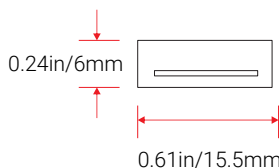


Aqueon® Flat RGB/RGBW Pixel

Color Chasing 24V DC



Aqueon Flat Pixel is a product that each segment is individually addressable so that you can achieve myriad color changing or animation effects via SPI controller. Available in both vertical and horizontal bending. IP67 or IP68 submersible UV and chemical resistant encapsulation. SPI protocol product with built-in IC chip of USC2903 or UCS2904.

FEATURES

- IK08, cUL Listed, UL Listed 2108
- Vertical Bending
- End to end continuous illumination / 17 LEDs per ft (56LEDs per meter)
- Up to 49.2ft(15m) continuous runs
- Standard: Cuttable/addressable section every 7.87" (200mm)
11 LEDs per pixel / 1.5 pixels per ft (5 pixels per meter)
- High Power: Cuttable/addressable section every 4.92" (125mm)
7 LEDs per pixel / 2.4 pixels per ft (8 pixels per meter)
- Pixel RGB and RGBW options
- Ultra low energy; RGB -1.83 w/ft (6 w/m) / RGBW -2.74 w/ft (9 w/m)
- 1"(25mm) minimum bending radius
- 5 year limited warranty; 60,000 hrs white, 100,000 hrs color LED lifetime
- SPI signal input, DMX512 signal compatible, DMX address programmable
- UV/IR protected silicone injection molded material
- Ambient working temperature -40°F~131°F (-40°C~55°C)

PART NUMBER & SPECIFICATIONS

Part #	Color	CRI	lm/ft	lm/m	Max Run	W/ft	W/m
Standard Aqueon® Flat RGB/RGBW-Pixel							
051645	RGB	>85	67	220	49.2ft 15m	1.83	6
051647	RGBW-27K	>85	80	264	49.2ft 15m	2.74	9
051648	RGBW-30K	>85	80	264	49.2ft 15m	2.74	9
051649	RGBW-40K	>85	80	264	49.2ft 15m	2.74	9
Part #	Color	CRI	lm/ft	lm/m	Max Run	W/ft	W/m
High Power Aqueon® Flat RGB/RGBW-Pixel							
051645-12	RGB	>85	134	440	49.2ft 15m	3.66	12
051647-15	RGBW-27K	>85	134	440	32.8ft 10m	4.57	15
051648-15	RGBW-30K	>85	134	440	32.8ft 10m	4.57	15
051649-15	RGBW-40K	>85	134	440	32.8ft 10m	4.57	15

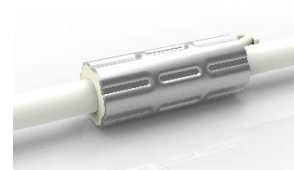
Specifications may be modified or improved without notification

Project

Date

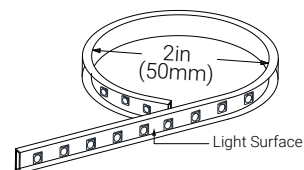
ANTI-WICKING

All connections include a ferrule on the power feed to prevent water wicking through the connection point.

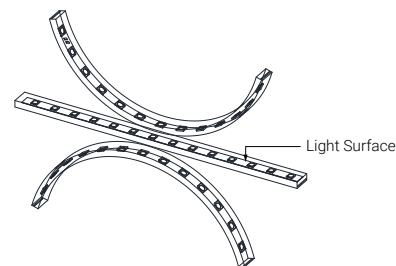


VERTICAL BENDING

Minimum bend diameter
2in (50mm).



The light can only be bent along the light surface.



Do not bend smaller than allowed minimum bend diameter.

Aqueon® Flat RGB/RGBW Pixel

ORGANIC LIGHTING®

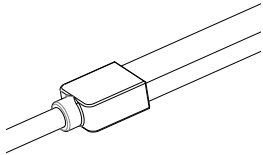
CONNECTORS & ACCESSORIES

Aqueon Flat Pixel RGB & RGBW IP67 accessories include end caps, extension cords and connectors with customizable cord lengths. Snap accessories are field installable.

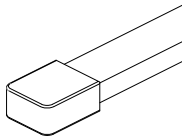
Project

Date

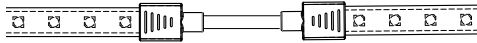
FACTORY ASSEMBLED IP67 CONNECTORS



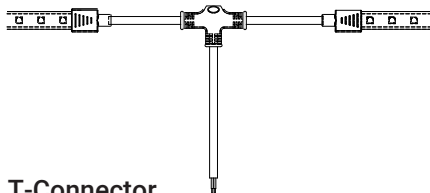
End Connector, 16'L (4.9m)
#051656-CU16



End Cap
#051686

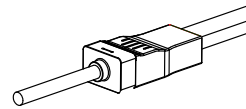


Extension
#051659

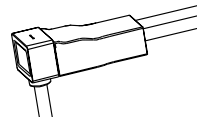


T-Connector
#051658

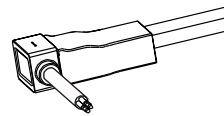
FIELD ASSEMBLY SNAP ON IP67 CONNECTORS



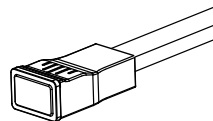
End Snap Connector, 16'L (4.9m)
#051666S-CU16



