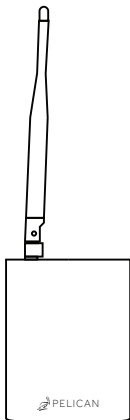




# Model: WR900

## Long Range Dual Band Wireless Repeater

### Installation Guide



## Before You Start

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Before beginning installation, thoroughly review all instructions to prevent any potential issues. This repeater is specifically designed to bridge Pelican wireless mesh networks across extended wireless gaps.

This device only requires a power connection. It's crucial to consider mounting orientation and location carefully to maximize wireless signal strength and quality.

## Network Connection

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Upon powering on, the repeater will seamlessly connect to an existing Pelican wireless mesh network without the need for additional installation steps.

To verify the repeater's connection status, consult the lights located at the bottom of the device or access the Pelican Connect app and navigate to Admin > Network Map to locate and confirm the repeater's connection within the network.

## Installation Location

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### **DO NOT INSTALL REPEATER:**

- ✗ Inside networking rooms like IDF, MDF, or IT closets to minimize the risk of wireless interference.
- ✗ Inside a room with concrete or cinder brick walls.
- ✗ In metal enclosures, on metal surfaces, near large metal panels, or in rooms with substantial metal fixtures like mirrors (e.g., restrooms), wireless signals may be obstructed due to metal interference.
- ✗ Near electrical equipment or conduit.
- ✗ Directly on networking racks or hanging it near other network equipment to prevent potential interference.
- ✗ Next to another Pelican Repeater or Gateway.
- ✗ On a desk or any other flat surface to ensure optimal signal propagation and minimize potential obstructions.
- ✗ On rooftops or anywhere outside unless advised otherwise by Pelican Technical Support.

### **DO INSTALL REPEATER:**

- ✓ Approximately halfway between the existing Pelican mesh network and the devices unable to connect. This ensures a reliable bridge for those devices to the primary network.
- ✓ Where it can effectively communicate with the wireless mesh network that is connected to the Ethernet. This ensures optimal coverage extension and connectivity for devices unable to reach the network.
- ✓ At minimum 5 feet away from any wireless signal emitting devices.
- ✓ Ensuring repeater is at least 6 to 7 feet above the floor and positioned above all other office or electrical equipment to mitigate wireless interference.

## Power

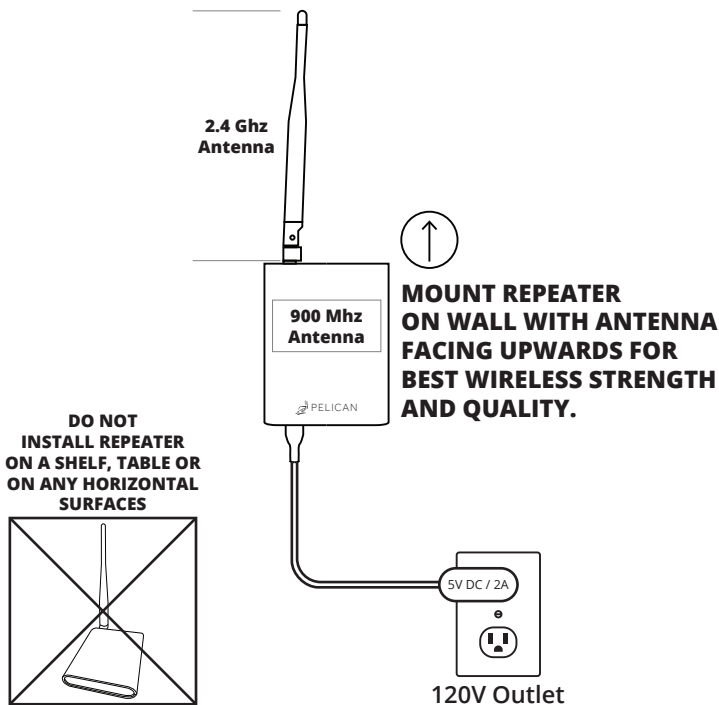
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The repeater operates using a 5V DC / 2A power adapter with a USB-C connector.

If the provided 6-foot electrical cable is insufficient for your setup or for achieving optimal positioning for maximum wireless range and performance, you can utilize any standard USB-C cable with a third-party 5V DC / 2A minimum power rating.

To power the device, connect the power adapter to a 120V AC electrical outlet and securely plug the male end of the cable into the female USB-C connector located at the bottom of the repeater.

Once connected, the STATUS light on the repeater will rapidly blink, indicating that the device has received power.



## Mounting

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**DO NOT INSTALL REPEATER ON A TABLETOP SURFACE SUCH AS A DESK, CABINET OR NETWORKING RACK, AS THIS WILL DRASTICALLY REDUCE WIRELESS DISTANCE AND QUALITY.**

**ALWAYS MOUNT THE REPEATER WITH THE LOGO FACING UPWARDS AND LEGIBLE FOR OPTIMIZED 900 MHz WIRELESS PERFORMANCE.**

**DIRECT THE ANTENNA UPWARDS AND AWAY FROM THE GROUND TO MAXIMIZE 2.4 GHz WIRELESS DISTANCE AND QUALITY.**

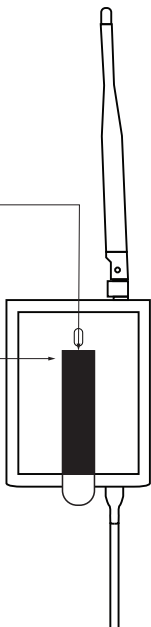
There are two options for mounting the repeater onto a wall:

### 3M Command Strip

Step 1: Peel off the side of the command strip labeled "COMMAND" to expose the adhesive. Press the adhesive firmly onto the back of the repeater.

