Verizon Wireless

N e t w o r k E x t e n d e r

User Manual

Please read this manual before operating your device, and keep it for future reference.

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For more information, refer to *"Warranty Information"* on page 26.

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Section 1: Getting Started

Introduction

Congratulations on the purchase of your Verizon Wireless Network Extender.

Your purchase of this Network Extender enhances the wireless telephone service that you and your family will receive while in your home or home office.

This User Guide introduces you to the Verizon Wireless Network Extender service and all the features of your new device. It includes the following sections:

- Getting Started
- Using Your Device
- External GPS Antenna
- Troubleshooting
- Important Safety Information
- Manufacturer's Warranty

Throughout this guide, you'll find tips and techniques that will help you make the most of your new device and service.

It is important that you read each section and note any special requirements. However, if you'd like to get right to a specific feature, simply locate that section in the Table of Contents and go directly to that page. Follow the instructions in that section, and you'll be ready to use your Network Extender.

Note: Due to updates in software and procedure, this printed guide may not be the most current version for your Network Extender. Visit www.verizonwireless.com/networkextender to access the most recent version of this guide.

What's In the Box?

- Network Extender
- Ethernet Cable
- Power Supply and Power Cord
- GPS extension cable
- User Guide
- Quick Start Guide

System Requirements

- An always-on broadband Internet connection with a minimum speed and available bandwidth of 1 MB (3.1 Mbps to support the maximum EVDO data rate.)

Note: Satellite, MiFi or wireless connections are not supported.

- An available Ethernet (LAN) port on either your broadband modem or a router connected to the modem.

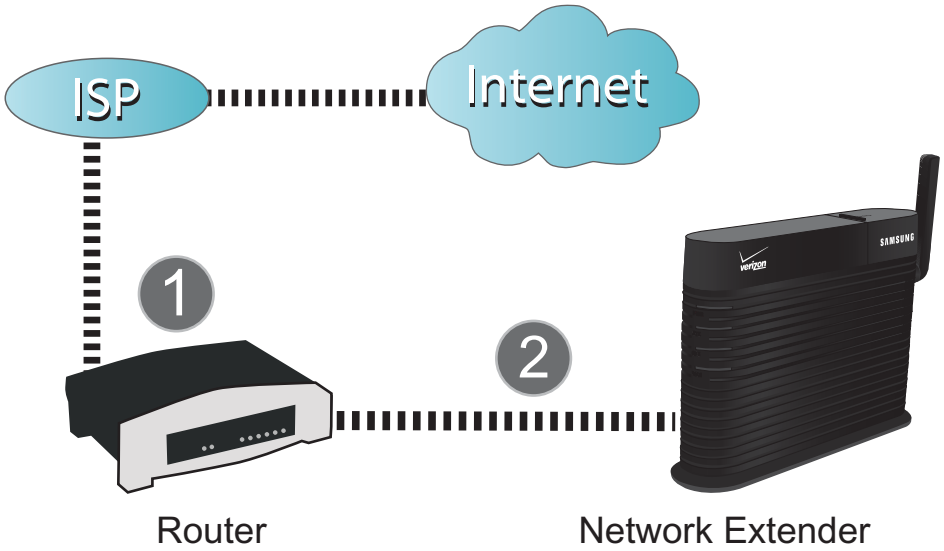
Note: If you are connecting your Verizon Wireless Network Extender to a router, please ensure it supports Virtual Private Networking (VPN). Although most routers support this functionality, refer to your router's product documentation to confirm compatibility.

Quick Setup

Setting up service on your new Verizon Wireless Network Extender is fast and easy. This section outlines the procedures needed to quickly set up the Network Extender.

Note: You may also visit www.verizonwireless.com/b2c/store/accessory?action=gotoSetup to view the online setup and usage tutorial. Follow the onscreen prompts.

1. Confirm your package contains all components.
2. Review the "Important Safety Information" on page 20 before installing the Network Extender.
3. Make sure that both your router and your Internet broadband modem are functioning properly. Refer to your particular product's documentation for more information.
4. If possible, place the Network Extender near a window in a central location.



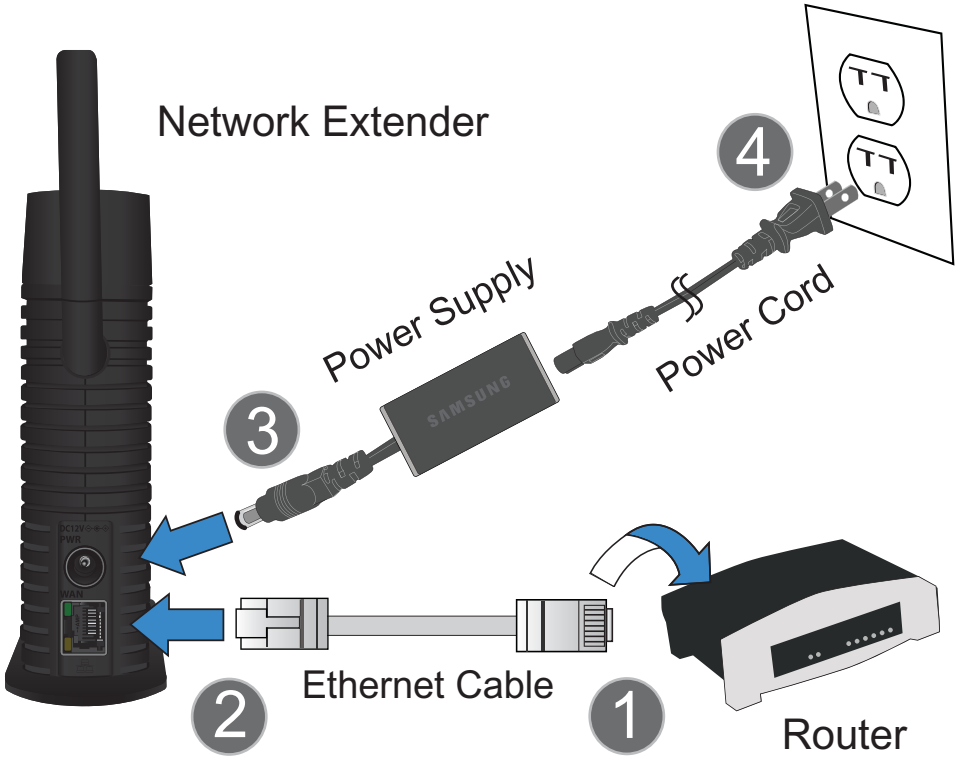
5. Connect one end of the included Ethernet cable to an open LAN port on the router (1) and connect the other end to the WAN port located at the rear of the Network Extender (2).

