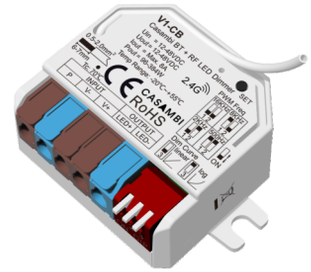
V1-CB

Casambi BT + RF Dimming LED Controller

Casambi



Features

- Casambi BT + RF dimming LED controller with 1 channel, maximum 8A output.
- Casambi APP control, support on/off, brightness adjustment, group control, scene editing, startup state for power on and multiple power-down memory function settings.
- Match with RF 2.4G single-zone or multi-zone dimming remote controller optional.
- 4096 levels 0-100% dimming smoothly without any flash.
- 500Hz, 2KHz, 8KHz or 16KHz output PWM frequency selectable.
- Connect with external push switch to achieve on/off, and brightness 0-100% adjustment function.
- Overheat/reverse/short circuit protection.

CE RoHS

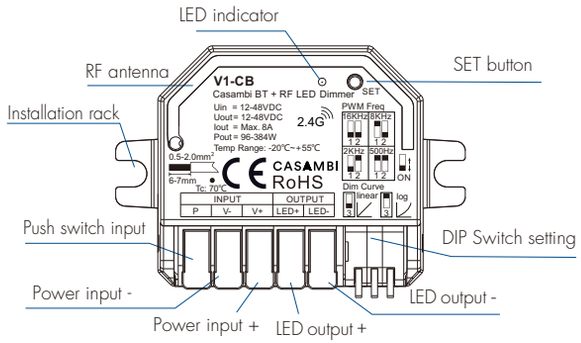
Technical Parameters

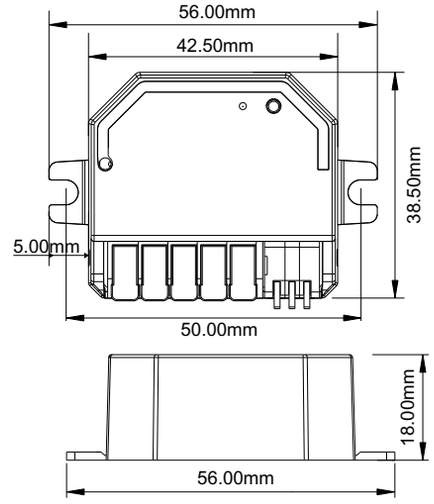
Input and Output	
Input voltage	12-48VDC
Output voltage	12-48VDC
Output current	Max. 8A
Output power	96-384W
Environment	
Operation temperature	Ta: -20°C ~ +55°C
Case temperature (Max.)	Tc: +70°C
IP rating	IP20

Dimming Data	
Input signal	Casambi + RF 2.4GHz + Push Switch
Control distance	30m(Barrier-free space)
Dimming gray scale	4096 (2^12)levels
Dimming range	0 -100%
Dimming curve	Linear/Logarithmic
PWM Frequency	500Hz/2KHz/8KHz/16KHz
Warranty and Protection	
Warranty	5 years
Protection	Reverse polarity, overheat short circuit

Safety and EMC	
EMC standard	EN IEC 55015 EN IEC 61547 ETSI EN 301 489-1/-3/-17
Safety standard	EN 61347-1/-2
Radio equipment	ETSI EN 300 328 ETSI EN 300 440
Certification	CE RoHS
Package	
Size	L60 x W60 x H40mm
Gross weight	0.043kg

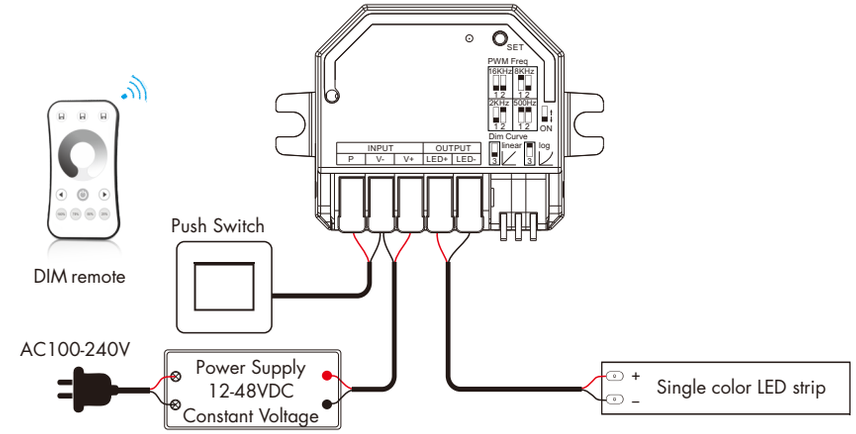
Mechanical Structures and Installations





Note: The mounting tabs on both sides can be snapped off along the scored lines to accommodate different installation requirements.

