NEON APEX

Neon Apex is a flexible LED neon designed for unique applications that require a top-bending light surface. Featuring a pliable silicone lens, Neon Apex is a great solution for lighting above or below an arch or wrapping around other unique molded shapes. With Static White, Variable White, color changing RGBW and even Addressable RGBW options, Neon Apex marries the classic gleam of neon with all the benefits of modern LEDs.

• Top-bending design, just like our RibbonLyte
• RGBW, Static White, Variable White at 4.5 W/ft (14.76 W/m)
• Addressable RGBW at 5.3 W/ft (17.4 W/m)
• Static White, Variable White cut lengths at 1.97 in. (50 mm)
• RGBW cut lengths at 3.28 in. (83.33 mm)
• Addressable RGBW cut lengths at 3.94 in. (100 mm)
• Waterproof and UV resistant
• Salt water resistant
• Compact square design creates signature style

Applications:

Commercial
Entertainment
Healthcare

Hospitality
Museums
Public Spaces

Residential
Retail / Signage

UL   CE   RoHS   REACH   IP67   TM66 ASSESSED

ORDERING GUIDE

Category	Wattage & Color		Power Feed Direction
NLA			
NLA - Neon Apex	**4.524** - 4.5 W/ft 2400K	**4.5VW** - 4.5 W/ft Variable White (2400K-6000K)	**E** - End Feed
	4.527 - 4.5 W/ft 2700K	**4.5RGB27** - 4.5 W/ft RGB+White (2700K)	**B** - Bottom Feed
	4.530 - 4.5 W/ft 3000K	**4.5RGB30** - 4.5 W/ft RGB+White (3000K)	
	4.535 - 4.5 W/ft 3500K	**4.5RGB40** - 4.5 W/ft RGB+White (4000K)	
	4.540 - 4.5 W/ft 4000K	**5.3RGB30ADD** - 5.3 W/ft RGBW (3000K) Addressable	

Mounting

1. Mounting Clips
Recommended for curved applications with 6 in. (150 mm) on center spacing
(Part #: NLAMOUNTCLIPV2)

2. Mounting Channel
Recommended for all straight run applications
Sold by the foot, up to 6 ft 6 in. / 2 m
(Part #: NLACHV2)

AVAILABLE COLORS AND COLOR TEMPERATURES

2400K	2700K	3000K	3500K	4000K	VW	RGBW

POWER FEED OPTIONS / SPECIFICATIONS / USAGE GUIDELINES

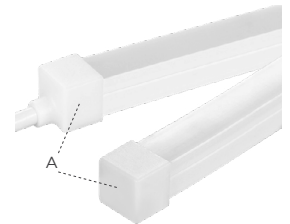| SPECIFICATIONS	NEON APEX
Operating Voltage	24 VDC
Power Consumption	Static White, Variable White, RGBW: 4.5 W/ft (14.76 W/m) RGBW Addressable: 5.3 W/ft (17.4 W/m)
Protection Rating	IP67
Beam Angle	110°
Dimming	ELV / MLV / 0-10 Volt / DMX
Operating Temperature	-4 — 140 °F (-20 — 60 °C)
Color Temperatures / Colors	2400K, 2700K, 3000K, 3500K, 4000K, Variable White (2400K-6000K), RGBW (2700K, 3000K, 4000K), RGBW (3000K) Addressable
Lamp Life	50,000 hours
Max Length	Static White: 39 ft 4.4 in. (12 m) Variable White, RGBW, RGBW Addressable: 16 ft 4.85 in. (5 m)
Cuttable Length	Static White, Variable White: 1.97 in. (50 mm) RGBW: 3.28 in. (83.33 mm) RGBW Addressable: 3.94 in. (100 mm) **NOT FIELD CUTTABLE**
Power Cable Length	Standard: 12 in (304.8 mm) / Custom: up to 20 ft (6 m)
UV Resistant	UV tested in accordance with ISO 4892-3 with no visible change on the appearance of the sample
Minimum Bend Radius	4.72 in. (120 mm)
CRI (white)	90+ for all Color Temperatures
Lumens	**4.5 Static White** 4000K: 351 lm/ft (1151.3 lm/m), 78 lm/W
	4.5 Variable White 293 lm/ft (961 lm/m), 69 lm/W
	4.5 RGBW Red: 14 lm/ft (45.9 lm/m), 17 lm/W / Green: 43 lm/ft (141 lm/m), 51 lm/W / Blue: 10 lm/ft (32.8 lm/m), 16 lm/W White: 75 lm/ft (246 lm/m), 67 lm/W / All LEDs at 100%: 142 lm/ft (465.8 lm/m), 31.6 lm/W
	5.3 RGBW Addressable Red: 14 lm/ft (45.9 lm/m), 12 lm/W / Green: 40 lm/ft (131.2 lm/m), 36 lm/W / Blue: 9 lm/ft (29.5 lm/m), 9 lm/W / White: 43 lm/ft (141 lm/m), 65 lm/W / All LEDs at 100%: 106 lm/ft (347.6 lm/m), 20 lm/W