Note: Plug the Ethernet cable into the Network Extender before connecting the power supply.

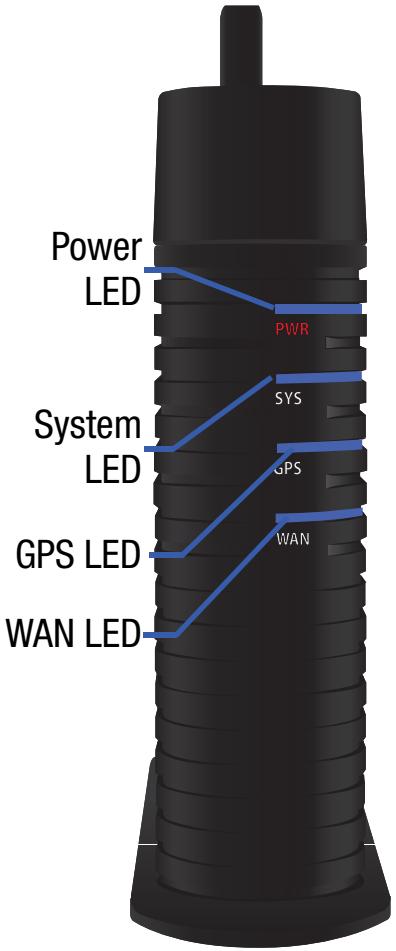
6. Plug the power supply connector into the DC 12V power port located at the rear of the Network Extender (3).
7. Insert one end of the power cord into the power supply and then plug the other end into an available power outlet (4).

Warning!: Insert the plug into the power outlet last. Failure to do so could cause an electrical short or power surge to the Network Extender.

Note: The use of a surge protector is recommended for the Verizon Wireless Network Extender.



8. Confirm that the front LEDs are illuminated as indicated below:



- **Power LED**: should be a continuous blue light, indicating that the Network Extender is receiving power.
  No illumination or magenta color indicates there is an issue with the power supply or power connector.
- **System LED**: should be a continuous blue light, indicating that the Network Extender is properly communicating with the Verizon Wireless network.
  Blinks red while establishing an initial network connection.
  Persistent solid magenta indicates a failure condition. Persistent solid red or slow- or fast-blinking red indicates an abnormal condition.
- **GPS LED**: should be a continuous blue light, indicating that the Network Extender has locked onto a valid GPS signal. If the GPS LED is solid red, the internal antenna may not be able to detect a GPS signal and installation of the external GPS antenna might be necessary. If the GPS LED is persistent magenta while the System LED is slow-blinking red, this indicates a failure condition.
- **WAN LED**: should be a steady blue light, indicating that the Network Extender has detected a valid Ethernet connection. A blinking blue LED indicates data communication.

Note: Allow 3 - 5 minutes for the Network Extender to complete the startup sequence and detect both its connections and available communications. The first time the Network Extender is used, it may take as long as one hour for the initial GPS acquisition. If the GPS LED is still red after one hour, relocate the GPS antenna to receive a stronger signal. See “Antenna Installation” on page 14.

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9. Confirm your setup was successful and your Network Extender is functioning properly:
   - Confirm that all the LEDs are blue.
   - Dial #48 from your Verizon Wireless phone and listen for the "You are on the Network Extender" message.

Verizon Wireless strongly recommends you access your Network Extender account online via **My Verizon** on www.verizonwireless.com and set up a list of priority users.

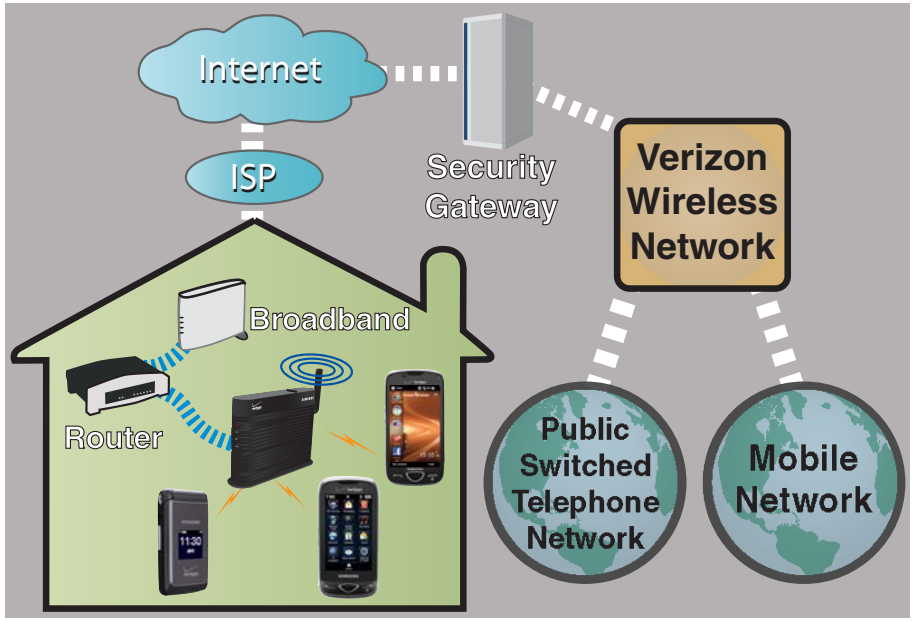
- You may want to include all members of your household that have a Verizon Wireless phone.
- If you do not choose to manage the access to your Network Extender, other Verizon Wireless subscribers within range of your Network Extender will be able to use your Network Extender.

Section 2: Using Your Device

Additional Setup Information

Getting started with your new Verizon Wireless Network Extender is easy. This section walks you through an overview of the product, package contents, activation, and how to contact Verizon Wireless for assistance with your service and your Network Extender.

The Verizon Wireless Network Extender is used within your home or home office to extend your Verizon Wireless coverage area through an existing Internet broadband connection.



About the size of a traditional wireless access point (WAP), the Network Extender facilitates the delivery of cellular traffic through the Internet to the Verizon Wireless network, which then routes the signal to the desired party.

