

The FBT RGB Series combines state of the art technology with a flexible, durable housing to create an extremely bright, uniform illumination with a versatility that makes it perfect for any custom design application. The RGB flexible border tube is equipped with tri-chip LEDs composed of red, green and blue colors that can be controlled by a DMX controller to offer several different color shades and effects. Each order is custom made and assembled specifically to your lengths and accessory requirements.

Model: \_\_\_\_\_ Date: \_\_\_\_\_  
Accessories: \_\_\_\_\_  
Job Name: \_\_\_\_\_ Type: \_\_\_\_\_

**Applications**

- Borders
- Cove Lighting
- Bridges
- Gazebos
- Roof Lines
- Signage
- Accent Lighting
- Restaurants

**Performance**

Color	Lumens/Foot (lm/ft)	Watts/Foot (w/ft)	CCT or Wavelength
Red	>12.8	N/A	620-630nm
Green	>33.53	N/A	520-530nm
Blue	>5.49	N/A	465-475nm
White (R+B+G)	>51.82	3.66	N/A



**Specifications**

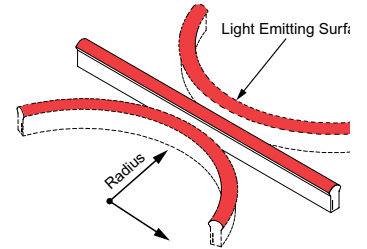
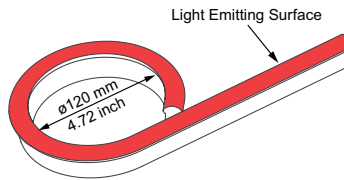
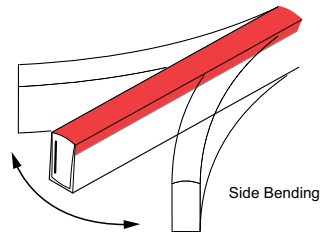
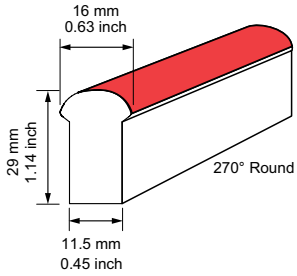
Dimensions	0.45" W x 1.14" H
LEDs per Foot	18
LED	Epistar or Nichia SMD 5050 Color LEDs
Cutting Increment (Factory Cuts)	3.94 Inches
Beam Angle	270°
Minimum Bend Radius	2.36 Inches
Mounting	2" Long mounting clips and linear mounting channels. Available in standard or tamper resistant locking versions
Facility Supply Voltage	120-277VAC Capability
LEDS	24VDC Constant Voltage
Power Consumption	3.66 Watts/Foot Maximum
Max Run Length	32' Single End Powered (Consult Factory), 65' Both Ends Powered (Consult Factory)
RGB light control	By DMX Controller sold separately
Line Cord	18AWG Red,Green,Blue,Yellow, Black inside .28 Inch Diameter Outer Sheath
Certification	Tested to UL & CSA, Complies with CA Title 24 Requirements, Exceeds ANSI C78.377A, CE-RoHS Compliant
IP Rating	Up to IP68 for factory molded assembled units
IK Rating	IK08 Protection
Ambient Operating Temperature	-13°F to 140°F (-25°C to 60°C)
Lumen Maintenance	70,000 Hours L70 @25°C, 50,000 Hours L70 @50°C
Warranty	5 Years for factory assembled units

**Ordering Information** Example: FBT-RGB-28-24V

Series	Length	Voltage
FBT-RGB <sup>1</sup>	65 = 65 Feet (Maximum roll length) XX.XX <sup>2</sup> = Custom Length in Decimal Feet	24V <sup>3</sup> = 24 Volt DC

**Notes**

- <sup>1</sup> Every order is custom so please consult the factory for your project needs
- <sup>2</sup> Customer requested length in Decimal feet. Factory will respond with actual length proposal based on specific cutting increments.
- <sup>3</sup> Requires factory specified 24VDC driver, ordered separately



Minimum Bending Diameter 4.72" (120mm)

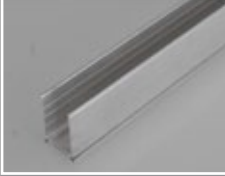
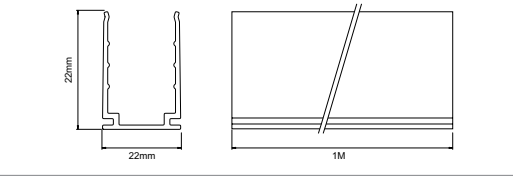

