

## NDRV-E-CSB-4

Technical Datasheet for Constant Voltage PWM Dimmer (4 Channel)



### Description

The NDRV-E-CSB-4 is a 4 channel PWM (Pulse Width Modulation) dimmer with Casambi integration, giving smooth dimming suitable for RGBW, tunable and single colour LEDs through a range of Constant Voltages.

- 4 Individually addressable outputs for tunable and colour control. Works with any standard Constant Voltage supply and LED array
- Casambi Enabled
- 12-52VDC, 5A per channel, 10A Max/Controller
- Bluetooth Beacons

## Technical Specifications

### Mechanical

Housing	Black Plastic Injection Moulded ABS
Dimensions	162.2mm x 35mm x 33.3mm
Weight	78g
Protection	IP20
Mounting	Screwdown

### Input

Voltage Range	12-52VDC
Max. Input Current	10A
No-load Standby Power	<100mW @ 24V

### Output

Number of Channels	4
Output Voltage	12-52VDC
Max. Output Current	5A per channel up to a combined total of 10A
Min. Load Requirement	0W
Dimming Method	Pulse Width Modulation (PWM) @ 1.9khz
Dimming Output	0-100%, 0.1% minimum dimming level

### Radio Transceiver

Operating Frequencies	2.4Ghz - 2.483Ghz
Maximum Output Power	+4dBm
Wireless Protocol	Bluetooth Low Energy v4.1

### Operating Conditions

Ambient Temperature	0°C to +50°C
Max. Case Temperature	+75°C
Storage Temperature	-40°C to +80°C
Max. Relative Humidity	80% non-condensing