- **Number of Users**: A maximum of **seven** (7) phones can connect to the Verizon Wireless Network Extender at any one time.
  - The first six callers to initiate or receive a call will connect to the Network Extender. Additional users who make or receive a call while all Network Extender channels are in use are redirected to the nearest compatible cell tower (if available). A seventh channel, open to all callers, is always reserved for emergency (E911) calls.
  - As each caller ends a call, that channel then becomes available for another user to initiate (or receive) a new call.

Note: The Network Extender can be managed to ensure Verizon Wireless phone numbers you authorize will always enjoy priority access to the Network Extender network. For more information, see "Quick Setup" on page 3, or view the online Setup tutorial at: http://www.verizonwireless.com/b2c/store/accessory?action=gotoSetup

- **Manage Access**: Authorized account users can manage access settings for their Verizon Wireless Network Extender by logging into My Verizon at www.verizonwireless.com.
  - Up to 50 Verizon Wireless cell phones can be registered.

– When the Network Extender is set to managed access mode, unauthorized users are redirected to the nearest compatible cell tower wherever possible.

- **Verify service on Network Extender**: Users can verify that they are on the Verizon Wireless Network Extender network by dialing #48 (and receiving an audio announcement). You will also hear a short double tone on your wireless phone when making or receiving a call while on the Network Extender network. The tone is played at the beginning of the call.

Note: A seventh channel, open to all callers, is always reserved for emergency (E911) calls.

- **Connect to the Network Extender**: In order to establish an initial connection to the Network Extender network, your Verizon Wireless mobile phone needs to move within close proximity (approximately 15 feet) of the Network Extender unit.
- **Calling on Network Extender**: After connecting to the Network Extender network, you can move within a broader perimeter while remaining under Network Extender coverage (approximately 40 feet). Refer to www.verizonwireless.com/networkextender for more details.
- **Ranges Will Vary**: Both the coverage area required to establish an initial connection and the broader coverage area of the Network Extender cannot be guaranteed and may vary due to environmental factors, such as physical structures and the strength of the external cell tower coverage.

The Network Extender uses approximately 40 kbps (downlink and uplink) of the broadband connections bandwidth per voice call. EVDO data calls will use a maximum of 3.1 Mbps downlink and 1.8 Mbps uplink

The Network Extender maximizes wireless phone utility within a small area by not only providing better voice quality, but by also allowing you to use this new service without any enhancements to your existing Verizon Wireless mobile phones.

By utilizing a built-in GPS antenna, the Network Extender is capable of maintaining exact network timing updates and providing E911 services with an accurate location.

- The GPS extension cable (provided with your Verizon Wireless Network Extender) allows you to place the Verizon Wireless Network Extender further from a window and run the antenna to an area with stronger GPS reception.

Warning!: You may not be able to make 911 calls in the event of an electrical power outage, broadband connection failure, or other service disruption outside of the Verizon Wireless network coverage area. 911 services may be limited in areas outside of the Verizon Wireless network coverage area. Not all public safety answering points have location-based E911 technology. Always be prepared to report your location to the 911 operator when placing an emergency call. Mobile phones operate using radio signals which cannot guarantee connection in all conditions.

Activating Your Verizon Wireless Network Extender

Your Network Extender should already be activated. If it is not activated, please call Verizon Wireless Customer Service at **(800) 922-0204** or ***611** from your Verizon Wireless mobile phone and select the option for technical support.

Note: The Network Extender must be activated for use on the Verizon Wireless network before setup. It will not work unless it has been activated.

Should you need to activate your Network Extender, you will be asked to provide the following information:

- Primary Wireless Phone Number or Verizon Wireless Account Number (located on your Verizon Wireless billing statement)
- Account Password
- MAC ID of the Network Extender found on the sticker affixed to the device.

Getting Help

Note: In order to establish an initial connection to the Verizon Wireless Network Extender network, your mobile phone needs to move within close proximity of your Network Extender unit. After connecting to the network, you can move within a broader perimeter while remaining under Network Extender coverage. Refer to www.verizonwireless.com/networkextender for more detail.

Note: Both the coverage area required to establish an initial connection and the broader coverage area of the Network Extender cannot be guaranteed and may vary due to environmental factors, such as physical structures and the strength of external cell tower coverage.

Reaching Verizon Wireless Customer Service

You can reach Verizon Wireless Customer Service in a number of ways:

- Call us toll free at **(800) 922-0204** or ***611** from your Verizon Wireless mobile phone.
- Visit the support pages at www.verizonwireless.com/networkextender.

LED	Function	Description
PWR	Power	• **Solid blue**: normal • **Magenta or no light**: abnormal
SYS	System connected	• **Solid blue**: normal • **Persistent solid magenta**: failure • **Persistent solid red or slow or fast-blinking red**: abnormal

LED	Function	Description
GPS	GPS signal	• **Solid blue**: normal (GPS is received) • **Blinking blue or red**: while searching for GPS • **Persistent solid red**: The internal antenna may not be able to detect a GPS signal and installation of the external GPS antenna might be necessary. • **Persistent solid magenta while the System LED is slow-blinking red**: failure condition: Contact the customer service and have the unit replaced.
WAN	WAN (Ethernet) connection	• **Solid blue**: normal • **Blinking blue**: data communication • **Solid red or no light**: abnormal

Verizon Wireless Network Extender Basics

- Components (page 10)
- Features (page 12)
- Maintenance Notes (page 13)

Your Network Extender is packed with features that expand your ability to stay connected to the people and information important to you. This section will guide you through the basic features and functions of your Verizon Wireless Network Extender.

Components - Front View

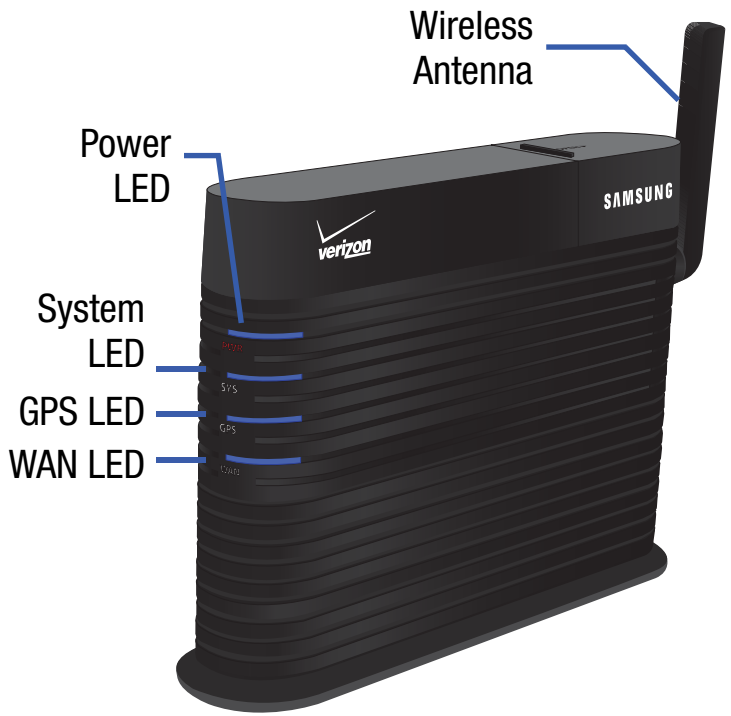
In addition to a wireless antenna, the Network Extender has four LED lights that are used to indicate the device connectivity status.

