



## Allegro Dot M RGB/RGBW Allegro Dot L RGB/RGBW

Allegro Dot is the next generation of intelligent media dot family. The dots are constructed on a flexible cable with customizable pitch. The dots can provide advanced features and flexibility for lighting design and project execution. Customizable pitch containing up to 65 dots max RGB/RGBW.



### Product Specifications

| Model                                   | Allegro Dot M<br>Direct View                                              | Allegro Dot M<br>Diffused View         | Allegro Dot L<br>Direct View                  | Allegro Dot L<br>Diffused View         |
|-----------------------------------------|---------------------------------------------------------------------------|----------------------------------------|-----------------------------------------------|----------------------------------------|
| Number of Pixel                         | 50                                                                        | 50                                     | 40                                            | 40                                     |
| Light Source                            | RGB: 6 RGB LEDs<br>RGBW: 6 RGB LEDs + 3 White                             |                                        | RGB: 9 RGB LEDs<br>RGBW: 9 RGB LEDs + 3 White |                                        |
| Color Range                             | 16.7 Million additive RGB colors, white CCT 6500K                         |                                        |                                               |                                        |
| Color Resolution                        | RGB: 3 x 12-bit (Gamma correction)<br>RGBW: 4 x 12-bit (Gamma correction) |                                        |                                               |                                        |
| WhiteOne                                | Algorithms enable auto control of white LED by 3-channel RGB values       |                                        |                                               |                                        |
| Beam Angle                              | 110°                                                                      | 150°                                   | 110°                                          | 150°                                   |
| Luminous Flux <sup>1</sup>              | RGB: 53 lm<br>RGBW: 103 lm                                                | RGB: 46 lm<br>RGBW: 94 lm              | RGB: 79 lm<br>RGBW: 147 lm                    | RGB: 72 lm<br>RGBW: 135 lm             |
| Efficacy <sup>1</sup>                   | RGB: 26.5 lm/W<br>RGBW: 51.8 lm/W                                         | RGB: 23 lm/W<br>RGBW: 47.2 lm/W        | RGB: 31.6 lm/W<br>RGBW: 49 lm/W               | RGB: 28.8 lm/W<br>RGBW: 45 lm/W        |
| Cover Lens                              | Clear (PC)                                                                | Diffuser dome (PC)                     | Clear (PC)                                    | Diffuser dome (PC)                     |
| LED Pitch                               | 150mm to 4000mm; Standard: 150mm                                          |                                        |                                               |                                        |
| Housing                                 | Die cast aluminum with PC cover                                           |                                        |                                               |                                        |
| Adjustment Options                      | Flexible cable                                                            |                                        |                                               |                                        |
| Dimensions<br>(Ø x L x H)               | Ø68 x 60 x 17mm<br>Ø2.7" x 2.4" x 0.7"                                    | Ø68 x 60 x 39mm<br>Ø2.7" x 2.4" x 1.5" | Ø68 x 60 x 17mm<br>Ø2.7" x 2.4" x 0.7"        | Ø68 x 60 x 39mm<br>Ø2.7" x 2.4" x 1.5" |
| Weight                                  | 80g                                                                       | 90g                                    | 80g                                           | 90g                                    |
| Regulatory Listing &<br>Safety Approval | CE, 3G ANSI C136.31                                                       |                                        |                                               |                                        |
| Operating Temperature                   | -30°C to + 60°C/-22°F to +140°F                                           |                                        |                                               |                                        |
| Storage Temperature                     | -40°C to + 70°C/-40°F to +158°F                                           |                                        |                                               |                                        |
| Environment                             | Outdoor (IP66, IP67), suitable for coastal environments                   |                                        |                                               |                                        |
| Humidity                                | 0 to 90% non-condensing                                                   |                                        |                                               |                                        |

### Electrical Specifications

|                                |                     |                       |  |
|--------------------------------|---------------------|-----------------------|--|
| Operating Voltage              | 30V DC              |                       |  |
| Power Consumption <sup>1</sup> | RGB: 2W<br>RGBW: 2W | RGB: 2.5W<br>RGBW: 3W |  |

### System Specifications

|                    |                                                                                         |
|--------------------|-----------------------------------------------------------------------------------------|
| Control            | DMX512/e:pix/RDM/e:net                                                                  |
| Power Supply       | LED ENG 240W 30V IP67 AL DO/LED ENG 185W 30V IP67 AL DO/<br>LED ENG 100W 30V IP67 AL DO |
| Addressing Options | Auto-Addressing                                                                         |

1. Measurement per dot.

**LED CHARACTERISTICS** Because LEDs are semiconductor devices, their performances are subject to inherent variability commonly found in semiconductor industry. To improve consistency in performance across the same product, LED manufacturers "sort" LEDs into bins according to different preset parameters, such as forward driving voltage, illumination, etc. Whereas binning is a sorting function, it is not a correction process. Inherent variability in the manufacturing process results always in different binning distributions according to different production lots. Traxon uses automatically binned LEDs on its products, thereby minimizing output variations within the model range.

