

Model No: 90 000113

Single color to RGBW Full protection CV output

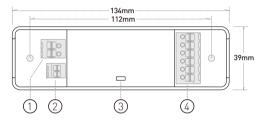


The 90 000113 LED controller is designed to drive constant voltage LED products in voltage range of DC6-24V. It can be controlled by the CASAMBI

Introduction

products in voltage range of DC6-24V. It can be controlled by the CASAMBI app, press key button, touch sensing, or RF remote controller. With multiple control method, user can control multiple controllers along with other CASAMBI products by smart-phone or by hardware press-key, touch sensing and RF remote. The controller has full protection function to guarantee the safety of applications. With push connectors and cable holders on both sides, the wiring is easy and secure to make the installation more reliable and durable.

Dimension & Terminal



1. Power supply input

Connect to power supply. The controller can accept supply voltage from DC 8V to 50V, please press the connector top and insert the power cable with polarity referring to the print on the top. The maximum cable gauge is AWG12 or 2.5mm². 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 wattage is capable for the load wattage. Please be noted the power input '+' unit inside is directly connected to the output terminal's '+'

2. Press key / touch sensing input

Connect to a press key or touch sensing pad to directly control the light. For press key switch, please use normally open type switch which only connect two poles when the key is pressed. For touch sensing control, please only connect a metal pad to the '+' terminal with a cable. The metal pad can be hiden under thin insulation material. To turn on the press key or touch sensing function, user still need to make corresponding setting on the controller setting page of CASAMBI App.

3. Work 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. Red flash: Overload protection. Yellow flash: Overheat protection.

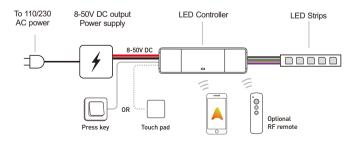
4. LED output

Connect to LED loads. The LED loads need to be constant voltage driving and with common anode connection. Please make sure the LED rated voltage is same as the power supply and each channel's maximum load current is below the controller's rated current.

The 90 000113 model can be configured to different application for single color, tunable white, RGB or RGBW. For different application, the 1-4 channel is mapped as following table:

Application	CH1	CH2	CH3	CH4
Single color	Single color	Single color	Single color	Single color
Tunable white	Cool white	Warm white	No use	No use
RGB	No use	Green	Red	Blue
RGBW	White	Green	Red	Blue

5. Wiring diagram



6. Press key / touch sensing control

The press key / touch sensing function need to be activated from the App setting page before using. The operation is listed as following: Single click: Turn on/off. Double click: Change color. Hold press: Dimming.

7. RF remote controller (optional)

Besides smart phone, press key and touch sensing control, it's also possible to control 90 000113 by a RF remote controller. With specific RF remote controller, user can turn on/off the controller, change color and brightness. User can enable or disable the RF remote controller from the controller setting page of CASAMBI App. The remote controller need to be paired to controller before using. Please refer to remote controller's manual for detailed operation.

8. Protection function

The controller has full protection function against wrong wiring, output short circuit, overload and overheat. It will stop working and the indicator will flash red at overload or short circuit situation, the indicator will flash yellow at overheat situation. The controller will try to recover from protection every 10 seconds after protection occurred, and will automatically recover working when the condition is good.

9. Change model & function

The controller can be configured to single color, tunable white, RGB and RGBW function by Casambi app. The model can only be changed on unpaired controller, please tap on the unpaired controller icon on the start page of Casambi app and select the 'Change profile' to switch to the desired

Specification

Working voltage	DC 8-50V	
Rated output current	8A for each channel , total max 24A.	
Standby power	<0.5W	
Wireless connection	CASAMBI protocol, 433MHz RF remote	
Press key and touch sensing	Normally open press switch / Capacitance touch sensing	
Output mode	PWM constant voltage, frequency at 500Hz, 1KHz, 2KHz, 4KHz	
Working temperature (Ta)	-20°C~+55°C	
Dimension	134x39x23.5mm	