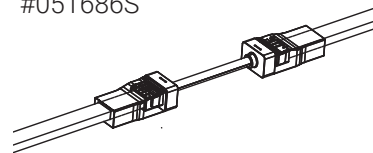
Bottom Snap Connector, 16'L (4.9m)
#051605S-CU16



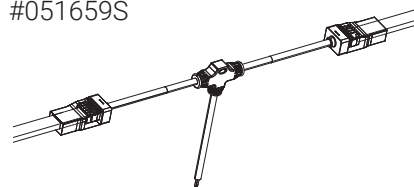
Side Snap Connector, 16'L (4.9m)
#051606S-CU16



Snap End Cap
#051686S



Snap Extension
#051659S



Snap T-Connector
#051658S

Specifications may be modified or improved without notification

Aqueon® Flat RGB/RGBW Pixel

POWER SUPPLIES, MOUNTINGS & EXTRUSIONS

POWER SUPPLIES - 24V

Forward Phase, Reverse Phase, & 0-10V Dimming Drivers. Remote enclosures available.

Part #	Ingress	Voltage	Wattage	Dimensions (inches / mm)	Description
045001	IP67	100-305V	20W	7.6 x 1.18 x 0.79 / 193 x 30 x 20	Dimmable LED Driver
045002	IP67	100-305V	40W	5.83 x 1.57 x 0.87 / 148 x 40 x 22	Dimmable LED Driver
045003	IP67	120-277V	60W	6.3 x 2.24 x 1.5 / 160 x 57 x 38	Dimmable LED Driver
045004	IP67	120-277V	75W	6.3 x 2.24 x 1.5 / 160 x 57 x 38	Dimmable LED Driver
045005	IP67	120-277V	96W	7.6 x 2.24 x 1.5 / 193 x 57 x 38	Dimmable LED Driver
045006	IP67	120-277V	200W	10.1 x 3.03 x 1.8 / 257 x 77 x 46	Dimmable LED Driver
045007	IP67	120-277V	300W	11.9 x 3.03 x 1.8 / 302 x 77 x 46	Dimmable LED Driver

ENCLOSURES

Part #	Ingress	Dimensions (inches / mm)	Description
045008	IP67	11.02 x 4.05 x 2.2 / 280 x 103 x 56	20W Enclosure
045009	IP67	11.02 x 4.05 x 2.2 / 280 x 103 x 56	40W Enclosure
045010	IP67	11.02 x 4.05 x 2.2 / 280 x 103 x 56	60W Enclosure
045011	IP67	11.02 x 4.05 x 2.2 / 280 x 103 x 56	75W Enclosure
045012	IP67	11.02 x 4.05 x 2.2 / 280 x 103 x 56	96W Enclosure
045013	IP67	16.7 x 9.8 x 2.3 / 424 x 249 x 58	200W Enclosure
045014	IP67	16.7 x 9.8 x 2.3 / 424 x 249 x 58	300W Enclosure

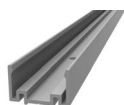
DMX CONTROLLER

Part #	Description
011343	100W Digital Controller
011344	180W Digital Controller
011345	720W Digital Controller
011341	Digital Controller & Power Supply Combination
011410	Nicolaude DE3 DMX 512 Controller
011403	Nicolaude DINA-DR1 DMX 512 Controller
050203	LT-200 SPI Controller - For Pixel
050205	DMX512 SPI Converter Decoder - For Pixel

MOUNTINGS & EXTRUSIONS

Mounting Channels to Match any Installation

Aluminum Channel



- High Quality Aluminum
- Lightweight
- Cost Effective

39.37in(1000mm) L - #051694

Clear Lensed Channel, 1/2" H



- Light-weight
- Easy to Install & Dismantle
- 1/2" High, 3/4" available
- Clear lens, frosted lens available.

39.37in(1000mm) L - #051695

Clear Lensed Channel, 3/4" H



- Light-weight
- Easy to Install & Dismantle
- 1/2" High, 3/4" available
- Clear lens, frosted lens available.

39.37in(1000mm) L - #51696

Frosted Lensed Channel, 1/2" H



- Light-weight
- Easy to Install & Dismantle
- 1/2" High, 3/4" available
- Clear lens, frosted lens available

39.37in(1000mm) L - #051697

Frosted Lensed Channel, 3/4" H



- Light-weight
- Easy to Install & Dismantle
- 1/2" High, 3/4" available
- Clear lens, frosted lens available

39.37in(1000mm) L - #51698

PVC Mounting Channel



- Light-weight
- Self adhesive

48in(1219mm) L - #037006

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Date

20W-60W Dimmable Driver



75W-300W Dimmable Driver



DMX512 SPI Converter Decoder



LT-200 SPI Controller



Specifications may be modified or improved without notification

Aqueon® Flat RGB/RGBW Pixel

CABLE REQUIREMENT

The Aqueon® LED strips need a minimum voltage at the beginning of the LED strip to function according to the specifications. The table below gives an indication of the maximum cable length based on the cable thickness. The standard starter cable is (18 AWG), see table below for max cable lengths.

