1800mm X 2400mm)	4	28 3/8" [720mm]	36" [915mm]

TABLE 1b - CIRCLES

NOMINAL SIZE	# SUSPENSION POINTS	DIM "X"	DIM "Y"
4' (1200mm)	4	15 3/4" (400mm)	15 3/4" (400mm)
6' (1800mm)	4	31 1/2" (800mm)	31 1/2" (800mm)

TABLE 1c - CURVED CORNERS

NOMINAL SIZE	# SUSPENSION POINTS	DIM "x"	DIM "y"
6'X9' (1800X2700mm)	4	38 1/2" (980mm)	36 3/4" (934mm)

TABLE 1d - BULLNOSE

NOMINAL SIZE	# SUSPENSION POINTS	DIM "x"	DIM "y"
4'X8' (1200X2400mm)	4	27 1/2" (698mm)	22 3/16" (564mm)

## 7.2. THREADED ROD ATTACHMENT POINTS

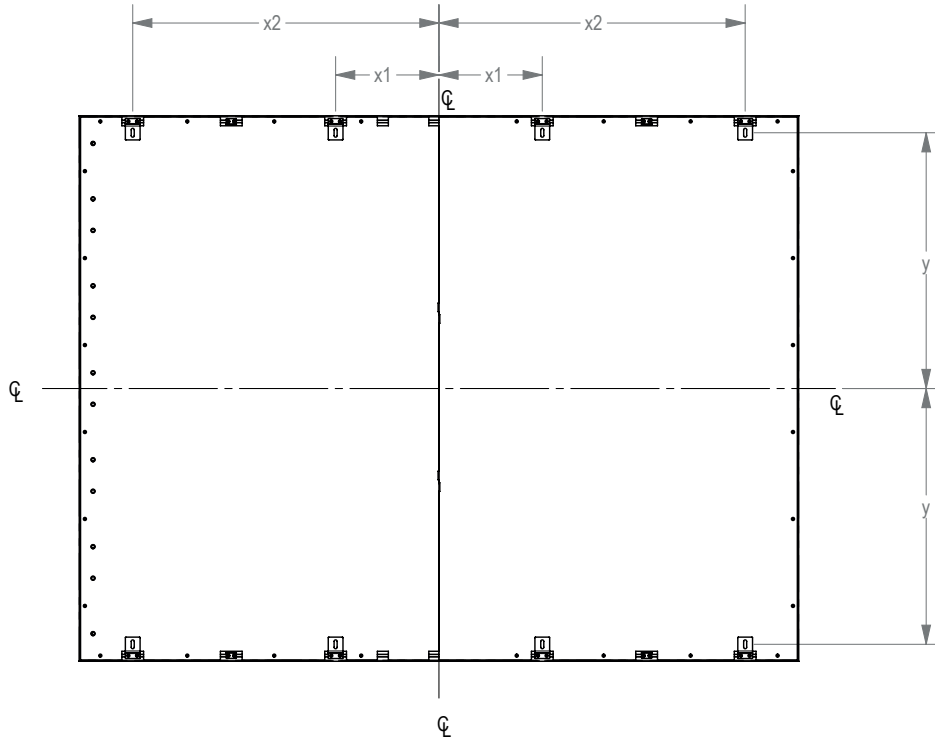


TABLE 2a - RECTANGLES

NOMINAL SIZE	# THREADED RODS	DIM "X1"	DIM "X2"	DIM "Y"
4' X 4' (1200mm X 1200mm)	4	13 3/4" [350mm]	N/A	20 7/8" [530mm]
4' X 6' (1200mm X 1800mm)	6	On center	32 5/16" [820mm]	20 7/8" [530mm]
4' X 8' (1200mm X 2400mm)	6	On center	3 3/16" [81mm]	20 7/8" [530mm]
6' X 6' (1800mm X 1800mm)	6	On center	29 15/16" [760mm]	34 13/16" [885mm]
6' X 8' (1800mm X 2400mm)	8	14 3/16" [360mm]	41 3/4" [1060mm]	34 13/16" [885mm]
6' X 9' (1800mm X 2700mm)	8	12 5/8" [320mm]	44 7/8" [1140mm]	34 13/16" [885mm]

TABLE 2b - CIRCLES

NOMINAL SIZE	# THREADED RODS	DIM "x"	DIM "y"
4' (1200mm)	4	14 1/8" (358mm)	14 1/8" (358mm)
6' (1800mm)	4	29 13/16" (758mm)	29 13/16" (758mm)

