VADSBO CBU-ASD Control Module Instruction Manual

Contents

CBU-ASD Control Module

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 and ensure it is switched off prior to installation.

Description

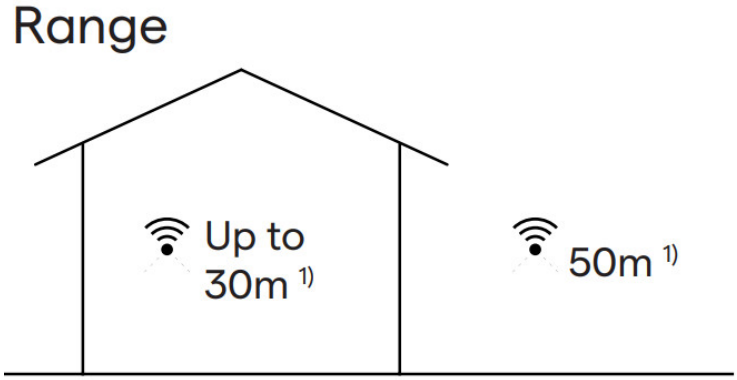
CBU-ASD is a wireless controller for LED and halogen actuators with 0-10V, 1-10V, or DALI dimming interface. The CBU-ASD is available with either analog 0-10V (and 1-10V) or a digital standalone Dali control interface.

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 a 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 colors (RGB and RGBW) or color temperature (CCT) while keeping the wiring and the number of components to a minimum.

CBU-ASD 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 CBU-ASD 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 number of fixtures can be operated regardless of where you are. No external distribution node is needed. The CBU-ASD can also be controlled via a standard on/off-wall switch.



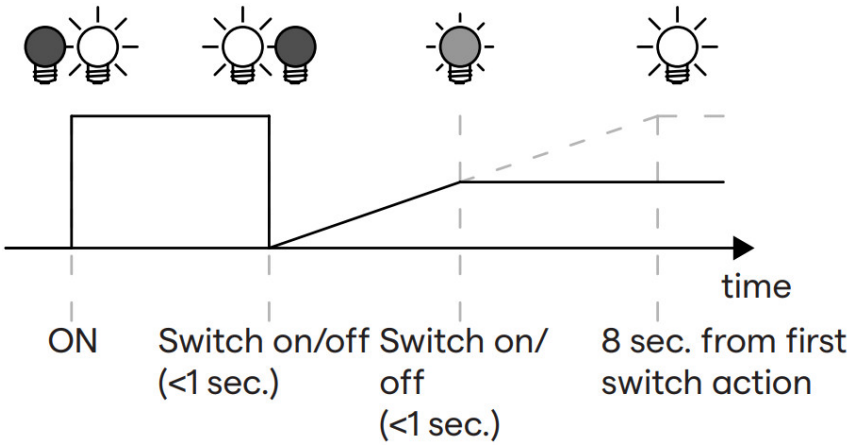
Casambi uses mesh network technology so that each CBU-ASD also acts as a range extender. A longer range can be achieved by using several Casambi devices.

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

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

Dimming without the app

1. Switch on the light using a wall switch.
2. Quickly switch off the wall switch (after a maximum of 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 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 color just the way you like it. Go into the connected network, and double-click on the device. Click “Change fixture state” to alter the light level, brightness, color, and color saturation. For color adjustment of RGBW, the profile RGBW [auto] is typically used.

Tunable-White (TW):