MOLDED END CAPS

Molded End Cap

Molded Power Feed End Cap

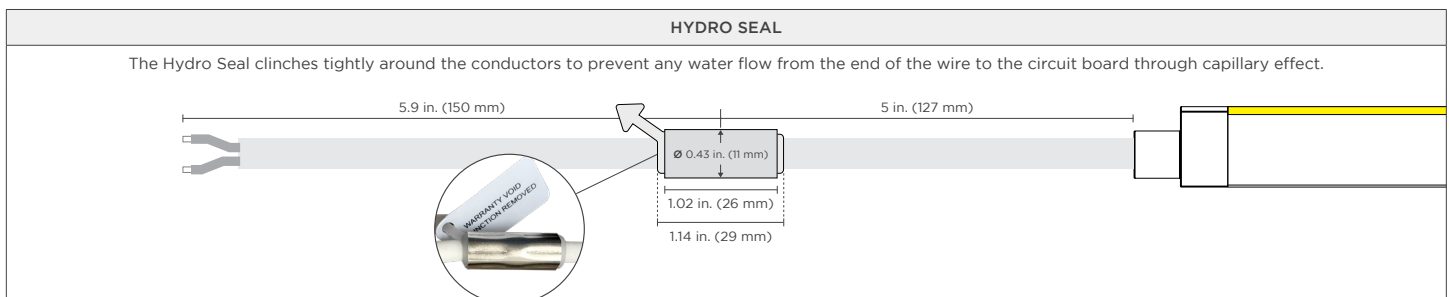**Note:** Fixtures less than 8 in. (203 mm) long will come with silicone end caps (A).
