

# octalux

## L 185 Dimmer

M-L-1.1





# ↗ L 185 octalux Dimmer

## User Manual



CE RoHS  RED

### L 185-1 3 Channel LED Dimmer

- ↗ 3-channel constant voltage LED RF controller, output for RGB LED strip connection
- ↗ Suitable for use with RF 2.4G remote control
- ↗ Up to 10 remotes can be paired with one LED RF controller
- ↗ Continuous dimming from 0-100%, or in 10 steps from 1-10, without flickering
- ↗ 10 built-in dynamic modes, including jump or gradual change style
- ↗ Auto forwarding: The controller automatically sends the remote control signal to another controller, doubling the remote control distance
- ↗ Synchronization: One remote control can operate multiple controllers at the same time
- ↗ Light on/off with selectable fade time of 3 seconds

### Technical Parameters

#### Input and Output

- ↗ Input voltage: 12-24 VDC
- ↗ Input current: 10 A
- ↗ Output voltage: 3 × (12-24) VDC
- ↗ Output current: 3 CH, 3A/CH
- ↗ Output power: 108-216 W (12-24 V)
- ↗ Output type: constant voltage

#### Dimming Data

- ↗ Input signal: RF 2.4 GHz
- ↗ Control distance: 30 m (barrier-free space)
- ↗ Dimming scale: Continuous dimming 0-100% or in 10 steps
- ↗ Dimming range: 0-100 %
- ↗ Dimming curve: logarithmic
- ↗ PWM frequency: 1000 Hz (by default)

#### Safety and EMC

- ↗ EMC standard: ETSI EN 301 489-1 V2.2.3 / ETSI EN 301 489-17 V3.2.4
- ↗ Safety standard: EN 61348-1:2015+A1:2021 / EN 61348-2-13:2014+A1:2017
- ↗ Radio Equipment Directive (RED): ETSI EN 300 328 V2.2.2
- ↗ Certification: CE, EMC, RED

#### Warranty and Protection

- ↗ Warranty: 2 years
- ↗ Protection: reverse polarity, short circuit

#### Environment

- ↗ Operation temperature: Ta: -30°C ~ +55°C
- ↗ Case temperature (max.): Tc: +85°C

#### Package

- ↗ Size: L 162 × W 42 × H 26 mm
- ↗ Gross weight: 0.071 kg

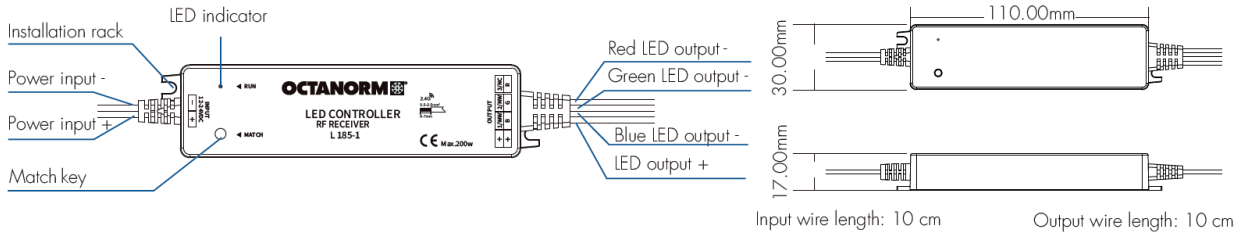


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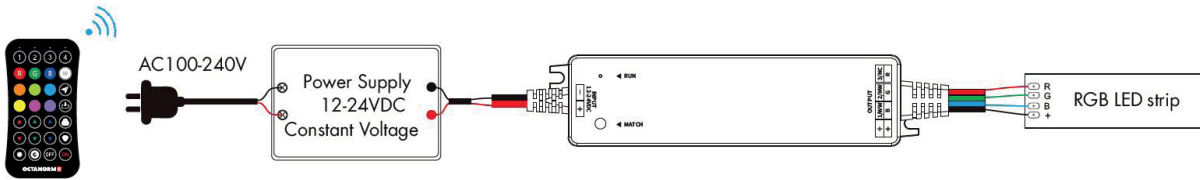
## User Manual

