

Wireless Trailer Lights

User Manual



 Safety Instructions

Read all instructions carefully before using this product.

This product is designed as a wireless auxiliary trailer light system. Before using it on public roads, check your local traffic laws and trailer lighting requirements. This product may not replace legally required trailer lights in all areas.

- 1. Please install the lights where they are clearly visible from the rear, and make sure they are not blocked by cargo, trailer parts, license plates, or other objects.
- 2. Please fully charge both lights before first use to ensure stable operation and proper wireless signal response.
- 3. Please test the tail lights, brake lights, left turn signal, right turn signal, and license plate light before every trip to make sure all functions work properly.
- 4. Please additionally use the included steel wire rope to secure each light and help prevent it from falling off during vibration, road impact, or long-distance travel.
- 5. When the lights are not in use, please turn them off to prevent the battery from draining.
- 6. This product is not a toy. Keep out of reach of children to prevent misuse or accidental damage.
- 7. The working temperature should be between 14°F to 140°F (-10°C to 60°C).

Model No

Model: CTL01

Product Overview

The CTL01 is a modular diamond-shaped wireless trailer light kit. It integrates tail light, turn signal light, and brake light functions into one compact unit. Designed with a universal standard size, this product is typically installed at the rear of RVs, trailers, and other specialty vehicles.

The kit includes 1 wireless transmitter and 2 wireless tail lights. The wireless transmitter is equipped with three standard male connectors: a standard 7-pin round connector, a 4-pin flat connector, and a 5-pin flat connector, making it compatible with most rear vehicle sockets. The transmitter communicates with the wireless tail lights via 433 MHz wireless transmission, with an operating range of over 131 ft / 40 m. The CTL01 adopts an active-trigger signal transmission mechanism. The transmitter sends a wireless signal only when a change is detected in the vehicle's tail light signal. This ensures that the wireless tail lights remain synchronized with the vehicle while reducing unnecessary wireless transmission. When there is no change in the

vehicle's lighting signal, the transmitter remains in silent mode, and the wireless tail lights continue to maintain their current lighting status based on the last received signal. For example, when the brake pedal is pressed, the transmitter detects that the brake signal has changed from low to high. It then sends a brake activation signal to the wireless tail lights and enters silent mode. After receiving the signal, the wireless tail lights turn on the brake light and maintain this status while the vehicle remains braking.

When the brake is released, the transmitter detects the signal change and sends a brake release signal to the wireless tail lights. The transmitter then returns to silent mode, and the wireless tail lights turn off the brake light after receiving the release signal.

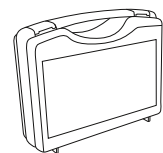
In this way, when the vehicle's lighting signal remains unchanged, the transmitter stays silent, and the wireless tail lights retain the last received lighting state.

Specifications

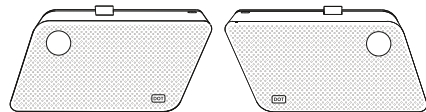
Light Function	Power	LED Color
Tail Light	0.5 W	Red 
Turn Signal Light	1.5 W	Red 
Brake Light	1.5 W	Red 
License Plate Light	0.5 W	Cool White 
Tail Light + Brake Light / Turn Signal Light	2 W	Red 

Specification	Parameter
Wireless Transmitter Input	12V
Wireless Tail Light Charging Input	5V / 1A
Battery Capacity	2000 mAh
Charging Time	3 Hours
Operating Time	10 Hours, depending on usage frequency
Material	ABS + PC

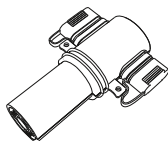
Package Contents



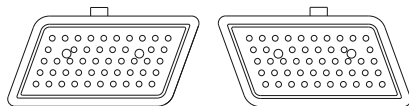
Storage Case × 1



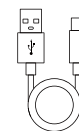
Tail Lights × 2



Transmitter × 1



Spare Mounting Back Plates × 2



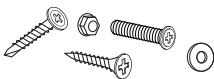
USB Charging Cables × 2



Steel Wire Ropes × 2

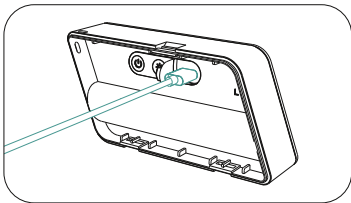


Adhesive Pads × 4 (Including 2 spare pads)

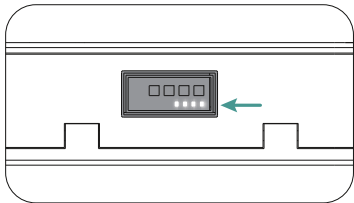


Screws (Including 1 spare set)

How to Charge



Charging



Battery indicator

Button Operation



Power Button

Press once: Turn ON — The trail light flashes once.
Press again: Turn OFF — The trail light flashes twice.