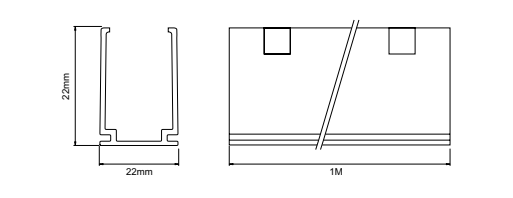
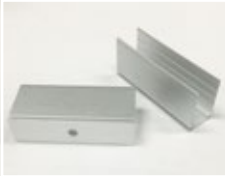
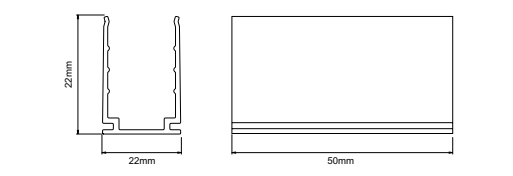

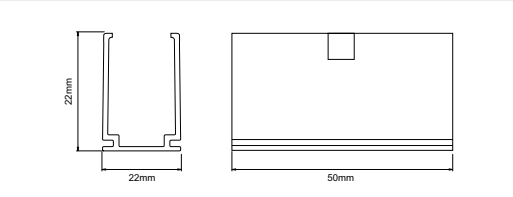
Minimum Bending Radius 2.36" (60mm)

Bend ONLY in these directions - do not stretch, bend up, bend down or twist


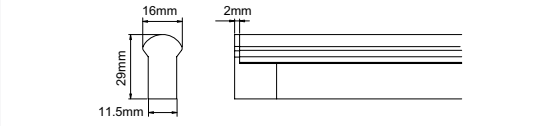

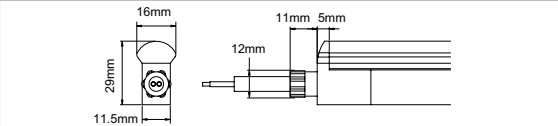

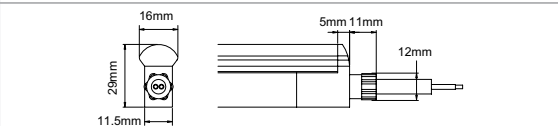

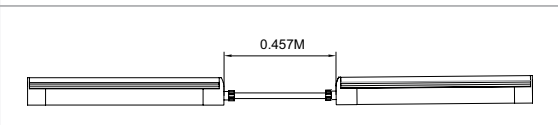
**Accessories - Lighting Controls** (Order As Separate Line Item)

Part Number	Image	Description
STICK-KE-2		DMX wall mounted Controller keypad, 1024 DMX channel capability
POWER4M		Power adapter for Nicolaudie Controller, input 120-240VAC 50/60Hz output 6-7VDC, 0.6-0.65A
RFX-DMX-CV-DECODER		DMX Decoder; 5-24V; 4-5A; Indoor (Needs DMX controller, not included)
RFX4B-3CH-RGB		Controller for RGB tape light; 12VDC; Indoor use only; 44 Key remote (Note: Use for sample product orders)

**Accessories - Mounting** (Field Installed - Order As Separate Line Item)

Part Number	Image	Description	Drawing
FBT-RGB-LCH		Linear Mounting Channel, 0.035" (0.9mm) thick anodized aluminum, 3.28' L x 0.875" H x 0.563" W (1M L x 22mm H x 14mm W). 0.136" (3.5mm) diameter holes in base for mounting screws.	
FBT-RGB-LCH-L		Locking Mounting Channel, 0.056" (1.4mm) thick anodized aluminum, tamper resistant design with locking retainers included. 3.28' L x 0.875" H x 0.563" W (1M L x 22mm H x 14mm W). 0.136" (3.5mm) diameter holes in base for mounting screws.	
FBT-RGB-MC		Mounting Clip, 0.035" (0.9mm) thick anodized aluminum. 2" L x 0.875" H x 0.563" W (50mm L x 22mm H x 14mm W). 3.5mm (0.136") diameter hole in base for mounting screws.	
FBT-RGB-MC-SL		Locking Mounting Clip, 0.056" (1.4mm) thick anodized aluminum, tamper resistant design with locking retainer included. 2" L x 0.875" H x 0.563" W (50mm L x 22mm H x 14mm W). 0.136" (3.5mm) diameter hole in base for mounting screws.	

**Accessories - Indoor Rated** (Factory Assembled - Order As Separate Line Item)

Part Number	Image	Description	Drawing
FBT-RGB-EC		End Cap connector assembly	
FBT-RGB-LCL-24V		Line Cord connector assembly left power feed	
FBT-RGB-LCR-24V		Line Cord connector assembly right power feed	
FBT-RGB-SJ-24V-1M		0.457M (1.5') Jumper Cable from one end of the flex to another.	

