SCOUT®
Professional Marine Antennas Made In Italy

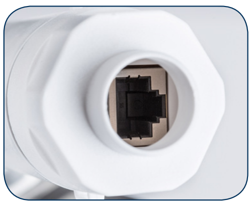
Quick User Guide
Rocket

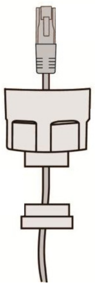
rev. 1-2016

1 Locate a suitable mounting site for your Rocket unit. Suitable locations would be elevated area with all round clear view of the horizon, to avoid interferences with the antenna signal. The Rocket should be mounted vertically to reduce stress on the N-Type Connector.

2 Connect the Rocket to the N-Type connector of the Scout KS-61 antenna.

3 Connect the Ethernet cable to the port located on the bottom of the Rocket.



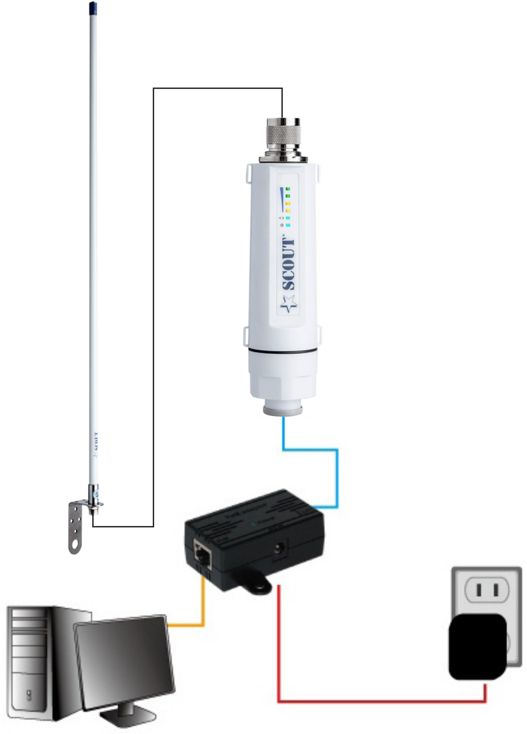


4 Connect the other end of the Ethernet cable from the Rocket to the Ethernet port labeled POE on the PoE Adapter.

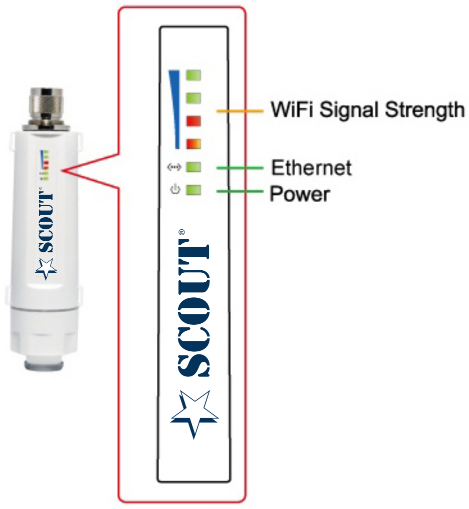
Then, connect the LAN port of the PoE Adapter to a PC using another Ethernet cable (please use only wired network connections to configure the Rocket).

Connect the power cord to the power port on the PoE Adapter. Connect the other end of the power cord to a power outlet.

5 After the above steps have been completed, the final configuration will look similar to the picture below.



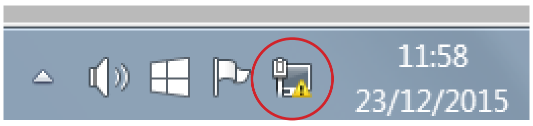
6 Check if the LEDs on the Rocket are displaying normally as illustrated in the next picture.



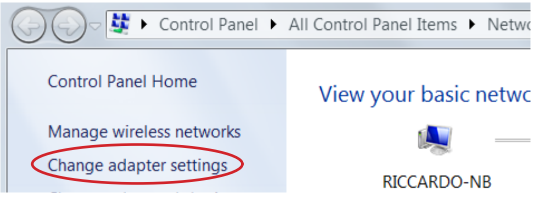
NOTE: If the LEDs are displaying abnormally please check if all the cables are connected to your devices properly.

Initial Connection to Device (Windows)

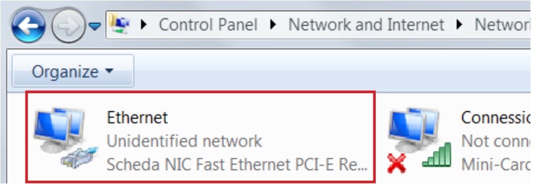
On your desktop look at the Task Tray in the bottom right corner, assuming you have notifications enabled you should see an icon indication similar to that in the picture below.



Position your mouse pointer over the circled icon and click the right mouse button, a dialogue box will appear, click on 'Open Network and Sharing Centre'. When the window in the picture below opens, click on 'Change adapter settings' as indicated.

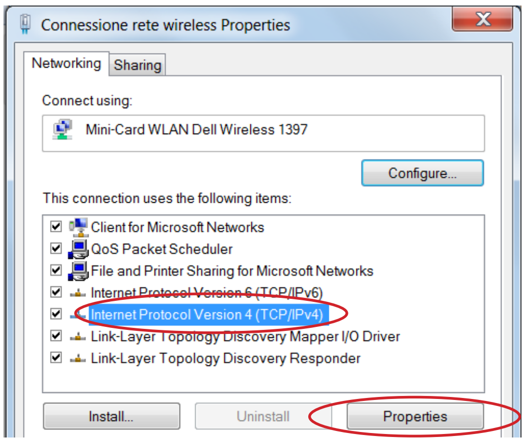


Click on the Local Area Connection/Ethernet icon; labeling may be different to the image in the picture below.


Control Panel ▸ Network and Internet ▸ Networ
Organize ▾
Ethernet
Unidentified network
Scheda NIC Fast Ethernet PCI-E Re...
Connessio
Not conn
Mini-Car

If the Local Area/Ethernet connection has a red cross on the icon you will need to right click on it and select 'Enable' from the top of the list.

Next click the right mouse button and select 'Properties' at the bottom of the list.
When the Properties window opens, scroll down the list until you see: 'Internet Protocol Version 4 (TCP/IPv4)', then select it by clicking the left mouse button, then click 'Properties'.



Connessione rete wireless Properties

Networking | Sharing

Connect using:
Mini-Card WLAN Dell Wireless 1397

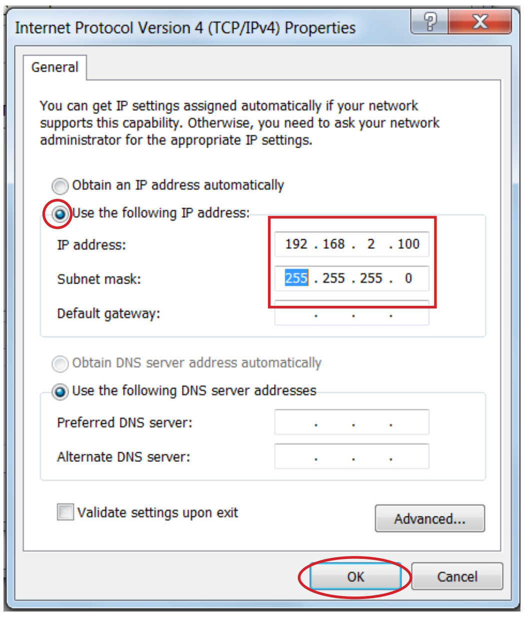
Configure...

This connection uses the following items:
- ☑ Client for Microsoft Networks
- ☑ QoS Packet Scheduler
- ☑ File and Printer Sharing for Microsoft Networks
- ☑ Internet Protocol Version 6 (TCP/IPv6)
- ☑ Internet Protocol Version 4 (TCP/IPv4)
- ☑ Link-Layer Topology Discovery Mapper I/O Driver
- ☑ Link-Layer Topology Discovery Responder

Install... | Uninstall | Properties

Inside the Properties tab 'Obtain an IP address automatically' is likely to be selected, as this is the default.

Instead you will need to select 'Use the following IP address'; this will enable the boxes and allow you to enter the numbers as shown in the next picture.



Internet Protocol Version 4 (TCP/IPv4) Properties

General

You can get IP settings assigned automatically if your network supports this capability. Otherwise, you need to ask your network administrator for the appropriate IP settings.

○ Obtain an IP address automatically
● Use the following IP address:
IP address: 192 . 168 . 2 . 100
Subnet mask: 255 . 255 . 255 . 0
Default gateway: . . .

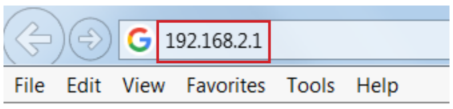
○ Obtain DNS server address automatically
● Use the following DNS server addresses
Preferred DNS server: . . .
Alternate DNS server: . . .

□ Validate settings upon exit | Advanced...

OK | Cancel

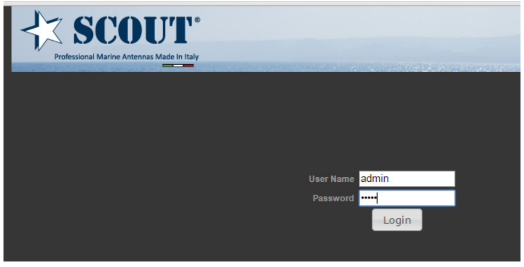
Don't close the window you have just opened as you'll need to change this setting back later on.

Open an Internet browser and click into the Address Bar at the top of the page, then type **192.168.2.1** just like the picture below, then press **ENTER**.



192.168.2.1

You should be greeted with the screen below.

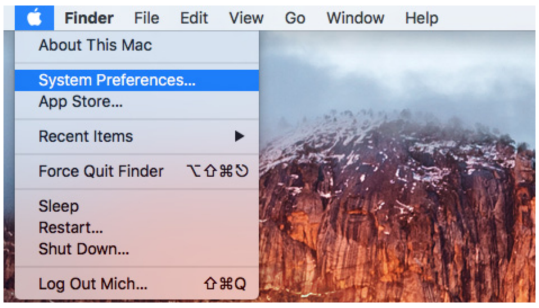


Enter **admin** as both the user and password, then click 'Login'.
The main status screen for the Rocket should now open, from here you can fully configure your device.

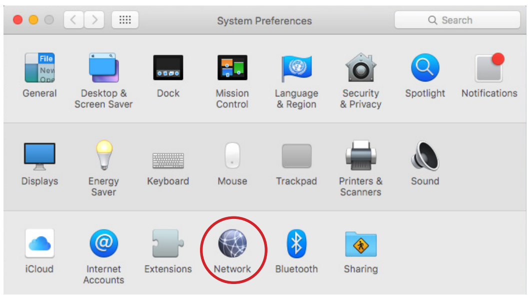
NOTE: When you have finished configuration **DON'T FORGET** to set your Ethernet IP address back to 'Obtain an IP address automatically' or you will not be able to connect to the network through your device.

Initial Connection to Device (MAC)

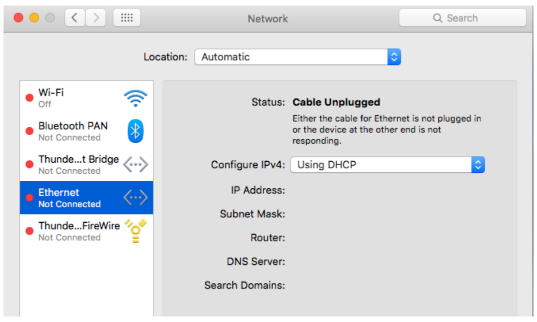
On your desktop go on the Apple menu and select System Preferences.



Then press Network button.



Select Ethernet on the left side menu.


Network

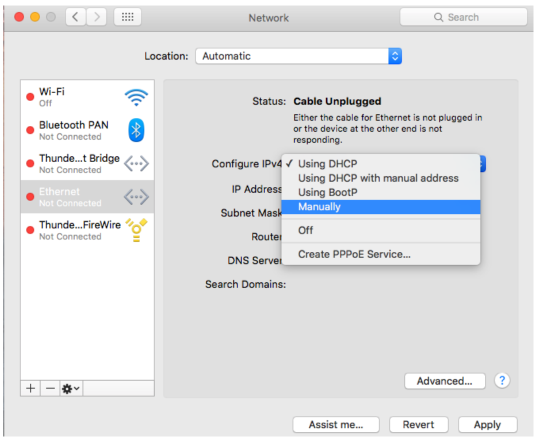
Location: Automatic

Wi-Fi – Off
Bluetooth PAN – Not Connected
Thunde...t Bridge – Not Connected
Ethernet – Not Connected
Thunde...FireWire – Not Connected

Status: **Cable Unplugged**
Either the cable for Ethernet is not plugged in or the device at the other end is not responding.

Configure IPv4: Using DHCP
IP Address:
Subnet Mask:
Router:
DNS Server:
Search Domains:

Select Manually from the 'Configure IPv4' scroll menu.

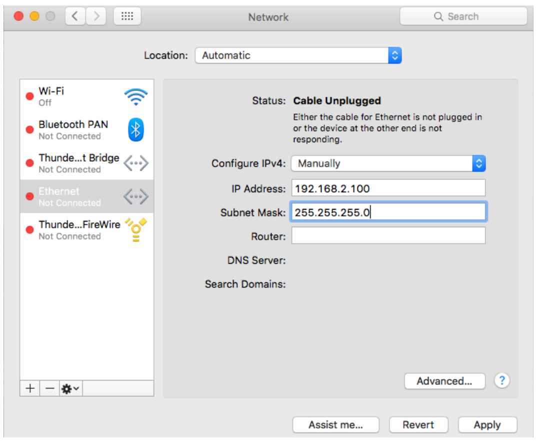

Network

Location: Automatic

Status: **Cable Unplugged**
Either the cable for Ethernet is not plugged in or the device at the other end is not responding.

Configure IPv4:
- ✓ Using DHCP
- Using DHCP with manual address
- Using BootP
- Manually
- Off
- Create PPPoE Service...

Enter the numbers as shown in the picture below, then press **Apply**.


Network

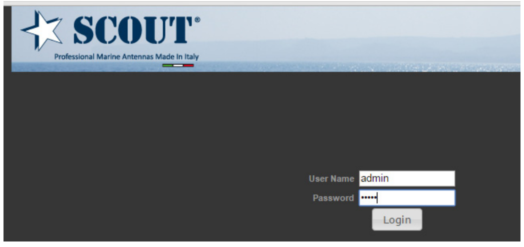
Location: Automatic

Status: **Cable Unplugged**
Either the cable for Ethernet is not plugged in or the device at the other end is not responding.

Configure IPv4: Manually
IP Address: 192.168.2.100
Subnet Mask: 255.255.255.0
Router:
DNS Server:
Search Domains:

Open an Internet browser and click into the Address Bar at the top of the page, then type **192.168.2.1** and press **ENTER**.

You should be greeted with the screen below.



User Name: admin
Password: •••••

Enter **admin** as both the user and password, then click 'Login'.

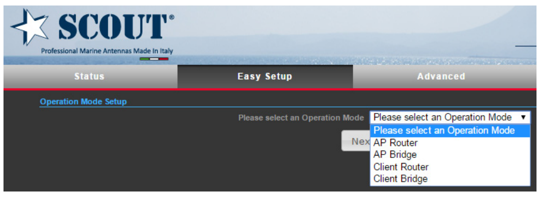
The main status screen for the Rocket should now open, from here you can fully configure your device.

NOTE: When you have finished configuration **DON'T FORGET** to set your Ethernet IP address back to 'Using DHCP' or you will not be able to connect to the network through your device.

Easy Setup

The Easy Setup is designed to help you to configure the basic settings required to get the Rocket up and running.

Click on Easy Setup to bring up the wizard.



Operation Mode Setup

Please select an Operation Mode: Please select an Operation Mode
- Please select an Operation Mode
- AP Router
- AP Bridge
- Client Router
- Client Bridge

AP Router - Connect Ethernet port to a broadband Modem. All devices then connect via WiFi just like a regular wireless Router.

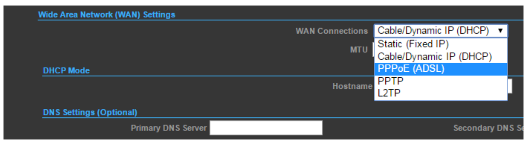
AP Bridge - Connect to a port on a Router to use as a Wireless AP (Access Point).

Client Router - Wirelessly connects to distant source, provides DHCP Router output from wired port. Plug into a wired switch to serve multiple devices by Ethernet, or into an AP (Access Point) to serve multiple devices wirelessly.

Client Bridge - Use when connecting a single device to a distant WiFi source just like a regular wireless adaptor.

Operation mode - AP Router

NOTE: The Ethernet port will convert into WAN port requiring you to configure your CPE via WLAN.


Wide Area Network (WAN) Settings

WAN Connections: Cable/Dynamic IP (DHCP)
- Static (Fixed IP)
- Cable/Dynamic IP (DHCP)
- PPPoE (ADSL)
- PPTP
- L2TP

MTU

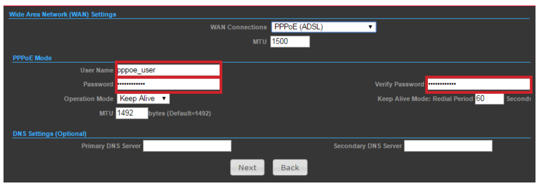
DHCP Mode

Hostname

DNS Settings (Optional)

Primary DNS Server / Secondary DNS Se

Set the PPPoE user name and password for the WAN port.


Wide Area Network (WAN) Settings

WAN Connections: PPPoE (ADSL)
MTU: 1500

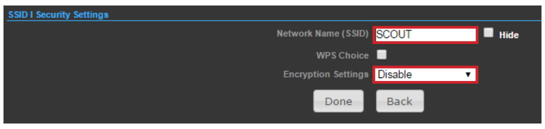
PPPoE Mode

User Name: pppoe_user
Password: ••••••••••••
Verify Password: ••••••••••••
Operation Mode: Keep Alive
Keep Alive Mode: Redial Period: 60 Seconds
MTU: 1492 bytes (Default=1492)

DNS Settings (Optional)

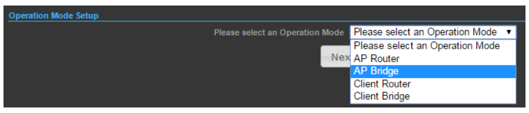
Primary DNS Server / Secondary DNS Server

Create a unique name and security level for your WiFi router.


SSID I Security Settings

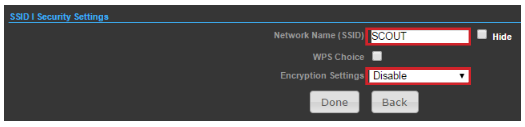
Network Name (SSID): SCOUT □ Hide
WPS Choice: □
Encryption Settings: Disable

Operation mode - AP Bridge


Operation Mode Setup

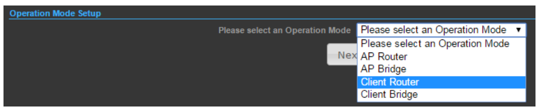
Please select an Operation Mode: Please select an Operation Mode
- Please select an Operation Mode
- AP Router
- AP Bridge
- Client Router
- Client Bridge

Create a unique name and security level for your WiFi router.


SSID I Security Settings

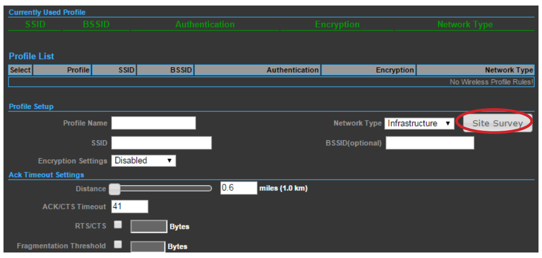
Network Name (SSID): SCOUT □ Hide
WPS Choice: □
Encryption Settings: Disable

Operation mode - Client Router


Operation Mode Setup

Please select an Operation Mode: Please select an Operation Mode
- Please select an Operation Mode
- AP Router
- AP Bridge
- Client Router
- Client Bridge

Press **Site Survey** button to find the remote AP that you want to share.


Currently Used Profile

SSID	BSSID	Authentication	Encryption	Network Type

Profile List

Select	Profile	SSID	BSSID	Authentication	Encryption	Network Type
						No Wireless Profile Rules!

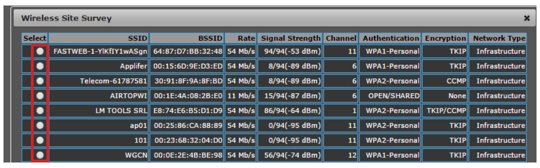
Profile Setup

Profile Name:
Network Type: Infrastructure
SSID:
BSSID(optional):
Encryption Settings: Disabled

Ack Timeout Settings

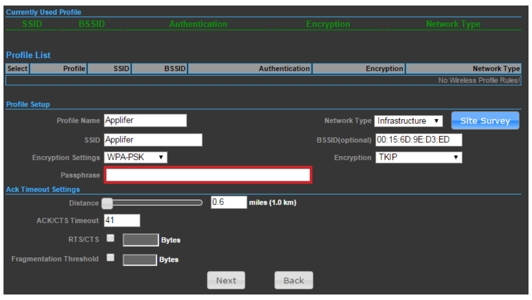
Distance: 0.6 miles (1.0 km)
ACK/CTS Timeout: 41
RTS/CTS □ Bytes
Fragmentation Threshold □ Bytes

Select your target network as shown in the picture below, then press **Select** to continue.


