

## Hi-Gain™ Outdoor Wireless-300N Dual Radio Smart Repeater

MODEL: **HOW2R1**



### PACKAGE CONTENTS:

- One Hi-Gain™ Outdoor Wireless-N Dual Radio Smart Repeater
- Two 5dBi Hi-Gain Outdoor Omni-Directional Antennas
- One Power over Ethernet DC Injector
- L-shape Antennas Connector
- One Waterproof Gasket Kit for RJ-45
- Power Cable and Power Transformer
- Ethernet Cable
- Wall & Pole Mounting Kit
- Setup CD-Rom

Unleash your Wireless Network with the Hawking **Hi-Gain™ Outdoor 2.4GHz Wireless-300N Dual Radio Smart Repeater, HOW2R1**. The HOW2R1 outdoor smart repeater connects and repeats your existing wireless network with up to 64X the power output and 8X the distance of a standard Wireless-G device. Similar to the Hawking's HW2R1 Smart Repeater with dual radio design, the HOW2R1 Outdoor Smart Repeater is engineered with two powerful Wi-Fi radios, one radio is dedicated to receiving signals from a wireless source, access point or router, and the other radio is used to rebroadcasting wireless signals throughout your surroundings. To further enhance its wireless range and coverage, the Wi-Fi receiving radio is connected to an 11dBi directional antenna, integrated internally in the HOW2R1. In addition, two external 5dBi antennas are connected to the rebroadcasting Wi-Fi radio to effectively eliminates wireless deadspots inside and outside of your home or office.

This powerful repeater is not only robustly design to withstand outdoor environment, it also packed with wireless security features, such as MAC access control, IEEE 802.11x authentication, WPA, WPA2, hidden ESSID, and the basic WEP encryption. With data transfer rate of up to 300Mbps, the HOW2R1 is an ideal solution for High Performance Wireless Solution, extending your wireless signals for your home or your business, or providing wireless access to RV parks or Marine docks. The possibilities are endless.

### Features

- Connects and repeats any 2.4GHz 802.11b/g/n Wireless Network
- Eliminate Wireless Dead Spots inside and outside your Home or Office with high power output of up to 200mW
- Increase your wireless distance of up to 8X and power output of up to 64X compared to a standard wireless 802.11g network\*
- Engineered with two WiFi radios - one receiving radio and one rebroadcasting radio
- Built-in 11dBi Directional Antenna is dedicated to receiving wireless signals
- Two 5dBi external Omni-Directional Antennas are dedicated to rebroadcasting wireless signals
- Easy Setup: Install and Configure in less than 1 Minute
- Heavy duty, waterproof design

### System Requirements:

- One computer (Mac or PC) with an available CD or DVD-Rom drive
- Internet Web Browser (Internet Explorer, Safari, etc.)
- A Wired or Wireless networking adapter (i.e. Airport card, built-in Ethernet adapter, etc.)
- A Wireless Internet connection (such as a HotSpot, etc.)



- Internal 11dBi Directional Antenna - **RECEIVE WIRELESS SIGNALS**
- Two Built-in Wi-Fi Radios: Receiving and Rebroadcasting signals

- Two External 5dBi Omni-Directional - **REBROADCAST WIRELESS SIGNALS**

**OUTDOOR WALL OR POLE MOUNTING KIT INCLUDED**

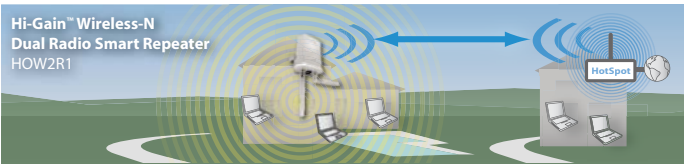


## SOLUTIONS

### HOME USE

Extend a wireless signal to your backyard

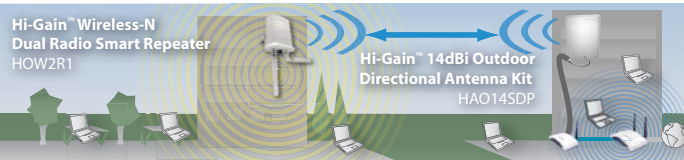
Hi-Gain™ Wireless-N Dual Radio Smart Repeater HOW2R1



### FOR THE OFFICE

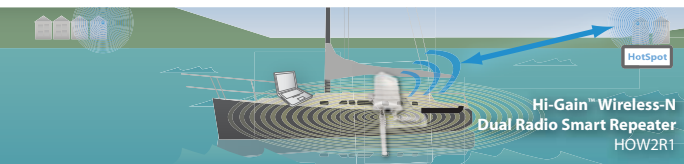
Connect the network and internet connection from one office to another

Hi-Gain™ Wireless-N Dual Radio Smart Repeater HOW2R1



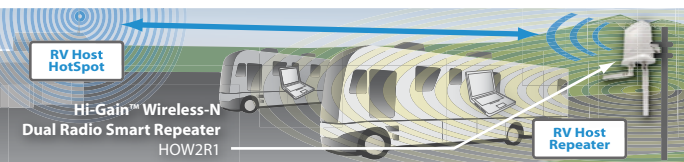
### FOR MARINERS

Connect to an on shore wireless Internet connection to provide wireless Internet access to your boat or yacht

