## 4.4 RGBW SERIES 2 RIBBONLYTE

4.4 RGBW Series 2 RibbonLyte is a color changing ribbon controlled with DMX. Each diode uses four separate chips (red, green, blue and white) to provide flawless color blending. Three CCT choices (2700K, 3000K, 4000K) deliver varied levels of brightness. Our RGBW Series 2 RibbonLyte offers better pixel density and shorter cut lengths for more custom fixture options than ever before.

- Color changing with DMX controls
- Improved pitch of 36 LEDs per foot
- Increased efficacy and lumen output
- Tighter cut lengths of 2 in. (50 mm)
- 4.4 W/ft (14.4 W/m)
- All on: Up to 72 lm/W
- All on: Up to 318.78 l m/ft (1045.6 lm/m)

UL LISTED    CE    RoHS    IP20    Declare.    TM66 ASSESSED

## ORDERING GUIDE

| Category | CRI | Ribbon Type & IP Rating | Wattage + Color | |
| --- | --- | --- | --- | --- |
| **RB** | **0** | **RGBWS220** | | |
| **RB** - Ribbonlyte | **0** - Color Changing | **RGBWS220** - RGBW Series 2 IP20 | **4.4RGB27** - 4.4 W/ft (14.4 W/m) RGB+2700K | **4.4RGB40** - 4.4 W/ft (14.4 W/m) RGB+4000K |
| | | | **4.4RGB30** - 4.4 W/ft (14.4 W/m) RGB+3000K | |

## CONNECTION OPTIONS

**1.** End Feed Bare Wire Connection (**Default Option**)

**2.** IP67 Connector Input

**3.** Soldered Daisy Chain

**4**. Daisy Chain with IP67 Connectors

**5.** Bare Wire on Both Ends

**Standard cable length if not specified:**
**1.** 12 in. cable with bare wire (custom length up to 20 feet)
**2.** Standard 12 in. cable with IP67 connectors (custom length up to 10 feet)
**3.** Daisy chain with 3 in. cable between runs (custom length up to 36 in.)
**4.** 3 in. cable between IP67 connector and RibbonLyte (custom length up to 18 in.)
**5.** Standard 12 in. cable with bare wire (custom length up to 10 feet)
Note: IP67 connectors are used for both IP20 and IP65/IP68 RibbonLyte

### AVAILABLE COLORS

RGBW

## USAGE GUIDELINES

- **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 60 °C / 140 °F maximum for which our product is rated. High-risk locations like this should be avoided.**
- IP20 RibbonLyte products are for indoor use in dry areas only. IP20 products are not intended to be submerged in pools and fountains and do not carry UL676 certification to do so.
- Please refer to the RibbonLyte Proper Usage Guide in our Application Guide for more information. Available for download at AcolyteLED.com.
- This product is compatible with a wide variety of control products including the entire line of Lutron dimming systems.
- For use with Acolyte drivers, 0-10V dimming modules and interface controllers (DMXINF models).
- Use with non-Acolyte supplied drivers is not supported or warrantied.
- Due to the nature of RibbonLyte products, cuttable lengths are generally longer or shorter than the customer requested length. Unless specified, RibbonLyte is factory cut at the shorter cuttable point.
- We reserve the right to make changes to product lineup, specifications, design and finishes at any time without notice.

Acolyte does not warrant or represent that the information is free from errors or omission. The information may change without notice and Acolyte is not in any way liable for the accuracy of any information printed and stored or in any way interpreted or used.

## SPECIFICATIONS / DIAGRAM / USAGE GUIDELINES

| 4.4 RGBW Series 2 RibbonLyte | |
|---|---|
| Operating Voltage | 24 V |
| Colors | RGBW (2700K, 3000K, 4000K) |
| Current (mA) - 24V | 183 mA/ft (602 mA/m) |
| LED Pitch | 36 LEDs/ft (120 LED/m) |
| Protection Rating | IP20 |
| Dimming/Control | DMX, DALI |
| Operating Temperature | -40 — 140 °F (-40 — 60 °C) |
| LED Beam Angle | 120° |
| Lifetime (L70 reported) | 50,000 hours |
| Cuttable Length | 1.97 in (50 mm) |
| Lumens/Watt | Lumens/Watt - RGBW 45 lm/W (All LEDs at 100%) |
| Constant Voltage | ✓ |
| Cable Length | 12 in (30.5 cm) |
| Certifications | UL 2108 Issued: 2016/06/17 Ed: 1 Rev: 2021/10/16 Low Voltage Lighting Systems. CSA C22.2 No. 250.0, General Requirements for Luminaires. ROHS compliant |

