NEXTIVITY ROAM R41 Smart Mobile Repeater User Guide

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NEXTIVITY ROAM R41 Smart Mobile Repeater

Product Information

The product is the ROAM R41, a cellular signal booster designed to improve cellular signal strength for mobile

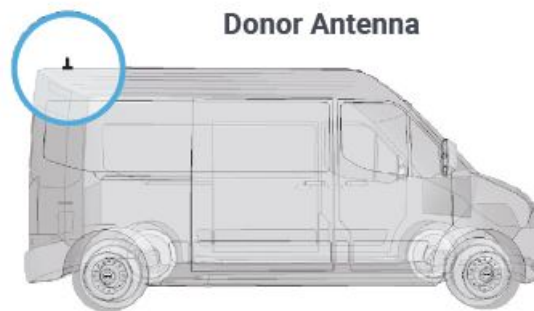devices in vehicles or boats. It includes the following components:

- Main Unit
- Automobile Auxiliary Power Adapter
- Mobile Donor Antenna*
- Server Antenna*
- Mounting Hardware
- Ground Cable

The ROAM R41 must be kept indoors in a dry, cool, and well-ventilated area.
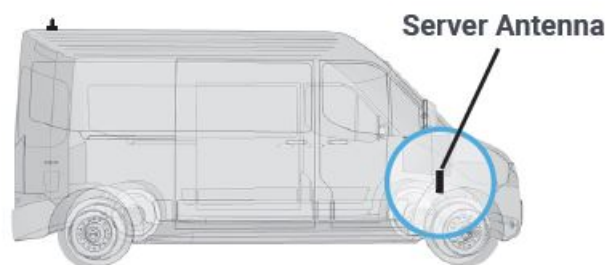
Product Usage Instructions

1. Install the Donor Antenna:
   - Mount the Donor Antenna on the exterior and towards the rear of your automobile or boat.
   - Ensure there is 50 cm of metal around the base of the antenna for optimal performance.
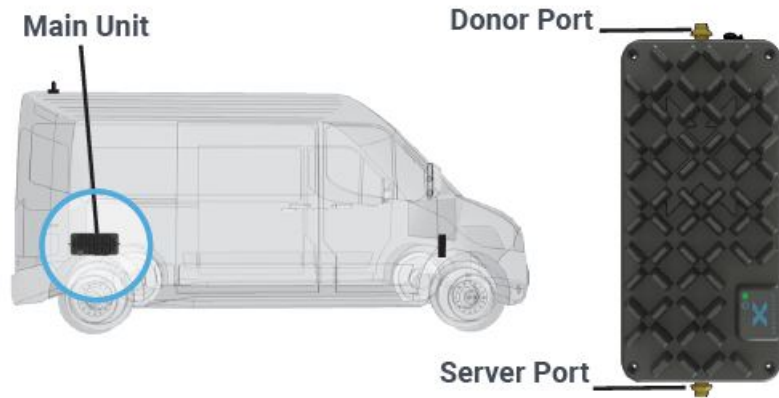

Donor Antenna

2. Install the Server Antenna:
   - Mount the Server Antenna in the cabin/deck towards the front of the vehicle where coverage is needed.
   - Mount the Server Antenna horizontally.
   - Separate/isolate the Donor Antenna as far away as possible from the Server Antenna for best performance.
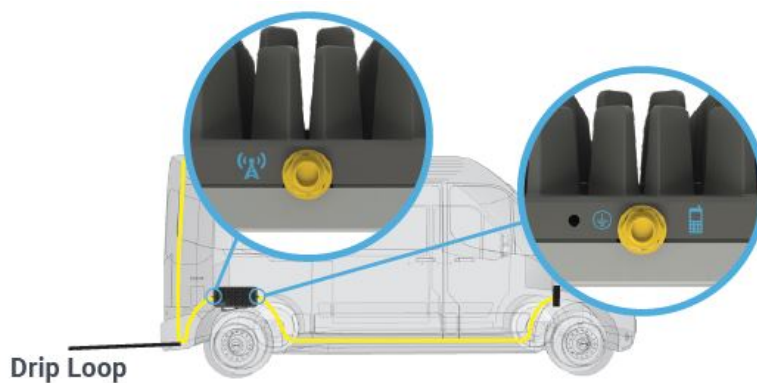

Server Antenna

3. Select the Main Unit Location:
   - Find a suitable location to securely mount the Main Unit.
   - Ensure airflow around the Main Unit and avoid contact with other objects.
   - Choose a location that provides enough distance for all cables to connect.