As with all electronic devices, LED output degrades over time – a term called lumen depreciation. This also explains why it is nearly impossible to expect photometric performances of two LED products with different service life spans to be the same. The rate of LED degrade is a complicate function of many factors such as operating efficiency, duration of continuous operation, and more significantly, environmental conditions (ambient temperature for example). If allowed working under optimal operating temperature range and with good ventilation, LED devices enjoy long service lives over conventional light sources. When using/installing LED devices, care should be taken to ensure that the devices will operate within the operating conditions specified in respective product literature.

[www.traxontechnologies.com](http://www.traxontechnologies.com)

©2019 TRAXON TECHNOLOGIES - AN OSRAM BUSINESS. ALL RIGHTS RESERVED. TRAXON™, TX CONNECT®, ARE TRADEMARKS OF TRAXON TECHNOLOGIES. U.S. PATENTS, E.U. PATENTS, JAPAN PATENTS, OTHER PATENTS PENDING. SPECIFICATIONS ARE SUBJECT TO CHANGE WITHOUT NOTICE.

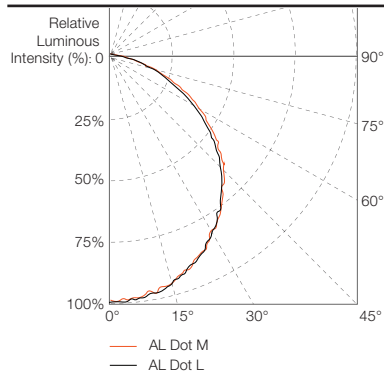
**Allegro Dot M RGB (Clear Cover)**  
**Allegro Dot L RGB (Clear Cover)**

Photometrics

**Source Specifications**

|               |                                       |                                       |
|---------------|---------------------------------------|---------------------------------------|
| <b>Source</b> | 6 LEDs packaged in RGB (One AL Dot M) | 9 LEDs packaged in RGB (One AL Dot L) |
| <b>Optics</b> | 110° (Clear cover)                    |                                       |

**Candela Distribution**



**Light Output**

|                 | Color        | Luminous Flux (lm) | Candela Distribution at 100% | Efficacy (lm/W) |
|-----------------|--------------|--------------------|------------------------------|-----------------|
| <b>AL Dot M</b> | <b>White</b> | 52.49              | 19.9                         | 29.32           |
|                 | <b>Red</b>   | 16.2               | 6.14                         | 25.31           |
|                 | <b>Green</b> | 31.63              | 11.99                        | 50.21           |
|                 | <b>Blue</b>  | 5.77               | 2.19                         | 10.49           |
| <b>AL Dot L</b> | <b>White</b> | 79.26              | 30.83                        | 31.58           |
|                 | <b>Red</b>   | 24.89              | 9.68                         | 25.4            |
|                 | <b>Green</b> | 48.74              | 18.96                        | 57.34           |
|                 | <b>Blue</b>  | 8.57               | 3.33                         | 10.71           |

**Illuminance at a Distance**

|                 | Center beam Lux/km | Beam width (m) H |
|-----------------|--------------------|------------------|
| <b>AL Dot M</b> | 379                | 2.75m            |
|                 | 95                 | 5.51m            |
|                 | 42                 | 8.26m            |
|                 | 24                 | 11.01m           |
|                 | 15                 | 13.76m           |

● Horiz.Spread: 108.0°  
 For feet multiply by 3.28

For fc divide by 10.7  
 IES and LDT files are available for download from the Traxon website.

|                 | Center beam Lux/km | Beam width (m) H |
|-----------------|--------------------|------------------|
| <b>AL Dot L</b> | 389                | 2.63m            |
|                 | 97                 | 5.25m            |
|                 | 43                 | 7.88m            |
|                 | 24                 | 10.50m           |
|                 | 16                 | 13.13m           |

● Horiz.Spread: 105.4°  
 For feet multiply by 3.28

For fc divide by 10.7  
 IES and LDT files are available for download from the Traxon website.

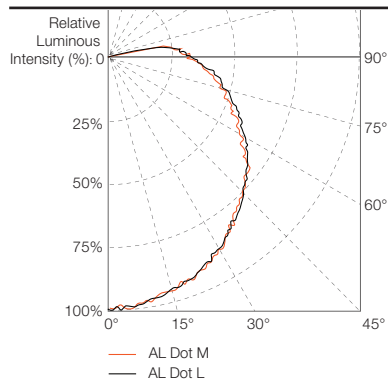
## Allegro Dot M RGB (Diffuser Dome Cover) Allegro Dot L RGB (Diffuser Dome Cover)

## Photometrics

### Source Specifications

|               |                                       |                                       |
|---------------|---------------------------------------|---------------------------------------|
| <b>Source</b> | 6 LEDs packaged in RGB (One AL Dot M) | 9 LEDs packaged in RGB (One AL Dot L) |
| <b>Optics</b> | 150° (Diffuser Dome cover)            |                                       |

