



Guía de Usuario

Modelo: 2615

54 Mbps Router Inalambrico MIMO



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SECCION 1: INTRODUCCION

1.1 COMENTARIOS SOBRE EL ROUTER MIMO

MUCHAS GRACIAS!!! por haber adquirido un **ANSEL MODELO 2615** (Wireless Broadband Router 802.11G MIMO). Que le permitirá compartir, entre todos los usuarios de la red, un enlace de Internet Broadband, **ADSL & CABLEMODEM**. Usándolo en conjunto con nuestra amplia gama de tarjetas de Red Wireless 802.11G MIMO, le garantizará **EL MÁXIMO PERFORMANCE** gracias al procesador de alto desempeño que equipa al 2615, el rango de cobertura Wireless es mayor que el de 802.11G y es compatible con todo tipo de dispositivos Wireless 802.11B & 802.11G.

Diseñado y fabricado para ambientes SOHO / PyME, y, no obstante que es muy fácil de instalar, configurar y mantener en operación por personal no entrenado técnicamente, el 2615 es una **SOLUCION COMPLETA** para las comunicaciones de su negocio. Antes de instalar este equipo, por favor, lea cuidadosamente todo el manual de operación adecuada.

La tecnología Multiple-Input Multiple-Output (MIMO) representa la forma más económica de incrementar las prestaciones de una red Wireless Lan. Gracias al uso de 3 antenas para transmitir y recibir señales de radio la productividad agregada de la red se refleja en:

- Incremento Múltiple en la eficiencia en el manejo de todo el espectro radioeléctrico.
- Dramática Reducción en el desvanecimiento de la señal gracias a la diversidad de antenas.
- Aumento en el número de usuarios potenciales.
- Baja probabilidad de detección.
- Resistencia Mejorada contra interferencias.

1.2 CONTENIDO DE ESTE PAQUETE

Antes de comenzar con la instalación por favor verifique que todos los componentes detallados se encuentran físicamente.

- 1 ANSEL MODELO 2615™ Wireless Broadband Router
- 3 Antenas
- 1 Fuente de poder externa
- 1 Manual de usuarios

En caso que alguno de estos aditamentos no esté o esté dañado, por favor, contacte a su distribuidor inmediatamente. Mantenga los empaques originales del equipo, ya que son necesarios en caso de reclamos de garantías.

1.3 Características

El 2615 MIMO Wireless Router cuenta con las siguientes funciones que redundan en mayor número y mejores prestaciones:

- Cumple con IEEE802.11g, IEEE802.11b, 802.11b/g MIMO, IEEE802.3, IEEE802.3u estándar
- 1 10/100M Auto-Negotiation WAN RJ45 port, 4 10/100M Auto-Negotiation LAN RJ45 ports
- Sistema de tecnología de antenas de múltiples entradas – múltiples salidas
- Con Soporte para Wireless Roaming, usted puede moverse entre AP's y no va a sufrir desconexión.
- Con Soporte para transferencia de datos vía inalámbrica entre los rubros de velocidad de los 54/48/36/24/18/12/9/6/11/5.5/3/2/1Mbps.
- Prove 64/128 bit WEP and 802.11i encryption security
- Con Soporte para wireless AP, AP Client mode
- Prove autenticación WPA y WPA2, así como la encriptación de seguridad TKIP/AES.
- Prove Filtrado wireless LAN ACL (Access Control List)
- Servidores NAT & DHCP integrados con soporte para IP Estática y distribución de direcciones IP.
- Con Soporte para Virtual Server, Special Application & DMZ host
- Firewall integrado con soporte para Filtrado de direcciones IP, Filtrado de Nombres de Dominio, y Filtrado de MAC Address.
- Con Soporte para CSMA/CA \ CSMA/CD \ TCP/IP \ PPPoE \ DHCP \ ICMP \ NAT
- Con Soporte para UPnP, Dynamic DNS, Static Routing,
- Con Soporte para ICMP-FLOOD, UDP-FLOOD, TCP-SYN-FLOOD filter
- Con Soporte para firmware upgrade
- Con Soporte para Administración Remota y Web management

