

RocketFish RF-HTN104 Wi-Fi Invite Home Router

User Manual



Preface

RocketFish reserves the right to modify this document at any time without obligation or notification of any person or organization of such revisions or changes.

Manual Revisions

Revision	Date	Description
1.0	November 23, 2010	First Draft
2.0	December 9, 2010	Second Draft
3.0	December 23, 2010	Third Draft

Trademarks

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Product Overview

Package Contents

RF-HTN104 Wi-Fi Invite Home Router



Power Adapter (12V DC 1.25A)



Ethernet Cable (1M RJ45)



CD-ROM with Manual



Quick Start Guide



System Requirements

Network requirements	<ul style="list-style-type: none">• an Ethernet-based Cable or DSL Modem• IEEE 802.11n or 802.11a/b/g wireless clients• 10/100Mbit Ethernet cable
Web-based configuration utility requirements	A computer with: <ul style="list-style-type: none">• a Windows, Mac or Linux-based operating system• an installed Ethernet adapter• A CD-ROM drive Browser requirements: <ul style="list-style-type: none">• Internet Explorer 6 or higher• Mozilla Firefox 3.0 or higher• Safari 3 or higher

Introduction

Congratulations on your purchase of the RocketFish RF-HTN104 Wireless Router. We hope that you will enjoy using this product to enhance your home network, but before you begin, please take a moment to read through this manual to learn all the features of the device.

The RF-HTN104 is a high performance wireless router designed to easily fit into your network and provide you with an easy way to connect all your devices and enjoy multimedia and games throughout your home.

SUPERIOR SPEED

Supporting 802.11a/b/g/n, the RF-HTN104 provides a blazingly fast wireless transfer speed so that you can enjoy the latest multimedia to its full. When using 802.11n to connect, you can experience speeds exceeding that of 100Mbps wired Ethernet connections.

BETTER PERFORMANCE

The RF-HTN104 can operate at both 2.4GHz and 5GHz spectrums allowing you to choose which frequency performs best for you. If you have compatible hardware, you can switch to operate on the 5GHz frequency to avoid crowding of the 2.4GHz spectrum and improve the stability and speed of your wireless connection.

INCREASED SECURITY

Using the included Wi-Fi Protected Setup (WPS), you can set up your wireless connection simply and securely. The RF-HTN104 supports both PBC and PIN methods of securely setting up the device. You can choose to use either WPA or WPA2 encryption methods to protect your network from intruders. Additionally, the RF-HTN104 comes with an easy to configure firewall to further protect you.

EASY SETUP

The Wi-Fi Protected Setup (WPS) and Wi-Fi Invite features allow you to easily connect another device to the RF-HTN104.

Features

- **Faster Wireless Networking** - The RF-HTN104 provides up to 300Mbps* wireless connection with other 802.11n wireless clients. This capability allows users to participate in real-time activities online, such as video streaming, online gaming, and real-time audio. The performance of this 802.11n wireless router gives you the freedom of wireless networking at speeds 650% faster than 802.11g.
- **Compatible with 802.11a, 802.11b, and 802.11g Devices** - The RF-HTN104 is fully compatible with the IEEE 802.11a, 802.11b, and 802.11g standards, so it can connect with existing 802.11a, 802.11b, and 802.11g PCI and USB network adapters.
- **Advanced Firewall Features** - The Web-based user interface displays a number of advanced network management features including:
 - **URL Blocking** - Easily applied content filtering based on IP Address or URL.
 - **Filter Scheduling** - URL Blocking can be scheduled to be active on certain days or for a duration of hours or minutes.

* Maximum wireless signal rate derived from IEEE Standard 802.11a, 802.11b, 802.11g, and Draft 802.11n specifications. Actual data throughput will vary. Network conditions and environmental factors, including volume of network traffic, building materials and construction, and network overhead, lower actual data throughput rate. Environmental conditions will adversely affect wireless signal range.

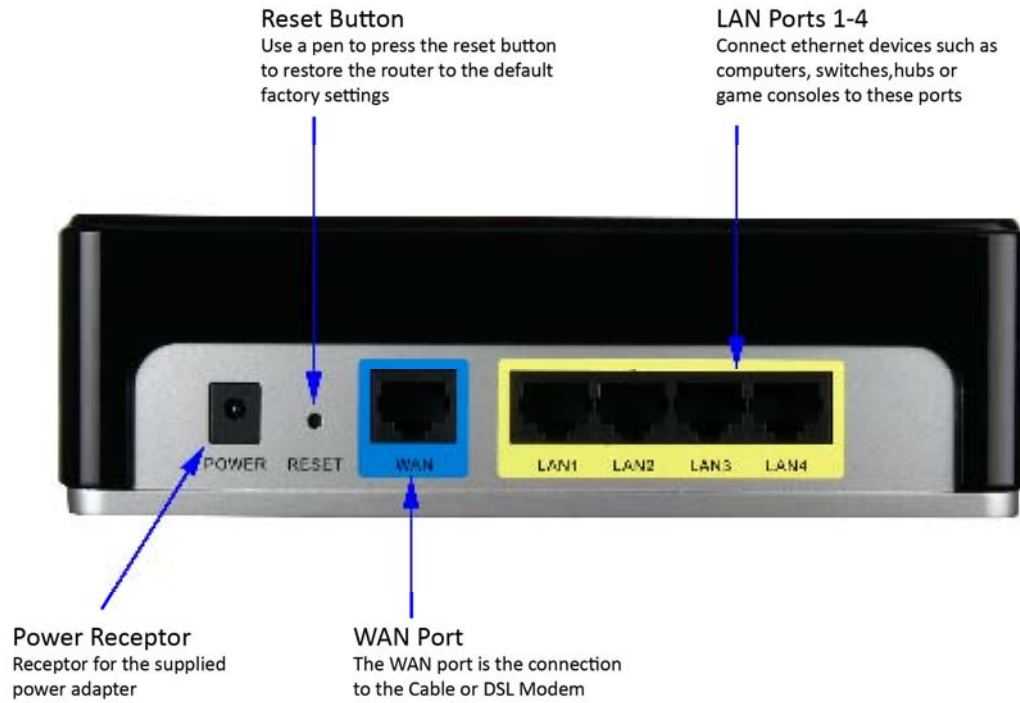
Hardware Overview

FRONT PANEL



Hardware Overview (Continued)

REAR PANEL



Installation

This section will walk you through installing the router. Placement of the router is very important. Be sure not to place it in an enclosed space like a cabinet, closet, attic, garage or any other area where there is not ample ventilation.

Before you Begin

- You can only use the Ethernet port on your modem. If you were using a USB connection before using the router then you must turn off your modem, disconnect the USB cable and connect an Ethernet cable to the WAN port on the router and then turn the modem back on. In some cases, you may need to contact your ISP to change connection types (USB to Ethernet)
- If you have DSL and are connecting via PPPoE, make sure you disable or uninstall any PPPoE software such as WinPoet, Broadjump, or Enternet 300 from your computer or you will not be able to connect to the Internet.

Wireless Installation Considerations

The RocketFish RF-HTN104 wireless router allows you to access your network via a wireless connection from anywhere within its operating range. However, keep in mind that there are factors that affect the signal strength and range of your connection. The number of objects the signal must pass through together with the number of radio frequencies in the area will have an effect on the range. Remember these tips to maximize the wireless range of your network:

1. Keep the number of walls or ceilings that the signal must pass through to a minimum. Each wall or ceiling that the signal must pass through will have an adverse effect on the range of your network.
2. Be aware of the direct line between the devices. A wall that is at an angle will mean that signal needs to pass through a greater surface area than the normal thickness of the wall.
3. Building materials make a difference. Try to position access points, routers and computers so that the signal passes through open doorways or through drywall. Materials such as glass, metal, steel, walls with insulation, bodies of water such as fish tanks, mirrors, file cabinets, brick and concrete will degrade your wireless signal.
4. Keep your wireless router at least 3-6 feet (1-2 meters) away from other devices which generate radio frequencies.
5. If you choose to operate the wireless router on the 2.4GHz spectrum, be aware that this is more commonly used than the 5GHz spectrum and is therefore susceptible to interference from devices such as microwaves and cordless phones. Try to keep the base station of your cordless phone as far away as possible from the wireless router as the base station will transmit a signal even if the phone is not in use.

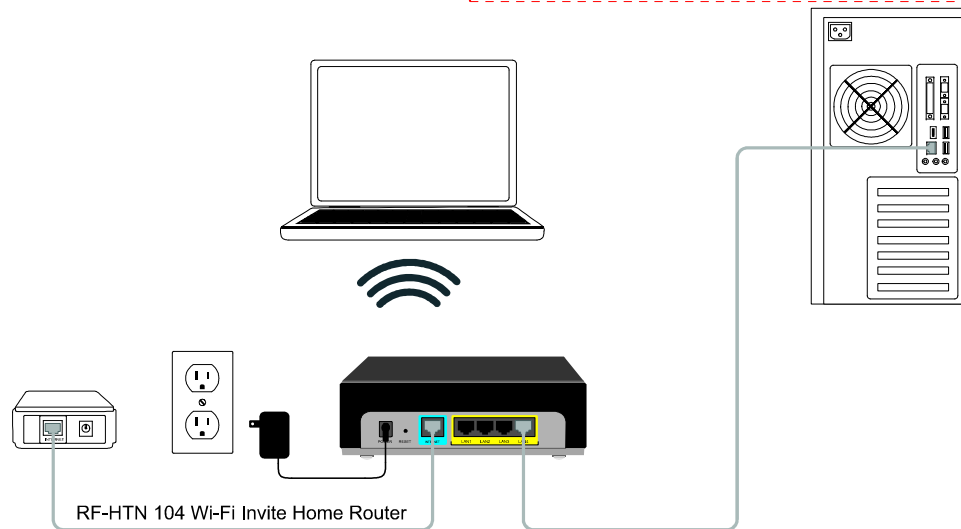
Connecting the RF-HTN104 to a Cable/DSL/Satellite Modem

If you are connecting the router to a cable/DSL/satellite modem, please follow the steps below:

1. Place the router in an open and central location. Do not plug the power adapter into the router.
2. Unplug the modem's power adapter. Shut down your computer.
3. Unplug the Ethernet cable (that connects your computer to your modem) from your computer and place it into the Internet port on the router.
4. Plug an Ethernet cable into one of the four LAN ports on the router. Plug the other end into the Ethernet port on your computer.
5. Plug in your modem. Wait for the modem to boot (about 30 seconds).
6. Plug the power adapter to the router and connect to an outlet or power strip.
7. Use the power switch to power on the router. Wait about 30 seconds for the router to boot.
8. Turn on your computer.

Refer to **"Configuring Your Wireless Router"** on page [14](#) to configure your router.

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Configuring your wireless router when connected to a modem

If you will be attaching your Wi-Fi Invite router to a modem, you have several options to establish an Internet connection:

When your modem initiates the connection:

- Auto (DHCP) (see page 32)
- Manual (see page 33)

When your Wi-Fi Invite router initiates the connection:

- PPPoE (see page 34)
- PPTP (see page 35)
- L2TP (see page 36)

Connecting the RF-HTN104 to Another Router

If you are connecting the RocketFish router to another router to use as a wireless access point and/or switch, you will have to do the following before connecting the router to your network:


- Disable DHCP (refer to the section of this manual called **DHCP Server** to learn more)
- Change the LAN IP address to an available address on your network. The LAN ports on the router cannot accept a DHCP address from your other router.

To connect to another router, please follow the steps below:

1. Plug the power into the router and use the power switch to power up the router. Connect one of your computers to the router (LAN port) using an Ethernet cable. Make sure your IP address on the computer is 192.168.1.xxx (where xxx is between 2 and 254). If you need to change the settings, write down your existing settings before making any changes. In most cases, your computer should be set to receive an IP address automatically in which case you will not have to do anything to your computer.