Wireless Site Survey

Select	SSID	BSSID	Rate	Signal Strength	Channel	Authentication	Encryption	Network Type
○	FASTWEB-1-YlKfIY1wASgn	64:87:D7:BB:32:48	54 Mb/s	94/94(-53 dBm)	11	WPA1-Personal	TKIP	Infrastructure
○	Applifer	00:15:6D:9E:D3:ED	54 Mb/s	8/94(-89 dBm)	6	WPA1-Personal	TKIP	Infrastructure
○	Telecom-61787581	30:91:8F:9A:8F:BD	54 Mb/s	8/94(-89 dBm)	6	WPA2-Personal	CCMP	Infrastructure
○	AIRTOPWI	00:1E:4A:08:2B:E0	11 Mb/s	15/94(-87 dBm)	6	OPEN/SHARED	None	Infrastructure
○	LM TOOLS SRL	E8:74:E6:B5:D1:D9	54 Mb/s	86/94(-64 dBm)	1	WPA2-Personal	TKIP/CCMP	Infrastructure
○	ap01	00:25:86:CA:88:89	54 Mb/s	0/94(-95 dBm)	11	WPA2-Personal	TKIP	Infrastructure
○	101	00:23:68:32:04:D0	54 Mb/s	0/94(-95 dBm)	11	WPA2-Personal	TKIP	Infrastructure
○	WGCN	00:0E:2E:4B:BE:98	54 Mb/s	56/94(-74 dBm)	12	WPA1-Personal	TKIP	Infrastructure

Enter the password to access the target network.


Currently Used Profile

SSID	BSSID	Authentication	Encryption	Network Type

Profile List

Select	Profile	SSID	BSSID	Authentication	Encryption	Network Type
						No Wireless Profile Rules!

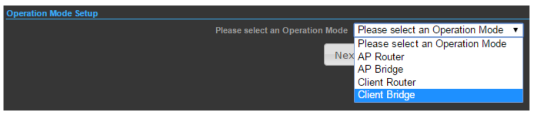
Profile Setup

Profile Name: Applifer
Network Type: Infrastructure
SSID: Applifer
BSSID(optional): 00:15:6D:9E:D3:ED
Encryption Settings: WPA-PSK
Encryption: TKIP
Passphrase:

Ack Timeout Settings

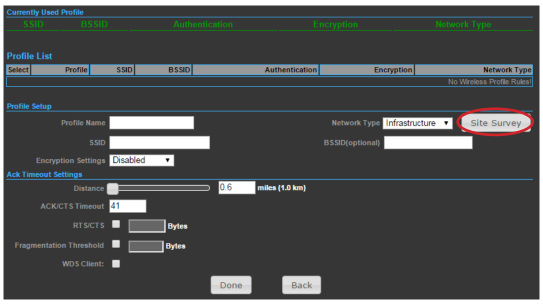
Distance: 0.6 miles (1.0 km)
ACK/CTS Timeout: 41
RTS/CTS □ Bytes
Fragmentation Threshold □ Bytes

Operation mode - Client Bridge


Operation Mode Setup

Please select an Operation Mode: Please select an Operation Mode
- Please select an Operation Mode
- AP Router
- AP Bridge
- Client Router
- Client Bridge

Press **Site Survey** button to find the remote AP that you want to share.


Currently Used Profile

SSID	BSSID	Authentication	Encryption	Network Type

Profile List

Select	Profile	SSID	BSSID	Authentication	Encryption	Network Type
						No Wireless Profile Rules!

Profile Setup

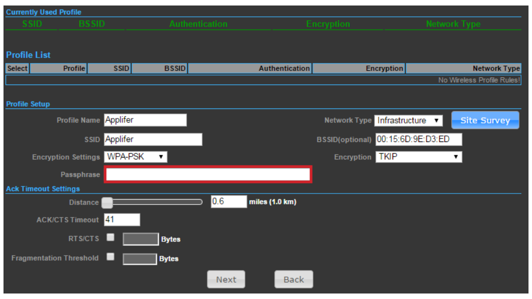
Profile Name:
Network Type: Infrastructure
SSID:
BSSID(optional):
Encryption Settings: Disabled

Ack Timeout Settings

Distance: 0.6 miles (1.0 km)
ACK/CTS Timeout: 41
RTS/CTS □ Bytes
Fragmentation Threshold □ Bytes
WDS Client: □

Select your target network then press **Select** to continue.

Enter the password to access the target network as shown in the next picture.


Currently Used Profile

SSID	BSSID	Authentication	Encryption	Network Type

Profile List

Select	Profile	SSID	BSSID	Authentication	Encryption	Network Type
						No Wireless Profile Rules!

Profile Setup

Profile Name: Applifer
Network Type: Infrastructure
SSID: Applifer
BSSID(optional): 00:15:6D:9E:D3:ED
Encryption Settings: WPA-PSK
Encryption: TKIP
Passphrase:

Ack Timeout Settings

Distance: 0.6 miles (1.0 km)
ACK/CTS Timeout: 41
RTS/CTS □ Bytes
Fragmentation Threshold □ Bytes

Caution:

1. Please use specific PoE injector and power adapter included in the package content.
2. Please visit our website **www.scoutantenne.com** to download the **advanced user manual** for more detailed configuration settings.

SCOUT®
Professional Marine Antennas Made In Italy

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web: www.scoutantenne.com | e-mail: scout@scoutantenne.com

Technical specifications here included may change without prior notice.

SCOUT®

Professional Marine Antennas Made In Italy

Advanced User Manual

ROCKET

802.11b/g/n Outdoor Access Point, Repeater, Client

2.4GHz

Ethernet

WaterProof

www.scoutantenne.com

ed. 01-2016

TABLE OF CONTENTS

INTRODUCTION

- HARDWARE DESCRIPTION

The ROCKET is a 1X1 MIMO IEEE 802.11b/g/n wireless outdoor AP/CPE which supports data rates up to 150Mbps. It is rain and splash proof when install in upright position. The ROCKET also supports N type connector and passive PoE for simplify installation.

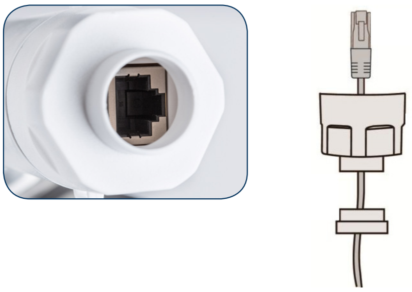
- HARDWARE INSTALLATION

Step 1 - Locate a suitable mounting site for your ROCKET unit. Suitable locations would be elevated area with all round clear view of the horizon, to avoid interferences with the antenna signal. The Rocket should be mounted vertically to reduce stress on the N-Type Connector.

Step 2 - Connect the ROCKET to the N-Type connector of the Scout KS-61 antenna (*Picture 1*).

Picture 1

Step 3 - Connect the Ethernet cable to the port located on the bottom of the ROCKET (*Picture 2*).



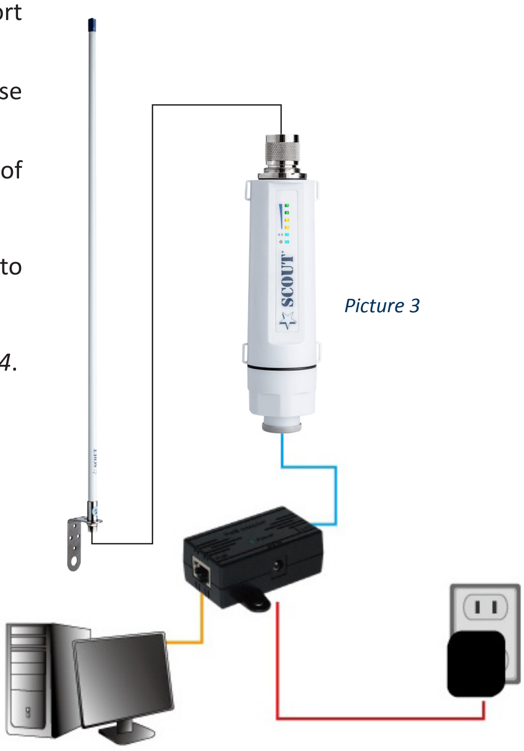
Picture 2

Step 4 - Connect the other end of the Ethernet cable from the ROCKET to the Ethernet port labeled POE on the PoE Adapter.

Then, connect the LAN port of the PoE Adapter to a PC using another Ethernet cable (please use only wired network connections to configure the ROCKET).

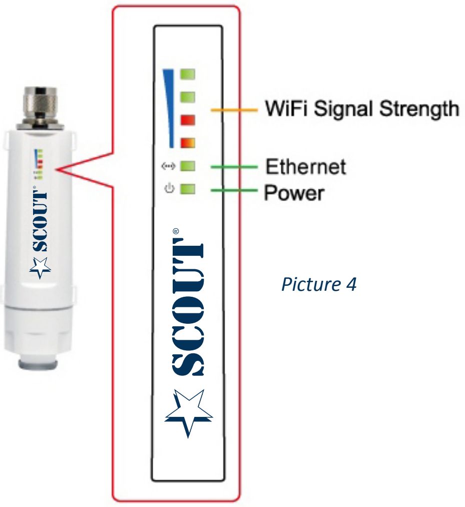
Connect the power cord to the power port on the PoE Adapter. Connect the other end of the power cord to a power outlet.

After the above steps have been completed, the final configuration will look similar to *Picture 3*.



Picture 3

Step 5 - Check if the LEDs on the ROCKET are displaying normally as illustrated in *Picture 4*.



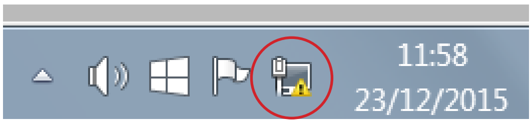
Picture 4

NOTE: If the LEDs are displaying abnormally lease check if all the cables are connected to your devices properly.

INITIAL CONFIGURATION

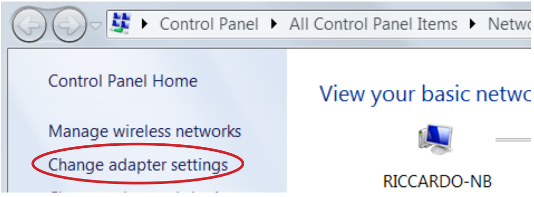
- CONNECTING TO THE LOGIN PAGE (WINDOWS)

On your desktop look at the Task Tray in the bottom right corner, assuming you have notifications enabled you should see an icon indication similar to that in the picture below (*Picture 5*).



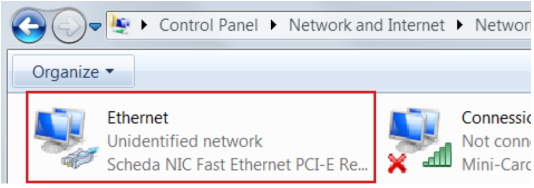
Picture 5

Position your mouse pointer over the circled icon and click the right mouse button, a dialogue box will appear, click on ‘Open Network and Sharing Centre’. When the window in the picture below opens, click on ‘Change adapter settings’ as indicated in *Picture 6*.



Picture 6

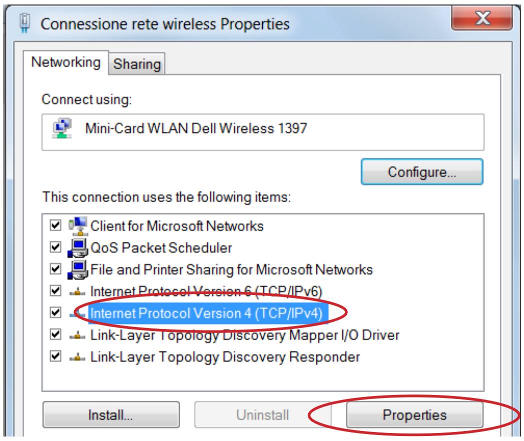
Click on the Local Area Connection/Ethernet icon; labeling may be different to the image in *Picture 7*.



Picture 7

If the Local Area/Ethernet connection has a red cross on the icon you will need to right click on it and select ‘Enable’ from the top of the list.

Next click the right mouse button and select ‘Properties’ at the bottom of the list.
When the Properties window opens, scroll down the list until you see: ‘Internet Protocol Version 4 (TCP/IPv4)’, then select it by clicking the left mouse button, then click ‘Properties’ (*Picture 8*).



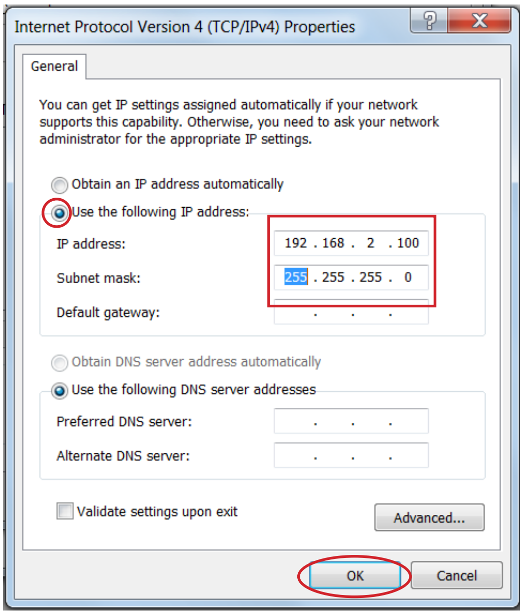
Connect using:
Mini-Card WLAN Dell Wireless 1397

This connection uses the following items:
- ☑ Client for Microsoft Networks
- ☑ QoS Packet Scheduler
- ☑ File and Printer Sharing for Microsoft Networks
- ☑ Internet Protocol Version 6 (TCP/IPv6)
- ☑ Internet Protocol Version 4 (TCP/IPv4)
- ☑ Link-Layer Topology Discovery Mapper I/O Driver
- ☑ Link-Layer Topology Discovery Responder

Picture 8

Inside the Properties tab ‘Obtain an IP address automatically’ is likely to be selected, as this is the default.

Instead you will need to select ‘Use the following IP address’; this will enable the boxes and allow you to enter the numbers as shown in *Picture 9*.



Internet Protocol Version 4 (TCP/IPv4) Properties

General

You can get IP settings assigned automatically if your network supports this capability. Otherwise, you need to ask your network administrator for the appropriate IP settings.

○ Obtain an IP address automatically

● Use the following IP address:

IP address: 192 . 168 . 2 . 100

Subnet mask: 255 . 255 . 255 . 0

Default gateway: . . .

○ Obtain DNS server address automatically

● Use the following DNS server addresses

Preferred DNS server: . . .

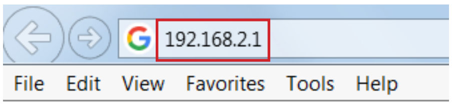
Alternate DNS server: . . .

□ Validate settings upon exit

Picture 9

Don't close the window you have just opened as you'll need to change this setting back later on.

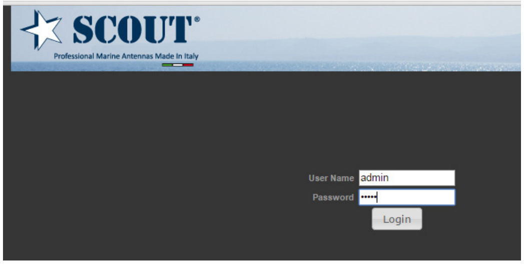
Open an Internet browser and click into the Address Bar at the top of the page, then type **192.168.2.1** just like the picture below (*Picture 10*), then press **ENTER**.



192.168.2.1

Picture 10

You should be greeted with the screen below (*Picture 11*).



User Name admin

Password •••••

Picture 11

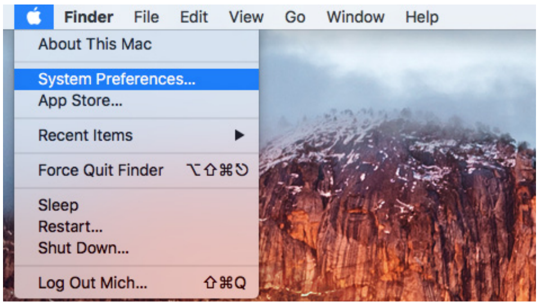
Enter **admin** as both the user and password, then click 'Login'.

The main status screen for the Rocket should now open, from here you can fully configure your device.

NOTE: When you have finished configuration **DON'T FORGET** to set your Ethernet IP address back to 'Obtain an IP address automatically' or you will not be able to connect to the network through your device.

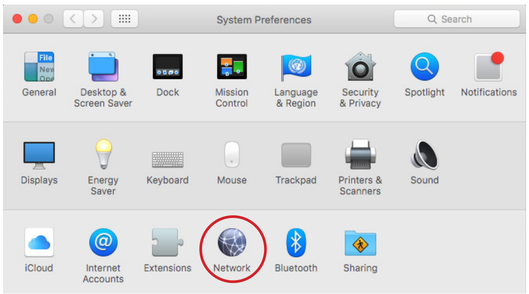
- CONNECTING TO THE LOGIN PAGE (MAC)

On your desktop go on the Apple menu and select System Preferences (*Picture 12*).



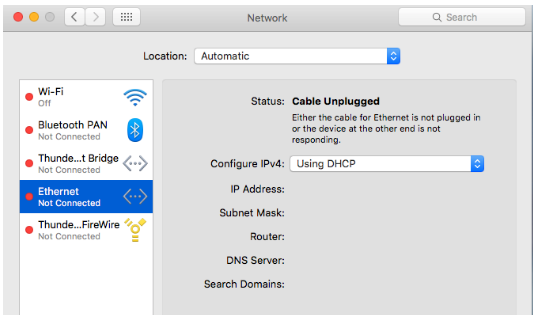
Picture 12

Then press Network button (*Picture 13*).



Picture 13

Select Ethernet on the left side menu (*Picture 14*).

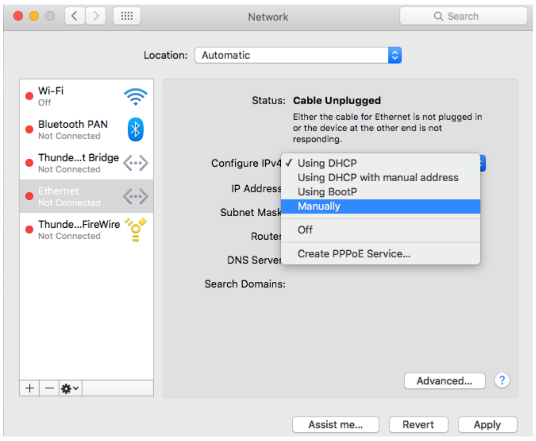


Status: **Cable Unplugged**
Either the cable for Ethernet is not plugged in or the device at the other end is not responding.

Configure IPv4: Using DHCP
IP Address:
Subnet Mask:
Router:
DNS Server:
Search Domains:

Picture 14

Select Manually from the ‘Configure IPv4’ scroll menu (*Picture 15*).

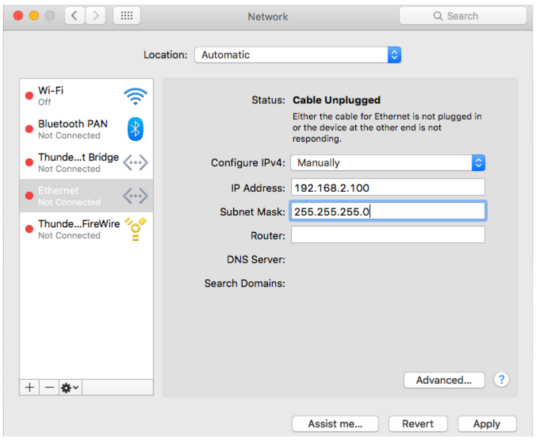


Status: **Cable Unplugged**
Either the cable for Ethernet is not plugged in or the device at the other end is not responding.

Configure IPv4
IP Address
Subnet Mask
Router
DNS Server
Search Domains:

Picture 15

Enter the numbers as shown in *Picture 16*, then press **Apply**.



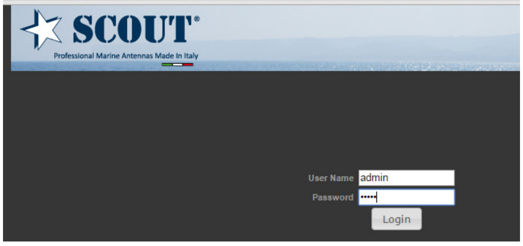
Location: Automatic

Status: **Cable Unplugged**
Either the cable for Ethernet is not plugged in or the device at the other end is not responding.

Configure IPv4: Manually
IP Address: 192.168.2.100
Subnet Mask: 255.255.255.0
Router:
DNS Server:
Search Domains:

Picture 16

Open an Internet browser and click into the Address Bar at the top of the page, then type **192.168.2.1** and press **ENTER**.
You should be greeted with the screen below (*Picture 17*).



