Orayafid YY-R7-A7-US

Orayafid Solar Outdoor Repeater Instruction Manual

Model: YY-R7-A7-US

1. Introduction

This manual provides comprehensive instructions for the installation, operation, and maintenance of your Orayafid Solar Outdoor Repeater. This device is designed to extend your existing Wi-Fi network coverage, providing a stable and robust internet signal in outdoor environments, powered by solar energy.
Please read this manual thoroughly before using the product to ensure proper functionality and safety.

2. Product Overview

The Orayafid Solar Outdoor Repeater (Model: YY-R7-A7-US) is a weatherproof Wi-Fi range extender featuring a high-efficiency solar panel and a large-capacity battery. It is engineered to provide reliable Wi-Fi signal extension for outdoor applications, such as security cameras, smart devices, and general internet access in areas beyond your primary router's reach.



Figure 2.1: Main unit of the Orayafid Solar Outdoor Repeater, showing the solar panel and integrated repeater components.



Figure 2.2: Overview of the Solar Repeater's key features, including wireless capability, IP65 waterproof rating, safety protection, 20000mAh battery, 150-meter range, and support for 8 devices.

Key Features:

- **Overall Relay Functionality:** Extends Wi-Fi network with speeds up to 300Mbps at 2.4GHz, suitable for wireless security cameras, streaming, and browsing.
- **High-Efficiency Solar Panel:** Equipped with a 15W solar panel with 24% conversion efficiency, protected by durable tempered glass for outdoor resilience.
- **Long-Lasting Battery:** Features a 20000mAh rechargeable lithium battery, providing extended usage and up to 500 recharge cycles with built-in protection.
- **IP65 Waterproof Design:** Designed to withstand extreme weather conditions, ensuring continuous operation in rain and snow.
- **Easy Installation:** Includes a 360-degree adjustable bracket for flexible and optimal positioning.

3. What's in the Box

Please verify that all components are present and in good condition upon opening the package:

- Solar panel with integrated repeater unit
- Mounting bracket
- Screw kit for installation
- User manual (this document)



Figure 3.1: Visual representation of the package contents and key dimensions of the solar outdoor repeater and mounting bracket.

4. Setup and Installation

Follow these steps for proper setup and installation of your Solar Outdoor Repeater.

4.1 Choosing an Installation Location

Select a location that receives ample direct sunlight throughout the day for optimal solar charging. Ensure the repeater is within range of your existing Wi-Fi router for effective signal extension. The device is weatherproof (IP65 rated), allowing for outdoor placement.



Figure 4.1: Diagram illustrating the installation process, including mounting the bracket, attaching the repeater, and adjusting its angle for optimal signal and solar exposure.

4.2 Mounting the Repeater

1. **Mount the bracket:** Use the provided screw kit to securely attach the mounting bracket to your chosen surface (wall, pole, etc.). Ensure the surface is stable enough to support the device.
2. **Fix the Solar Outdoor Repeater to the bracket:**Align the repeater unit with the bracket and secure it using the designated fasteners.
3. **Adjust the angle:** Utilize the 360-degree adjustable bracket to position the solar panel for maximum sun exposure and the repeater for optimal Wi-Fi signal reception and transmission.

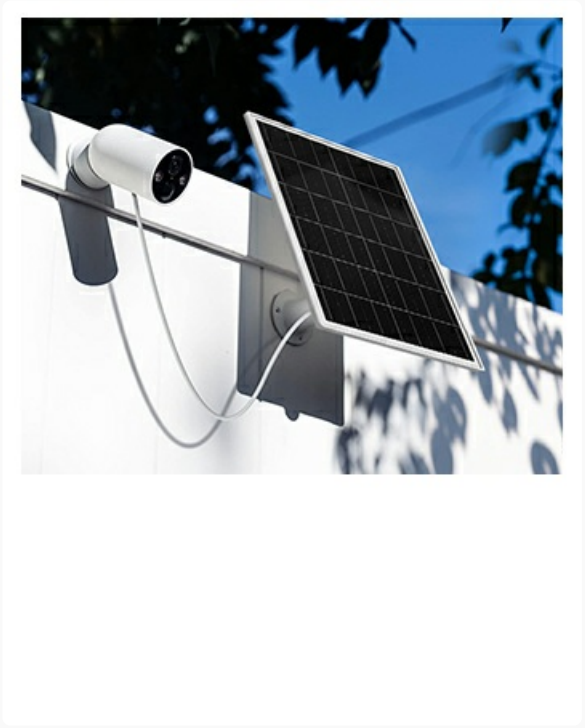


Figure 4.2: Example of the solar repeater providing power and Wi-Fi connectivity to an outdoor security camera.