Main Unit

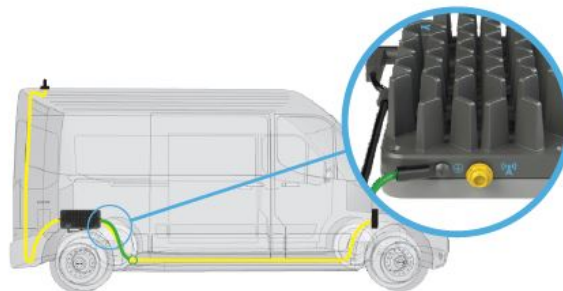**Donor Port**

Server Port

4. Attach Server and Donor Antennas to the Main Unit.

   Attach the Donor Antenna and Server Antenna to the Main Unit. Note: Adding a drip loop to the Donor Antenna cable is crucial as it prevents water from flowing down the cable and damaging the Main Unit's electronic equipment.
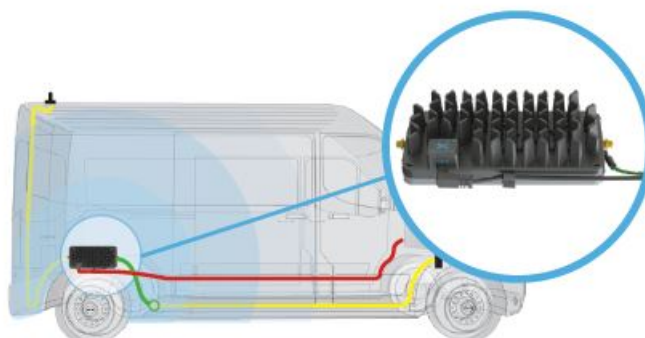
Drip Loop

5. Install the Ground Cable:
   - Attach one end of the ground cable to the Main Unit and the other end to the chassis of the automobile or boat.
   - Add a drip loop to the Donor Antenna cable to prevent water damage to the Main Unit.

6. Plug in the Main Unit using the provided power adapter.

   Using the provided M3 screw, attach one end of the ground cable to the Main Unit and the other end to the chassis of the automobile or boat.

7. Download the Nextivity WAVE App or MyWave App to monitor and manage the status of your ROAM R41 and

set it to automatically track the base station to which your phone is connected.
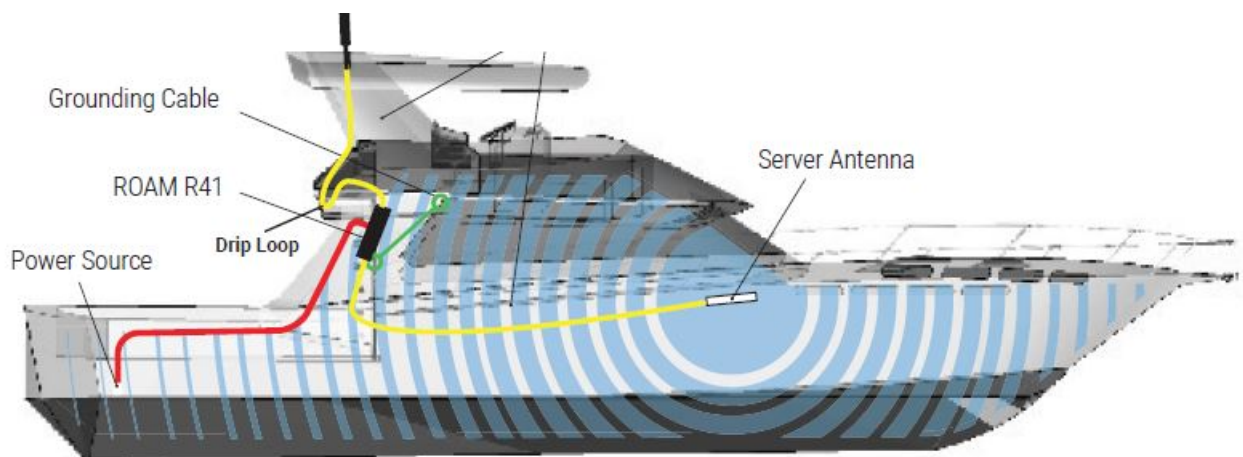

Download the MyWave App to set your ROAM R41 to automatically track the base station to which your phone is connected.

Scan to Download

Note: For detailed LED indicator behavior and translation/error states, please refer to the product manual.

Marine Installation

Model#	Bands Supported	Link	Output Power (dBm)
R41-YB	1/3/5/7/8/26/28L	Downlink	0
		Uplink	22
R41-9B	1/3/7/8/20	Downlink	0
		Uplink	22

Power/Status LED Indicator

LED Behavior	Translation/Error State
No light	Device is powered OFF
Solid Orange	Device is powered ON
–	Device is booting up
Slow blinking green	Device is band scanning to acquire network signals
Solid Green	Device is operating normally and providing coverage
Solid Red	Hardware Error (ES1)–Disconnect & Reconnect
Flash RED 1 time & OFF for 4sec	Device is not receiving signal from the cellular network (ES2)
Flash RED 2 times & OFF for 4sec	Donor input signal is too strong for the device (ES4)
Flash RED 3 times & OFF for 4sec	Device's server antenna is too close to donor antenna (ES7)
Flash RED 4 times & OFF for 4sec	Device is disabled by the operator (ES9)
Flash RED 5 times & OFF for 4sec	Device location lock pending (ES10)
Flash RED 6 times & OFF for 4sec	Device registration pending (ES11)
Flash RED 7 times & OFF for 4sec	Device Self-Test Failed (ES12)

Documents / Resources

NEXTIVITY ROAM R41 Smart Mobile Repeater [pdf] User Guide
R41-9B-001, R41-9B-002, R41-9B-003, R41-YB-001, R41-YB-002, R41-YB-003, ROAM R41 Smart Mobile Repeater, ROAM R41, Smart Mobile Repeater, Mobile Repeater, Repeater