### Candela Distribution



### Light Output

|                 | Color        | Luminous Flux (lm) | Candela Distribution at 100% | Efficacy (lm/W) |
|-----------------|--------------|--------------------|------------------------------|-----------------|
| <b>AL Dot M</b> | <b>White</b> | 45.99              | 10.54                        | 25.69           |
|                 | <b>Red</b>   | 14.48              | 3.32                         | 22.63           |
|                 | <b>Green</b> | 26.8               | 6.14                         | 42.54           |
|                 | <b>Blue</b>  | 5.03               | 1.15                         | 9.15            |
| <b>AL Dot L</b> | <b>White</b> | 72.3               | 16.36                        | 28.8            |
|                 | <b>Red</b>   | 23.36              | 5.28                         | 23.84           |
|                 | <b>Green</b> | 44.09              | 9.97                         | 51.87           |
|                 | <b>Blue</b>  | 7.33               | 1.65                         | 9.16            |

### Illuminance at a Distance

|                 | Center beam Lux/klm | Beam width (m) H |
|-----------------|---------------------|------------------|
| <b>AL Dot M</b> | 229                 | 5.71m            |
|                 | 57                  | 11.42m           |
|                 | 25                  | 17.13m           |
|                 | 14                  | 22.84m           |
|                 | 9                   | 28.56m           |

● Horiz.Spread: 141.4°  
For feet multiply by 3.28

For fc divide by 10.7

IES and LDT files are available for download from the Traxon website.

|                 | Center beam Lux/klm | Beam width (m) H |
|-----------------|---------------------|------------------|
| <b>AL Dot L</b> | 226                 | 6.97m            |
|                 | 57                  | 13.56m           |
|                 | 25                  | 20.92m           |
|                 | 14                  | 27.90m           |
|                 | 9                   | 34.87m           |

● Horiz.Spread: 148.0°  
For feet multiply by 3.28

For fc divide by 10.7

IES and LDT files are available for download from the Traxon website.

## Allegro Dot M RGBW (Clear Cover) Allegro Dot L RGBW (Clear Cover)

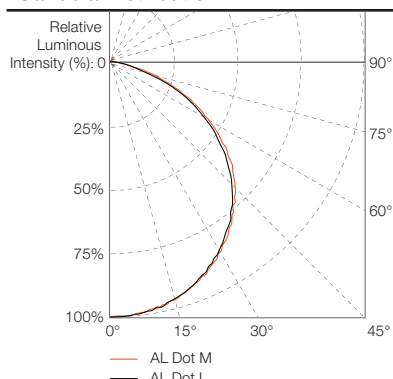
## Photometrics

### Source Specifications

| Source | (One AL Dot M)<br>6 LEDs packaged in RGB<br>3 LEDs packaged in White | (One AL Dot L)<br>9 LEDs packaged in RGB<br>3 LEDs packaged in White |
|--------|----------------------------------------------------------------------|----------------------------------------------------------------------|
|--------|----------------------------------------------------------------------|----------------------------------------------------------------------|

Optics 110° (Clear cover)

### Candela Distribution



### Light Output

|          | Color           | Luminous Flux (lm) | Candela Distribution at 100% | Efficacy (lm/W) |
|----------|-----------------|--------------------|------------------------------|-----------------|
| AL Dot M | White (full on) | 103.23             | 37.64                        | 51.87           |
|          | White (RGB off) | 51.12              | 18.64                        | 75.18           |
|          | RGB             | 53.44              | 19.49                        | 38.72           |
|          | Red             | 16.99              | 6.19                         | 23.93           |
|          | Green           | 33.74              | 12.3                         | 58.17           |
|          | Blue            | 3.76               | 1.37                         | 8.36            |
| AL Dot L | White (full on) | 146.63             | 53.88                        | 52.56           |
|          | White (RGB off) | 77.55              | 28.5                         | 82.5            |
|          | RGB             | 69.92              | 25.69                        | 37.39           |
|          | Red             | 22.71              | 8.34                         | 23.17           |
|          | Green           | 43.33              | 15.92                        | 57.77           |
|          | Blue            | 5.89               | 2.16                         | 11.11           |

### Illuminance at a Distance

|          | Center beam Lux/km | Beam width (m) H |
|----------|--------------------|------------------|
| AL Dot M | 365                | 2.97m            |
|          | 91                 | 5.93m            |
|          | 41                 | 8.90m            |
|          | 23                 | 11.86m           |
|          | 15                 | 14.83m           |

Horiz.Spread: 112.0°

For fc divide by 10.7

For feet multiply by 3.28

IES and LDT files are available for download from the Traxon website.

|          | Center beam Lux/km | Beam width (m) H |
|----------|--------------------|------------------|
| AL Dot L | 367                | 2.93m            |
|          | 92                 | 5.86m            |
|          | 41                 | 8.80m            |
|          | 23                 | 11.73m           |
|          | 15                 | 14.66m           |

Horiz.Spread: 111.4°

For fc divide by 10.7

For feet multiply by 3.28

IES and LDT files are available for download from the Traxon website.

[www.traxontechnologies.com](http://www.traxontechnologies.com)

©2019 TRAXON TECHNOLOGIES - AN OSRAM BUSINESS. ALL RIGHTS RESERVED. TRAXON™, TX CONNECT®, ARE TRADEMARKS OF TRAXON TECHNOLOGIES. U.S. PATENTS, E.U. PATENTS, JAPAN PATENTS, OTHER PATENTS PENDING. SPECIFICATIONS ARE SUBJECT TO CHANGE WITHOUT NOTICE.

