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# Single Channel 0-10V Controller | Model: C-T1C-24-DS00



### Specifications

- DC Input Voltage 12-24VDC
- Max power consumption 1W
- DC Output Voltage 0-10VDC
- Operating Temperature -22° to 158°F (-30° to 70°C)
- 0-10V Dimming\* 100mA Max
- Optional Power Supply
- Dimensions 3.25" x 1.5" x 0.25" (82.5 x 38 x 6.35 mm)

#### Description

The **C-T1C-24-DS00 Single Channel Controller** is a Bluetooth Mesh Bridge that converts any 0-10V device into a Bluetooth Mesh Node. It can be installed inside fixtures, j-boxes, or remoted. It can control a single or multiple 0-10V devices connected together.

# Operation

The **Single Channel Controller** operates on 12-24VDC Once powered up, the device broadcasts its identification code waiting to be provisioned through the Bubblynet App.

The **Single Channel Controller** is a Bluetooth Mesh Qualified device. This means that it can be controlled and be part of any Bluetooth Mesh Network, independently of the brand or manufacturer of the additional devices or controls.

The dimming performance of the 0-10 Controller depends on dimmability of 3rd party 0-10V driver. Expected results of the driver(s) to be controlled can only be determined by testing in BubblyNet's facilities. This 0-10V Controller does not have a relay to cut power. If the driver does not go to zero at 0V, then the luminaire will be not turned off. Use instead a 0-10V Controller with relay.

#### Features

- Simple to Install
- Converts any 0-10V Device into a Wireless Device
- Programmable Dimming Curves, Soft ON/OFF
- Does Not Require a Gateway

# Certifications

# Installation

The installation of the **Single Channel Controller** is very simple. The two wires for 0-10V output are connected to the 0-10V input device. As soon as the Controller is powered on it will start broadcasting the non-provisioned advertising messages that will tell the provisioning app that a new device is ready to join. The provisioning app will connect to the new driver, configure security keys, addresses and other data so the new Controller can join the Mesh Network. After the new Controller joins the Mesh Network it is ready to be configured (publishing / subscribing data.)

# Applications

The **Single Channel 0-10V Controller** is a wireless module that controls via Bluetooth any 0-10V driver, motorized blinds, power unit or other devices. It transforms any 0-10V device into a smart wireless device and does not require the use of a gateway.

#### Connectivity

Devices are repeaters for other devices and should be installed within a certain maximum distance from each other.

Typical maximum distance:

Outdoor (line of sight):	200ft
Indoor (through building material):	
Glass:	100ft
Drywall:	70ft
Cinderblock:	60ft
Brick:	50ft
Concrete + rebar	Oft

Devices with external antenna should have the antenna outside any metal box and away from metal surfaces as metal reduces connectivity.

For design purposes a 60ft. maximum distance is appropriate for most installations.