

TRONIX

213-401

Casambi Bluetooth + RF Triac Dimmer Feature

- Casambi Bluetooth + RF + Push AC phasecut dimmer, 1 channel output.
- To dim and switch single color dimmable LED lamps, traditional incandescent and halogen lights.
- Casambi APP control, supports On/Off, brightness adjustment, group control, scene editing, Min/Max Brightness setting, power-on status and various power-down memory settings.
- 256 levels of 0-100% dimming smoothly without any flash.
- Minimum brightness, reverse-phase or forward-phase dimming can be set by key.
- Compatibility with RF 2.4G single zone or multiple zone dimming remote control.
- Connect with external push switch to achieve on/off and 0-100% dimming function.
- Easy to be placed on rail or in standard wall junction box.
- Overheat/Overload protection, recover automatically.



CE RoHS

Technical Parameters

Input and Output		Dimming data		Safety and EMC	
Input voltage	AC100-240V	Input signal	Bluetooth + RF 2.4GHz + Push	EMC standard	EN IEC 55015/ EN IEC 61547 ETSI EN 301 489-1/-3/-17
Output voltage	AC100-240V	Control distance	30m(Barrier-free space)	Safety standard	EN 60669-1/-2
Output current	Max 1.5A	Dimming level	256 levels	Radio equipment	ETSI EN 300 440 ETSI EN 300 328
Output power	150-360W	Dimming range	0-100%	Certification	CE RoHS
Warranty and Protection		Environment		Package	
Warranty	5 years	Operation temperature	Ta: -20°C ~ +55°C	Size	160 x W60 x H40mm
Protection	Overheat/Overload	Case temperature (Max.)	Tc: +90°C	Gross weight	0.061kg
		IP rating	IP20		

Compatible Load Types

Load type	Maximum load	Remarks
Dimmable LED lamps	200W @ 220V 100W @ 110V	Due to variety of LED lamp designs, maximum number of LED lamps is further dependent on power factor result when connected to dimmer.
Triac dimmable LED drivers	200W @ 220V 100W @ 110V	Maximum permitted number of drivers is 200W divided by driver rated input power rating, and make sure the surge current is no more than 2 times 65A.
Incandescent lighting, HV halogen lamps	400W @ 220V 200W @ 110V	

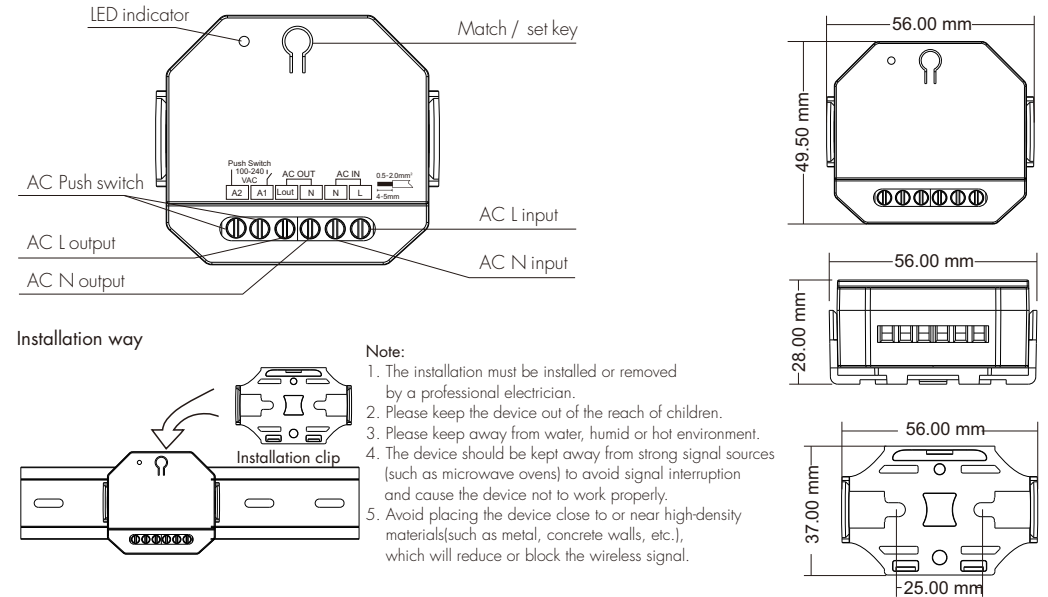
Because different manufacturers triac dimmable LED driver rated input power is different, you can refer to the formula to calculate the max. number of LED driver. Formula: $D_{max} = 200W / RP$, at the same time need to meet the sum of the surge current (I surge) does not exceed 130A. For example: triac dimmable LED driver rated input power(RP) = 15.4W, surge current = 10A/230VAC, Then $D_{max} = 200 / 15.4 = 13$ (pcs), $I_{surge} = 13 * 10 = 130A$, the max. number of triac dimmable LED driver is 13.

