



PX-RGB-PWM

Wireless Dongle for LED Lighting Fixture

Compatible with ColorCue, CM-T10PROE, DMX-Link, PX-T10 and ColorFx

Introduction

PX-RGB-PWM is a wireless receiver that will communicate with all ColorMaker RF transmitters. The radio signal from the remote is converted to 3 PWM signals (RGB) and can be used to control any RGB LED common Anode LED cluster. All Colormaker technology including ColorRoll , Color Effects and Auto Programming are coded into the PX-RGB-PWM dongle.

The PWM signals (RGB) output is through removable terminal block connector. The PWM will offer flicker free dimming and color mixing. The PX-RGB-PWM dongle is powered by 9-12 volt DC and can wired through the terminal block or use the 2.5mm power jack.

The PX-RGB-PWM can be auto programmed to receive one RGB channel from the remote. The swivel mount antenna can be adjusted to a position the antenna for best performance.



PX-RGB-PWM Details

A - Programming jack use to update the PX-RGB-PWM software.

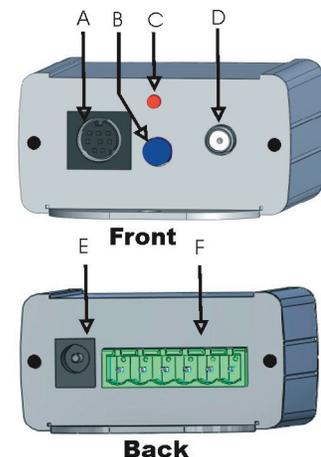
B - Auto Program switch used to set the PX-RGB-PWM receive address.

C - Auto Programming indicator.

D - Connector for the antenna (included)

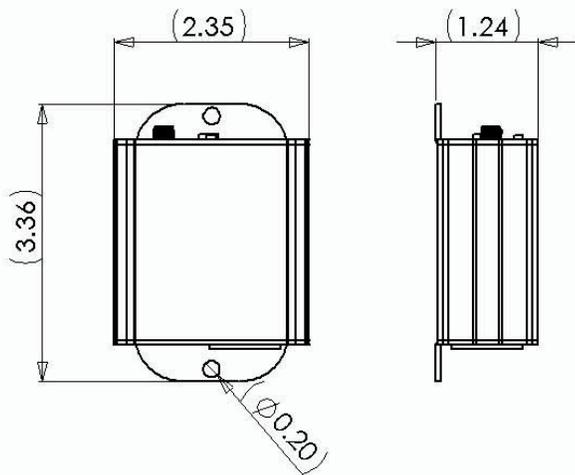
E - 2.5mm power jack for 9-12 volt input.

F - 3 Channel PWM Output



The PX-RGB-PWM dongle operates on 916 MHz and has a communication range of +400 feet line of sight is not required. 916 MHz a frequency not commonly used so wireless devices such as microphones and speakers will not interfere with the operation. The 916 MHz frequency is well below the 2.4GHz widely used by other wireless LED manufacturers.

Dimensions



Frequency: 916 MHz
Power supply: 9-12 volts 2.5mm power jack
Max current: 6 AMPS

Dimensions:

Width: 2.35
Height: 1.24
Length: 3.36 (including mounting ears)
Weight: .2 lbs

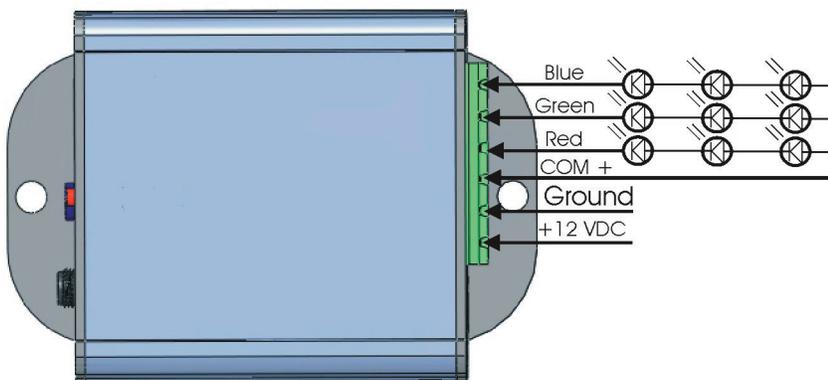
Operation

The PX-RGB-PWM can be controlled with all ColorMaker remote controls. Some of the features require our most advanced models such as the PX-T10 and ColorFx. The dongle address is factory set to receive data on channel Q1 from the PX series and is ready to go out of the box. Most of the features for the PX-RGB-PWM dongle and how to use them can be found in the manual for the transmitter. The PX-RGB-PWM will receive 1 channel of RGB and convert the data to a PWM signal. Each of the 3 colors has an output that will connect to a common anode (+) LED cluster. The LED clusters should be designed to run at 12 volts with a maximum current of 2 AMPS for each color.

Connecting the PX-RGB-PWM dongle to the LED fixture

The PX-RGB-PWM dongle has a 6 pin terminal block with outputs for RGB and COM, Power +12v and Ground. There is also a 2.5mm power jack that can be used as an alternate power input. Each output can drive up to 2 AMPS.

Internal resettable fuse with protect the output from overloads.



Auto Addressing

To auto address the dongle follow these few steps.

- 1) Power up the PX-RGB-PWM dongle
- 2) Press and hold the program button until the indicator light turns yellow.
- 3) Select the Q you want to use on the remote then press the Red UP button. The PX-RGB-PWM dongle should then respond. The indicator LED on the dongle will turn green. This completes the addressing. The address is stored in memory and will not be lost when power is turned off. The address can be set as many times as needed.

Software upgrade

Colormaker has designed the PX-RGB-DMX dongle with more memory and features than we will ever use. We are always thinking of how to improve our products with more controls and features so we designed the PX-RGB-DMX dongle with load of extra memory space and used a micro processor with extra timers, registers, converters and clocks so we are only limited by our imagination. We also included connector for users to load our new ideas.

Warranty

ColorMaker hereby warrants, to the original purchaser, ColorMaker products to be free of manufacturing defects in materials and workmanship for a period of 1 year from the date of purchase. This warranty shall be valid only if product is purchased within the United States of America. It is the owners responsibility to establish the date and place of purchase by accepting evidence, at the time service is sought.

For warranty service, send the product to the ColorMaker factory. All shipping charges must be prepaid. Equipment must be sent in its original package and to include all control devices.

Warrant is void if serial number has been altered or removed, seals have been voided, if the product is modified in any manner which ColorMaker concludes, after inspection, affects the reliability of the product; if the product has been repaired or services by anyone other than ColorMaker unless prior written authorization was issued to purchaser.

ColorMaker reserves the right to make any changes in the designs and/or improvements upon its products without any obligation to include these changes in any products theretofore manufacture.

Factory location:
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This equipment has been tested and found to comply with the limits for a class B digital device, pursuant to part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses and can radiate radio frequency energy and if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

- * Reorient or relocate the receiving antenna.
- * Increase the separation between the equipment and receiver.
- * Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
- * Consult the dealer or an experienced radio/TV technician for help.

The user is cautioned that changes and modifications made to the equipment without the approval of manufacturer could void the user's authority to operate this equipment.