TABLE 2c - CURVED CORNERS

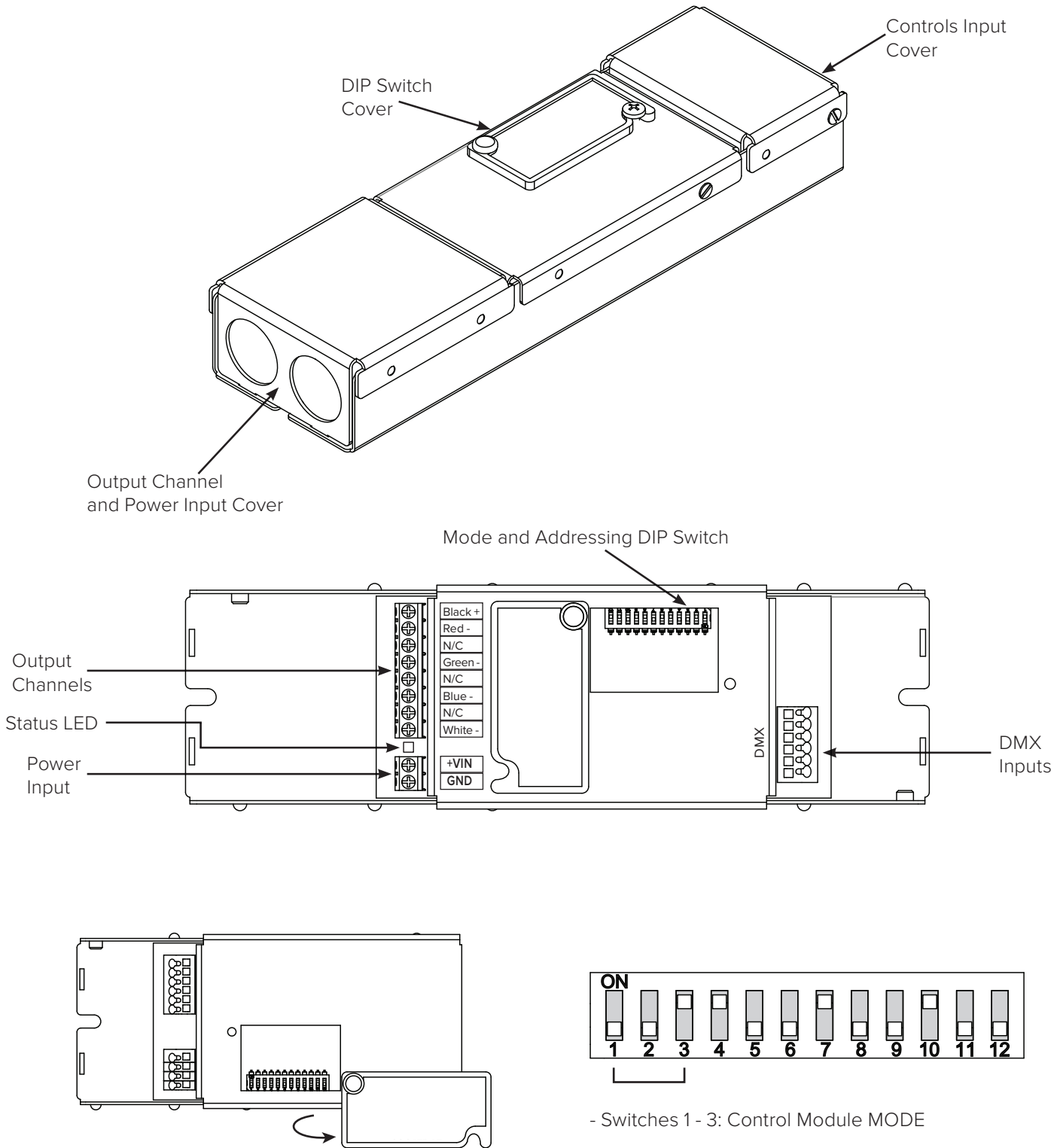
NOMINAL SIZE	# THREADED RODS	DIM "x1"	DIM "x2"	DIM "y"
6'X9' (1800X2700mm)	6	On center	36 7/8" (937mm)	35 5/8" (905mm)

TABLE 2d - BULLNOSE

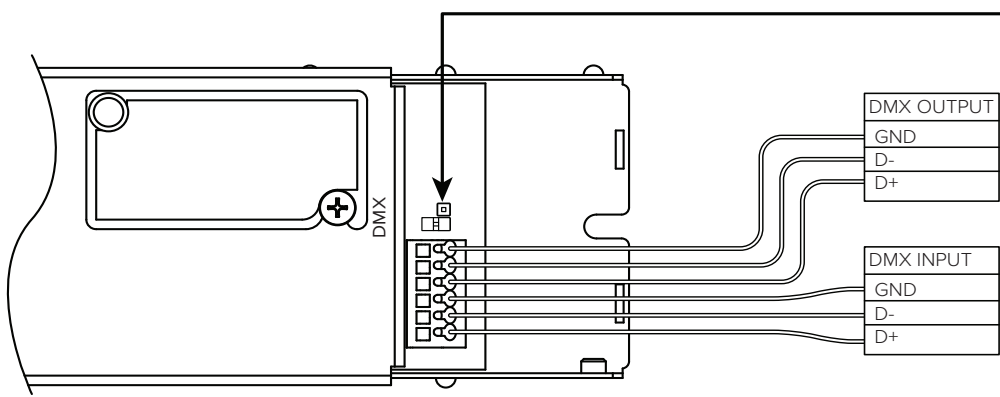
NOMINAL SIZE	# THREADED RODS	DIM "x1"	DIM "x2"	DIM "y"
4'X8' (1200X2400mm)	4	18 1/2" (470mm)	N/A	21 1/2" (545mm)

## 8. APPENDIX - DMX CONTROL

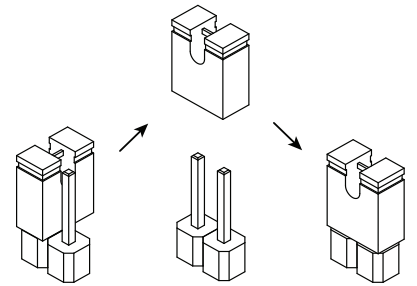
### Control Module overview



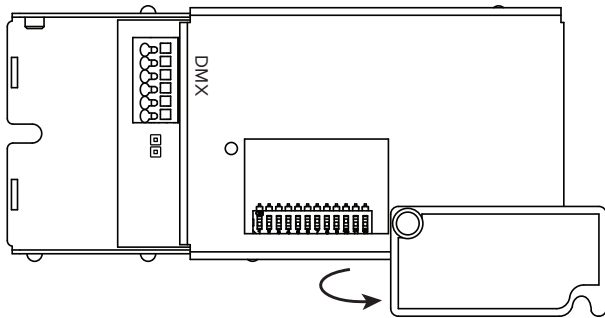
To access the DIP switches for selecting the operational mode, unfasten the cover screw and rotate cover out of the way. Positions 1-3 are used to identify the controller mode. Settings for each mode are explained in each section.