Step 2: Peel off the other side of the command strip labeled "WALL" to expose the adhesive.

Step 3: Attach the repeater to the wall by firmly pressing the exposed adhesive side of the command strip onto the wall to secure it in place.



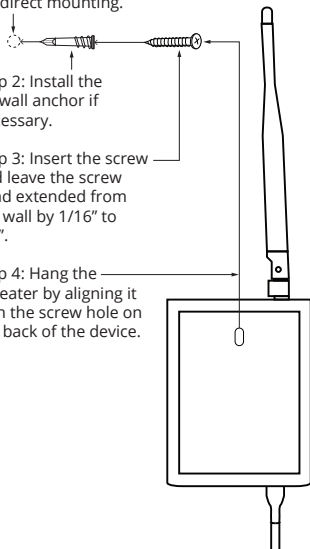
### Screw Mount

Step 1: Use a drill to create a guide hole for the drywall anchor or for direct mounting.

Step 2: Install the drywall anchor if necessary.

Step 3: Insert the screw and leave the screw head extended from the wall by 1/16" to 1/8".

Step 4: Hang the repeater by aligning it with the screw hole on the back of the device.

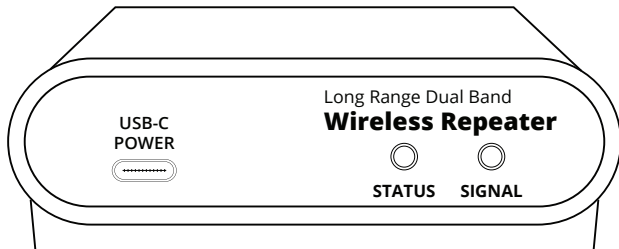


## Indicator Lights

There are two green lights on the repeater.

(1) STATUS indicates the operational state of the repeater.

(2) SIGNAL indicates the wireless signal detection and quality of the repeater.



### STATUS



OFF : NO POWER



FAST BLINKS : POWERING UP



SHORT BLINKS : TRYING TO JOIN THE WIRELESS NETWORK



SLOW BLINKS : TRYING TO CONNECT WITH THE CLOUD SERVER



ON : FULLY ACTIVE

### SIGNAL



OFF : UNABLE TO FIND A PELICAN WIRELESS NETWORK



SHORT BLINKS : WEAK WIRELESS SIGNAL (UNUSABLE)



SLOW BLINKS : MARGINAL SIGNAL DETECTED (PARTIALLY USABLE)



ON : GOOD SIGNAL (USABLE)

## Troubleshooting

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### **If the Repeater does not power On, check the following:**

1. Use a multi-meter to ensure there is 120V AC power at the outlet you have plugged the power adapter into.
2. Verify that the USB-C male connector on the power cable is fully inserted into the female connector on the repeater.
3. Try a different USB-C power adapter and cable that provides 5V DC / 2A.
4. Verify that the cable between the repeater and the power adapter is intact and that no wires are exposed.

If the repeater still does not power On, for further assistance, please contact Pelican technical support at 888.512.0490 and select the option for Technical Support.

### **If the Pelican repeater is unable to find the Pelican wireless network or has an unusable or a partially usable signal to the wireless mesh network, check the following:**

1. Ensure there are no electronic devices like network routers, switches, backup generators, or other wireless hubs near the Pelican repeater, as these can cause interference.
2. Ensure there are no metal or thick concrete walls or enclosures around the repeater, as these materials can block or significantly reduce the repeater's wireless signal range and quality.

If the repeater is still unable to find the Pelican wireless network, it might be in a bad location or too far from the network to connect. Try moving the repeater to a new location. For further assistance, please contact Pelican technical support at 888.512.0490 and select the option for Technical Support.

### **If the Pelican repeater is connected to the Pelican wireless network but is unable to connect with the cloud server, check the following:**

1. Verify the Pelican gateway is powered On and has an Internet connection.
2. If your Pelican repeater can't reach the cloud server, it might be because the network or device(s) it's communicating with cannot reach the Pelican gateway. Try moving the repeater closer to the network connected to the gateway, so that it can bridge both networks together.

3. Ensure there are no electronic devices like network routers, switches, backup generators, or other wireless hubs near the Pelican repeater, as these can cause interference.

4. Ensure there are no metal or thick concrete walls or enclosures around the repeater, as these materials can block or significantly reduce the repeater's wireless signal range and quality.

If the repeater is still unable to connect with the cloud server, for further assistance, please contact Pelican technical support at 888.512.0490 and select the option for Technical Support.

