

AC750 WiFi Extender



NP127 USER GUIDE



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Save Our Environment

When this equipment has reached the end of its useful life, it must be taken to a recycling centre and processed separately from domestic waste.

The cardboard box, the plastic contained in the packaging, and the parts that make up this device can be recycled in accordance with regionally established regulations. Never dispose of this electronic equipment along with your household waste. You may be subject to penalties or sanctions under the law. Instead, ask for disposal instructions from your municipal government.

Please be responsible and protect our environment.

This manual covers the following products: NetComm Wireless NP127

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Table 1 - Document Revision History



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Overview

Introduction

This manual provides information related to the installation, operation, and use of the NP127.

Target Users

The individual reading this manual is presumed to have a basic understanding of telecommunications terminology and concepts.

Prerequisites

Before continuing with the installation of your NP127, please confirm that you comply with the minimum system requirements below.

- Computer with Windows, Macintosh, or Linux-based operating systems with a working 802.3 10/100 Fast Ethernet adapter with TCP/IP Protocol installed.
- A Web Browser such as Internet Explorer, Google Chrome, Mozilla Firefox, Opera, Safari etc.
- Wireless Computer System Requirements:
 - Computer with a working 802.11b, 802.11g, 802.11n or 802.11ac wireless adapter.

Notation

The following symbols are used in this manual:



Indicates a note requiring attention.



Indicates a note providing a warning.



Indicates a note providing useful information.



Product Introduction

Product Overview

AC750 WiFi Extender

The AC750 WiFi Extender is the perfect product to combat weak wireless signals in the home or office. The AC750 WiFi Extender features the latest 5GHz 802.11ac WiFi technology that can put an end to unstable, inconsistent or non-existent wireless signals. Working as a wireless repeater for existing wireless networks, you can extend the reach of your WiFi into previously hard to reach areas. The unobtrusive device connects directly to the wall, features 5 signal strength LEDs that guide you into the best location, has a WPS button for easy pairing with wireless clients and advanced wireless security features.

Two devices in one.

With its 2 in 1 functionality the AC750 WiFi Extender abolishes ineffective wireless signals on any wireless network.

- 1. Wireless repeater. Extend and strengthen your existing wireless signal by transforming it into a wireless network with the power to reach the far corners of the home or office.
- 2. Wireless access point. If you don't have wireless connectivity simply connect the AC750 WiFi Extender directly into your modem/router via an Ethernet cable to achieve a powerful wireless signal throughout the home or office.

AC Dual Band WiFi.

You can extend the reach of your 2.4GHz and 5GHz WiFi network – at the same time. The 2.4GHz WiFi will work with all legacy 802.11b/g/n WiFi clients, which make up the majority of devices. The 5GHz WiFi will work with all new and more recent wireless clients that feature the high speed 802.11ac technology. The NP127 will pick up existing weak WiFi signals and redistribute a strong WiFi signal for users to connect to. An ideal solution for non-existent, unstable or inconsistent WiFi signals in upstairs bedrooms, living rooms at the other end of the house or far corner offices.

Package Contents

The NP127 package consists of:

- ♦ 1x AC750 WiFi Extender.
- lick Start Guide.
- Ethernet cable (RJ45).
- Wireless Security Card.
- line Warranty Card.

If any of these items are missing or damaged, please contact NetComm Wireless Support immediately by visiting the NetComm Wireless Support website at: http://www.netcommwireless.com/contact-forms/support

Product Features

- 2 in 1 functionality. Works as a wireless repeater or wireless access point
- When in wireless repeater mode: Extend wireless signal to areas unreached by router
- When in wireless access point mode: Connect into a modem/router to create a wireless network
- The WPS button for easy pairing with wireless clients and access points in repeater mode
- Toncurrent dual band WiFi extend the reach of your 2.4Ghz and 5Ghz WiFi network
- 🎄 5 signal strength LEDs guide you into the best placement within your WiFi network
- Sonnects directly to the wall allows for unobtrusive placement within the home/office



Interfaces and LED Indicators

Front panel

The NP127 features 7 LEDs on the front panel and a WPS button. The top 5 LEDs give an indication of the distance and strength of the signal between the NP127 and the connected router. The signal strength LEDs only functions when the device is in repeater mode. The images below describe the meaning of each indicator and button.



1 and 2 seconds then release to trigger the WPS connection when you are connecting a client device to the NP127. Press and hold the button for between 4 and 9 seconds then release to trigger the WPS connection when you are connecting the NP127 to a router. The WPS LED blinks when the WPS process is triggered.



Bottom panel



Reset button – press and hold this button for more than 3 second to restore the factory default settings of the NP127.

Ethernet port – Connect the supplied RJ-45 Ethernet cable here to set up the WiFi Extender.

Power switch – Turns the NP127 on or off.

Physical Dimensions

The following table lists the physical dimensions of the NP127.