2. Open a web browser and enter **http://192.168.1.1** and press **Enter**. When the login window appears, set the user name to **admin** and leave the password

box empty. Click  to continue.

3. Click the  icon from the animated menu at the bottom of the web-configuration utility. Select **DHCP Server** from the menu on the left. Uncheck the **Enable DHCP Server** checkbox as in the screenshot on this page. Click

 to continue.

5. Select **IP Address** from the menu on the left, enter an available IP address

and the subnet mask of your network. Click  to save your settings. Use this new IP address to access the configuration utility of the router in the future. Close the browser and change your computer's IP settings back to the original values as in Step 1.



6. Disconnect the Ethernet cable from the router and reconnect your computer to your network.

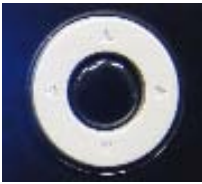
7. Connect an Ethernet cable in one of the **LAN** ports of the router and connect it to your other router. Do not plug anything into the Internet (WAN) port of the RocketFish router.

8. You may now use the other 3 LAN ports to connect other Ethernet devices and computers. To configure your wireless network, open a web browser and enter the IP address you assigned to the router.

Router Front Panel

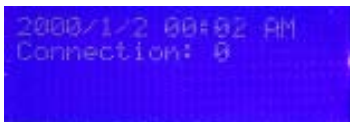
Front Panel Controls

The router is equipped with a multidirectional control pad on the front panel. You can use this control pad to navigate your way through the menus shown on the front LCD screen. Pressing the black button in the middle will confirm the selected option.



LCD Display

The LCD Display of the RF-HTN104 can show some basic information for quick access and also perform simple Wi-Fi connection functions. Under normal operation, the LCD will show the time and date and the number of wireless clients connected to the router.



Accessing System Information

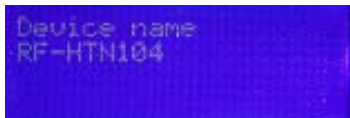
To access basic system information:

1. Press the middle button of the control pad. The Main Menu is displayed.
2. Press the middle button of the control pad again to select **System Information**. The Admin account and password are displayed.



```
Admin account:  
admin  
Admin Password:
```

3. Press the down direction button on the control pad. The host name is displayed.



```
Device name  
RF-HTN104
```

4. Press the left direction button on the control pad to return to the main menu.

Accessing Wi-Fi Information

To access Wi-Fi Information:

1. Press the middle button of the control pad to display the main menu.
2. Select **WIFI Information** using the control pad and press the middle button to confirm your selection.
3. Select either **2.4G** or **5G** and press the middle button to confirm your selection. The SSID, Security Type is displayed.



4. Press the down direction button on the control pad to display the Wireless Pass Phrase.

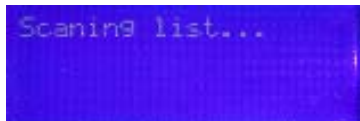
Using Wi-Fi Invite from the front panel controls

To join a network using Wi-Fi Invite:

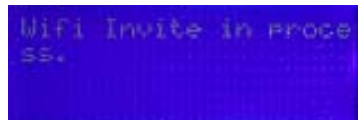
1. Place the hub and router close to each other for the setup procedure and power them on. The first time the router detects a signal from a Wi-Fi Invite hub within range, it displays the following screen:



2. Select the **Invite** function to continue by pressing the center button on the control pad. The router will scan for wireless clients in range and show a list of discovered devices after a few moments.



3. Select the host name of the device you want to invite from the list by pushing the right direction button on the control pad. For the Wi-Fi Invite Home Hub, this will be RF-HTN102 by default.

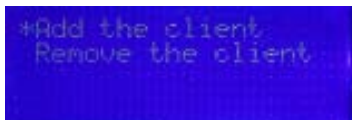


-
4. On your RocketFish Wi-Fi Invite Home Hub, you should see the CONNECT button flashing if you have invited it successfully. If the CONNECT button is not flashing, confirm that you have invited the correct device from the router and try again. Press the CONNECT button on the front to accept the invitation. Within 2 minutes, the router will connect with the hub and display "WIFI invite connection established!". If it does not establish a connection, try repositioning the router or the client and try again.



To block a client from being able to connect to your router:

1. Press the middle button of the control pad. The Main Menu is displayed.
2. Select **WIFI Invite** and press the middle button of the control pad again to confirm your selection.
3. Select **Block List** and press the middle button of the control pad to confirm your selection. A screen asking whether you want to add or remove a client to the block list is displayed.



4. Select **Add the client**. The router scans for clients within range.
5. Select the device you want to block from the list by pressing the right direction button on the control pad to confirm your selection. A screen confirming that the device has been blocked is shown.



To remove a client from the block list:

1. Press the middle button of the control pad. The Main Menu is displayed.
2. Select **WIFI Invite** and press the middle button of the control pad again to confirm your selection.
3. Select **Block List** and press the middle button of the control pad to confirm your selection. A screen asking whether you want to add or remove a client to the block list is displayed.
4. Highlight Remove the client and press the center button. The router displays a list of devices currently on the block list.
5. Select the device you want to remove by using the up and down direction buttons on the control pad and pressing the right direction button to confirm your selection.

