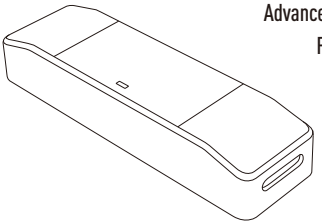
CASAMBI
LED Controller

illumino
Die Licht GmbH

Model: 077-0004-005



5-in-1 Multi-function Model
Advanced Parameters
Full Protection

Smart + Remote

User Parameters

Full Protection

Push Terminal

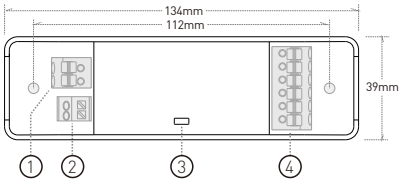
8-50 Volt

Multi-Function

Introduction

This LED controller is designed to drive single color to RGB+CCT constant voltage LED products in voltage range of DC 8-50V . With powerful functions of Casambi platform, it also has advanced user parameters to fine tune the application. It has full protection function to ensure the safety, and with push cable connectors, the installation will be simple and reliable.

Function & Size



1. Power supply input

Connect to power supply. The controller can accept supply voltage from DC 8V to 50V, the maximum cable gauge is AWG12 or 2.5mm^2. The controller's output voltage is at same level as the power input voltage, please make sure the power supply voltage is correct and the power is capable for the load wattage. The power input '+' unit is directly connected to the output terminal '+' unit inside the controller.

2. Press key input

Connect to a normally open type press key switch if local operation is needed. Three operation method is available for the press key:

Single press: Turn on/off.
Double click: Change color or color temperature.
Hold press: Dimming.

3. Working status indicator

This indicator shows all working status of the controller. It displays different events as following:

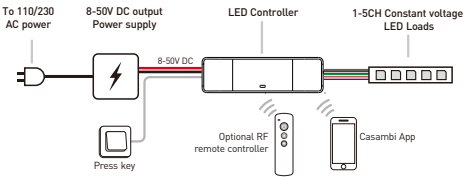
Steady green: Normal working.
Short green blink: Command received.
Green blink for 3 times: Confirmation or identification.
Single yellow flash : Edge of the adjustment.
Red flash: Overload protection.
Yellow flash: Overheat protection.

4. LED output

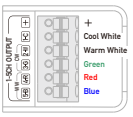
Connect to LED loads. The LED loads must be constant voltage driving type and with common anode connection for multi-channel models. Please make sure the LED rated voltage is same as the power supply and each channel's maximum load current is in range of the controller's rated current.

Wiring

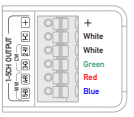
Please connect the controller output to LED loads and power supply to the controller power input. The power supply voltage must be same as the LED load's rated voltage. Check all cables to be well connected and insulated before power on.



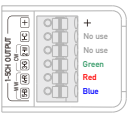
This model supports 1-5 channel application from single color to RGB+CCT, please refer to following diagram for multiple application output wiring.



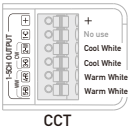
RGB+CCT



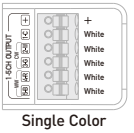
RGBW



RGB



CCT



Single Color

Operation

5. Control by smartphone

Please install CASAMBI app on your smart phone first. It requires iOS10.0, Android 4.4 or macOS11.0 or later system to support the app. All functions of the controller is integrated with the CASAMBI app, please find the guidance on the app for operation.

6. Pair the optional RF remtoe

Besides smart phone and press key control, user can also use the RM05 RF remote controller to turn on/off and change color or brightness. The remote controller needs to be paired to controller before using. Please refer to remote controller's manual for detailed operation.

Advanced features

7. Change model function

The working mode can be changed from 1 channel (single color) to 5 channels (RGB+CCT) from the Casambi app.

To change the model, Please make sure the controller is not paired and then select the '**Change profile**' function on the app to select desired model.

8. Change user parameters

The press key, RF remote, gradient time and PWM frequency is adjustable from the user parameter setting. Please go to the setting menu on Casambi app to set up the parameters.

CAUTION!

The PWM frequency option is for solving flicker or audible noise issues for some application. To ensure more stable working, please do not set to high frequency if no noise or flicker issues occurred.

The controller's efficiency will drop versus increased frequency and the output current need to be derated maximum 50% with frequency higher than 4KHz.

9. Protection feature

The controller has full protection function against wrong wiring, load short circuit, overload and overheat. The controller will stop working and the indicator will flash with red / yellow color to indicate the malfunction. The controller will try to recover from protection status in a short time when the working condition is good.

For protection issues, please check the situation with different indicator information:

Red flash: Check the output cables and load, make sure no short circuit and the load current is in rated range. Also the load must be constant voltage type.

Yellow flash: Check the installation environment, make sure in a rated temperature range and with good ventilation or heat dissipation condition.

Specification

Function	Single color, CCT, RGB, RGBW, RGB+CCT
Working voltage	DC 8-50V
Rated output current at 1KHz PWM freq.	Max 8A for each channel, total max 24A * output current need to be derated up to 50% when PWM frequency is higher than 4Khz.
Smartphone connection	Bluetooth mesh
Press key function	Yes
RF remote fucntion	Yes
RF remote frequency	433.92MHz
Output mode	PWM constant voltage
User parameter	Press key, Remote enable, Gradient, PWM frequency
PWM frequency	498Hz - 15.7KHz optional
Overload protection	Yes
Overheat protection	Yes
Working temperature (Ta)	-20°C~+55°C
Dimension	134x39x24mm