User Name admin
Password •••••

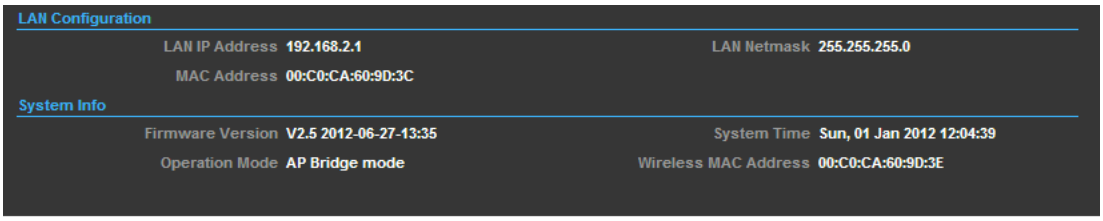
Picture 17

Enter **admin** as both the user and password, then click ‘Login’.
The main status screen for the ROCKET should now open, from here you can fully configure your device.

NOTE: When you have finished configuration **DON’T FORGET** to set your Ethernet IP address back to ‘Using DHCP’ or you will not be able to connect to the network through your device.

STATUS PAGE

After logging in to the web interface, the Status page displays. The Home page top-menu-bar shows the Status, Easy Setup, Advanced and Language (*Picture 18*).



LAN Configuration

LAN IP Address 192.168.2.1
LAN Netmask 255.255.255.0
MAC Address 00:C0:CA:60:9D:3C

System Info

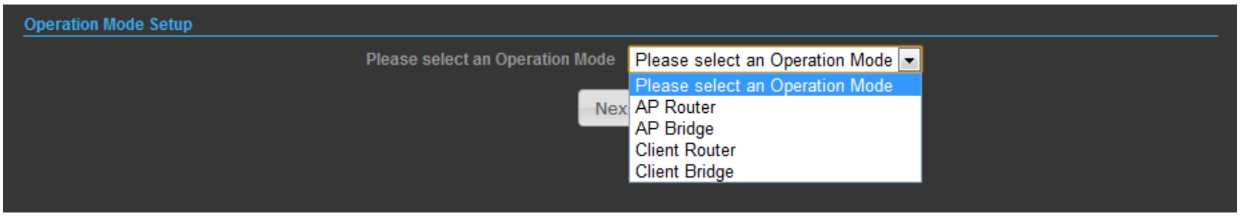
Firmware Version V2.5 2012-06-27-13:35
System Time Sun, 01 Jan 2012 12:04:39
Operation Mode AP Bridge mode
Wireless MAC Address 00:C0:CA:60:9D:3E

Picture 18

EASY SETUP

The Easy Setup is designed to help you to configure the basic settings required to get the ROCKET up and running. There are only a few basic steps you need to set up the ROCKET to get the connection.

Click on Easy Setup to bring up the wizard (*Picture 19*).



Operation Mode Setup

Please select an Operation Mode: Please select an Operation Mode

Picture 19

If you want to configure a router connection, please select **AP Router**.

If you want to configure to an access point, please select **AP Bridge**.

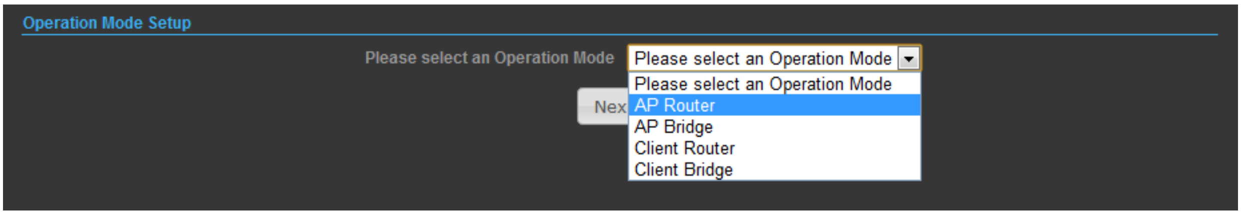
If you want to configure to WISP, please select **Client Router**.

If you want to configure to WiFi client, please select **Client Bridge**.

- OPERATION MODE (AP ROUTER)

Choose menu “Easy Setup” and select AP Router if you want to configure a router connection (*Picture 20*).

NOTE: The Ethernet port will convert into WAN port requiring you to configure your CPE via WLAN.



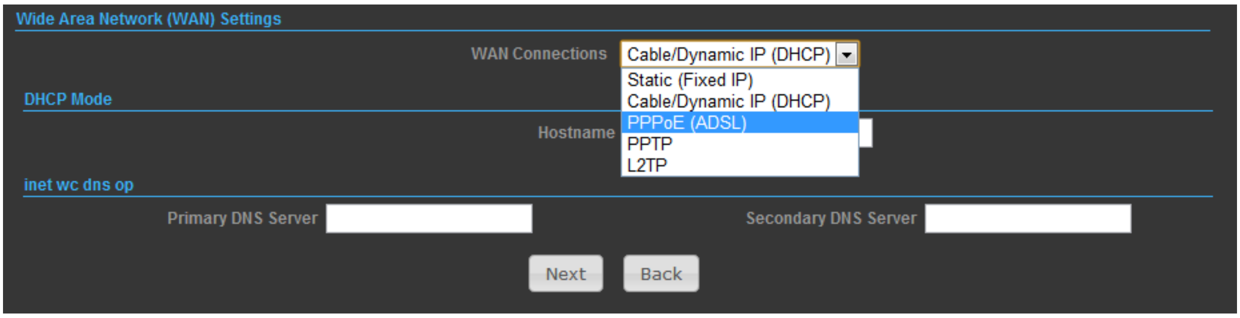
Operation Mode Setup

Please select an Operation Mode: Please select an Operation Mode

Picture 20

- - SETTINGS – PPPoE(ADSL)

1) Select PPPoE to be assigned automatically from an Internet service provider (ISP) through a DSL modem using Point-to-Point Protocol over Ethernet (PPPoE) (*Picture 21*).



Wide Area Network (WAN) Settings

WAN Connections: Cable/Dynamic IP (DHCP)

DHCP Mode

Hostname

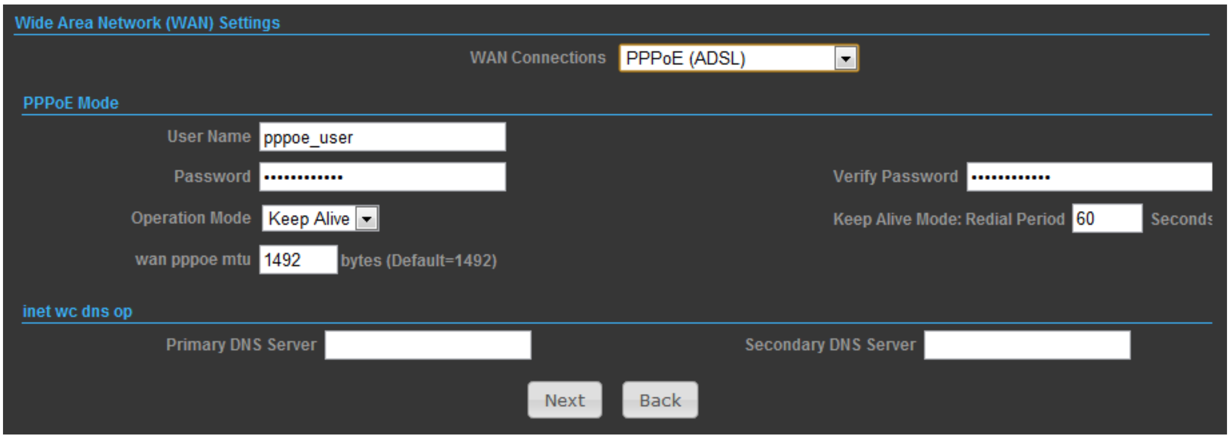
inet wc dns op

Primary DNS Server

Secondary DNS Server

Picture 21

2) User Name - Sets the PPPoE user name for the WAN port.
Password - Sets a PPPoE password for the WAN port.
Verify Password - Prompts you to re-enter your chosen password.
Operation Mode - Enables and configures the keep alive time and configures the on-demand idle time.

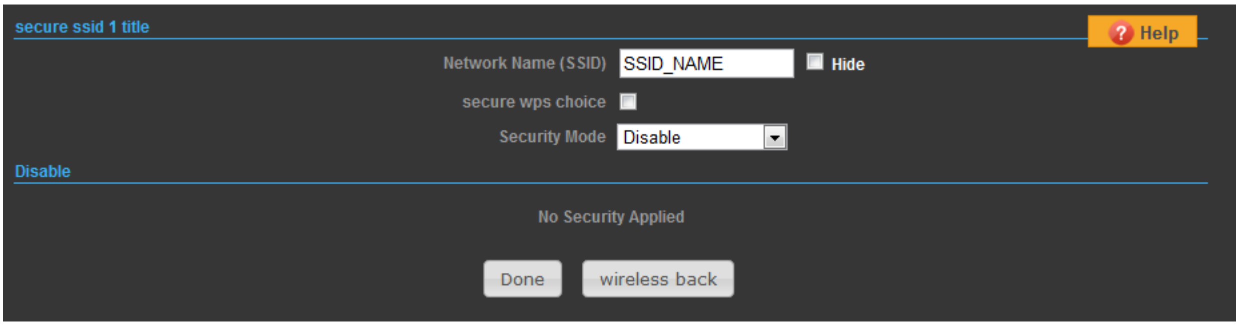

Wide Area Network (WAN) Settings
WAN Connections: PPPoE (ADSL)
PPPoE Mode
User Name: pppoe_user
Password: ············
Verify Password: ············
Operation Mode: Keep Alive
Keep Alive Mode: Redial Period: 60 Seconds
wan pppoe mtu: 1492 bytes (Default=1492)
inet wc dns op
Primary DNS Server:
Secondary DNS Server:

Picture 22

3) Security Setup

Network Name (SSID) - SSID (Service Set Identification) must be assigned to all wireless devices in your network. Considering your wireless network security.

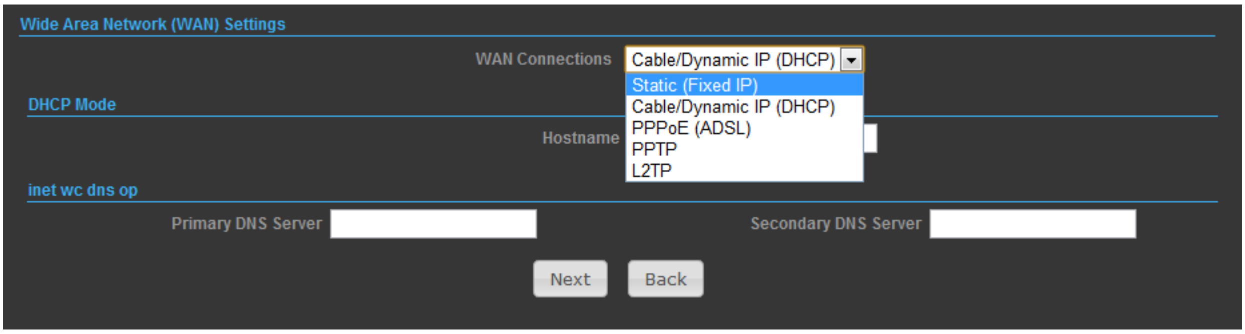
Security Mode - Select the security method and then configure the required parameters.
(Options: Disabled, WEP-AUTO, WPA-PSK, WPA2-PSK, WPA-Auto-PSK, WPA, WPA2, WPA-Auto, 802.1X; Default: Disabled)


secure ssid 1 title
Network Name (SSID): SSID_NAME □ Hide
secure wps choice □
Security Mode: Disable
Disable
No Security Applied

Picture 23

- - SETTINGS – STATIC (FIXED IP)

1) Select Static (Fixed IP), if your Internet service provider (ISP) to be permanent address on the Internet. A Static IP address is a number (in the form of a dotted quad).


Wide Area Network (WAN) Settings
WAN Connections: Cable/Dynamic IP (DHCP)
DHCP Mode
Hostname
inet wc dns op
Primary DNS Server:
Secondary DNS Server:

Picture 24

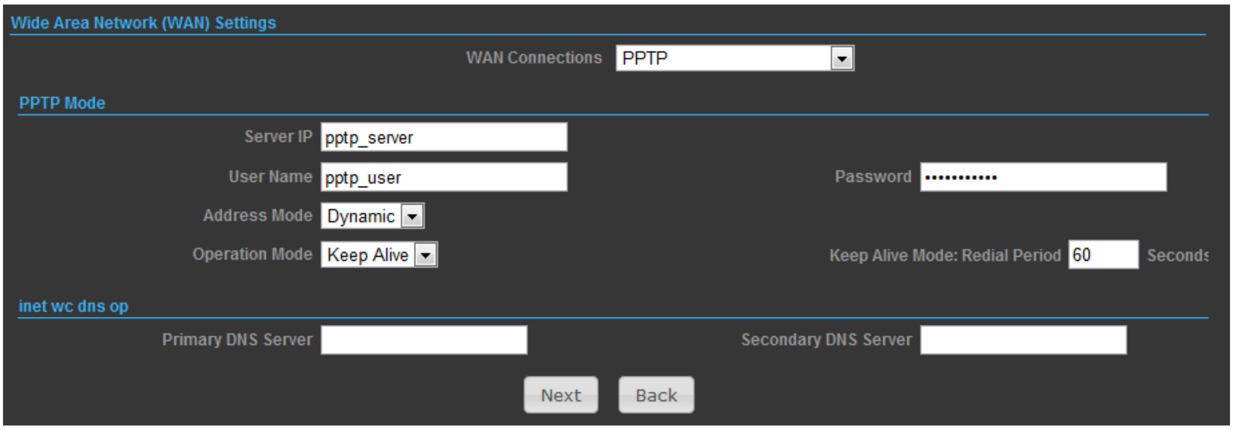
2) IP Address - Sets the static IP address.

Subnet Mask - Sets the static IP subnet mask. (Default: 255.255.255.0)

Default Gateway - The IP address of a router that is used when the requested destination IP address is not on the local subnet.

Primary DNS Server - The IP address of the Primary Domain Name Server. A DNS maps numerical IP addresses to domain names and can be used to identify network hosts by familiar names instead of the IP addresses. To specify a DNS server, type the IP addresses in the text field provided. Otherwise, leave the text field blank.

Secondary DNS Server - The IP address of the Secondary Domain Name Server.



Wide Area Network (WAN) Settings

WAN Connections: PPTP

PPTP Mode

Server IP: pptp_server

User Name: pptp_user

Password: ••••••••••••

Address Mode: Dynamic

Operation Mode: Keep Alive

Keep Alive Mode: Redial Period: 60 Seconds

inet wc dns op

Primary DNS Server:

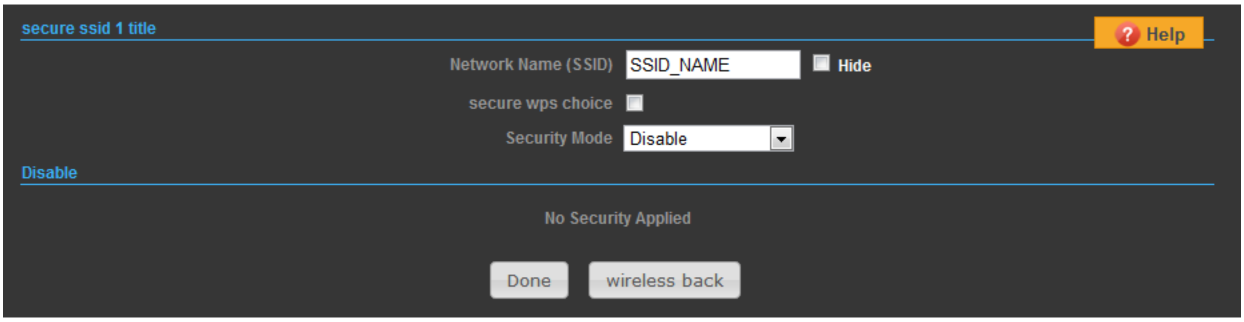
Secondary DNS Server:

Picture 25

3) Security Setup

Network Name (SSID) - SSID (Service Set Identification) must be assigned to all wireless devices in your network. Considering your wireless network security.

Security Mode - Select the security method and then configure the required parameters.
(Options: Disabled, WEP-AUTO, WPA-PSK, WPA2-PSK, WPA-Auto-PSK, WPA, WPA2, WPA-Auto, 802.1X; Default: Disabled)



secure ssid 1 title

Network Name (SSID): SSID_NAME ☐ Hide

secure wps choice ☐

Security Mode: Disable

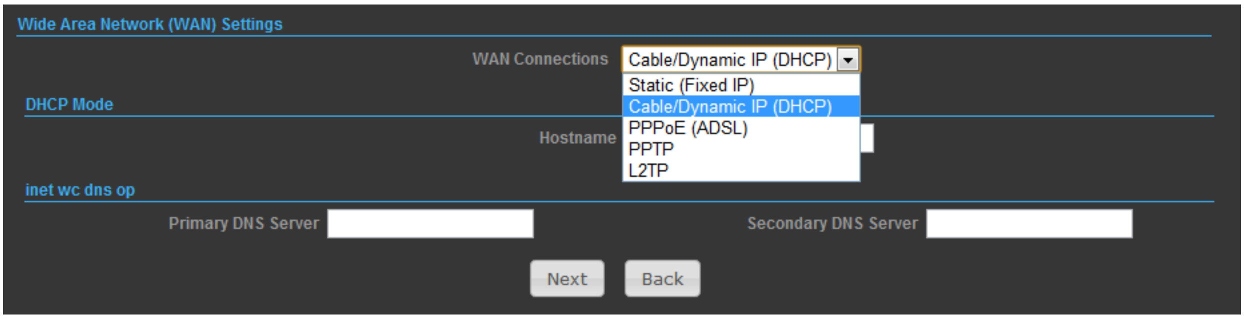
Disable

No Security Applied

Picture 26

- - SETTINGS – CABLE/DYNAMIC IP (DHCP)

1) Select Cable/Dynamic IP (DHCP), if your Internet service provider (ISP) use a DHCP service to assign your Router an IP address when connecting to the Internet.



Wide Area Network (WAN) Settings

WAN Connections: Cable/Dynamic IP (DHCP)

DHCP Mode

Hostname:

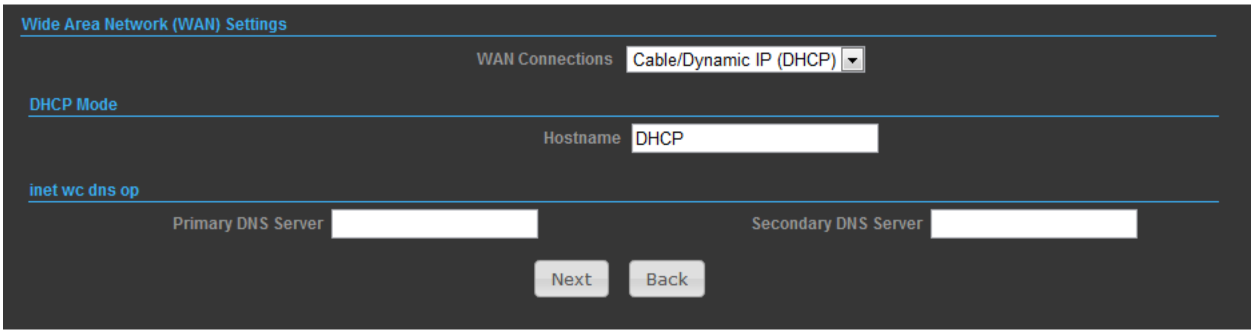
inet wc dns op

Primary DNS Server:

Secondary DNS Server:

Picture 27

2) The host name that you selected from the DHCP service provider.


Wide Area Network (WAN) Settings

WAN Connections: Cable/Dynamic IP (DHCP)

DHCP Mode

Hostname: DHCP

inet wc dns op

Primary DNS Server:

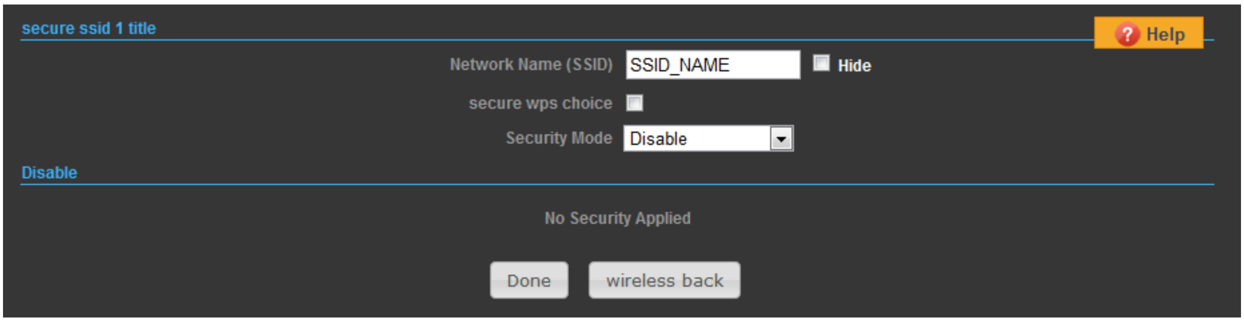
Secondary DNS Server:

Picture 28

3) Security Setup

Network Name (SSID) - SSID (Service Set Identification) must be assigned to all wireless devices in your network. Considering your wireless network security.