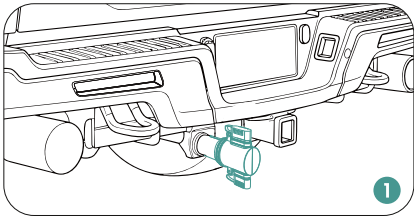
License Plate Light Button

Press once: Turn ON — License plate light flashes once
Press again: Turn OFF — License plate light flashes twice

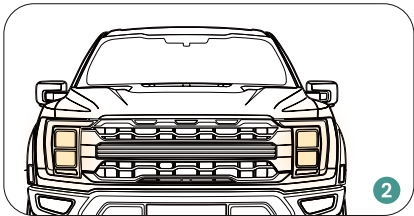
Note

The license plate light works by following the tail light signal from the vehicle. When the license plate light function is turned on, the license plate light will turn on automatically when the vehicle headlights or tail lights are turned on.

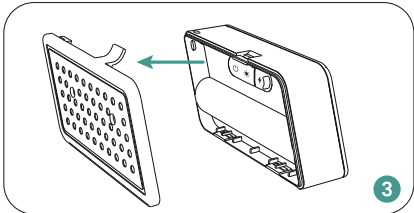
Pairing Setup



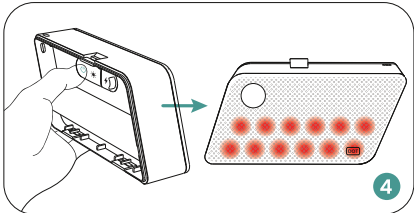
Plug the transmitter into the towing vehicle trailer socket.



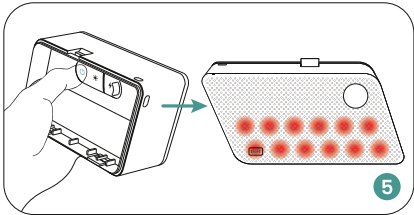
Turn on the vehicle headlight or tail light to power the transmitter signal.



Remove the mounting back plate from one tail light before pairing.



Press the Power Button once to turn on the tail light, then press and hold the Power Button for about 5 seconds until the lower red light stays on to confirm successful pairing.

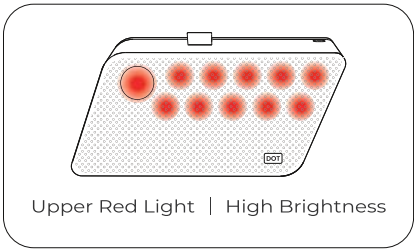


Repeat the same process for the other tail light.

Pairing Tip

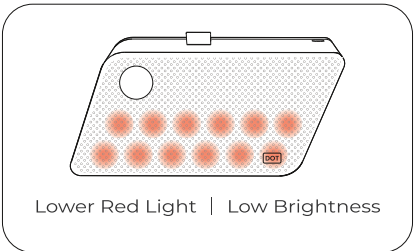
First pair the tail lights close to the transmitter. After successful pairing, install them on the trailer and test all functions again before driving.

Tail Light Signal Functions



Upper Red Light | High Brightness

Brake / Turn Signal



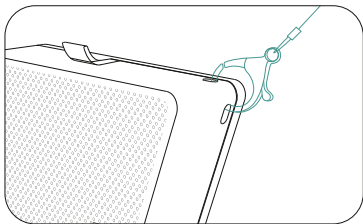
Lower Red Light | Low Brightness

Tail Light

Signal from Vehicle	What the Tail Lights Do
Tail Light On	Lower red light stays on at low brightness
Brake	Upper red lights stay on at high brightness
Left Turn	Upper red light on the left side flashes at high brightness
Right Turn	Upper red light on the right side flashes at high brightness
Brake + Turn	Upper brake light stays bright, and the corresponding turn signal side flashes
Tail Light + Brake	Lower red light stays on, and upper red brake light stays bright
Tail Light + Turn	Lower red light stays on, and the corresponding upper turn signal flashes

Note: The lights respond automatically to the vehicle signals received by the wireless transmitter.

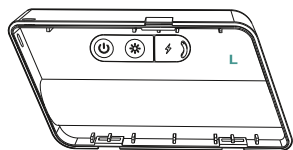
Installation Methods



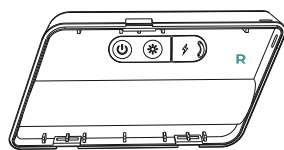
Choose the mounting method that best fits your trailer surface. For road use, always make sure each light is securely attached and additionally secured with the included steel wire rope before driving.

Before Installation

Check the back of each tail light before installation.



