ENG Installation instructions CM10WCM

Warning!
High voltage. Risk of electric shock or fire. The installation must only be performed by a competent electrician. Disconnect the power supply to the primary side och ensure it is switched off prior to installation.

Description

CM10WCM is a wireless controller for LED and halogen-actuators with 0-10V, 1-10V or DALI dimming interface. The CM10WCM is available with either analog 0-10V (and 1-10V) or a digital standalone Dali control interface.

With standalone Dali-output, the CM1 0WCM will act both as a controller and power source, which enables it to connect directly to an LED actuator with Dali interface, without the need for an external Dali power source. The so-called independent Dali makes it possible to implement multi-channel light systems with adjustable colours (RGB and RGBW) or colour temperature (CCT) while keeping the wiring and the number of components to a minimum.

CM10WCM does not comply with IEC 60929 and is therefore not designed for connection to an existing DALI-network. The module can only be used in a closed system, that is to say as part of a system that is not connected to an external Dali-network.

The CM10WCM is controlled wirelessly via Casambi's app on a smartphone or tablet, via the Bluetooth 4.0 protocol. The Casambi-app can be downloaded free from Apple App Store and Google Play Store.

The devices automatically create a secure wireless mesh network so that a large amount of fixtures can be operated regardless of where you are. No external distribution node is needed. The CM10WCM can also be controlled via a standard on/off wall switch.

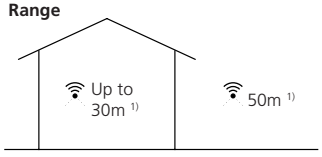
Installation

Ensure that the primary side voltage is switched off before the connection is made. Use 0.75 - 1.5mm2 single or multi-strand cables. Strip the cable 6 to 7mm from the end.

Insert the cables into the corresponding holes and tighten the screws on the terminal block. Make sure that the inputs and outputs are connected correctly. The primary input connector is marked with the letters L and N with an arrow pointing inwards, while primary output connector is marked with the letters L and N, with an arrow pointing outwards. The low voltage output is marked with the + and - symbols.

If the installation of the CM10WCM is carried out in a heat-sensitive environment (e.g. in a light fixture or a ceiling socket above a light fixture), make sure that the ambient temperature does not exceed the specified maximum value.

Range



Download on the App Store

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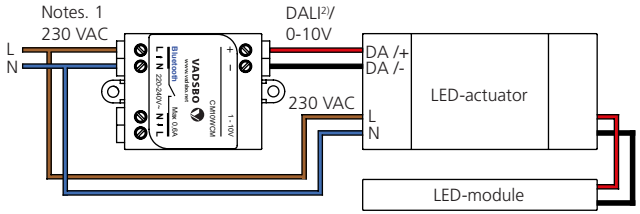
Compatible devices:
iPhone 4S or later iPad 3 or later iPod Touch 5th gen or later Android 4.4 KitKat or later devices post-2013 with full BT 4.0 support

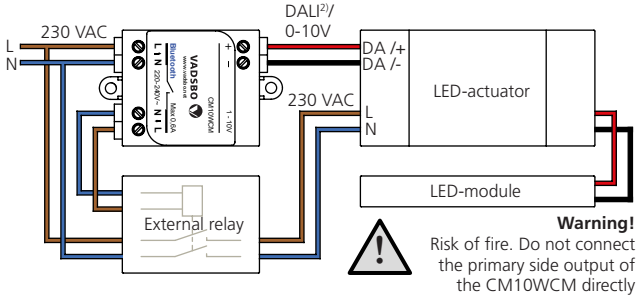
Casambi uses mesh network technology so that each CM10WCM also acts as a range extender. A longer range can be achieved by using several Casambi devices.

1) The range is very dependent on the surroundings and obstacles, such as walls and building materials.

Circuit diagram for a directly-operated DALI or 0-10V actuator
Suitable for a ctuators that can be switched off via a control interface.

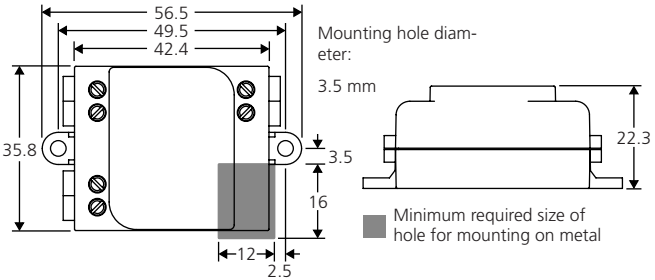


Wiring diagram, DALI or 1-10V actuator operated by an external relay
Suitable for actuators that cannot be switched off via a control interface.



Warning!
Risk of fire. Do not connect the primary side output of the CM10WCM directly to the primary side input of the LED-actuator.

Dimensions



Note 1. CM10WCM is a built-in Class II device. Use double insulated cables or an external mounting box if the device is not mounted inside another insulation unit.