5. Operating Instructions

Once installed, the Solar Outdoor Repeater will automatically begin charging its internal battery via the solar panel. The device is designed for continuous operation.

5.1 Connecting to the Repeater

The repeater extends your existing 2.4GHz Wi-Fi network. The setup process typically involves connecting to the repeater's initial Wi-Fi network (usually named similar to the product model or a default name) and then configuring it to connect to your main router's Wi-Fi network. Refer to the specific instructions provided with the device for detailed Wi-Fi configuration steps, which may involve a web interface or a mobile application.



Figure 5.1: Illustration of the repeater extending Wi-Fi coverage up to 150 meters from the main router, demonstrating improved signal strength in remote areas.

5.2 Device Connectivity

The repeater can support connectivity for up to 8 devices simultaneously, including security cameras, mobile phones, tablets, and laptops. This allows for a robust outdoor network solution.



Figure 5.2: Visual representation of various devices, such as cameras, mobile phones, and laptops, connecting to the extended Wi-Fi network provided by the repeater.

6. Maintenance

Regular maintenance ensures the longevity and optimal performance of your Solar Outdoor Repeater.

- **Solar Panel Cleaning:** Periodically clean the surface of the solar panel with a soft, damp cloth to remove dust, dirt, or debris that may accumulate and reduce charging efficiency. Avoid abrasive cleaners.
- **Physical Inspection:** Regularly inspect the mounting bracket and connections for any signs of wear, corrosion, or loosening. Tighten screws if necessary.
- **Environmental Factors:** While the device is weatherproof, ensure it is not obstructed by overgrown vegetation or other objects that could block sunlight or signal transmission.



Figure 6.1: Depiction of the repeater's IP65 waterproof and dustproof capabilities, highlighting its resilience against rain, lightning, snow, and heat, ensuring durability in various outdoor conditions.

7. Troubleshooting

If you encounter issues with your Solar Outdoor Repeater, refer to the following common troubleshooting steps:

Problem	Possible Cause	Solution
No Wi-Fi signal from repeater	Repeater is out of range of main router; insufficient power; incorrect configuration.	Relocate repeater closer to the main router. Ensure solar panel receives direct sunlight. Reconfigure repeater settings.
Slow internet speed	Weak signal from main router; interference; too many connected devices.	Optimize repeater placement. Check for sources of interference. Reduce number of connected devices if overloaded.

Problem	Possible Cause	Solution
Battery not charging	Solar panel obstructed or dirty; insufficient sunlight; faulty battery.	Clean solar panel. Ensure direct sunlight exposure. If problem persists, contact support.
Device not connecting to repeater	Incorrect Wi-Fi password; device compatibility issue.	Verify Wi-Fi password. Ensure device supports 2.4GHz Wi-Fi (802.11bgn).

8. Specifications

Feature	Detail
Model Number	YY-R7-A7-US (YY-R7)
Product Dimensions	12.6 x 9.25 x 7.87 inches
Item Weight	4.09 pounds
Wireless Standard	802.11bgn (2.4GHz)
Data Transfer Rate	Up to 300 Mbps
Solar Panel Power	15W (24% conversion efficiency)
Battery Capacity	20000mAh Lithium Ion (10 cells included)
Waterproof Rating	IP65
Connector Type	USB-C
Manufacturer	AI MATCH INTELLIGENT TECHNOLOGY CO., LTD

9. Warranty and Support

For warranty information and technical support, please refer to the official Orayafid website or contact their customer service directly. Keep your purchase receipt as proof of purchase for warranty claims.
Manufacturer: AI MATCH INTELLIGENT TECHNOLOGY CO., LTD
For further assistance, please visit the Orayafid Store on Amazon.

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