

## BTF-LIGHTING FCOB-12V-480L-W-IP30

# BTF-LIGHTING FCOB COB LED Strip User Manual

Brand: BTF-LIGHTING | Model: FCOB-12V-480L-W-IP30

## 1. PRODUCT OVERVIEW

The BTF-LIGHTING FCOB COB LED Strip provides uniform, high-density illumination for various indoor decorative applications. This flexible LED ribbon operates at DC12V, emits Natural White 4000K light, and features a high Color Rendering Index (CRI) of 90+ for accurate color representation. Its design ensures a spotless and soft light output, avoiding visible individual LED dots.

### Key Features:

- **Ultra Bright and Uniform Light:** Features 480 LEDs/meter for a continuous, dot-free light output.
- **High CRI 90+:** Ensures colors appear true and vibrant.
- **Flexible and Cuttable:** Can be cut at designated marks and bent for custom installations.
- **Dimmable:** Compatible with various dimmers and controllers for adjustable brightness.
- **Easy Installation:** Equipped with self-adhesive backing for simple mounting.



Figure 1: FCOB LED Strip (left) provides more uniform light compared to traditional SMD LED strips (right).

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Video 1: Overview of FCOB LED Strip technology and features.

## 2. PACKAGE CONTENTS

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The following items are included in your package:

- 1x 16.4FT FCOB LED Strip Light (No Power Supply or Controller included)
- 2x Non-Wired Gapless Solderless Connectors
- 3x LED Strip Fixed Clips
- 1x 20AWG Extension Wires
- 1x User Manual

## 3. TECHNICAL SPECIFICATIONS

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Feature	Specification
Brand	BTF-LIGHTING
Model Number	FCOB-12V-480L-W-IP30
Color	Natural White 4000K
Voltage	12 Volts (DC)
Wattage	18 Watts (for 16.4FT)
LEDs per Meter	480 LEDs/m
Item Length	5 Meters (16.4FT)
Width	8mm
CRI	90+
Indoor/Outdoor Usage	Indoor
Special Features	DC connector, Dimmable, No Light spot, Uniform light
Average Life	65,000 Hours

## 4. SAFETY INFORMATION

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- Ensure the power supply is disconnected before installation or maintenance.
- Use only with a compatible DC12V power supply (not included). Using an incorrect voltage can damage the strip.
- Do not bend the LED strip sharply or apply excessive force, as this may damage the internal circuitry.
- Avoid installing in areas with high humidity or direct water exposure unless the product's IP rating specifically allows for it (this model is IP30 for indoor use).
- Keep out of reach of children.
- Do not cover the LED strip with materials that could trap heat, as this may lead to overheating.

## 5. INSTALLATION GUIDE

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Follow these steps for proper installation of your FCOB LED strip:

### 5.1 Surface Preparation

- Clean the installation surface thoroughly to remove dust, dirt, and oils. A clean, dry surface ensures optimal adhesion of the strip's self-adhesive backing.
- Ensure the surface is smooth and non-porous for best results.

### 5.2 Cutting and Linking

The FCOB LED strip is designed to be cut at specific intervals. Look for the designated cut marks along the strip. You can link multiple strips using the provided non-wired gapless solderless connectors or by soldering.