Note 2. CM10WCM and the associated DALI interface do not meet the requirements of IEC 60929. Only connect directly to a controllable DALI LED-actuator. Should not be connected to an existing DALI-network. Connect only one LED-actuator (DALI or "0/1-10V" actuator) to a CM10WCM.

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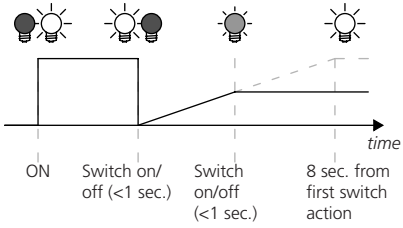
Dimming without the app

1. Switch on the light using a wall switch.
2. Quickly switch off the wall switch (after maximum 1 second) and then on again in quick succession. The light level begins to increase gradually.
3. Turn off the power switch when the desired level has been achieved. The level is saved automatically.
4. If the light is not switched back on within 8 sec., the light intensity will reach its maximum level.
5. The on/off switch off sequence can also be used to switch between preset scenes.



Change the operation of the device:

To change the operation of the device, it must be unplugged from the network. Click "More" and wait for the device to become visible under "Devices in the vicinity", then click on it and choose Change Profile.

1-10V (factory-set profile)

For easy control of devices (actuator, dimmer) with 0-10V-control. The device can sometimes require an external relay to switch on/off. For 1-10V dimming, use the profile CBU ASD.

Colour Adjustment

Adjust the colour just the way you like it. Go into the connected network, double-click on the device. Click "Change fixture state" to alter the light level, brightness, colour, and colour saturation. For colour adjustment of RGBW, the profile RGBW [auto] is typically used.

Tunable-White (TW):

Tunable-White (TW) is operated by several adjustable channels which alter the colour temperature of the light source to adjust the shade of output white light.

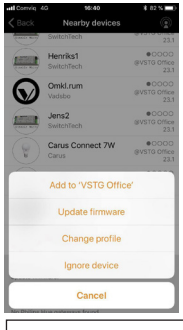
DALI

Connect to a DALI fixture and control it easily without programming. For easy dimming of a DALI fixture, use profile DALI Broadcast.

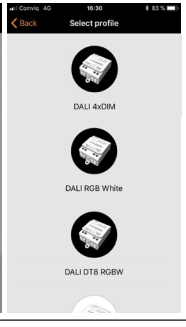
Alternative control

It is possible to operate the device via external push buttons. It is possible to control the device both by push buttons connected to actuators/dimmers with Bluetooth support or directly via push buttons with Bluetooth support. First make sure that the desired push button is connected to the same network as the device you wish to control.

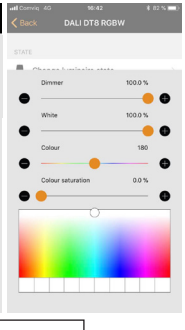
Change profile



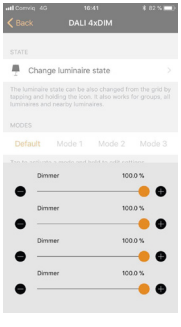
Profile choice



RGBW-profile



Profile for the dimming of four channels



Technical data

Input

Voltage range	220-240 VAC
Frequency	50 Hz
Maximum primary current	0,6 A

Primary output

Output relay	SSR in phase
Voltage Range	220-240 VAC
Frequency	50 Hz
Maximum start-up current on the connected load	12A/8ms (use external relay for larger start-up currents).

0-10V Output

Voltage range	0-10 VDC
Maximum energy use	6mA

DALI-Output

Voltage range	9-12 VDC
Maximum energy use	6mA

Radio receiver

Operating frequency	2.4...2.483 Ghz
Maximum output power	+4 dBm

Operating conditions

Ambient temperature, bring	-20...+50°C (lut 0 A) -20...+40°C (lut 0,6 A)
The maximum enclosure temperature, to	+70 °C
The storage temperature	-25...+75 °C
Maximum relative humidity	0...80%, non-condensable.

Connections

Cable cross sectional area, single and multi-stranded	0.75-1.5 mm² 14-22 AWG
Stripping length	6-7 mm
Tightening torque	0.4 Nm/4 Kgf.cm/2.6 Lb-In

Mechanical data

Dimensions	56.5 x 35.8 x 22.3 mm
Weight	48 g
IP-protection	IP20 (for indoor use only)
Rating	Built-in class II

Instructions for disposal

In line with the EU Waste Electrical and Electronic Equipment Directive (2002/96/EC) (WEEE).

This electrical product may not be disposed of with unsorted municipal waste.

Please dispose of this product by returning to the store where it was purchased or to a local municipal recycling centre.

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For more information about the Casambi app, visit our website at www.vadsbo.net/CM10WCM

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