Wiring Diagram



Wire preparation:

1. The wiring can be solid or stranded with a cross-sectional area of 0.5 to 2.0 mm². Conventional 1mm² can withstand 10A output current.
2. When wiring is installed, the terminals must be tightened. If they are not tightened, the contact point resistance will be too high and the terminals will easily burn due to heat when used at full load for a long time.

Note: The output power of a constant voltage power supply should be at least 1.2 times that of the output load (LED strip), otherwise the full power output of the load can easily cause automatic flickering or shaking of the light.

Installation Precautions:

1. The products shall not be stacked, the distance should be ≥ 20cm, so as not to affect lifespan of the products due to poor heat dissipation.
2. The product shall not be installed close to the switching power supply with an interval of ≥ 20cm to avoid radiation interference of switching power supply.
3. The installation height shall be ≥ 1m from the Loor to avoid shortening the remote control distance due to too weak reception signal.
4. The products are not allowed to be close to or covered by metal objects, with an interval of ≥ 20cm to avoid signal attenuation and shorten remote distance.
5. Avoid installation at the corner of the wall or the corner of the beam, with an interval of ≥ 20cm to avoid signal interference.

Match with RF Remote Control

There are two ways to match/delete:

Use SET button

Match:
Short press SET button, enter the match state.
immediately press on/off key (single zone remote)
or zone key (multiple zone remote) of the remote,
The LED indicator fast flash means match is successful.

Delete:
Press and hold SET button for 10s to delete all match,
The LED indicator fast flash means all matched remotes were deleted.

Use Power Restart

Match:
Switch off the power, then switch on power, repeat again.
Immediately short press on/off key (single zone remote)
or zone key (multiple zone remote) 3 times on the remote.
The output light flashes 3 times means match is successful.

Delete:
Switch off the power, then switch on power, repeat again.
Immediately short press on/off key (single zone remote)
or zone key (multiple zone remote) 5 times on the remote.
The output light flashes 5 times means all matched remotes were deleted.

Push Switch Dimming

The push switch interface can be connected to push panel switch or push button for dimming.

- **Short press:** Turn the light on or off.
- **Double-click:** Switch between 10% and 100% brightness.
- **Long press (1-6s):** Continuously increase or decrease the brightness, long press again after each release, the brightness changes in the opposite direction.
- **Synchronize:** If multiple controllers are connected to the same self-reset switch, please long press for 10s first to synchronize all lights to 100% brightness. It is recommended that the number of controllers connected to the same push switch does not exceed 25, and the length of the connecting wire does not exceed 20m.

PWM Frequency Setting

Set the PWM frequency using DIP switch 1 and 2. The factory default PWM frequency is 2KHz.
Higher PWM frequency, will cause lower output current, higher power noise, but more suitable for camera (No flickers for video).

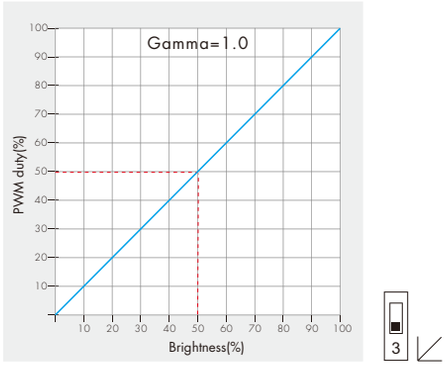
PWM frequency and output current mapping:

PWM frequency / Iout / Uin	1 2	1 2	1 2	1 2
	500Hz	2KHz	8KHz	16KHz
12-24V	8A	8A	7A	6A
36-48V	8A	8A	7A	5A

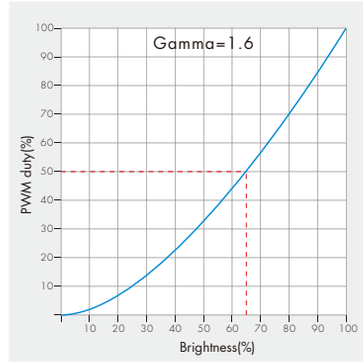
Dimming Curve Setting

Set the dimming curve using DIP Switch 3. The factory default is logarithmic dimming.

Linear dimming curve



Logarithmic dimming curve



Casambi APP Connection

Use Casambi APP for the first time

When devices are used for the first time, they need to be added to the network.
A device can only be part of one network.
All Casambi devices are normally supplied in an unpaired state.

