PRODUCT DATA SHEET

ColorBright™
Color Changing
RGB+W Series

15 Year
Warranty

RoHS COMPLIANT

CE

c(UL)us
LISTED
(LOW VOLTAGE LUMINAIRE)
E362522

www.FlexfireLEDs.com

Description

The ColorBright™ Color Changing + White LED strip light is an ingenious product that has combined two powerful strips into one. This product has alternating RGB color changing LEDs and single color high brightness white LEDs. This product is for those who love to control every aspect of their lives, starting with their lights. These lights can produce any color you can imagine, including a beautiful warm white. No longer will you have to sacrifice one product for the other, we have combined them both into one strip.

Product Features

- White LEDs have a High CRI of 80+
- Specification Grade LED strips
- Fully dimmable
- Highest quality components and premium packaged 5050 LEDs
- Single BIN LED selection to ensure color consistency (3-Step MacAdam)
- Thermally Resistant 3M VHB 4930 adhesive for long lasting bond
- 120° Beam Angle
- Only 1/2" (12mm) strip width

- Short LED pitch of 3/4" (17mm)
- 12V or 24V DC Input Options
- LEDs per foot: RGB: 9, White: 9
- Can be cut every 6 LEDs (10 LEDs for 24V)
- 18 LEDs / Foot (60 / Meter)
- Thick double layer 2 oz copper PCB for excellent thermal management
- Operating Temperature -4°F to +104°F (-20°C to 40°C)
- Maximum Length in Series 16ft 5in (5 Meters) for 12V 32ft 10 in (10 Meters) for 24V

Product Specific Specifications

Product SKU	Color (CCT)	Watts / foot (Meter)	Lumen / foot (Meter) [White chips only]	Lumen / foot (Meter) [RGB only]	CRI [White]	Gamut Score Rg (Color Sat.) [White]	Relative Fidelity Score (RF) [White]
CB-RGB24K	2400K	4.4 W/ft 14.4 W/m	153 lm/ft (500 lm/m)	R: 11LM (35/m) G: 46LM (150/m) B: 10LM (30/m)	Coming Soon	Coming Soon	Coming Soon
CB-RGB27K	2700K	4.4 W/ft 14.4 W/m	159 lm/ft (520 lm/m)	R: 11LM (35/m) G: 46LM (150/m) B: 10LM (30/m)	Coming Soon	Coming Soon	Coming Soon
CB-RGB30K	3000K	4.4 W/ft 14.4 W/m	168 lm/ft (550 lm/m)	R: 11LM (35/m) G: 46LM (150/m) B: 10LM (30/m)	83	91.4	82.9
CB-RGB42K	4200K	4.4 W/ft 14.4 W/m	183 lm/ft (600 lm/m)	R: 11LM (35/m) G: 46LM (150/m) B: 10LM (30/m)	82	96.9	80.6
CB-RGB62K	6200K	4.4 W/ft 14.4 W/m	189 lm/ft (620 lm/m)	R: 11LM (35/m) G: 46LM (150/m) B: 10LM (30/m)	83	94.3	79.5

