DMX CBM003B Casambi Scene Controller Selector User Guide

DMX CBM003B Casambi Scene Controller Selector

Contents

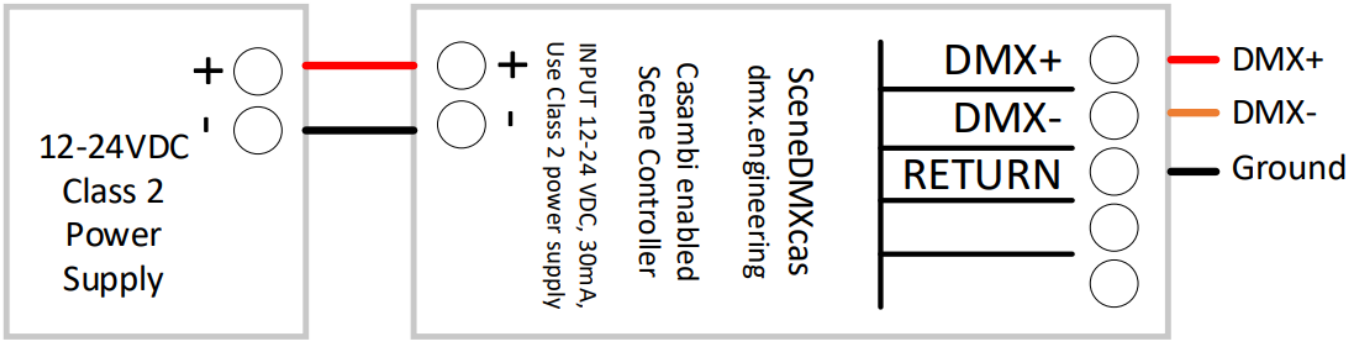
Product Description

SceneDMXcas is a Casambi “Gateway” device designed to utilize a connection to a standard DMX digital master controller to provide remote selection of pre-defined Casambi Scenes and Scene Intensity. SceneDMXcas is connected between a 12-24 VDC Class 2 power supply, and a DMX master universe.

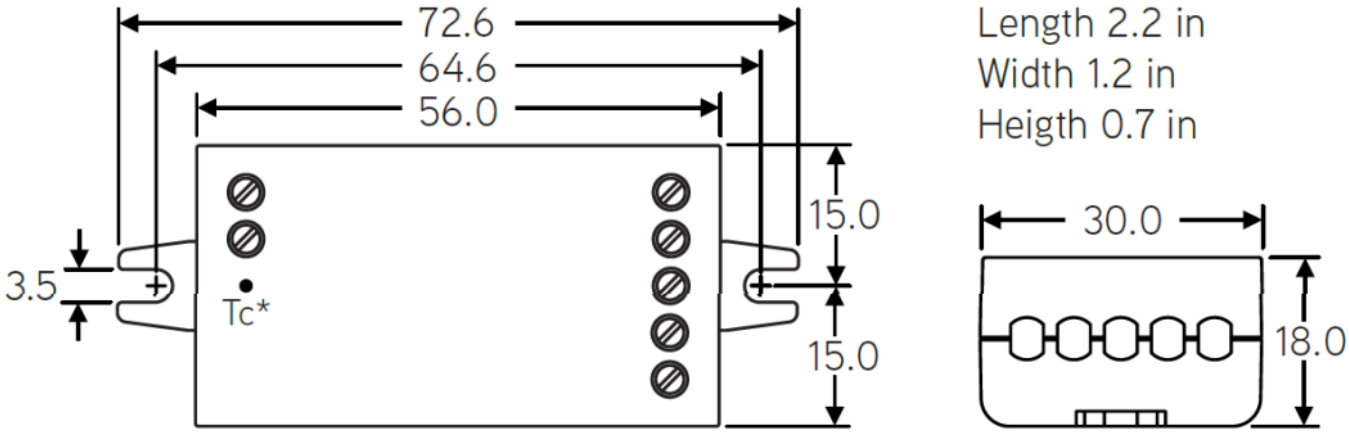
SceneDMXcas decodes two DMX channels, and provides Scene selections by mapping the first DMX channel to up to 20 pre-defined Casambi Scenes. The second DMX channel provides 0-100% intensity selection for the selected Casambi Scene. The DMX Start Address for each SceneDMXcas is also user selectable. SceneDMXcas can be configured with the Casambi app which can be downloaded free of charge from Apple App Store and Google Play Store.

Different Casambi enabled products can be used from a simple one luminaire direct control to a complete and full featured light control system where up to 127 units form automatically an intelligent mesh network.