Sección 2: INSTALACION DEL HARDWARE

2.1 Panel Layout

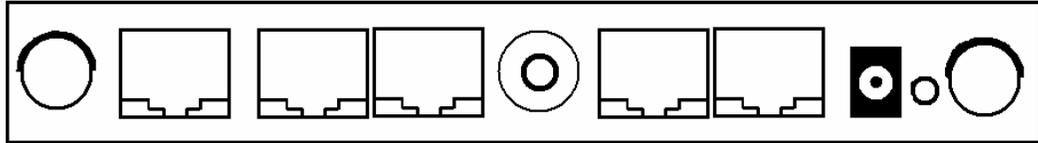
2.1.1 Panel Frontal

El front panel del 2615 cuenta con varios indicadores LED que están diseñados para indicar conexiones. Visto de derecha a izquierda, la tabla describe la función de cada uno de los leds:



NOMBRE	ACCIÓN	DESCRIPCIÓN
POWER	APAGADO	NO POWER
	PRENDIDO	POWER PRENDIDO
M1	PRENDIDO	EL ROUTER SE ESTÁ INICIALIZANDO.
	INTERMITENTE	EL ROUTER ESTÁ FUNCIONANDO ADECUADAMENTE.
	APAGADO	EL ROUTER TIENE UN PROBLEMA DE HARDWARE
WAN	APAGADO	NO HAY ENLACE WAN ACTIVO EN ESE PUERTO
	PRENDIDO	HAY UN DISPOSITIVO ACTIVO ENLAZADO PERO SIN
	INTERMITENTE	HAY UN DISPOSITIVO ACTIVO ENLAZADO Y CON ACTIVIDAD
WLAN 1/2/3/4	PRENDIDO	LA FUNCIÓN WIRELESS RADIO SE ENCUENTRA ACTIVA
	INTERMITENTE	LA FUNCIÓN WIRELESS RADIO SE ENCUENTRA
	APAGADO	NO HAY UN DISPOSITIVO ACTIVO CONECTADO
	PRENDIDO	HAY UN DISPOSITIVO ACTIVO ENLAZADO PERO SIN
	INTERMITENTE	HAY UN DISPOSITIVO ACTIVO ENLAZADO Y CON ACTIVIDAD

2.1.2 PANEL TRASERO



Fix Antenna WAN 1 2 Unfix Antenna 3 4 Power Jack Reset Fix Antenna

1. Antenas, 2 fijas y 1 desmontable.
2. Puerto WAN RJ45 para conectar el enlace ADSL / CABLEMODEM.
3. 4 Puertos LAN 10/100Mbps RJ45 para conectar el 2615 a PC's ó Switches.
4. Puerto para fuente de poder, utilice solo la provista con el equipo, perderá la garantía si utiliza una fuente distinta.
5. Botón Reset para reestablecer a parámetros de fábrica.

REESTABLECIMIENTO A PARAMETROS DE FABRICA:

- Apague el 2615
- Presione y mantenga presionado el botón de RESET durante 10 segundos, sin soltar conecte la corriente al 2615
- Presione y mantenga presionado el botón de RESET hasta que el LED del sistema se encienda, aprox. 10 segundos.
- Libere el botón RESET y espere a que el router reubtee.

2.2 REQUERIMIENTOS DEL SISTEMA

- Enlace Broadband (DSL / Cable / Ethernet)
- 1 módem DSL / Cable que cuente con conector RJ45. No se requiere en caso que usted conecte el 2615 a una red LAN Ethernet.
- Cada PC en la red deberá contar con una tarjeta de Red Ethernet y con el patch cord con conectores RJ45.
- Cada PC en la red deberá contar con el Protocolo TCP/IP instalado.
- Microsoft Internet Explorer 5.0 o más reciente, Netscape Navigator 6.0 mínimo.