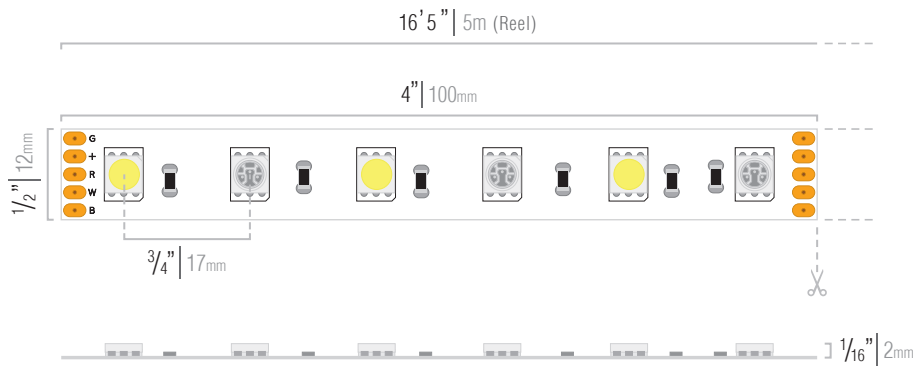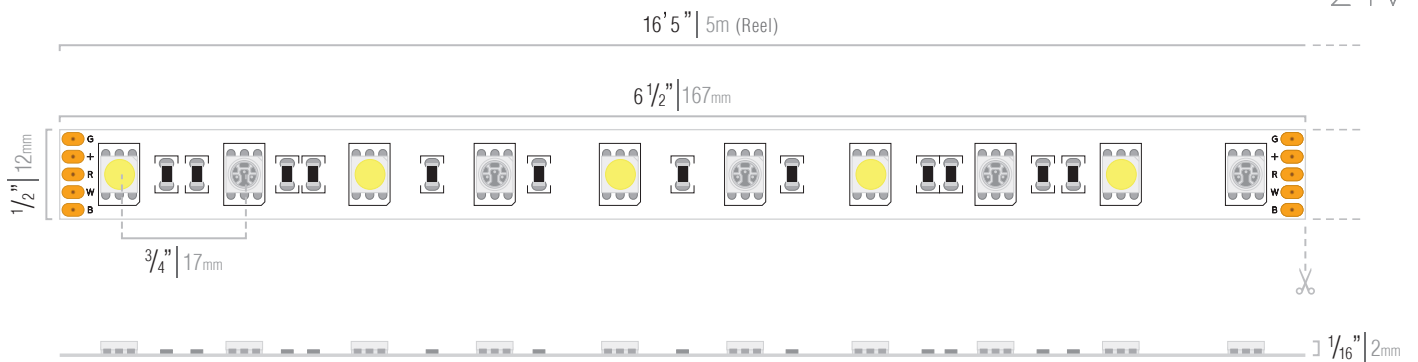*Because of variability of RGB, we cannot calculate CRI, Gamut, RF, or efficacy

Ordering Code

INDOOR

Brand	Color	CCT	Voltage	Length
CB - ColorBright™	**RGB**	**24K -** 2400K	**24V**	**01 FT -** 01 ft Reel
		27K - 2700K	**12V -** (Special)	**04 FT -** 04 ft Reel
		30K - 3000K		**08 FT -** 08 ft Reel
		42K - 4200K		**16 FT -** 16 ft Reel
		62K - 6200K		

Dimensions

12V

16'5" | 5m (Reel)

4" | 100mm

1/2" | 12mm

G + R W B

3/4" | 17mm

1/16" | 2mm

24V

16'5" | 5m (Reel)

6 1/2" | 167mm

1/2" | 12mm

G + R W B

G + R W B

3/4" | 17mm

1/16" | 2mm

Example Installation and Layout

IN SERIES

AC Outlet
(or AC source)

LED Strip

Transformer

Dimmer / Controller

IN PARALLEL

AC Outlet
(or AC source)