- **Wireless Antenna** provides omnidirectional transmission and reception of signals between the Network Extender and communicating Verizon Wireless mobile phones. The wireless antenna rotates 360 degrees.
- **Power LED (PWR)** indicates the power status.
- **System LED (SYS)** indicates the status of Network Extender connectivity to the Verizon Wireless network.
- **GPS LED** indicates the GPS connection status.

Note: If the unit's GPS signal strength is weak (due to location), it is recommended that you either move the Network Extender near a window or install the external GPS antenna. For more details, see "External GPS Antenna" on page 14.

Note: GPS antenna receives signals from Global Positioning System satellites and uses them to obtain time and location information.

- **WAN LED** indicates the status of the Ethernet connection and traffic activity on the Network Extender.



Components - Rear View

The rear of the Network Extender provides access to the WAN port, power port, and external GPS antenna.

1. **GPS Antenna Port** slides to provide access to the external GPS antenna for removal and relocation.
   - A red GPS LED indicates a GPS signal could not be detected using the internal GPS antenna. The external GPS antenna should be connected. See “External GPS Antenna” on page 14.
2. **Heat Vents** provide passive ventilation for the Network Extender and allow for dissipation of internally generated heat.

Note: The Network Extender needs to remain vertical and in a well-ventilated location. The vertical position allows proper air flow to the internal components.

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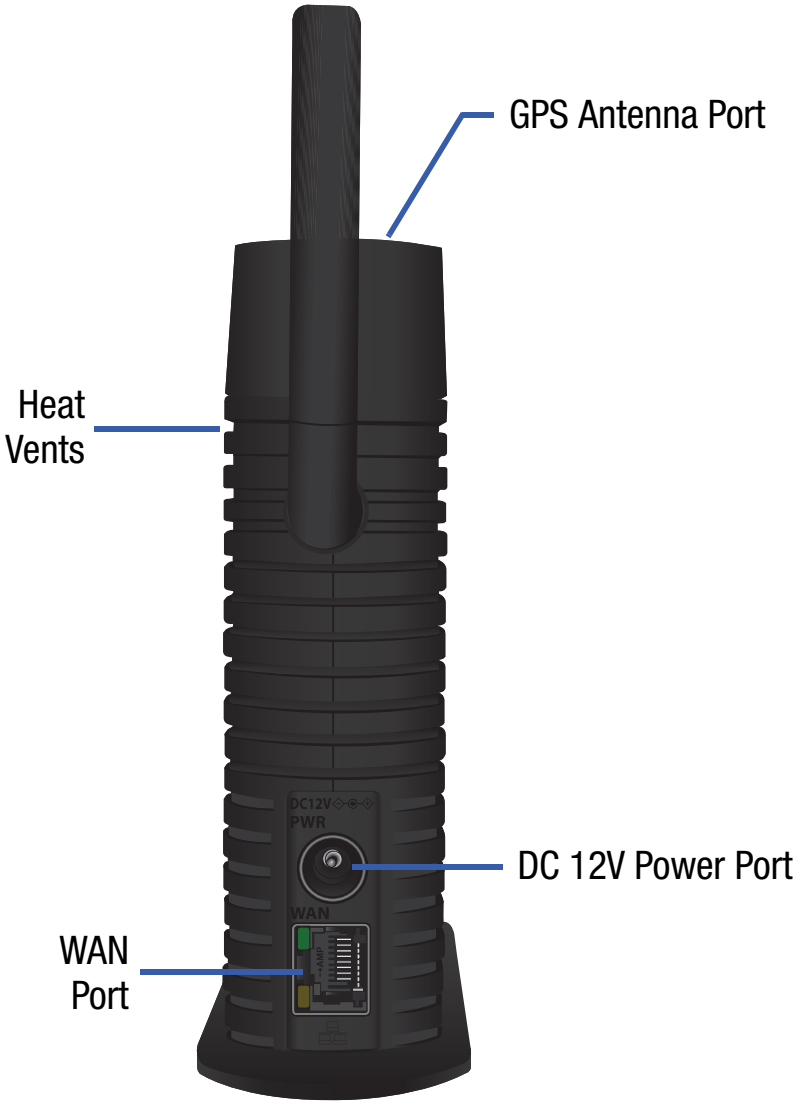
3. **DC 12V Power Port** provides power to the Network Extender when connected to the AC power supply and cord (included).

Warning!: Only use the provided power cord and supply. Using any other power source may damage the Network Extender.



4. **WAN Port** allows you to connect the Ethernet cable provided to establish communication between the Network Extender and your broadband router. This connection port is then used to transmit voice and data through the Internet to the Verizon Wireless network, which then authenticates the Network Extender and allows communication with wireless phones.
   - If the WAN LED does not illuminate, this indicates that the Ethernet cable connection has not been detected.
   - Please see *"Troubleshooting"* on page 17.

Features

The following list highlights some of the Network Extender's features:

- The Network Extender is a Plug & Play device that can be installed to automatically provide enhanced wireless telephone service in a home or small office without having to change your existing mobile phone.
- The Network Extender enables users to easily install and configure the system by connecting to an existing broadband network.
- This Network Extender supports voice and data calls. It allows as many users as desired to register and supports up to six calls.
- The Network Extender utilizes a GPS receiver to get both timing and unit location information. In case of a weak GPS signal, install the external GPS antenna and locate it near a window to receive a stronger signal.
- To prevent unauthorized users from accessing the Network Extender and diminishing your available bandwidth, you have the option to restrict the use of your Network Extender by logging into My Verizon at www.verizonwireless.com.

Note: Certain Verizon Wireless services are not compatible with the Network Extender, refer to www.verizonwireless.com/networkextender for details.