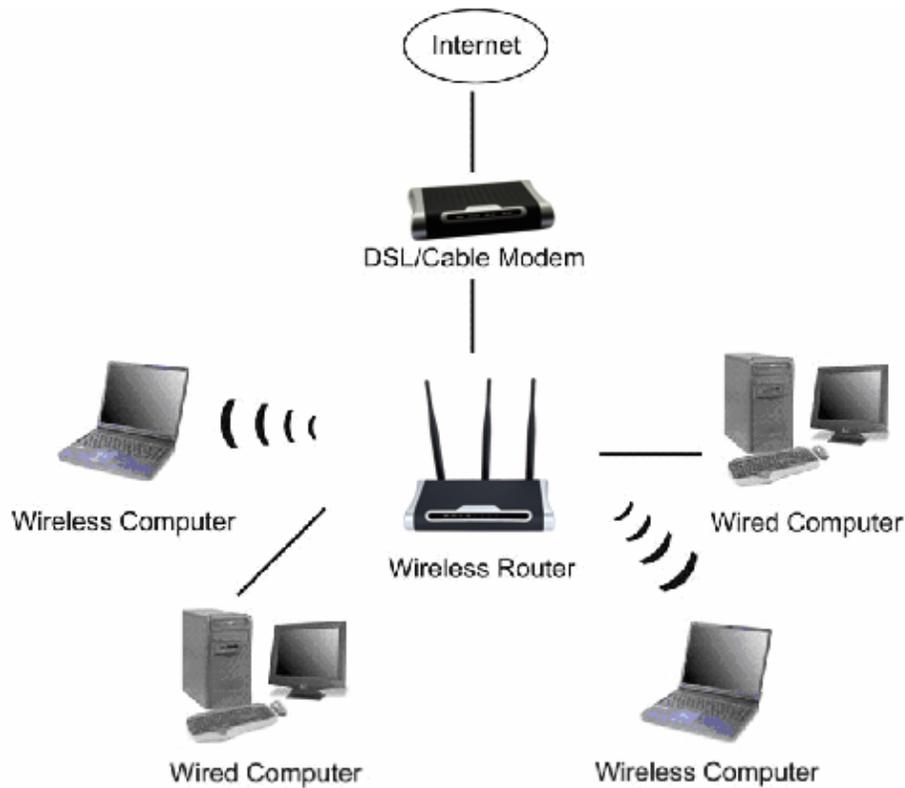
2.3 REQUERIMIENTOS AMBIENTALES PARA LA INSTALACIÓN

- Evite la exposición solar directa.
- Evite la saturación de equipos, tiene que haber un espacio de al menos 2 pulgadas (5cm) entre equipos.
- El espacio tiene que estar muy bien ventilado.
- Temperatura Operación: 0°~40°
- Humedad Operación: 5%~90%RH, sin condensación.

2.4 CONECTANDO EL ROUTER

IMPORTANTE: Antes de conectar el 2615 asegúrese de apagar su computadora, el módem ADSL / CABLE y el Router. Para lograr obtener la máxima cobertura wireless, despliegue las antenas del 2615 a 45 grados hacia fuera.

- 1) Conecte una punta del cable al puerto WAN del router y la otra punta al Módem ADSL / CABLE .
- 2) Con otro cable UTP, conecte la tarjeta de red de su computadora a uno de los puertos LAN del ruteador.
- 3) Encienda el Módem ADSL / CABLE y espera a que los led's indicadores le indiquen que el equipo ha iniciado correctamente.
- 4) Encienda el 2615, para lo cual tienen que conectar la fuente de poder externa incluida en el paquete, a la corriente eléctrica y al puerto de entrada de la fuente de poder en el 2615.
- 5) Encienda su computadora.
- 6) Asegúrese que los LEDS indicadores WAN, WLAN y LAN estén encendidos, en caso contrario, repita los pasos.



SECCIÓN 3: CONFIGURANDO SU COMPUTADORA

Una vez conectado si 2615 a la red, tiene que configurarlo. Este capítulo describe a fondo la configuración de las funciones básicas del equipo. Este procedimiento no le llevará más que unos pocos minutos.

3.1 CONFIGURACIÓN TCP/IP

La dirección IP default del 2615 es: 192.168.1.1

La máscara de SUBNET: 255.255.255.0.

