

Radium



SMART Blue PWM4 Dimmer

Description

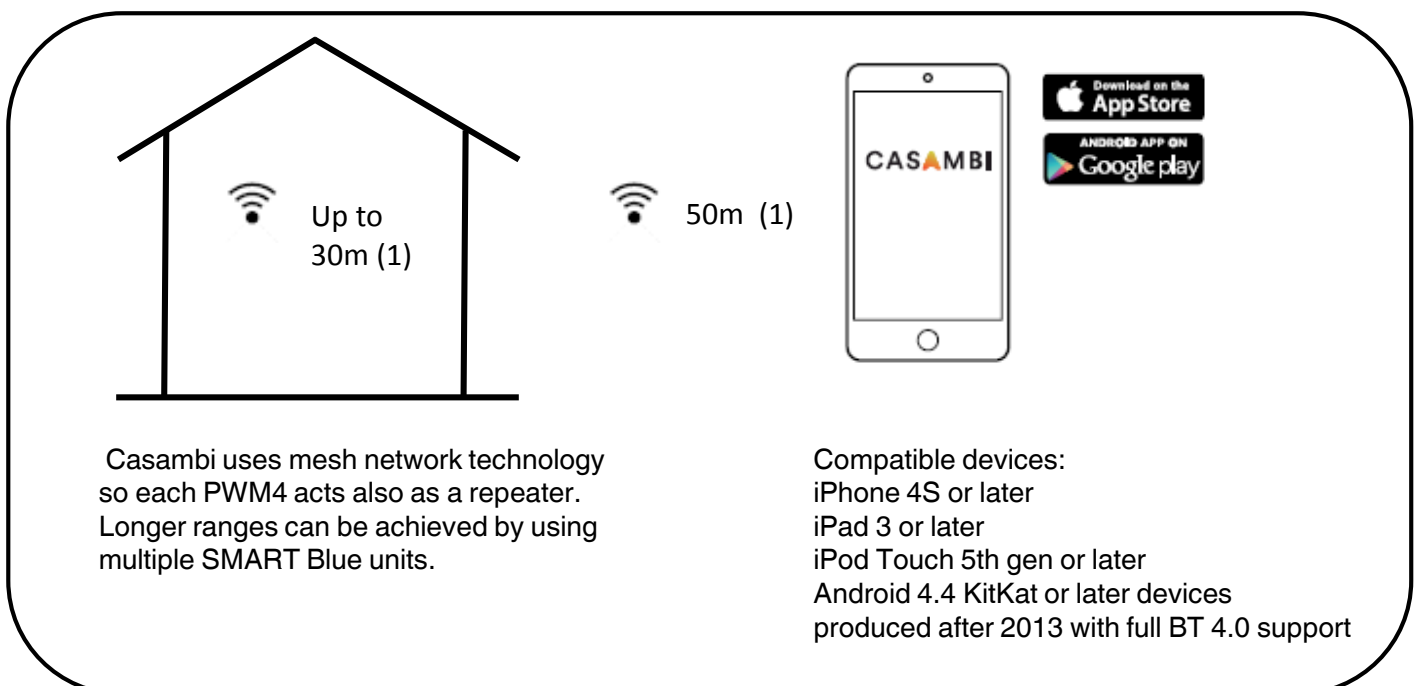
PWM4 is a Bluetooth controllable, four channel PWM dimmer for constant voltage LED loads, such as LED strips and constant voltage LED modules. It is connected between a 12-24 V DC power supply and the constant voltage LED load.

PWM4 can control up to four channels making it an ideal partner for RGBW, RGB and tunable white (TW) applications. The maximum combined output current is 6 A which can be freely divided between 1 -4 channels. PWM4 comes with protection against overvoltage, overcurrent and short circuit situations.

PWM4 can be controlled by the Casambi app which can be downloaded free of charge from Apple App Store and Google Play Store.

There are different SMART Blue products available – from ones for direct control of one simple luminaire to complete and fully featured light control systems where up to 127 units automatically form an intelligent mesh network.

Range



1) Range is highly dependent on the surrounding and obstacles, such as walls and building materials.