L = Left Tail Light

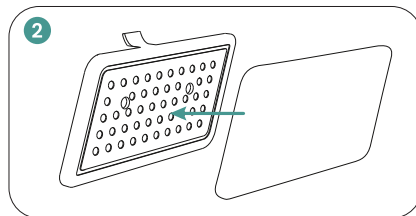


R = Right Tail Light

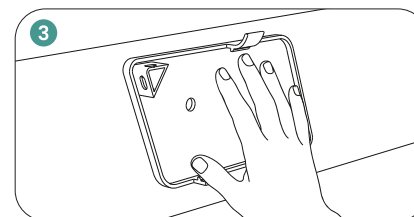
Adhesive Mounting



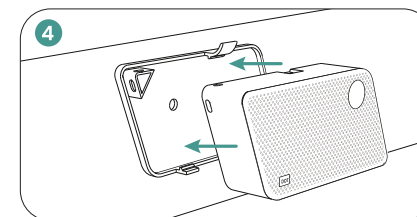
Clean and dry the mounting surface before installation.



Peel off one side of the double-sided adhesive tape and attach it firmly to the back of the mounting back plate.



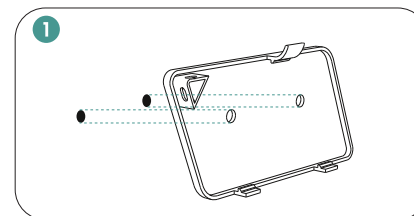
Press the mounting back plate firmly onto the installation surface.



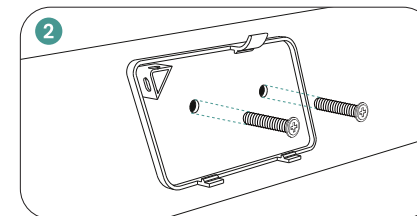
Attach the tail light to the mounting back plate until it is securely locked.
Note: For best adhesion, wait 24 hours before attaching the tail light.

Existing Hole Mounting

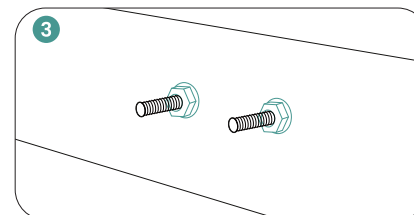
Use this method if your trailer already has reserved mounting holes or if tail lights were previously installed in the same position.



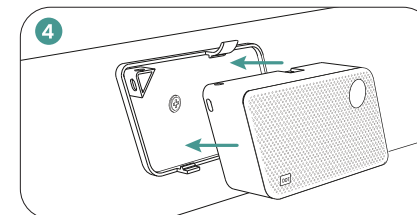
Align the mounting back plate with the existing mounting holes on the trailer.



Insert the male screws through the mounting back plate and the existing holes.



Attach the nuts to the male screws and tighten them securely.

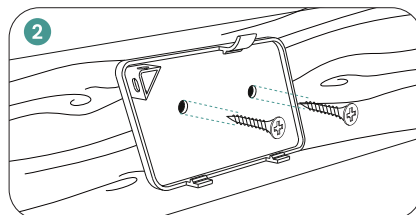


Attach the tail light to the mounting back plate until it is locked in place.

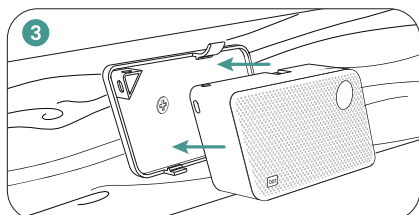
Wood Surface Mounting



Choose a flat and solid position on the rear of the wooden trailer.



Use the dedicated screws to fasten the mounting back plate directly onto the wood surface.



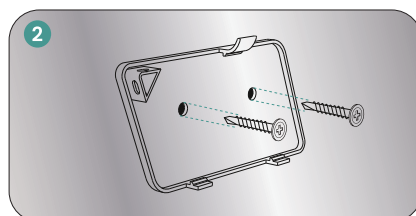
Attach the tail light to the mounting back plate until it is locked in place.

Metal Surface Mounting

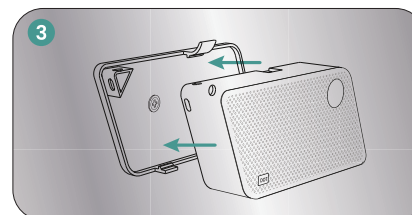
Use this method when installing the tail lights on aluminum, iron, or other metal surfaces.



Choose a flat and solid position on the aluminum, iron, or other metal surface.



Use the dedicated metal screws to fasten the mounting back plate directly onto the metal surface.



Attach the tail light to the mounting back plate until it is locked in place.

Note:

For installation on RVs, aluminum trailers, or other metal surfaces, you may place the included silicone gasket between the mounting back plate and the mounting surface to help seal the screw holes and prevent rainwater from entering.

Troubleshooting

Q1 Why won't the tail light turn on?

A Please fully charge the tail light first, then press the Power Button once to turn it on.

Q2 Why does only one tail light work?

A Please check whether both tail lights are turned on and successfully paired with the transmitter. If one light does not respond, move it close to the transmitter and pair it again.

Q2 Why does the turn signal not work correctly?

A Please check whether the left and right tail lights are installed on the correct sides. If the light is installed on the wrong side, remove it and install it on the correct side.