Estos valores pueden ser vistos desde la LAN. Pueden ser cambiados como usted guste, pero como ejemplo, utilizaremos estos valores para efectos de ejemplificación. Conecte las PC a los puertos LAN del Router, hay 2 maneras de configurar la direcciones IP de sus

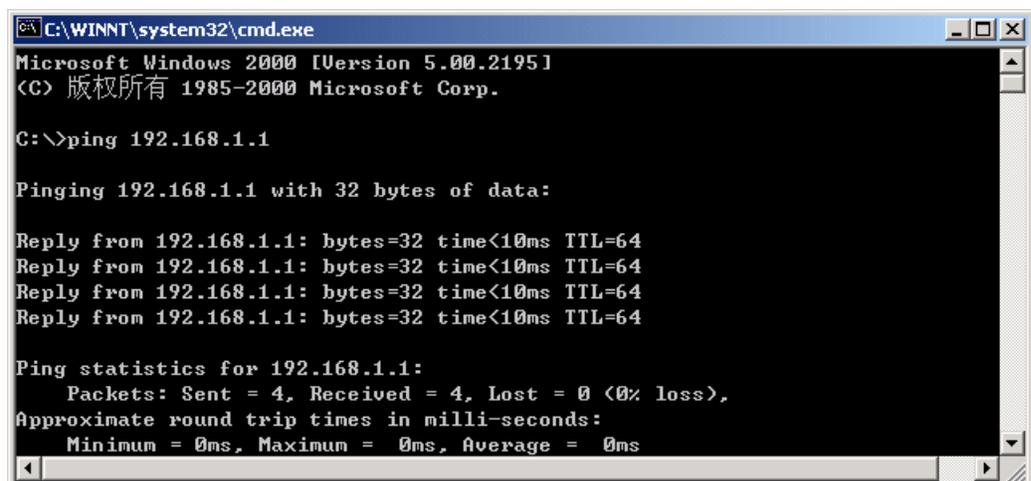
computadoras.

a. CONFIGURACIÓN DE LA DIRECCIÓN IP DE MANERA MANUAL:

- i. Inserte en los campos de configuración TCPIP de la tarjeta de red de sus PC's.
- ii. Dirección IP: 192.168.1.xxx ("xxx" oscila entre 2 y 254)
- iii. Subnet Mask is 255.255.255.0
- iv. Gateway 192.168.1.1

b. CONFIGURACION DE LA DIRECCIÓN IP DE FORMA AUTOMATICA:

- i. Elija la opción "Obtener Dirección IP de forma automática" en el panel de configuración de la tarjeta de red de su computadora.
- ii. Apague el Router y las PC's, encienda el Router y las PC's. El servidor DHCP del 2615 le asignará una dirección IP a cada una de las PC.
- iii. Vaya a Start, teclee "command" (para Windows 95/98/ME) o "cmd" (para Windows2000/XP), luego haga click en OK. Aparecerá la siguiente pantalla y teclee "ping 192.168.1.1" y luego Enter.



```
C:\WINNT\system32\cmd.exe
Microsoft Windows 2000 [Version 5.00.2195]
(C) 版权所有 1985-2000 Microsoft Corp.

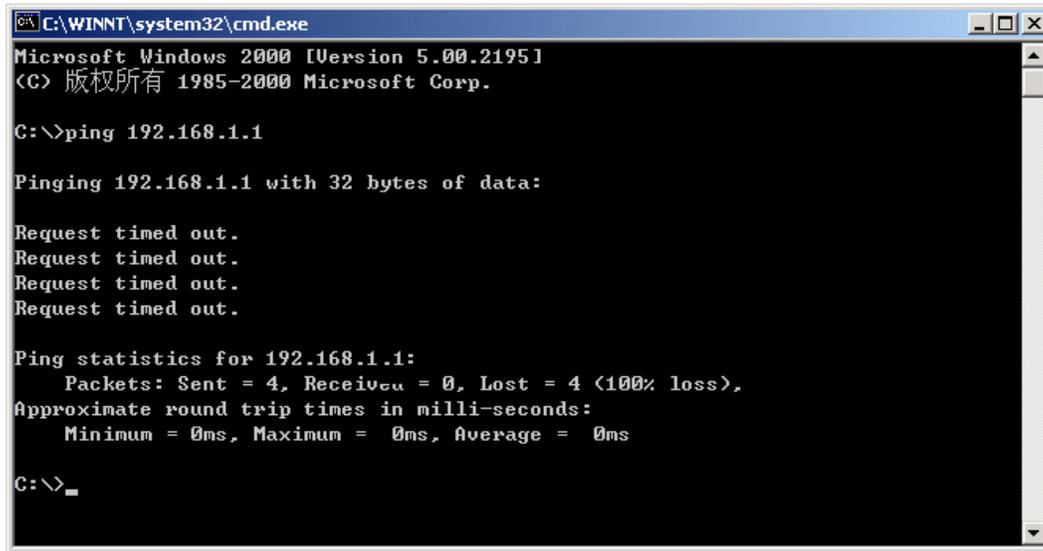
C:\>ping 192.168.1.1

Pinging 192.168.1.1 with 32 bytes of data:

Reply from 192.168.1.1: bytes=32 time<10ms TTL=64

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

Si el resultado que está obteniendo es similar al que se muestra la conexión entre sus PC's y el Router ha quedado establecida de forma correcta.



