

Smart-Reach™ Base Installation and Quick Start Guide

Package Contents (typical)

The contents of a typical installation package are shown below. The actual contents of your installation package may vary. The installation package include 3 ft Ethernet (CAT5e) cable and mounting hardware.



Smart-Reach Base (single or dual radio)



Omni-directional antenna with mounting bracket and 6 ft coaxial cable



PoE (Power over Ethernet) injector and AC adapter



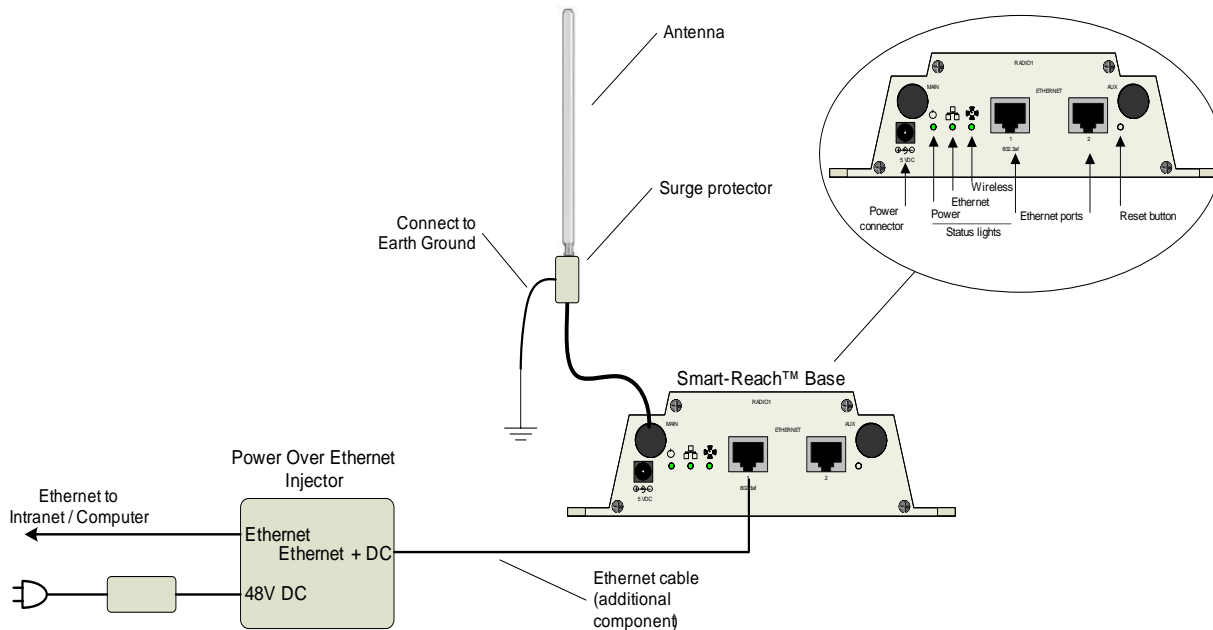
Antenna lightning (surge) protector, N-Male to N-Female

Additional components required:

- Ethernet cable to connect the PoE injector to ETHERNET Port 1 on the Smart-Reach Base. Purchase the length required for your installation.
- 12 AWG stranded wire to connect the ground terminal on the surge protector to a pipe in the ground.

Installation

In a typical installation, the Smart-Reach Base, single radio or dual radio, is mounted indoors.



Installing the Antenna

The Smart-Reach Base can have a single or dual radio with two antennas for diversity. Each radio has two antenna connections: Main and Aux. In a typical installation, only the Main antenna connection on each radio is used. The antenna is supplied with a mounting bracket and a lightning protector. The antenna connectors are reverse-polarity SMA jacks. Antenna or cable connectors must use RP-SMA plugs.



WARNING

Check with the local electrical code requirements for the proper installation and grounding of the lightning protector. Seon Design Inc. is not responsible for improper installation of the lightning protector and does not provide protection against lightning strikes.

- 1 Secure the mounting bracket to the desired location.
- 2 Insert the antenna into the bracket and secure with the supplied hardware.
- 3 Attach the lightning protector.
- 4 Use 12 AWG stranded wire to connect the ground terminal on the lightning connector to a pipe in the ground.
- 5 Connect the SMA-RP connector on the coaxial cable to the MAIN antenna connector on the Smart-Reach.
- 6 Connect the other end of the cable to the lightning protector to a torque of 6–10 in lbs (0.68–1.13 Nm). Do not overtighten.

Installing the Smart-Reach Base



CAUTION

Shielded Ethernet cables must be used for all connections.

Mount the Smart-Reach Base in a secure and dry location.

- Wall or ceiling: ensure the mounting surface can support a minimum of 2 pounds (0.9 kg) for the Smart-Reach Base and the fasteners. Allow extra weight for cables.
- Inside a plenum: plenum-rated cables and attachment hardware must be used. Only the Smart-Reach Base and appropriate cabling can be located in the plenum.



CAUTION

Power supplies and PoE (power over Ethernet) injectors cannot be installed inside a plenum.

- 1 Use the Ethernet CAT5e cable to connect ETHERNET Port 1 on the Smart-Reach Base to Ethernet + DC connector on the PoE injector.
- 2 Connect the PoE Ethernet cable to a properly configured computer/network.



WARNING: Surge Protection and Grounding

If you plan on connecting an outdoor antenna to the Smart-Reach Base, make sure that proper lightning surge protection and grounding precautions are taken according to local electrical code. Failure to do so may result in personal injury, fire, equipment damage, or a voided warranty.