NP127 DIMENSIONS		
Length	89 mm	
Width	67 mm	
Height	117 mm	
Weight	165 grams	



Safety and Product Care

With reference to unpacking, installation, use and maintenance of your electronic device, the following basic guidelines are recommended:

- Do not use or install this product near water to avoid fire or shock hazard. For example, near a bathtub, kitchen sink, laundry tub, or near a swimming pool. Also, do not expose the equipment to rain or damp areas (e.g. a wet basement).
- To safeguard the equipment against overheating, make sure that all openings in the unit that offer exposure to air are unobstructed.
- When the device is connected by Ethernet cable to a computer, the cable should not exceed 100 metres in length.
- Keep the device clean and avoid exposing it to direct sunlight for extended periods.
- Do not place any metallic objects in the device.



WARNING

Disconnect the power line from the device before servicing.

Transport and Handling

When transporting the NP127, it is recommended to return the product in the original packaging. This ensures the product will not be damaged.



In the event the product needs to be returned, ensure it is securely packaged with appropriate padding to prevent damage during courier transport.



Installation and Configuration of the NP127

Placement of your NP127

The wireless connection between your NP127 and your WiFi devices will be stronger the closer your connected devices are to your NP127. Your wireless connection and performance will degrade as the distance between your NP127 and connected devices increases. This may or may not be directly noticeable, and is greatly affected by the individual installation environment.

As the WiFi Extender is designed to increase the wireless range of your network, it is best placed in a location that is neither too close nor too far from the router so as to achieve a good balance of range and performance. You may need to try connecting the WiFi Extender to different power points in the area you wish to cover and observe the signal strength LEDs in order to find the best position for it.

If you have concerns about your network's performance that might be related to range or obstruction factors, try moving the WiFi Extender to a position between three to five meters from the router in order to see if distance is the problem.



Note: While some of the items listed below can affect network performance, they will not prohibit your wireless network from functioning; if you are concerned that your network is not operating at its maximum effectiveness, this checklist may help.

If you experience difficulties connecting wirelessly between your WiFi Devices and your NP127, please try the following steps:

- In multi-storey homes, place the NP127 on a floor that is as close to the centre of the home as possible. This may mean placing the NP127 on an upper floor.
- Try not to place the NP127 near a cordless telephone that operates at the same radio frequency as the NP127 (2.4GHz and 5GHz).

Avoid obstacles and interference

Avoid placing your NP127 near devices that may emit radio "noise," such as microwave ovens. Dense objects that can inhibit wireless communication include:

- Refrigerators
- Washers and/or dryers
- Metal cabinets
- large aquariums
- Metallic-based, UV-tinted windows
- If your wireless signal seems weak in some spots, make sure that objects such as those listed above are not blocking the signal's path (between your devices and the NP127).

Cordless Phones

If the performance of your wireless network is impaired after considering the above issues, and you have a cordless phone:

- Try moving cordless phones away from your NP127 and your wireless-enabled computers.
- Unplug and remove the battery from any cordless phone that operates on the 2.4GHz or 5GHz band (check manufacturer's information). If this fixes the problem, your phone may be interfering with the NP127.
- If your phone supports channel selection, change the channel on the phone to the farthest channel from your wireless network. For example, change the phone to channel 1 and move your NP127 to channel 11 for the 2.4GHz band. See your phone's user manual for detailed instructions.
- ✤ If necessary, consider switching to a 900MHz or 1800MHz cordless phone.



Choose the "Quietest" Channel for your Wireless Network

In locations where homes or offices are close together, such as apartment buildings or office complexes, there may be wireless networks nearby that can conflict with your wireless network. Use the Site Survey capabilities found in the Wireless Utility of your wireless adapter to locate any other wireless networks that are available (see your wireless adapter's user manual), and switch your Router and computers to a channel as far away from other networks as possible.

Experiment with more than one of the available channels, in order to find the clearest connection and avoid interference from neighbouring cordless phones or other wireless devices.



Hardware installation

- Connect a PC to the WiFi Extender using the Ethernet cable provided in the package. 1
- 2. Plug the WiFi Extender into the wall socket.
- Turn the power switch to the ON position. 3.

Accessing the NP127 for the first time

For the initial setup procedure, you may connect to the NP127 by Ethernet cable or by WiFi. The following diagram illustrates the methods you may use to connect to the NP127 for the initial configuration.



In order to do this, you must first configure the TCP/IP settings of your computer to be able to access the NP127. Refer to the following PC configuration section for further detail.

Making a wireless connection to the WiFi Extender

To connect the wireless network adapter to the Extender:

If a wireless network adapter is installed on your PC, the wireless icon 💷 appears in the lower right corner of the 1. desktop. Left-click it to display a list of wireless networks within range of your computer.

Currently connected to:	47	-
Hidentified network		
Wireless Network Connection	^	I
and server all server to be	.all	
SeeCasse Patients	ألد	
NetComm 7693	للد	
and the second state	ألده	
1005204	الد	
The grade	.ul	
Part Surge MUS	Il	
New states 1988	- 11	-
Open Network and Sharing C	enter	



Note: The Wireless network name shown here is for demonstration only. Your particular wireless network name (SSID) may differ. Please refer to your Wireless Security Card for your SSID and Security Key.

2. Left-click the network name (SSID). Click the Connect button that appears. You are prompted to enter a password. Enter the password for the appropriate network listed on the included Wireless Security card.