```
C:\WINNT\system32\cmd.exe
Microsoft Windows 2000 [Version 5.00.2195]
<C> 版权所有 1985-2000 Microsoft Corp.

C:\>ping 192.168.1.1

Pinging 192.168.1.1 with 32 bytes of data:

Request timed out.
Request timed out.
Request timed out.
Request timed out.

Ping statistics for 192.168.1.1:
    Packets: Sent = 4, Received = 0, Lost = 4 (100% loss),
Approximate round trip times in milli-seconds:
    Minimum = 0ms, Maximum = 0ms, Average = 0ms

C:\>_
```

En cambio, si el resultado que obtiene es como lo que aparece en la pantalla de arriba, significa que su PC NO está conectada al Router. Por favor siga los siguientes pasos:

1. ¿La conexión entre el 2615 y la PC es la correcta?
 - a. Los led's 1/2/3/4 del Router y los de la tarjeta de red de la PC tienen que estar encendidos.
2. ¿La configuración TCPIP de la PC son correctos?
 - a. La dirección del Router es: 192.168.1.1
 - b. La dirección de su PC debe ser en el siguiente rango: 192.168.1.2 ~ 192.168.1.254
 - c. El gateway debería ser:192.168.1.1

Para Windows 2000/XP, teclee: ipconfig /release y enter

```
C:\WINDOWS\System32\cmd.exe
Microsoft Windows XP [Version 5.1.2600]
(C) Copyright 1985-2001 Microsoft Corp.

C:\Documents and Settings\ipconfig/release

Windows IP Configuration

Ethernet adapter Local Area Connection:

    Connection-specific DNS Suffix  . : 
    IP Address . . . . . : 0.0.0.0
    Subnet Mask . . . . . : 0.0.0.0
    Default Gateway . . . . . : 

C:\Documents and Settings\
```

Teclee: IPCONFIG /RENEW Y ENTER. Debería ahora tener la dirección IP 192.168.1.x (donde x en un número entre 2 - 254). Proceda a la sección 3 para Configurar su Router. Si NO obtiene una dirección IP, entonces reinicie a valores de fabrica su 2615, apriete el Botón RESET durante 10 segundos mientras que el 2615 está encendido. Intente nuevamente ejecutando las funciones IPCONFIG / RENEW.

```
C:\WINDOWS\System32\cmd.exe
Microsoft Windows XP [Version 5.1.2600]
(C) Copyright 1985-2001 Microsoft Corp.