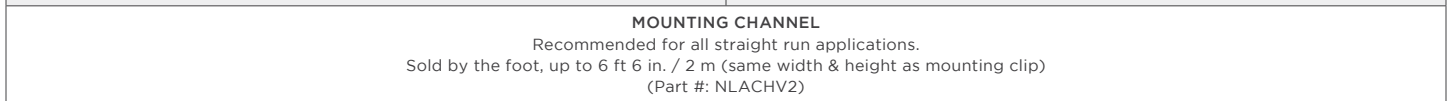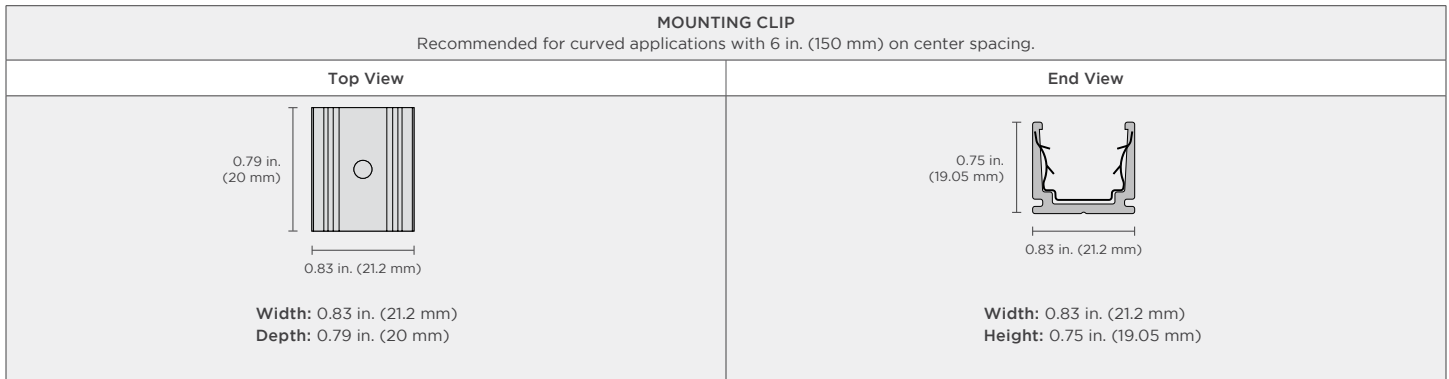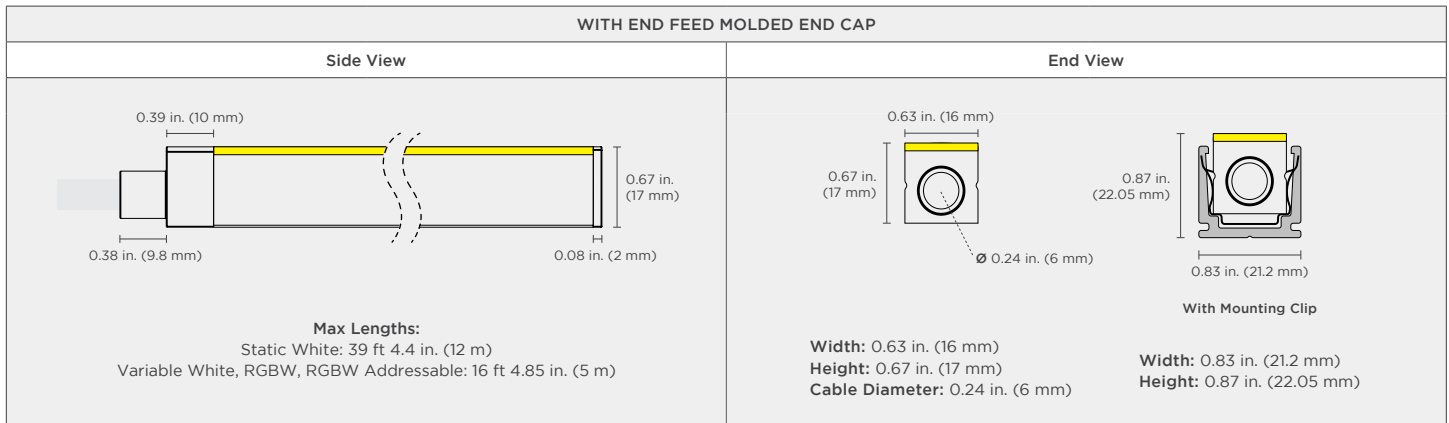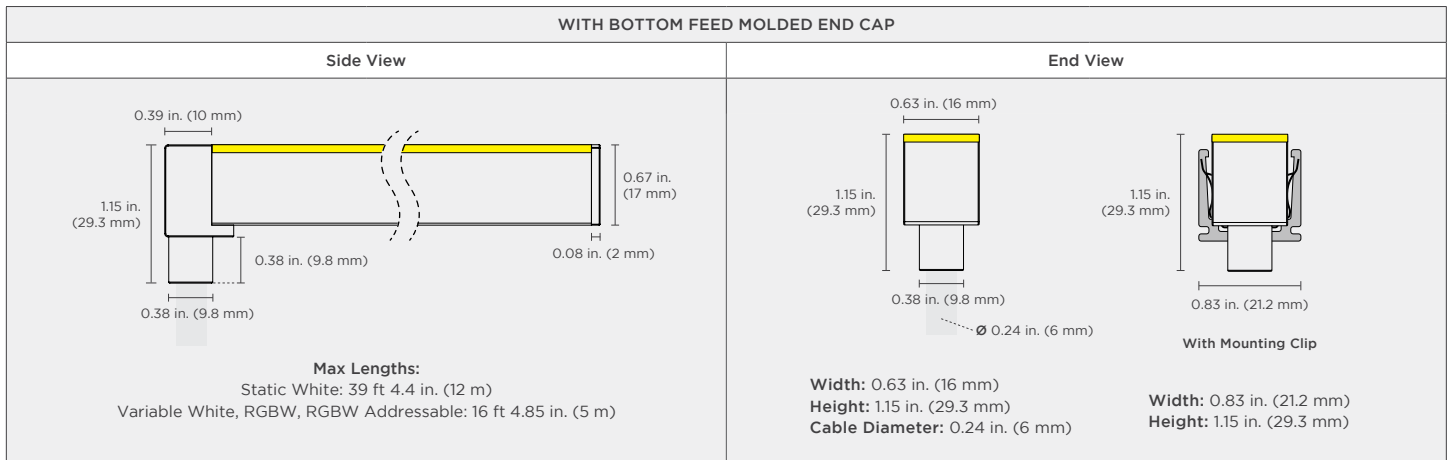