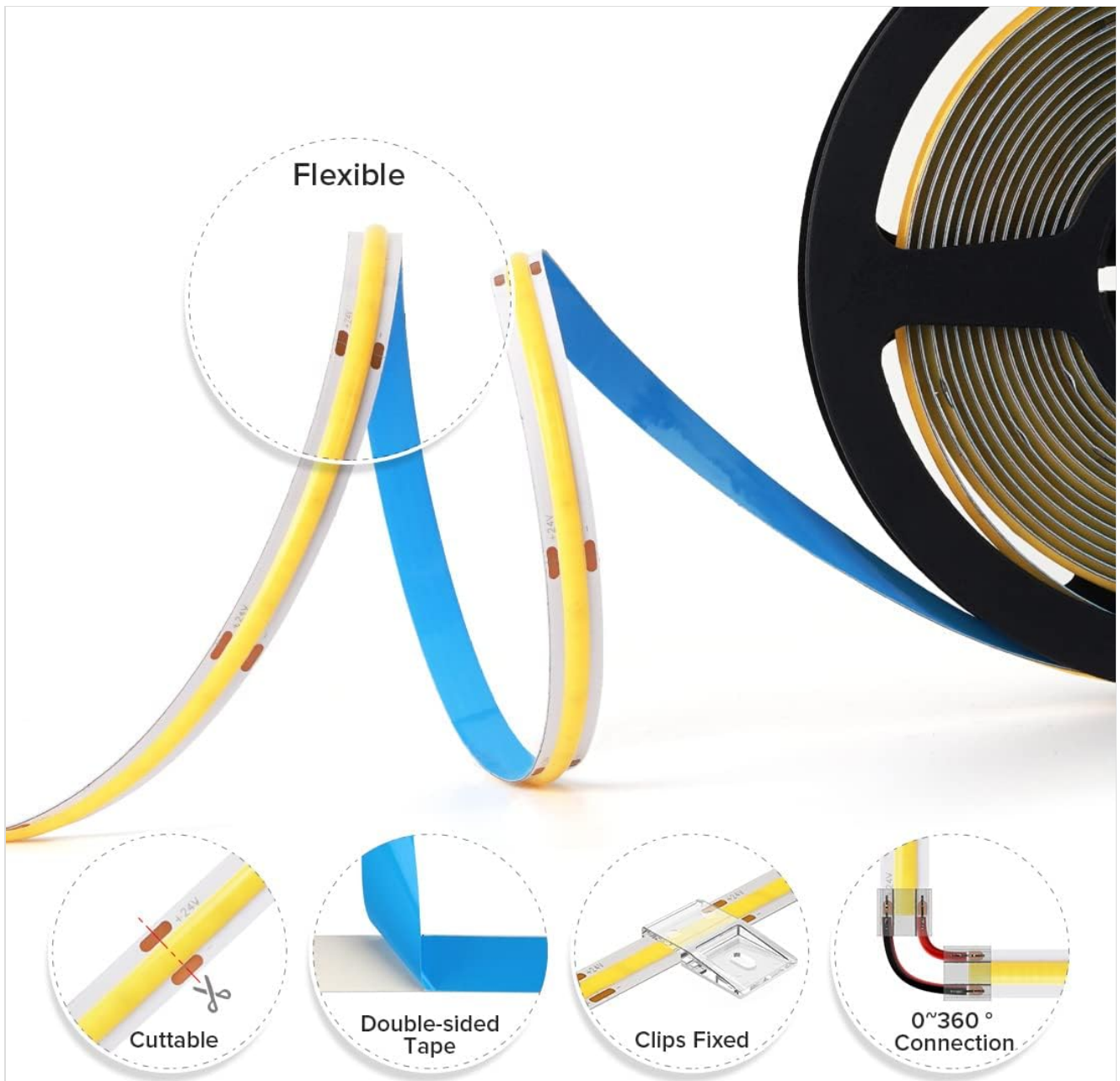


Figure 2: The LED strip is flexible, cuttable, and features double-sided tape for easy installation. Clips are included for secure mounting.

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Video 2: Demonstrates how to use FCOB LED strip connectors for 8mm/10mm widths.

### 5.3 Connection Methods

The LED strip can be connected in several ways:

- **Direct Power Supply:** Connect the strip directly to a compatible DC12V power adapter using the DC plugs on the strip.
- **With a Controller:** For dimming and other control features, connect the strip to a compatible LED controller (sold separately), which then connects to a power adapter.
- **With a Dimmable LED Driver:** For TRIAC dimming, connect the strip to a compatible dimmable LED driver.

Figure 3: Different wiring configurations for connecting the LED strip to power supplies, controllers, or dimmable drivers.

### 5.4 Strip Dimensions

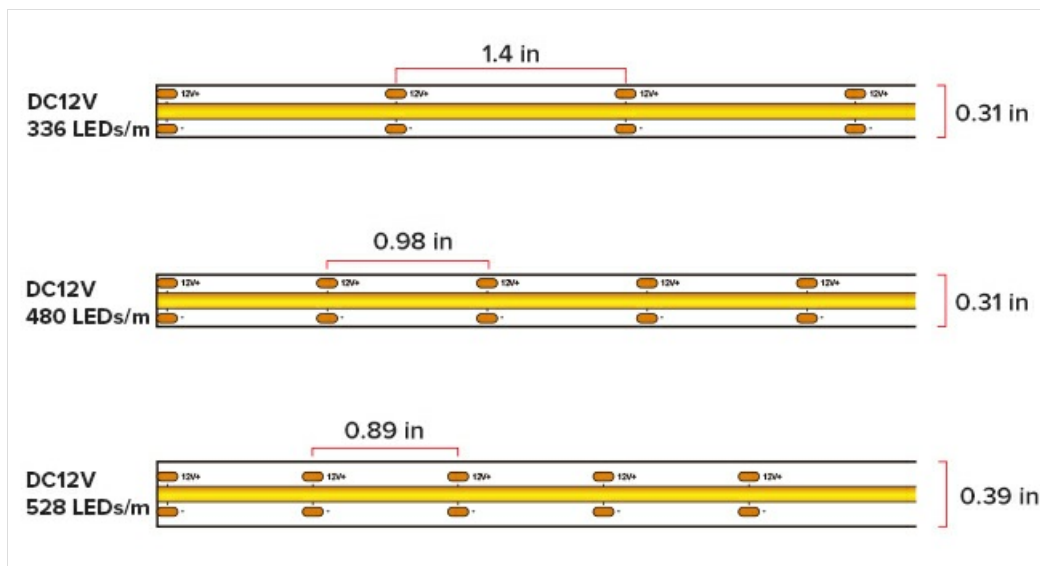


Figure 4: DC12V LED strip dimensions and cut points.