C:\Documents and Settings\ipconfig/renew

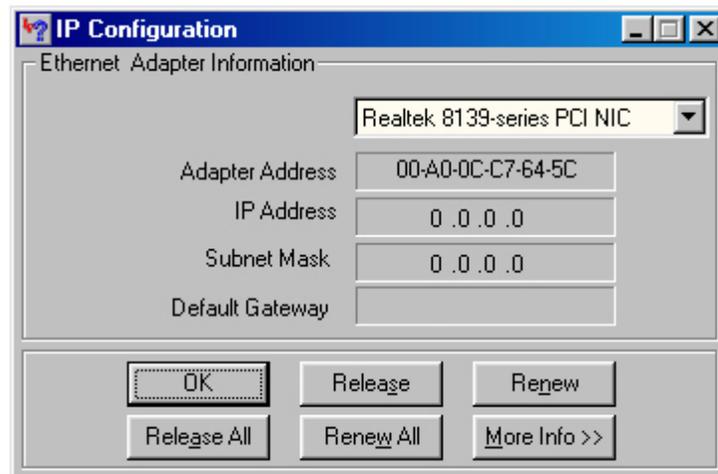
Windows IP Configuration

Ethernet adapter Local Area Connection:

    Connection-specific DNS Suffix  . : 
    IP Address . . . . . : 192.168.1.5
    Subnet Mask . . . . . : 255.255.255.0
    Default Gateway . . . . . : 192.168.1.1