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```
"RF-HTN102(2.4G)"  
has been unlocked fr  
on the block list.
```

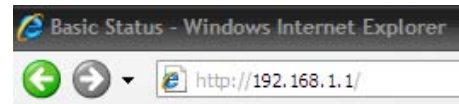
Configuration

This section will describe how to set up the RF-HTN104 using the web-based configuration utility.

Web-based configuration utility

Accessing the web-based configuration utility

To access the web-based configuration utility, open a web browser, such as Internet Explorer and enter the IP address of the router (192.168.1.1) .



Enter **admin** in the User Name field and leave the Password field empty for the initial setup process.



Press the Enter key or click the arrow icon to complete the login.

Checking the General Status of the Router

After logging in, the Device Basic Status screen is displayed. This is the home screen, denoted by an icon of a house.

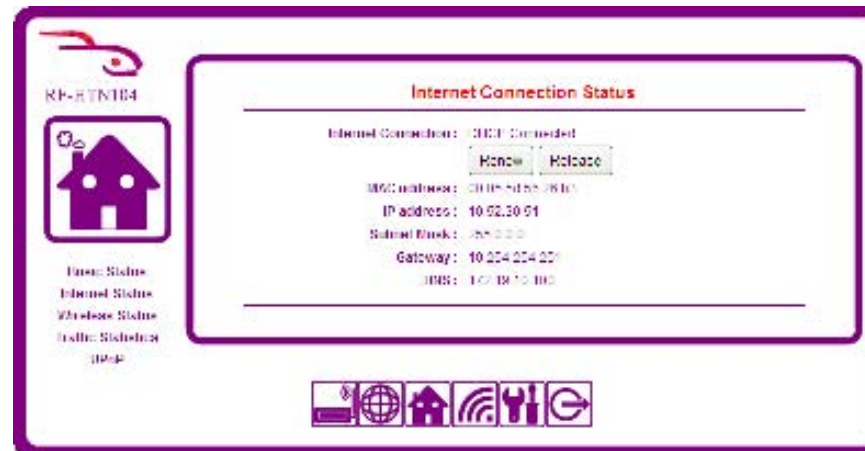
The menu on the left side of the screen allows you to select various status screens which provide information about the status of the various functions of the router.



Checking the Internet Connection Status

This screen allows you check whether the router has an active connection to the internet and provides the details of the connection.

If you wish to release the current IP address, click **Release** and then click **Renew** to acquire a new address from the DHCP server.



Checking the Wireless Network status

Wireless Status – 2.4GHz Band & Wireless Status – 5GHz Band

This section shows the details of the 2.4GHz and 5GHz wireless connection including the mode it is running in and the current supported standards (a/b/g/n), the Network Name or SSID, the MAC address of the wireless access point, the channel it is operating on, authentication mode and type of encryption.

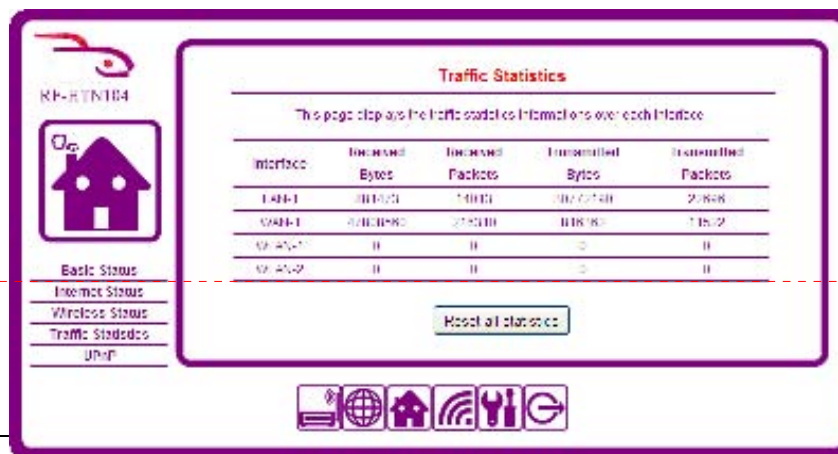
Wireless Client List

This section displays a list of the names of connected clients, their MAC addresses, the mode of connection and the length of time they have been connected.



Checking the Traffic Statistics

This screen shows the number of packets and bytes received and transmitted for each [wireless radio \(2.4Ghz and 5GHz\)](#) of the router.



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Accessing uPNP Information


This screen shows details of port mapping via the Universal Plug N Play protocol.

[Plug n Play \(uPnP\) is a protocol which allows uPnP supported software or hardware devices to locate each other on a network. When a uPnP compatible product is operating, you may see details of what ports it is using on this screen.](#)

[The details shown here are the details for the time the screen was accessed. To refresh the screen, click **uPnP** from the menu on the left.](#)



Router Administration

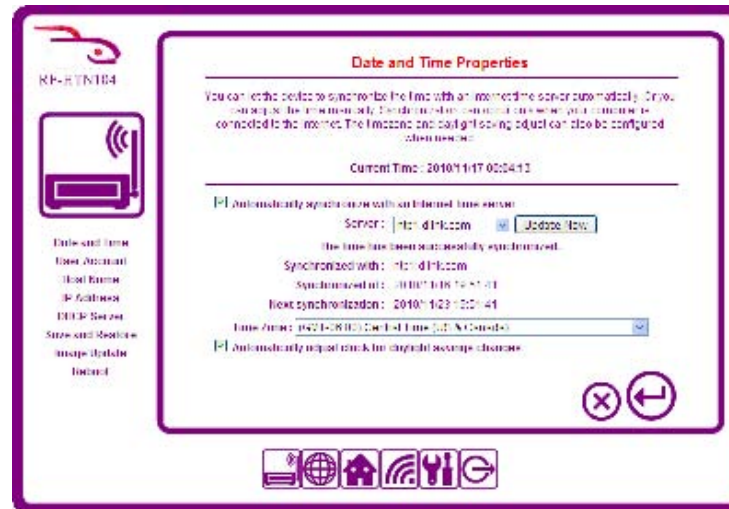
1. Login to the router as described in the section of this manual titled “**Accessing the web-based configuration utility**”.
2. Click the  icon from the animated menu at the bottom of the web-configuration utility.
3. The Date and Time Properties screen is displayed along with a menu on the left from which you can select what you would like to configure.

Adjusting the Time and Date Settings

Automatic time adjustment

The RF-HTN104 is capable of synchronizing its time with popular Internet time servers automatically. To make the router automatically synchronize the time, check the box labeled **Automatically synchronize with an Internet time server** and select which server you wish to synchronize with from the drop down menu. By default, this will use D-Link’s time server (ntp1.dlink.com). Ensure you have selected the correct time zone you are in from the drop down menu labeled **Time Zone**. If you are in a time zone which acknowledges daylight saving, check the box labeled **Automatically adjust clock for daylight savings changes**. Click the **Update Now** button.



A message stating that the synchronization was successful will appear and the current date and time is shown in the middle of the window.



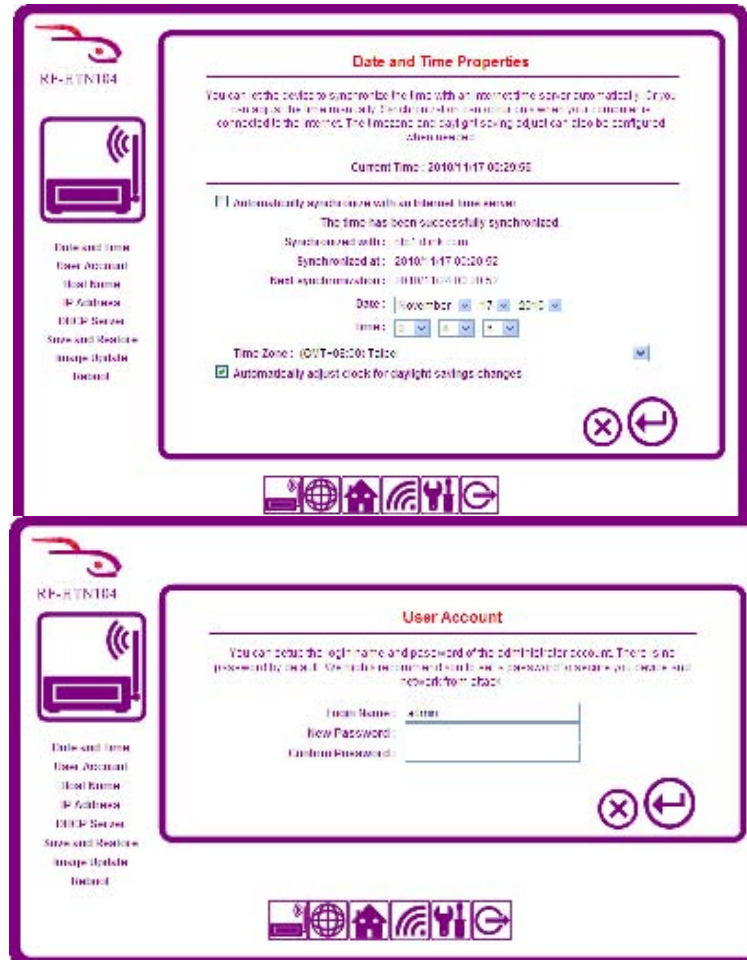
Manual time adjustment

You may also set the time manually by removing the check from the box labeled **Automatically synchronize with an Internet time server** and select the date and time from the drop down menus.

Changing the Administrator Account

You can change the login name and password for the router. To change the login name and/or password, enter the login name you wish to use. In the **New Password** field, type the new password you wish to use. Repeat the password you just typed in the **Confirm Password** field and click the  button. If you wish to cancel, press the  button.



We strongly recommend that you set a secure password to prevent unauthorized access to your router configuration.



Changing the Host Name of the Router

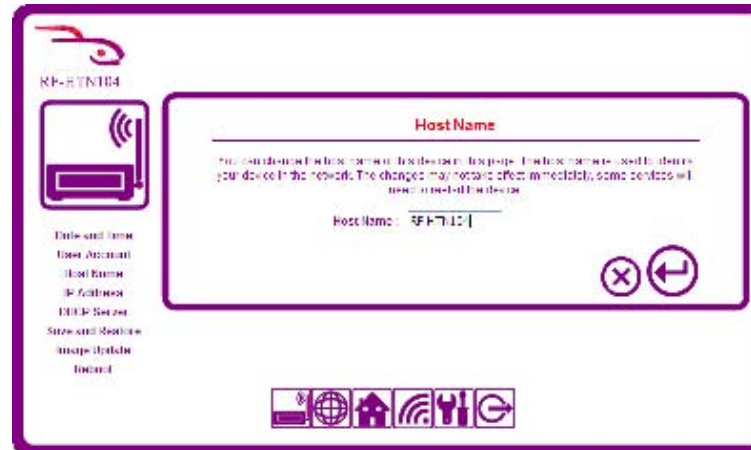
The host name of the device is the name which is used to identify the router on your network. On this screen you may change the host name of the router to make it easily identifiable.

To change the host name, enter a name of up to 15 characters and press the

 button. If you wish to cancel, press the  button.



You may not enter a space in the name or use special characters such as @ # \$ % & * in the host name. If you enter any forbidden characters, the router will show an error when you try to save the host name.

You may need to restart the device for the changes to take effect.



Changing the IP Address of the Router

The IP Address is the address used to locate and identify the router on your network. On this screen you may change the IP address and subnet mask allocated to your router if you have another device on your network which uses 192.168.1.50, for example. When you have entered the new IP Address, click

the  button to continue. If you wish to cancel, click the  button.

Check the **Enable DNS server** button to use the router as a DNS Server. If unchecked, the DNS Server information from your ISP is used.

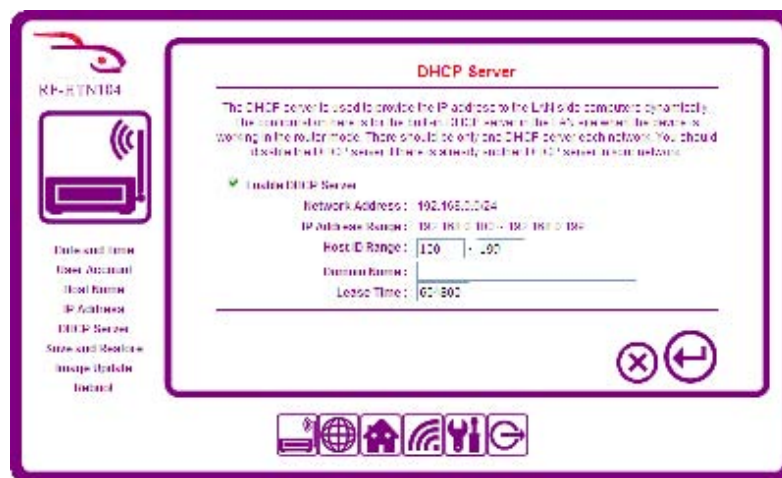


Configuring the DHCP Server

The RF-HTN104 can act as a Dynamic Host Control Protocol (DHCP) Server, providing internal network addresses to the devices you connect on your LAN. Check the **Enable DHCP Server** box if you wish to use the DHCP server on the router and ensure that your computers are set to DHCP clients by setting the TCP/IP settings to “Obtain an IP Address automatically”. If you have another DHCP server on your network, please disable the DHCP server on the router to avoid conflicts.

Using the DHCP Server you can connect up to 100 devices to your router including both wired and wireless connections. They will dynamically be assigned addresses with the last octet of the address beginning at 100 by default, as devices are connected. You can adjust the range here if you prefer by entering your own range into the **Host ID Range**.

Additionally, you can specify a domain name and the time (in minutes) to lease for the IP Addresses.



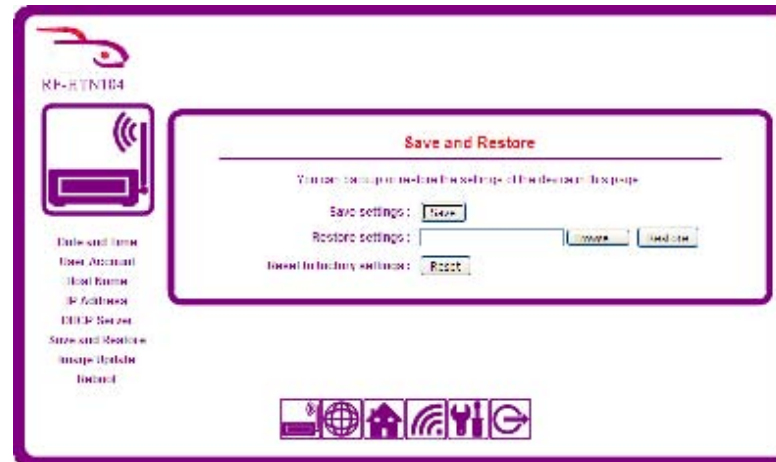
Backing up and Restoring Router Settings

When you have configured the router to your liking, you can back up the settings to a file in case you want to make changes and you are able to easily revert back to a trusted configuration.

To save the configuration, click the **Save** button. A window appears prompting you to save the file named config.bin. Choose a place on your computer to save the file and click the save button.

To restore the configuration from a previously saved configuration, click the **Browse** button, select the file on your computer in the window which appears and click **Open**. Click the **Restore** button. The router will update the settings according to those in the config.bin file and reboot.

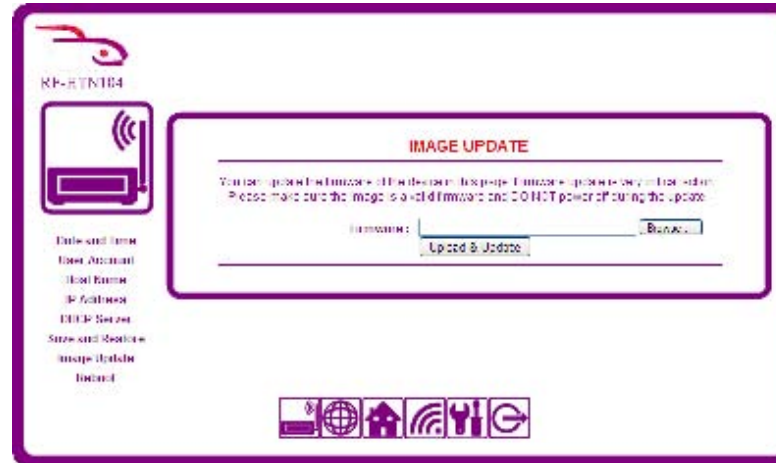
To restore the router to the factory settings, simply click the **Reset** button. Be aware that this will cause any configuration changes you have made to be lost.



Updating the Firmware of the RF-HTN104

From time to time, RocketFish may provide firmware updates to add or improve the existing features of your router. If you need to update the firmware, click the **Browse** button and select the firmware file you downloaded and click **Open**. The firmware file will have a .bin extension. Click the **Upload & Update** button to begin the firmware update process.

Note: The process of updating the firmware is a sensitive one. Ensure that you have the selected the correct firmware for your device and do not turn off the power to the router during the update.