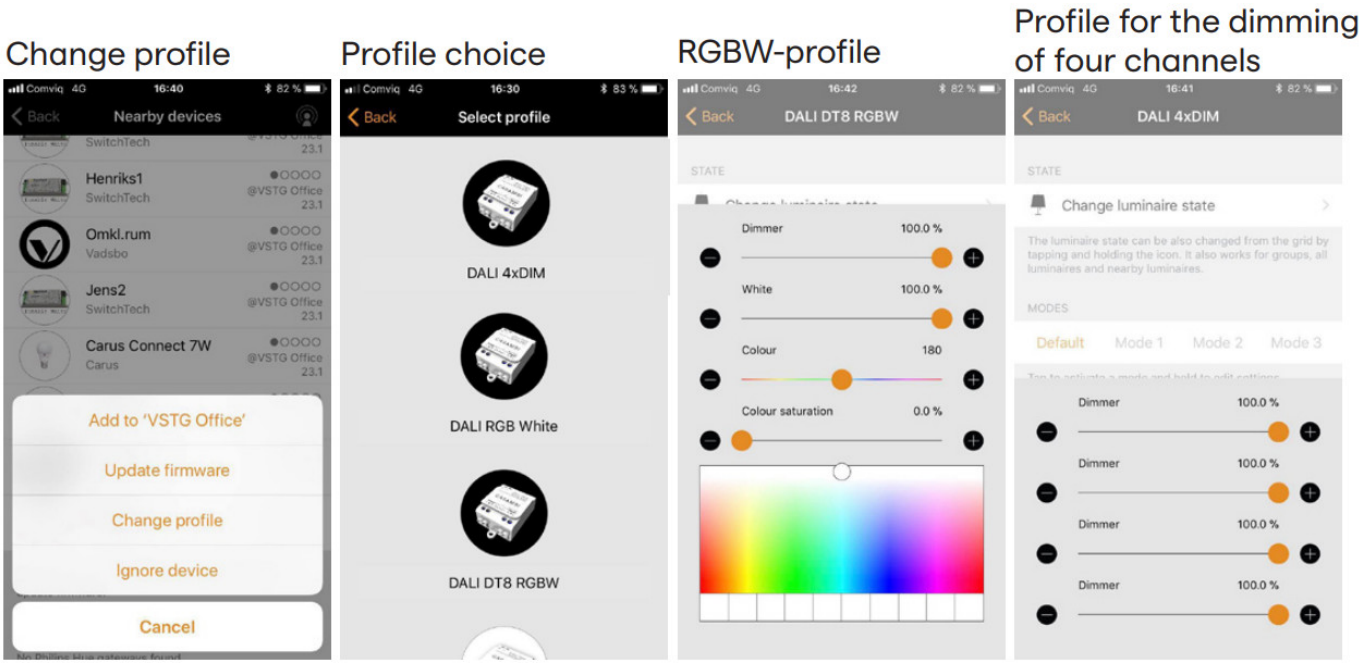
Tunable-White (TW) is operated by several adjustable channels which alter the color temperature of the light source to adjust the shade of output white light.

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.



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 it to the store where it was purchased or to a local municipal recycling center.

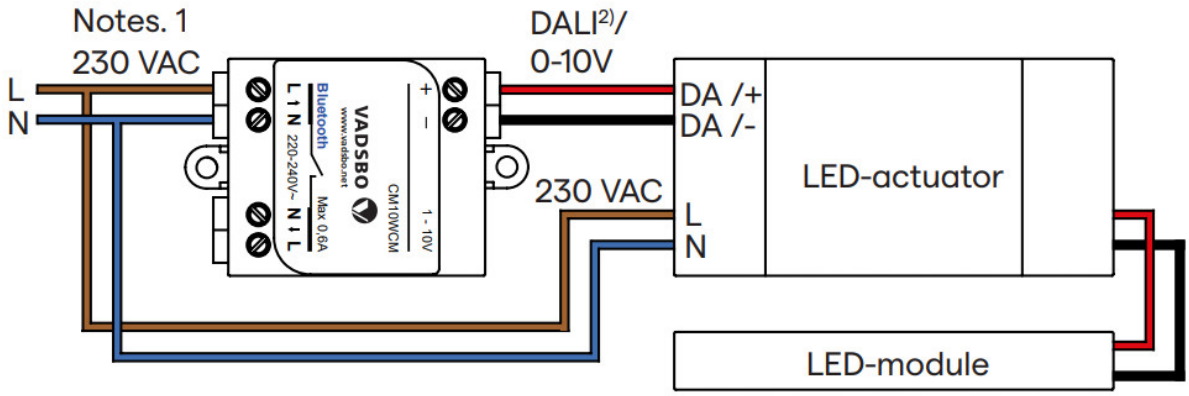
Installation

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.

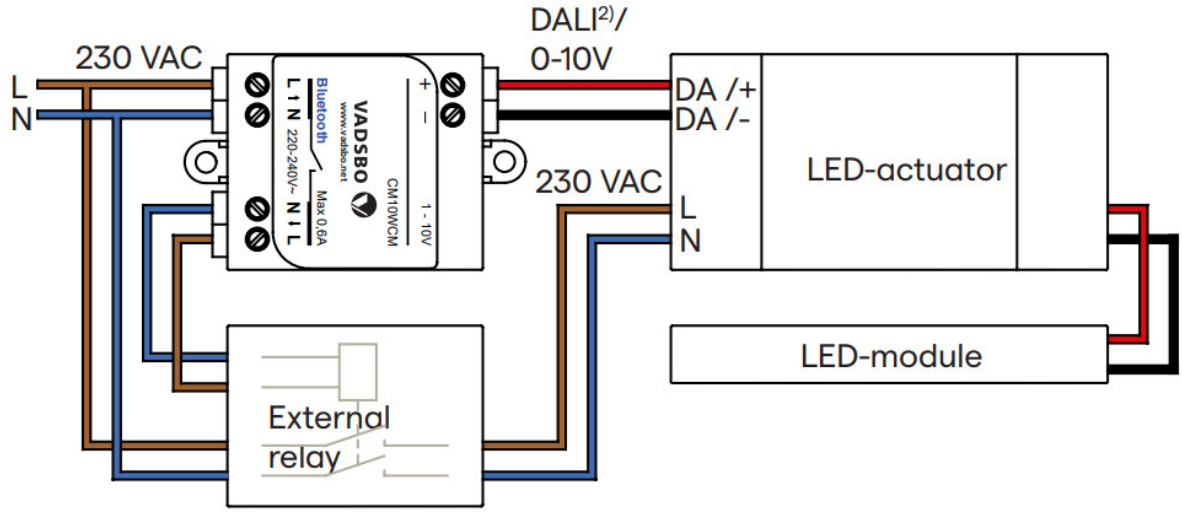
Insert the cables into the corresponding holes and tighten the screws on the terminal block. Make sure that the inputs and outputs are connected correctly. The primary input connector is marked with the letters L and N with an arrow pointing inwards, while the primary output connector is marked with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