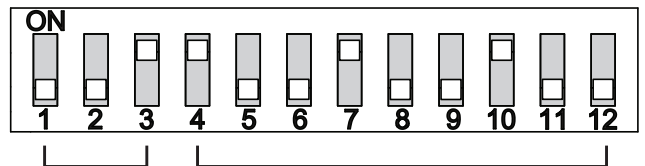
When installing the final controller (termination point) in a DMX network use the provided jumper on the indicated header.



## SELECTING DMX ADDRESSES



1 = On , 0 = Off



- Switches 1 - 3: Factory set, refer to modes below for details.
- Switches 4 - 12: Addressing switches.

- To access the dip switch for selecting addresses for DMX controls, unfasten the cover screw and rotate cover out of the way.

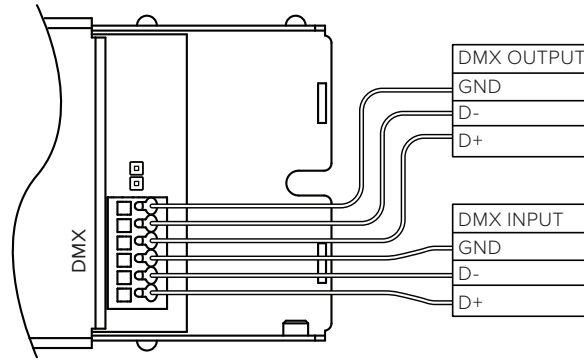
### DMX Controllers are factory set to address 1

- Each of the 9 switches (4-12) represents a bit in binary representation for the address. For example, when switch 12 is 'ON' only address 1 is selected, if switch 12 & 11 are 'ON' then address 3 is selected. The address is selected by the sum of the values of each 'ON' switch. Addresses 1 through 511 are possible

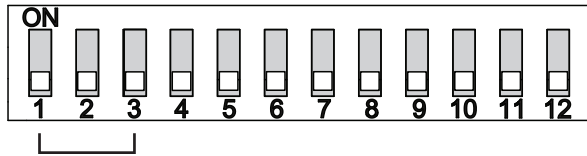
Switch:	4	5	6	7	8	9	10	11	12
Address:	256	128	64	32	16	8	4	2	1

## STANDARD MODE

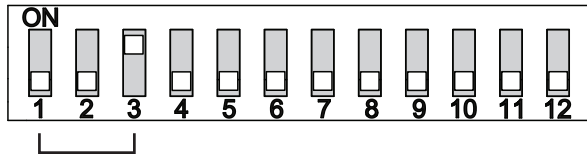
In standard mode there are Red, Green, Blue, and White channels. Each can handle up to a 90W load.



**LOG MODE**



**LIN MODE**



- Switches 1 - 3: Control Module MODE

Table 1:

STANDARD MODES 8bits/16bits	MODE (Pos 1-3)	Switches 4-12	DESCRIPTION
DMX Standard LOG 16 bits	0-0-0	Addressing	Standard LOG 16 bits
DMX Standard LIN 16 bits	0-0-1	Addressing	Standard LIN 16 bits
DMX Standard LOG 8 bits	0-1-0	Addressing	Standard LOG 8 bits
DMX Standard LIN 8 bits	0-1-1	Addressing	Standard LIN 8 bits

**Warning! Unit must be powered off when changing DIP switch settings**

**For STANDARD -16bit Modes- LOG or LIN- each Output Channel uses 2 x DMX Channels:**

**1 for DIM Coarse**

**1 for DIM Fine**

**In total, each controller occupies 8 x DMX channels, assigned as below:**

DMX CH1 – DIM Coarse RED Channel

DMX CH2 – DIM Fine RED Channel

DMX CH3 – DIM Coarse GREEN Channel

DMX CH4 – DIM Fine GREEN Channel

DMX CH5 – DIM Coarse BLUE Channel

DMX CH6 – DIM Fine BLUE Channel

DMX CH7 – DIM Coarse WHITE Channel

DMX CH8 – DIM Fine WHITE Channel

**Example of addressing units for 16-bit LIN/LOG Modes on DMX bus:**

- Unit 1 takes DMX Address = 1, and unit occupies DMX Channels # 1-8
- Unit 2 takes DMX Address = 9, and unit occupies DMX Channels # 9-16
- Unit 3 takes DMX Address = 17, and unit occupies DMX Channels # 17-24

**For the above the DIP SETTINGS are:**

- 000 000000001 Controller set for 16-bit LIN/LOG Mode, unit occupies DMX Channels 1-8
- 000 000001001 Controller set for 16-bit LIN/LOG Mode, unit occupies DMX Channels 9-16
- 000 000010001 Controller set for 16-bit LIN/LOG Mode, unit occupies DMX Channels 17-24

For STANDARD -8bit LIN/LOG Modes - each Output Channel uses 1x DMX Channel:

In total, each controller occupies 4 x DMX channels, assigned as below:

DMX CH1 – DIM RED Channel

DMX CH2 – DIM GREEN Channel

DMX CH3 – DIM BLUE Channel

DMX CH4 – DIM WHITE Channel

Example of addressing units for 8-bit LIN/LOG Modes on DMX bus:

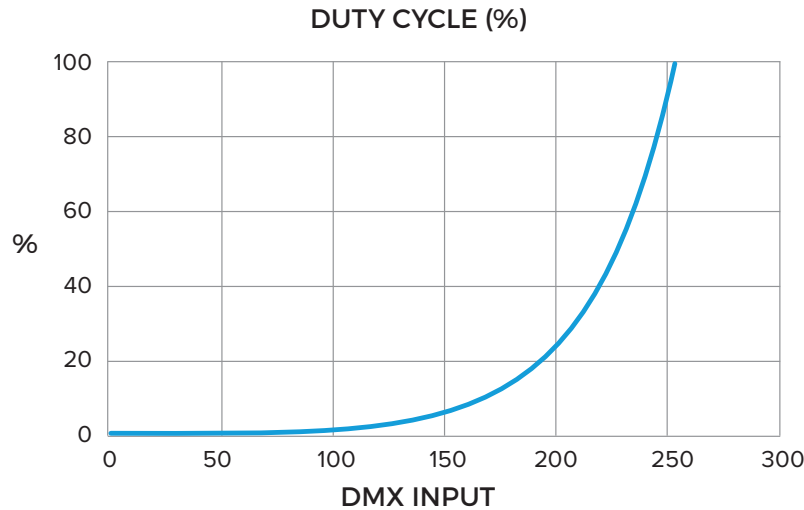
1. Unit 1 takes DMX Address = 1 and unit occupies DMX Channels # 1-4
2. Unit 2 takes DMX Address = 5 and unit occupies DMX Channels # 5-8
3. Unit 3 takes DMX Address = 9 and unit occupies DMX Channels # 9-12

For the above the DIP SETTINGS are:

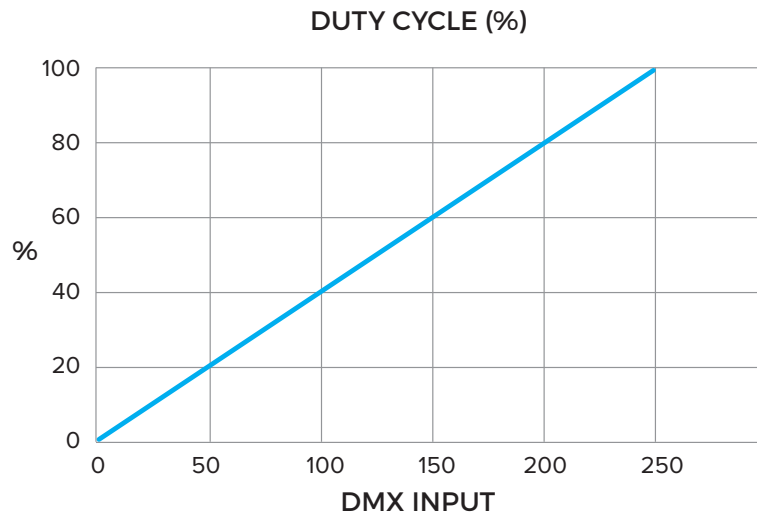
1. 000 000000001 Controller set for 8-bit LIN/LOG Mode, unit occupies DMX Channels 1-4
2. 000 000000101 Controller set for 8-bit LIN/LOG Mode, unit occupies DMX Channels 5-8
3. 000 000001001 Controller set for 8-bit LIN/LOG Mode, unit occupies DMX Channels 9-12

For 16-bit Standard Modes the dimming curves are shown below:

### 16-bit LOG DIMMING CURVE

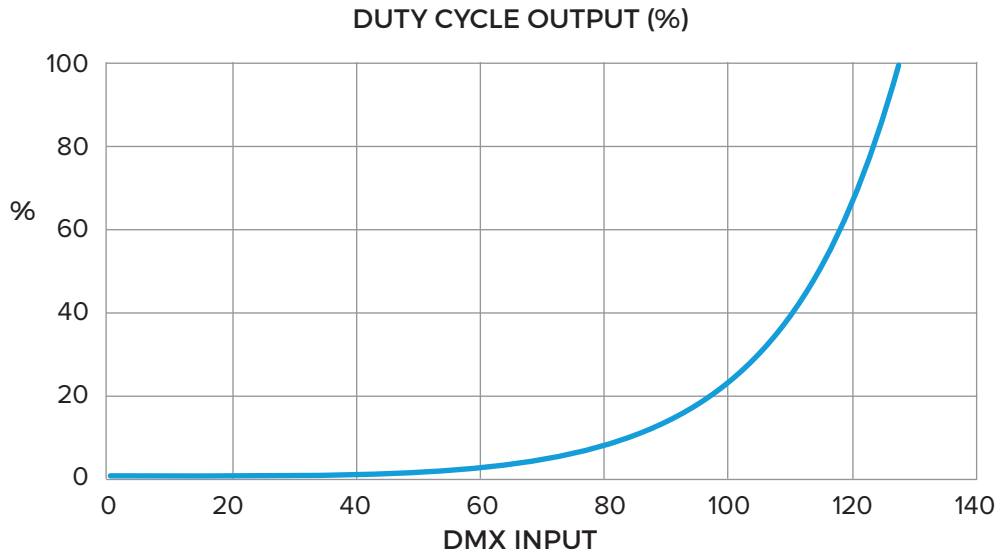


### 16-bit LINEAR DIMMING CURVE

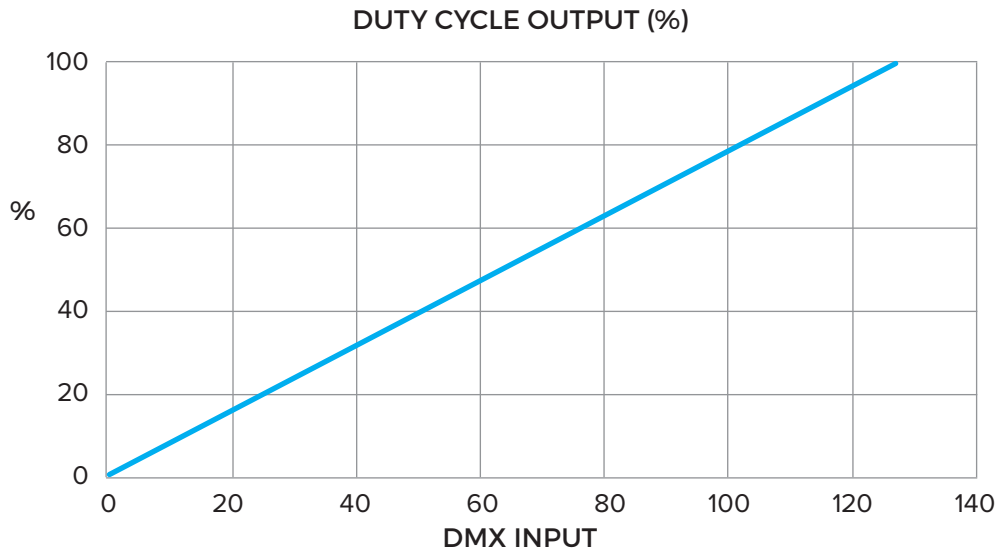


For 8-bit Standard Modes the dimming curves are shown below:

### 8-bit LOG DIMMING CURVE



### 8-bit LIN DIMMING CURVE



## STANDALONE MODE

Standalone mode gives a pre-defined user-selectable fixed color output. No external control input is required.

When one of the operational modes (Standalone Fixed or Standalone Dynamic ) is selected through the DIP Switch setting, the module will ignore DMX commands and operate according to the settings, as per table below.

Standalone Fixed Modes selection include:

- 8 x Fixed R, G, B, W colors
- 26 predefined mixed colors
- 6 x CCT white combinations

### Standalone Fixed Modes

STANDALONE FIXED RGBW 8bits/16bits	MODE (Pos 1-3)	Switches 4-12	DESCRIPTION
FIXED RED LOG	1-0-0	X-X-X-X-X-X-0-0	RED channel fixed LOG for 16bit/8bit
FIXED RED LIN	1-0-0	X-X-X-X-X-X-0-1	RED channel fixed LIN for 16bit/8bit
FIXED GREEN LOG	1-0-0	X-X-X-X-X-X-1-0	GREEN channel fixed LOG for 16bit/8bit
FIXED GREEN LIN	1-0-0	X-X-X-X-X-X-1-1	GREEN channel fixed LIN for 16bit/8bit
FIXED BLUE LOG	1-0-1	X-X-X-X-X-X-0-0	BLUE channel fixed LOG for 16bit/8bit
FIXED BLUE LIN	1-0-1	X-X-X-X-X-X-0-1	BLUE channel fixed LIN for 16bit/8bit
FIXED WHITE LOG	1-0-1	X-X-X-X-X-X-1-0	WHITE channel fixed LOG for 16bit/8bit
FIXED WHITE LIN	1-0-1	X-X-X-X-X-X-1-1	WHITE channel fixed LIN for 16bit/8bit
FIXED 32 Colors with 16 intensities	110	X-X-X-X-X-X-X-X	32 Colors*** = X-X-X-X and 16 intensities = X-X-X-X

\*\*\*DIP switch positions 4-7 are used to select 16 intensities for each of 32 fixed colors as shown in Table below:

INTENSITY LEVEL	DIP SETTING POS 4-7	OUTPUT %
1	0-0-0-0	1
2	0-0-0-1	5
3	0-0-1-0	10
4	0-0-1-1	15
5	0-1-0-0	20
6	0-1-0-1	25
7	0-1-1-0	30
8	0-1-1-1	35
9	1-0-0-0	40
10	1-0-0-1	45
11	1-0-1-0	50
12	1-0-1-1	60
13	1-1-0-0	70
14	1-1-0-1	80
15	1-1-1-0	90
16	1-1-1-1	100

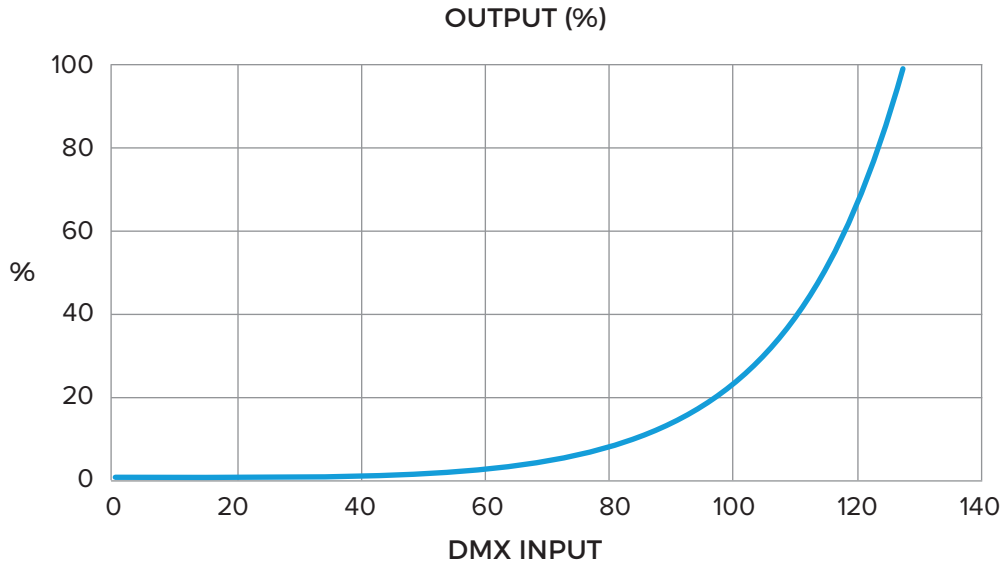


DIP switch positions 8-12 are used to select 32 colors as shown in Table below:

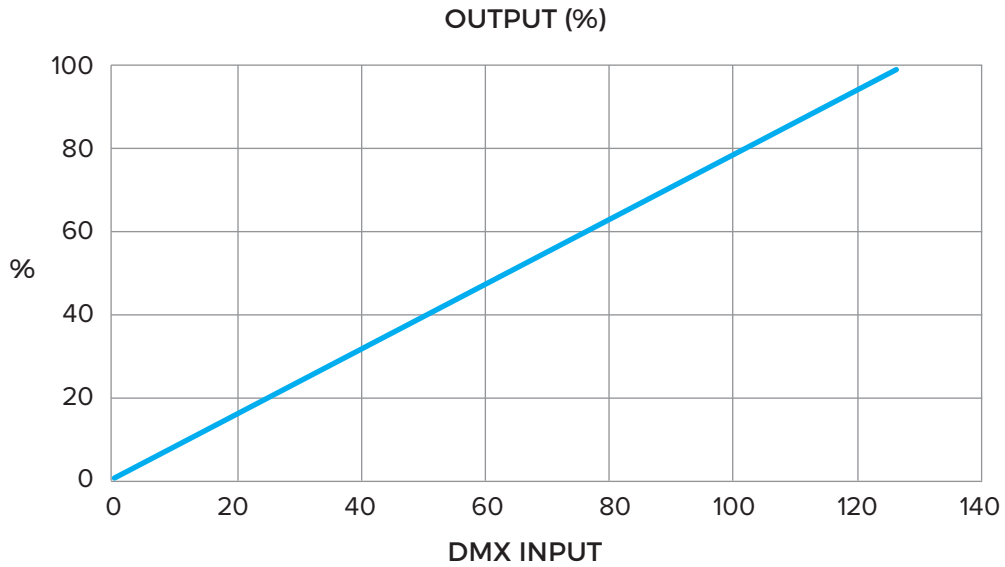
COLOR NUMBER	COLOR	DIP SETTING POS 8-12
1	PINK	0-0-0-0-0
2	LIGHT PINK	0-0-0-0-1
3	VIOLET	0-0-0-1-0
4	FUCSHIA (MAGENTA)	0-0-0-1-1
5	PLUM	0-0-1-0-0
6	ORCHID	0-0-1-0-1
7	ORANGE	0-0-1-1-0
8	SALMON	0-0-1-1-1
9	CORAL	0-1-0-0-0
10	LIGHT CORAL	0-1-0-0-1
11	YELLOW	0-1-0-1-0
12	LIGHT VIOLET	0-1-0-1-1
13	OLIVE	0-1-1-0-0
14	AQUAMARINE	0-1-1-0-1
15	SPRING GREEN	0-1-1-1-0
16	LIGHT SEA GREEN	0-1-1-1-1
17	LIME GREEN	1-0-0-0-0
18	PALE GREEN	1-0-0-0-1
19	TURQUOISE	1-0-0-1-0
20	ROYAL BLUE	1-0-0-1-1
21	SKY BLUE	1-0-1-0-0
22	CYAN	1-0-1-0-1
23	POWDER BLUE	1-0-1-1-0
24	SLATE BLUE	1-0-1-1-1
25	LAVENDER	1-1-0-0-0
26	AZURE	1-1-0-0-1
27	2700K	1-1-0-1-0
28	3000K	1-1-0-1-1
29	3500K	1-1-1-0-0
30	4000K	1-1-1-0-1
31	5000K	1-1-1-1-0
32	5700K	1-1-1-1-1

For Standalone RED, GREEN, BLUE or WHITE Fixed Modes the dimming curves are shown below:

### STANDALONE FIXED RGBW LOG DIM CURVE



### STANDALONE FIXED RGBW LIN DIM CURVE



LOG DIP SETTINGS/DIMMING LEVELS FOR FIXED RGBW

LEVEL	DIPSW SETTING	OUTPUT (%)	LEVEL	DIPSW SETTING	OUTPUT (%)	LEVEL	DIPSW SETTING	OUTPUT (%)
1	0000000	0.05	44	0101011	1.4	87	1010110	11.36
2	0000001	0.21	45	0101100	1.45	88	1010111	12
3	0000010	0.24	46	0101101	1.51	89	1011000	12.65
4	0000011	0.24	47	0101110	1.59	90	1011001	13.35
5	0000100	0.27	48	0101111	1.66	91	1011010	14.07
6	0000101	0.27	49	0110000	1.74	92	1011011	14.85
7	0000110	0.29	50	0110001	1.8	93	1011100	15.65
8	0000111	0.32	51	0110010	1.89	94	1011101	16.52
9	0001000	0.32	52	0110011	1.98	95	1011110	17.43
10	0001001	0.35	53	0110100	2.07	96	1011111	18.4
11	0001010	0.37	54	0110101	2.17	97	1100000	19.4
12	0001011	0.4	55	0110110	2.25	98	1100001	20.46
13	0001100	0.4	56	0110111	2.37	99	1100010	21.6
14	0001101	0.43	57	0111000	2.47	100	1100011	22.8
15	0001110	0.46	58	0111001	2.61	101	1100100	24.06
16	0001111	0.49	59	0111010	2.73	102	1100101	25.38
17	0010000	0.51	60	0111011	2.87	103	1100110	26.8
18	0010001	0.54	61	0111100	3.01	104	1100111	28.3
19	0010010	0.57	62	0111101	3.16	105	1101000	29.85
20	0010011	0.58	63	0111110	3.32	106	1101001	31.51
21	0010100	0.59	64	0111111	3.48	107	1101010	33.25
22	0010101	0.62	65	1000000	3.67	108	1101011	35.11
23	0010110	0.64	66	1000001	3.85	109	1101100	37
24	0010111	0.67	67	1000010	4.04	110	1101101	39.13
25	0011000	0.69	68	1000011	4.24	111	1101110	41.3
26	0011001	0.72	69	1000100	4.47	112	1101111	43.6
27	0011010	0.73	70	1000101	4.71	113	1100000	46
28	0011011	0.76	71	1000110	4.95	114	1100001	48.6
29	0011100	0.78	72	1000111	5.2	115	1100010	51.3
30	0011101	0.81	73	1001000	5.47	116	1100011	54.18
31	0011110	0.84	74	1001001	5.76	117	1101000	57.2
32	0011111	0.87	75	1001010	6.07	118	1101001	60.4
33	0100000	0.92	76	1001011	6.39	119	1101010	63.8
34	0100001	0.94	77	1001100	6.73	120	1101011	67.35
35	0100010	0.98	78	1001101	7.1	121	1111000	71.1
36	0100011	1.02	79	1001110	7.47	122	1111001	75.1
37	0100100	1.06	80	1001111	7.87	123	1111010	79.28
38	0100101	1.1	81	1010000	8.3	124	1111011	83.71
39	0100110	1.15	82	1010001	8.75	125	1111100	88.4
40	0100111	1.2	83	1010010	9.21	126	1111101	93.35
41	0101000	1.23	84	1010011	9.71	127	1111110	98.58
42	0101001	1.3	85	1010100	10.24	128	1111111	100
43	0101010	1.34	86	1010101	10.8			

**LIN DIP SETTINGS/DIMMING LEVELS FOR FIXED RGBW**

LEVEL	DIPSW SETTING	OUTPUT (%)	LEVEL	DIPSW SETTING	OUTPUT (%)	LEVEL	DIPSW SETTING	OUTPUT (%)
1	0000000	0.05	44	0101011	34.22	87	1010110	68.08
2	0000001	1.15	45	0101100	35.01	88	1010111	68.88
3	0000010	1.95	46	0101101	35.81	89	1011000	69.67
4	0000011	2.73	47	0101110	36.6	90	1011001	70.45
5	0000100	3.51	48	0101111	37.37	91	1011010	71.24
6	0000101	4.31	49	0110000	38.17	92	1011011	72.02
7	0000110	5.1	50	0110001	38.95	93	1011100	72.82
8	0000111	5.87	51	0110010	39.75	94	1011101	73.6
9	0001000	6.67	52	0110011	40.53	95	1011110	74.4
10	0001001	7.46	53	0110100	41.32	96	1011111	75.18
11	0001010	8.24	54	0110101	42.1	97	1100000	75.98
12	0001011	9.03	55	0110110	42.9	98	1100001	76.75
13	0001100	9.82	56	0110111	43.68	99	1100010	77.54
14	0001101	10.6	57	0111000	44.47	100	1100011	78.33
15	0001110	11.4	58	0111001	45.25	101	1100100	79.12
16	0001111	12.18	59	0111010	46.05	102	1100101	79.9
17	0010000	12.98	60	0111011	46.83	103	1100110	80.7
18	0010001	13.75	61	0111100	47.63	104	1100111	81.48
19	0010010	14.55	62	0111101	48.4	105	1101000	82.28
20	0010011	15.33	63	0111110	49.19	106	1101001	83.04
21	0010100	16.12	64	0111111	49.97	107	1101010	83.84
22	0010101	16.91	65	1000000	50.77	108	1101011	84.64
23	0010110	17.7	66	1000001	51.55	109	1101100	85.42
24	0010111	18.48	67	1000010	52.34	110	1101101	86.21
25	0011000	19.28	68	1000011	53.12	111	1101110	86.98
26	0011001	20.05	69	1000100	53.92	112	1101111	87.77
27	0011010	20.85	70	1000101	54.7	113	1110000	88.56
28	0011011	21.64	71	1000110	55.49	114	1110001	89.34
29	0011100	22.42	72	1000111	56.27	115	1110010	90.14
30	0011101	23.2	73	1001000	57.07	116	1110011	90.92
31	0011110	24	74	1001001	57.85	117	1110100	91.71
32	0011111	24.78	75	1001010	58.65	118	1110101	92.49
33	0100000	25.58	76	1001011	59.42	119	1110110	93.28
34	0100001	26.35	77	1001100	60.21	120	1110111	94.08
35	0100010	27.15	78	1001101	61	121	1111000	94.88
36	0100011	27.92	79	1001110	61.8	122	1111001	95.64
37	0100100	28.72	80	1001111	62.58	123	1111010	96.44
38	0100101	29.51	81	1010000	63.38	124	1111011	97.2
39	0100110	30.3	82	1010001	64.15	125	1111100	97.97
40	0100111	31.08	83	1010010	64.95	126	1111101	98.76
41	0101000	31.88	84	1010011	65.73	127	1111110	99.53
42	0101001	32.65	85	1010100	66.51	128	1111111	100%
43	0101010	33.45	86	1010101	67.3			