Security Mode - Select the security method and then configure the required parameters.
(Options: Disabled, WEP-AUTO, WPA-PSK, WPA2-PSK, WPA-Auto-PSK, WPA, WPA2, WPA-Auto, 802.1X; Default: Disabled)


secure ssid 1 title

Network Name (SSID): SSID_NAME □ Hide

secure wps choice □

Security Mode: Disable

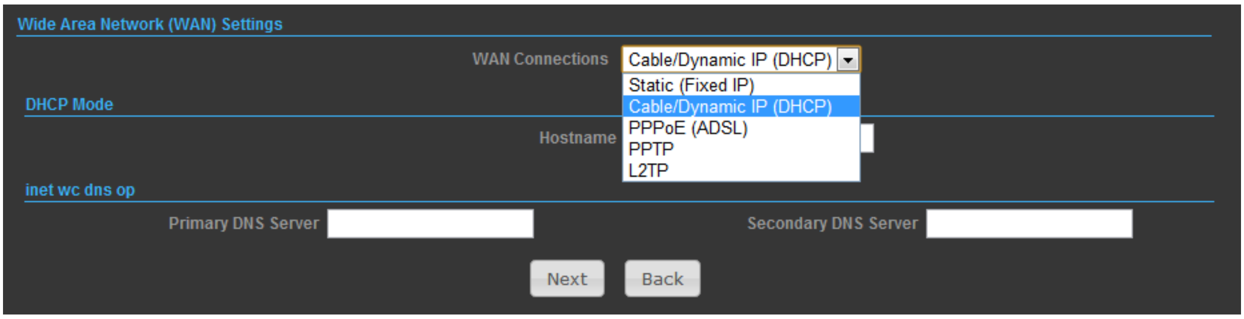
Disable

No Security Applied

Picture 29

- - SETTINGS – PPTP

1) Select PPTP, if you are using PPTP service to gain connection to the Internet.


Wide Area Network (WAN) Settings

WAN Connections: Cable/Dynamic IP (DHCP)

DHCP Mode

Hostname

inet wc dns op

Primary DNS Server:

Secondary DNS Server:

Picture 30

2) Server IP - Sets the PPTP server IP Address. (Default: pptp_server)

User Name - Sets the PPTP user name for the WAN port.

Password - Sets a PPTP password for the WAN port.

Address Mode - Sets a PPTP network mode. (Default: Dynamic IP)

Operation Mode - Enables and configures the keep alive time.

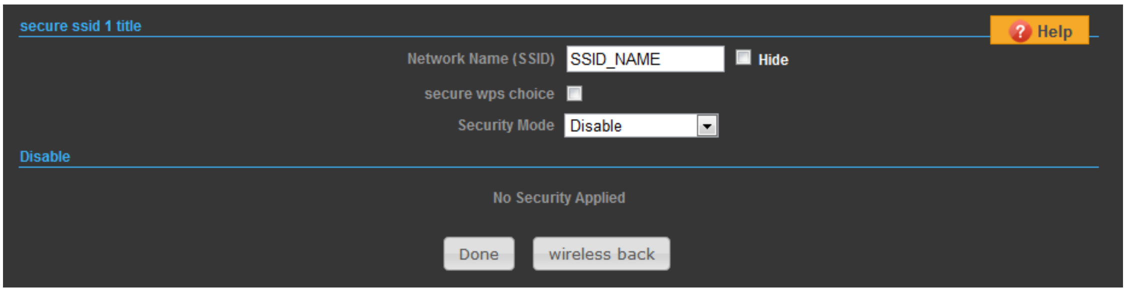
Primary DNS Server - The IP address of the Primary Domain Name Server. A DNS maps numerical IP addresses to domain names and can be used to identify network hosts by familiar names instead of the IP addresses. To specify a DNS server, type the IP addresses in the text field provided. Otherwise, leave the text field blank.

Secondary DNS Server - The IP address of the Secondary Domain Name Server.

3) Security Setup

Network Name (SSID) - SSID (Service Set Identification) must be assigned to all wireless devices in your network. Considering your wireless network security.

Security Mode - Select the security method and then configure the required parameters.
(Options: Disabled, WEP-AUTO, WPA-PSK, WPA2-PSK, WPA-Auto-PSK, WPA, WPA2, WPA-Auto, 802.1X; Default: Disabled)



secure ssid 1 title

Network Name (SSID): SSID_NAME ☐ Hide

secure wps choice ☐

Security Mode: Disable

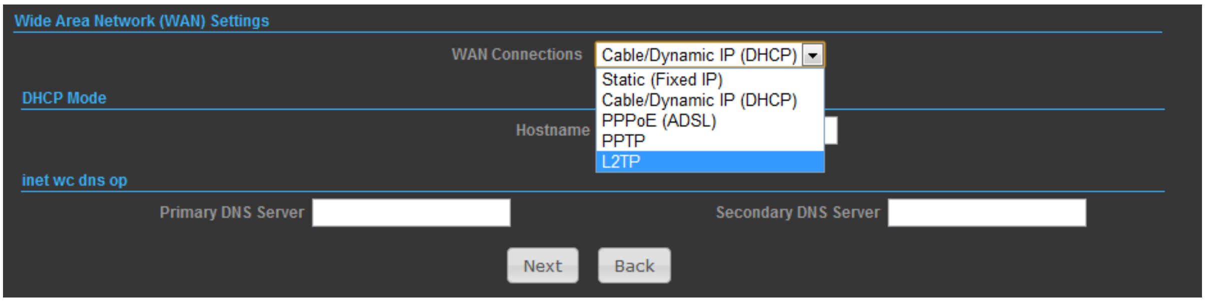
Disable

No Security Applied

Picture 31

- - SETTINGS – L2TP

1) Select L2TP, if you are using PPTP service to gain connection to the Internet.



Wide Area Network (WAN) Settings

WAN Connections: Cable/Dynamic IP (DHCP)

DHCP Mode

Hostname

inet wc dns op

Primary DNS Server

Secondary DNS Server

Picture 32

2) Server IP - Sets the L2TP server IP Address. (Default: l2tp_server)

User Name - Sets the L2TP user name for the WAN port.

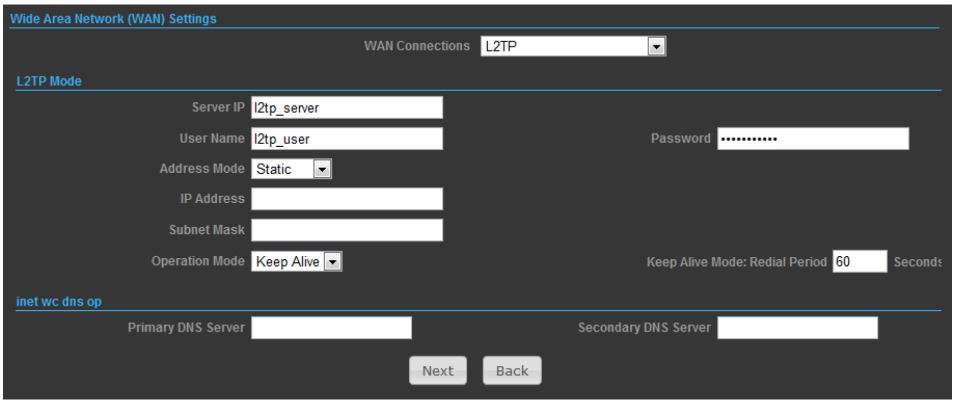
Password - Sets a L2TP password for the WAN port.

Address Mode - Sets a L2TP network mode. (Default: Dynamic IP)

Operation Mode - Enables and configures the keep alive time.

Primary DNS Server - The IP address of the Primary Domain Name Server. A DNS maps numerical IP addresses to domain names and can be used to identify network hosts by familiar names instead of the IP addresses. To specify a DNS server, type the IP addresses in the text field provided. Otherwise, leave the text field blank.

Secondary DNS Server - The IP address of the Secondary Domain Name Server.



Wide Area Network (WAN) Settings

WAN Connections: L2TP

L2TP Mode

Server IP: l2tp_server

User Name: l2tp_user

Password: •••••••••••

Address Mode: Static

IP Address

Subnet Mask

Operation Mode: Keep Alive

Keep Alive Mode: Redial Period: 60 Seconds

inet wc dns op

Primary DNS Server

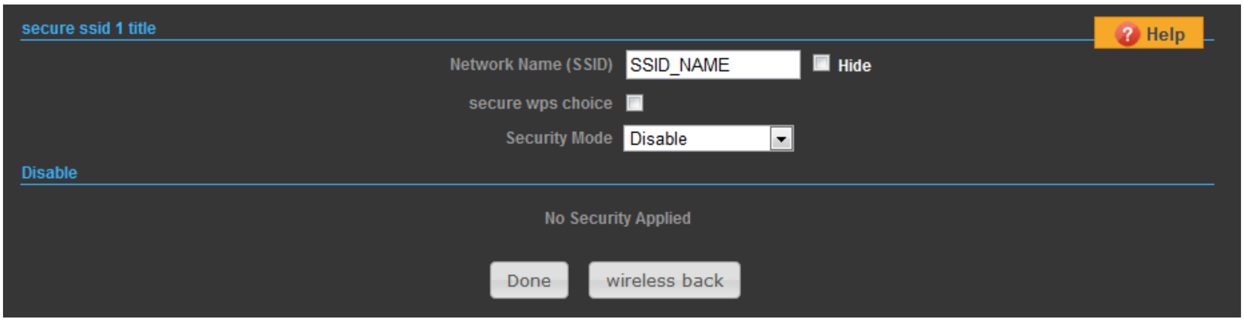
Secondary DNS Server

Picture 33

3) Security Setup

Network Name (SSID) - SSID (Service Set Identification) must be assigned to all wireless devices in your network. Considering your wireless network security.

Security Mode - Select the security method and then configure the required parameters.
(Options: Disabled, WEP-AUTO, WPA-PSK, WPA2-PSK, WPA-Auto-PSK, WPA, WPA2, WPA-Auto, 802.1X; Default: Disabled)


secure ssid 1 title

Network Name (SSID): SSID_NAME □ Hide

secure wps choice □

Security Mode: Disable

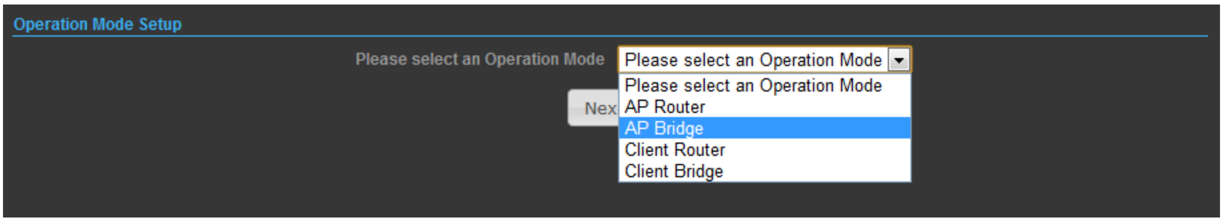
Disable

No Security Applied

Picture 34

- OPERATION MODE (AP BRIDGE)

Choose menu “Easy Setup” and select AP Bridge if you want to configure to an access point (*Picture 35*).


Operation Mode Setup

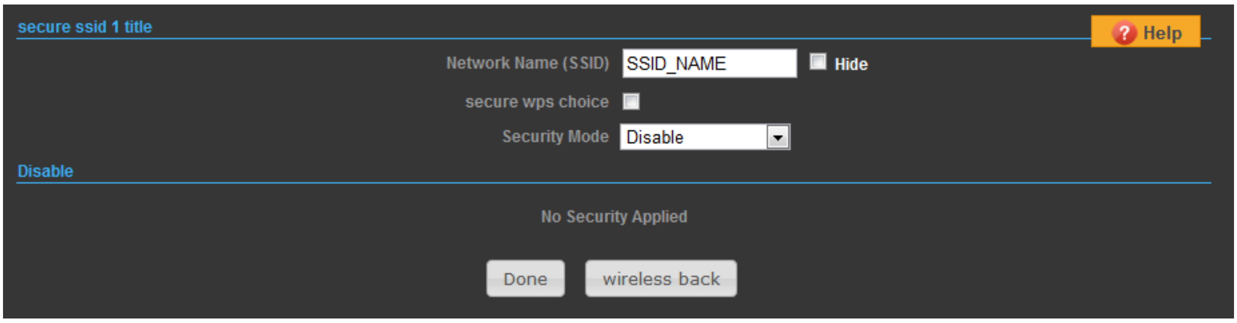
Please select an Operation Mode: Please select an Operation Mode

Picture 35

1) Security Setup

Network Name (SSID) - SSID (Service Set Identification) must be assigned to all wireless devices in your network. Considering your wireless network security.

Security Mode - Select the security method and then configure the required parameters.
(Options: Disabled, Open, Shared, WEP-AUTO, WPA-PSK, WPA2-PSK, WPA-PSK_WPA2-PSK, WPA, WPA2, WPA1_WPA2, 802.1X; Default: Disabled)


secure ssid 1 title

Network Name (SSID): SSID_NAME □ Hide

secure wps choice □

Security Mode: Disable

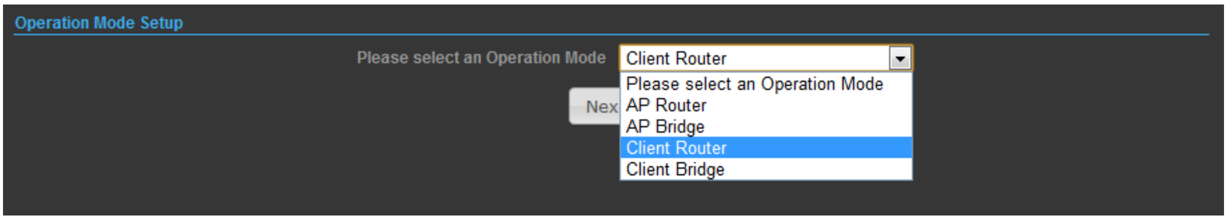
Disable

No Security Applied

Picture 36

- OPERATION MODE (CLIENT ROUTER)

The Client Router mode is also known as WISP. The ROCKET wireless side is connected to the remote AP (Base-Station) as in Client Infrastructure mode. Between the wireless and LAN is the IP sharing router function. This is used to share Client Router connection. The WAN is on the wireless side.

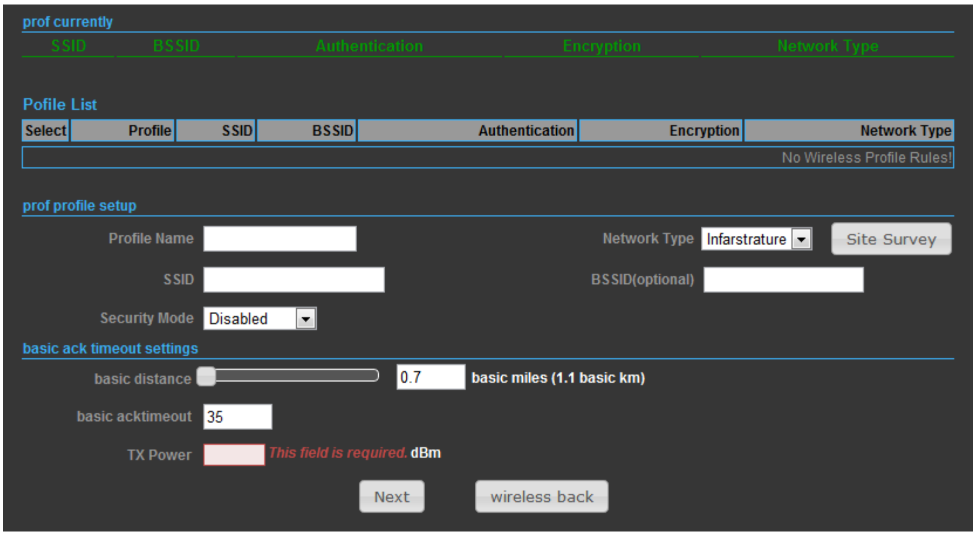


Operation Mode Setup

Please select an Operation Mode: Client Router

Picture 37

1) Press Site Survey button and look for available wireless network then click on the SSID that you attempt to connect to it; Applifer is the SSID that we are going to connect in this example. Press Next button when finished (*Picture 38 - Picture 39*)



prof currently

SSID	BSSID	Authentication	Encryption	Network Type

Pofile List

Select	Profile	SSID	BSSID	Authentication	Encryption	Network Type
No Wireless Profile Rules!						

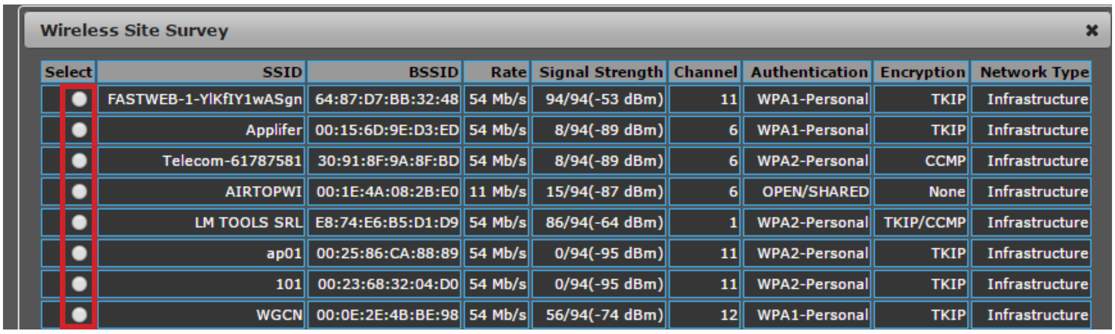
prof profile setup

Profile Name:
Network Type: Infarstrature
SSID:
BSSID(optional):
Security Mode: Disabled

basic ack timeout settings

basic distance: 0.7 basic miles (1.1 basic km)
basic acktimeout: 35
TX Power: This field is required. dBm

Picture 38

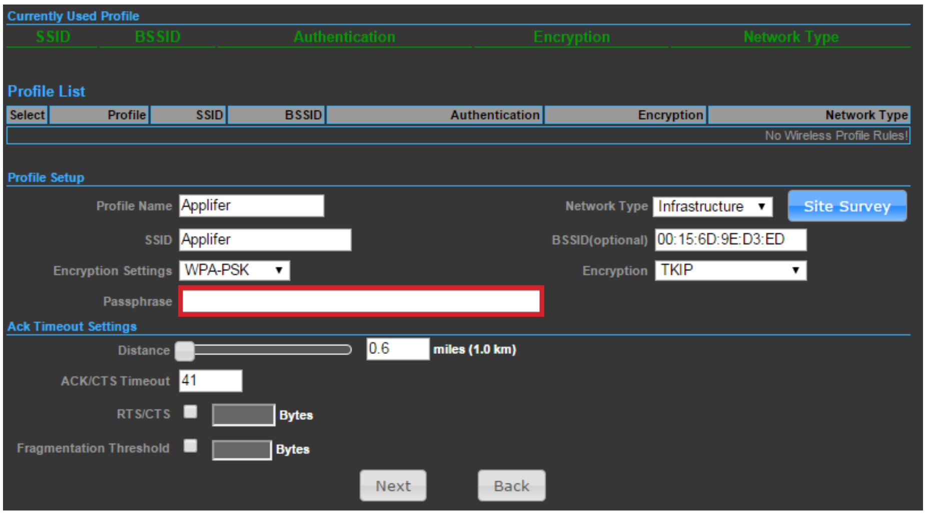


Wireless Site Survey

Select	SSID	BSSID	Rate	Signal Strength	Channel	Authentication	Encryption	Network Type
○	FASTWEB-1-YIKfIY1wASgn	64:87:D7:BB:32:48	54 Mb/s	94/94(-53 dBm)	11	WPA1-Personal	TKIP	Infrastructure
○	Applifer	00:15:6D:9E:D3:ED	54 Mb/s	8/94(-89 dBm)	6	WPA1-Personal	TKIP	Infrastructure
○	Telecom-61787581	30:91:8F:9A:8F:BD	54 Mb/s	8/94(-89 dBm)	6	WPA2-Personal	CCMP	Infrastructure
○	AIRTOPWI	00:1E:4A:08:2B:E0	11 Mb/s	15/94(-87 dBm)	6	OPEN/SHARED	None	Infrastructure
○	LM TOOLS SRL	E8:74:E6:B5:D1:D9	54 Mb/s	86/94(-64 dBm)	1	WPA2-Personal	TKIP/CCMP	Infrastructure
○	ap01	00:25:86:CA:88:89	54 Mb/s	0/94(-95 dBm)	11	WPA2-Personal	TKIP	Infrastructure
○	101	00:23:68:32:04:D0	54 Mb/s	0/94(-95 dBm)	11	WPA2-Personal	TKIP	Infrastructure
○	WGCN	00:0E:2E:4B:BE:98	54 Mb/s	56/94(-74 dBm)	12	WPA1-Personal	TKIP	Infrastructure

Picture 39

2) Now, it shows the Profile Name, SSID, BSSID, and encryption type received from your target network. Press Next button to continue (*Picture 40*).



Currently Used Profile

SSID	BSSID	Authentication	Encryption	Network Type

Profile List

Select	Profile	SSID	BSSID	Authentication	Encryption	Network Type
No Wireless Profile Rules!						