LED Strips

Transformer
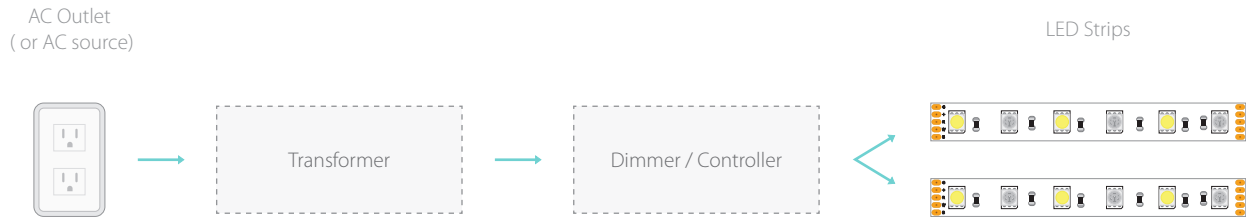
Dimmer / Controller

Dimming Options

In-Line Dimming

Receiver*

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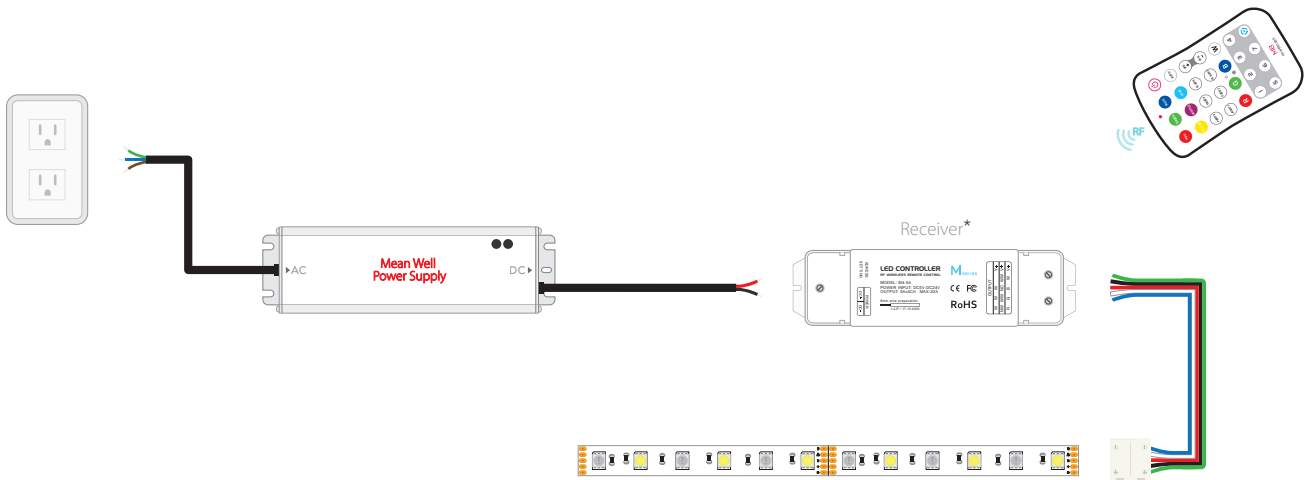
* The receiver and controller may differ from the one shown.

Strip Light Connectors

SKU	Description	Wire Gauge	Amp Limit**	Mockup
RGBW-C1*	Attaches LED strip directly to a Power Supply/Driver, low voltage control or DC source.	22 AWG		
RGBW-C2*	Attaches two sections of LED strip together. Wire lead allows for turns around tight corners.	22 AWG	5 Amps	
RGBW-C3*	Attaches two sections of LED strip together in a continuous run.	-		

   *   Calculate max length of LED strip to follow the solderless connector based on an amperage draw of 0.37 amps per foot (1.20 A/m) at 12 volts, or at 24 volts use 0.18 A/ft (0.60 A/m).

