

# LFXC077XPWMBTT

Bluetooth controllable 4CH PWM Controller



## Description

LFXC077XPWMBTT is a Bluetooth controllable, four channel PWM dimmer for constant voltage LED loads, such as LED strips and constant voltage LED modules. It is connected between a 12-24 VDC power supply and the constant voltage LED load.

LFXC077XPWMBTT can control up to four channels making it an ideal partner for RGBW and tunable white applications. The maximum combined output current is 6 A which can be freely divided between 1-4 channels. LFXC077XPWMBTT is protected against overvoltage, overcurrent and short circuit situations.

LFXC077XPWMBTT can be controlled with Casambi app which can be downloaded free of charge from Apple App Store and Google Play Store.

Different Lafit bluetooth enabled products can be used from a simple one luminaire direct control to a complete and full featured light control system where up to 127 units form automatically an intelligent mesh network.

## Installation

Connect a constant voltage 12-24 VDC power supply to the input connector. Make sure not to use a constant current LED driver and make sure that the cable polarity is correct.

The product has one shared positive output connector (+) and each of the four channels have its own negative connector (-). This is the most typical case with multichannel LED strips. Connect the LED load wires accordingly.

LFXC077X... can be configured having different types of outputs, such as 4 channel RGBW, 3 channel RGB and 2 channel TW. Also, it is possible to configure 1-4 jointly and individually dimmable channels. These configurations can be made by the end user from Casambi App.

As default, LFXC077XPWMBTT is delivered with RGBW configuration.

LFXC077XPWMBTT, as any other Lafit bluetooth product, should not be placed in a metal enclosure or next to large metal structures. Metal will effectively block all radio signals which are crucial to the operation of the product.

## Technical data

### Input

Voltage range: 12-24 VDC  
 Max. input current: 6 A  
 No-load standby power: < 0,3 W

### Output

Output voltage: same as input voltage  
 Max. output power: 144 W @ 24 VDC  
 72 W @ 12 VDC  
 Max. output current: 6 A (can be freely divided between the channels)  
 Min. load requirement: 0 W  
 Dimming method: Pulse Width Modulation (PWM)

### Radio transceiver

Operating frequencies: 2,4...2,483 Ghz  
 Maximum output power: +4 dBm

### Operating conditions

Ambient temperature, ta: -20...+45°C  
 Max. case temperature, tc: +75°C  
 Storage temperature: -25...+75°C  
 Max. relative humidity: 0...80%, non-cond.

### Connectors

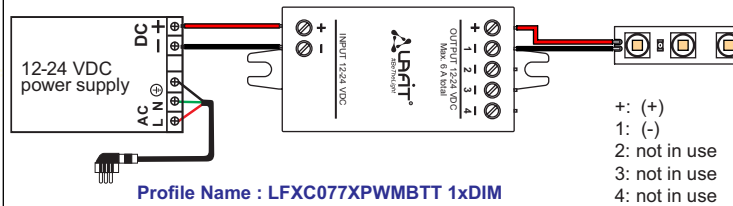
Wire range, solid & stranded: 0,75 - 1,5 mm<sup>2</sup>  
 14 - 22 AWG

Wire strip length: 6 - 7 mm  
 Tightening force: 0,4 Nm  
 Maximum input cable length: 3 m

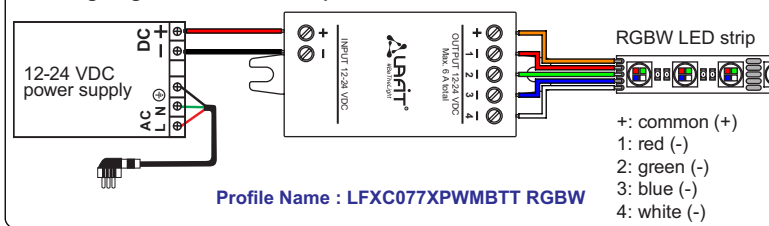
### Mechanical data

Dimensions: 72,6 x 30,0 x 18,0 mm  
 Weight: 23 g  
 Degree of protection: IP20 (indoor use only)

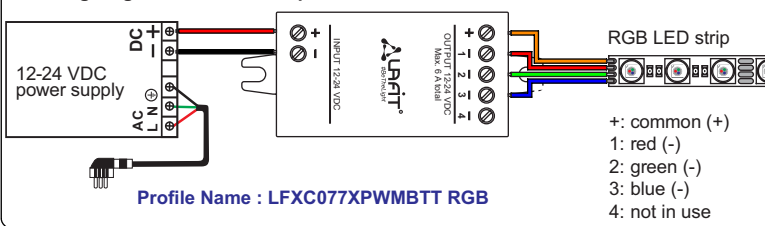
## Wiring diagram, Single color LED strip



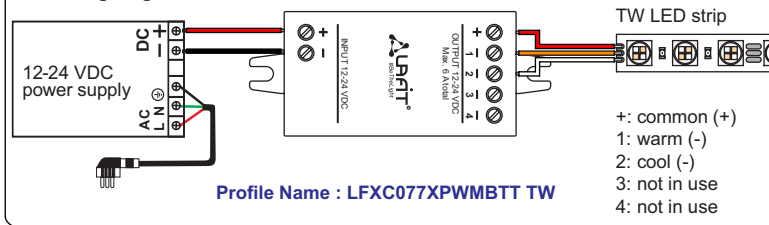
## Wiring diagram, RGBW LED Strip



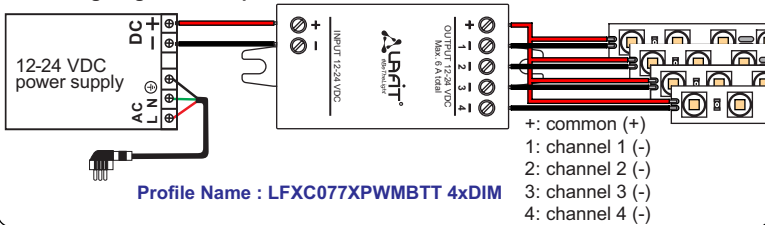
## Wiring diagram, RGB LED Strip



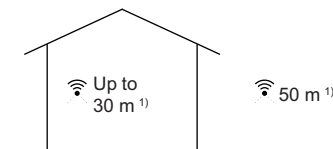
## Wiring diagram, tunable white



## Wiring diagram, 1-4 separate channels



## Range



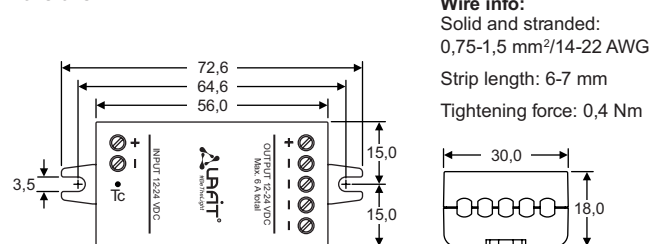
Lafit uses mesh network technology so each LFXC077X acts also as a repeater. Longer ranges can be achieved by using multiple Lafit units.



Compatible devices:  
 iPhone 4S or later  
 iPad 3 or later  
 iPod Touch 5th gen or later  
 Android 4.4 KitKat or later devices produced after 2013 with full BT 4.0 support

<sup>1)</sup> Range is highly dependant on the surrounding and obstacles, such as walls and building materials.

## Dimensions



\* Tc point is on bottom side

Information in this document is subject to change.