## Allegro Dot M RGBW (Diffuser Dome Cover) Allegro Dot L RGBW (Diffuser Dome Cover)

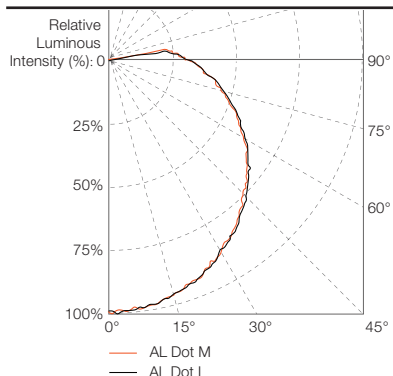
## Photometrics

### Source Specifications

|               |                                                                      |                                                                      |
|---------------|----------------------------------------------------------------------|----------------------------------------------------------------------|
| <b>Source</b> | (One AL Dot M)<br>6 LEDs packaged in RGB<br>3 LEDs packaged in White | (One AL Dot L)<br>9 LEDs packaged in RGB<br>3 LEDs packaged in White |
|---------------|----------------------------------------------------------------------|----------------------------------------------------------------------|

**Optics** 150° (Diffuser Dome cover)

### Candela Distribution



### Light Output

|                 | Color                  | Luminous Flux (lm) | Candela Distribution at 100% | Efficacy (lm/W) |
|-----------------|------------------------|--------------------|------------------------------|-----------------|
| <b>AL Dot M</b> | <b>White (full on)</b> | 93.85              | 21.67                        | 47.16           |
|                 | <b>White (RGB off)</b> | 47.13              | 10.88                        | 69.31           |
|                 | <b>RGB</b>             | 48.5               | 11.2                         | 35.14           |
|                 | <b>Red</b>             | 15.09              | 3.48                         | 21.25           |
|                 | <b>Green</b>           | 30.26              | 6.99                         | 52.17           |
|                 | <b>Blue</b>            | 3.4                | 0.79                         | 7.56            |
| <b>AL Dot L</b> | <b>White (full on)</b> | 134.81             | 30.5                         | 48.32           |
|                 | <b>White (RGB off)</b> | 72.89              | 16.49                        | 77.54           |
|                 | <b>RGB</b>             | 63.27              | 14.31                        | 33.83           |
|                 | <b>Red</b>             | 20.42              | 4.62                         | 20.84           |
|                 | <b>Green</b>           | 39.23              | 8.88                         | 52.31           |
|                 | <b>Blue</b>            | 5.4                | 1.22                         | 10.19           |

### Illuminance at a Distance

|                 | Center beam Lux/klm | Beam width (m) H |
|-----------------|---------------------|------------------|
| <b>AL Dot M</b> | 231                 | 5.94m            |
|                 | 58                  | 11.89m           |
|                 | 26                  | 17.83m           |
|                 | 14                  | 23.77m           |
|                 | 9                   | 29.71m           |

For fc divide by 10.7  
IES and LDT files are available for download from the Traxon website.

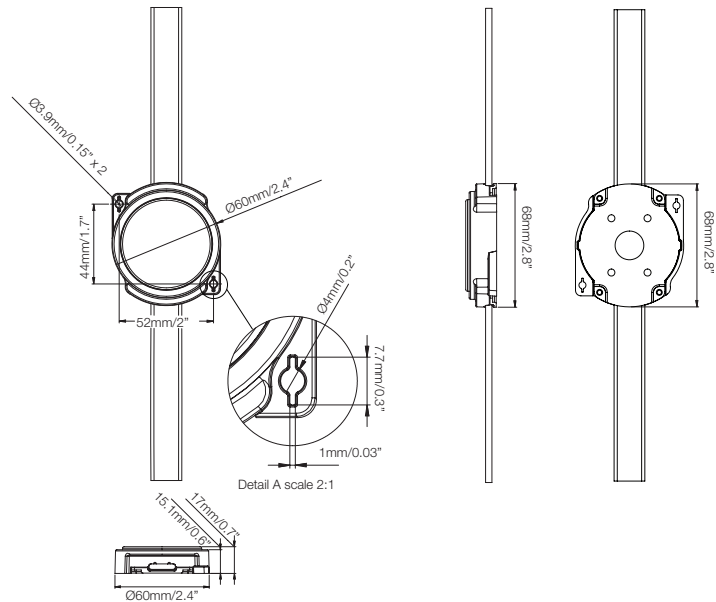
|                 | Center beam Lux/klm | Beam width (m) H |
|-----------------|---------------------|------------------|
| <b>AL Dot L</b> | 226                 | 6.50m            |
|                 | 57                  | 13.00m           |
|                 | 25                  | 19.50m           |
|                 | 14                  | 26.00m           |
|                 | 9                   | 32.51m           |

For fc divide by 10.7  
IES and LDT files are available for download from the Traxon website.

