CASAMBI
LED Controller

Single color to RGBW
Full protection
CV output

Smart Control   Full Protection

Compact Size   High Power   Press Key

Cable Holder   4-in-1 Model   Wireless Remote
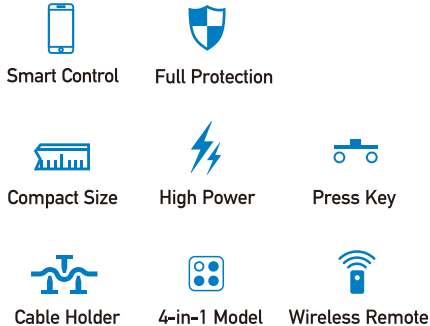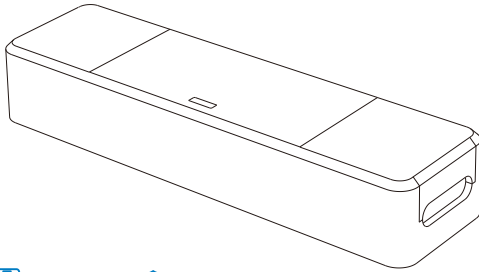
■ Introduction

The NB.1 LED controller is designed to drive constant voltage LED 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 and RF remote. The controller has full protection function to guarantee the safety of applications. With compact dimension and cable holders, the installation is easy and secure to make the installation more reliable and durable.

■ Dimension & Terminal

87mm
72mm
24mm

① ② ③ ④
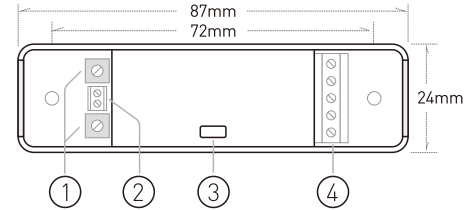
1. Power supply input

Connect to power supply. The controller can accept supply voltage from DC 6V to 24V, 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 wattage is capable for the load wattage. Please be noted the power input '+' unit is directly connected to the output terminal's '+' unit inside the controller.

2. Press key input

Connect to a press key to control the light directly. Please use normally open type switch which only connect two poles when the key is pressed. To turn on the press key function, user still need to make corresponding setting on the controller setting page of CASAMBI App.

Rayrun

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 NB.1 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	Cool white	Warm white	Warm white
RGB	No use	Green	Red	Blue
RGBW	White	Green	Red	Blue

5. Wiring diagram

To 110/230 AC power   6-24V DC output Power supply   LED Controller   LED Strips

6-24V DC

Press key
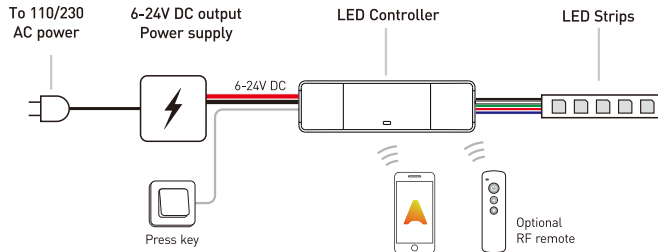
Optional RF remote

6. Press key control

The press key 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 NB.1 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. Please select the 'Change profile' function for non-paired controller on app to change model function.

■ Specification

Working voltage	DC 6-24V
Rated output current	3A for each channel , total max 12A.
Standby power	<0.5W
Wireless connection	CASAMBI protocol, 433MHz RF remote
Press key and touch sensing	Normally open press switch
Output mode	PWM constant voltage, frequency at 500Hz, 1KHz, 2KHz, 4KHz
Working temperature (Ta)	-20°C~+55°C
Dimension	87x24x15mm