Profile Setup

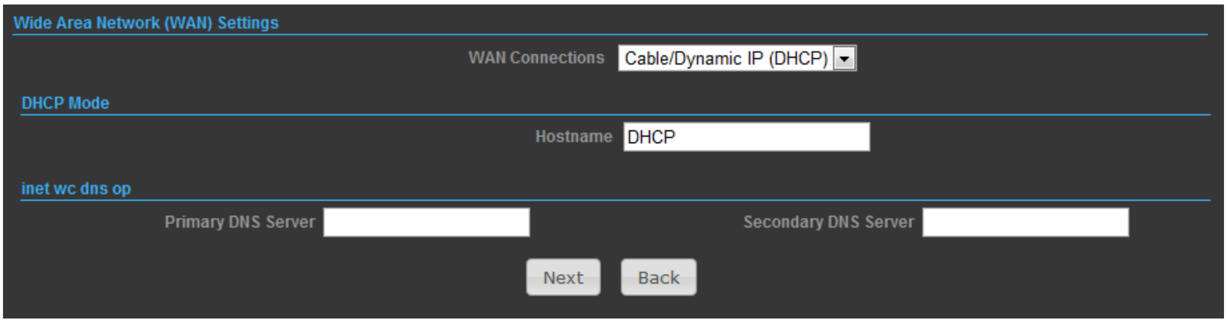
Profile Name: Applifer
Network Type: Infrastructure
SSID: Applifer
BSSID(optional): 00:15:6D:9E:D3:ED
Encryption Settings: WPA-PSK
Encryption: TKIP
Passphrase:

Ack Timeout Settings

Distance: 0.6 miles (1.0 km)
ACK/CTS Timeout: 41
RTS/CTS □ Bytes
Fragmentation Threshold □ Bytes

Picture 40

3) Finally, you need to tell the system about IP address received from WAN, DHCP Hostname, and DNS Server. Press Next button to finish the wizard (*Picture 41*).



Wide Area Network (WAN) Settings

WAN Connections: Cable/Dynamic IP (DHCP)

DHCP Mode

Hostname: DHCP

inet wc dns op

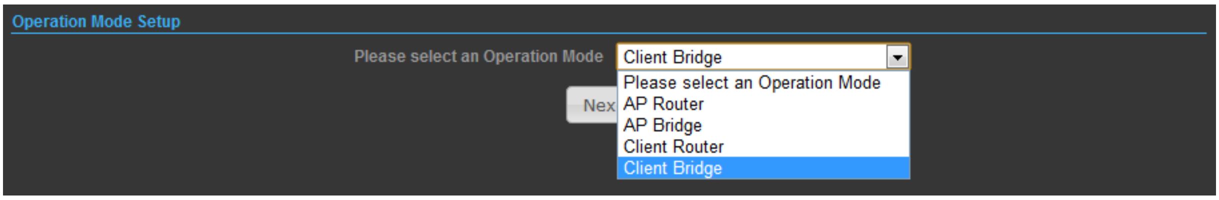
Primary DNS Server:

Secondary DNS Server:

Picture 41

- OPERATION MODE (CLIENT BRIDGE)

In the Client Bridge mode your ROCKET will behave just the same as Wireless adapter. With Client Bridges, the WLAN and the LAN are on the same subnet.

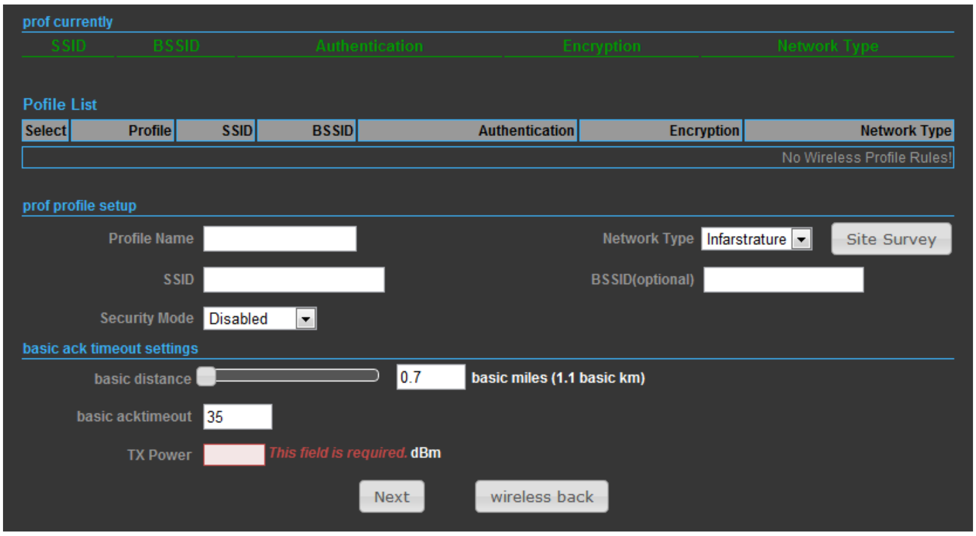


Operation Mode Setup

Please select an Operation Mode: Client Bridge

Picture 42

1) Press Site Survey button and look for available wireless network then click on the SSID that you attempt to connect to it; Applifer is the SSID that we are going to connect in this example. Press Next button when finished (*Picture 43 - Picture 44*)



prof currently

SSID	BSSID	Authentication	Encryption	Network Type

Pofile List

Select	Profile	SSID	BSSID	Authentication	Encryption	Network Type
						No Wireless Profile Rules!

prof profile setup

Profile Name:

Network Type: Infarstrature

SSID:

BSSID(optional):

Security Mode: Disabled

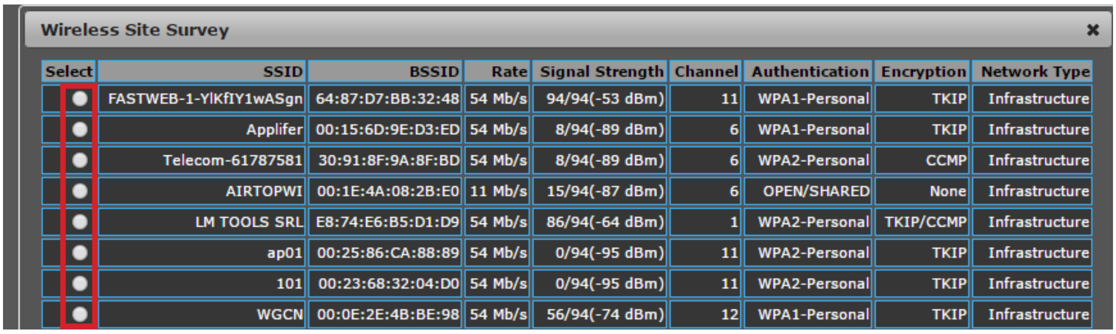
basic ack timeout settings

basic distance: 0.7 basic miles (1.1 basic km)

basic acktimeout: 35

TX Power: *This field is required.* dBm

Picture 43

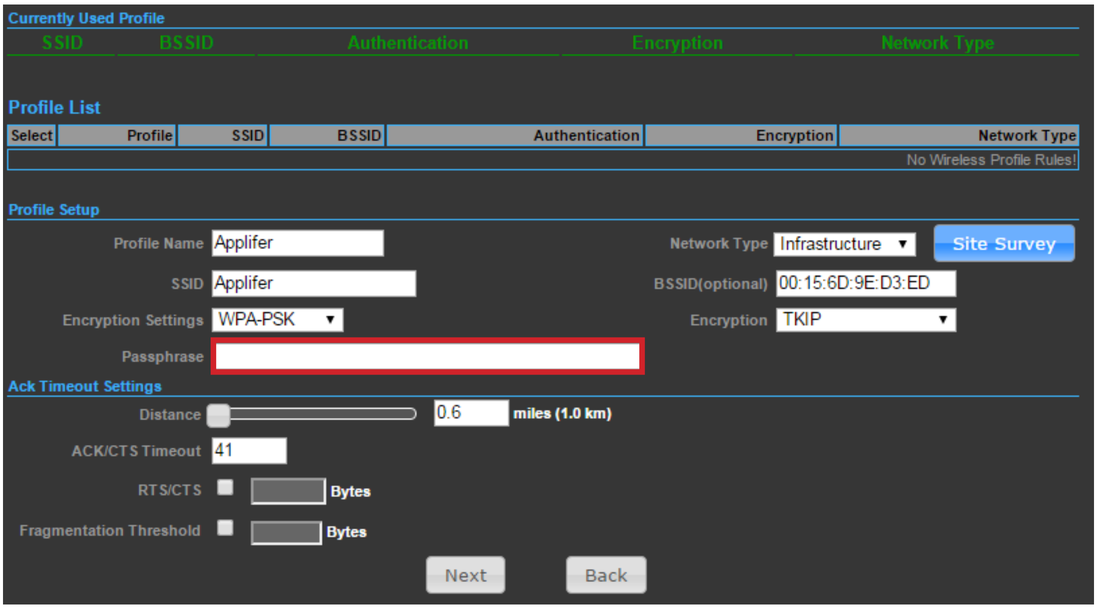


Wireless Site Survey

Select	SSID	BSSID	Rate	Signal Strength	Channel	Authentication	Encryption	Network Type
○	FASTWEB-1-YlKfIY1wASgn	64:87:D7:BB:32:48	54 Mb/s	94/94(-53 dBm)	11	WPA1-Personal	TKIP	Infrastructure
○	Applifer	00:15:6D:9E:D3:ED	54 Mb/s	8/94(-89 dBm)	6	WPA1-Personal	TKIP	Infrastructure
○	Telecom-61787581	30:91:8F:9A:8F:BD	54 Mb/s	8/94(-89 dBm)	6	WPA2-Personal	CCMP	Infrastructure
○	AIRTOPWI	00:1E:4A:08:2B:E0	11 Mb/s	15/94(-87 dBm)	6	OPEN/SHARED	None	Infrastructure
○	LM TOOLS SRL	E8:74:E6:B5:D1:D9	54 Mb/s	86/94(-64 dBm)	1	WPA2-Personal	TKIP/CCMP	Infrastructure
○	ap01	00:25:86:CA:88:89	54 Mb/s	0/94(-95 dBm)	11	WPA2-Personal	TKIP	Infrastructure
○	101	00:23:68:32:04:D0	54 Mb/s	0/94(-95 dBm)	11	WPA2-Personal	TKIP	Infrastructure
○	WGCN	00:0E:2E:4B:BE:98	54 Mb/s	56/94(-74 dBm)	12	WPA1-Personal	TKIP	Infrastructure

Picture 44

2) Now, it shows the Profile Name, SSID, BSSID, and encryption type received from your target network. Press Next button to continue (*Picture 45*).



Currently Used Profile

SSID	BSSID	Authentication	Encryption	Network Type

Profile List

Select	Profile	SSID	BSSID	Authentication	Encryption	Network Type
						No Wireless Profile Rules!

Profile Setup

Profile Name	Applifer	Network Type	Infrastructure ▾
SSID	Applifer	BSSID(optional)	00:15:6D:9E:D3:ED
Encryption Settings	WPA-PSK ▾	Encryption	TKIP ▾
Passphrase			

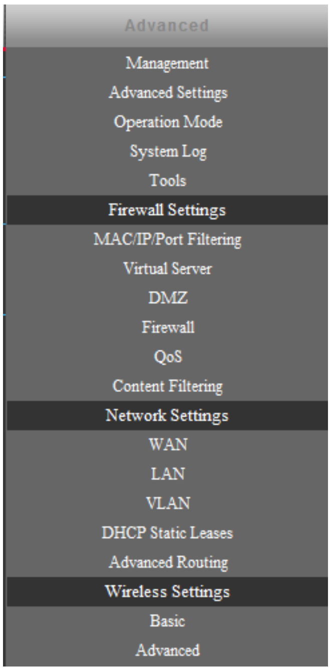
Ack Timeout Settings

Distance	0.6 miles (1.0 km)
ACK/CTS Timeout	41
RTS/CTS	□ Bytes
Fragmentation Threshold	□ Bytes

Picture 45

ADVANCED SETUP

In the Advanced Manual Bar, it includes all the settings such as firmware upgrade, LAN, WAN and wireless settings that change the RF behaviors. It is important to read through this section before attempting to make changes (*Picture 46*).

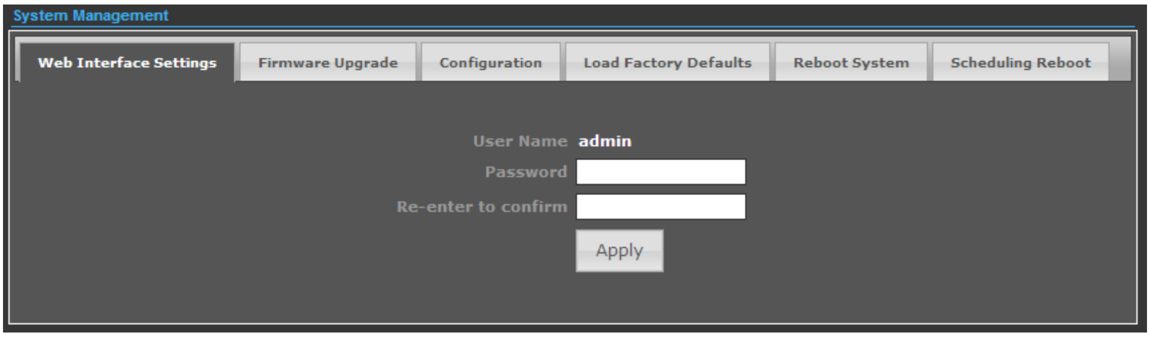


Picture 46

- MANAGEMENT

The Management section is provided for configuration of administrative needs such as language type, user name / Password, firmware upgrade, export and import settings, load factory defaults and reboots system.

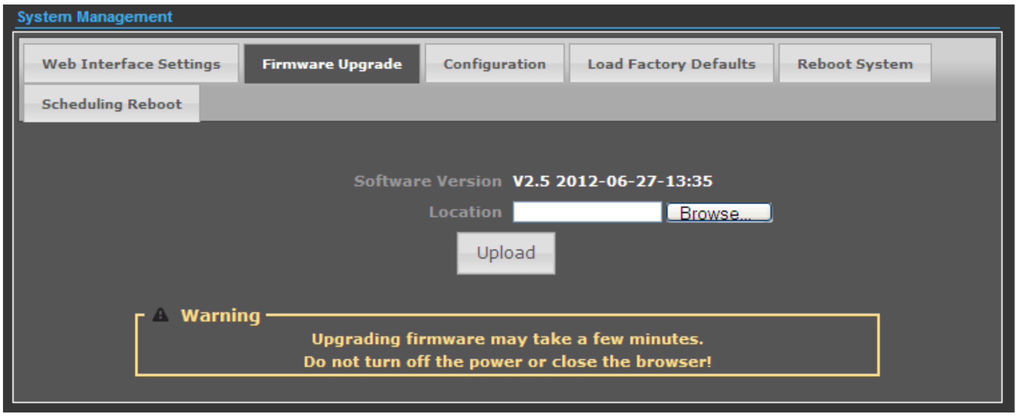
Password - The new password must not exceed 32 characters in length and must not include any spaces. Enter the new password a second time to confirm it (*Picture 47*).



User Name admin
Password
Re-enter to confirm

Picture 47

Software Version - This displays the current firmware version (*Picture 48*).



Software Version V2.5 2012-06-27-13:35
Location

Warning
Upgrading firmware may take a few minutes.
Do not turn off the power or close the browser!

Picture 48

To upgrade the Router's firmware, follow these instructions below:

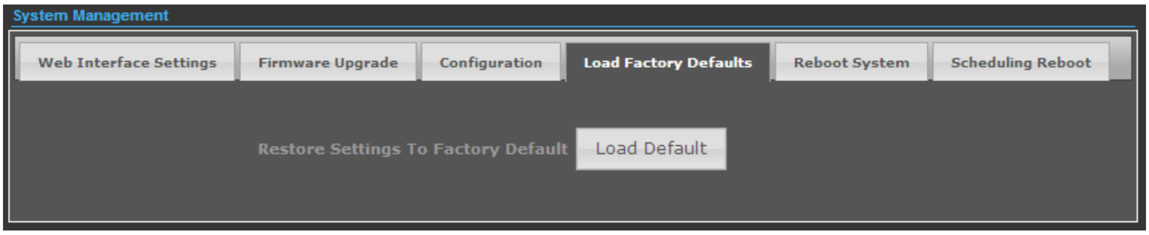
1. Download a more recent firmware upgrade file from our website.
2. Type the path and file name of the update file into the File field. Or click the Browse button to locate the update file.
3. Click the Upgrade button.

Note:

1. New firmware versions are posted at our website and can be downloaded for free. There is no need to upgrade the firmware unless the new firmware has a new feature you want to use. However, when experiencing problems caused by the Router rather than the configuration, you can try to upgrade the firmware.
2. When you upgrade the Router's firmware, you may lose its current configurations, so before upgrading the firmware please write down some of your customized settings to avoid losing important settings.
3. Do not turn off the Router or press the Reset button while the firmware is being upgraded, otherwise, the Router may get damaged.
4. The Router will reboot after the upgrading has been finished.

Export Settings - Click the Export Button to download current router configuration to your PC (*Picture 49*).

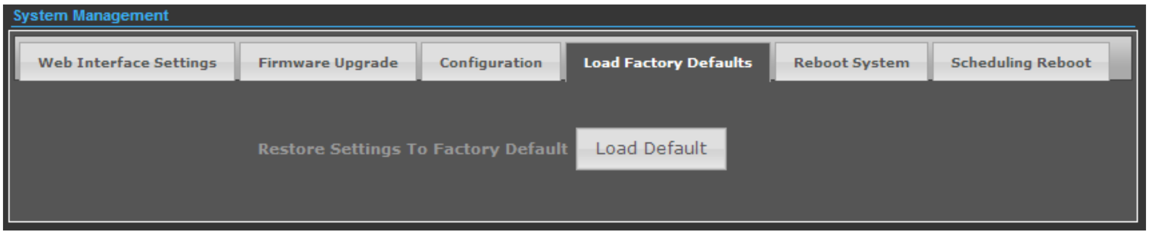
Import Settings - Click the Import Button to browse for the configuration file that is currently saved on your PC. Click Import to overwrite all current configurations with the one in the configuration file (*Picture 49*).



Restore Settings To Factory Default

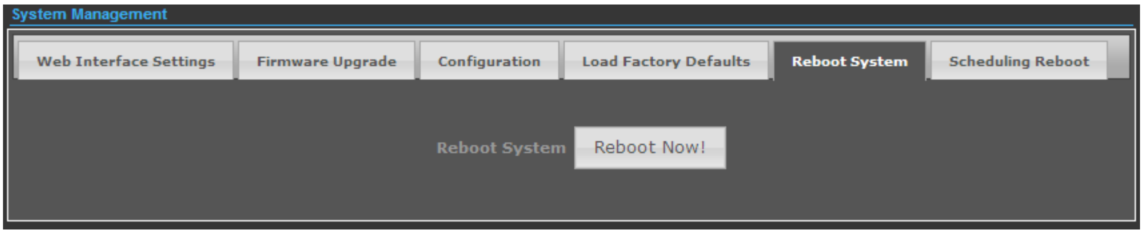
Picture 49

Load Factory Defaults - If you have problems with the ROCKET, which might be a result from changing some settings, but you are unsure what settings exactly, you can restore the factory defaults by click the Load Default Button (*Picture 50*).



Picture 50

Reboot System - If you want to reboot the TUBE-2H, click the Reboot Now Button (*Picture 51*)



Picture 51

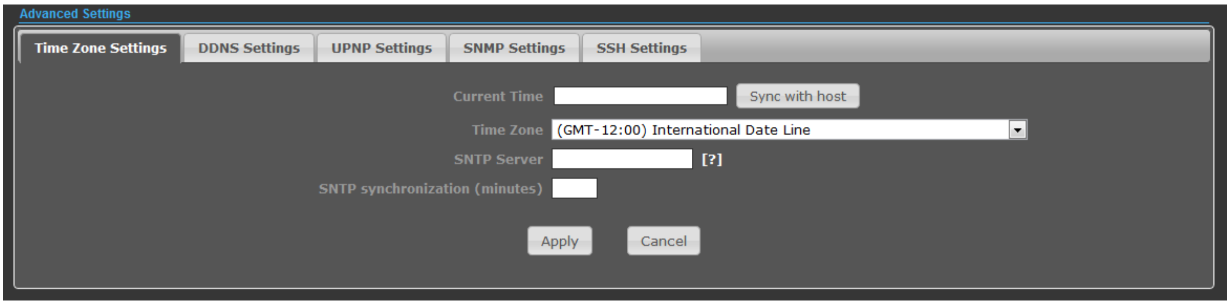
- ADVANCED SETTINGS

The Advanced Settings section is provided for configuration of Time Zone, DDNS, UPnP, SNMP, and SSH (*Picture 52*).

Time Zone Settings - The Time Zone Settings allows you to configure, update and maintain the correct time on the ROCKET's internal system clock.

SNTP Server - Enter the address of an SNTP server to receive time updates.

SNTP synchronization (minutes) - Specify the interval between SNTP server updates.



Time Zone (GMT-12:00) International Date Line

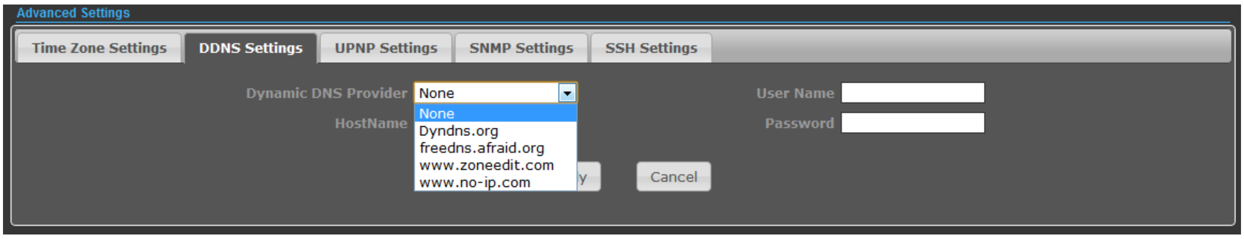
Picture 52

DDNS Settings - DDNS lets you assign a fixed host and domain name to dynamic Internet IP address. It is useful when you are hosting your own website, FTP server, or other server behind the ROCKET. Before using this feature, you need to sign up for DDNS service at www.dyndns.org , a DDNS service provider (*Picture 53*).