The wireless connection is complete.

Note: The TCP/IP settings of the connected PC should be set to be Obtain an IP address automatically.





Web Based Configuration Interface

Logging in

Please follow the steps below to configure your NP127 AC750 WiFi Extender via the web based configuration interface.

1. Open your web browser (e.g. Internet Explorer/Firefox/Safari) and type http://my.extender or http://192.168.40.1/ into the address bar at the top of the window.

New Tab	× +	
http://my.extender		

2. In the window that is displayed as shown below, enter the password, and click **Login**. If **Remember my password** is selected, you will not need to enter the password when accessing the WiFi Extender from this computer in the future. The default password is **admin**.

NetCommWireless
Password: Remember my password
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Note: Entering an incorrect password 5 consecutive times will result in you not being able to login for one minute. If it is up to 6 consecutive times, you need to wait for 2 minutes before starting login. Up to 7 times, you need to wait for 3 minutes and so on, up to a maximum of 15 minutes.



Setup

The Setup submenu contains Connection Wizard and Mode Settings.

Connection Wizard

1. Select **Set-up** > **Connection Wizard** and the following screen appears. This page presents the current wireless configuration including SSID and security mode of your WiFi Extender and connected uplink device.

Connection Wizard Click the Start button below to begin connecting the WiFi Extender to your broadband hub/router. Wireless Connection to Router/Hub Wireless network/SSID: Wireless security: None Connection status: Disconnected Extender Wireless Network 2.4GHz Wireless network/SSID: NetComm 6384 2.4GHz Wireless security: WPA2-PSK[AES] 5GHz Wireless network/SSID: NetComm 0791 WPA2-PSK[AES] 5GHz Wireless security:

Start Refresh

FIELD	DESCRIPTION
SSID of Router	The SSID of connected uplink device. It is blank when no uplink device is connected.
Wireless Security Mode	The wireless security mode of connected uplink device. It shows None when no uplink device is connected.
Connect Status	The connection status of uplink connection. It shows Connected if it connected to an uplink device. It shows Disconnected if no uplink device is connected.
SSID of 2.4GHz Interface	The SSID of the Extender in the 2.4GHz band.
2.4GHz Wireless Security Mode	The wireless security mode of the Extender in the 2.4GHz band.
SSID of 5GHz Interface	The SSID of the Extender in the 5GHz band.
5GHz Wireless Security Mode	The wireless security mode of the Extender in the 5GHz band.

If the Wireless Connection to Router/Hub shows Disconnected, you can click Start on the bottom of this page, and the following figure appears.

Click **Refresh** to force the Extender to search available network.

Connection Wizard: Step 1 of 2

Select your hub/router's wireless network name from the list below and click Next.

Refres	sh of wireless networks found: 37			
#	SSID	MAC Address	Signal	Select
1	NetComm 9036	00:60:64:B2:8E:66	100%	0
2	NetComm 4434	00:60:64:BB:59:7B	100%	0

2. Select the SSID that matches your router's network. Click Next to go to the page of Security Settings shown as follow.



Connection Wi	zard: Step 2 of 2
Enter your broadband	nub/router's wireless key then click Finish.
Wireless Security	
Security:	WPA2-PSK(AES)
Wireless key:	(8-63 characters or 64 hex digits
	Back Finish

3. In the Wireless key field, enter the password of the selected network and click Finish.

	Connection Wizard: Step 2 of 2
	Connecting to the Access Point is in progress, please wait a moment.
	Connecting to the Access Point is in progress, please wait a moment.
When the connection is su	uccessful, the following screen is displayed.
	Connection Wizard: Step 2 of 2
	Connection successful.
	Connection successful.
	The management IP address may have changed. Please refer to your router's administration interface to deteremine the IP address of the WiFi Extender.
	ОК

4. Click the **OK** button. Your WiFi Extender is now connected and has been assigned an IP address by the router. To continue configuring the WiFi Extender, connect an Ethernet cable to the NP127 and enter http://my.extender into a web browser or access your router's web configuration interface to find the IP address assigned to the WiFi Extender. Refer to your router's user guide for more information.

When you have found the IP address of the WiFi Extender, enter it into your browser's URL field and press enter. Refer to the <u>Logging in</u> section of this guide to log in again, substituting the IP address with the one assigned by your router.

•

Note: The DHCP service will be disabled when the NP127 is connected to your router and you will be unable to access the NP127 using http://192.168.40.1



Mode Settings

The mode settings page allows you to change the operation mode of the WiFi Extender. In Repeater mode, the WiFi Extender extends the range of an existing wireless network. When in AP mode, the WiFi Extender acts as an access point. This is useful for adding a wireless network to a router that does not have a wireless function. When in AP mode, connect the WiFi Extender to a LAN port on the router using the provided Ethernet cable.

Mode Settings
On this page you can choose your Wi-Fi Extender work mode.
Repeater mode
O AP mode
Note that switching mode need to restart the device to take effect.
Apply Cancel

Note: Switching modes requires the WiFi Extender to be restarted in order for the change to take effect.