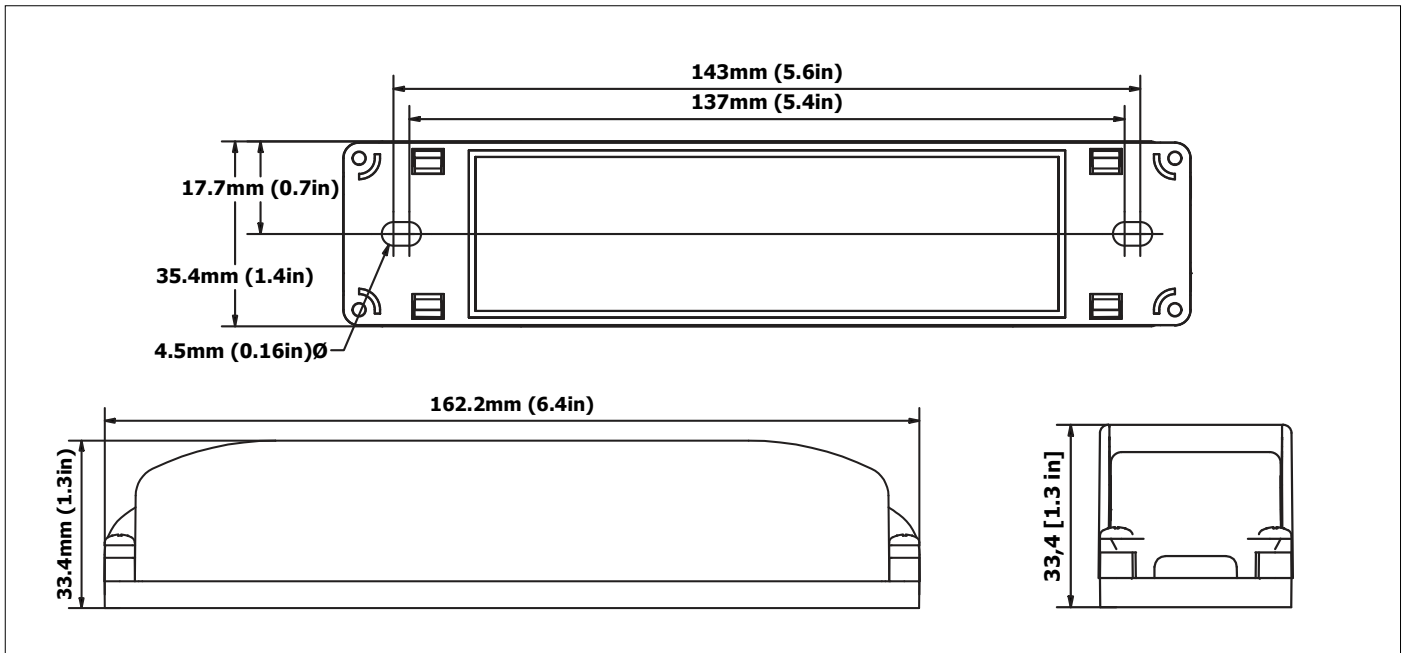
### Input Connectors

Wire Range	0.2mm - 2.5mm
Wire Strip Length	5mm

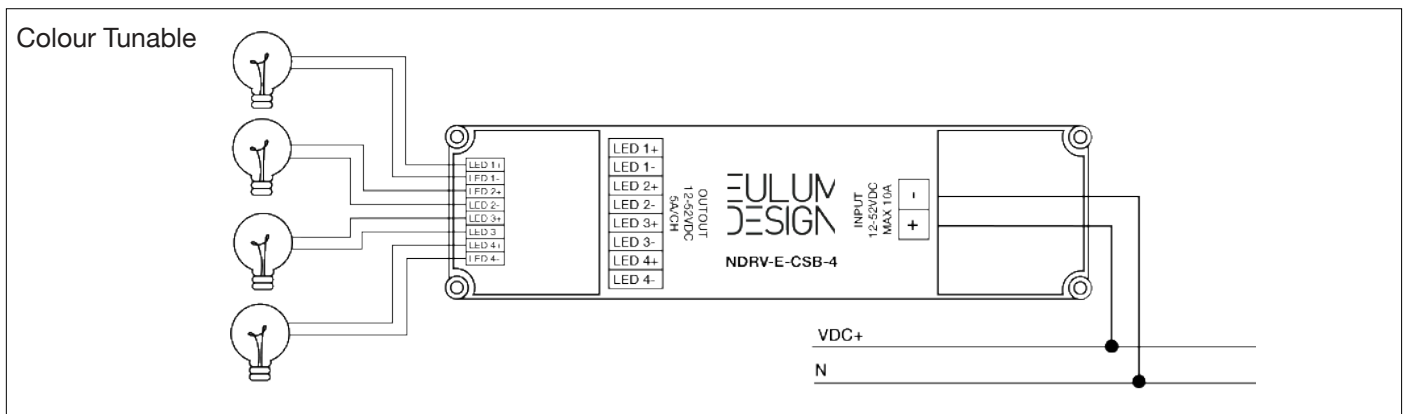
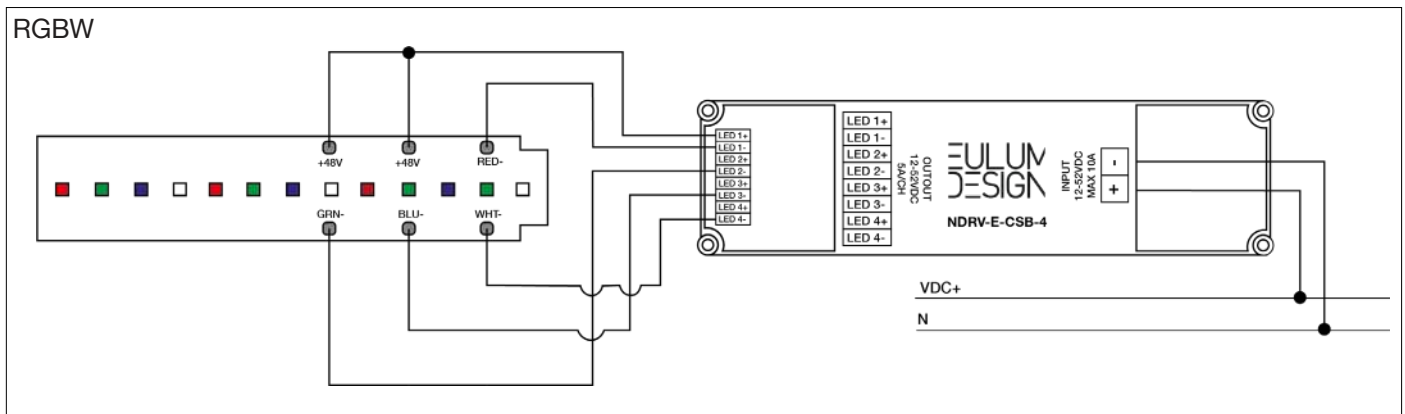
### Output Connectors