Testing the Wireless Network

By default, the Smart-Reach Base is configured with the static IP address **172.24.1.1**. Note: Your network configuration may vary.

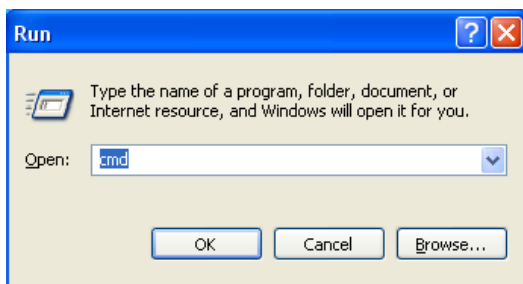
- 1 Enable your computer's wireless network interface, and verify that it is set with the static IP address **172.24.1.2** to **172.24.1.254**.
In Windows XP, use **Control Panel > Network Connections > Local Area Connection > Properties > Internet Protocol (TCP/IP) > Properties**.
- 2 Connect to the wireless network. From the Windows XP Start menu, select **Settings > Network Connections > Wireless Network Connections**. The list of available wireless networks appears. Select Seon Network (default) and then **Connect**.
- 3 Confirm that you can ping the Access point from the host computer.

The status lights provide the following information:

Status Light	State	Description
Power	On	Smart-Reach Base is fully operational.
	Flashing	Smart-Reach Base is starting up. If the power light continues to flash after several minutes, the firmware has failed to load. Reset or power cycle the Smart-Reach Base. If this condition persists, contact Seon Customer Service at sales@seon.com.
	Off	Smart-Reach Base has no power.
Ethernet	On	Illuminates for a short time when the link is established.
	Flashing	Ethernet port is transmitting or receiving data.
	Off	Ethernet port is not connected or there is no activity.
Wireless	Flashing	Wireless port is transmitting or receiving data.

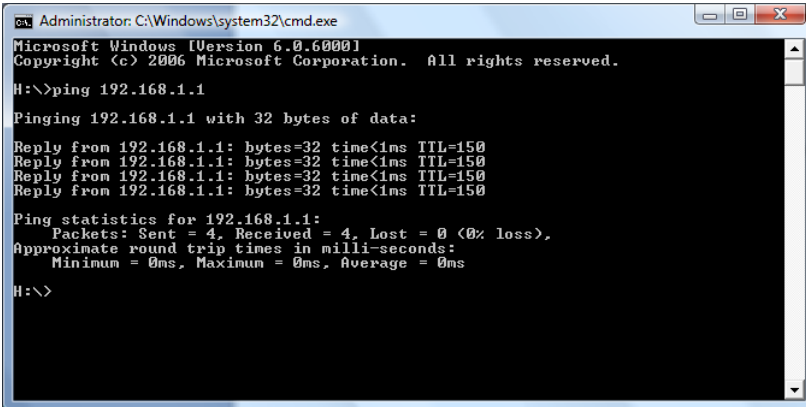
Using the Ping Command

- 1 On the Start menu, click Run.



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- 2 Type cmd and click OK.
- 3 In the command line, type `ping xxx.xxx.xxx.xxx` (the IP address of the machine you wish to contact).
- 4 If you successfully ping the machine, you will get a reply as shown.



```
Administrator: C:\Windows\system32\cmd.exe
Microsoft Windows [Version 6.0.6000]
Copyright (c) 2006 Microsoft Corporation. All rights reserved.

H:\>ping 192.168.1.1

Pinging 192.168.1.1 with 32 bytes of data:

Reply from 192.168.1.1: bytes=32 time<1ms TTL=150
Reply from 192.168.1.1: bytes=32 time<1ms TTL=150
Reply from 192.168.1.1: bytes=32 time<1ms TTL=150
Reply from 192.168.1.1: bytes=32 time<1ms TTL=150

Ping statistics for 192.168.1.1:
    Packets: Sent = 4, Received = 4, Lost = 0 (0% loss),
    Approximate round trip times in milli-seconds:
        Minimum = 0ms, Maximum = 0ms, Average = 0ms

H:\>
```

- 5 If your ping is not successful, your requests will time out or you will receive a notice that the recipient could not be contacted.

Configuration

The Smart-Reach Base has pre-configured Seon default settings. To make minor changes to configuration, read through this section. The Smart-Reach Base is managed via its Web-based management software using Microsoft® Internet Explorer® 7.0 or Mozilla Firefox®2.0 or later versions.

Configuring the Network Settings of your Computer

- 1 Use the Ethernet cable to connect the LAN port on your computer to the Ethernet port on the PoE injector.
- 2 Configure your computer to use a static IP address in the range **172.24.1.2** to **172.24.1.254**. The subnet mask of **255.255.255.0** is entered automatically. Set the default gateway to **172.24.1.1** and the DNS server to **192.168.1.1**.

In Windows XP, use **Control Panel > Network Connections > Local Area Connection > Properties > Internet Protocol (TCP/IP) > Properties**.

- 3 Disable any wireless connection.

Important: To perform any additional configuration, assign an IP address, or to reset the Smart-Reach Base to factory defaults, contact Customer Service.

FCC Information to the User

This equipment has been tested and found to comply with the limits for a digital device, pursuant to Part 15 of the FCC rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses, and can radiate radio frequency energy. If not installed and used in accordance with the instructions, it may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment causes harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

- Reorient or relocate the receiving antenna.
- Increase the separation between the equipment and the receiver.
- Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
- Consult the dealer or an experience radio/TV technician for help.

Customer Service Contact Information

Toll free telephone 1-877-630-7366 or telephone 604-941-0880

Email: service@seon.com

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