User Name - Sets the DDNS user name for the connection.

Password - Sets a DDNS password for the connection.

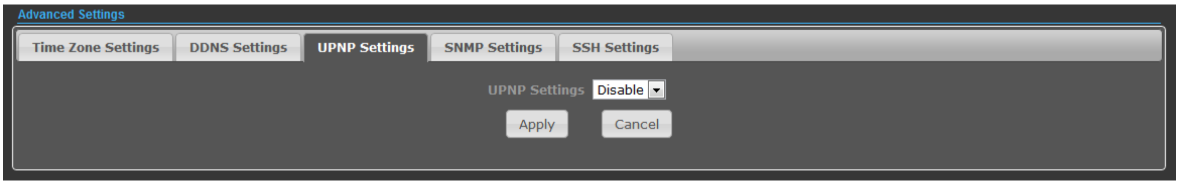
HostName - The host name that you selected from the DDNS service provider.



Dynamic DNS Provider None

Picture 53

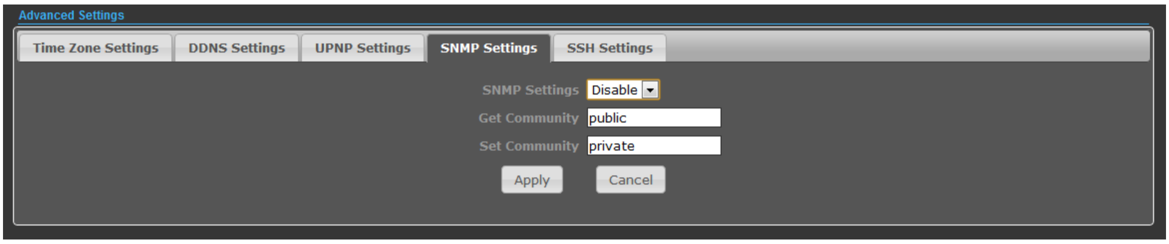
UPNP Settings - UPnP permits network devices to discover other network device(s) preference and establish functional network services for data sharing, communication, and entrainment. Default setting is Disabled (*Picture 54*).



UPNP Settings: Disable

Picture 54

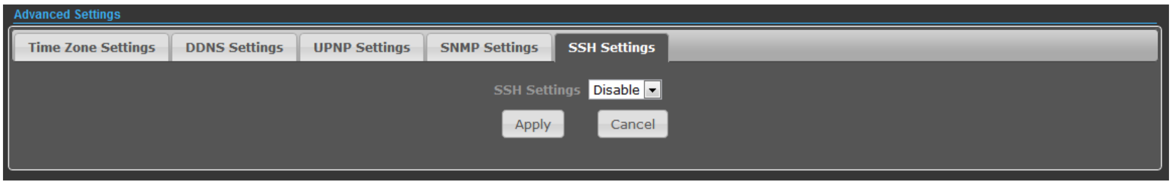
SMNP Settings - Managing devices on IP networks. Default setting is Disabled (*Picture 55*).



SNMP Settings: Disable
Get Community: public
Set Community: private

Picture 55

SSH Settings - Secure Shell. Enable your ROCKET unit to access secure shell (SSH) based network device. Default setting is Disabled. (*Picture 56*).

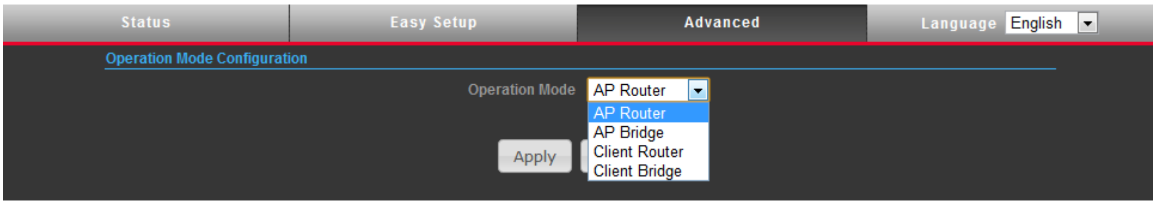


SSH Settings: Disable

Picture 56

- OPERATION MODE

The Operation Mode content four modes: AP Bridge, AP Router, Client Router and Client Bridge (*Picture 57*).



Operation Mode: AP Router

Picture 57

AP Bridge - The wired Ethernet and wireless are bridged together. Once the mode is selected, all WAN related functions will be disabled.

AP Router - The Ethernet port will convert into WAN port requiring you to configure your CPE via WLAN.

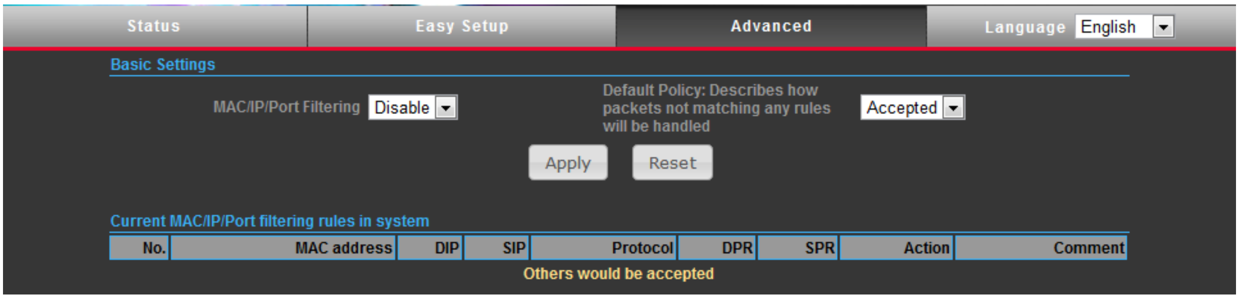
Client Router - The ROCKET will behave just the same as the client mode for wireless function. However, router functions are added between the wireless WAN side and the Ethernet LAN side. Therefore, the WSIP subscriber can share the WISP connection without the extra router.

Client Bridge - The ROCKET will behave just the same as Wireless adapter. With Client Bridges, the WLAN and the LAN are on the same subnet. Consequently, NAT is no longer used and services that are running on the original network.

FIREWALL CONFIGURATION

- MAC/IP/PORT FILTERING

MAC/IP/Port filtering restricts connection parameters to limit the risk of intrusion and defends against a wide array of common hacker attacks. MAC/IP/Port filtering allows the unit to permit, deny or proxy traffic through its MAC addresses, IP addresses and ports. The ROCKET allows you define a sequential list of permit or deny filtering rules. This device tests ingress packets against the filter rules one by one. A packet will be accepted as soon as it matches a permit rule, or dropped as soon as it matches a deny rule. If no rules match, the packet is either accepted or dropped depending on the default policy setting (*Picture 58*).



Basic Settings

MAC/IP/Port Filtering: Disable

Default Policy: Describes how packets not matching any rules will be handled: Accepted

Current MAC/IP/Port filtering rules in system

No.	MAC address	DIP	SIP	Protocol	DPR	SPR	Action	Comment

Others would be accepted

Picture 58

MAC/IP/Port Filtering - Enables or disables MAC/IP/Port Filtering. (Default: Disable)

Default Policy - When MAC/IP/Port Filtering is enabled, the default policy will be enabled. If you set the default policy to “Dropped”, all incoming packets that don’t match the rules will be dropped. If the policy is set to “Accepted,” all incoming packets that don’t match the rules are accepted. (Default: Dropped)

MAC Address - Specifies the MAC address to block or allow traffic from.

DIP - Specifies the destination IP address to block or allow traffic from.

SIP - Specifies the source IP address to block or allow traffic from.

Protocol - Specifies the destination port type, TCP, UDP or ICMP.

Destination Port Range - Specifies the range of destination port to block traffic from the specified LAN IP address from reaching.

Source Port Range - Specifies the range of source port to block traffic from the specified LAN IP address from reaching.

Action - Specifies if traffic should be accepted or dropped. (Default: Accept)

Comment - Enter a useful comment to help identify the filtering rules.

Current Filtering rules - The Current Filter Table displays the configured IP addresses and ports that are permitted or denied access to and from.

No. — The table entry number.

MAC Address — Displays a MAC address to filter.

Destination IP Address (DIP) — Displays the destination IP address.

Source IP Address (SIP) — Displays the source IP address.

Protocol — Displays the protocol type.

Destination Port Range (DPR) — Displays the destination port range.

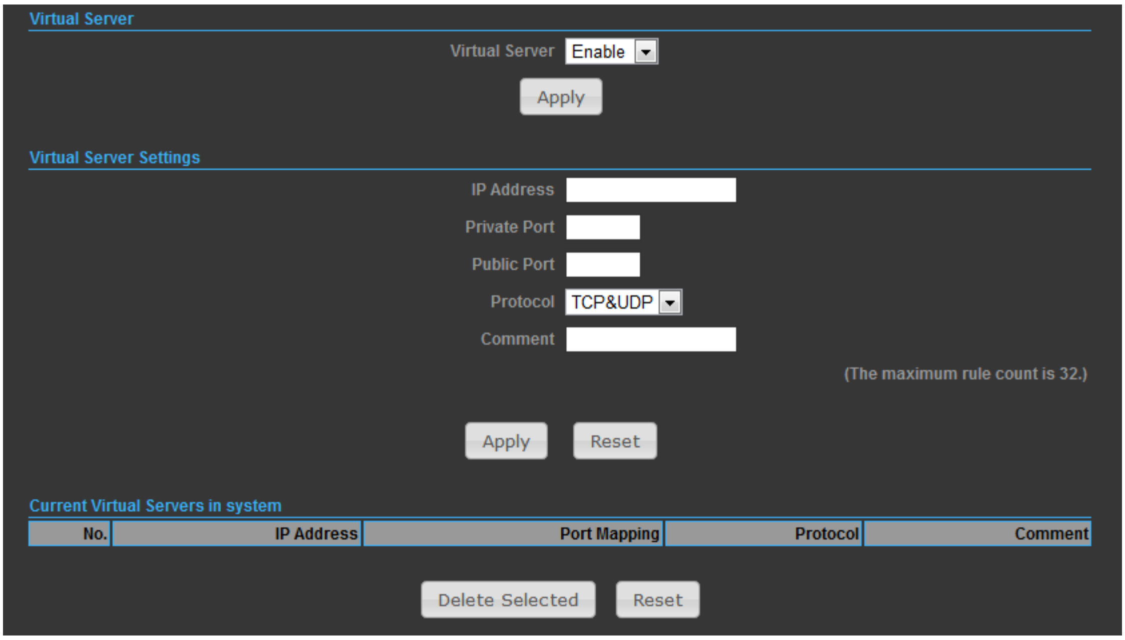
Source Port Range (SPR) — Displays the source port range.

Action — Displays if the specified traffic is accepted or dropped.

Comment — Displays a useful comment to identify the filter rules.

- VIRTUAL SERVER SETTINGS

Virtual Server (sometimes referred to as Port Forwarding) is the act of forwarding traffic from one network node to another based on received protocol port number. This technique can allow an external user to reach a port on a private IP address (inside a LAN) from the outside through a NAT enabled router (*Picture 59*).



Virtual Server

Virtual Server: Enable

Virtual Server Settings

IP Address:

Private Port:

Public Port:

Protocol: TCP&UDP

Comment:

(The maximum rule count is 32.)

Current Virtual Servers in system

No.	IP Address	Port Mapping	Protocol	Comment

Picture 59

Virtual Server - Selects between enabling or disabling port forwarding the virtual server. (Default: Disable)

IP Address - Specifies the IP address of a server on the local network to allow external access.

Private Port - The protocol port number on the local server.

Public Port - The protocol port number on the router's WAN interface.

Protocol - Specifies the protocol to forward, either TCP, UDP, or TCP&UDP.

Comment - Enter a useful comment to help identify the port forwarding service on the network.

Current Virtual Servers in System - The Current Port Forwarding Table displays the entries that are allowed to forward packets through the ROCKET's firewall.

No. - The table entry number.

IP Address - The IP address of a server on the local network to allow external access.

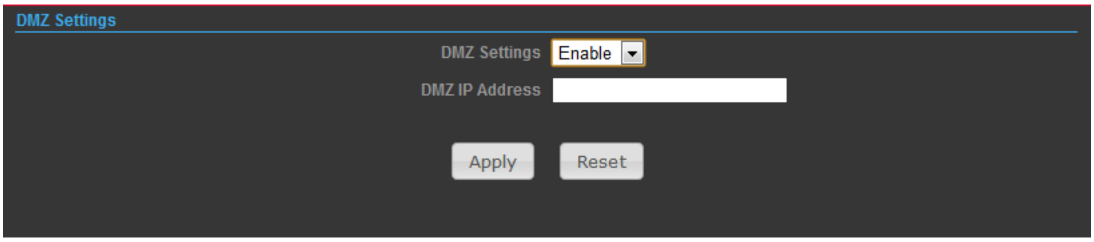
Port Mapping - displays the port mapping for the server.

Protocol - Displays the protocol used for forwarding this port.

Comment - Displays a useful comment to identify the nature of the port to be forwarded.

- DMZ

DMZ is to specified host PC on the local network to access the Internet without any firewall protection. Some Internet applications, such as interactive games or video conferencing, may not function properly behind the firewall. By specifying a Demilitarized Zone (DMZ) host, the PC's TCP ports are completely exposed to the Internet, allowing open two-way communication. The host PC should be assigned a static IP address (which is mapped to its MAC address) and this must be configured as the DMZ IP address (*Picture 60*).



DMZ Settings

DMZ Settings: Enable

DMZ IP Address:

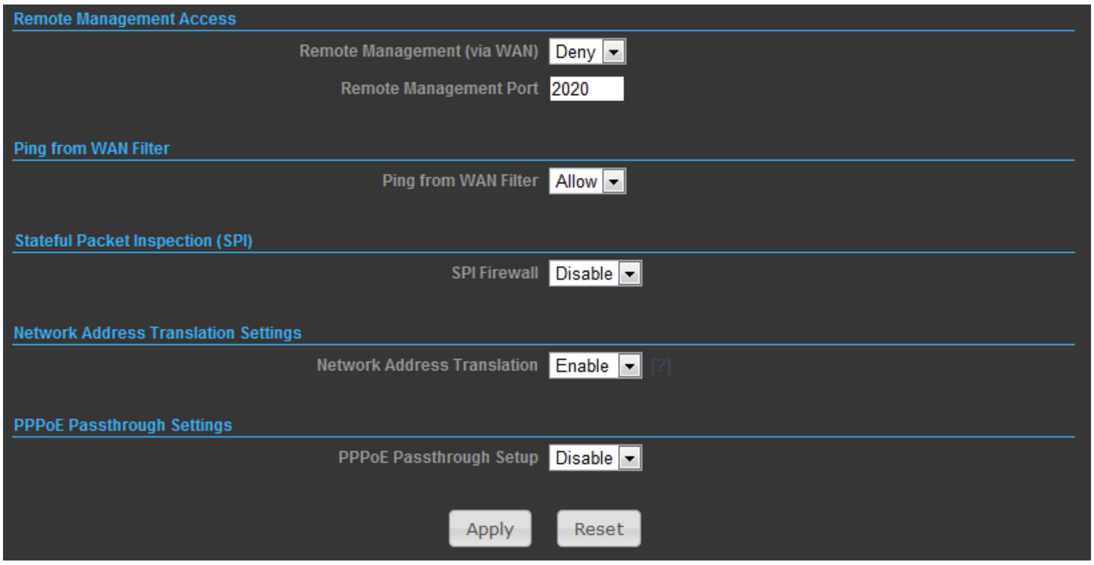
Picture 60

DMZ Settings - Sets the DMZ status. (Default: Disable)

DMZ IP Address - Specifies an IP address on the local network allowed unblocked access to the WAN.

- FIREWALL

Firewall functions which will help to protect your network and computer. You can utilized firmware functions to protect your network from hackers and malicious intruders (*Picture 61*).



Remote Management Access

Remote Management (via WAN) Deny

Remote Management Port 2020

Ping from WAN Filter

Ping from WAN Filter Allow

Stateful Packet Inspection (SPI)

SPI Firewall Disable

Network Address Translation Settings

Network Address Translation Enable

PPPoE Passthrough Settings

PPPoE Passthrough Setup Disable

Picture 61

Remote Management (via WAN) - allow or deny to manage the router from anywhere on the Internet.

Remote Management Port - The port that you will use to address the management from the Internet. For example, if you specify port 2020, then to access the ROCKET from Internet, you would use a URL of the form: http://xxx.xxx.xxx.xxx:2020/

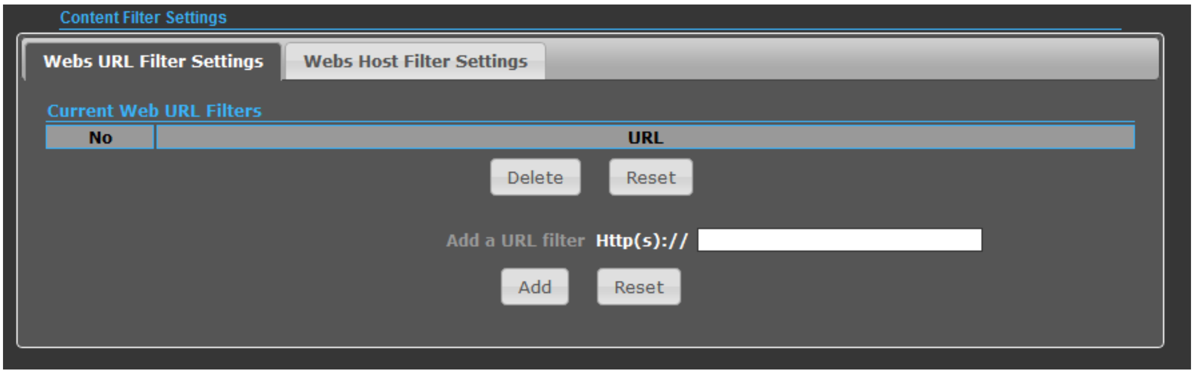
Ping from WAN Filter - When Allow, the ROCKET does not respond to ping packets received on the WAN port.

SPI Firewall - SIP firewall help to keep track of the state of network connections (such as TCP streams, UDP communication) traveling across it. It is programmed to distinguish legitimate packets for different types of connections. Only packets matching a known active connection will be allowed by the firewall; others will be rejected.

Network Address Translation - NAT is the process of modifying IP address information in IP packet headers while in transit across a traffic routing device.

- CONTENT FILTERING

The ROCKET provides a variety of options for blocking Internet access based on content, URL and host name. (*Picture 62*).



Content Filter Settings

Current Web URL Filters

No	URL

Add a URL filter Http(s)://

Picture 62

Web URL Filter Settings - By filtering inbound Uniform Resource Locators (URLs) the risk of compromising the network can be reduced. URLs are commonly used to point to websites. By specifying a URL or a keyword contained in a URL traffic from that site may be blocked.

Current URL Filters - Displays current URL filter.

Add a URL Filter - Adds a URL filter to the settings.

Delete a URL Filter - Deletes a URL filter entry from the list.

Web Host Filter Settings - Allows Internet content access to be restricted based on web address keywords and web domains. A domain name is the name of a particular web site. For example, for the address www.HOST.com, the domain name is HOST.com. Enter the Keyword then click "Add."

Current Host Filters - Displays current Host filter.

Add a Host Filter - Enters the keyword for a host filtering.

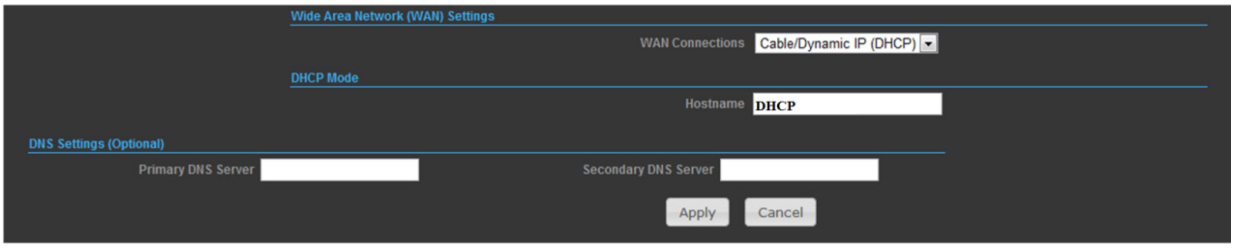
Delete a Host Filter - Deletes a Host filter entry from the list.

NETWORK SETTINGS

- WAN

In this section, there are several connection types to choose from; Static IP, DHCP, PPPoE, PPTP and L2TP. If you are unsure of your connection method, please contact your Internet Service Provider.