## 6. OPERATING INSTRUCTIONS

Once installed and connected to a compatible power source and/or controller, operate your FCOB LED strip as follows:

### 6.1 Power On/Off

If connected directly to a power supply, the strip will illuminate when the power supply is active. If using a controller, use the controller's power button to turn the strip on or off.

### 6.2 Dimming

This LED strip is dimmable when used with a compatible dimmer or controller. Adjust the brightness levels using your chosen control device.

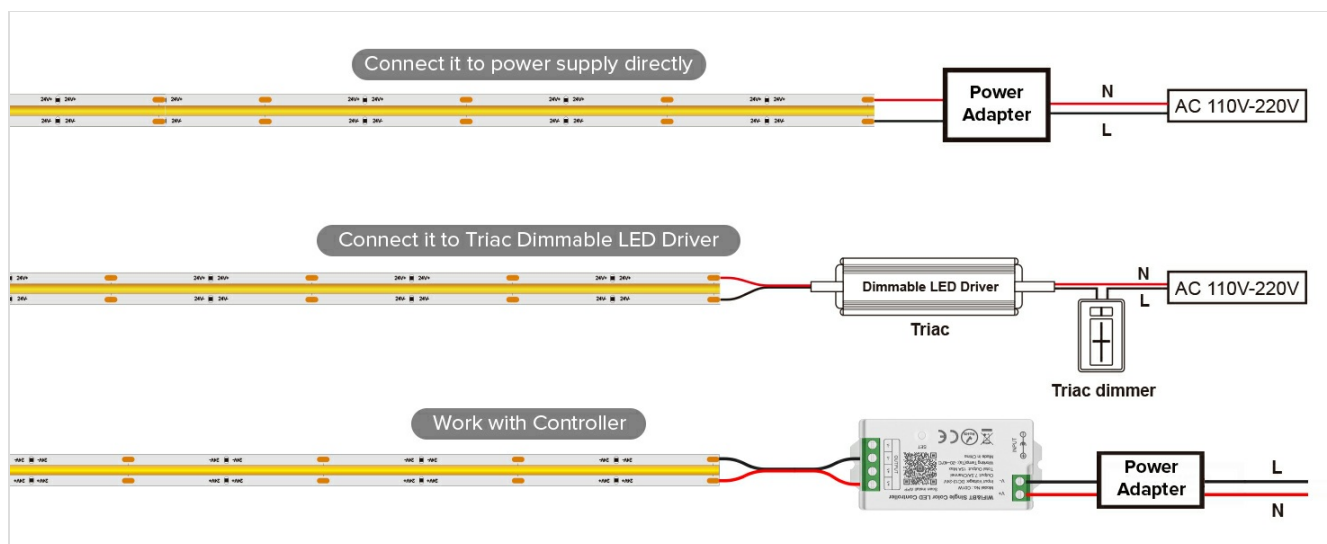


Figure 5: The LED strip offers smooth dimming from 0% to 100% brightness.

### 6.3 Color Temperature

This specific model provides Natural White 4000K light. Other models may offer different color temperatures (e.g., Warm White 2700K/3000K, Daylight White 5000K, Cool White 6000K) which can be selected via a compatible controller if applicable.





Figure 6: Examples of various color temperatures available in FCOB LED strips.

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Video 3: Demonstrates dimming and color temperature adjustments of an FCOB LED strip.

## 7. TROUBLESHOOTING

If you encounter issues with your LED strip, refer to the following common problems and solutions:

- **No Light:**
  - Check if the power supply is properly connected and receiving power.
  - Verify that the LED strip is correctly connected to the power supply or controller.
  - Ensure the power supply voltage matches the strip's requirement (DC12V).
  - If using a controller, check its battery and ensure it's functioning correctly.
- **Flickering or Inconsistent Light:**
  - Check all connections for looseness or poor contact.
  - Ensure the power supply has sufficient wattage for the length of the LED strip.
  - Inspect the strip for any physical damage or sharp bends.
- **Dimming Not Working:**
  - Confirm that your controller or dimmer is compatible with single-color LED strips and is functioning correctly.
  - Ensure the controller is properly connected between the power supply and the LED strip.

## 8. CARE AND MAINTENANCE

- **Cleaning:** Gently wipe the LED strip with a soft, dry cloth. Avoid using abrasive cleaners or excessive moisture.
- **Handling:** When handling, avoid pulling the strip by its wires or applying sharp bends.
- **Storage:** If storing the strip, roll it loosely on its original reel to prevent damage.

## 9. WARRANTY AND CUSTOMER SUPPORT

BTF-LIGHTING FCOB LED strips are designed for a long lifespan of over 65,000 hours. For any troubleshooting, replacement, or questions regarding purchase or installation, please contact BTF-LIGHTING customer service. We are committed to providing support and assistance.