### Description

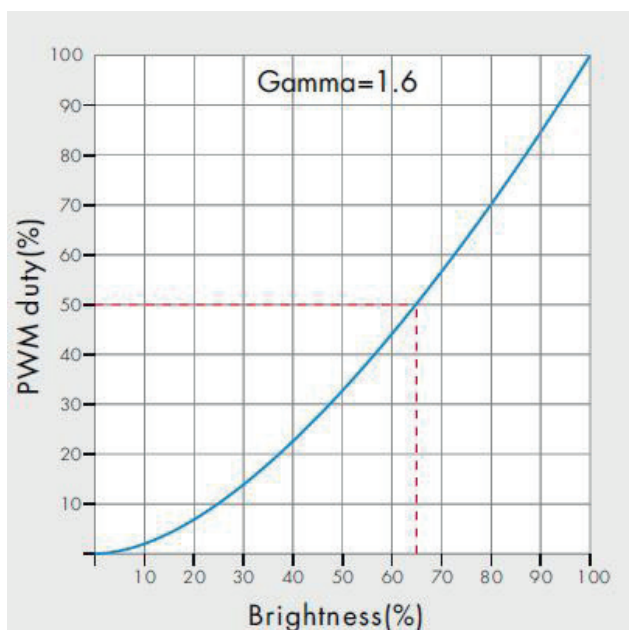
#### LED Controller L 185-1



### Wiring Diagram



### Dimming Curve





### L 185-2 4 Channel RGB Remote Controller

- 4-channel RGB 2.4G wireless remote control, suitable for use with RF RGB LED controller L 185-1
- Each remote can be combined with one or more RF LED controllers
- CR2032 battery powered
- Operation with 4 LED indicator lights
- Up to 20 RGB controllers L 185-1 can be programmed per channel (= a total of 80 RGB controllers L 185-1)

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### Technical Parameters

#### Input and Output

- Output signal: RF (2.4 GHz)
- Working voltage: 3VDC (CR2032)
- Working current: <5 mA
- Standby current: <6 μA
- Standby time: 1 year
- Remote distance: 30 m (barrier-free space)

#### Safety and EMC

- EMC standard: ETSI EN 301 489-1 V2.2.3 / ETSI EN 301 489-17 V3.2.4
- Safety standard: EN 61347-1:2015+A1:2021 / EN 61347-2-13:2014+A1:2017
- Radio Equipment Directive (RED): ETSI EN 300 328 V2.2.2
- Certification: CE, EMC, RED

#### Warranty and Protection

- Warranty: 2 years

#### Environment

- Operation temperature: Ta: -30°C ~ +55°C

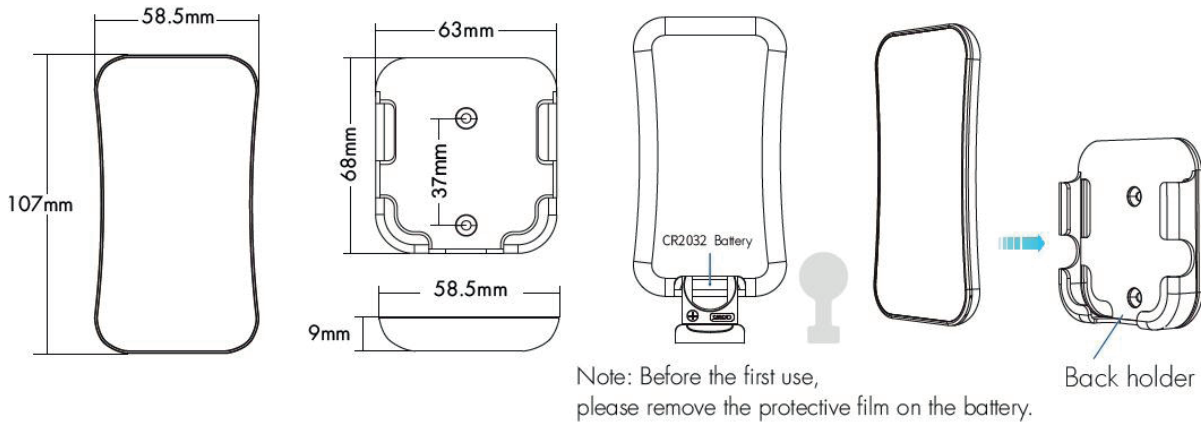
#### Package

- Size: L 114 × W 65 × H 20 mm
- Gross weight: 0.058 kg



### Description

#### Remote Control L 185-2



The remote control can be mounted in two ways:

**Option 1:** Use two screws to attach the remote holder to the wall.

**Option 2:** Use adhesive tape to secure the remote holder to the wall.

#### Pairing/Unpairing of Remote and LED Controller

There are two ways to connect or disconnect the remote control and the LED controller:

##### ➤ Using the match key on the LED controller

**Pair/match:** Briefly press the match key, then immediately press a channel button on the remote. The LED indicator will flash rapidly a few times to indicate a successful connection.

**Unpair/delete:** Press and hold match key for 5 s. to delete all connections, the LED will flash a few times rapidly to indicate that all paired devices have been deleted.

##### ➤ Using the device restart

**Pair/match:** Turn the LED controller off and on again. Repeat. Immediately press a channel button on the remote 3x quickly. The connection is successful if the light flashes 3 times.

**Unpair/delete:** Turn the LED controller off and on again. Repeat. Immediately press a channel button on the remote 5x quickly. The light will flash 5 times to indicate that all paired devices have been deleted.