The following diagrams illustrate the different modes of operation:

Factory default setting

The NP127 initially uses the IP address 192.168.40.1 and is accessible on both the 2.4GHz and 5GHz spectrums. For illustration purposes, the NetComm Wireless NB16WV-03 ADSL2+ AC1200 WiFi Gigabit modem is pictured here with the IP address of 192.168.20.1.



Repeater mode (example)

In repeater mode, the NP127 joins the 2.4GHz or 5GHz wireless network of the NB16DG to extend the range of the wireless signal. The NP127 becomes a DHCP client and is assigned an address by the NB16DG in the 192.168.20.X range. The client device (in this example, a laptop) may connect to the NP127 through 2.4GHz or 5GHz WiFi or via Ethernet cable.



AP mode

In AP mode, the NP127 connects to the router via an Ethernet cable (up to 100 metres in length) to provide a full-speed link between the router and the NP127. This is useful for adding WiFi to a router which does not have WiFi built in or creating a WiFi network that provides coverage to an area further away from the router. If the router does have WiFi, it provides you with additional coverage since clients can connect to the WiFi signal of the router or the NP127 and add extra wireless bandwidth to share between your WiFi clients.





Advanced

Manual connection to Hub/Router

Select Advanced > Connection to Hub/Router and the following screen appears. This page allows you to configure the connection manually between the WiFi Extender and your wireless broadband hub/router. If your wireless router uses a hidden SSID, please use this method.

Select the frequency, enter the SSID, select the Security Mode, and enter the password of the router to which you are connecting.

Connection to Hub/Ro	outer
Manually configure the connection broadband hub/router.	n between the Wi-Fi Extender and your wireless
Wireless settings	
Select Frequency:	2.4GHz 💙
Wireless network/SSID:	NetComm 9036
Security:	WPA2-PSK(AES)
Wireless key:	(8-63 characters or 64 hex digits)
	Apply Cancel

Click Apply to go to confirm your settings. The WiFi Extender attempts to apply the settings.

Connection to Hub/Router
Manually configure the connection between the Wi-Fi Extender and your wireless broadband hub/router.
Connecting, please wait a moment
Cancel
ul, the following screen is displayed.

When the connection is successful

Connection to Hub/Router

Manually configure the connection between the Wi-Fi Extender and your wireless broadband hub/router

Connection successful.

The management IP address may have changed. Please refer to your router's administration interface to deteremine the IP address of the WiFi Extender.





Extended Wireless Network

Click Advanced > Extended Wireless Network and the following page appears.

Extended Wireless N	letwork	
Set your Wi-Fi Extender's netwo band. For advanced users only	rk/SSID, security mode	and wireless key for each
Use the same SSID and se	curity settings for both	1 2.4GHz and 5GHz bands.
2.4GHz Band Settings		
Wireless network/SSID:	NetComm 9036	
Security:	WPA2-PSK(AES)	~
Wireless key:	hex digits)	(8-63 characters or 64
5GHz Band Settings		
Enable 5GHz wireless:		
Wireless network/SSID:	NetComm 9036	
Security:	WPA2-PSK(AES)	~
Wireless key:	hex digits)	(8-63 characters or 64
5GHz Channel		
Channel:	Auto 🗸	
	Apply Cancel	

On this page, you can set the basic parameters of your extended wireless network. If you wish to have the same SSID and security settings for both 2.4GHz and 5GHz bands, select the checkbox at the top of the screen to enable this function. These settings should only be configured after you have established a connection with your wireless router.

The following table describes parameters on this page.

FIELD	DESCRIPTION
Wireless network/SSID	Wireless Network name. The SSID can contain no more than 32 characters. Illegal characters including ? "\$[\+ , the initial character cannot be ! #. The SSID cannot contain such string (case sensitive): BTWiFi Auto-BT BTFON BTOpenzone DIRECT .
Security	Security is used to set the encryption mode to protect your wireless network. You can select one from the dropdown list.
Wireless key	Please enter a password for your wireless network. The length of the password should be between 8-63 characters, or within 64 HEX digits.
Channel	Sets the channel used for the 5GHz band.



Note: If Enable 5GHz Wireless is not selected, the Extender will not work on the 5GHz band.



Wireless Advanced Settings

This page allows you to configure advanced settings of the wireless radio. The default settings are optimal for most situations. We recommend that you do not change these settings unless you are aware of the effect that they will have.

Wireless Advanced S	ettings	
This page allows you to configure settings are optimal for most situ settings unless you are aware of	advanced settings of the wir ations. We recommend that y the effect of they will have.	eless radio. The default ou do not change these
Wireless advanced settings		
Frequency :	2.4G 💌	
Fragmentation Length :	2346	(256-2346)
CTS/RTS Threshold :	2346	(256-2346)
Preamble Mode :	Long preamble 🐱	
Transmit Power Control :	100% 🗸	
	· · · · · · · · · · · · · · · · · · ·	



FIELD	DESCRIPTION
Frequency	Use the drop down list to select the frequency that you wish to configure.
Fragmentation length	This specifies the maximum size of a packet during the fragmentation of data to be transmitted. If you set this value too low, it will result in bad performance.
CTS/RTS Threshold	When the packet size is smaller than the RTS threshold, the wireless router will not use the RTS/CTS mechanism to send this packet.
Preamble Mode	A radio preamble is a part of a datagram packet at the head of the Physical Layer Convergence Protocol (PLCP) to increase throughput. Shortening the preamble reduces the size of the data packet increasing throughput. However not all wireless network adapters are able to use this setting.
Transmit Power Control	This determines the transmission or output power of the broadcast wireless signal.