**Accessories - Outdoor Rated** (Factory Molded - Order As Separate Line Item)

Part Number	Image	Description	Drawing
FBT-RGB-EC-F		Seamless End Cap, factory molded, outdoor rated IP68.	
FBT-RGB-LCL-24V-F1M FBT-RGB-LCL-24V-F3M FBT-RGB-LCL-24V-F5M		LEFT SIDE Seamless End Exit with line cord. Factory molded, outdoor rated IP68. Minimum cord length from end cap to end of outer sheathing: F1M = 1M (3.28') F3M = 3M (9.84') F5M = 5M (16.40')	
FBT-RGB-LCR-24V-F1M FBT-RGB-LCR-24V-F3M FBT-RGB-LCR-24V-F5M		RIGHT SIDE Seamless End Exit with line cord. Factory molded, outdoor rated IP68. Minimum cord length from end cap to end of outer sheathing: F1M = 1M (3.28') F3M = 3M (9.84') F5M = 5M (16.40')	
FBT-RGB-LCLBE-24V-F1M FBT-RGB-LCLBE-24V-F3M FBT-RGB-LCLBE-24V-F5M		LEFT SIDE Seamless Bottom Exit with Line cord. Factory molded, outdoor rated IP68. Minimum cord length from end cap to end of outer sheathing: F1M = 1M (3.28') F3M = 3M (9.84') F5M = 5M (16.40')	
FBT-RGB-LCRBE-24V-F1M FBT-RGB-LCRBE-24V-F3M FBT-RGB-LCRBE-24V-F5M		RIGHT SIDE Seamless Bottom Exit with line cord. Factory molded, outdoor rated IP68. Minimum cord length from end cap to end of outer sheathing: F1M = 1M (3.28') F3M = 3M (9.84') F5M = 5M (16.40')	
FBT-RGB-LCLSE-24V-F1M FBT-RGB-LCLSE-24V-F3M FBT-RGB-LCLSE-24V-F5M		LEFT SIDE Seamless Side Exit with line cord. Factory molded, outdoor rated IP68. Minimum cord length from end cap to end of outer sheathing: F1M = 1M (3.28') F3M = 3M (9.84') F5M = 5M (16.40')	
FBT-RGB-LCRSE-24V-F1M FBT-RGB-LCRSE-24V-F3M FBT-RGB-LCRSE-24V-F5M		RIGHT SIDE Seamless Side Exit with line cord. Factory molded, outdoor rated IP68. Minimum cord length from end cap to end of outer sheathing: F1M = 1M (3.28') F3M = 3M (9.84') F5M = 5M (16.40')	
FBT-RGB-SJ-24V-F1M		Seamless Jumper Cable. Factory molded, outdoor rated IP68. Length "L" from end cap to end cap: F1M = 1M (3.28')	

**Typical Accessories For 24V Installation**

- FBT-RGB Flexible Border Tube (FBT-RGB-26-24V)
- Linear Channel (FBT-RGB-LCH) AND/OR Mounting Clips (FBT-RGB-MC)
- End cap connector assembly (FBT-RGB-EC-F)
- Line Cord (FBT-RGB-LCR-24V-F1M)
- Transformer (XFMR-24-150)
- Decoder (RFX-RGB-DMX-CV-DECODER)
- DMX controller (STICK-KE2)
- Power adapter for DMX controller (POWER4M)

Specifications are subject to change without notice.  
Installation must be performed in accordance with  
Barron Lighting Group installation instructions.

## 120VAC Input Non-Dimming 24VDC Transformer Ordering Information (Order As Separate Line Item)

Example: XFMR-24-60

Part Number	Description	Dimensions (AxBxC)
XFMR-24-20	20 Watt, 120-240VAC input, 24VDC output, Class 2	118.11mm x 35.05mm x 25.9mm (4.65" x 1.38" x 1.02")
XFMR-24-35	35 Watt, 120-240VAC input, 24VDC output, Class 2	148.08mm x 39.88mm x 30mm (5.83" x 1.57" x 1.18")
XFMR-24-60	60 Watt, 120-240VAC input, 24VDC output, Class 2	162.56mm x 42.42mm x 32mm (6.40" x 1.67" x 1.26")
XFMR-24-150	150 Watt, 120-277VAC input, 24VDC output	222.25mm x 68.072mm x 38.86mm (8.75" x 2.68" x 1.53")



## 277VAC Input Non-dimming 24VDC Transformer Ordering Information (Order As Separate Line Item)

Example: XFMR-24-60

Part Number	Description	Dimensions (AxBxC)
XFMR-277-24-20	20 Watt, 120-277VAC input, 24VDC output, Class 2	148.6mm x 36.6mm x 27.9mm (5.85" x 1.52" x 1.10")
XFMR-277-24-30	30 Watt, 120-277VAC input, 24VDC output, Class 2	145.03mm x 47mm x 30mm (5.71" x 1.85" x 1.18")
XFMR-277-24-45	45 Watt, 120-277VAC input, 24VDC output, Class 2	181.1mm x 61.47mm x 35.05mm (7.13" x 2.42" x 1.38")
XFMR-277-24-60	60 Watt, 120-277VAC input, 24VDC output, Class 2	181.1mm x 61.47mm x 35.05mm (7.13" x 2.42" x 1.38")
XFMR-277-24-150	150 Watt, 120-277VAC input, 24VDC output	222mm x 68.07mm x 38.86mm (8.74" x 2.68" x 1.53")



Note: All transformers are to be installed per NEC requirements. Transformer is to be mounted within 10 feet of product. If transformer is mounted more than 10 feet from product, voltage drop and maximum operating distances should be taken into account when making transformer selection. Dimming transformer does not include dimming controller.