Installation

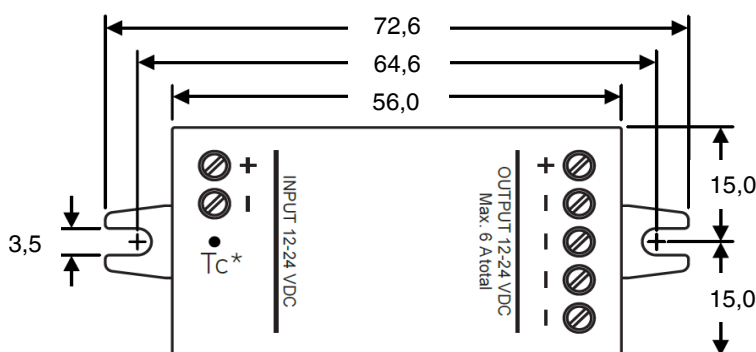
Connect a constant voltage power supply 12-24V DC to the input terminals. Make sure that you do not use a constant current power supply and make sure the polarity is correct.

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

PWM4 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 as well as individually dimmable channels. These configurations can be made in the app. How to do this, you can find out in the “Profile Guide” from our Radium website.

The PWM4, such as any other SMART Blue product, should not be placed in a metal enclosure or next to large metal structures. Metal will effectively block all radio signals which are crucially important for the operation of the product.

Dimensions



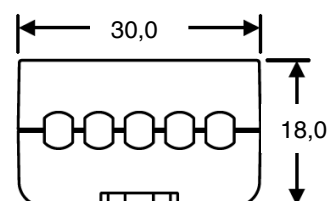
*Tc point is on bottom side

Wire info:

Solid and stranded:
0,5-1,5 mm²/16-20 AWG

Strip length: 6-8 mm

Tightening force: 0,4 Nm



Technical Data

Input

Voltage range:	12-24 VDC
Max. Input current:	6A
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:	6A (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, t_a	-20...+45°C
Max. case temperature, t_c	+75°C
Storage temperature:	-25...+75°C
Max. relative humidity:	0...80%, non-cond.