WPS Settings

Click Advanced > WPS Settings and the following page appears.

WPS Settings

If your device supports the WPS function, WPS button below. For advanced users of Note: The WPS button on the front of the or router/hub.	you can easily connect them to the only. device can only be used to connect	extender by clicking the
WPS Configuration		
Enable WPS:		
Down Link:		
Push button:		PBC
Up Link:		
Push PBC:		PBC
	Apply Cancel	

WPS is the abbreviation of WiFi Protected Setup. You can easily add the wireless clients to your wireless network by WPS without additional settings such as SSID, Security mode and so on, but it requires that the wireless clients also support WPS.



Note: WPS may be used to connect the WiFi Extender to a router or to connect a wireless client device to the WiFi Extender.



To connect a wireless client device to the WiFi Extender:

- 1. Select the **Enable WPS** option. Click **Apply**.
- 2. Under the **Down Link** section, Select the PBC or PIN method.
- 3. If using PBC (Push Button Connect) mode, click the **PBC** button and press the PBC button on your client device. If using the **PIN** method, obtain the PIN number from your client and in the PIN field, enter the PIN number and then click the **PIN** button. The WPS connection is established.

To connect the WiFi Extender to a router:

- 1. Select the Enable WPS option. Click Apply.
- 2. Under the Up Link section, Select the PBC or PIN method.
- 3. If using PBC mode, click the **PBC** button and press the PBC button on your client device. If using the **PIN** method, enter the PIN displayed in the PIN field into your router's user interface and trigger the WPS connection. The WPS connection is established. You may change the WPS PIN at any time by pressing the **Generate PIN** button.

Device List

The Device List displays a list of all wireless devices connected to the WiFi Extender, detailing the IP Address assigned, the MAC Address of the client and the Device Name. Click the **Refresh** button to update the listing.

Dev	vice List		
All de	evices connected to yo	ur Wi-Fi Extender.	
Wire	less Devices		
#	IP Address	MAC Address	Device Name
		Refresh	



System

Select the **System** menu. The System submenus include Status, System Information, System Logs, Set Password, Firmware Upgrade and Reboot.

Status

Select System > Status. This page shows the connection status and signal strength of the connected uplink device.

Connection Status	
Status of connection between your b	roadband router and the Wi-Fi Extender.
Connection status:	Connected
Signal strength:	-43dBm

System Information

Select System > System Information, and the following page appears.

System Information

Wi-Fi Extender's firmware version and MAC address	ses.
System Info	
Hardware version:	V1.0.0
Firmware version:	V1.0.7
Product name:	NP127- AC750 WiFi Extender
LAN Port	
MAC Address	00:60:64:F7:B4:1D
Wireless Port	
MAC Address (2.4GHz):	00:60:64:F7:B4:1D
MAC Address (5GHz):	00:60:64:F7:B4:1E

This page displays the system information including basic system information, MAC Address of the Ethernet port and wireless port.

System Logs

Select System > System Logs to display this page. The System log displays log information which is useful for troubleshooting connection problems.

2011-01-01	23:00:44	[5]	syslog:	[ipconn] Wan Link was Disconnected		
2011-01-01	23:00:44	[5]	syslog:	[Internet connected] WAN Physical link:Down		
2011-01-01	23:00:44	[5]	syslog:	[ipconn] Wan Link was Disconnected		
2011-01-01	23:00:45	[5]	syslog:	[dhcp] Dhcp assign 192.168.40.2 to 74:d4:35:e6:7d:a6		
2011-01-01	23:00:45	[5]	syslog:	[dhcp] Dhcp assign 192.168.40.2 to 74:d4:35:e6:7d:a6		
2011-01-01	23:00:45	[5]	syslog:	[dhcp] Dhcp assign 192.168.40.2 to 74:d4:35:e6:7d:a6		
2011-01-01	23:00:45	[5]	syslog:	[dhcp] Dhcp assign 192.168.40.2 to 74:d4:35:e6:7d:a6		
2011-01-01	23:00:45	[5]	syslog:	[dhcp] Dhcp assign 192.168.40.2 to 74:d4:35:e6:7d:a6		
2011-01-01	23:00:47	[5]	syslog:	[dhcp] Dhcp assign 192.168.40.2 to 74:d4:35:e6:7d:a6		
2011-01-01	23:00:47	[5]	syslog:	[dhcp] Dhcp assign 192.168.40.2 to 74:d4:35:e6:7d:a6		
2011-01-01	23:00:47	[5]	syslog:	[dhcp] Dhcp assign 192.168.40.2 to 74:d4:35:e6:7d:a6		
2011-01-01	23:00:47	[5]	syslog:	[dhcp] Dhcp assign 192.168.40.2 to 74:d4:35:e6:7d:a6		
2011-01-01	23:00:58	[5]	syslog:	[AUTH] Not found session 52c55298, user login check failed		
2011-01-01	23:01:05	[5]	syslog:	[AUTH] User admin login success		
2011-01-01	23:19:43	[5]	syslog:	[AUTH] User admin session timeout and auto logout		
2011-01-01	23:19:43	[5]	syslog:	[AUTH] Not found session 52c55298, user login check failed		
2011-01-01	23:00:43	[5]	syslog:	[Internet connected] WAN Physical link:Down		
2011-01-01	23:00:43	[5]	syslog:	[ipconn] Wan Link was Disconnected		
2011-01-01	23:00:43	[5]	syslog:	[Internet connected] WAN Physical link:Down		
2011-01-01	23:00:43	[5]	syslog:	[ipconn] Wan Link was Disconnected 🗸 🗸 🗸		
2011-01-01	23:00:48	[5]	syslog:	[dhcp] Dhcp assign 192.168.40.2 to 2c:44:fd:12:3c:6e		