  **   The max continuous run of the RGB 300 LED strip is 16 feet (5 meters) at 12V. Be sure no more than 5 amps is drawn after any solderless connector.
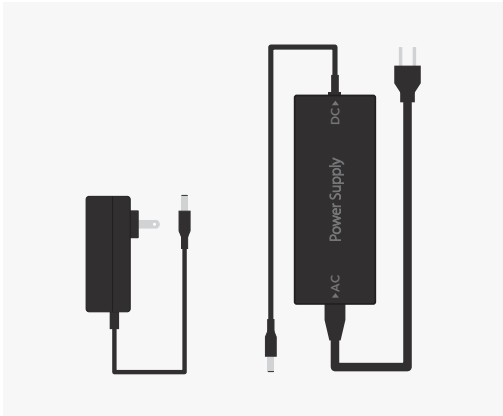
Solderless Connection Guide
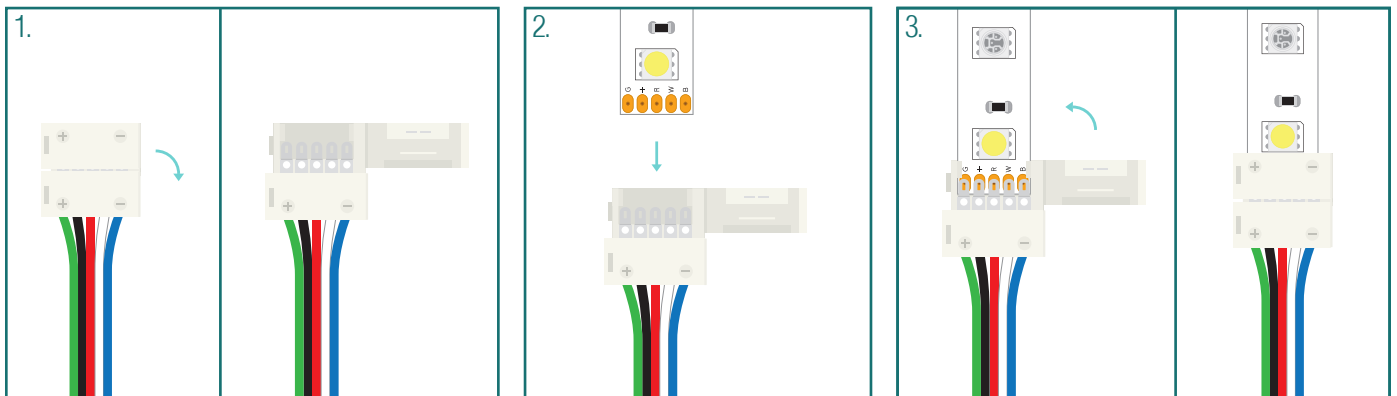
1. Open the RGBW strip connector. *See Diagram 1*

2. Take a look at the cut mark on the strip and you will see G,+, R, W, B. Match the colors on the wires as follows: Green to G, Black to positive, R to red, W to white and Blue to B. *See Diagram 2*

3. Insert the end of the strip under the 5 metal pins on the connector, make sure the pins are making contact on the copper contact points and finally close the lid on the connector. *See Diagram 4*

   NOTE: Soldering is the preferred method. If you need further assistance, please download our Solderless Connector Installation Guide from our website

Compatible Drivers (12V only)
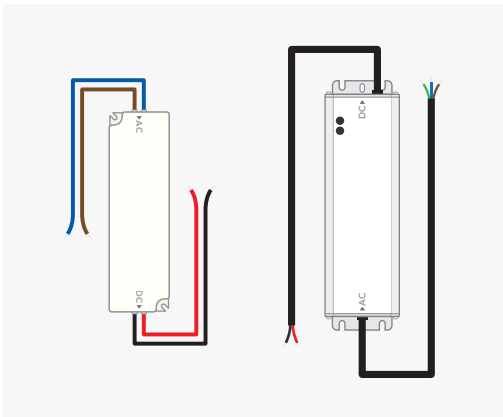
Wall Mounted Power Supply / Desktop Power Supply

LED Strip Length	SKU
1 - 4 ft	12V-WMPS-1
5 - 9 ft	12V-DPS-2
10 - 18 ft	12V-DPS-4
18 - 26 ft	12V-DPS-6
22 - 35 ft	12V-DPS-8

Mean Well

LED Strip Length	SKU	LED Strip Length	SKU
1 - 4 ft	LPV-20-12	36 - 54 ft	HLG-320H-12A
5 - 8 ft	HLG-40H-12A	55 - 92 ft	HLG-600H-12A
7 - 12 ft	HLG-80H-12A		
12 - 20 ft	LPV-100-12		
18 - 24 ft	HLG-120H-12A		
21 - 29 ft	HLG-150H-12A		
27 - 39 ft	HLG-240H-12A		

Compatible Drivers (24V only)

Wall Mounted Power Supply / Desktop Power Supply
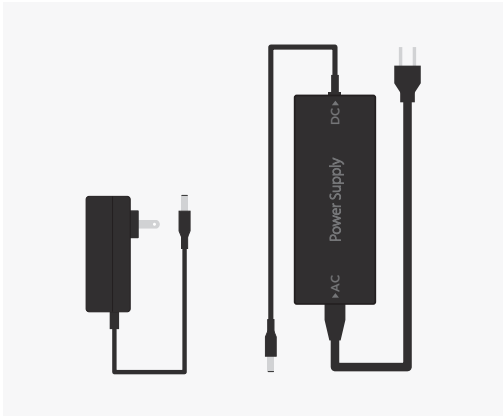
LED Strip Length	SKU
1 - 9 ft	24V-WMPS-1
9 - 22 ft	24V-DPS-2.5
22 - 35 ft	24V-DPS-4
28 - 44 ft	24V-DPS-5