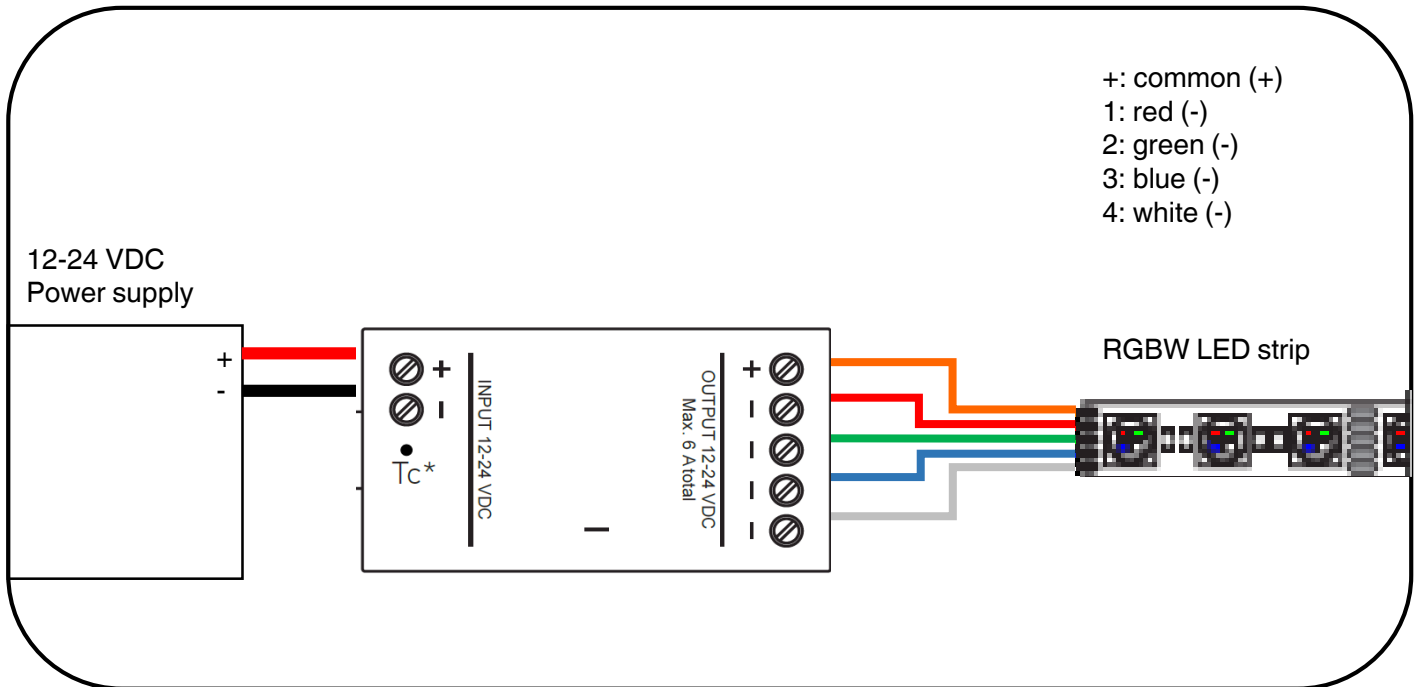
Connectors

Wire range, solid & stranded:	0,75 – 1,5 mm ² 14 – 22 AWG
Wire strip length:	6 – 7 mm
Tightening force:	0,4 Nm / Lb-in