SNTP

The SNTP page provides configuration options for network time protocol settings. Here you can choose whether to sync with a network time server, specify the time servers to synchronise with, specify the time zone that the device is in and set daylight saving dates and offset.

Time Setting							
Automatically synchroniz	e with Interr	net time servers	;				
First NTP time server :	0.net	0.netcomm.pool.ntp.o					
Second NTP time server :	1.net	1.netcomm.pool.ntp.o					
Time Configuration							
Current Time :	2011-0	2011-01-01 23:23:30					
Time Zone :	(GMT+	(GMT+10:00) Canberra, Melbourne, Sydney 🗸					
Enable Daylight Saving							
Daylight Saving Offset :	+1:00	¥					
		Month	Week	Day	Time		
Daylight Saving Dates :	Start	Oct 🗸	1st v	Sun 🗸	2 am 🗸		
	End	Apr 🗸	1st ∨	Sun 🗸	3am ∨		

Set Password

Select System > Set Password. The following page appears.

Your default Admin password is printed on the back of your Wi-Fi Extender.	
Old password:	
New password:	
Confirm password:	

On this page, you can modify the login password. After you have entered the old password and the new password (twice), click **Apply** to make the settings take effect.



Note: After setting a new password and clicking **Apply**, the page will go back to the login page. You need to enter the new password to access the WiFi Extender's web configuration interface. The default password is **admin**.

Firmware Upgrade

Select System > Firmware Upgrade. The following page appears.

Firmware Upgrade	
From time to time, NetComm Wireless may provide new firmware to improve functionality and performance. To upgrade the firmware, download the latest firmware update from support.netcommwireless.com Note: The update takes approximately 2 minutes to complete after which the device reboots. Please do not turn off your WiFi Extender before the update is complete.	
Select file	
Browse Clear config :	
Upload and Install	

This page is used to upgrade the software version of the WiFi Extender. Click **Browse...** and navigate to the update file stored on your computer. If you select **Clear Config**, the Extender restores to the default settings after upgrade. If you do not select it, the current settings will remain. Click **Upload and Install** to start the upgrade.



After the upgrade is complete, the WiFi Extender automatically reboots.



Caution: Only use a direct Ethernet connection to the NP127 to complete a firmware upgrade. During the upgrade, do not power off the Extender or press the Reset button. Failure to do so may result in a non-functional unit.

Settings Manager

The Settings Manager gives you the option to backup the current configuration of the WiFi Extender and restore it to another NP127 or to the same NP127 in case you need to reset to the factory default settings after a firmware upgrade, which is also available from this page. Lastly, you can reboot the device by using the Reboot button.

Settings Manager		
The buttons below provide you with the ability to restore the device to factory default configuration and reboot the device.		
Backup Current Configuration		
	Backup	
Restore saved settings		
Browse_ No file selected.		
	Update	
Restore factory default		
	Restore	
Reboot Device		
	Reboot	

Reboot

Select **System > Reboot**. The following page is displayed.

Reboot	
The buttons below provide you with the abil configuration and reboot the device.	ity to restore the device to factory default
Backup Current Configuration	
B	ackup
Update Configuration form a File	
Browse_ No file selected.	
U	odate
Restore the factory default configuration.	
R	estore
Reboot System	
R	eboot

The reboot page provides the ability to reboot the WiFi Extender, backup the current configuration and restore the configuration from a backed up file. Additionally, the **Restore** button restores the WiFi Extender to the factor default configuration.

Logout

Clicking the Logout menu button immediately logs you out of the WiFi Extender's configuration interface.

You've been logged out. Click Return to login to login again

Return to login



Additional Product Information

Establishing a wireless connection

Windows XP (Service Pack 3)

- 1. Open the Network Connections control panel (Start -> Control Panel -> Network Connections):
- 2. Right-click on your Wireless Network Connection and select View Available Wireless Networks:
- 3. Select the wireless network listed on your included wireless security card and click Connect.
- 4. Enter the network key (refer to the included wireless security card for the default wireless network key).
- 5. The connection will show Connected.