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

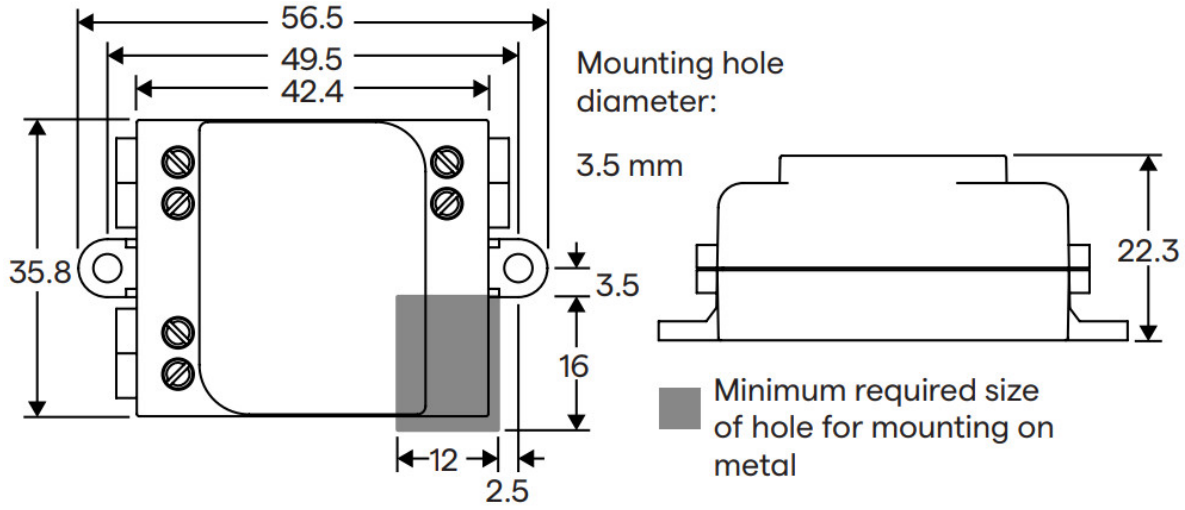


Wiring diagram, DALI, or 1-10V actuator operated by an external relay Suitable for actuators that cannot be switched off via a control interface.



⚠ **Warning!**
Risk of fire. Do not connect the primary side output of the CBU-ASD directly to the primary side input of the LED actuator.

Dimensions



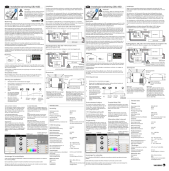
Note 1. CBU-ASD is a built-in Class II device. Use double insulated cables or an external mounting box if the device is not mounted inside another insulation unit.
Note 2. CBU-ASD and the associated DALI interface do not meet the requirements of IEC 60929. Only connect directly to a controllable DALI LED actuator. Should not be connected to an existing DALI network. Connect only one LED actuator (DALI or “0/1-10V” actuator) to a CBU-ASD.

Technical data

Input	
Voltage range	220-240 VAC
Frequency	50 Hz
Maximum primary current	0,6 A
Output relay	
Voltage Range	SSR in phase
Frequency	220-240 VAC
Primary output	50 Hz
Maximum start-up current on the connected load	12A/8ms (use an extern al relay for larger start-u p 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 (Iut 0 A)
The maximum enclosure temperature, to	
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

Documents / Resources

	VADSBO CBU-ASD Control Module [pdf] Instruction Manual CBU-ASD Control Module, CBU-ASD, Control Module, CBU-ASD Module, Module

References

- Kgf.cm
- Kgf.cm/2,6
- Kgf.cm/2.6