A

USAGE GUIDELINES

- Neon Apex cannot be cut in the field. All custom cuts and connections for these models must be performed at the factory to ensure waterproofing standards are met. Any modification of the waterproofing will result in a void warranty.

- When installing this product, consider the surface temperature of the material where it will be mounted. Many building surfaces which are exposed to direct sunlight exceed the 140 °F (60 °C) maximum for which this product is rated. High-risk locations like this should be avoided.

- This product can be used in wet, outdoor locations, but is not intended to be submerged in pools and fountains and does not carry UL 676 certification for submersion.

- Compatible with a wide variety of controls.

- For use with Acolyte drivers, Triac dimming modules, and 0-10 V modules.

- Use with non-Acolyte Triac, MLV or ELV drivers is not supported or warrantied.

- Due to the cuttable points inside, this product's cuttable lengths are generally longer or shorter than the customer requested length. Unless specified, this product is factory cut at the shorter cuttable point.
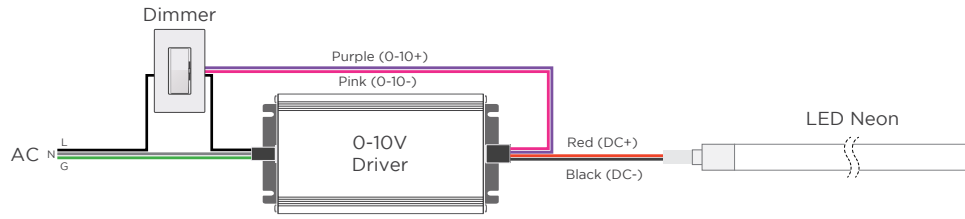
Acolyte does not warrant or represent that this information is free from errors or omission. We reserve the right to make changes to our product lineup, specifications, design and finishes at any time without notice. Acolyte is not in any way liable for the accuracy of any information printed and stored or in any way interpreted or used.
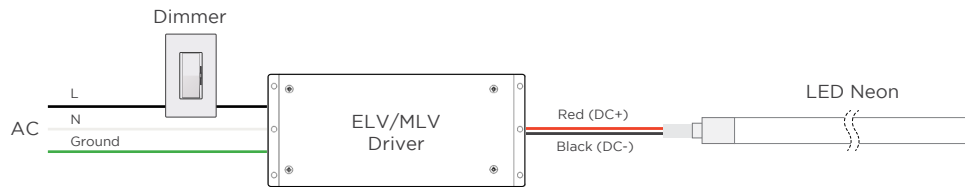
DIMENSIONS / DIAGRAMS