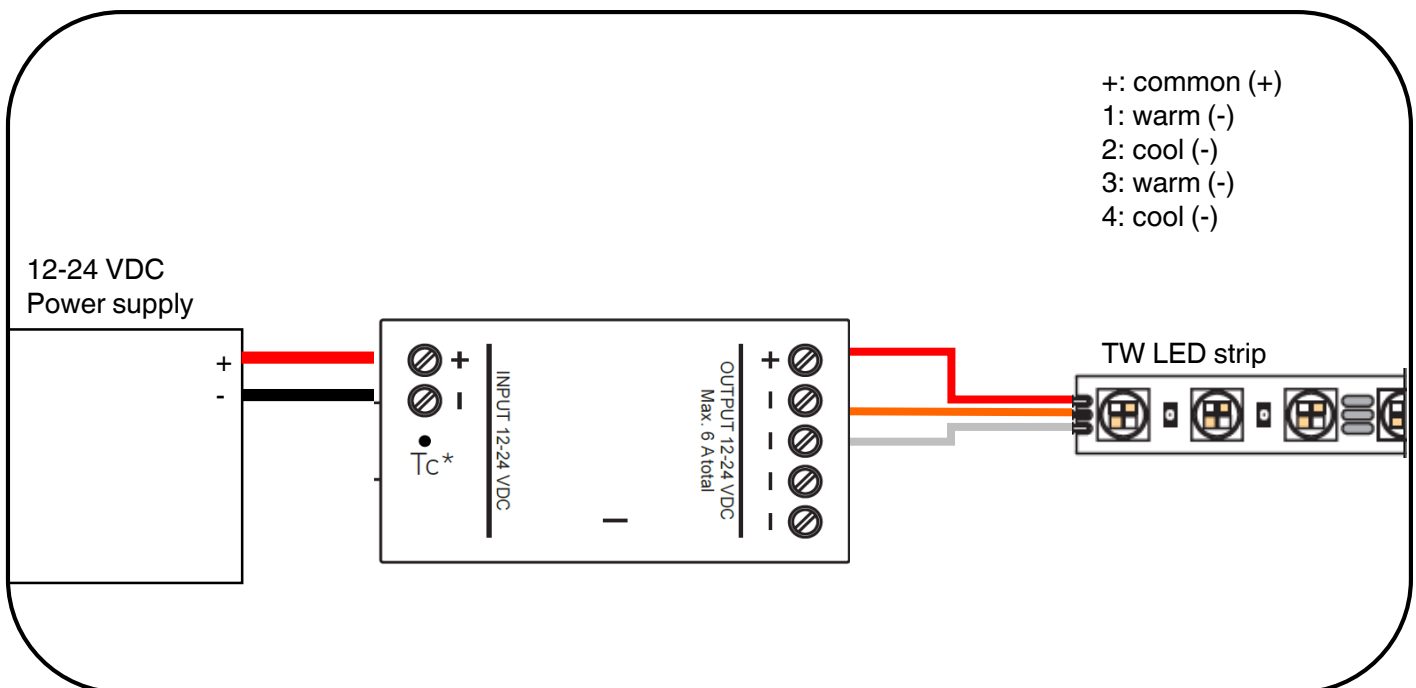
Mechanical data

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

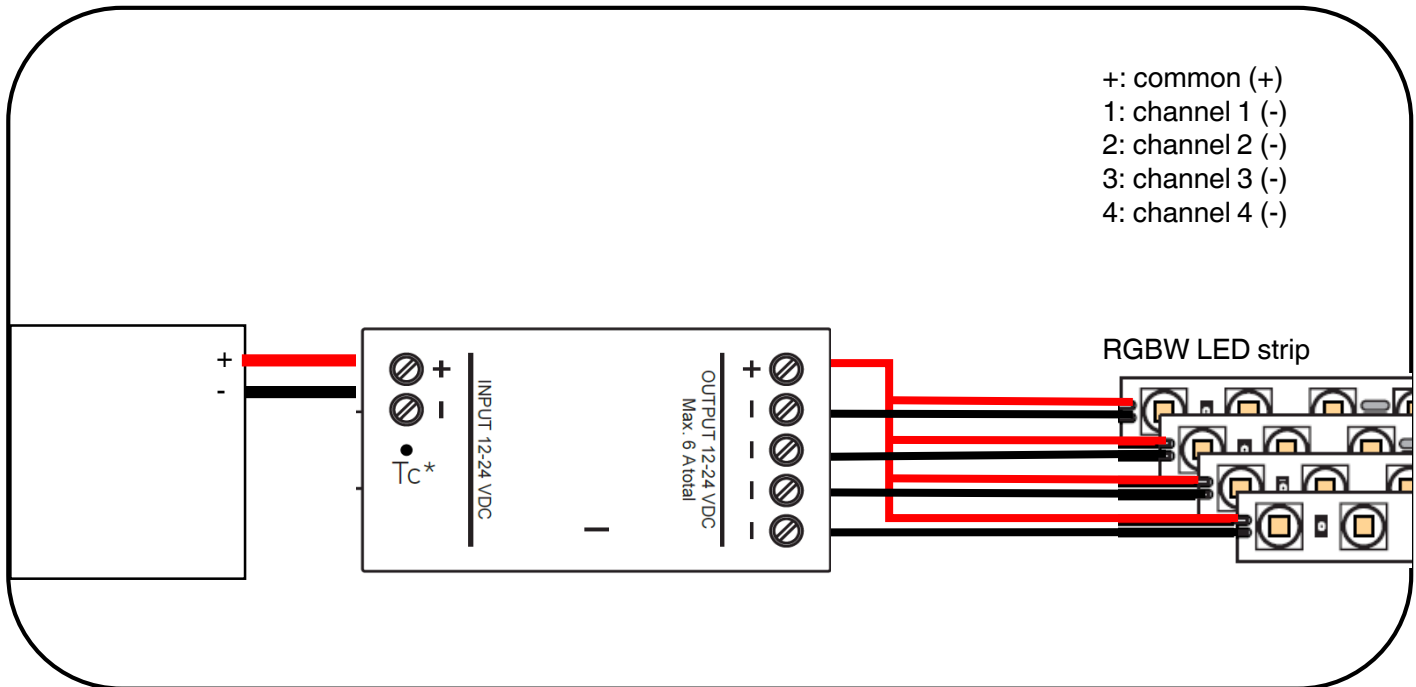
Wiring diagram, RGBW



Wiring diagram, tunable white



Wiring diagram, 1-4 separate channels



Disposal Introductions

In line with EU Directive 2002/96/EC (recast 2012/19/EU) on waste electrical and electronic equipment (WEEE), this electrical product must not be disposed of as unsorted municipal waste.

Please dispose of this product as special waste by returning it to the point of sale or to your local municipal collection point for recycling.