Maintenance Notes

These notes should be carefully reviewed before using the Network Extender:

- See “General Precautions” on page 20.
- Only connect the Network Extender’s power plug to a 110–125 VAC outlet.

Note: The use of a surge protector is recommended.

- When cleaning the Network Extender, first unplug the connector from the power outlet. Do not clean the Network Extender using chemical solvents or detergents, but with an anti-static cleaning pad.
- If the Verizon Wireless Network Extender is connected to a Wi-Fi router, ensure that the unit is placed at least 2 feet away from the router (to avoid interference).
- Do not obstruct the heat vents by blocking the openings or covering the Network Extender.
- Remove the Network Extender’s power connector from the power outlet if the device will not be used for an extended period of time.

Section 3: External GPS Antenna

If your Verizon Wireless Network Extender cannot receive a Global Positioning System (GPS) signal, it may be necessary to improve the reception by installing and then positioning the external GPS antenna. This section outlines the installation and relocation of this GPS antenna.

Antenna Installation

In some cases, you may find that because of its current location, the Network Extender's GPS antenna may not be able to properly receive an active GPS signal. If a stable GPS signal is not detected, as indicated by the red GPS LED, you will need to install the GPS antenna cable as explained in this section.

Without a valid GPS signal, the Network Extender cannot function properly, and calls will be redirected to the nearest compatible cell tower.

Warning!: Use only the GPS antenna supplied with your Verizon Wireless Network Extender.

When positioning the GPS antenna, ensure that it is:

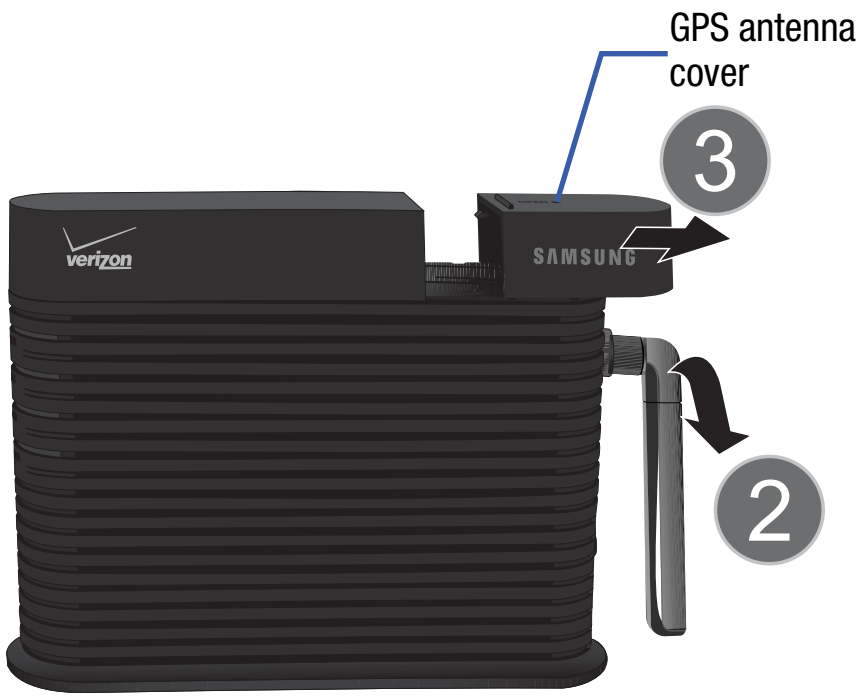
- Installed in a horizontal position.
- Adjacent to a window and in an open area. This ensures clear reception of the GPS signal.

Note: GPS signal strength is greatly reduced when passing through walls or other hard surfaces.

To connect the GPS antenna to the Network Extender, follow these steps:

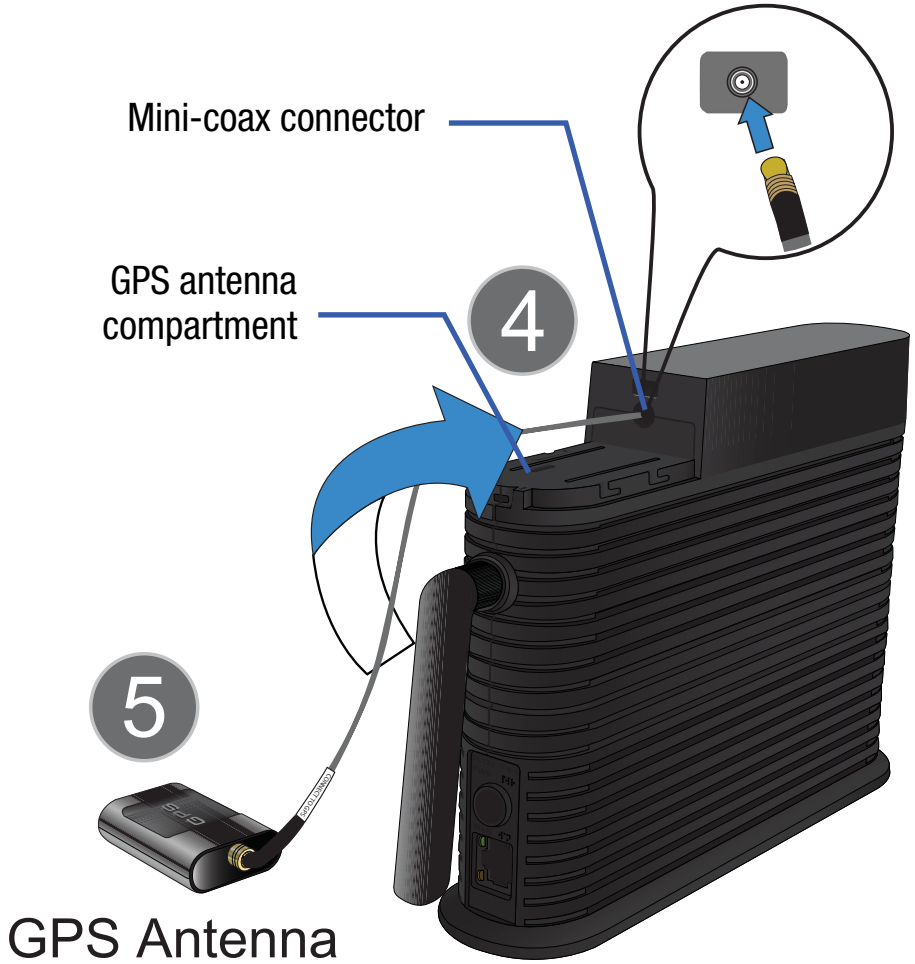
1. Turn off the Network Extender.
2. Rotate the antenna down to provide access to the GPS antenna's protective cover.