WITH BOTTOM FEED MOLDED END CAP
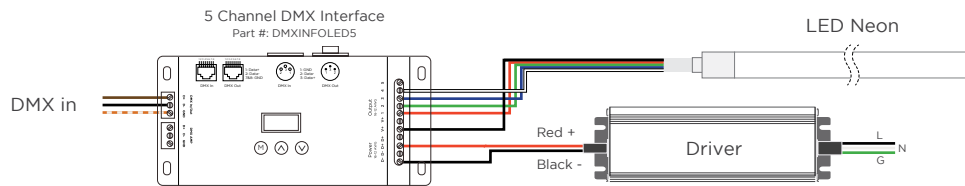
Side View	End View

Side View

0.39 in. (10 mm)
1.15 in. (29.3 mm)
0.38 in. (9.8 mm)
0.38 in. (9.8 mm)
0.67 in. (17 mm)
0.08 in. (2 mm)

Max Lengths:
Static White: 39 ft 4.4 in. (12 m)
Variable White, RGBW, RGBW Addressable: 16 ft 4.85 in. (5 m)

End View

0.63 in. (16 mm)
1.15 in. (29.3 mm)
0.38 in. (9.8 mm)
Ø 0.24 in. (6 mm)

Width: 0.63 in. (16 mm)
Height: 1.15 in. (29.3 mm)
Cable Diameter: 0.24 in. (6 mm)

1.15 in. (29.3 mm)
0.83 in. (21.2 mm)

With Mounting Clip

Width: 0.83 in. (21.2 mm)
Height: 1.15 in. (29.3 mm)

WITH END FEED MOLDED END CAP

Side View	End View

Side View

0.39 in. (10 mm)
0.38 in. (9.8 mm)
0.67 in. (17 mm)
0.08 in. (2 mm)

Max Lengths:
Static White: 39 ft 4.4 in. (12 m)
Variable White, RGBW, RGBW Addressable: 16 ft 4.85 in. (5 m)

End View

0.63 in. (16 mm)
0.67 in. (17 mm)
Ø 0.24 in. (6 mm)

Width: 0.63 in. (16 mm)
Height: 0.67 in. (17 mm)
Cable Diameter: 0.24 in. (6 mm)

0.87 in. (22.05 mm)
0.83 in. (21.2 mm)

With Mounting Clip

Width: 0.83 in. (21.2 mm)
Height: 0.87 in. (22.05 mm)

MOUNTING CLIP
Recommended for curved applications with 6 in. (150 mm) on center spacing.

Top View	End View

Top View

0.79 in. (20 mm)
0.83 in. (21.2 mm)

Width: 0.83 in. (21.2 mm)
Depth: 0.79 in. (20 mm)

End View

0.75 in. (19.05 mm)
0.83 in. (21.2 mm)

Width: 0.83 in. (21.2 mm)
Height: 0.75 in. (19.05 mm)

MOUNTING CHANNEL
Recommended for all straight run applications.
Sold by the foot, up to 6 ft 6 in. / 2 m (same width & height as mounting clip)
(Part #: NLACHV2)

HYDRO SEAL

The Hydro Seal clinches tightly around the conductors to prevent any water flow from the end of the wire to the circuit board through capillary effect.

5.9 in. (150 mm)
5 in. (127 mm)
Ø 0.43 in. (11 mm)
1.02 in. (26 mm)
1.14 in. (29 mm)

WARRANTY VOID
FUNCTION REMOVED

WIRING DIAGRAMS - STATIC WHITE / RGBW

0-10V

Dimmer

Purple (0-10+)
Pink (0-10-)

AC
L
N
G

0-10V
Driver

Red (DC+)
Black (DC-)

LED Neon

MLV / ELV

Dimmer

AC
L
N
Ground

ELV/MLV
Driver

Red (DC+)
Black (DC-)

LED Neon

DMX

5 Channel DMX Interface
Part #: DMXINFOLED5

LED Neon

DMX in

Red +
Black -

Driver

L
N
G

DALI-2 WIRING WITH STATIC WHITE NEON APEX

96W Dimmable DALI-2 DT6 D4I
1 Channel Driver
Part #: DRVW2496DALI1CH

L (Black)
N (White)
G (Green)

Note:
Brown AUX wire does
not need to be used.