Mean Well
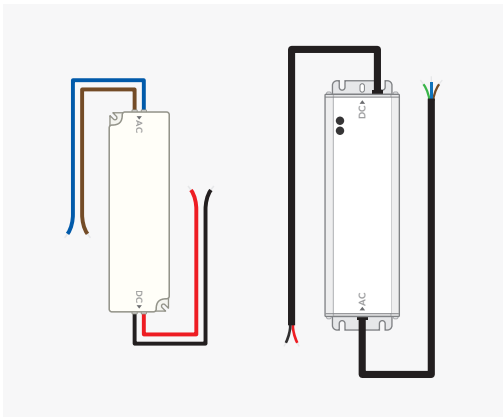
LED Strip Length	SKU		LED Strip Length	SKU
1 - 4 ft	LPV-20-24		44 - 67 ft	HLG-320H-24A
5 - 8 ft	HLG-40H-24A		68 - 120 ft	HLG-600H-24A
8 - 12 ft	HLG-60H-24A			
11 - 16 ft	HLG-80H-24BL			
14 - 19 ft	HLG-100H-24A			
17 - 24 ft	HLG-120H-24A			
24 - 37 ft	HLG-185H-24A			
34 - 48 ft	HLG-240H-24A			

Compatible Aluminum Extrusions

▶ GIZA Anodized Extrusion   (SKU: KL-B5556ANODA-1m)

Covers
- HS 22 Clear Cover (SKU: KL-17022-1m)
- HS 22 Frosted Cover (SKU: KL-17011-1m)

End Caps
- GIZA End Cap without Wire Hole (SKU: KL-24007)

Mounting Accessories
- GP Surface Spring (SKU: KL-00293)
  • minimum surface thickness 10mm (3/8")
- Mounting Bracket (SKU: KL-24143)

▶ 45-ALU Anodized Extrusion   (SKU: KL-B4023ANODA-1m)

Covers
- HS Clear Cover (SKU: KL-1370-1m)t
- HS Frosted Cover (SKU: KL-1369-1m)
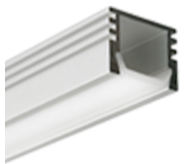- LIGER Frosted Cover (SKU: KL-17031-1m)

End Caps
- 45-ALU End Cap without Wire Hole (SKU: KL-1383)
- 45-ALU End Cap with Wire Hole (SKU: KL-1440)

Mounting Accessories
- Zinc Mounting Bracket (SKU: KL-24144)
  NOTE: All solderless connectors do not fit inside this
        aluminum extrusion.

▶ KLUS PDS4-ALU Anodized Extrusion   (KL-B1718ANODA-1m)

Covers
- HS Clear Cover (SKU: KL-1370-1m)t
- HS Frosted Cover (SKU: KL-1369-1m)
- LIGER Frosted Cover (SKU: KL-17031-1m)

End Caps
- PDS4-ALU End Cap without Wire Hole (SKU: KL-1055)
- PDS4-ALU End Cap with Wire Hole (SKU: KL-1057)

Mounting Accessories
- Zinc Mounting Bracket (SKU: KL-24190)
  NOTE: All solderless connectors do not fit inside this
        aluminum extrusion.

▶ KLUS TAMI Anodized Extrusion   (KL-B5390ANODA-1m)

Covers
- Comes with Translucent Cover

End Caps
- Eco TAMI End Cap (SKU: KL-20051)

Mounting Accessories
- Zinc Mounting Bracket (SKU: KL-24190)
  NOTE: All solderless connectors do not fit inside this
        aluminum extrusion.