Note: The GPS antenna receives signals from Global Positioning System satellites and uses them to obtain time and location information.



3. Slide the protective cover back to expose the rectangular GPS antenna.
4. Use a blunt tool (such as a coin) to carefully pry the GPS antenna away from the Network Extender.
5. Remove the GPS antenna from its compartment.

6. Connect and secure the GPS antenna to the end of the provided GPS cable labeled "Connect to GPS Antenna."
7. Connect and secure the terminal end of the same mini-coax cable to the port on the Network Extender (within the GPS antenna compartment).



Warning!: Do not force the connector into the GPS antenna port as this can damage the connector.

8. Replace the cover on the station. Verify the cable is threaded through the opening on the cover.
9. Rotate the antenna back up to its original position.

Tip: Place the antenna near a window where the GPS signal is strongest.

Warning!: Do not use duct tape to secure the GPS antenna to its new location.

Tip: You can use double-sided tape to secure the bottom of the GPS antenna to its new location.

10. Power on the Network Extender to allow the detection of both the external antenna connection and an available GPS signal.

Note: If a GPS signal cannot be detected, remove the GPS antenna and place it in a new location to receive a stronger signal. This new location should be located close to a window.

Section 4: Troubleshooting

Now that you've been given an overview of the Verizon Wireless Network Extender, some situations might arise where you'll need additional usage or connection help. This section provides some troubleshooting tips and techniques.

For more information, please visit us online at www.verizonwireless.com/support.

- **My Power LED is not Illuminating.**
  - Make sure that one end of the power cord is securely connected to an active outlet and that the other end is properly connected to the power supply.
  - Make sure the power connector is securely inserted into the rear DC 12V port on the back of the Network Extender.
- **My Power LED is magenta.**
  - The internal power supply has failed. The Network Extender should be returned.
- **My GPS LED is magenta.**
  - The interface to the GPS receiver has failed. The Network Extender should be returned.
- **My GPS LED is not illuminating blue even after a few minutes.**

Note: The first time the Network Extender is used after installation or after relocation, it can take up to one hour to acquire a GPS connection.

  - The GPS antenna cannot obtain a signal.
  - If possible, move the Network Extender to a location with fewer surrounding obstructions. The new location should be in an open area and closer to a window, if possible.
  - If the preceding fails, remove the power cord from the wall outlet for at least 10 seconds.
  - If relocation does not produce a GPS signal, uninstall the GPS antenna from the Network Extender and relocate it to receive a stronger signal.
- **My WAN LED is red.**
  - A local IP address cannot be obtained. Investigate your DHCP Server, a function usually provided by your router.
- **My WAN LED is not illuminating.**
  - The Ethernet cable connection has not been detected. Verify your connection.

- **My System LED is magenta.**
  - Internal initialization failed. The Network Extender should be returned.
- **My System LED is solid red or blinking red for more than a minute.**
  - A red System LED indicates a system error was detected and is symptomatic of a communication problem with the Verizon Wireless network.
  - Confirm your Network Extender was activated at time of purchase. If your Network Extender has not already been activated, call Verizon Wireless Customer Service at (800) 922-0204 or *611 from your Verizon Wireless mobile phone and select the option for technical support.
  - Before contacting the Verizon Wireless Customer Service Center, confirm the following:
    - Is your WAN LED illuminating blue?
      - If it is not, then there may be a communication problem between your Network Extender and the router.
      - If the WAN LED is illuminating blue, then check that the router is communicating properly with your ISP. The Internet activity LED on your router should be blinking. For further router troubleshooting tips, please review either the router manufacturer's printed or online documentation.
    - Is the GPS LED illuminating blue? If it is not, the Network Extender might not be receiving a GPS signal. Inability to receive a GPS signal can result in the Network Extender failing to validate your account information and network timing, which then prevents usage and reroutes you back to the nearest compatible cell tower.

      If this is the problem, install the external GPS antenna. See "External GPS Antenna" on page 14.
- **The Network Extender seems to be getting too hot.**
  - Make sure there is nothing blocking the heat vents located along the side of the Network Extender.
  - It is recommended that the Network Extender be located in a well-ventilated open area at least 12 inches from any surrounding hot surfaces. It is not recommended that the Network Extender be installed in a cabinet or other enclosed location.
- **How can I manage access to my Network Extender?**
  - You have the option to manage priority access settings for your Network Extender to specified numbers by logging into My Verizon at www.verizonwireless.com. A maximum of 50 authorized Verizon Wireless callers can be registered.
  - When the Network Extender is set to open access, the first six callers detected within the device's area are given access to place or receive calls through the Network Extender. Your Verizon Wireless Network Extender is set to open access by default.
  - Anyone else who then initiates a call while all Network Extender channels are occupied is redirected to the nearest compatible cell tower when available.
  - When unauthorized callers (callers not on your managed access list) within range of the Network Extender attempt to place a call, they are automatically redirected to the nearest compatible cell tower.

– If a handoff to the nearest compatible cell tower is not possible and all channels are not in use, one channel may be available for an unauthorized user to access. Callers on the managed access list are always given priority access to the Network Extender.

Note: Both authorized and unauthorized callers may see more service bars on their Verizon Wireless handset due to their proximity to the Verizon Wireless Network Extender.

Note: A seventh channel is always reserved for emergency (E911) calls to any user within range of the Network Extender.

Section 5: Important Safety Information

This user guide contains important operational and safety information that will help you safely use your Network Extender.

General Precautions

There are several simple guidelines to operating your Network Extender properly and maintaining safe, satisfactory service.

- Avoid exposing your Network Extender to rain or liquid spills. If your device does get wet, immediately turn the power off and remove the power connector.
- Do not operate the Network Extender in an extremely dusty or humid environment.
- Avoid placing the Network Extender near radiators or other heating sources.
- Do not obstruct the heat vents by blocking the openings or covering the Network Extender, and do not operate it in a confined space.
- Avoid locating the Network Extender where it could be exposed to direct sunlight for prolonged periods.
- Do not connect the Network Extender to a power strip containing an excessive number of other devices. Refer to the documentation that came with your power strip for capacity information.
- Do not disassemble the wireless antenna.
- Do not attempt to open the Network Extender or power supply, or dissemble either component, or remove the wireless antenna. You run the risk of electrical shock and/or burn and voiding the limited warranty. No user-serviceable parts are located within the Network Extender enclosure.
- If the Network Extender will not be used for a prolonged period, remove the power cord from the AC outlet.
- Although your Network Extender is quite sturdy, it is a complex piece of equipment and can be broken. Avoid dropping, hitting, bending, or sitting on it.
- Any changes or modifications to your Network Extender not expressly approved in this document could void your warranty for this equipment and void your authority to operate this equipment.