(Pink) DALI +
(Purple) DALI -
(Brown) PUSH-L/AUX

(Blue/White) TEMP -
(Yellow/White) TEMP +

Note:
Temp. wires can be used to
control temperature with
optional external sensors.

V + (Red)
V - (Black)

LED Neon
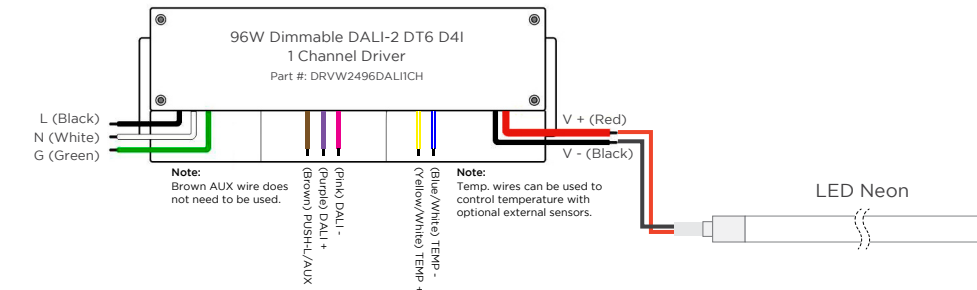
STATIC WHITE NEON APEX WIRING WITH ATHENA WIRELESS COMPATIBLE DRIVER

94W Athena Wireless Compatible
1 Channel Driver
Part #: DRVW2494ATH1CH

L (Black)
N (White)
G (Green)

Note:
Brown AUX wire does
not need to be used.

(Brown) PUSH-L/AUX

Athena
Wireless
Node

(Blue/White) TEMP -
(Yellow/White) TEMP +

Note:
Temp. wires can be used to
control temperature with
optional external sensors.

V + (Red)
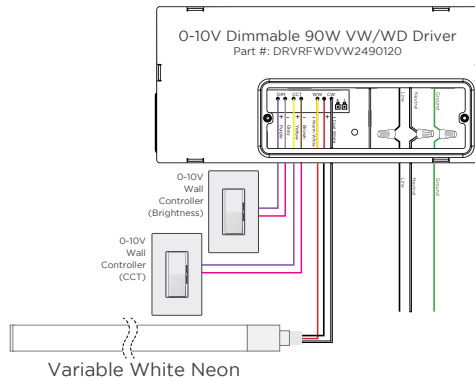V - (Black)

LED Neon

WIRE COLORS PER RIBBONLYTE COLOR

STATIC WHITE
Red Wire (+) Positive
Black Wire (-) Negative

RGBW
Black Wire (+) Positive
Red Wire (-) goes to Red Channel
Green Wire (-) goes to Green Channel
Blue Wire (-) goes to Blue Channel
White Wire (-) goes to White Channel
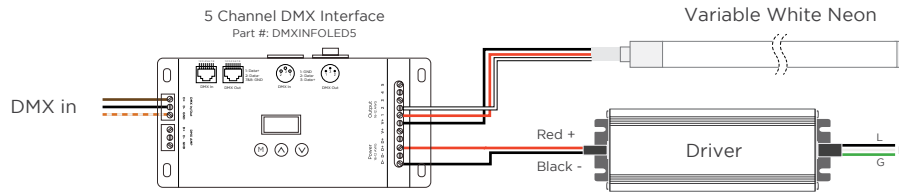

WIRING DIAGRAMS - VARIABLE WHITE
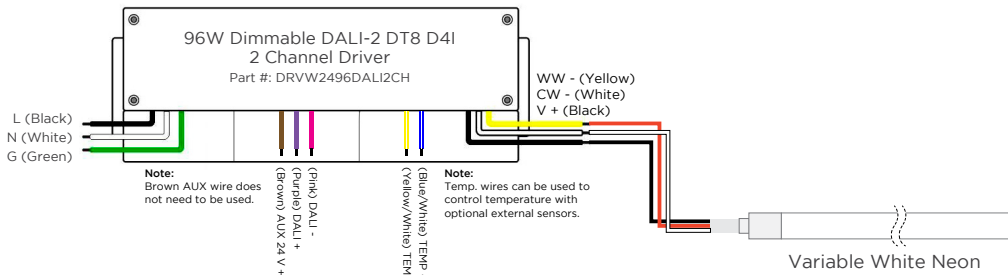
2-CHANNEL VARIABLE WHITE DIMMING

0-10V Dimmable 90W VW/WD Driver
Part #: DRVRFWDVW2490120

0-10V Wall Controller (Brightness)