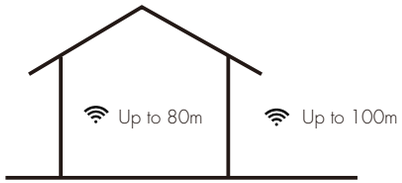
1. Download the Casambi APP from the Apple APP Store or Google Play Store.
2. The device is powered on and automatically enter the config state.
3. The APP will search for all devices with casambi turned on within the Bluetooth range of the mobile device.
4. When a device is added to the network, it can be controlled by application.

CASAMBI

Download on the App Store

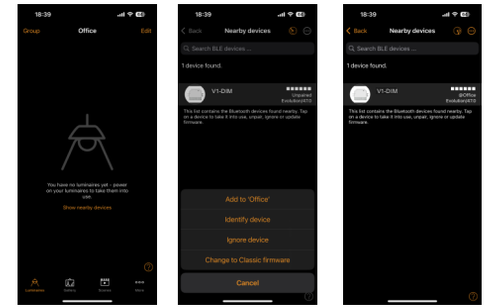
GET IT ON Google Play

Compatible System:
Android 4.4 and ios10.0 or above.

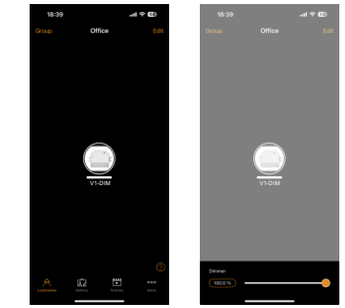


Casambi uses Bluetooth Mesh network technology and each Casambi device can also be used as a repeater for longer distances.
The distance is highly dependent on the surroundings and obstacles such as walls and building materials.

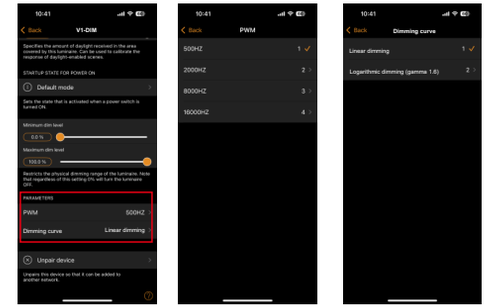
Casambi APP user interface



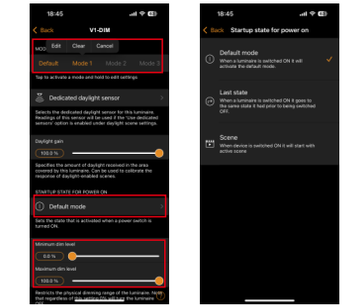
Device Pairing:
Click "show nearby devices", add the V1-DIM device to your network,and pairing will be successful.



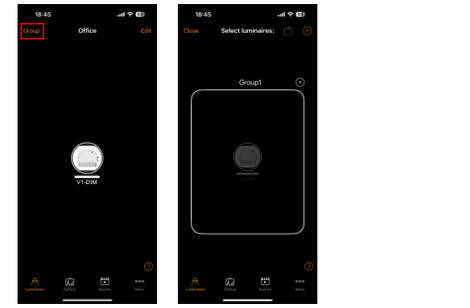
Dimming:
Click the light fixture icon: Turn the light on or off.
Long-press the light fixture icon:
A brightness slider appears at the bottom of the screen.
Touch the brightness slider to adjust the light level.



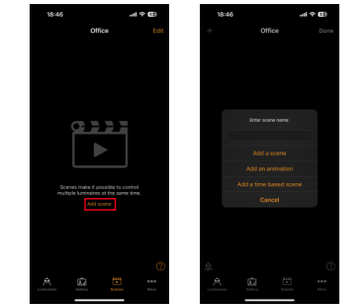
Parameter Settings:
Click "PWM" to select PWM frequency:
500Hz, 2000Hz, 8000Hz, 16000Hz.
Click "Dimming curve" to select Linear dimming or Logarithmic dimming (gamma 1.6).



Mode Settings/Startup State for Power on Settings /Minimum, Maximum Brightness Settings:
Double-click the light fixture icon to enter the settings interface.
Long-press "Mode 1/2/3" to edit/clear/cancel mode settings.
Click "Default Mode" to select the startup state for power on.
Swipe left or right on the slider to set minimum/maximum brightness.



Group Control:
In the main interface, click "Group" in the upper left corner, select the fixture you want to group, and create a group.
The main interface shows the new group, and then you can control the group.



Scene Setting:
Click "Add Scene" in the Scene Interface to add and edit scenes.