| RGBW (2700K) | | | | | |
|---|---|---|---|---|---|
| | Red | Green | Blue | White (2700K) | All On |
| Power Consumption | 1.1 W/ft (3.6 W/m) | 1.1 W/ft (3.6 W/m) | 1.1 W/ft (3.6 W/m) | 1.1 W/ft (3.6 W/m) | 4.4 W/ft (14.4 W/m) |
| Lumen | 40.24 lm/ft (131.99 lm/m) | 127.62 lm/ft (418.59 lm/m) | 28.64 lm/ft (93.94 lm/m) | 90.85 lm/ft (297.99 lm/m) | 292.13 lm/ft (958.19 lm/m) |
| Efficacy | 37 lm/W | 116 lm/W | 26 lm/W | 83 lm/W | 66 lm/W |
| RGBW (3000K) | | | | | |
| | Red | Green | Blue | White (3000K) | All On |
| Power Consumption | 1.1 W/ft (3.6 W/m) | 1.1 W/ft (3.6 W/m) | 1.1 W/ft (3.6 W/m) | 1.1 W/ft (3.6 W/m) | 4.4 W/ft (14.4 W/m) |
| Lumen | 28.66 lm/ft (94 lm/m) | 76.4 lm/ft (250.59 lm/m) | 21.77 lm/ft (93.94 lm/m) | 73.66 lm/ft (241.6 lm/m) | 194.5 lm/ft (637.96 lm/m) |
| Efficacy | 26 lm/W | 69 lm/W | 20 lm/W | 67 lm/W | 44 lm/W |
| RGBW (4000K) | | | | | |
| | Red | Green | Blue | White (4000K) | All On |
| Power Consumption | 1.1 W/ft (3.6 W/m) | 1.1 W/ft (3.6 W/m) | 1.1 W/ft (3.6 W/m) | 1.1 W/ft (3.6 W/m) | 4.4 W/ft (14.4 W/m) |
| Lumen | 42.01 lm/ft (137.8 lm/m) | 139.45 lm/ft (457.4 lm/m) | 32.98 lm/ft (108.17 lm/m) | 94.82 lm/ft (311 lm/m) | 318.78 lm/ft (1045.6 lm/m) |
| Efficacy | 38 lm/W | 127 lm/W | 30 lm/W | 86 lm/W | 72 lm/W |

### DIMENSIONS

**Top View**

IP20



CUTTABLE EVERY: 1.97 in (50 mm)

**Side View**

**Dimensions**

**Width** 0.47 in (12 mm)
**Max Length** 19 ft 8 in (6 m)
**Height** 0.09 in (2.3 mm)

### OPTIONAL ACCESSORY

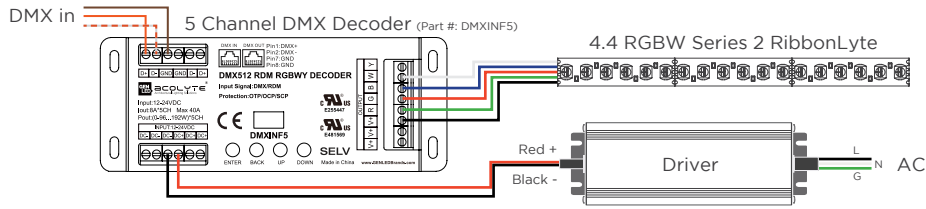| 0.5 in. VHB Tape | Flat Mounting Clip |
|---|---|
| Provides superior holding power in surface mounted applications  Part Number: VHBTAPE0.5BK | For mounting IP20 RibbonLyte  Part Number: RBMNTSIL |

Note: RibbonLyte comes with an adhesive backing, but Acolyte recommends using VHB Tape for extra support in surface mounted applications.

# CHANNEL COMPATIBILITY / CHANNEL OPTIONS

| CHANNEL | IP20 |
|---------|------|
| AC1 | ✓ |
| AC2 | ✓ |
| AC3 | ✓ |
| AC4 | ✓ |
| AC5 | ✓ |
| AR1 | ✓ |
| AR3 | ✓ |
| AS1 | ✓ |
| AS2 | ✓ |
| AS3 | ✓ |
| AS6 | ✓ |
| AS11 | |
| AS16 | ✓ |
| AS18 | ✓ |
| AS20G | ✓ |
| AS22 | ✓ |
| AS30 | ✓ |
| AS53 | |
| AT4 | ✓ |
| AT5 | ✓ |
| B1 | ✓ |
| SC3 | ✓ |
| WH35 | ✓ |