0-10V Wall Controller (CCT)

Variable White Neon

DMX WIRING DIAGRAM - COMPATIBLE WITH ALL MODELS OF VARIABLE WHITE RIBBONLYTE

5 Channel DMX Interface
Part #: DMXINFOLED5

Variable White Neon

DMX in

Red +
Black -

Driver

L
N
G

DALI-2 WIRING WITH VARIABLE WHITE NEON

96W Dimmable DALI-2 DT8 D4I
2 Channel Driver
Part #: DRVW2496DALI2CH

L (Black)
N (White)
G (Green)

WW - (Yellow)
CW - (White)
V + (Black)

Note:
Brown AUX wire does not need to be used.

(Pink) DALI -
(Purple) DALI +
(Brown) AUX 24 V +

(Blue/White) TEMP -
(Yellow/White) TEMP +

Note:
Temp. wires can be used to control temperature with optional external sensors.

Variable White Neon

ATHENA WIRELESS COMPATIBLE DRIVER WIRING WITH VARIABLE WHITE NEON

94W Athena Wireless Compatible
2 Channel Driver
Part #: DRVW2494ATH2CH

L (Black)
N (White)
G (Green)

WW - (Yellow)
CW - (White)
V + (Black)

Note:
Brown AUX wire does not need to be used.

(Brown) AUX 24 V +

Athena Wireless Node

(Blue/White) TEMP -
(Yellow/White) TEMP +

Note:
Temp. wires can be used to control temperature with optional external sensors.