Wire Range	0.2mm - 1.5mm
Wire Strip Length	5mm

**Dimensions**



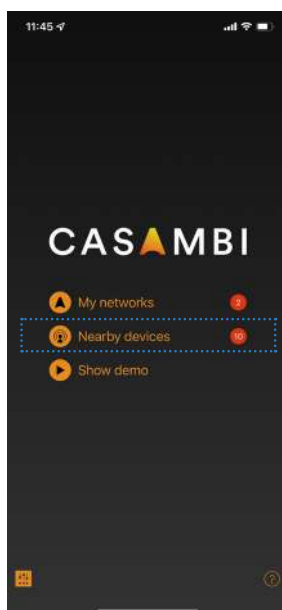
**Wiring Diagram**



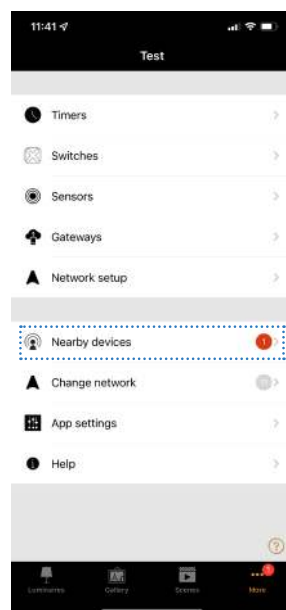
## Profiles

Profile Name	Description
NDRV-E-CSB-4	4 Channel Independent
NDRV-E-2760-TW2	Two Tunable outputs, common CCT
NDRV-E-CSB-RGBW	RGBW, always RGB
NDRV-E-CSB-RGBWI	RGBW, ratio slider of RGB vs W
Version	Classic/Evolution

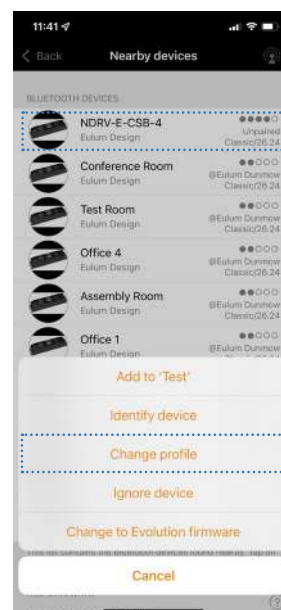
## Calibration



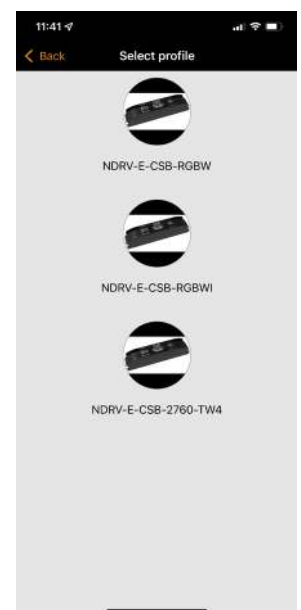
1. Power on the device and open the Casambi App, select “Nearby devices”.



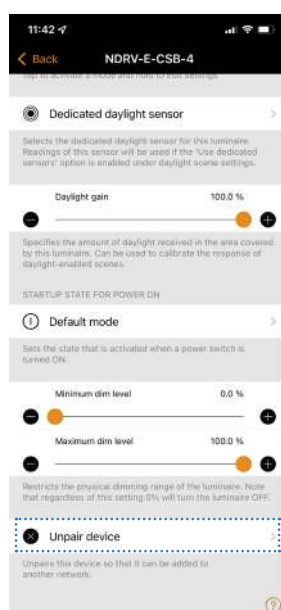
2. Tap “Nearby Devices”



2. Tap the NDRV and then “Change profile”.



4. Choose your desired profile. NDRV-E-CSB-4 is the standard profile and will not show.



NOTE: The NDRV-E-CSB-4 must be unpaired to change the profile. To unpair, double tap the NDRV-E-CSB-4 in the network and scroll to the bottom of the options to “Unpair Device”, then follow step on from Step 1 above.

## Range

In open air, the bluetooth range can reach up to 75m. This will be reduced when placed inside a building. Please note that putting the bluetooth unit inside a metal enclosure is unadvised as this will dramatically reduce the signal range.

## Compatible Devices:

iPhone iOS and later are supported  
iPad iOS 10 and later are supported  
Android 4.4 version (KitKat) and later are supported.



## Warranty

For information on our warranty, please visit: [www.eulum.com/warranty/](http://www.eulum.com/warranty/)