## SURFACE CHANNELS

**AS1**
W: 0.68 in. / 17.2 mm
H: 0.34 in. / 8.6 mm
Inside W: 0.48 in. / 12.2 mm

**AS2**
W: 0.7 in. / 17.8 mm
H: 0.6 in. / 15.2 mm
Inside W: 0.49 in. / 12.5 mm

**AS3**
W: 0.93 in. / 23.6 mm
H: 0.42 in. / 10.7 mm
Inside W: 0.81 in. / 20.6 mm

**AS6**
W: 0.89 in. / 22.5 mm
H: 0.62 in. / 15.7 mm
Inside W: 0.71 in. / 18 mm

**AS16**
W: 0.74 in. / 18.8 mm
H: 0.73 in. / 18.6 mm
Inside W: 0.65 in. / 16.4 mm

**AS18**
W: 0.92 in. / 23.4 mm
H: 1.1 in. / 27.8 mm
Inside W: 0.73 in. / 18.6 mm

**B1**
W: 0.77 in. / 19.6 mm
H: 0.26 in. / 6.5 mm
Inside W: 0.69 in. / 17.6 mm

**AS20G**
W: 0.61 in. / 15.5 mm
H: 0.71 in. / 18 mm
Inside W: 0.48 in. / 12.3 mm

**AS22**
W: 1.03 in. / 26.2 mm
H: 1.3 in. / 32.9 mm
Inside W: 0.87 in. / 22.2 mm

**AS30**
W: 1.31 in. / 33.4 mm
H: 1.17 in. / 29.6 mm
Inside W: 1.17 in. / 29.8 mm

**AT4**
W: 0.77 in. / 19.6 mm
H: 0.74 in. / 18.8 mm
Inside W: 0.66 in. / 16.8 mm

**AT5**
W: 0.77 in. / 19.6 mm
H: 0.74 in. / 18.8 mm
Inside W: 0.66 in. / 16.8 mm

**WH35**
W: 1.37 in. / 35 mm
H: 1.47 in. / 37.5 mm
Inside W: 1.23 in. / 31.2 mm

## CORNER CHANNELS

**AC1**
W: 0.63 in. / 16 mm
H: 0.63 in. / 16 mm
Inside W: 0.48 in. / 12.2 mm

**AC2**
W: 0.63 in. / 16 mm
H: 0.63 in. / 16 mm
Inside W: 0.48 in. / 12.2 mm

**AC3**
W: 0.74 in. / 18.8 mm
H: 0.74 in. / 18.8 mm
Inside W: 0.48 in. / 12.2 mm

**AC4**
W: 1.18 in. / 30 mm
H: 1.18 in. / 30 mm
Inside W: 0.77 in. / 19.6 mm

**AC5**
W: 1.18 in. / 30 mm
H: 1.18 in. / 30 mm
Inside W: 0.77 in. / 19.6 mm

## RECESSED CHANNELS

**AR1**
W: 0.9 in. / 22.9 mm
H: 0.31 in. / 7.87 mm
Inside W: 0.49 in. / 12.5 mm

**AR3**
W: 1.2 in. / 30.5 mm
H: 0.39 in. / 9.9 mm
Inside W: 0.81 in. / 20.6 mm

## MUD-IN CHANNELS

**SC3**
W: 2.62 in. / 66.6 mm
H: 0.55 in. / 14 mm
Inside W: 0.69 in. / 17.5 mm

## WIRING DIAGRAMS

### DMX



**WIRE COLORS PER RIBBONLYTE COLOR**

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

## ACTUAL POWER CONSUMPTION

| Length (ft) | Length (m) | Actual Power Consumed (W) | Average Wattage (W/ft) | Average Wattage (W/m) | Actual Current Drawn (A) |
|---|---|---|---|---|---|
| 5 | 1.52 | 21.56 | 4.31 | 14.14 | 0.898 |
| 10 | 3.05 | 42.43 | 4.24 | 13.92 | 1.768 |
| 15 | 4.57 | 61.84 | 4.12 | 13.52 | 2.577 |
| 19.7 | 6.01 | 79.15 | 4.02 | 13.18 | 3.298 |

**NOTE:** Quotes use nominal values. We highly recommend using nominal wattages for all customer calculations. Allow for a 15% buffer (10% driver, 5% fixture) in these calculations as performance may vary. Acolyte is not liable for product performance if these tables are used instead of nominal values when orders are placed.