▶ KLUS KOPRO Anodized Extrusion   (KL-B6367ANODA-1m)

Covers
- KOPRO-L Cover (SKU: KL-17092-1)

End Caps
- KOPRO-L End Cap (SKU: KL-24116)

Mounting Accessories
- GP Surface Spring (SKU: KL-00293)
  • minimum surface thickness 10mm (3/8")
- Mounting Bracket (SKU: KL-24143)

▶ KLUS LIPOD Anodized Extrusion   (SKU: KL-B5554ANODA-1m)

Covers
- HS 22 Clear Cover (SKU: KL-17022-1m)
- LIGER 22 Frosted Cover (SKU: KL-17032-1m)

End Caps
- LIPOD-MET End Cap (SKU: KL-24051)

Mounting Accessories
- GP Surface Spring (SKU: KL-00293)
  • minimum surface thickness 10mm (3/8")
- Mounting Bracket (SKU: KL-24143)

Safety And Disclosures

1. Installation must be in accordance with local and national electrical code regulations.

2. To ensure safety and correct installation, our strips are intended to be installed by a qualified, licensed electrician.

3. Only install with a Class 2 DC Constant Voltage LED driver to meet UL requirements.

4. Do not install in environment where excessive heat may exist.

5. LED strip lights must be handled with care. Excessive handling, bending, and pressure may damage the product, voiding the warranty.

6. Do not install indoor LED tape light products in outdoor / wet location environments. Only use copper wiring. Use wires rated for at least 176°F (80°C) and certified for use with external connection of electrical equipment.

7. Each maximum run requires a dedicated power feed from the driver. Do not extend beyond the recommended maximum run length.

8. Make sure the appropriate gauge wire is installed between driver, LEDs, and any dimmers. When choosing wire, calculate voltage drop, maximum amperage rating, and the location ratings on the wire. Improper wire selection and installation could overheat wires, and cause fire.

9. Do not modify the product beyond the instructions or the warranty will be void.

10. We reserve the right to modify and improve the design of our fixtures without prior notice. Although we try our best to order the same colors every time, due to changes in technology and phosphors over time, we cannot guarantee to match existing installed fixtures for subsequent orders or replacements in regards to product appearance, CCT, or lumen output.

Warranty Information

Limited Warranty

This product has a 15 year limited warranty from the date of shipment. This warranty only includes the main product outlined in this specification sheet and does not include the additional accessories that are used as a reference. Complete warranty details for fixtures and additional accessories are available at https://www.flexfireleds.com/warranties/ within the Policies section. For warranty related questions please contact product support team at (support@flexfireleds.com).

Consumer's Acknowledgment

Flexfire LEDs, Inc. stands behind its products when they are used properly and according to our specifications. When you purchase our products, you are agreeing to the terms and conditions outlined in our warranty section. We try our best to make recommendations, but the burden of proper installation, design, and maintenance relies on the purchaser.

This limited warranty does not include product failures that are the result of:

Not using a voltage regulated power supply to connect the LED product or controls; Connecting LED products to the wrong output voltage; Improper connection of power supplies, LED products, or controls; Connecting LED products or controls directly to any AC power source if they are stated for DC only input; Connecting power supplies backwards to an AC power source; Products used in an inappropriate location or in environmental conditions (temperature, humidity, moisture, etc.) outside the normal specified range; Water damage to products not specifically sold as waterproof products; Electrical power surges and spikes; Damage from hail, flooding, tornado, fire, wind, earthquake, lightning, electrical storm, or any other natural disasters or "force majeure" incidences; Damage caused by a vehicle or other accident; Damage caused when transporting the item; Damage to any products that were modified by the user, used for purposes other than as intended or directed, or connected to LED systems or components not purchased from Flexfire LEDs; Products that have been subjected to misuse, mishandling, misapplication or accident. Products used in connection with any components, devices or systems other than those explicitly approved as compatible with Company's products and listed on Company's website. Excessive wear and tear and/or physical or accidental abuse, loss, or theft. Improper repairs or warranty services performed by someone other than Flexfire LEDs will void this warranty.