- - CABLE/DYNAMIC IP (DHCP)



Wide Area Network (WAN) Settings

WAN Connections: Cable/Dynamic IP (DHCP)

DHCP Mode

Hostname: DHCP

DNS Settings (Optional)

Primary DNS Server:

Secondary DNS Server:

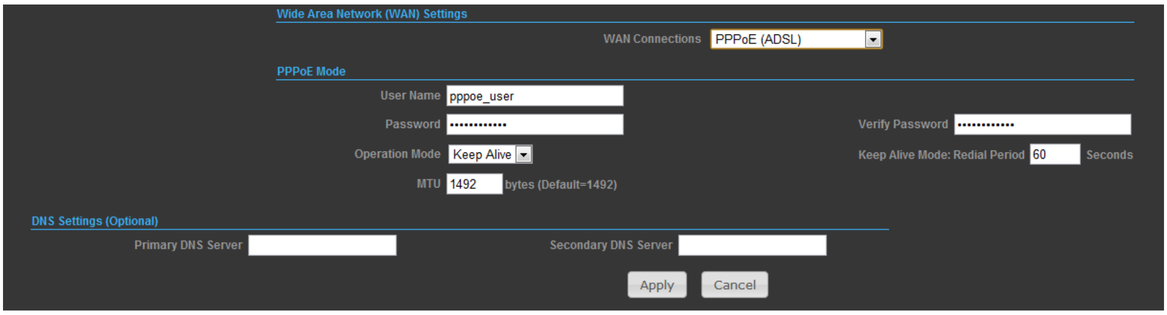
Picture 63

Hostname - Specifies the host name of the DHCP client.

Primary DNS Server - The IP address of the Primary Domain Name Server. A DNS maps numerical IP addresses to domain names and can be used to identify network hosts by familiar names instead of the IP addresses. To specify a DNS server, type the IP addresses in the text field provided. Otherwise, leave the text field blank.

Secondary DNS Server - The IP address of the Secondary Domain Name Server.

- - PPPoE (ADSL)



Wide Area Network (WAN) Settings

WAN Connections: PPPoE (ADSL)

PPPoE Mode

User Name: pppoe_user

Password: ••••••••••••

Verify Password: ••••••••••••

Operation Mode: Keep Alive

Keep Alive Mode: Redial Period: 60 Seconds

MTU: 1492 bytes (Default=1492)

DNS Settings (Optional)

Primary DNS Server:

Secondary DNS Server:

Picture 64

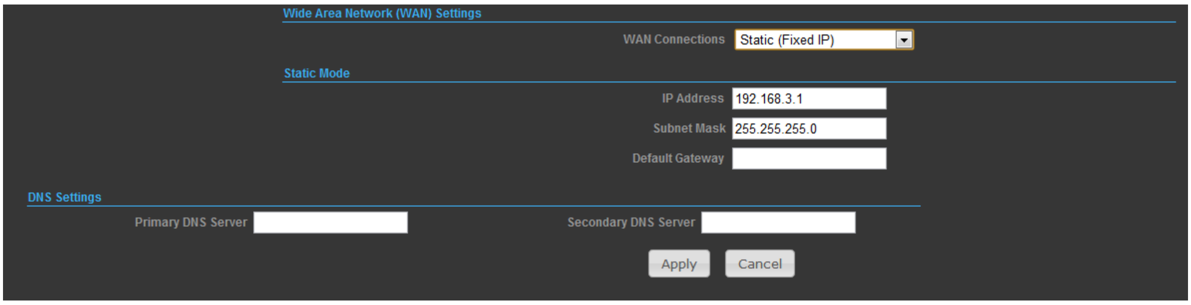
User Name - Sets the PPPoE user name for the WAN port.

Password - Sets a PPPoE password for the WAN port.

Verify Password - Prompts you to re-enter your chosen password.

Operation Mode - Enables and configures the keep alive time and configures the on-demand idle time.

- - STATIC IP (FIXED IP)



Wide Area Network (WAN) Settings

WAN Connections: Static (Fixed IP)

Static Mode

IP Address: 192.168.3.1

Subnet Mask: 255.255.255.0

Default Gateway:

DNS Settings

Primary DNS Server:

Secondary DNS Server:

Picture 65

IP Address - Sets the static IP address.

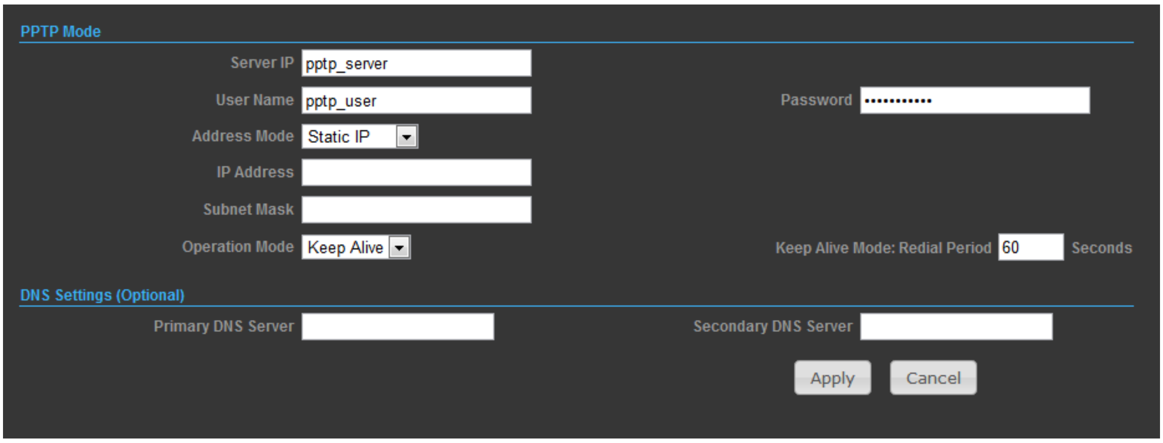
Subnet Mask - Sets the static IP subnet mask. (Default: 255.255.255.0)

Default Gateway - The IP address of a router that is used when the requested destination IP address is not on the local subnet.

Primary DNS Server - The IP address of the Primary Domain Name Server. A DNS maps numerical IP addresses to domain names and can be used to identify network hosts by familiar names instead of the IP addresses. To specify a DNS server, type the IP addresses in the text field provided. Otherwise, leave the text field blank.

Secondary DNS Server - The IP address of the Secondary Domain Name Server.

- - PPT



PPTP Mode

Server IP: pptp_server

User Name: pptp_user

Password: •••••••••••

Address Mode: Static IP

IP Address:

Subnet Mask:

Operation Mode: Keep Alive

Keep Alive Mode: Redial Period 60 Seconds

DNS Settings (Optional)

Primary DNS Server:

Secondary DNS Server:

Picture 66

Server IP - Sets the PPTP server IP Address. (Default: pptp_server)

User Name - Sets the PPTP user name for the WAN port.

Password - Sets a PPTP password for the WAN port.

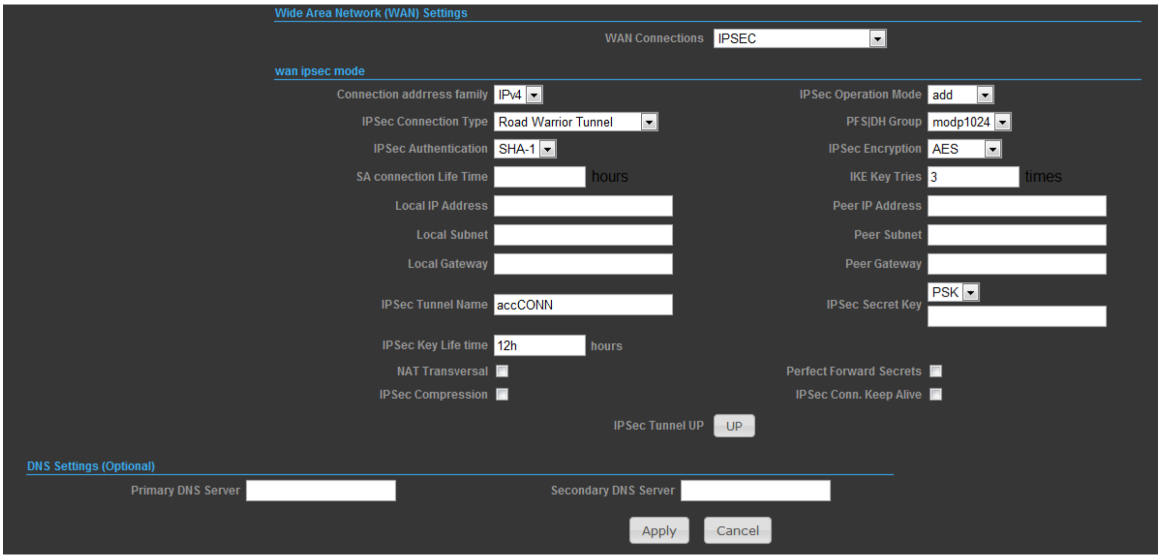
Address Mode - Sets a PPTP network mode. (Default: Dynamic IP)

Operation Mode - Enables and configures the keep alive time.

Primary DNS Server - The IP address of the Primary Domain Name Server. A DNS maps numerical IP addresses to domain names and can be used to identify network hosts by familiar names instead of the IP addresses. To specify a DNS server, type the IP addresses in the text field provided. Otherwise, leave the text field blank.

Secondary DNS Server - The IP address of the Secondary Domain Name Server.

- - IPSec



Wide Area Network (WAN) Settings

WAN Connections: IPSEC

wan ipsec mode

Connection address family: IPv4

IPSec Operation Mode: add

IPSec Connection Type: Road Warrior Tunnel

PFS|DH Group: modp1024

IPSec Authentication: SHA-1

IPSec Encryption: AES

SA connection Life Time: hours

IKE Key Tries: 3 times

Local IP Address:

Peer IP Address:

Local Subnet:

Peer Subnet:

Local Gateway:

Peer Gateway:

IPSec Tunnel Name: accCONN

IPSec Secret Key: PSK

IPSec Key Life time: 12h hours

NAT Transversal □

Perfect Forward Secrets □

IPSec Compression □

IPSec Conn. Keep Alive □

IPSec Tunnel UP: UP

DNS Settings (Optional)

Primary DNS Server:

Secondary DNS Server:

Apply Cancel

Picture 67

Verify the desire settings and use scroll down for more options.

IPSec Connection Type - Use drop down menu to select from Road Warrior Tunnel, Host to Host Tunnel, Subnet to Subnet Tunnel, Host to Host Transport, Pass trough, Drop, or Reject. Default setting is Road Warrior Tunnel

IPSec Authentication - Use drop down menu to select from SHA-1, or MD5. Default setting is SHA1.

SA Connection Life Time - Specify how often each SA should be rekeyed, measured in hour.

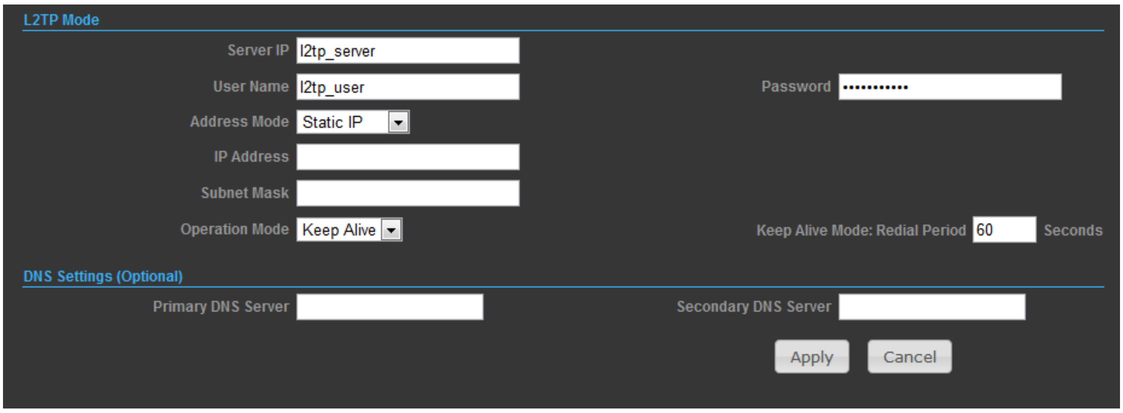
Local IP address / Subnet / Gateway - Local end point IP address, Subnet, and Gateway IP address.

IPSec Operation Mode - Use drop down menu to select from Add, Route Start, Manual, or Ignore. Default setting is Add.

IKE Key Retry - Specify maximum retry limits for negotiate key to Internet Key Exchange.

Peer IP address / Subnet / Gateway - Remote end point IP address, Subnet, and Gateway IP address.

- - L2TP



L2TP Mode

Server IP: l2tp_server

User Name: l2tp_user

Password: ••••••••••••

Address Mode: Static IP

IP Address:

Subnet Mask:

Operation Mode: Keep Alive

Keep Alive Mode: Redial Period: 60 Seconds

DNS Settings (Optional)

Primary DNS Server:

Secondary DNS Server:

Apply Cancel

Picture 68

Server IP - Sets the L2TP server IP Address. (Default: l2tp_server)

User Name - Sets the L2TP user name for the WAN port.

Password - Sets a L2TP password for the WAN port.

Address Mode - Sets a L2TP network mode. (Default: Dynamic IP)

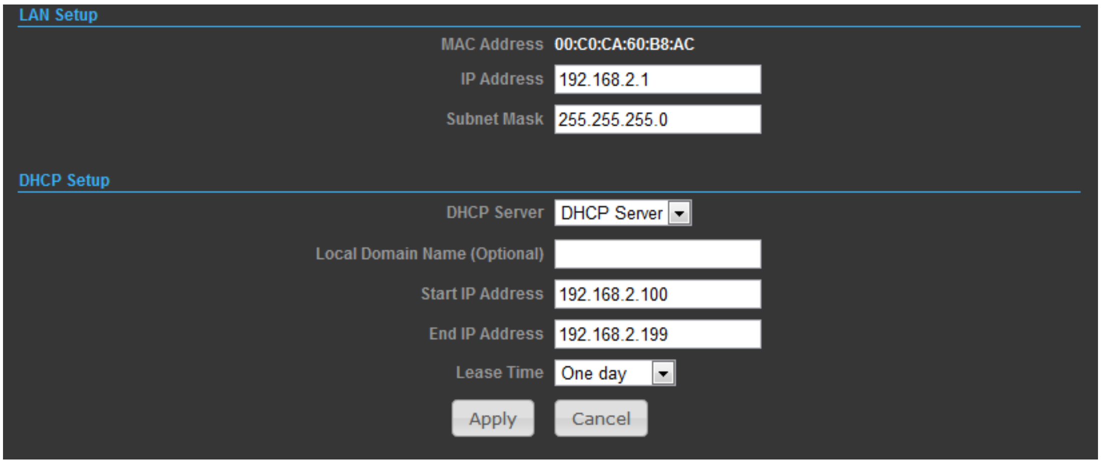
Operation Mode - Enables and configures the keep alive time.

Primary DNS Server - The IP address of the Primary Domain Name Server. A DNS maps numerical IP addresses to domain names and can be used to identify network hosts by familiar names instead of the IP addresses. To specify a DNS server, type the IP addresses in the text field provided. Otherwise, leave the text field blank.

Secondary DNS Server - The IP address of the Secondary Domain Name Server.

- LAN

In this section, the LAN settings are configured based on the IP Address and Subnet Mask. The IP address is also used to access this Web-based management interface. It is recommended to use the default settings if you do not have an existing network (*Picture 69*).



LAN Setup

MAC Address	00:C0:CA:60:B8:AC
IP Address	192.168.2.1
Subnet Mask	255.255.255.0

DHCP Setup

DHCP Server	DHCP Server
Local Domain Name (Optional)	
Start IP Address	192.168.2.100
End IP Address	192.168.2.199
Lease Time	One day

Picture 69

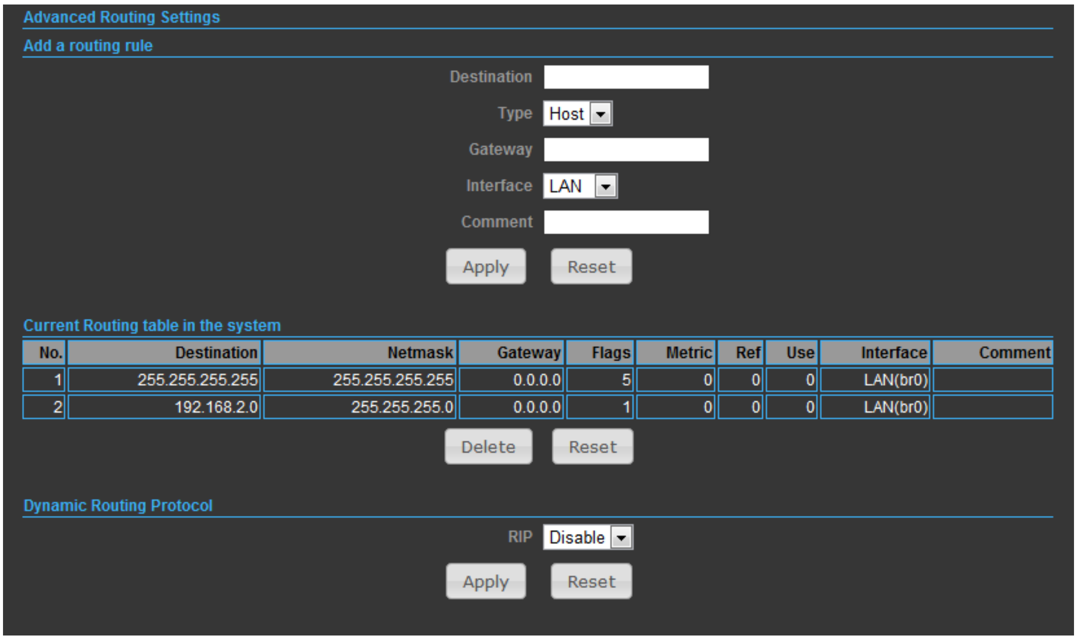
IP Address - The IP address of ROCKET on the local area network. (Default: 192.168.2.1)

Subnet Mask - The subnet mask of ROCKET on the local area network

DHCP Server - The DHCP Server is to assign private IP address to the ROCKET in your local area network(LAN). The default LAN IP address is 192.168.2.1, changing IP address will also change the DHCP server's IP subnet.

- ADVANCED ROUTING

In this section, allow to configure routing feature in the ROCKET (*Picture 70*).



Advanced Routing Settings

Add a routing rule

Destination	
Type	Host
Gateway	
Interface	LAN
Comment	

Current Routing table in the system

No.	Destination	Netmask	Gateway	Flags	Metric	Ref	Use	Interface	Comment
1	255.255.255.255	255.255.255.255	0.0.0.0	5	0	0	0	LAN(br0)	
2	192.168.2.0	255.255.255.0	0.0.0.0	1	0	0	0	LAN(br0)	

Dynamic Routing Protocol

RIP	Disable

Picture 70

Destination - The IP address of packets that can be routed.

Type - Defines the type of destination. (Host: Signal IP address / Net: Portion of Network)

Netmask - Displays the subnetwork associated with the destination.

Gateway - Defines the packets destination next hop.

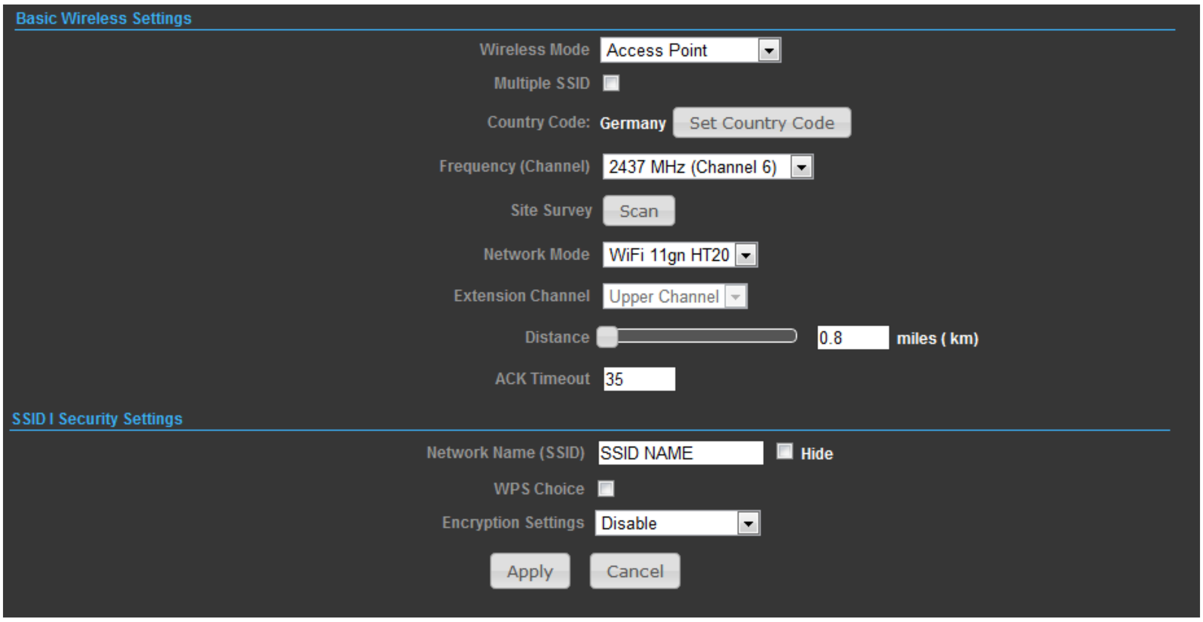
Interface - Select interface to which a static routing subnet is to be applied.