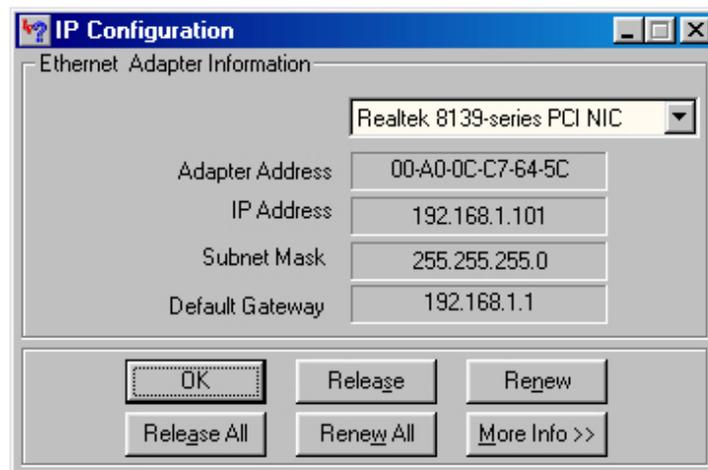
C:\Documents and Settings\
```

Para Windowss 95/98/ME vaya a Start, Run, teclee winipcfg y OK. Elija la tarjeta de Red que va a utilizar:



Si NO obtiene una dirección IP, entonces reinicie a valores de fabrica su 2615, apriete el Botón RESET durante 10 segundos mientras que el 2615 está encendido. Intente nuevamente ejecutando las funciones

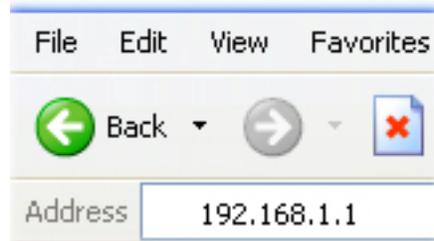
IPCONFIG /RENEW.



SECCIÓN 4: CONFIGURANDO EL ROUTER

El 2614 puede ser configurado vía un navegador Web tales como Netscape Communicator o Internet Explorer. Para efectos de este ejemplo usaremos el Microsoft Internet Explorer:

1. Arranque el navegador, seleccione herramientas, Opciones de Internet, Oprima "Conectar". Seleccione "Dial Up Network" NUNCA, seleccione: "Affirm inspect setting automatically", "Configure scrip automatically" y "Use agency server on LAN setting".
2. Teclee <http://192.168.1.1>, Enter, ingrese su User name y password. En caso que sea la primera vez que entra a esta opción utilice los valores de fábrica: User name: **admin**, password: **admin**, Apriete OK.



Una vez logeado satisfactoriamente le aparecerá la siguiente pantalla:



4.1 Wizard, asistente para la configuración

4.1.1 Host Setting

Time Zone Seleccione la hora local.

The screenshot shows the 'Wizard' configuration interface. At the top, there is a navigation bar with tabs: Wizard, System, WAN, LAN, NAT, Firewall, Routing, UPnP, DDNS, and Wireless. The 'Wizard' tab is active. Below the navigation bar, the 'Wizard' title is displayed. On the left side, there is a list of steps: 1. Host Settings (highlighted in blue), 2. WAN Settings, and 3. DNS. The main area contains the 'Wizard' configuration form with the following fields:

Host Name	<input type="text" value="router"/>
Domain Name	<input type="text" value="router"/>
Time Zone	<input type="text" value="(GMT+08:00) Hong Kong, Perth, Singapore, Taipei"/>
Daylight Saving	<input type="checkbox"/> Enabled From: <input type="text" value="FEB"/> <input type="text" value="2"/> To: <input type="text" value="FEB"/> <input type="text" value="2"/>

At the bottom right of the form, there is a 'Next' button.

4.1.2 CONFIGURACIÓN WAN

Estos valores son los que están fuera de su red y se utilizan cada vez que el 2615 se conecta a Internet. Casi todos los proveedores de Acceso a Internet (ISP) asignan una dirección Ip a cada uno de sus clientes cada vez que se logean. Por favor elija su caso:

1. **ENLACE DE CABLEMODEM:** Por favor, elija **Cable Modem** y siga con el siguiente paso.

Si su ISP requiere registrar su dirección MAC, elija **ENABLE**, introduzca su MAC y oprima **Clone MAC Address**, Seleccione **Next** para guardar los cambios.

Wizard System WAN LAN NAT Firewall Routing UPnP DDNS Wireless

Wizard

1. Host Settings
2. WAN Settings
3. DNS

Wizard
Cable Modem

MAC Cloning Enabled

MAC Address 00 : 13 : D3 : 1F : 5F : 56

Clone MAC Address

Back Next

2. Si su ISP le asigna una dirección IP FIJA, oprima **Fixed-IP xDSL** e introduzca su dirección Ip asignada, **Subnet Mask**, **ISP Gateway Address** y **DNS**, todos estos datos son provistos por su ISP.

Wizard

1. Host Settings
2. WAN Settings
3. DNS

Wizard
Fixed-IP xDSL

IP address assigned by your ISP	0	0	0	0
Subnet Mask	255	255	255	0
ISP Gateway Address	0	0	0	0

Back Next

ENLACE VIA ADSL: Por favor, solicite a su ISP le informe si utiliza PPPoE. En caso afirmativo, seleccione **PPPoE xDSL** e introduzca su User Name y Password.

MTU: Maximum Transmission Unit-1492: Este es un valor definido por default, en caso que requiera cambiar este valor para mejorar el performance con su ISP. En caso que su ISP sea AOL, por favor ajuste el valor de la MTU a 1400.

Maximum Idle Time: El valor del Tiempo Máximo sin Actividad se utiliza solamente para esquemas de conexión "On Demand". Especifica cuantos minutos el enlace WAN va a estar activo no obstante que no haya actividad. El valor 0 significa que el enlace nunca va a dejar de estar activo no obstante que no haya actividad.

Wizard System WAN LAN NAT Firewall Routing UPnP DDNS Wireless

Wizard

1. Host Settings
2. WAN Settings
3. DNS

Wizard

Dial-Up xDSL(PPPoE)

User Name	sz26515336@163.gd
Password	*****
Retype password	*****
Service Name	