Windows Vista

- 1. Open the Network and Sharing Center (Start > Control Panel > Network and Sharing center).
- 2. Click on "Connect to a network".
- 3. Choose "Connect to the Internet" and click on "Next".
- 4. Select the wireless network listed on your included wireless security card and click Connect.
- 5. Enter the network key (refer to the included wireless security card for the default wireless network key).
- 6. Select the appropriate location. This will affect the firewall settings on the computer.
- 7. Click on both "Save this network" and "Start this connection automatically" and click "Next".

Windows 7 / 8 / 8.1

- 1. From the System tray (bottom right hand corner of the screen in desktop mode), right-click on the Network 🔛 icon and select **Open Network and Sharing Center**.
- 2. Click on "Change Adapter settings" on the left-hand side.
- 3. Right-click on "Wireless Network Connection" and select "Connect / Disconnect".
- 4. Select the wireless network listed on your included wireless security card and click Connect.
- 5. Enter the network key (refer to the included wireless security card for the default wireless network key).
- 6. You may then see a window that asks you to "Select a location for the 'wireless' network". Please select the "Home" location.
- 7. You may then see a window prompting you to setup a "HomeGroup". Click "Cancel" on this.
- 8. You can verify your wireless connection by clicking the "Wireless Signal" indicator in your system tray.
- 9. After clicking on this, you should see an entry matching the SSID of your NP127 with "Connected" next to it.

Mac OSX 10.6

- 1. Click on the Airport icon on the top right menu.
- 2. Select the wireless network listed on your included wireless security card and click Connect.
- 3. On the new window, select "Show Password", type in the network key (refer to the included wireless security card for the default wireless network key) in the Password field and then click on OK.
- 4. To check the connection, click on the Airport icon and there should be a tick on the wireless network name.



Note: For other operating systems, or if you use a wireless adaptor utility to configure your wireless connection, please consult the wireless adapter documentation for instructions on establishing a wireless connection.



Troubleshooting

Using the indicator lights (LEDs) to Diagnose Problems The LEDs are useful aides for finding possible problem causes.

Power LED

The Power LED does not light up.

STEP	CORRECTIVE ACTION
1	Make sure that the NP127 is plugged in to an appropriate power source.
2	Check that the NP127 and the power source are both turned on and device is receiving sufficient power.
3	Turn the NP127 off and on.
4	If the error persists, you may have a hardware problem. In this case, you should contact technical support.

Web Configuration

I cannot access the web configuration pages.

STEP	CORRECTIVE ACTION
1	Make sure you are using the correct IP address of the NP127. You can check the IP address of the device from the Network Setup configuration page or find the DHCP-assigned IP address from your router if it is running in Repeater mode.
2	Your computer's and the NP127's IP addresses must be on the same subnet for LAN access. You can check the subnet in use by the router on the Network Setup page.
3	If you are still not able to access the web configuration pages, reset the router to the factory default settings by pressing the reset button for ten seconds and then releasing it. When the Power LED begins to blink, the defaults have been restored and the NP127 restarts. Navigate to <u>http://my.extender</u> or <u>http://192.168.40.1</u> in your web browser and enter "admin" (without the quotes) as the username and password.

The web configuration does not display properly.

STEP	CORRECTIVE ACTION
1	Delete the temporary web files and log in again. In Internet Explorer, click Tools, Internet Options and then click the Delete Files button. When a Delete Files window displays, select Delete all offline content and click OK. (Steps may vary depending on the version of your Internet browser.)

Login Password

l forgot my login password.

STEP	CORRECTIVE ACTION
1	Press the Reset button for 3 seconds, and then release it. When the Power LED begins to blink, the defaults have been restored and the NP127 restarts. You can now login with the factory default password "admin" (without the guotes)
2	It is highly recommended to change the default password. Make sure you store the password in a safe place.

WLAN Interface

I cannot access the NP127 from the WLAN or ping any computer on the WLAN.

STEP	CORRECTIVE ACTION
1	Check the WiFi LED on the front of the unit and verify the WLAN is enabled as per the LED Indicator section.
2	If you are using a static IP address for the WLAN connection, make sure that the IP address and the subnet mask of the NP127 and your computer(s) are on the same subnet. You can check the router's configuration from the Network Setup page.



Legal & Regulatory Information

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Customer Information

The Australian Communications & Media Authority (ACMA) requires you to be aware of the following information and warnings:

- 1. This unit may be connected to the Telecommunication Network through a line cord which meets the requirements of the AS/CA S008-2011 Standard.
- 2. This equipment incorporates a radio transmitting device, in normal use a separation distance of 20cm will ensure radio frequency exposure levels complies with Australian and New Zealand standards.
- 3. This equipment has been tested and found to comply with the Standards for C-Tick and or A-Tick as set by the ACMA. These standards are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses, and can radiate radio noise and, if not installed and used in accordance with the instructions detailed within this manual, may cause interference to radio communications. However, there is no guarantee that interference will not occur with the installation of this product in your home or office. If this equipment does cause some degree of interference to radio or television reception, which can be determined by turning the equipment off and on, we encourage the user to try to correct the interference by one or more of the following measures:
 - i. Change the direction or relocate the receiving antenna.
 - ii. Increase the separation between this equipment and the receiver.
 - iii. Connect the equipment to an alternate power outlet on a different power circuit from that to which the receiver/TV is connected.
 - iv. Consult an experienced radio/TV technician for help.
- 4. The power supply that is provided with this unit is only intended for use with this product. Do not use this power supply with any other product or do not use any other power supply that is not approved for use with this product by NetComm Wireless. Failure to do so may cause damage to this product, fire or result in personal injury.