Comment - Help identify the routing.

RIP - Enable or disable the RIP(Routing Information Protocol) for the WAN or LAN interface.

WIRELESS SETTINGS

- BASIC



Basic Wireless Settings

Wireless Mode: Access Point

Multiple SSID: □

Country Code: Germany

Frequency (Channel): 2437 MHz (Channel 6)

Network Mode: WiFi 11gn HT20

Extension Channel: Upper Channel

Distance: 0.8 miles (km)

ACK Timeout: 35

SSID I Security Settings

Network Name (SSID): SSID NAME □ Hide

WPS Choice: □

Encryption Settings: Disable

Picture 71

Wireless On/Off - Enables or Disable the radio. (Default: Turn On)

Wireless Mode - There are 4 wireless mode, those are Access Point, WDS Access Point, WDS Repeater and WDS Client

Note

If WEP authentication is selected for WDS communication, you will then only have one set of encryption for the entire channel.

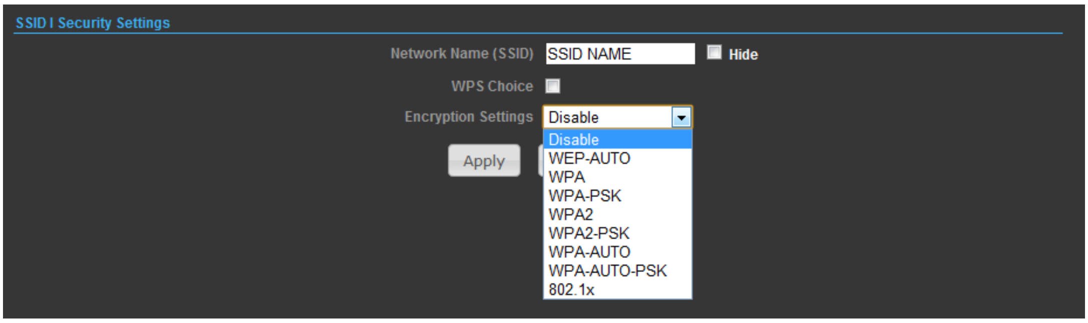
Network Name (SSID) - The name of the wireless network service provided by the ROCKET. Clients that want to connect to the network must set their SSID to the same as that of the ROCKET.

Multiple SSID - One additional VAP interface supported on the device.

Frequency (Channel) - The radio channel that the ROCKET uses to communicate with wireless clients.

Network Mode - Defines the radio operating mode.

- SECURITY



SSID I Security Settings

Network Name (SSID): SSID NAME □ Hide

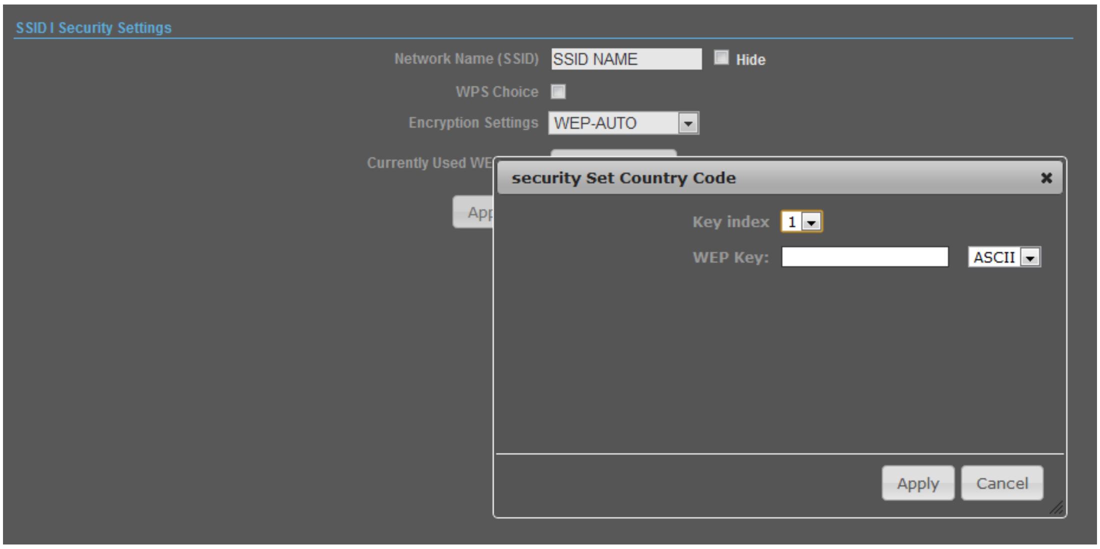
WPS Choice: □

Encryption Settings: Disable

Picture 72

- - WIRED EQUIVALENT PRIVACY (WEP)

WEP provides a basic level of security, preventing unauthorized access to the network, and encrypting data transmitted between wireless clients and an access point. WEP uses static shared keys (fixed-length hexadecimal or alphanumeric strings) that are manually distributed to all clients that want to use the network.
When you select to use WEP, be sure to define at least one static WEP key for user authentication or data encryption. Also, be sure that the WEP shared keys are the same for each client in the wireless network.



SSID I Security Settings

Network Name (SSID) SSID NAME □ Hide

WPS Choice □

Encryption Settings WEP-AUTO

Currently Used WE

security Set Country Code

Key index 1

WEP Key: ASCII

Picture 73

WEP-AUTO - Allows wireless clients to connect to the network using.

Open-WEP (uses WEP for encryption only) or Shared-WEP (uses WEP for authentication and encryption).

Encrypt Type - Selects WEP for data encryption (OPEN mode only).

Security Key Index - Selects the WEP key number to use for authentication or data encryption. If wireless clients have all four WEP keys configured to the same values, you can change the encryption key to any of the settings without having to update the client keys.

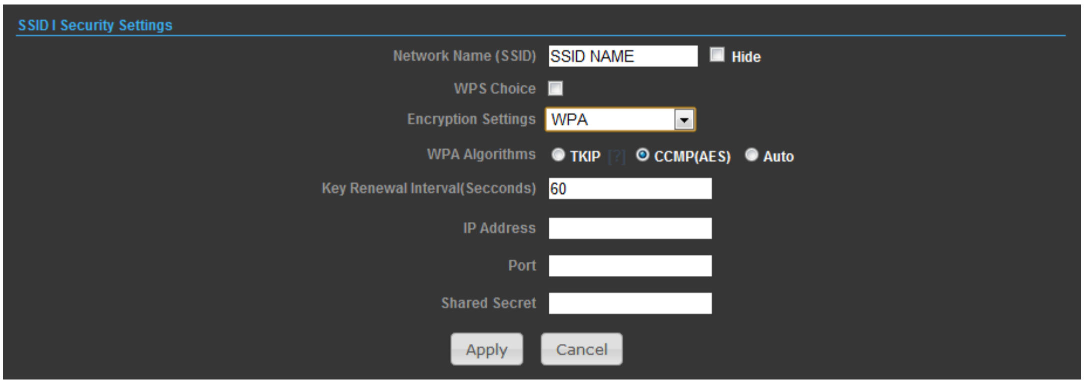
WEP Keys - Sets WEP key values. The user must first select ASCII or hexadecimal keys. Each WEP key has an index number. Enter key values that match the key type and length settings. Enter 5 alphanumeric characters or 10 hexadecimal digits for 64-bit keys, or enter 13 alphanumeric characters or 26 hexadecimal digits for 128-bit keys. (Default: Hex, no preset value)

Note

If WEP authentication is selected for WDS communication, you will then only have one set of encryption for the entire channel.

- - WPA & WPA2

Wi-Fi Protected Access (WPA) was introduced as an interim solution for the vulnerability of WEP pending the adoption of a more robust wireless security standard. WPA2 includes the complete wireless security standard, but also offers backward compatibility with WPA.



SSID I Security Settings

Network Name (SSID) SSID NAME □ Hide

WPS Choice □

Encryption Settings WPA

WPA Algorithms ○ TKIP [?] ● CCMP(AES) ○ Auto

Key Renewal Interval(Secconds) 60

IP Address

Port

Shared Secret

Picture 74

WPA - Clients using WPA for authentication.

WPA2 - Clients using WPA2 for authentication.

WPA-Auto - Clients using WPA or WPA2 for authentication.

WPA Algorithms - Selects the data encryption type to use. (Default is determined by the Security Mode selected).

TKIP - Uses Temporal Key Integrity Protocol (TKIP) keys for encryption. WPA specifies TKIP as the data encryption method to replace WEP. TKIP avoids the problems of WEP static keys by dynamically changing data encryption keys.

AES - Uses Advanced Encryption Standard (AES) keys for encryption. WPA2 uses AES Counter-Mode encryption with Cipher Block Chaining Message Authentication Code (CBC-MAC) for message integrity. The AES Counter-Mode/CBCMAC Protocol (AESCCMP) provides extremely robust data confidentiality using a 128- bit key. Use of AES-CCMP encryption is specified as a standard requirement for WPA2. Before implementing WPA2 in the network, be sure client devices are upgraded to WPA2-compliant hardware.

Auto - Uses either TKIP or AES keys for encryption. WPA and WPA2 mixed modes allow both WPA and WPA2 clients to associate to a common SSID. In mixed mode, the unicast encryption type (TKIP or AES) is negotiated for each client.

Key Renewal Interval - Sets the time period for automatically changing data encryption keys and redistributing them to all connected clients.

RADIUS Server - Configures RADIUS server settings.

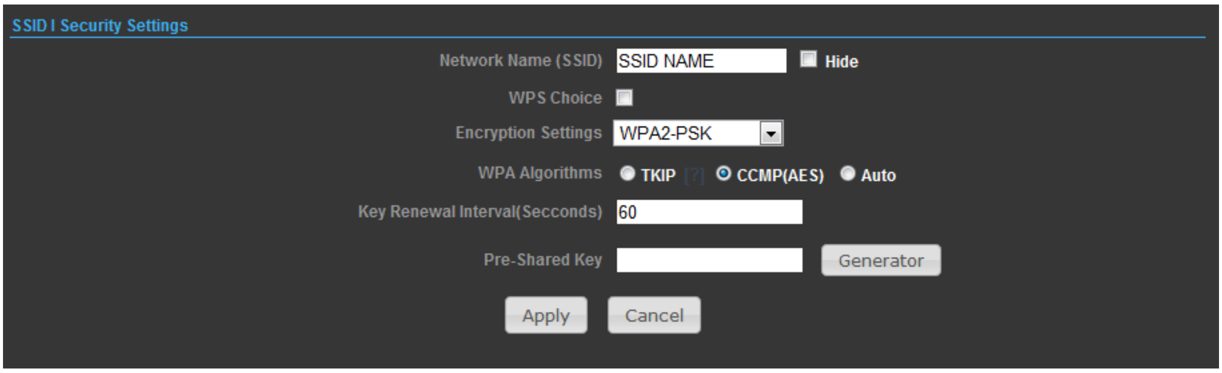
IP Address - Specifies the IP address of the RADIUS server.

Port - The User Datagram Protocol (UDP) port number used by the RADIUS server for authentication messages. (Range: 1024-65535; Default: 1812)

Shared Secret - A shared text string used to encrypt messages between the access point and the RADIUS server. Be sure that the same text string is specified on the RADIUS server. Do not use blank spaces in the string. (Maximum length: 20 characters)

- - WPA-PSK & WPA2-PSK

Wi-Fi Protected Access (WPA) was introduced as an interim solution for the vulnerability of WEP pending the adoption of a more robust wireless security standard. WPA2 includes the complete wireless security standard, but also offers backward compatibility with WPA. For small home or office networks, WPA and WPA2 provide a simple “personal” operating mode that uses just a pre-shared key for network access. The WPA Pre-Shared Key (WPA-PSK) mode uses a common password phrase for user authentication that is manually entered on the access point and all wireless clients. Data encryption keys are automatically generated by the access point and distributed to all clients connected to the network.



SSID I Security Settings

Network Name (SSID) SSID NAME □ Hide

WPS Choice □

Encryption Settings WPA2-PSK

WPA Algorithms ○ TKIP [?] ● CCMP(AES) ○ Auto

Key Renewal Interval(Secconds) 60

Pre-Shared Key

Picture 75

WPA-PSK — Clients using WPA with a Pre-shared Key are accepted for authentication.

WPA2-PSK — Clients using WPA2 with a Pre-shared Key are accepted for authentication.

WPA- Auto-PSK — Clients using WPA or WPA2 with a Preshared Key are accepted for authentication. The default data encryption type is TKIP/AES.

WPA Algorithms - Selects the data encryption type to use. (Default is determined by the Security Mode selected.)

TKIP - Uses Temporal Key Integrity Protocol (TKIP) keys for encryption. WPA specifies TKIP as the data encryption method to replace WEP. TKIP avoids the problems of WEP static keys by dynamically changing data encryption keys.

AES - Uses Advanced Encryption Standard (AES) keys for encryption. WPA2 uses AES Counter-Mode encryption with Cipher Block Chaining Message Authentication Code (CBC-MAC) for message integrity. The AES Counter-Mode/CBCMAC Protocol (AESCCMP) provides extremely robust data confidentiality using a 128- bit key. Use of AES-CCMP encryption is specified as a standard requirement for WPA2. Before implementing WPA2 in the network, be sure client devices are upgraded to WPA2-compliant hardware.

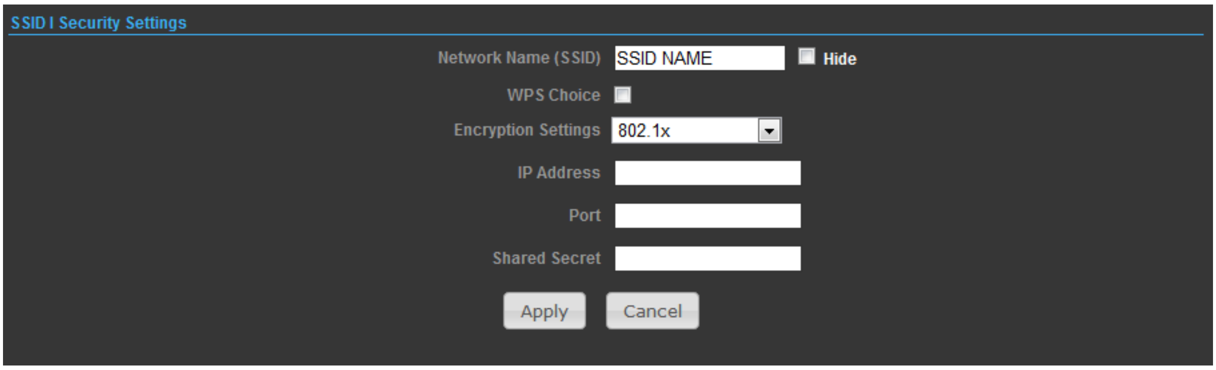
Auto - Uses either TKIP or AES keys for encryption. WPA and WPA2 mixed modes allow both WPA and WPA2 clients to asso ciate to a common SSID. In mixed mode, the unicast encryption type (TKIP or AES) is negotiated for each client.

Pass Phrase - The WPA Preshared Key can be input as an ASCII string (an easy-to-remember form of letters and numbers that can include spaces) or Hexadecimal format. (Range: 8~63 ASCII characters, or exactly 64 Hexadecimal digits)

Key Renewal Interval - Sets the time period for automatically changing data encryption keys and redistributing them to all connected clients.

- - IEEE 802.1X AND RADIUS

IEEE 802.1X is a standard framework for network access control that uses a central RADIUS server for user authentication. This control feature prevents unauthorized access to the network by requiring an 802.1X client application to submit user credentials for authentication. The 802.1X standard uses the Extensible Authentication Protocol (EAP) to pass user credentials (either digital certificates, user names and passwords, or other) from the client to the RADIUS server. Client authentication is then verified on the RADIUS server before the client can access the network. Remote Authentication Dial-in User Service (RADIUS) is an authentication protocol that uses software running on a central server to control access to RADIUS-aware devices on the network. An authentication server contains a database of user credentials for each user that requires network access.
The WPA and WPA2 enterprise security modes use 802.1X as the method of user authentication. IEEE 802.1X can also be enabled on its own as a security mode for user authentication. When 802.1X is used, a RADIUS server must be configured and be available on the connected wired network.


SSID I Security Settings

Network Name (SSID): SSID NAME ☐ Hide

WPS Choice ☐

Encryption Settings: 802.1x

IP Address:

Port:

Shared Secret:

Picture 76

RADIUS Server - Configures RADIUS server settings.

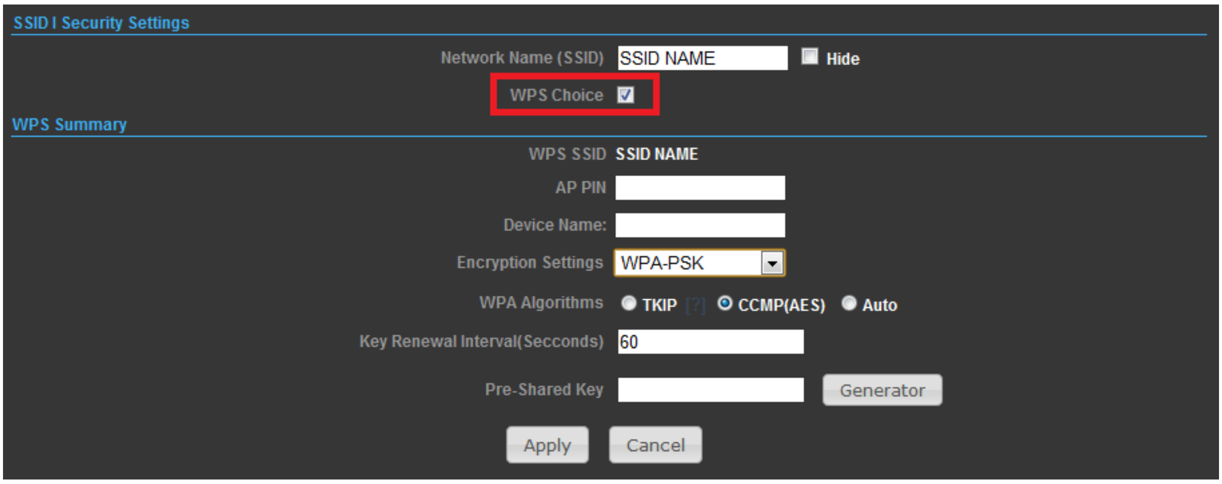
IP Address - Specifies the IP address of the RADIUS server.

Port - The User Datagram Protocol (UDP) port number used by the RADIUS server for authentication messages. (Range: 1024-65535; Default: 1812)

Shared Secret - A shared text string used to encrypt messages between the access point and the RADIUS server. Be sure that the same text string is specified on the RADIUS server. Do not use blank spaces in the string. (Maximum length: 20 characters)

- - WI-FI PROTECTED SETUP (WPS)

Wi-Fi Protected Setup (WPS) is designed to ease installation and activation of security features in wireless networks. WPS has two basic modes of operation, Push-button Configuration (PBC) and Personal Identification Number (PIN). The WPS PIN setup is optional to the PBC setup and provides more security. The WPS button on the Wireless Router can be pressed at any time to allow a single device to easily join the network. The WPS Settings page includes configuration options for setting WPS device PIN codes and activating the virtual WPS button (*Picture 77*).



SSID I Security Settings

Network Name (SSID): SSID NAME □ Hide

WPS Choice ☑

WPS Summary

WPS SSID: SSID NAME

AP PIN:

Device Name:

Encryption Settings: WPA-PSK

WPA Algorithms: ○ TKIP ● CCMP(AES) ○ Auto

Key Renewal Interval(Secconds): 60

Pre-Shared Key:

Picture 77

WPS SSID - The service set identifier for the unit.

AP PIN - Displays the PIN Code for the Wireless Router.

Device Name - WPS name for connecting to the device.

Encryption Settings - Selects between methods of broadcasting the WPS beacon to network clients wanting to join the network:

WPA Algorithms - Select the data encryption type to use. (Default is determined by the Security Mode selected.)

TKIP - Uses Temporal Key Integrity Protocol (TKIP) keys for encryption. WPA specifies TKIP as the data encryption method to replace WEP. TKIP avoids the problems of WEP static keys by dynamically changing data encryption keys.

AES - Uses Advanced Encryption Standard (AES) keys for encryption. WPA2 uses AES Counter-Mode encryption with Cipher Block Chaining Message Authentication Code (CBC-MAC) for message integrity. The AES Counter-Mode/CBCMAC Protocol (AESCCMP) provides extremely robust data confidentiality using a 128- bit key. Use of AES-CCMP encryption is specified as a standard requirement for WPA2. Before implementing WPA2 in the network, be sure client devices are upgraded to WPA2-compliant hardware.

Auto - Uses either TKIP or AES keys for encryption. WPA and WPA2 mixed modes allow both WPA and WPA2 clients to associate to a common SSID. In mixed mode, the unicast encryption type (TKIP or AES) is negotiated for each client.

Key Renewal Interval - Sets the time period for automatically changing data encryption keys and redistributing them to all connected clients.

Pass Phrase - The WPA Preshared Key can be input as an ASCII string (an easy-to-remember form of letters and numbers that can include spaces) or Hexadecimal format. (Range: 8~63 ASCII characters, or exactly 64 Hexadecimal digits)