Rebooting the Router

To reboot the device, click the **Reboot** button. The device will power up again and retain your configuration.



Configuring Internet Connection Settings

Configuring your Internet Connection

To configure the Internet Connection settings on your router login to the router and click the  icon from the animated menu at the bottom of the screen. The Internet Connection window appears:

Auto (DHCP)

This is the default setting. [If you already have a modem connected to the internet, choose this mode.](#)

When selected, the router will acquire an IP address from your ISP or another DHCP server and access the internet this way. You can also manually specify DNS servers and the Maximum Transmission Unit (MTU) here if you wish.



Manual

If you have a static IP address and wish to specify your connection details manually, check the **Manual** radio button. You will need to know your IP Address, Subnet Mask, Default Gateway, Preferred DNS, Alternate DNS and the MTU.

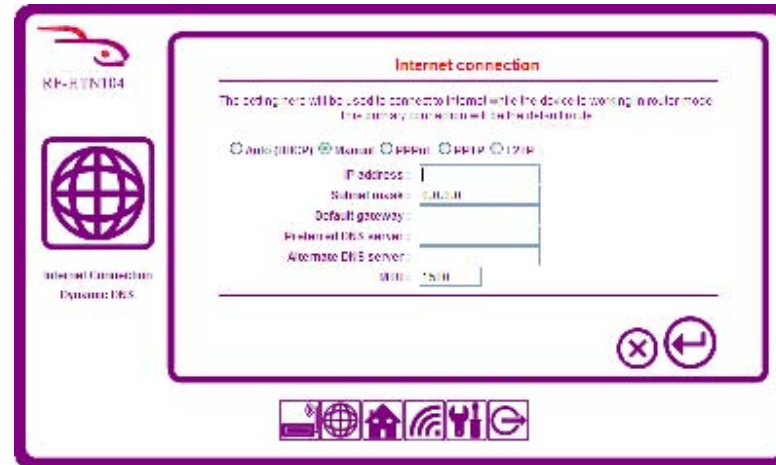
IP Address: Enter the IP Address assigned by your Internet Service Provider (ISP). The IP Address must contain four octets separated by a dot (x.x.x.x). The router will not accept the IP Address if it is not in this format.



Subnet Mask: Enter the Subnet Mask assigned by your ISP

Default Gateway: Enter the Default Gateway assigned by your ISP

DNS Servers: The preferred and alternate DNS Server details will be supplied by your ISP

MTU: You may need to change the MTU for optimal performance. Your ISP should provide you with the size of the Maximum Transmission Unit. It is set to 1500 by default.



Click the  button to save your settings when you are finished. If you wish to cancel, press the  button.

PPPoE (Point-to-Point Protocol over Ethernet)

Select the PPPoE option if your ISP has provided you with a Username and Password for a PPPoE connection. This is typically used for DSL connections. Ensure that you uninstall any PPPoE software you may have on your computer as the connection will now be handled by the router and is not needed on the computer.

User Name: Enter your PPPoE User Name

Password: Enter your PPPoE Password and type it again in the Retype Password field

Service Name: Enter a name for the connection, for example, "MyCable Connection"

AC Name: This is used to configure the access concentrator name on the PPPoE interface. Typically this is the name or MAC address of the router. You may leave this blank to simply use the name of the router.

Local IP Address: If you have a static IP address issued by your ISP, you can specify that it be used here. Ensure that you check the box labeled **Use the following local IP address**.

DNS Servers: Enter the primary and secondary DNS Servers provided by your ISP. Ensure that you check the box labeled **Use the following DNS server addresses**.

MTU: The Maximum Transmission Unit. You may need to modify this according to your ISP. The default setting is 1492.

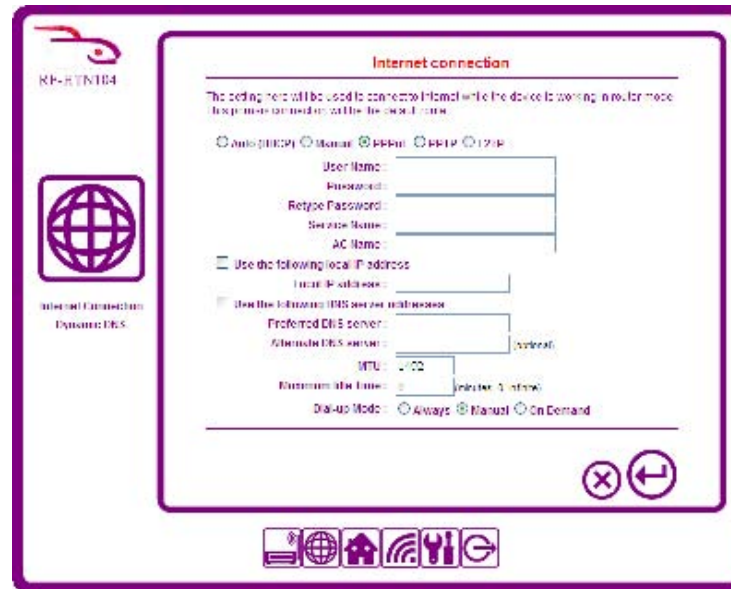
Maximum Idle Time: Enter the maximum time in minutes that the internet connection should be maintained when there is no network activity. Enter 0 to always keep the connection active.

Dial-up mode: Use the radio button to select a reconnect mode. You may choose from:

Auto: reconnect when disconnection detected.

Manual: the user must come back to this screen and click  to connect again.



On Demand: the router will detect when a request is made for an internet resource and initiate the connection.



The screenshot shows the 'Internet connection' configuration screen on a KIP-RTN104 router. The screen is titled 'Internet connection' and includes a warning: 'The following will be used to connect to Internet while the device is working in router mode. It is recommended to set the following items.' The configuration options are as follows:

- Connection type: Auto (PPPoE), Static, PPPoE, PPTP, L2TP
- User Name: [text input]
- Password: [text input]
- Retype Password: [text input]
- Service Name: [text input]
- AC Name: [text input]
- Use the following local IP address: (checked)
- Local IP address: [text input]
- Use the following DNS server addresses: (checked)
- Preferred DNS server: [text input]
- Alternate DNS server: [text input]
- MTU: 1492
- Maximum Idle Time: [text input]
- Dial-up Mode: Always, Manual, On Demand

Navigation icons at the bottom include a home icon, a refresh icon, and a back icon.

Click the  button to save your settings when you have finished. If you wish to cancel, press the  button.

PPTP (Point-To-Point Protocol)

Select the PPTP radio button if your ISP uses a PPTP connection. Your ISP will provide you with a username and password. This is typically used for DSL connections.

User Name: Enter the PPTP user name provided by your ISP.

Password: Enter the password provided by your ISP. Enter it again in the **Retype Password** field.

PPTP Server: Enter the PPTP Server IP Address provided by your server.

Local IP Address: If you have a static IP address issued by your ISP, you can specify that it be used here. Ensure that you check the box labeled **Use the following local IP address**.


DNS Servers: Enter the primary and secondary DNS Servers provided by your ISP. Ensure that you check the box labeled **Use the following DNS server addresses**.

MTU: The Maximum Transmission Unit. You may need to modify this according to your ISP. The default setting is 1400.

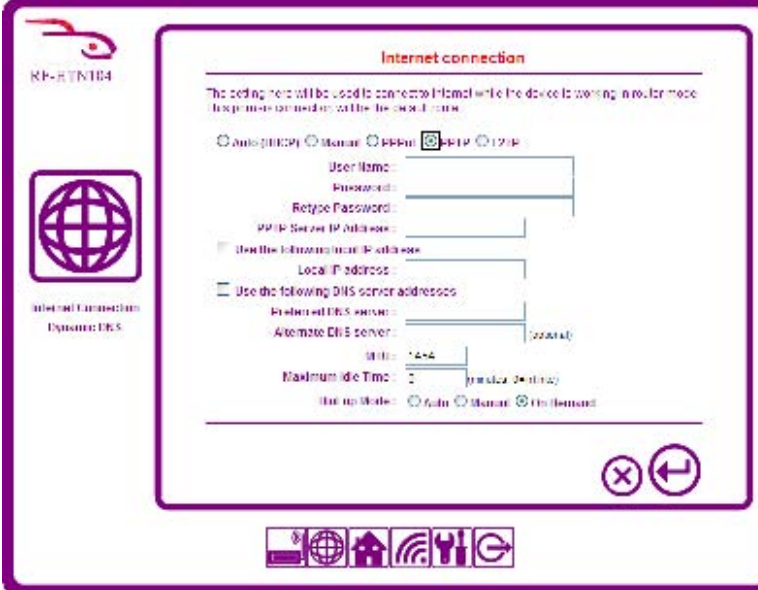
Maximum Idle Time: Enter the maximum time in minutes that the internet connection should be maintained when there is no network activity. Enter 0 to always keep the connection active.

Dial-up mode: Use the radio button to select a reconnect mode. You may choose from:



Auto: reconnect when disconnection detected.

Manual: the user must come back to this screen and click  to connect again.

On Demand: the router will detect when a request is made for an internet resource and initiate the connection.



The screenshot shows the 'Internet connection' configuration page. At the top, there's a title 'Internet connection' and a subtitle 'The settings here will be used to connect to Internet while the device is working in router mode. It's primary connection will be the default mode.' Below this, there are radio buttons for 'Auto (DHCP)', 'Manual', 'PPTP', and 'On Demand'. The 'PPTP' option is selected. The 'PPTP' section includes fields for 'User Name', 'Password', 'Retype Password', 'PPTP Server IP address', 'Local IP address', 'Preferred DNS server', and 'Alternate DNS server'. There are also fields for 'MTU' and 'Maximum Idle Time'. At the bottom, there are radio buttons for 'Dial-up Mode' with options 'Auto', 'Manual', and 'On Demand'. The 'On Demand' option is selected. The screen also features a globe icon on the left and a set of navigation icons at the bottom.

Click the  button to save your settings when you have finished. If you wish to cancel, press the  button.

L2TP (Layer 2 Tunneling Protocol)

Select the L2TP radio button if your ISP uses a L2TP connection. Your ISP will provide you with a username and password. This is typically used for DSL connections.

User Name: Enter the L2TP user name provided by your ISP.

Password: Enter the password provided by your ISP. Enter it again in the **Retype Password** field.

L2TP Server: Enter the L2TP Server IP Address provided by your server.

Local IP Address: If you have a static IP address issued by your ISP, you can specify that it be used here. Ensure that you check the box labeled **Use the following local IP address**.


DNS Servers: Enter the primary and secondary DNS Servers provided by your ISP. Ensure that you check the box labeled **Use the following DNS server addresses**.

MTU: The Maximum Transmission Unit. You may need to modify this according to your ISP. The default setting is 1400.

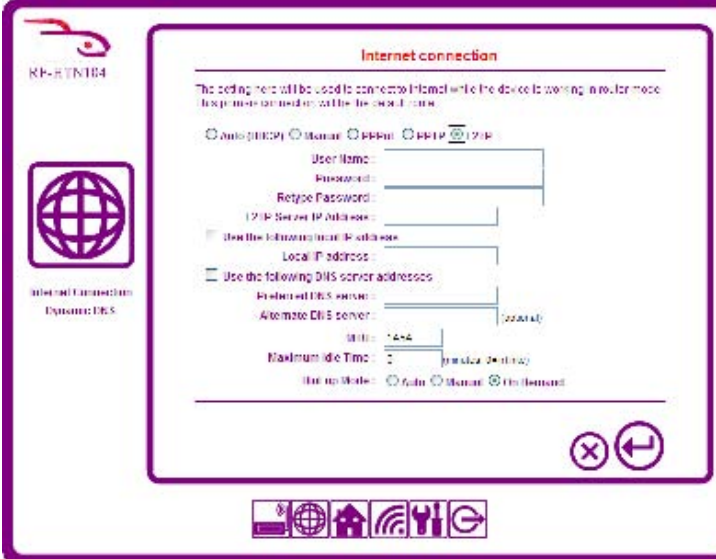
Maximum Idle Time: Enter the maximum time in minutes that the internet connection should be maintained when there is no network activity. Enter 0 to always keep the connection active.

Dial-up mode: Use the radio button to select a reconnect mode. You may choose from:



Auto: reconnect when disconnection detected.

Manual: the user must come back to this screen and click  to connect again.

On Demand: the router will detect when a request is made for an internet resource and initiate the connection.