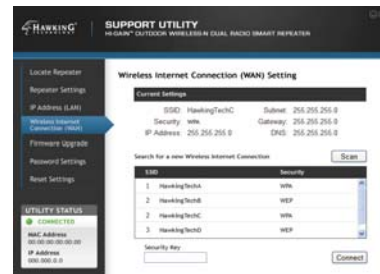


### FOR OUTDOOR APPLICATIONS

Extend the range of a camp ground's wireless Internet

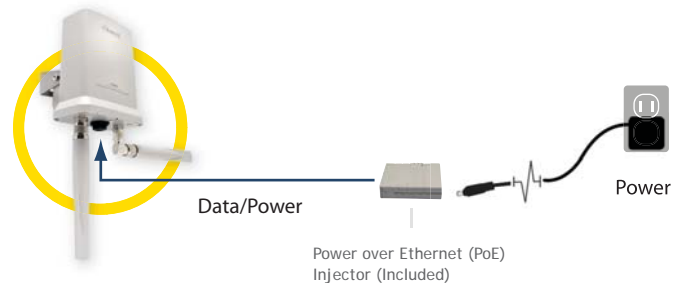


## SUPPORT UTILITY



The included Windows based Smart Repeater Support Utility is a powerful tool for administrators to configure and troubleshoot wireless connections for multiple Smart Repeaters. The Support Utility allows administrators to upgrade firmware, reset devices to factory settings, adjust IP settings, scan and connect to wireless Internet networks and view current system settings. The Utility uses a proprietary communication protocol to connect to the Smart Repeater without having to know the correct IP settings.

## HARDWARE SETUP



By combining your power and data connections into a single cable, PoE simplifies the setup of the Hi-Gain™ Outdoor Wireless-N Dual Radio Smart Repeater. The included Power over Ethernet DC Injector provides power and network access (through your home or business router or network connection), and combines them into a single RJ-45 connection for the HOW2R1. This allows you to install the HOW2R1 outdoor in hard to reach locations without worrying about running both power and Ethernet cables.



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## SPECIFICATIONS:

### Bridge Specifications (Receiving):

- ◆ 802.11n 150M Wireless WAN
  - Dedicated RJ-SMA Antenna Port
  - Real Time LED Signal Strength Display
  - Supports WPA, WPA2, WEP Wi-Fi Security
- ◆ Network Bridging Mode:
  - Pass through Settings from a wireless Internet connection
- ◆ Antenna: Internal 11dBi Directional
- ◆ Output Power
  - 11n: 18 ± 1.5dBm, 11g: 21 ± 1.5dBm, 11b: 23 ± 1.5dBm

### Local Network Specifications (Rebroadcasting):

- ◆ RJ-45 Ethernet 10/100M Port
- ◆ 802.11n 300Mbps Wireless LAN
  - Two dedicated RJ-SMA Antenna Ports
  - Supports WPA, WPA2, WPS (Wi-Fi Protected Setup) WEP Wi-Fi Security
- ◆ Broadband Router Features
  - DHCP Server
  - Firewall
  - Demilitarized Zone (DMZ)
  - Port Forwarding
  - Quality of Service
  - Virtual Servers / Port Forwarding
  - Network Address Translation
  - Access Control: Mac & IP Address Filtering
  - URL Blocking
  - Denial of Service (DoS)
  - Remote Management
- ◆ Antenna: Two external 5dBi Omni-Directional
- ◆ Output Power
  - 11n: 14 ± 1.5dBm, 11g: 15 ± 1.5dBm, 11b: 17 ± 1.5dBm

### Hardware Specifications:

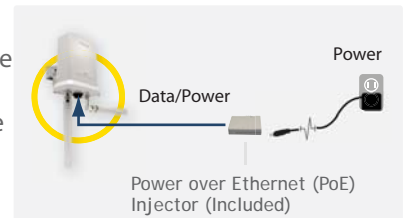
- ◆ Connectors/Ports/Switches
  - Two N-Type Connectors
  - One 10/100M Ethernet Ports (LAN)
- ◆ Power: 48V, 0.5 Switching Power Adapter (POE)
- ◆ Dimension / Weight
  - POE Injector: 3 x 2¼ x ¾ in / app. 0.10 lb.
  - Repeater: 7 x 5½ x 3 in / app. 1.10 lb (excludes antennas)

## POWER ON & CONNECT!

It's easy to install, it's easy to use! Everyone can do it.

### STEP 1: Power on the Repeater

Connect the included Ethernet cable to the Repeater, and Power over Ethernet Injector. Finally, connect the power adapter to an available wall socket.



### STEP 2: Configure the Repeater

Insert the included CD and open the Support Utility. Configure the Repeater, and you're ready to go!



### STEP 3: Mount the Repeater

Find a safe location to mount the Hi-Gain Outdoor Wireless-N Smart Repeater.



## NETWORK DIAGRAM