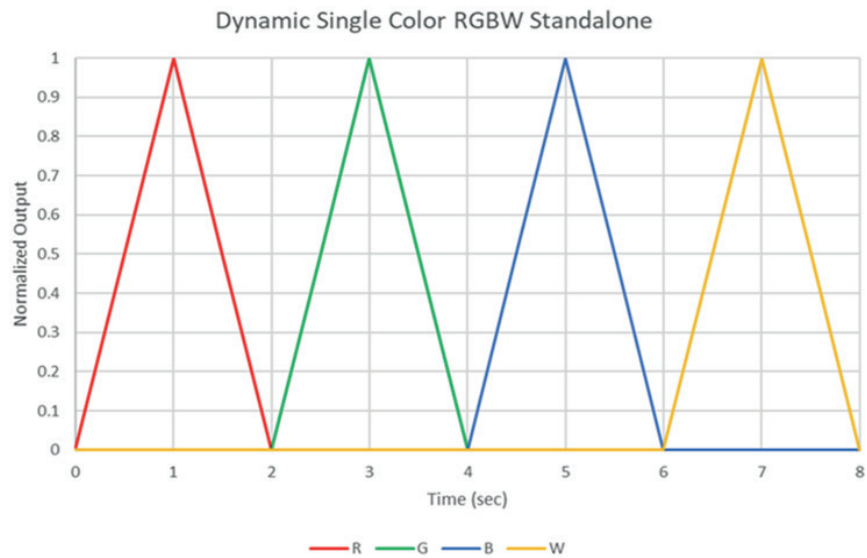
## STANDALONE DYNAMIC MODES

Dynamic test mode is used to check the system functionality. This mode will ignore control inputs and cycle through the output range.

STANDALONE DYNAMIC RGBW 8bits/16bits	MODE(Pos 1-3)	Switches 4-12
DYNAMIC Single color RGBW 16bit/8bit	111	X-X-X-X-X-X-X-0
DYNAMIC Mixed color RGBW 16bit/8bit	111	X-X-X-X-X-X-X-1

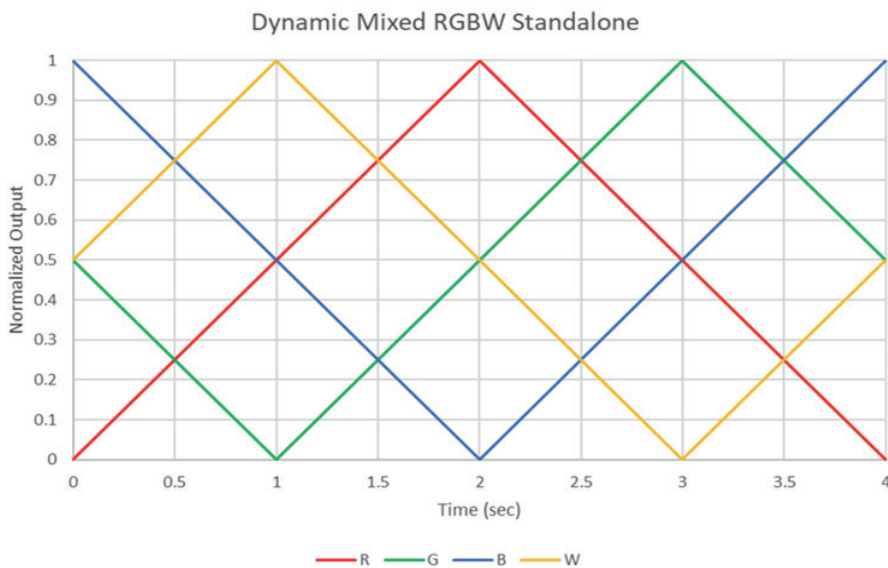
### DYNAMIC SINGLE COLOR

Each color output duty cycle starts from 0% and ramps linearly up to 100% output for 1s, then ramps back down to 0% for 1s, starting with RED, GREEN, BLUE, WHITE and then repeats indefinitely with a period of 8 seconds.



### DYNAMIC MIXED COLOR

Each color output duty cycle starts from 0% and ramps linearly up to 100% output for 2s, then ramps back down to 0% for 2s. Channels start ramping with 1s delay starting with RED color and repeats indefinitely.



## TROUBLESHOOTING

CONTROLLER STATUS	MODE	LED STATUS	LOAD BEHAVIOR
OFF (No input power)	All	OFF	OFF
DMX Control Input Recognized	Standard	Green ON Steady	Responsive to DMX Commands
Standalone Recognized	Standalone	Alternate Amber/Green Slow(1 Hz)	Responsive only to DIP Switch Settings
DMX Control Input missing	Standard	Amber On Steady State	ALL colors at full ON, white color
DMX Shorted	Standard	Amber On Steady State	ALL colors at full ON, white color
Input Over Voltage	All	Amber Flashing Slow (1Hz)	OFF
Input Under Voltage	All	Amber Flashing Fast (8 Hz)	OFF
Output Short Circuit Common + to any R,G,B,W color -	All	RED LED flashes at 1s rate	Load is OFF on shorted Channel All loads of the unit, except the shorted one, are flashing The rest of units in the installation remain responsive to DMX commands
Output short circuit between any two R,G,B,W -	All	RED LED flashes at 1s rate	Color shorted is brighter, still DMX control
Output Overload		RED LED flashes at 1s rate	Loads Flash at 1s rate
DMX Disconnected during normal operation (D- or D+) from unit "n"	Standard	Amber LED on units with addresses > "n"	Units with addresses <n have loads flickering and units with addresses >n are at full ON and display amber LE



**RoHS**



**5 Year Limited Warranty:**  
Parts and workmanship