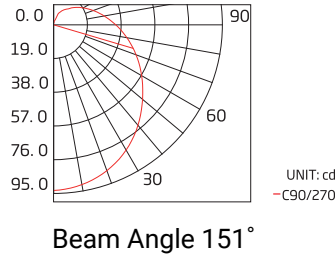


Aqueon® Neon Mono - Pixel

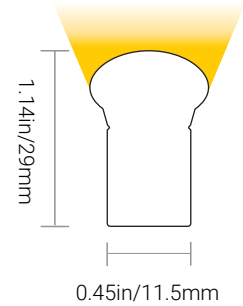
24V DC ● ● ● ● ● ●



ORGANIC LIGHTING®

Project

Date

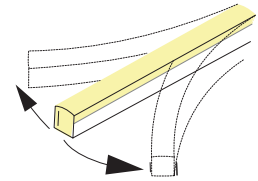


Aqueon NEON Monochrome Pixel is a horizontal bending flexible neon LED Strip. Made from structurally superior Silicone encapsulation; Aqueon NEON offers resistance to UV exposure, chemical, and the most challenging exterior environments. Premium NICHIA LED's with SDCM3 binning for accurate color rendering and exceptional lifetime consistency. Use SPI Pixel signal to create dazzling Mono color chasing effects, similar to retro neon signage.

FEATURES

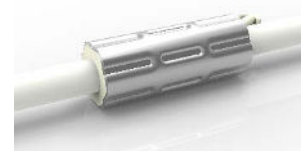
- End to end Continuous Illumination
- Constant Voltage DC 24V
- Horizontal Bending Only - Min Bending Diameter 4.72 in (120mm)
- Flood and Vibration Proof
- Cuttable every: 6.56in(166.7mm)
- Max Run Length- 49.2ft (15m)
- Available in Mono 22K, 27K, 30K, 35K, 40K, 57K, Red, Green, Blue, Amber
- Ambient Working Temperature: -40~131°F / -40~55°C
- Storage Temperature: -40~140°F / -40~60°C
- 5 Year Limited Warranty - 50,000 hrs white
- IP68 Waterproof Connectors
- IK10 Rated, CE-EMC, cUL Listed, UL Listed 676, UL Listed 2108, IP68

HORIZONTAL BENDING



ANTI-WICKING

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



PART NUMBER & SPECIFICATIONS

Aqueon Neon® Monochrome - Pixel

Part #	Color	W/ft	W/m	CRI	lm/ft	lm/m	lm/W
054120	2200K	4.57	15	>80	95	310	20.78
054121	2700K	4.57	15	>80	116	380	25.38
054122	3000K	4.57	15	>80	116	380	25.38
054123	3500K	4.57	15	>80	116	380	25.38
054124	4000K	4.57	15	>80	116	380	25.38
054125	5700K	4.57	15	>80	116	380	25.38

Specifications may be modified or improved without notification

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Aqueon® Neon Mono - Pixel

CONNECTORS & ACCESSORIES

Factory assembled 3-wired Aqueon IP68 submersible accessories include end caps, extension cords and connectors with customizable cord lengths. IP67 self assembly connectors are also available.

Project

Date

FACTORY ASSEMBLED IP68 CONNECTORS

Silicone Injection - molded connectors (3 wire)



**End Feed
IP68 Connector**
#054140-CU16



**Left Feed
IP68 Connector**
#054141-CU16



**Right Feed
IP68 Connector**
#054142-CU16



**Bottom Feed
IP68 Connector**
#054143-CU16



**T-Connector
IP68 Connector**
#054144-CU16



**Jumper
IP68 Connector**
#054145-CU16



**End Cap
IP68 Connector**
#054046

FIELD ASSEMBLY IP67 CONNECTORS

Snap Connectors (3 wire)



**End Feed
IP67 Connector**
#054140S-CU16



**Left Feed
IP67 Connector**
#054141S-CU16



**Right Feed
IP67 Connector**
#054142S-CU16



**Bottom Feed
IP67 Connector**
#054143S-CU16



**T-Connector
IP67 Connector**
#054144S-CU16



**Jumper
IP67 Connector**
#054145S-CU16



**End Cap
IP67 Connector**
#054046S

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Aqueon® Neon Mono - 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	9.4 x 2.6 x 1.9 / 239 x 66 x 48	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
011420	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

PET and Aluminum Mounting Channels to Match any Installation

Aluminum Channel



- High Quality Aluminum
- Lightweight
- Cost Effective
- Available with a Flange for Recessed Installation

3.25ft (1m) L - #054060

1.38in (35mm) L - #054060-CU1

Flanged Aluminum Channel



- High Quality Aluminum
- Lightweight
- Cost Effective
- Flange for Recessed Installation

3.25ft (1m) L - #054061

1.38in (35mm) L - #054061-CU1

Flanged Serrated Aluminum Channel



- Lightweight
- Easy to Install & Dismantle
- Continuous & Strong Gripping
- Flange for Recessed Installation

3.25ft (1m) L - #054063

0.79in (20mm) L - #054063-CU1

Bendable Serrated Aluminum Channel



- High Quality Aluminum
- Easy to Install & Dismantle
- Continuous & Strong Gripping
- Memory Retaining
- Perfect for Curved Installations