Warning!: You may not be able to make 911 calls in the event of an electrical power outage, broadband connection failure, or other service disruption. 911 services may be limited in areas outside of the Verizon Wireless network. Not all public safety answering points have location-based E911 technology. Always be prepared to report your location to the 911 operator when placing an emergency call. Mobile phones operate using radio signals which cannot guarantee connection in all conditions.

Using Your Network Extender Near Other Electronic Devices

Most modern electronic equipment is shielded from radio frequency (RF) signals. However, RF signals from your Network Extender may affect inadequately shielded electronic equipment.

Conversely, ensure the unit is placed at least 2 feet away from products which generate electromagnetic radiation, such as a computer monitor or microwave oven.

Note: For the best care of your Network Extender, ensure that only authorized personnel service your device. Failure to do so may be dangerous and void your warranty. Consult the manufacturer of any personal medical devices, such as pacemakers and hearing aids, to determine if they are adequately shielded from external RF signals.

Radio Frequency (RF) Energy

Understanding How Your Network Extender Operates

Your Network Extender functions as a radio transmitter and receiver. When it is turned on, it receives and transmits radio frequency (RF) signals. When you use your Network Extender, the system handling your call controls the power level.
This power can range from 10 microwatt to 30 milliwatts.

Knowing Radio Frequency Safety

The design of your Network Extender complies with updated NCRP standards described below:

In 1991–92, the Institute of Electrical and Electronics Engineers (IEEE) and the American National Standards Institute (ANSI) joined in updating ANSI's 1982 standard for safety levels with respect to human exposure to RF signals. More than 120 scientists, engineers and physicians from universities, government health agencies and industries developed this updated standard after reviewing the available body of research.

In 1993, the Federal Communications Commission (FCC) adopted this updated standard in a regulation. In August 1996, the FCC adopted a hybrid standard consisting of the existing ANSI/IEEE standard and the guidelines published by the National Council of Radiation Protection and Measurements (NCRP).

For more information about RF exposure, visit the FCC Web site at www.fcc.gov.

FCC Radio Frequency Emission

This device meets the FCC Radio Frequency Emission Guidelines. FCC ID number: A3LSCS-2UAAAA

FCC Statement

This product has been tested and complies with the specifications for a Class B 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 and, if not installed and used according to the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which is found 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 receiver.
- Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
- Consult the dealer or an experienced radio/TV technician for help.

This device complies with Part 15 of the FCC Rules. Operation is subject to the following two conditions: (1) This device may not cause harmful interference, and (2) This device must accept any interference received, including interference that may cause undesired operation.

FCC Caution: Any changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate this equipment.

Important Note.

FCC Radiation Exposure Statement

To ensure the safety of users, the FCC has established criteria for the amount of radio frequency energy various products may produce depending on their intended usage. This product has been tested and found to comply with the FCC's exposure criteria.

This transmitter must not be co-located or operating in conjunction with any other antenna or transmitter.

The installation of the base unit should allow at least 20 centimeters between the base and persons to be in compliance with FCC RF exposure guidelines.

Please read the following important safety notices and instructions before installing or using the product.

- A DANGER warning refers to situations that could cause bodily injury.
- A CAUTION warning refers to situations that could result in equipment malfunction or damage.

1. Follow all warnings and instructions marked on the product.
2. Unplug this product from the wall outlet before cleaning. Do not use liquid cleaners or aerosol cleaners. Use an anti-static cleaning pad for cleaning.
3. Do not use this product near water.
4. Do not place this product on an unstable cart, stand or table. If the product falls, it could be seriously damaged.
5. This product should be operated using the type of power indicated on the marking label. If you are not sure of the type of power available, consult your dealer or local power company.
6. Do not allow anything to rest on the power cord. Do not locate this product where people will walk on the cord.
7. Never push objects of any kind into this product through cabinet slots as they may touch dangerous voltage points or short-out parts that could result in a fire or electric shock.
8. Never spill liquid of any kind into or onto the product.
9. Do not attempt to service this product yourself, as opening or removing covers may expose you to dangerous voltage points or other risks.
10. Refer all questions regarding servicing of this product to qualified service personnel.

Danger—Electric Shock and Fire

Electric current from power, telephone, and communication cables is hazardous, and could result in electric shock and/or fire.

To avoid electric shock, use caution when connecting cables. For example, do not connect safety extra-low voltage (SELV) circuits to telephone-network voltage (TNV) circuits. LAN ports contain SELV circuits, and WAN ports contain TNV circuits. Some LAN and WAN ports both use RJ-45 connectors.

To avoid electric shock, do not operate the product or connect or disconnect cables during electrical storms. To avoid electric shock, do not use this product in or near water.

To reduce the risk of fire or overheating, keep this product in well ventilated areas, away from radiators or other heat sources. Do not block cooling vents.

The plug-socket combination must be accessible at all times because it serves as the main power-disconnecting device.

Use only the manufacturer-provided AC adaptor approved for use with this product. Use of another AC adaptor may cause a fire or explosion.

This product relies on short-circuit (overcurrent) protection installed in your home or office. Ensure that a fuse or circuit breaker no larger than 120 VAC, 15A U.S. is used on the phase conductors (all current carrying conductors).

Unplug this product from the wall outlet and refer servicing to qualified service personnel under the following conditions:

a. When the power cord or plug is damaged or frayed.

b. If liquid has been spilled into the product.

c. If the product has been exposed to rain or water.

d. If the product does not operate normally when the operating instructions are followed. Adjust only those controls that are covered by the operating instructions, since improper adjustment of other controls may result in damage and will often require extensive work by a qualified technician to restore the product to normal condition.

Caution—Electromagnetic Interference

This product generates, uses, and can radiate radio frequency energy and, if not installed or used in accordance with the manufacturer's instruction manual, may cause interference with radio and television reception. This product has been tested and found to comply with the limits set forth in Part 15 of the Federal Communications Commission Rules.

