

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



CE RoHS  RED

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

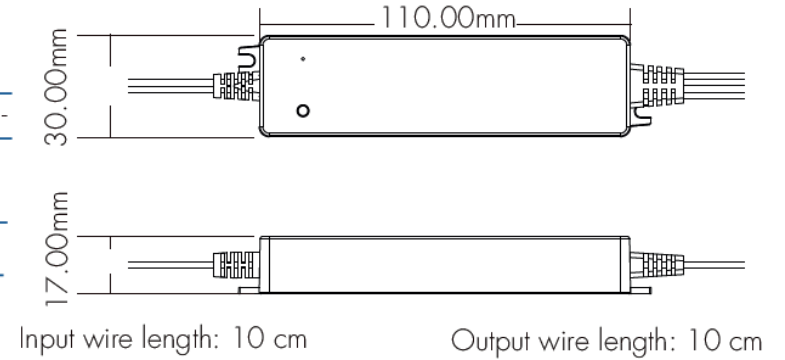
- Operation temperature: Ta: -30°C ~ +55°C
- Case temperature (max.): Tc: +85°C

Package

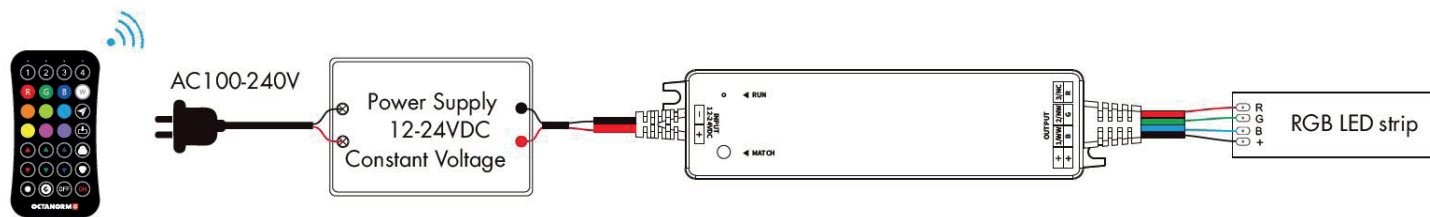
- Size: L 162 × W 42 × H 26 mm
- Gross weight: 0.071 kg

Description

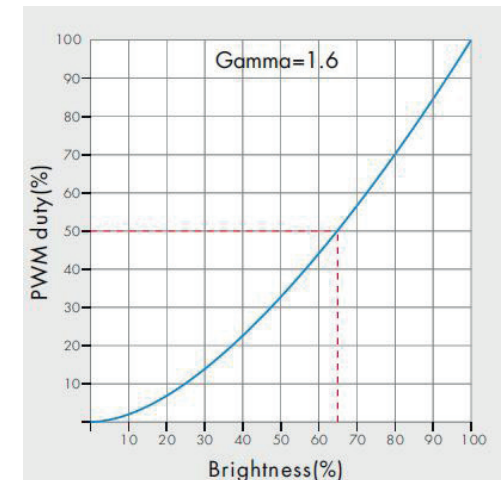
LED Controller L 185-1



Wiring Diagram

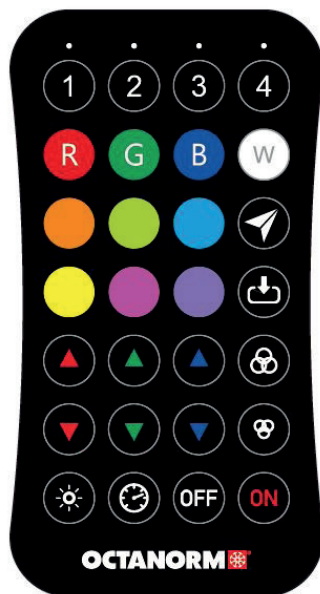


Dimmkurve



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)



CE RoHS emc RED

Technical Parameters

Input and Output

- Output signal: RF (2.4 GHz)
- Working voltage: 3 VDC (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

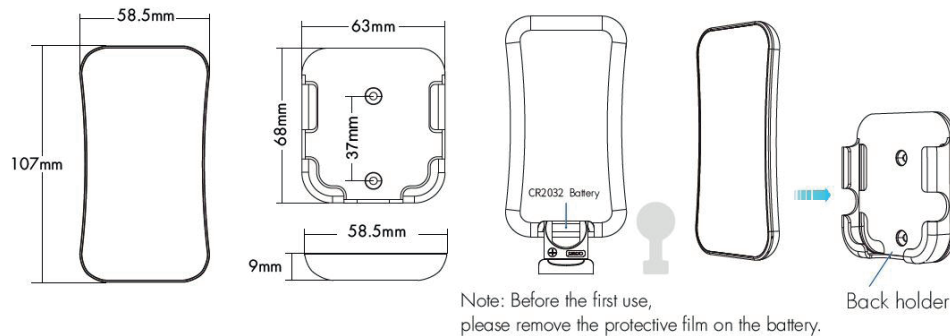
- Operation temperature: Ta: -30° C ~ +55° C

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.

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.

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

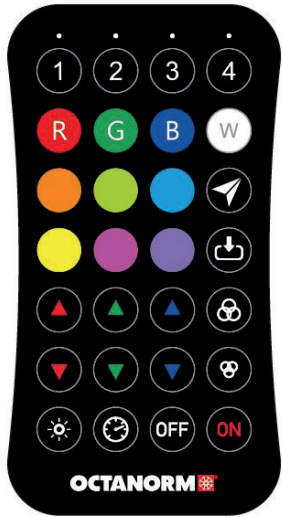
Pair/match: Briefly press the match key, then immediately press a channel button on the remote. The LED indicator will flash rapidly a few times to indicate a successful connection.

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.



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

Dynamic Modes List

No.	Name	Color	Name	R/G/B Value
1	RGB change		Red	255/0/0
2	Dynamic crossfade		Green	0/255/0
3	6 color change		Blue	0/0/255
4	6 color crossfade		White	255/255/255
5	Yellow cyan purple crossfade		Orange	255/128/0
6	RGB smooth fade in and out		Grass green	128/255/0
7	Red smooth fade in and out		Cyan	0/255/255
8	Green smooth fade in and out		Bright yellow	255/160/0
9	Blue smooth fade in and out		Rose red	255/0/128
10	White smooth fade in and out		Purple	128/0/255

Static Color Key List

Malfunction Analysis and Troubleshooting

Malfunctions	Causes	Troubleshooting
No light	1. No power. 2. Incorrect or unstable connection.	1. Check power supply. 2. Check connection/wiring.
Color error	1. R/G/B wiring error.	1. Connect the R/G/B wires in the correct way.
Uneven intensity between front and rear, with voltage drop	1. Output cable is too long. 2. Wire diameter is too small. 3. Overload beyond power supply capability. 4. Overload beyond controller capability.	1. Use shorter cable. 2. Change to wider wire. 3. Use PSU with higher output. 4. Add power repeater.
No response from the remote	1. Battery low or empty 2. Beyond controllable distance. 3. No connection to controller.	1. Replace battery. 2. Reduce remote distance. 3. Reconnect the remote.

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

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.