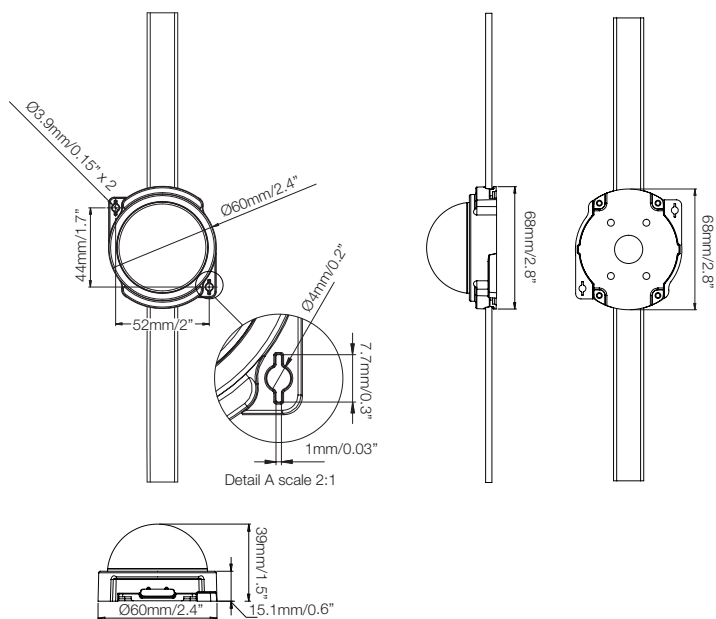
[www.traxontechnologies.com](http://www.traxontechnologies.com)

©2019 TRAXON TECHNOLOGIES - AN OSRAM BUSINESS. ALL RIGHTS RESERVED. TRAXON™, TX CONNECT®, ARE TRADEMARKS OF TRAXON TECHNOLOGIES. U.S. PATENTS, E.U. PATENTS, JAPAN PATENTS, OTHER PATENTS PENDING. SPECIFICATIONS ARE SUBJECT TO CHANGE WITHOUT NOTICE.

Dot M/ L Direct View



Dot M/ L Diffused View

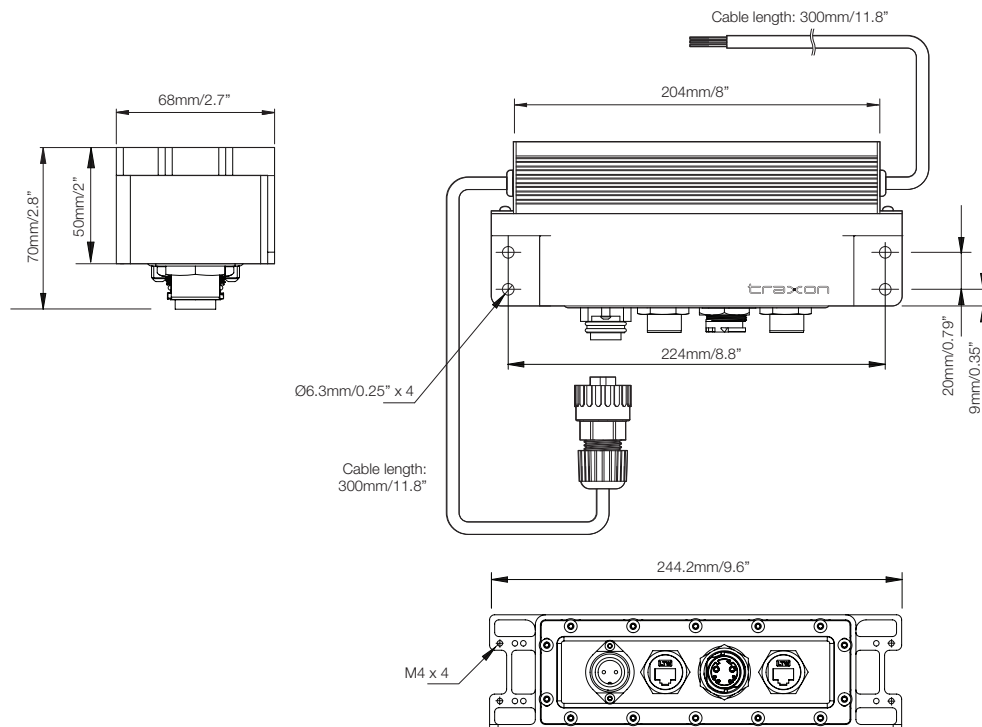




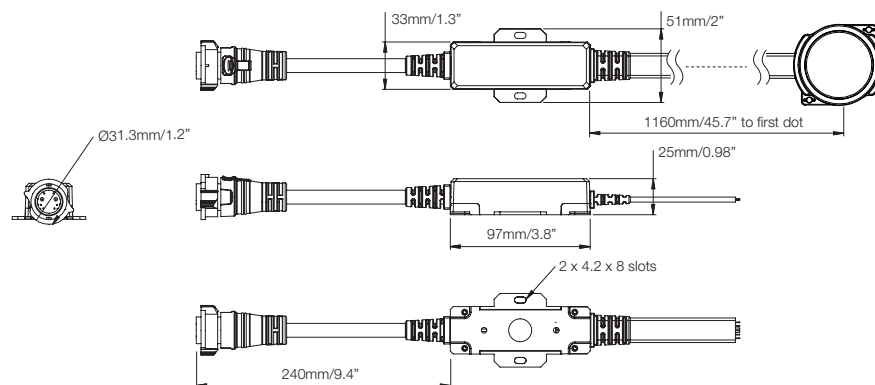
## Allegro Dot M RGB/RGBW Allegro Dot L RGB/RGBW