Owner's Record

The model name, model number, regulatory number, and FCC ID are located on a label affixed to the bottom of the unit. The MSN and MAC ID are on a sticker affixed on the side of the unit. Record the MSN and the MAC ID in the space provided below. This will be helpful if you need to contact us about your Network Extender in the future.

Model: Verizon Wireless Network Extender

MSN:

MAC ID:

User Guide Proprietary Notice

CDMA Technology is licensed by QUALCOMM Incorporated under one or more of the following patents:

5,267,262 5,416,797 5,506,865 5,544,196

5,657,420 5,267,261 5,414,796 5,504,773

5,535,239 5,600,754 5,778,338 5,228,054

5,337,338 5,710,784 5,568,483 5,659,569

5,490,165 5,511,073

Section 6: Warranty Information

Your Verizon Wireless Network Extender has been designed to provide reliable, worry-free service. If for any reason you have a problem with your equipment, please refer to the manufacturer's warranty in this section. For information regarding the terms and conditions of service for your Network Extender, please visit www.verizonwireless.com or call Verizon Wireless Customer Service at (800) 922-0204 or *611 from your Verizon Wireless mobile phone.

Standard Limited Warranty

What is Covered and For How Long?
SAMSUNG TELECOMMUNICATIONS AMERICA, LLC ("SAMSUNG") warrants to the original purchaser ("Purchaser") that SAMSUNG's Network Extender and accessories ("Products") included in this package are free from defects in material and workmanship under normal use and service for the period commencing upon the date of purchase and continuing for the following specified period of time after that date:

All components carry a one-year warranty.

What is Not Covered? This Limited Warranty is conditioned upon proper use of Product by Purchaser. This Limited Warranty does not cover: (a) defects or damage resulting from accident, misuse, abuse, neglect, unusual physical, electrical or electromechanical stress, or modification of any part of Product, including antenna, or cosmetic damage; (b) equipment that has the serial number removed or made illegible; (c) any plastic surfaces or other externally exposed parts that are scratched or damaged due to normal use; (d) malfunctions resulting from the use of Product in conjunction with accessories, products, or ancillary/peripheral equipment not furnished or approved by SAMSUNG; (e) defects or damage from improper testing, operation, maintenance, installation, or adjustment; (f) installation, maintenance, and service of Product, or (g) Product used or purchased outside the United States or Canada.

What are SAMSUNG's Obligations? During the applicable warranty period, SAMSUNG will repair or replace, at SAMSUNG's sole option, without charge to Purchaser, any defective component part of Product. To obtain service under this Limited Warranty, Purchaser must return Product to an authorized service facility in an adequate container for shipping, accompanied by Purchaser's sales receipt or comparable substitute proof of sale showing the date of purchase, the serial number of Product and the sellers'

name and address. To obtain assistance on where to deliver the Product, call Samsung Customer Care at 1-888-987-4357. Upon receipt, SAMSUNG will promptly repair or replace the defective Product.

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"THE WORKMANSHIP OF THE PRODUCT OR THE COMPONENTS CONTAINED THEREIN; OR

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This offer is valid to anyone in receipt of this information. Below is the list of components covered under open source licenses.

Software	License	Software	License
apache	Apache License2.0	sed	GPL 2.0
mdnsresponder	APSL	stunnel	GPL 2.0
bsd-finger	BSD	sysklogd	GPL 2.0
ipsec-tools	BSD	systune	GPL 2.0
mailx	BSD	sysvinit	GPL 2.0
netkit-base	BSD	tar	GPL 2.0
netkit-ftp	BSD	u-boot	GPL 2.0
netkit-telnet	BSD	udev	GPL 2.0
thttpd	BSD	watchdog	GPL 2.0

Software	License	Software	License
traceroute	BSD	wget	GPL 2.0
wpa_supplicant	BSD	which	GPL 2.0
adduser	GPL 2.0	xkbd	GPL 2.0
anacron	GPL 2.0	pam	GPL 2.0/BSD
at	GPL 2.0	util-linux	GPL 2.0/BSD
atm	GPL 2.0	binutils	GPL 2.0/ LGPL 2.1
autofs	GPL 2.0	gcc	GPL 2.0/ LGPL 2.1
base-passwd	GPL 2.0	procps	GPL 2.0/ LGPL 2.1
bash	GPL 2.0	mvlutils	GPL 2.0/ Other
busybox	GPL 2.0	prelink	LGPL 2.1
console-tools	GPL 2.0	tslib	LGPL 2.1
coreutils	GPL 2.0	glibc	LGPL 2.1/ BSD
devfsd	GPL 2.0	putty	MIT License

Software	License	Software	License
dhcpcd	GPL 2.0	mvlttools	MontaVista Proprietary
e2fsprogs	GPL 2.0	pcmcia-cs	MPL/GPL 2.0
exim	GPL 2.0	openssl	OpenSSL
findutils	GPL 2.0	elfutils	OSL
gawk	GPL 2.0	bind	Other
GPS Device Driver	GPL 2.0	cracklib-libs	Other
grep	GPL 2.0	cron	Other
gzip	GPL 2.0	dhcp	Other
hostapd	GPL 2.0	file	Other
hostname	GPL 2.0	iputils	Other
ifupdown	GPL 2.0	libcap	Other
iptables	GPL 2.0	libpcap	Other
jed	GPL 2.0	libpcre	Other
ksymoops	GPL 2.0	libwww	Other

Software	License	Software	License
Linux kernel 2.6.10	GPL 2.0	linux-ftpd	Other
logrotate	GPL 2.0	makedev	Other
ltrace	GPL 2.0	net-snmp	Other
mDOC Block Device Driver	GPL 2.0	nis	Other
memstat	GPL 2.0	ntp	Other
mgetty	GPL 2.0	openssh	Other
module-init-tools	GPL 2.0	php4	Other
netbase	GPL 2.0	pidentd	Other
net-tools	GPL 2.0	portmap	Other
nfs-utils	GPL 2.0	radvd	Other
psmisc	GPL 2.0	shadow	Other
quota	GPL 2.0	tcpdump	Other
readline-libs	GPL 2.0	tcp-wrappers	Other
rpm	GPL 2.0	xinetd	Other

Software	License	Software	License
samba	GPL 2.0	zlib	Other
SB IPSEC 3.0	GPL 2.0	base-files-Mobilinux	Public Domain
schedutils	GPL 2.0	filesystem	Public Domain

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