The screenshot shows the 'Internet connection' configuration window. The 'L2TP' radio button is selected. The 'Manual' dial-up mode option is highlighted with a red circle and arrow. The interface includes fields for User Name, Password, Retype Password, L2TP Server IP Address, Local IP address, and DNS server addresses. There are also fields for MTU and Maximum Idle Time. At the bottom, there are radio buttons for Dial-up mode: Auto, Manual, and On Demand. The Manual option is highlighted with a red circle and arrow.

Click the  button to save your settings when you have finished. If you wish to cancel, press the  button.

Configuring a Dynamic DNS Service Provider

The Dynamic DNS feature allows you to host a server (e.g. web server, FTP or Game server) using a domain that you own with a dynamically assigned IP address. Many ISPs assign IP addresses dynamically i.e. the IP address changes each time you connect and disconnect. Using a Dynamic DNS service provider, you or your friends can connect to your server no matter what your IP address.



Enable: Check this box to turn on the feature

Service Provider: Choose the Dynamic DNS provider from the drop down list

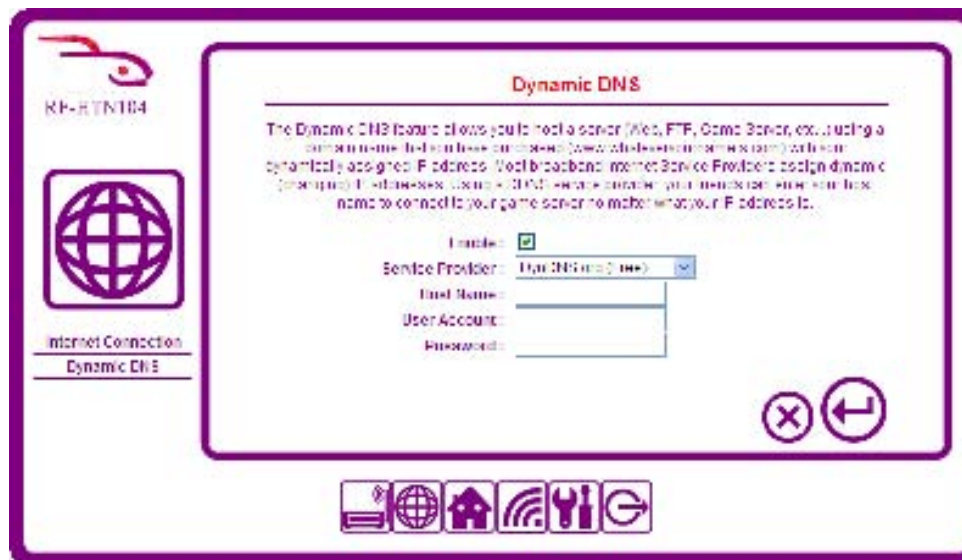
Host Name: Enter the host name that you registered with the service provider

User Account: Enter the username for the Dynamic DNS account

Password: Enter the password for the Dynamic DNS account


Click the  button to save your settings when you have finished. If you wish to cancel, press the  button.

Note: For further information on Dynamic DNS, please go to www.dyndns.com



The screenshot shows a web interface for configuring Dynamic DNS. At the top left, there is a logo for 'RP-RTN104' and a globe icon. Below the globe icon, it says 'Internet Connection' and 'Dynamic DNS'. The main content area is titled 'Dynamic DNS' and contains the following text: 'The Dynamic DNS feature allows you to host a server (Web, FTP, Game Server, etc.) using a domain name that you own with a dynamically assigned IP address. Many ISPs assign IP addresses dynamically i.e. the IP address changes each time you connect and disconnect. Using a Dynamic DNS service provider, you or your friends can connect to your server no matter what your IP address is.' Below this text are four input fields: 'Enable:' with a checked checkbox, 'Service Provider:' with a dropdown menu showing 'DynDNS.com (DDNS)', 'Host Name:', 'User Account:', and 'Password:'. At the bottom right of the form, there are two circular buttons: one with a red 'X' (cancel) and one with a blue arrow (save). At the bottom of the window, there is a row of icons: a globe, a house, a Wi-Fi signal, a wrench and screwdriver, and a refresh/circular arrow icon.

Configuring Wireless Settings

To configure the wireless settings on your router, login to the router and click the  icon. The Wi-Fi-2.4GHz Band page appears.



WPA/WPA2 Encryption Standards

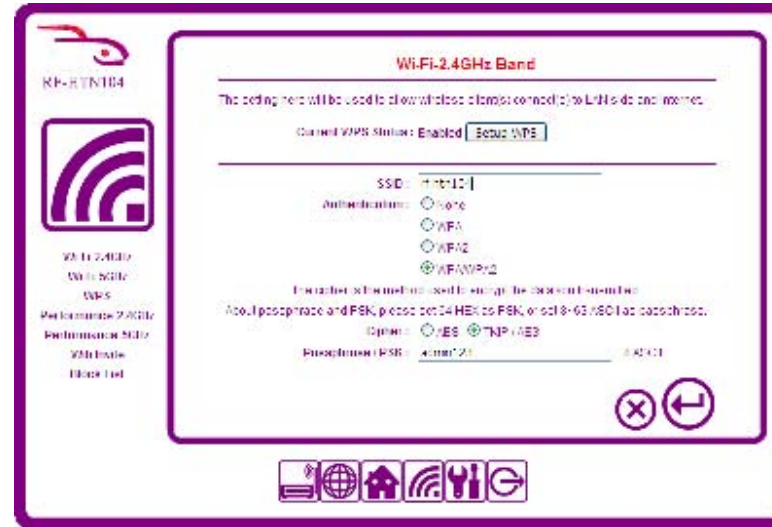
Wi-Fi Protected Access (WPA) and Wi-Fi Protected Access 2 (WPA2) are encryption methods developed by the Wi-Fi Alliance. Both of these methods encrypt packets using a 256-bit key.

Configuring Wi-Fi 2.4GHz Settings

To configure the 2.4GHz wireless feature on your router:

1. Enter up to 32 characters into the **SSID** field. The SSID is case sensitive. By default this is set to the model number of your router (RF-HTN104).
2. Choose an authentication method. You can choose between **None**, **WPA**, **WPA2** or **WPA/WPA2**. For the best combination of security and flexibility, choose **WPA/WPA2**. This will mean that devices that support only one of the methods will still be able to connect. It is strongly recommended that you do not choose **None** as anybody will be able to join your private network.
3. Select an encryption Cipher (AES or AES/TKIP).
4. Enter a Passphrase / Pre-Shared Key (PSK). This must be at least 8 characters in length. Be sure to select a secure passphrase so that your network will not be accessible by intruders.

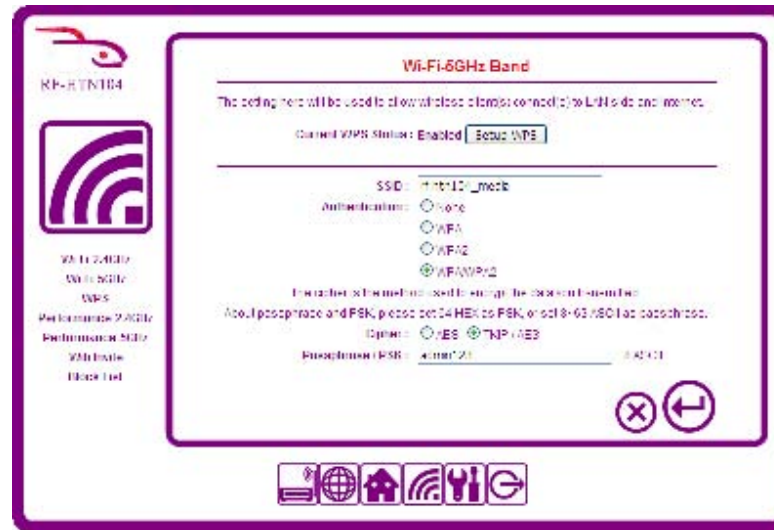
Click the  button to save your settings when you have finished. If you wish to cancel, press the  button.





Configuring Wi-Fi 5GHz Settings


To configure the 5GHz wireless feature on your router:

1. Enter up to 32 characters into the **SSID** field. The SSID is case sensitive. By default this is set to the model number of your router (RF-HTN104).
2. Choose an authentication method. You can choose between **None**, **WPA**, **WPA2** or **WPA/WPA2**. For the best combination of security and flexibility, choose **WPA/WPA2**. This will mean that devices that support only one of the methods will still be able to connect. It is strongly recommended that you do not choose **None** as anybody will be able to join your private network.
3. Select an encryption Cipher (AES or AES/TKIP).
4. Enter a Passphrase / Pre-Shared Key (PSK). This must be at least 8 characters in length. Be sure to select a secure passphrase so that your network will not be accessible by intruders.



Click the  button to save your settings when you have finished. If you wish to cancel, press the  button.

Configuring Advanced Wi-Fi 2.4GHz Settings

To adjust the advanced settings of the 2.4GHz Wi-Fi function, login to the router and click on the  icon, then select **Performance-2.4GHz** from the menu on the left.

Note: It is only recommended that you change these settings if you are experienced and familiar with what each of these settings does.

Channel: Select a channel from the drop down menu. For best performance, choose a channel which is not in use by other wireless devices in your area.

Wi-Fi Mode: Select a mode from the drop down menu. This will affect the wireless connection speed of your devices. Some older devices may not work if you choose to work in 11n alone.

Enable WMM: Wi-Fi Multimedia (WMM) is Quality of Service (QoS) for your router. Check this box to improve the quality of video and voice applications for your wireless clients. This cannot be selected for modes where 11n is operational.

Bandwidth: Select the frequency which you want to operate on by checking the radio box for **20MHz** or **20/40MHz**.

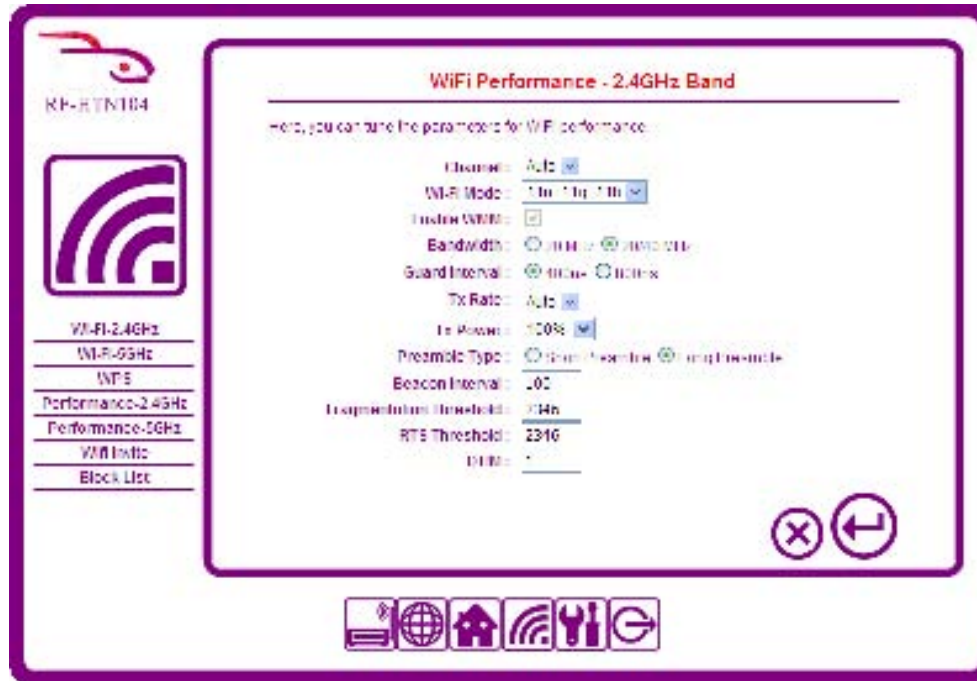
Guard Interval: The guard interval is the space between symbols being transmitted. It is often confused with the space between packets. Normal 802.11 operation is 800ns but with 802.11n, you may halve the time to wait to 400ns which can increase throughput.

Tx Rate: Only modifiable if 11n Wi-Fi Mode is selected. This allows you to specify the maximum transmission rate for the wireless network.

Tx Power: Sets the transmission power. Modifying this can help you to achieve more range on your network.

Preamble Type: The Preamble Type defines the length of the Cyclic Redundancy Check (CRC) block for communication between the router and roaming wireless adapters.

删除: Access Point





Beacon Interval: This represents the amount of time between beacon transmissions. Before a station enters power-save mode, the station needs the beacon interval to know when to wake up to receive the beacon (and learn whether there are buffered frames at the access point). Enter a value in the field between 1 and 65,535. If you enter an invalid value, the router will return an error.

Fragmentation Threshold: The 802.11 standard includes the ability for radio-based network interface cards (NICs) and access points to fragment packets for improving performance in the presence of RF interference and marginal coverage areas. The fragment size value can typically be set between 256 and 2,346 bytes. Setting it at or above 2,346 bytes effectively disables fragmentation.


RTS Threshold: Request To Send (RTS) is an optional feature which can reduce collisions on your network. Set a packet size between 0 and 2346. If the packet that the access point is transmitting is larger than the threshold, it will initiate the RTS function. If the packet size is equal to or less than the threshold, the access point will not kick off RTS. The use of 2346 bytes effectively disables RTS for the access point.

DTIM: This setting determines how often the Access Point's Beacon contains a Delivery Traffic Indication Message (DTIM). The DTIM tells client devices in power-save mode that a packet is waiting for them. The default setting causes client devices using power-save mode to wake up. To conserve battery power in client devices using power-save mode, increase the Data Beacon Rate (DTIM) setting. However, setting the DTIM too high may cause a wireless client to lose its network connection.