#### Light on/off with Fade Times

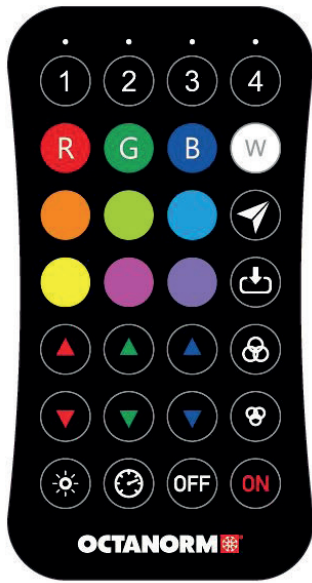
Press and hold match key for 5 s., then quickly press 3 times. This sets the the light effect to a smooth fade in and fade out over 3 s. The LED controller indicator light will blink three times.

Press and hold match key for 10 s. to restore the factory settings. The switch on/off time is restored to 0.5 s.















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### L 185-2 Remote Control Key Functions

-  **Short press:** turn on current channel  
**Long press:** turn on all channels
-  **Short press:** turn off current channel  
**Long press:** turn off all channels
-     **Short press:** select and turn on channel  
**Long press (2 s.):** turn off channels  
**Short press several channels in a row:** select multiple channels at the same time
-  Recall saved scene
-  Save current light effect
-  **Short press:** run next dynamic mode  
**Long press (2 s.):** run first dynamic mode
-  **Short press:** switch to previous dynamic mode  
**Long press (2 s.):** run first dynamic mode
-  Set individual R/G/B colors  
**Short press:** 10 levels  
**Long press (1-6 s.):** for continuous 256 levels adjustment
-  Adjust brightness  
**Short press:** 10 levels of color intensity  
**Long press (1-6 s.):** fine tuning of 256 colors
-  Adjust dynamic mode speed  
**Short press:** 10 levels  
**Long press (2 s.):** back to default speed

### Static Color Key List

Color	Name	R/G/B Value
	Red	255/0/0
	Green	0/255/0
	Blue	0/0/255
	White	255/255/255
	Orange	255/128/0
	Grass green	128/255/0
	Cyan	0/255/255
	Bright yellow	255/160/0
	Rose red	255/0/128
	Purple	128/0/255

### Dynamic Modes List

No.	Name
1	RGB change
2	Dynamic crossfade
3	6 color change
4	6 color crossfade
5	Yellow cyan purple crossfade
6	RGB smooth fade in and out
7	Red smooth fade in and out
8	Green smooth fade in and out
9	Blue smooth fade in and out
10	White smooth fade in and out



### Malfunction Analysis and Troubleshooting

Malfunctions	Causes	Troubleshooting
No light	<ol style="list-style-type: none"><li>1. No power.</li><li>2. Incorrect or unstable connection.</li></ol>	<ol style="list-style-type: none"><li>1. Check power supply.</li><li>2. Check connection/wiring.</li></ol>
Color error	<ol style="list-style-type: none"><li>1. R/G/B wiring error.</li></ol>	<ol style="list-style-type: none"><li>1. Connect the R/G/B wires in the correct way.</li></ol>
Uneven intensity between front and rear, with voltage drop	<ol style="list-style-type: none"><li>1. Output cable is too long.</li><li>2. Wire diameter is too small.</li><li>3. Overload beyond power supply capability.</li><li>4. Overload beyond controller capability.</li></ol>	<ol style="list-style-type: none"><li>1. Use shorter cable.</li><li>2. Change to wider wire.</li><li>3. Use PSU with higher output.</li><li>4. Add power repeater.</li></ol>
No response from the remote	<ol style="list-style-type: none"><li>1. Battery low or empty</li><li>2. Beyond controllable distance.</li><li>3. No connection to controller.</li></ol>	<ol style="list-style-type: none"><li>1. Replace battery.</li><li>2. Reduce remote distance.</li><li>3. Reconnect the remote.</li></ol>

### Safety Information

- ↗ Please wear suitable light protection goggles for programming!
- ↗ Read all instructions carefully before you begin this installation.
- ↗ When installing the battery, observe the positive and negative polarity of the battery. If you do not use the remote control for a long time, remove the battery. If the range of the remote control decreases and it becomes unresponsive, replace the battery.
- ↗ Remove and immediately recycle or dispose of used batteries according to local regulations and keep away from children. Do not dispose of batteries in household trash or incinerate them.
- ↗ Do not attempt to discharge, recharge, disassemble, or heat the battery.
- ↗ Stop using the product if the battery compartment is not securely closed.
- ↗ If a battery is swallowed, seek medical attention immediately.
- ↗ Handle the remote control carefully. Do not drop it.
- ↗ For indoor and dry location use only.



### After Sales Service

If used according to the instructions, we offer free repair or replacement services for our products for up to 2 years after the date of purchase. Excluded from this are:

- ↗ Any errors and damages caused by faulty operation
- ↗ Any damages caused by inappropriate power supply or voltage deviation
- ↗ Any damages caused by unauthorized removal, maintenance, circuit alteration, incorrect connection and chip replacement
- ↗ Any damages caused by transportation, breakage and water after purchase
- ↗ Any damages caused by earthquakes, fire, flooding, lightning, etc. (natural disasters and force majeure)
- ↗ Any damages caused by negligence, inappropriate storage at high temperatures, in humid environments or near harmful chemicals



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