## Dimensions

### Pixel Distributor with Power Supply (Outdoor)



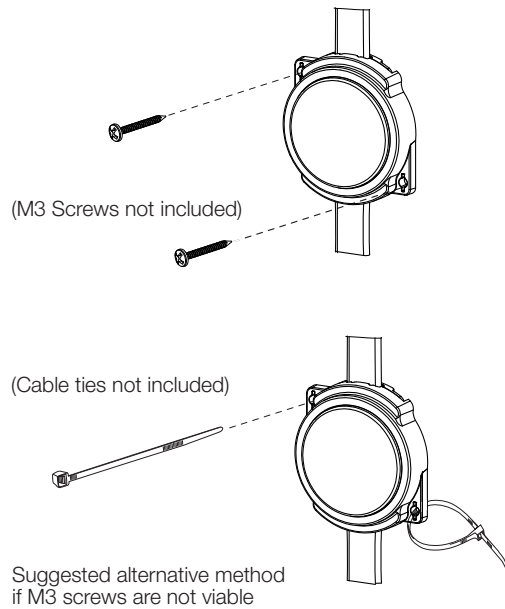
### Dot M/ L Smart Junction



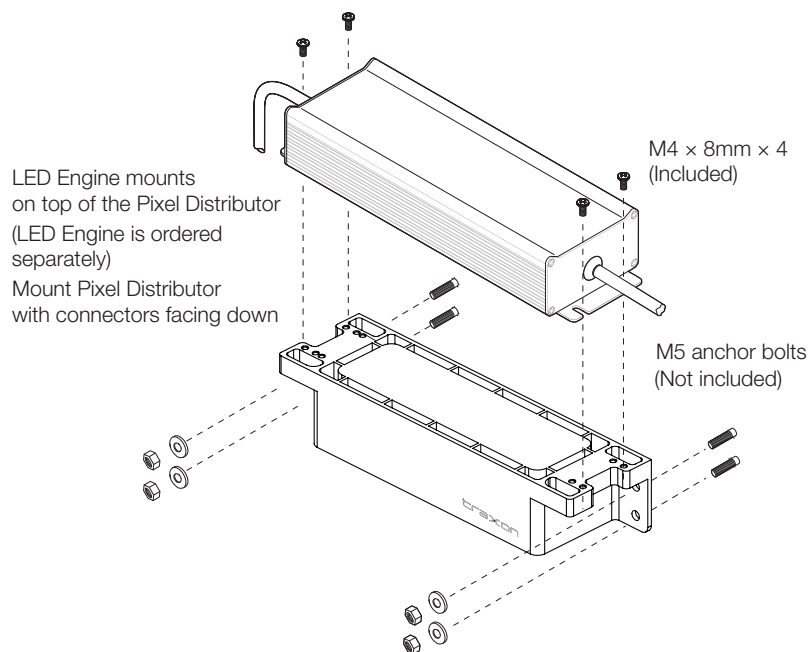
[www.traxontechnologies.com](http://www.traxontechnologies.com)

©2019 TRAXON TECHNOLOGIES - AN OSRAM BUSINESS. ALL RIGHTS RESERVED. TRAXON™, TX CONNECT®, ARE TRADEMARKS OF TRAXON TECHNOLOGIES. U.S. PATENTS, E.U. PATENTS, JAPAN PATENTS, OTHER PATENTS PENDING. SPECIFICATIONS ARE SUBJECT TO CHANGE WITHOUT NOTICE.