The DTIM is a multiple of the Beacon. So if the DTIM was set to 3, a DTIM message would be sent with every third Beacon.

Click the  button to save your settings when you have finished. If you wish to cancel, press the  button.

Configuring Advanced 5GHz Wi-Fi Settings

To adjust the advanced settings of the 5GHz Wi-Fi function, login to the router and click on the  icon, then select **Performance-5GHz** from the menu on the left.

Note: It is only recommended that you change these settings if you are experienced and familiar with what each of these settings does.

Channel: Select a channel from the drop down menu. For best performance, choose a channel which is not in use by other wireless devices in your area.

Wi-Fi Mode: Select a mode from the drop down menu. This will affect the wireless connection speed of your devices. Some older devices may not work if you choose to work in 11n alone.

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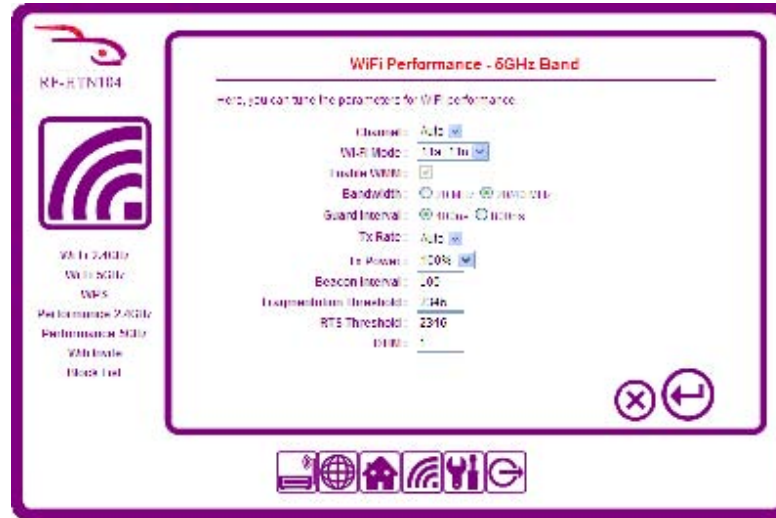
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Tx Power: Sets the transmission power. Modifying this can help you to achieve more range on your network.

Preamble Type: The Preamble Type defines the length of the Cyclic Redundancy Check (CRC) block for communication between the router and roaming wireless adapters.

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删除: Access Point

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删除: access point

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The DTIM is a multiple of the Beacon. So if the DTIM was set to 3, a DTIM message would be sent with every third Beacon.

Click the  button to save your settings when you have finished. If you wish to cancel, press the  button.

Configuring WPS (Wi-Fi Protected Setup)

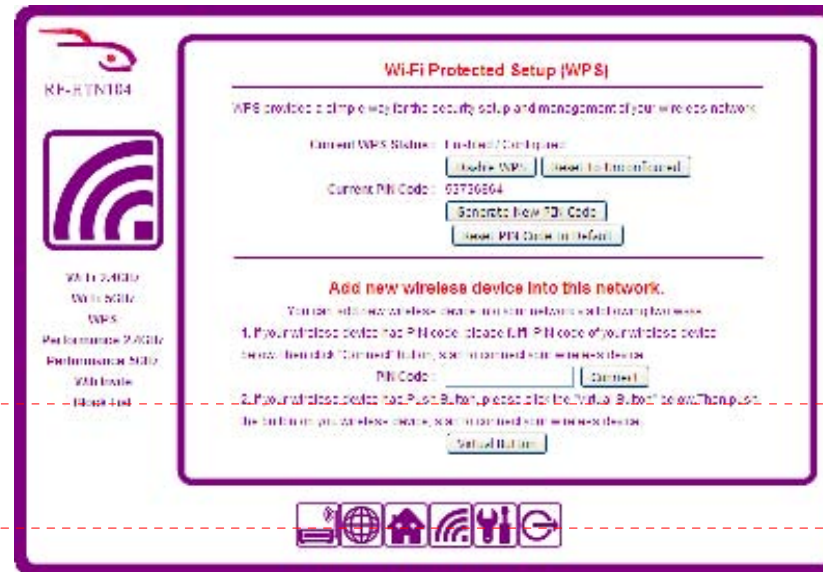
Wi-Fi Protected Setup (WPS) System is a simplified method for securing your wireless network during the initial setup and the process of adding a new device to the network. The Wi-Fi Alliance (WFA) has certified it across different products and manufacturers. There are two simple methods to securely add a device to your network via WPS; The Push Button Configuration (PBC) method and the Personal Identification Number (PIN) Code method. Both of these WPS methods greatly reduce the time it takes to get a new device on your network while using WPA2 encryption.

To add a new device using the PBC method:

1. Press the **Virtual Button** on the Wi-Fi Protected Setup Page or hold down the **CONNECT** button located on the front of your wireless router device for approximately 3 seconds. The RocketFish router will attempt to find other devices that support WPS within range.
2. Go to your wireless client and hold down the **CONNECT** button on the front of your wireless client device for approximately 3 seconds. Your client should find the signal of the router and they should connect within 2 minutes.

To add a new device using the PIN Code method:

1. Acquire the PIN number for your wireless client device. On the RocketFish Wi-Fi Invite Home Hub, the PIN number is printed on the bottom of the device.
2. On the RocketFish router, enter the PIN into the field labeled **PIN Code** and click **Connect**. On the Wi-Fi Invite Hub, press the **CONNECT** button on the front panel to confirm the connection. On other brands of hub, start the WPS tool and confirm the connection with the **CONNECT** button. The two devices will connect within 2 minutes.




刪除: Usually a device will have a PIN Code printed on the device itself somewhere.

格式化: 字型: 非粗體

格式化: 字型: 非粗體

刪除: should connect within 2 minutes.

To connect your RF-HTN104 to another device using the PIN Code method:



1. Login to your RocketFish router and click on the  icon
2. Select **WPS** from the menu on the left side of the screen. You will see a PIN Code listed under **Current PIN Code**. If there is no PIN Code, click **Generate New PIN Code**. The default PIN Code is also printed on the bottom of your router.
3. Enter the PIN Code into your other wireless router. When your other router has begun the invitation, press the **CONNECT** button on the front of your Wi-Fi Invite Home Router. Your router will connect to the remote wireless router.

删除: device

删除: device

You can verify that the router and client connected successfully by going to the **Wireless Status** screen. See the section titled "**Checking the Wireless Network status**" for more information.


Disabling and Enabling WPS



By default, WPS is enabled. If you want to disable WPS, click the **Disable WPS** button and click  to save the changes. The Current WPS Status will change to **Disabled / Configured**. To enable it again, click **Enable WPS** and click  to save the changes.

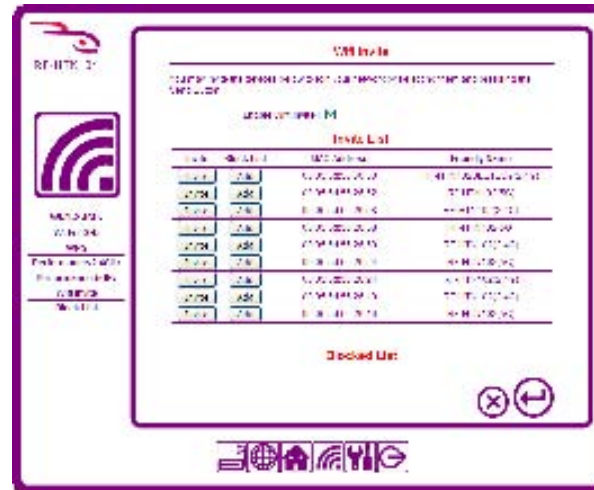
Adding a Device to your Network using Wi-Fi Invite

Wi-Fi Invite is another method to securely add another Wi-Fi Invite compatible device to your network. Using Wi-Fi Invite, a list of available wireless devices will show up on the Invite List and you can manually select which one you would like to add.

To add a device via Wi-Fi Invite:

1. Login to your router and click on the  icon.
2. Select **Wifi Invite** from the menu on the left hand side.
3. Ensure the box labeled **Enable Wifi Invite** is checked.
4. A list of Wi-Fi Invite compatible wireless devices within range is displayed under the Invite List.
5. Select the one you wish to invite to connect and click the **Invite** button.
6. If you invited the correct device, the **CONNECT** light on the front of your hub will be flashing. Press the **CONNECT** button to confirm the invitation. The router and hub are now connected.



Click the  button to save your settings when you have finished. If you wish to cancel, press the  button.

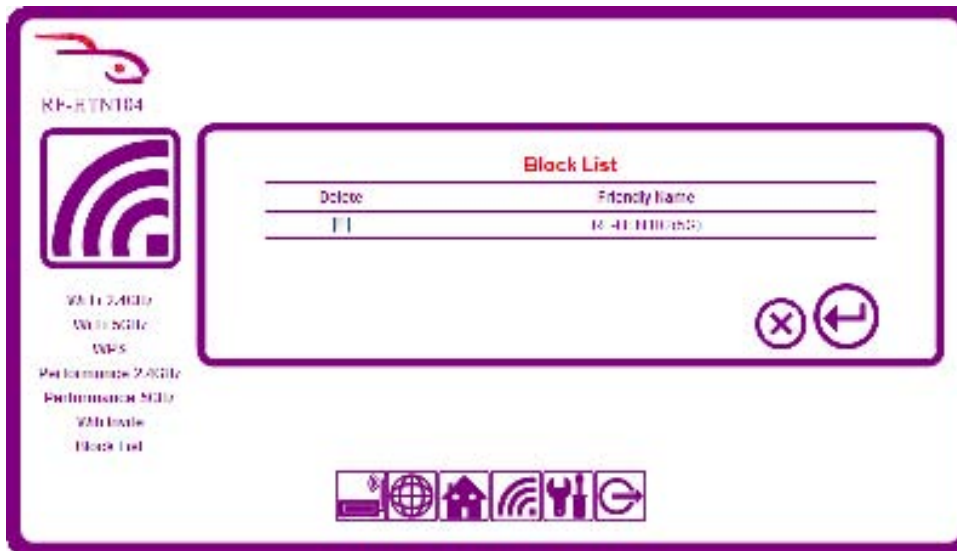


Viewing the Wifi Invite Block List

If you have chosen to block another access point from connecting to your router using the controls on the front of the router or on the Wifi Invite page, you can view the list of clients which have been blocked on this screen.

To view the blocked clients:

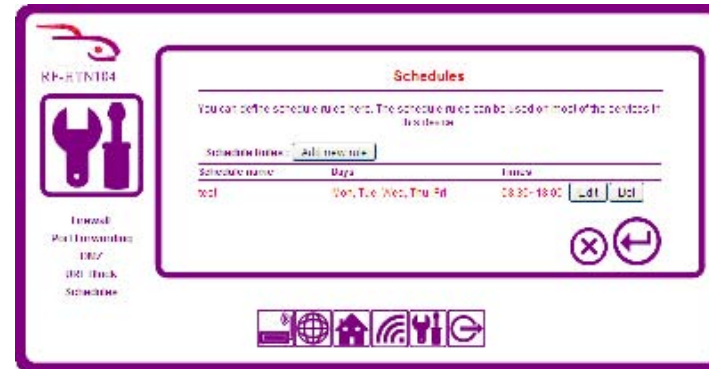
1. Login to your router and click on the  icon.
2. Select **Block List** from the menu on the left hand side. A list of blocked clients is displayed.
3. You can remove any of the clients from the blocked list by checking the box in the Delete column for the client you want to remove and the click  to save the settings.






Configuring Advanced Network Settings



Setting up Schedules

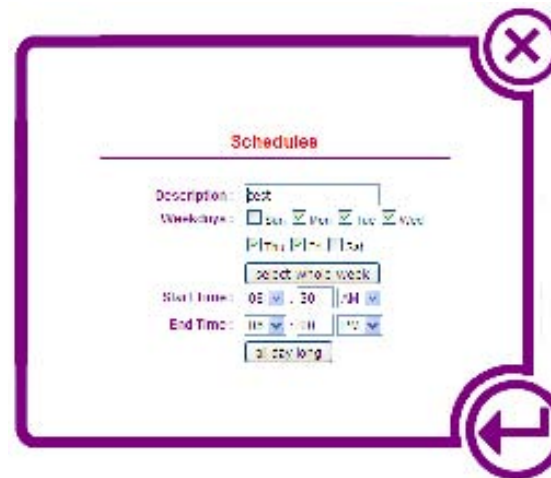
For many of the advanced settings, the RF-HTN104 is able to apply different rules according to a schedule. You can create schedules and have them automatically applied based on the time of day or the day of the week. For example, you might want to restrict web access in the evenings to protect your children from undesirable websites.







To create a schedule:

1. Login to your router and click the  icon. Click **Schedules** from the menu on the left side of the screen.
2. Click the **Add New Rule** button. A new window appears prompting you to enter schedule information.
3. Type a description in the **Description** field, e.g. weekdays
4. Check the box for the days you wish this schedule to operate. If you want it to apply for the whole week then click the **Select Whole Week** button.
5. Enter a **Start Time** and **End Time** for the days checked.
6. Click the  button to save your settings or click  to cancel.




Click the  button on the main Schedules screen to save your schedule. If you navigate away from this screen without clicking , your schedule settings will be lost.



To change a schedule:

1. On the main *Schedules* screen, click the **Edit** button for the schedule you want to change in the list of schedules. The *Schedule* details screen opens.
2. Make your changes, then click  to save your settings. The main *Schedules* screen reopens.
3. Click  to save your schedule, or click  to cancel. If you leave the main *Schedules* screen without clicking , your schedule will not be saved.

To delete a schedule:

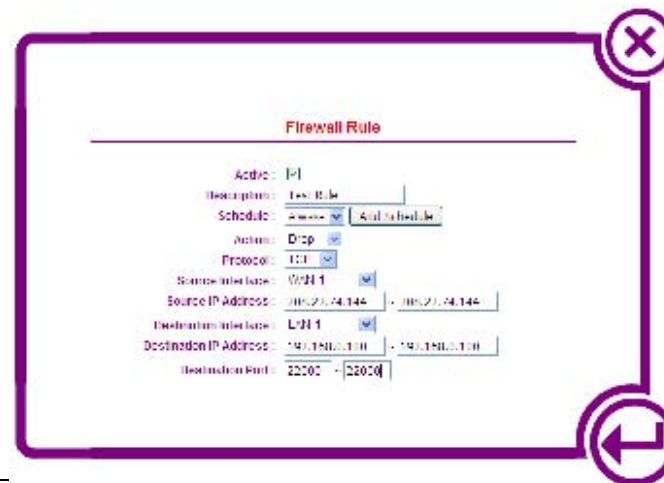
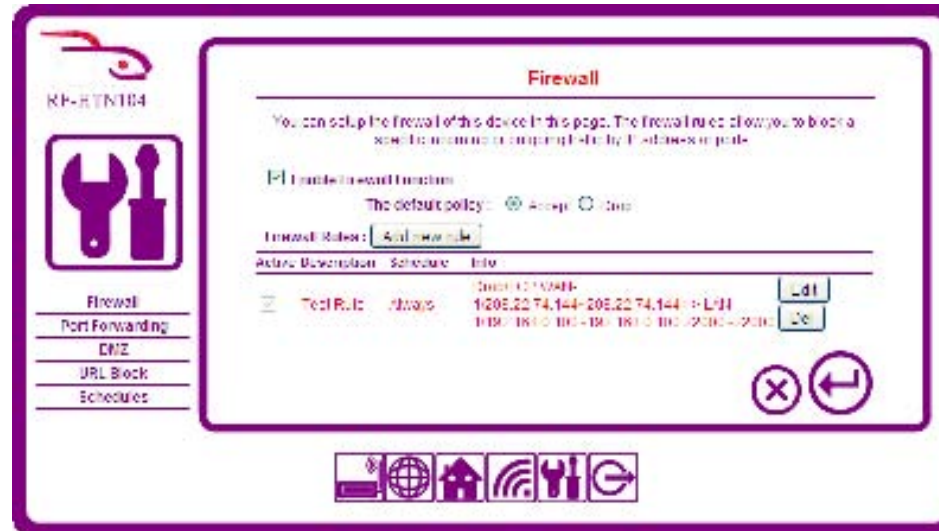
On the main *Schedules* screen, click the **Del** button for the schedule you want to delete in the list of schedules. The rule is removed. Click  to save your changes , or click  to cancel. If you leave the *Schedules* screen without clicking , your changes will not be saved.





Configuring the Firewall