In case the required length is longer than the length mentioned in this cable, it is recommended to cut the starter cable down to 1ft (0.3m) and splice a larger gauge cable. Please contact your distributor for a detailed cable calculation.

Cable X Information	LED Strip	Max. Cable Length
6W/m		24V
18 AWG *Standard	3.28ft / 1m 16.4ft / 5m 32.8ft / 10m 39.4ft / 12m 49.2ft / 15m	656ft / 200m 118ft / 36m 46ft / 14m 32.8ft / 10m 3ft / 1m
16 AWG	3.28ft / 1m 16.4ft / 5m 32.8ft / 10m 39.4ft / 12m 49.2ft / 15m	1115ft / 340m 196ft / 60m 78ft / 24m 52ft / 16m 26ft / 8m
14 AWG	3.28ft / 1m 16.4ft / 5m 32.8ft / 10m 39.4ft / 12m 49.2ft / 15m	1771ft / 540m 328ft / 100m 131ft / 40m 78ft / 24m 39ft / 12m

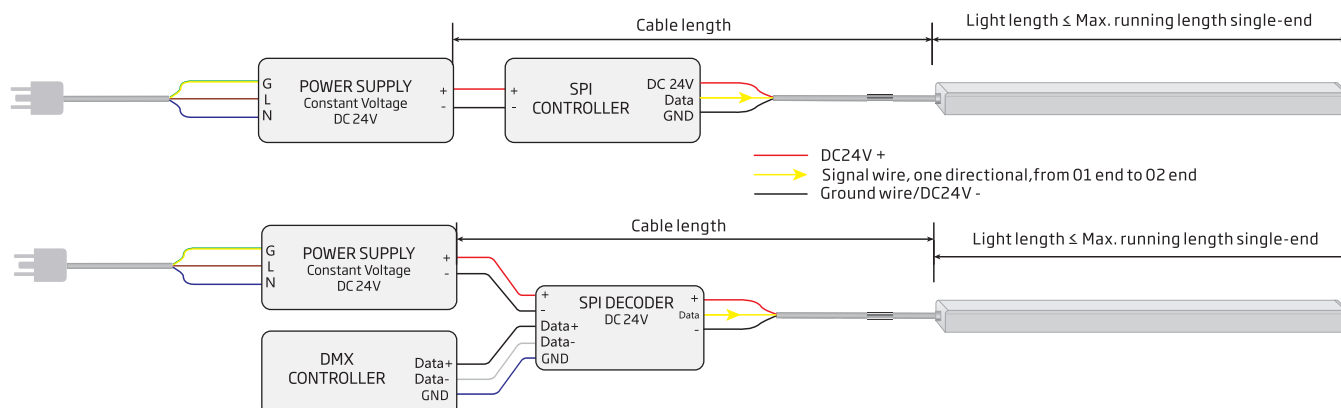
Cable X Information	LED Strip	Max. Cable Length
9W/m-12W/m		24V
18 AWG *Standard	3.28ft / 1m 16.4ft / 5m 32.8ft / 10m 39.4ft / 12m 49.2ft / 15m	362.8ft / 110.6m 66.5ft / 20.3m 27.2ft / 8.3m 17.7ft / 5.4m 2ft / 0.6m
16 AWG	3.28ft / 1m 16.4ft / 5m 32.8ft / 10m 39.4ft / 12m 49.2ft / 15m	591.1ft / 180.2m 108.4ft / 33m 44.3ft / 13.5m 28.8ft / 8.8m 14.8ft / 4.5m
14 AWG	3.28ft / 1m 16.4ft / 5m 32.8ft / 10m 39.4ft / 12m 49.2ft / 15m	927ft / 282.6m 170ft / 51.8m 69.5ft / 21.2m 45.1ft / 13.8m 23.2ft / 7.1m

Cable X Information	LED Strip	Max. Cable Length
15W/m		24V
18 AWG *Standard	3.28ft / 1m 9.84ft / 3m 16.4ft / 5m 23ft / 7m 32.8ft / 10m	278.1ft / 84.8m 89.3ft / 27.2m 48.8ft / 14.9m 29.9ft / 9.1m 27.9ft / 8.5m
16 AWG	3.28ft / 1m 9.84ft / 3m 16.4ft / 5m 23ft / 7m 32.8ft / 10m	453.2ft / 138.1m 145.6ft / 44.4m 79.6ft / 24.3m 48.8ft / 14.9m 45.5ft / 13.9m
14 AWG	3.28ft / 1m 9.84ft / 3m 16.4ft / 5m 23ft / 7m 32.8ft / 10m	710.7ft / 216.6m 228.3ft / 69.6m 124.8ft / 38m 76.5ft / 23.3m 71.3ft / 21.7m

NOTE: To avoid signal degradation, please ensure the data cable length is within the maximum signal transmission distance according to the specification of controller / decoder.

ELECTRICAL DETAILS

Pixel / Single-end Feed



Specifications may be modified or improved without notification