Dot M/ L



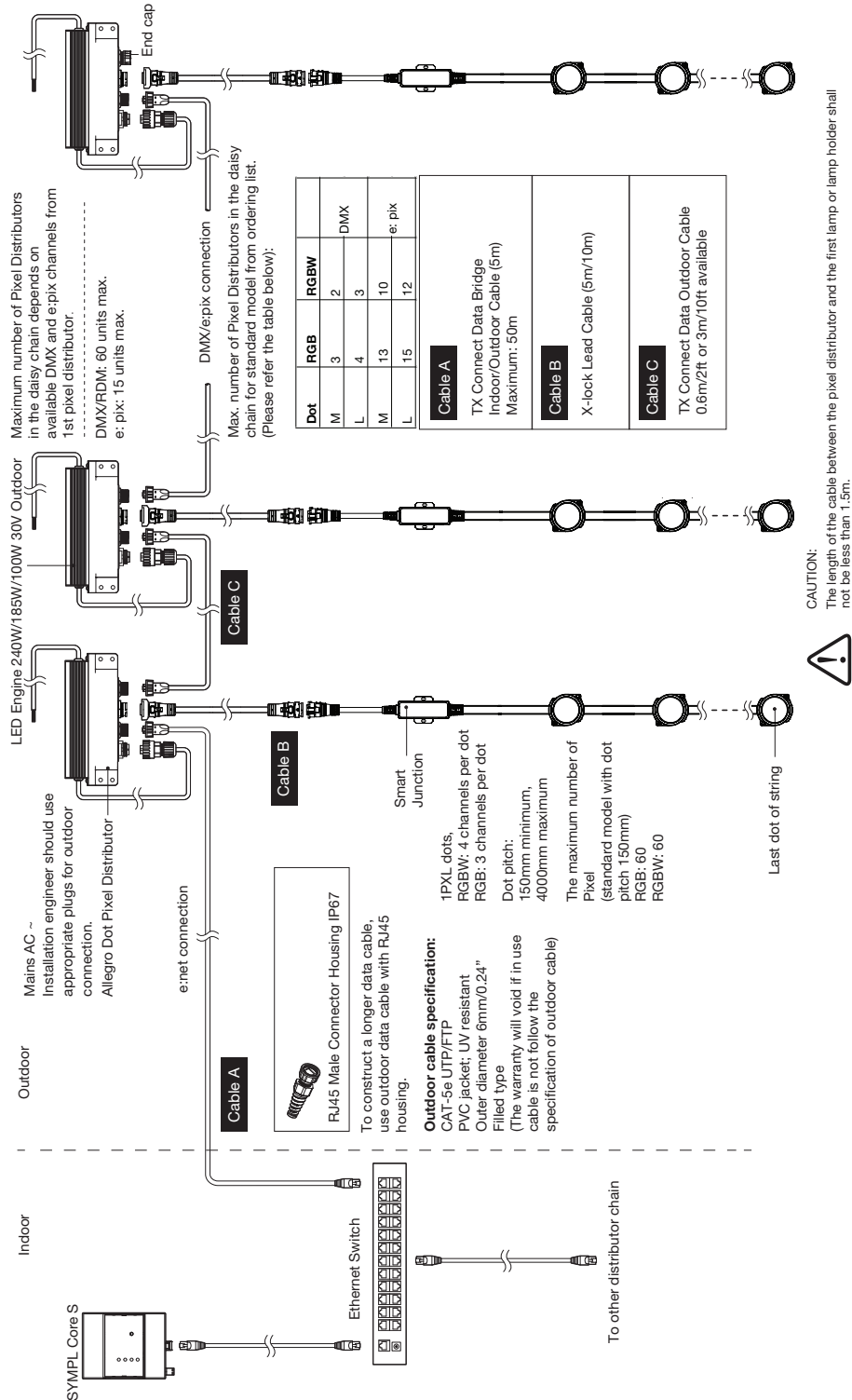
Pixel Distributor



Allegro Dot M RGB/RGBW  
Allegro Dot L RGB/RGBW

System Diagram

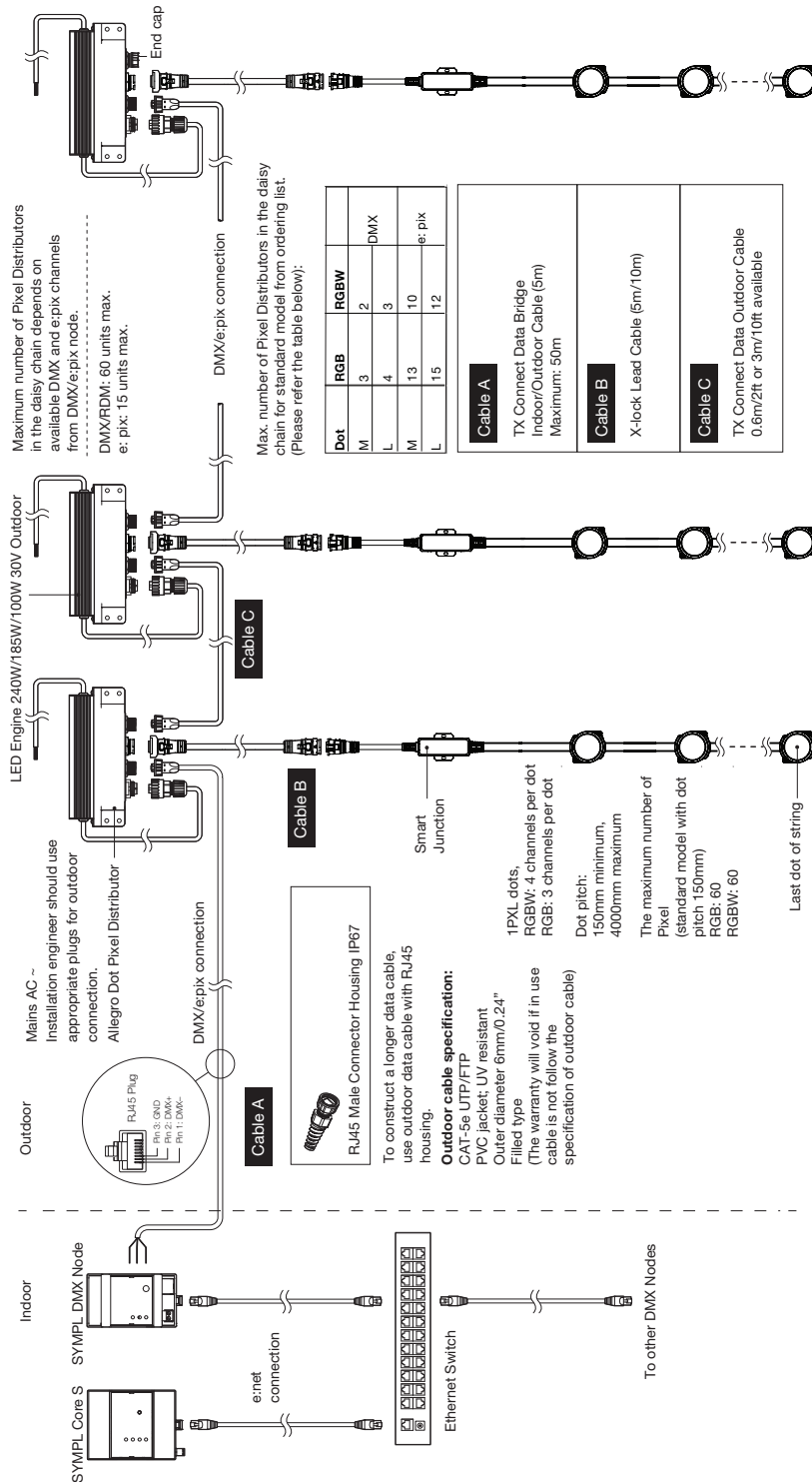
System Diagram-e:net connection



# Allegro Dot M RGB/RGBW Allegro Dot L RGB/RGBW

## System Diagram

### System Diagram-DMX/e:pix connection





## Allegro Dot M RGB/RGBW Allegro Dot L RGB/RGBW

Ordering

### Fixtures

| Model No.     | Description                          | Item Code   |
|---------------|--------------------------------------|-------------|
| DO.A2.1110040 | AL DO M DF RGB 50PPF 150P 1.5M WT    | AM335560055 |
| DO.A2.2110040 | AL DO M DF RGBW65 50PPF 150P 1.5M WT | AM335550055 |
| DO.A2.1210040 | AL DO M CR RGB 50PPF 150P 1.5M WT    | AM335540055 |
| DO.A2.2210040 | AL DO M CR RGBW65 50PPF 150P 1.5M WT | AM335530055 |
| DO.A3.1110040 | AL DO L DF RGB 40PPF 150P 1.5M WT    | AM335600055 |
| DO.A3.2110040 | AL DO L DF RGBW65 40PPF 150P 1.5M WT | AM335590055 |
| DO.A3.1210040 | AL DO L CR RGB 40PPF 150P 1.5M WT    | AM335580055 |
| DO.A3.2210040 | AL DO L CR RGBW65 40PPF 150P 1.5M WT | AM335570055 |

### Standard Accessories

| Model No.     | Description                         | Item Code   |
|---------------|-------------------------------------|-------------|
| DO.AD.0001020 | ALLEGRO DOT PXL DISTRIBUTOR         | AM278810055 |
| DO.AC.0100300 | X-LOCK LEAD CABLE 5M 14AWG VS15 TX  | AM061830055 |
| DO.AC.0100400 | X-LOCK LEAD CABLE 10M 14AWG VS10 TX | AM061850055 |

### Optional Accessories

| Model No. | Description                  | Item Code   |
|-----------|------------------------------|-------------|
| N/A       | AL DOT M/L FIELD CUT END CAP | AM355000055 |