A firewall protects the devices on your network from the outside world. The RF-HTN104 provides a firewall function. The firewall works by analyzing a set of rules that dictate whether the firewall should accept or drop packet requests on specific ports.




To use the firewall function on your router:

1. Check the **Enable Firewall Function** box.
2. Choose a default policy. The default policy will dictate what the firewall does for packet requests for which there is no defined rule. You may choose to either **Accept** or **Drop** packet requests.
3. Click the **Add New Rule** button. A new window appears prompting you to enter details of the rule.
4. Check the **Active** box if you want this new rule to be active when you have finished configuring it.
5. Type a Description into the **Description** field.
6. Select a schedule if you have already created one or select **Always** to have the rule apply all the time. Additionally, you can click **Add Schedule** if you want to add a schedule now.
7. Choose from the drop down menu whether you want the rule to Accept or Drop the packets.
8. Select the Source interface for which this rule is to apply from the **Source Interface** drop down menu. The Source Interface is the network where the packets originate. If the packet originates locally, select LAN. If the packets are from a remote network such as the internet, select WAN.
9. Enter the Source IP in the **Source IP Address** field. You may enter a range of IP Addresses by entering the starting address in the first box and the ending address in the second box.






-
10. Select the Destination Interface for which this rule is to apply from the **Destination Interface** drop down menu. The Destination Interface is the network where the packets will arrive. If the packets will arrive on your local network, select LAN. If the packets will arrive at a remote network, select WAN.
 11. Enter the Destination IP in the **Destination IP Address** field. You may enter a range of IP Addresses by entering the starting address in the first box and the ending address in the second box.
 12. Enter the port range you want this rule to apply for in the **Destination Port** boxes.
 13. Click the  button to save your settings on the Firewall Rule window when you have finished. If you wish to cancel, press the  button.
 14. On the Firewall screen you will now see a new rule in the list with details of whether it is active, the description, which schedule it applies to and information about the rule.
 15. Click the  button to save your settings on the Firewall window when you have finished. If you wish to cancel, press the  button.

To change a firewall rule:

1. On the *Firewall* screen, click the Edit button for the rule you want to edit in the **Firewall Rules** list. The *Firewall Rule* screen opens.
2. Make your changes, then click to save your settings. The *Firewall* screen reopens.
3. Click  to save your changes , or click  to cancel. If you leave the *Firewall* screen without clicking  , your changes will not be saved.




To delete a rule:

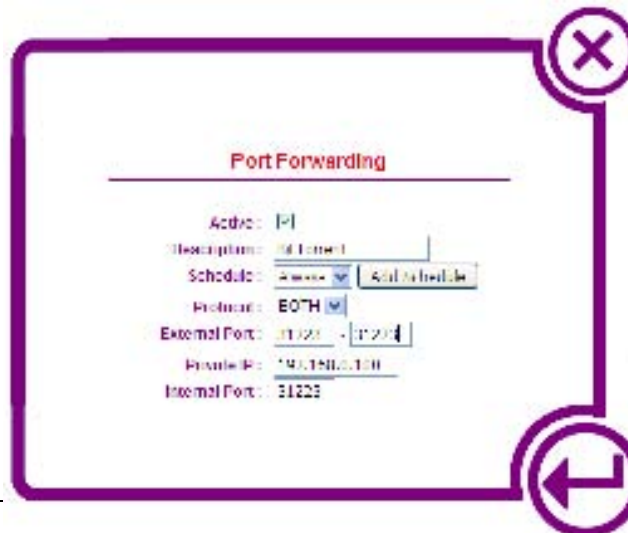
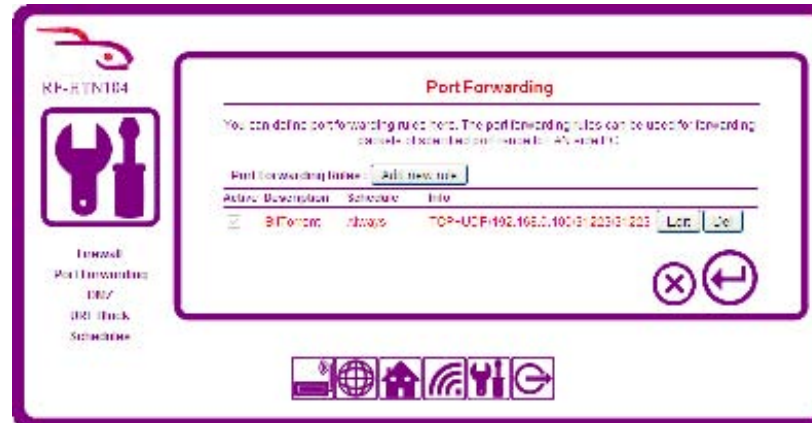
On the *Firewall* screen, click the **Del** button for the rule you want to delete in the **Firewall Rules** list. The rule is removed. Click  to save your changes , or click  to cancel. If you leave the *Firewall* screen without clicking  , your changes will not be saved.

Configuring Port Forwarding




This allows you to open a single port or a range of ports.

To forward a port or range of ports:




1. Login to your router and click the  icon. Click **Port Forwarding** from the menu on the left side of the screen.
2. Click the **Add New Rule** button. A new window appears prompting you to enter port forwarding information.
3. Check the **Active** box if you want this rule to be active when you have finished configuring it.
4. Type a description in the **Description** field, e.g. BitTorrent
5. Select a schedule if you have already created one or select **Always** to have the rule apply all the time. Additionally, you can click **Add Schedule** if you want to add a schedule now.
6. Select from the **Protocol** drop down menu whether you want this rule to apply to **TCP** packets, **UDP** packets or **BOTH**.
7. Enter an External Port range in the **External Port** boxes.
8. Type the internal IP Address that you want the packets to be sent to in the **Private IP** field.
9. Enter the **Internal Port** number you want to forward to.
10. Click the  button to save your settings or click  to cancel.



To change a port forwarding rule:

1. On the main *Port Forwarding* screen, click the Edit button for the rule you want to change in the *Port Forwarding Rules* list. The *Port Forwarding* details screen opens.
2. Make your changes, then click to save your settings. The main *Port Forwarding* screen reopens.
3. Click  to save your settings, or click  to cancel. If you leave the main *Port Forwarding* screen without clicking , your settings will not be saved.




To delete a Port Forwarding rule:

On the *Port Forwarding* screen, click the **Del** button for the rule you want to delete in the **Port Forwarding Rules** list. The rule is removed. Click  to save your changes, or click  to cancel. If you leave the *Port Forwarding* screen without clicking , your changes will not be saved.



Enabling DMZ (Demilitarized Zone)

Under certain circumstances, you may want to have one or more of your devices exposed to the outside world. Placing machines into the DMZ or Demilitarized Zone can be useful for testing but will open your machine to remote attacks over the Internet.

To put a device into the DMZ:

1. Check the **Enable DMZ Host** check box.
2. From the drop down menu on the right, select the device name that you want to expose and click the  button to retrieve the **Host IP Address** of the device.
3. Click the  button to save your settings or click  to cancel.

To remove a device from the DMZ:





1. Remove the check from the **Enable DMZ Host** check box.
2. Click the  button to save your settings or click  to cancel.

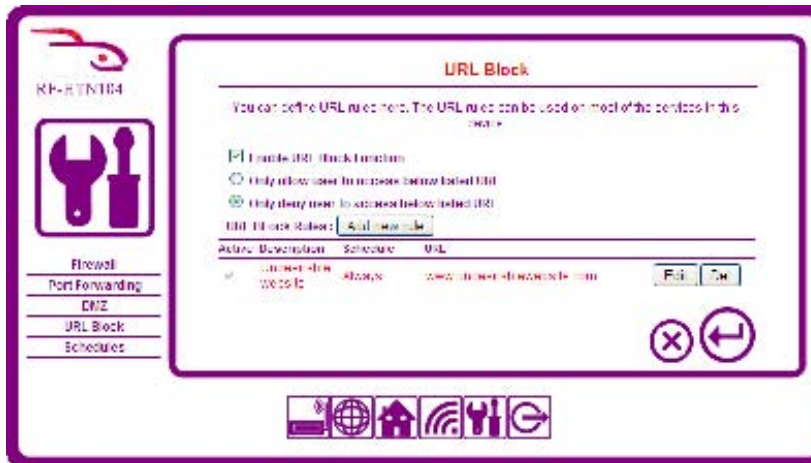


Blocking URLs

The RF-HTN104 wireless router allows you to configure a list of sites which are either allowed or denied access. This is useful if you want to restrict access to certain websites. You can either create a 'white list' i.e. a list of sites which you allow access to and block everything else or you can create a 'black list' which is a list of sites you want to deny but allow access to everything else.

To enable the URL blocking function:

1. Check the box labeled **Enable URL Block Function**.
2. Select either to **Only allow user to access below listed URL** or **Only deny user to access below listed URL**.
3. Click the **Add new rule** button. A new window appears prompting you to enter the URL blocking rules.
4. Check the **Active** box if you want the rule to be active when you have finished entering the details.
5. Enter a name for the blocking rule into the **Description** field
6. Type the URL of the site into the **URL** field.
7. Select a schedule if you have already created one or select **Always** to have the rule apply all the time. Additionally, you can click **Add Schedule** if you want to add a schedule now.
8. Click the  button to save your settings or click  to cancel.
9. The main URL Block window appears again showing your new rule in the list.
10. Click the  button to save your settings or click  to



cancel.

Troubleshooting

This section provides solutions to problems that can occur during the installation and operation of the RF-HTN104. Read the following descriptions if you are having problems. The following is written assuming you are using Windows XP. For other operating systems or versions of Windows, the steps provided may differ.

1. Why can't I access the web-based configuration utility?

When entering the IP address of the RocketFish router (192.168.1.1 for example), you are not connecting to a website hosted on the Internet. The router has the utility built-in to a ROM chip in the device itself. Your computer must be on the same IP subnet to connect to the web-based utility.

- Check that your PC is set to **Obtain an IP address automatically**.
 - Click **Start > Settings > Control Panel**. Select **Network Connections**. Select the connection profile which is connected to the router, most likely labeled **Local Area Connection**.