Casambi

Recommended Number of Load Connection

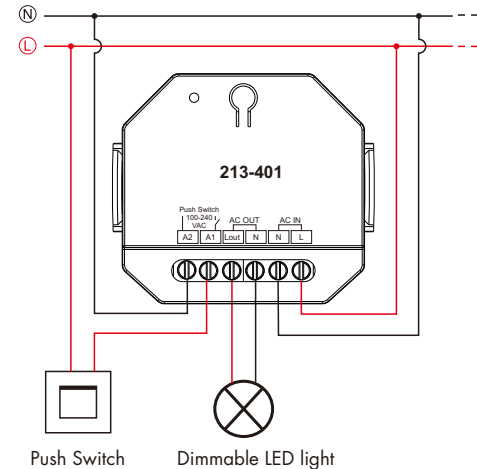
Load type	Output power per load	Quantity
Dimmable downlight	5.5W @ 220V~240V	20
Triac dimmable LED driver	12W @ 200V~240V	15
Triac dimmable LED driver	36W @ 200V~240V	4
Triac dimmable LED driver	75W @ 200V~240V	2

Mechanical Structures and Installations

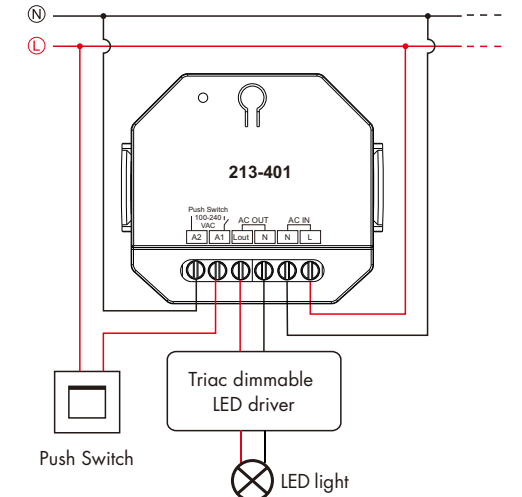


Wiring Diagram

Connect with dimmable LED light:



Connect with Triac dimmable LED driver:



Caution: Please carefully ensure all wire connections and polarities are correct and secure before applying power, otherwise this dimmer will be damaged.

AC Push-dim:

Short press: Turn on or off light.

Long press (1-6s): Step-less dimming, brightness increases or decreases continuously, each time you release and then long press again, the brightness changes in the opposite direction.

Casambi APP Connection

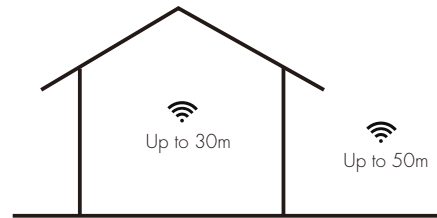
Use Casambi APP for the first time

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 enters 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.