### E:cue Control

| Model No.     | Description                 | Item Code   |
|---------------|-----------------------------|-------------|
| N/A           | SYMPL Core S                | AB447060035 |
| N/A           | SYMPL DMX Node              | AB444180035 |
| N/A           | SYMPL e:pix Node            | AB443930035 |
| EN.BP.0000100 | Butler Pro DMX/RDM          | AA628600035 |
| EN.BP.0000200 | Butler Pro e:pix            | AA628610035 |
| EN.BU.0000001 | Butler S2                   | AB436200031 |
| AC.BG.0000001 | Butler S2 Garage (Optional) | AA611800031 |

### TX Connect

| Model No.     | Description                                            | Item Code   |
|---------------|--------------------------------------------------------|-------------|
| DE.AC.0000100 | TX CONNECT Data Indoor/Outdoor Bridge Cable, 5m/16.4ft | AA508850055 |
| DE.IC.0060000 | TX CONNECT Data Outdoor Cable, 0.6m/1.97ft             | AA664580055 |
| DE.IC.0300000 | TX CONNECT Data Outdoor Cable, 3m/9.84ft               | AA438810055 |
| DE.AC.0100000 | RJ45 Male Connector Housing IP67                       | AA556100155 |

### TX Power

| Model No. | Description                 | Item Code   |
|-----------|-----------------------------|-------------|
| N/A       | LED ENG 240W 30V IP67 AL DO | AM290860055 |
| N/A       | LED ENG 185W 30V IP67 AL DO | AM019480055 |
| N/A       | LED ENG 100W 30V IP67 AL DO | AM019490055 |



©2019 TRAXON TECHNOLOGIES - AN OSRAM BUSINESS. ALL RIGHTS RESERVED. TRAXON™, TX CONNECT®, ARE TRADEMARKS OF TRAXON TECHNOLOGIES. U.S. PATENTS, E.U. PATENTS, JAPAN PATENTS, OTHER PATENTS PENDING. SPECIFICATIONS ARE SUBJECT TO CHANGE WITHOUT NOTICE.