Consumer Protection Laws

Australian and New Zealand consumer law in certain circumstances implies mandatory guarantees, conditions and warranties which cannot be excluded by NetComm and legislation of another country's Government may have a similar effect (together these are the Consumer Protection Laws). Any warranty or representation provided by NetComm is in addition to, and not in replacement of, your rights under such Consumer Protection Laws.

If you purchased our goods in Australia and you are a consumer, you are entitled to a replacement or refund for a major failure and for compensation for any other reasonably foreseeable loss or damage. You are also entitled to have the goods repaired or replaced if the goods fail to be of acceptable quality and the failure does not amount to a major failure. If you purchased our goods in New Zealand and are a consumer you will also be entitled to similar statutory guarantees.



Product Warranty

All NetComm Wireless products have a standard one (1) year warranty from date of purchase, however, some products have an extended warranty option (refer to packaging and the warranty card) (each a Product Warranty). To be eligible for the extended warranty option you must supply the requested warranty information to NetComm Wireless Limited within 30 days of the original purchase date by registering online via the NetComm Wireless web site at www.netcommwireless.com. For all Product Warranty claims you will require proof of purchase. All Product Warranties are in addition to your rights and remedies under applicable Consumer Protection Laws Section above).

Subject to your rights and remedies under applicable Consumer Protection Laws which cannot be excluded (see the <u>Consumer</u> <u>Protection Laws</u> Section above), the Product Warranty is granted on the following conditions:

- 1. the Product Warranty extends to the original purchaser (you / the customer) and is not transferable;
- 2. the Product Warranty shall not apply to software programs, batteries, power supplies, cables or other accessories supplied in or with the product;
- 3. the customer complies with all of the terms of any relevant agreement with NetComm and any other reasonable requirements of NetComm including producing such evidence of purchase as NetComm may require;
- 4. the cost of transporting product to and from NetComm's nominated premises is your responsibility;
- 5. NetComm Wireless Limited does not have any liability or responsibility under the Product Warranty where any cost, loss, injury or damage of any kind, whether direct, indirect, consequential, incidental or otherwise arises out of events beyond NetComm's reasonable control. This includes but is not limited to: acts of God, war, riot, embargoes, acts of civil or military authorities, fire, floods, electricity outages, lightning, power surges, or shortages of materials or labour; and
- 6. the customer is responsible for the security of their computer and network at all times. Security features may be disabled within the factory default settings. NetComm Wireless Limited recommends that you enable these features to enhance your security.

Subject to your rights and remedies under applicable Consumer Protection Laws which cannot be excluded (see Section 3 above), the Product Warranty is automatically voided if:

- 1. you, or someone else, use the product, or attempt to use it, other than as specified by NetComm Wireless Limited;
- 2. the fault or defect in your product is the result of a voltage surge subjected to the product either by the way of power supply or communication line, whether caused by thunderstorm activity or any other cause(s);
- 3. the fault is the result of accidental damage or damage in transit, including but not limited to liquid spillage;
- 4. your product has been used for any purposes other than that for which it is sold, or in any way other than in strict accordance with the user manual supplied;
- 5. your product has been repaired or modified or attempted to be repaired or modified, other than by a qualified person at a service centre authorised by NetComm Wireless Limited; or
- 6. the serial number has been defaced or altered in any way or if the serial number plate has been removed.

Limitation of Liability

This clause does not apply to New Zealand consumers. Subject to your rights and remedies under applicable Consumer Protection Laws which cannot be excluded (see the <u>Consumer Protection Laws</u> Section above), NetComm Wireless Limited accepts no liability or responsibility, for consequences arising from the use of this product. NetComm Wireless Limited reserves the right to change the specifications and operating details of this product without notice.

If any law implies a guarantee, condition or warranty in respect of goods or services supplied, and NetComm Wireless's liability for breach of that condition or warranty may not be excluded but may be limited, then subject to your rights and remedies under any applicable Consumer Protection Laws which cannot be excluded, NetComm Wireless's liability for any breach of that guarantee, condition or warranty is limited to: (i) in the case of a supply of goods, NetComm Wireless Limited doing any one or more of the following: replacing the goods or supplying equivalent goods; repairing the goods; paying the cost of replacing the goods or of acquiring equivalent goods; or paying the cost of having the goods repaired; or (ii) in the case of a supply of services, NetComm Wireless Limited doing either or both of the following: supplying the services again; or paying the cost of having the services supplied again.

To the extent NetComm Wireless Limited is unable to limit its liability as set out above, NetComm Wireless Limited limits its liability to the extent such liability is lawfully able to be limited.





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