 - Select **Internet Protocol (TCP/IP)** and click **Properties**. Select the radio button **Obtain an IP address automatically** and **Obtain DNS server address automatically**. Click **OK** twice.
 - Try to connect to the web-based configuration utility again.

- If you have manually specified an IP address to use, you will need to make sure your IP address is in the 192.168.1.XX range and subnet is 255.255.255.0 in order to connect to the router.
 - Click **Start > Settings > Control Panel**. Select **Network Connections**. Select the connection profile which is connected to the router, most likely labeled **Local Area Connection**.
 - Select **Internet Protocol (TCP/IP)** and click **Properties**. Select the radio button **Use the following IP address** and give the connection a local IP address which is not in use already e.g. 192.168.1.111. Set the **Subnet Mask** to 255.255.255.0. Click **OK** twice.
 - Try to connect to the web-based configuration utility again.

- Make sure you have an updated Java-enabled web browser. We recommend the following:
 - Microsoft Internet Explorer® 6.0 and higher
 - Mozilla Firefox 3.0 and higher
 - Google™ Chrome 2.0 and higher

- Verify physical connectivity on the device. Try using a different cable or connect to a different port on the device if possible.
- Disable any Internet security software running on the computer. Software firewalls such as Zone Alarm, Black Ice, Sygate, Norton Personal Firewall, and Windows® XP firewall may block access to the configuration pages. Check the help files included with your firewall software for more information on disabling or configuring it.
- Configure your Internet settings:
 - Go to **Start > Settings > Control Panel**. Select the **Internet Options** icon. From the **Security** tab, click the button to restore the settings to their defaults.
 - Click the **Connection** tab and set the dial-up option to Never Dial a Connection. Click the LAN Settings button. Make sure nothing is checked. Click **OK**.
 - Go to the **Advanced** tab and click the button to restore these settings to their defaults. Click **OK** three times.
 - Close your web browser (if open) and open it.
 - Access the web management. Open your web browser and enter the IP address of your RocketFish router in the address bar. This should open the login page for your web management.
 - If you still cannot access the configuration, unplug the power to the router for 10 seconds and plug back in. Wait about 30 seconds and try accessing the configuration. If you have multiple computers, try connecting using a different computer.

2. What can I do if I forgot my password?

If you forgot your password, you must reset your router. Unfortunately this process will change all your settings back to the factory defaults.

To reset the router, locate the reset button on the rear panel of the unit. With the router powered on, use a pen to hold the button down for 10 seconds. Release the button and the router will go through its reboot process. Wait about 30 seconds to access the router. The default IP address is 192.168.1.1. When logging in, the username is **admin** and leave the password box empty.

3. Why can't I connect to certain sites or send and receive emails when connecting through my router?

If you are having a problem sending or receiving email, or connecting to secure sites such as eBay, banking sites, and Hotmail, we suggest lowering the MTU in increments of ten (Ex. 1492, 1482, 1472, etc).

Note: AOL DSL+ users must use MTU of 1400.

To find the proper MTU Size, you'll have to do a special ping of the destination you're trying to go to. A destination could be another computer, or a URL.

- Click on Start and then click Run.
- Windows® 95, 98, and Me users type in command (Windows® NT, 2000, XP and 7 users type in **cmd**) and press **Enter** (or click OK).
- Once the window opens, you'll need to do a special ping. Use the following syntax:



ping [url] [-f] [-l] [MTU value]

Example: ping yahoo.com -f -l 1472

You should start at 1472 and work your way down by 10 each time. Once you get a reply, go up by 2 until you get a fragmented packet. Take that value and add 28 to the value to account for the various TCP/IP headers. For example, lets say that 1452 was the proper value, the actual MTU size would be 1480, which is the optimum for the network we're working with (1452+28=1480).

Once you find your MTU, you can now configure your router with the proper MTU size.

To change the MTU rate on your router follow the steps below:

- Open your browser, enter the IP address of your router (192.168.1.1) and click **OK**.
- Enter your username (admin) and password (blank by default). Click **OK** to enter the web configuration page for the device.
- Click on .
- To change the MTU enter the number in the MTU field and click  to save your settings.
- Test your email. If changing the MTU does not resolve the problem, continue changing the MTU in increments of ten.

Technical Specifications

STANDARDS	IEEE 802.11n IEEE 802.11g IEEE 802.11b IEEE 802.11a IEEE 802.3 IEEE 802.3u
DEVICE INTERFACE	1 10/100 WAN Port 4 10/100 LAN Ports
SECURITY	Wi-Fi Protected Access (WPA, WPA2)
ADVANCED FEATURES	Networks Address Translation (NAT) Wi-Fi Invite
DEVICE MANAGEMENT	Internet Explorer 6 or later Mozilla Firefox 3.0 or later Safari 3 or later
LEDS	Power Connect Display Panel - 4 x 20 characters
CERTIFICATION	FCC / IC Wi-Fi
DIMENSIONS (WxDxH)	Device: 180*171*55mm (7.1"*6.7"*2.2") Packaging: 308.9*218.9*90.5mm (12.2"*8.6"*3.56")
WEIGHT	Device: 541.2grams (1.19lbs) Packaging: 676.8grams (1.49lbs)
WARRANTY	1-Year Limited (US only)

FCC

Federal Communication Commission Interference Statement

This equipment has been tested and found to comply with the limits 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 in accordance with 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 can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one 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. For operation within 5.15 ~ 5.25GHz frequency range, it is restricted to indoor environment.

IMPORTANT NOTE:

FCC Radiation Exposure Statement:

This equipment complies with FCC radiation exposure limits set forth for an uncontrolled environment. This equipment should be installed and operated with minimum distance 20cm between the radiator & your body. This transmitter must not be co-located or operating in conjunction with any other antenna or transmitter.

IEEE 802.11b or 802.11g operation of this product in the U.S.A. is firmware-limited to channels 1 through 11.

Industry Canada statement:

This device complies with Industry Canada licence-exempt RSS standard(s). 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.

Règlement d'Industry Canada

Le présent appareil est conforme aux CNR d'Industrie Canada applicables aux appareils radio exempts de licence. L'exploitation est autorisée aux deux conditions suivantes : (1) l'appareil ne doit pas produire de brouillage, et (2) l'utilisateur de l'appareil doit accepter tout brouillage radioélectrique subi, même si le brouillage est susceptible d'en compromettre le fonctionnement.

IMPORTANT NOTE:**Radiation Exposure Statement:**

This equipment complies with IC radiation exposure limits set forth for an uncontrolled environment. This equipment should be installed and operated with minimum distance 20cm between the radiator & your body.

Cet équipement est conforme aux limites d'exposition aux rayonnements définies par IC pour un environnement non contrôlé. Cet équipement doit être installé et utilisé avec un minimum de 20 cm de distance entre le radiateur et votre corps.

Antenna statement

Under Industry Canada regulations, this radio transmitter may only operate using an antenna of a type and maximum (or lesser) gain approved for the transmitter by Industry Canada.

To reduce potential radio interference to other users, the antenna type and its gain should be so chosen that the equivalent isotropically radiated power (e.i.r.p.) is not more than that necessary for successful communication.

Conformément à la réglementation d'Industrie Canada, le présent émetteur radio peut fonctionner avec une antenne d'un type et d'un gain maximal (ou inférieur) approuvé pour l'émetteur par Industrie Canada.

Dans le but de réduire les risques de brouillage radioélectrique à l'intention des autres utilisateurs, il faut choisir le type d'antenne et son gain de sorte que la puissance isotrope rayonnée équivalente (p.i.r.e.) ne dépasse pas l'intensité nécessaire à l'établissement d'une communication satisfaisante.