3.25ft (1m) L - #054064



Project

Date

20W -60W Dimmable Driver



75W -300W Dimmable Driver



Digital Controller (100W, 180W, 720W)



Nicolaude DE3 DMX 512 Controller



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Aqueon® Neon Mono - Pixel

MOUNTINGS & WIRING DIAGRAMS

MOUNTINGS & EXTRUSIONS (CONTINUED)

Serrated Aluminum Channel



- Continuous & Strong Gripping
- Lightweight
- Easy to Install & Dismantle
- For Suspended Installations
- Available with a Flange for Recessed Installation

3.25ft (1m) L - #054062

0.79in (20mm) - #054062-CUI

Stainless Steel Channel



- Grade 316 Stainless Steel
- Easy to Install & Dismantle
- Rust Resistant
- Suitable for Humid environments
- Perfect for Curved Installations

1.38in (35mm) L - #054065

Thickened Plastic Channel



- 0.12in(3mm) Thick Plastic Profile
- Easy to Install & Dismantle
- Corrosion Resistant

3.25ft (1m) L - #054066

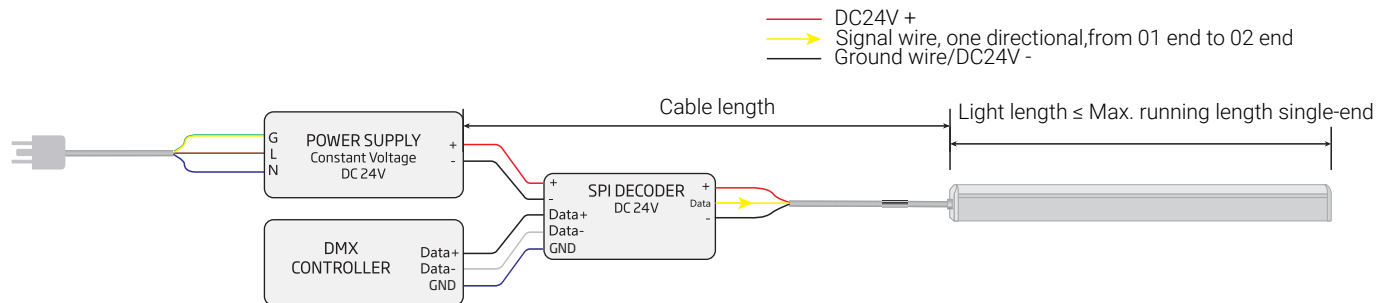
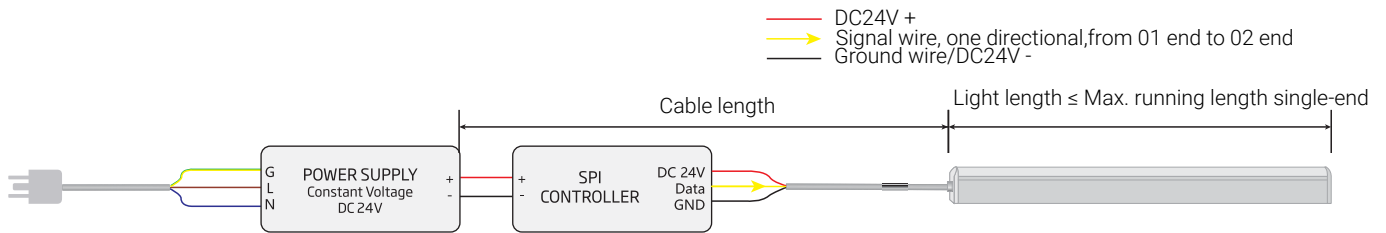
0.79in (20mm) - #054066-CU1

1.64ft (0.5m) L - #054066-CU2

6.56ft (2m) - #054066-CU6

WIRING DIAGRAMS

SINGLE-END FEED



Aqueon® Neon Mono - 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 (20 AWG) has a cable length of 16ft(4.88m).

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 and splice a larger gauge cable. Please contact your distributor for a detailed cable calculation.

Cable X Information	LED Strip	Max. Cable Length
		24 V
20 AWG x 2	3.28 ft / 1m	303 ft / 92.35m
	16.4 ft / 5m	57 ft / 17.37m
	32.8 ft / 10m	36 ft / 10.98m
	49.2 ft / 15m	20 ft / 6.1m
	65.6 ft / 20m	16 ft / 4.9m
18 AWG x 2	3.28 ft / 1m	457 ft / 139.3m
	16.4 ft / 5m	86 ft / 26.21m
	32.8 ft / 10m	56 ft / 17.07m
	49.2 ft / 15m	35 ft / 10.67m
	65.6 ft / 20m	25 ft / 7.62m
16 AWG x 2	3.28 ft / 1m	914 ft / 278.6m
	16.4 ft / 5m	172 ft / 52.43m
	32.8 ft / 10m	90 ft / 27.43m
	49.2 ft / 15m	60 ft / 18.3m
	65.6 ft / 20m	40 ft / 12.2m
14 AWG x 2	3.28 ft / 1m	1521 ft / 463.6m
	16.4 ft / 5m	287 ft / 87.5m
	32.8 ft / 10m	140 ft / 42.67m
	49.2 ft / 15m	96 ft / 29.26m
	65.6 ft / 20m	70 ft / 21.34m