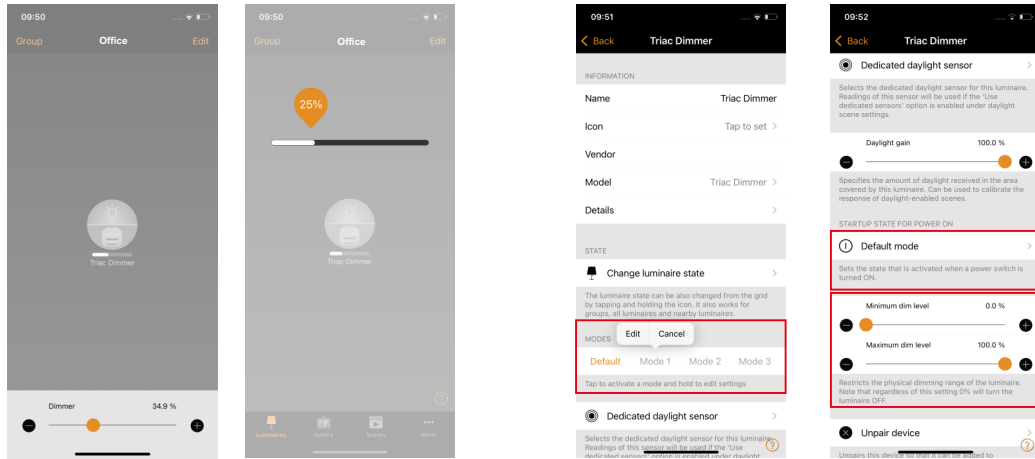


Compatible System: Android 4.4 and ios 10.0 or above



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



Main interface dimming:

Option 1: Slide the lamp icon left or right to adjust the brightness.
 Option 2: Long press the fixture icon, a pop-up window at the bottom of the interface will show the brightness slider, touch the brightness slider to adjust the brightness.

Mode Setting / General Startup Status / Minimum, Maximum Brightness Setting:

Double click the fixture icon to enter the setting interface:
 Long press 'Mode 1/2/3' to edit/clear/cancel the setting mode.
 Short press 'Default Mode' to select universal startup state.
 Slide the adjustment slider left/right or click '+/-' button to set the minimum/maximum brightness.

Match RF Remote Control (two match ways)

End user can choose the suitable match/delete ways. Two options are offered for selection:

Use the controller's Match key

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

Delete:
 Press and hold Match key for 5s to delete all match, The LED indicator fast blinks 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 light blinks 3 times means match is successful.

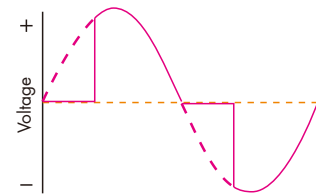
Delete:
 Switch off the power, then switch on power, repeat again. Immediately short press on/off key (single zone remote) or zone key (multiple zone remote) 5 times on the remote. The light blinks 5 times means all matched remotes were deleted.

Leading Edge or Trailing Edge Dimming Setting

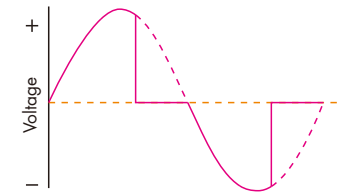
Select leading edge(forward-phase) dimmer or trailing edge(reverse-phase) dimmer according to dimmable LED light or driver.

- ① At the moment when the dimmer is powered on, long press set key for 10s to set trailing edge dimming(factory default), the LED indicator flash 1 time.
- ② At the moment when the dimmer is powered on, long press set key for 15s to set leading edge dimming, the LED indicator flash 3 times.

Forward-phase control dimmer(TRIAC)



Reverse-phase control dimmer



Min Brightness Setting

The minimum output brightness can also be set through the set key.

Long press set key for 2s, the light blink 2 times, ready for min brightness set, then short press set key 1-6 times, to get 6 min brightness: 5%(default), 10%, 15%, 20%, 25% or 30%, the light will output the current min brightness immediately, Long press set key for 2s or wait 8s, quit min brightness set, the light will output 100% brightness automatically. Long press the set key for 10s to restore factory defaults.

Installation Precautions

1. The products shall not be stacked, the distance should be $\geq 20\text{cm}$, 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 $\geq 20\text{cm}$ to avoid radiation interference of the switching power supply.
3. The installation height shall be $\geq 1\text{m}$ from the oor 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 $\geq 20\text{cm}$ to avoid signal attenuation and shorten the remote distance.
5. Avoid installation at the corner of the wall or the corner of the beam, with an interval of $\geq 20\text{cm}$ to avoid signal interference.