Typical Connection Diagram



Mechanical Data



Dimensions are in mm. *Tc point is on bottom side

Dimensions: 2.2 x 1.2 x 0.7 inch
72.6 x 30.0 x 18.0 mm
Weight: 0.8 oz (23 g)

DMX Engineering LLC
9221 E. Baseline Road, Suite 109-492
Mesa, AZ 85209

Compatible devices:

Download on the App Store	iPhone 4S or later iPad 3 or later iPod Touch 5th gen or later
GET IT ON Google Play	Android 4.4 or later devices produced after 2013 with full BT 4.0 support

Technical Data

Input

Voltage range: 12-24 VDC, Class 2
No-load input current: 30 mA

DMX-512 Input

3-wire non-isolated DMX-512
Channel 1—Scene selection
Channel 2—Intensity level

Radio transceiver

Casambi CBM003B Radio Module

Operating frequencies: 2.401-2.483 Ghz
Maximum output power: typ. +8 dBm -103 dBm RX sensitivity in long-range mode

Operating conditions

Ambient temperature, ta: -13…+113°F (-25…+45°C)
Max. case temperature, tc: +167°F (+75°C)
Storage temperature: -13…+167°F (-25…+75°C)
Max. relative humidity: 0…80%, non-cond.

Connectors

Wire range, solid & stranded: 0.5 – 1.5 mm2 14 – 22 AWG
Wire strip length: .25” (6 – 7 mm)
Tightening force: 0.4 Nm / 2.6 Lb-in

Installation

Connect a Class 2 power supply with 12-24 VDC output voltage to the input connector of Scene10cas. Make sure not to use a constant current LED driver and make sure that the cable polarity is correct. The product has two DMX input connections (+ and -), plus one common (RETURN) ground.
Connect the DMX in wires to a DMX master of your choice to give you DMX control of your Casambi Scene lighting network. Add Scenes to the Casambi network, the SceneDMXcas will allow up to 20 Scenes to be selected.

Using the Casambi app, go to Gateways, and press on the SceneDMXcas device, and add it to your Casambi network. Now press on the SceneDMXcas icon, and scroll to the bottom of that screen. Note at the bottom of this screen there are 21 user programmable parameters—DMX Start Address, and 20 Scene selectors. First select your DMX Start Address, then up to 20 Scenes from your pre-defined Scenes in your Casambi network. Now simply use your DMX master to select the Scene and Intensity, with the first DMX channel selecting the Scene and the second channel defining the Intensity.

SceneDMXcas should not be placed in a metal enclosure, such as metal junction boxes. Metal will attenuate radio signals which are crucial to the operation of the product. If the product will have to installed into a junction box, make sure to use a plastic junction box. SceneDMXcas is an ETL Listed Open-Type device which means that it will have to be used together with a Class 2 power supply with maximum output power of 100 VA. The product can be installed outside of junction box. Make sure to comply with National Electric Code in installation and when selecting installation wires.

Range
The range between two SceneDMXcas’s or between a SceneDMXcas and a smart phone can vary depending on obstacles and surrounding material.
In open air the range between two SceneDMXcas can be in excess of 200 ft, but if the unit is encapsulated into a metal structure, the range can be only few feet. Therefore, thorough testing is high suggested.

Casambi uses mesh network technology so each SceneDMXcas acts also as a repeater. When testing the network, it is important to test that each unit can be controlled from any point of the network covered area.

Compliance Statement
This device complies with part 15 of the FCC Rules. Operation is subject to the following two conditions:

1. This device may not cause harmful interference, and
2. This device must accept any interference received, including interference that may cause undesired operation.

Warning
Changes or modifications not expressly approved by DMX Engineering and Design LLC could void the user's authority to operate the equipment.

FCC Interference Statement
This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one of the following measures:

- Reorient or relocate the receiving antenna.
- Increase the separation between the equipment and receiver.
- Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
- Consult the dealer or an experienced radio/TV technician for help.

Radiation Exposure Statement for Canada
This device complies with Industry Canada's licence-exempt RSSs. Operation is subject to the following two conditions:

1. This device may not cause interference
2. This device must accept any interference, including interference that may cause undesired operation of the device.

   This equipment is exempt from the routine RF exposure evaluation requirements of RSS-102. This equipment should be installed and operated with a minimum distance of 20 cm between the antenna and the user or bystanders.

CUSTOMER SUPPORT

Information in this document is subject to change.

SceneDMXcas User Guide v2.01 USA and Canada

⚠ **WARNING:**

Cancer and Reproductive Harm www.P65Warnings.ca.gov.

Certifications
FCC ID: 2ALA3-CBM002A
IC: 22496-CBM002A
Conforms to UL STD 916
Certified to CSA STD C22.2#205

DMX Engineering LLC
9221 E. Baseline Road, Suite 109-492
Mesa, AZ 85209

DMX Engineering LLC
http://dmx.engineering
DMX Casambi Scene Selector with Casambi CBM003 Long Range Radio

Documents / Resources

	DMX CBM003B Casambi Scene Controller Selector [pdf] User Guide CBM003B Casambi Scene Controller Selector, CBM003B, Casambi Scene Controller Selector, Scene Controller Selector, Controller Selector, Selector

References

- DMX Engineering | DMX & Casambi Lighting Solutions
- User Manual