Variable White Neon

WIRE COLORS PER RIBBONLYTE COLOR

VARIABLE WHITE
Black Wire (+) Positive
Red Wire (-) goes to Warm White Channel
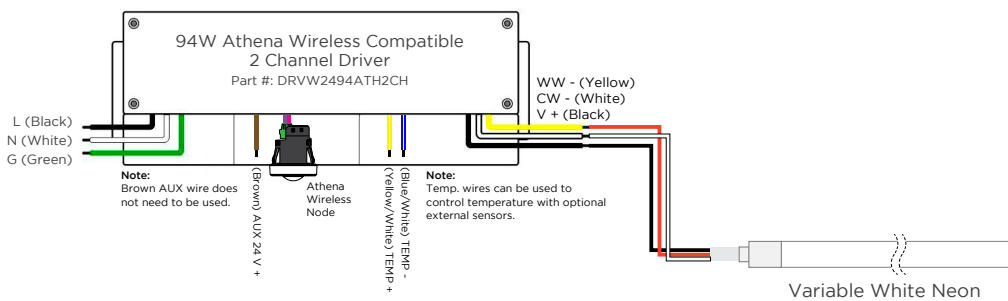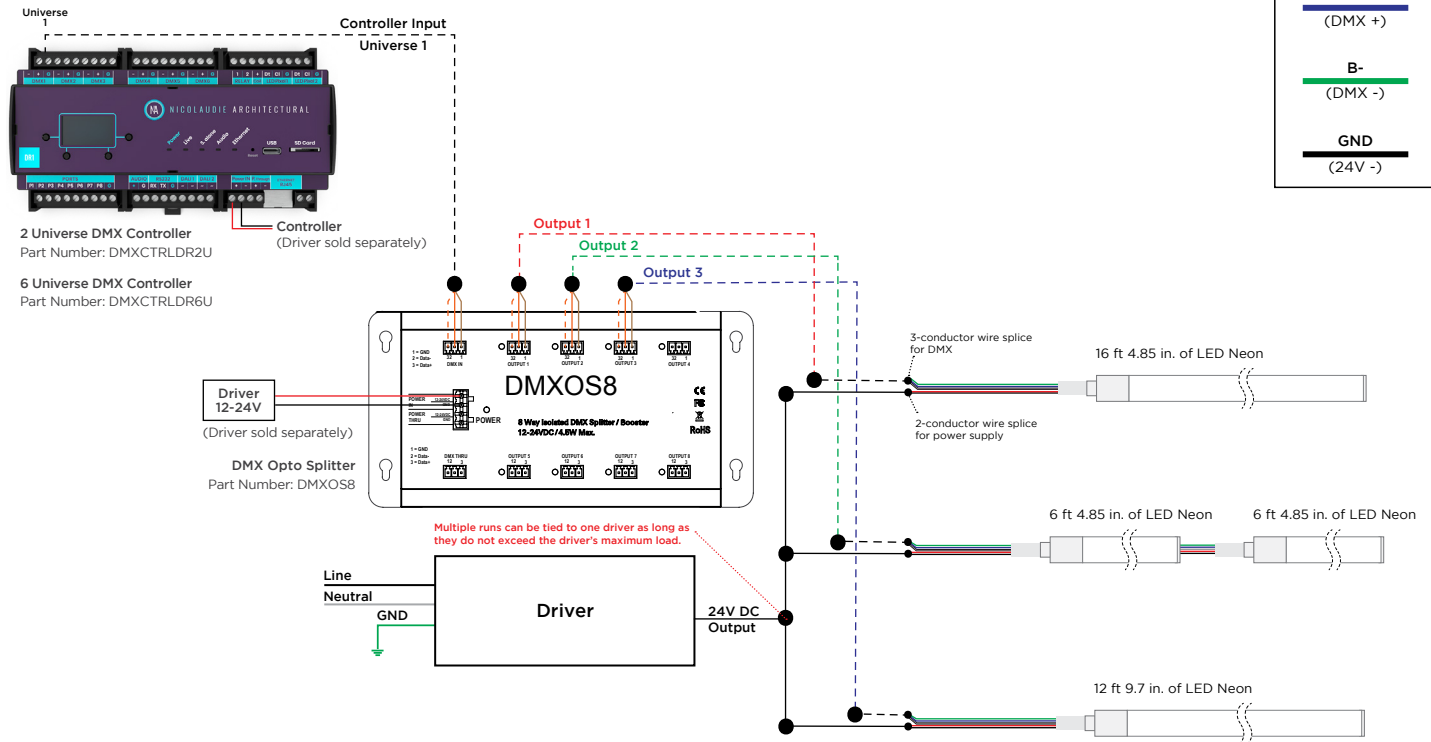White Wire (-) goes to Cool White Channel

WIRING DIAGRAMS - RGBW ADDRESSABLE

One DMX Universe consists of 128 addresses and 512 channels (42 ft 8 in. of Neon Apex).

Any single run of Neon Apex that is less than 16 ft 4.85 in. (5 m) can be wired directly to the controller.

For additional runs, Opto Splitter must be used. Each individual run will need its own Opto Splitter output.

WIRE INDEX

+	(24V +)
PI	(DMX GND)
A+	(DMX +)
B-	(DMX -)
GND	(24V -)

Universe 1

Controller Input
Universe 1

NICOLAUDIE ARCHITECTURAL

2 Universe DMX Controller
Part Number: DMXCTRLDR2U

6 Universe DMX Controller
Part Number: DMXCTRLDR6U

Controller
(Driver sold separately)

Output 1
Output 2
Output 3

DMXOS8
8 Way Isolated DMX Splitter / Booster
12-24VDC / 4.5W Max.

Driver
12-24V
(Driver sold separately)

DMX Opto Splitter
Part Number: DMXOS8

Line
Neutral
GND

Driver

24V DC
Output

Multiple runs can be tied to one driver as long as they do not exceed the driver's maximum load.

3-conductor wire splice for DMX
2-conductor wire splice for power supply

16 ft 4.85 in. of LED Neon

6 ft 4.85 in. of LED Neon   6 ft 4.85 in. of LED Neon

12 ft 9.7 in. of LED Neon