MTU (546-1492)	1492
Maximum Idle Time	0 (seconds)

Back Next

3. Si usted se conecta a Internet vía **PPTP** por favor ingrese la siguiente información provista por su ISP.

- 1. Host Settings
- 2. WAN Settings
- 3. DNS

Wizard

PPTP

PPTP Account	<input type="text" value="pptp_user"/>
PPTP Password	<input type="password" value="*****"/>
Retype password	<input type="password" value="*****"/>
Service IP Address	<input type="text" value="0"/> . <input type="text" value="0"/> . <input type="text" value="0"/> . <input type="text" value="0"/>
My IP Address	<input type="text" value="0"/> . <input type="text" value="0"/> . <input type="text" value="0"/> . <input type="text" value="0"/>
My Subnet Mask	<input type="text" value="255"/> . <input type="text" value="255"/> . <input type="text" value="255"/> . <input type="text" value="0"/>
Connection ID	<input type="text" value="5"/> (Optional)
MTU (546-1460)	<input type="text" value="1460"/>
Maximum Idle Time	<input type="text" value="300"/> seconds

4. Si usted se conecta a Internet vía **PPTP** por favor ingrese la siguiente información provista por su ISP.

- 1. Host Settings
- 2. WAN Settings
- 3. DNS

Wizard

L2TP

L2TP Account	<input type="text" value="l2tp_user"/>
L2TP Password	<input type="password" value="*****"/>
Retype password	<input type="password" value="*****"/>
Service IP Address	<input type="text" value="0"/> . <input type="text" value="0"/> . <input type="text" value="0"/> . <input type="text" value="0"/>
My IP Address	<input type="text" value="0"/> . <input type="text" value="0"/> . <input type="text" value="0"/> . <input type="text" value="0"/>
My Subnet Mask	<input type="text" value="255"/> . <input type="text" value="255"/> . <input type="text" value="255"/> . <input type="text" value="0"/>
MTU (546-1460)	<input type="text" value="1460"/>
Maximum Idle Time	<input type="text" value="300"/> seconds

4.1.3 DNS

Los Domain Name Servers se utilizan para “mapear” una dirección IP que es

equivalente al nombre de un dominio. Su ISP le tiene que proporcionar las direcciones IP necesarias para uno o mas DNS.

The screenshot shows the 'Wizard' configuration interface. At the top, a navigation bar includes 'Wizard', 'System', 'WAN', 'LAN', 'NAT', 'Firewall', 'Routing', 'UPnP', 'DDNS', and 'Wireless'. Below this, the 'Wizard' title is displayed. On the left, a sidebar lists three steps: '1. Host Settings', '2. WAN Settings', and '3. DNS'. The main content area is titled 'Wizard DNS Settings'. It features a 'Static DNS Server' section with an 'Enable' checkbox checked. Below this are two rows for DNS addresses: 'Primary DNS address' with fields containing '202', '96', '134', and '133'; and 'Secondary DNS address' with fields containing '202', '96', '128', and '68'. At the bottom right, there are 'Back' and 'Finish' buttons.

4.2 SISTEMA

Esta opción le permite revisar el estado de funcionamiento del equipo y cambiar el password de administrador, entre otros parámetros configurables.

4.2.1 ESTATUS DEL SISTEMA

Con esta pantalla podrá ver el estado de la conexión, de las interfases WAN/LAN del Router, versiones del firmware y hardware y número de clientes conectados a la red. Los siguientes ITEM se incluyen en la pantalla:

- **INTERNET:** Muestra el estado de la conexión.
- **GATEWAY:** Muestra la configuración IP, DHCP, NAT & Firewall.
- **INFORMATION:** Muestra el número de clientes conectados y versiones del firmware y hardware.

System Settings

System Status

System Settings
 Administrator Settings
 Firmware Upgrade
 Configuration Tools
 System Log

System Status

INTERNET Refresh

Cable/DSL	Disconnected
WAN IP	0.0.0.0
Subnet Mask	0.0.0.0
Gateway	0.0.0.0
DNS	202.96.128.166
Secondary DNS	0.0.0.0
Domain Name	
Connection Type	PPPoE
Connection Time	00:00:00

Connection Disconnected

GATEWAY

IP Address	192.168.1.1
Subnet Mask	255.255.255.0
DHCP Server	Enabled
NAT	Enabled
Firewall	Enabled

INFORMATION

System Up Time	02:06:16
System Date	5/17/2006 18:37:42
Connected Clients	0
Runtime Code Version	V0.1.2.103

4.2.2 SYSTEM SETTINGS, Configuración del sistema

System Settings

System Status

System Settings

Administrator Settings

Firmware Upgrade

Configuration Tools

System Log

System Settings

Help

Host Name	<input type="text"/>
Domain Name	<input type="checkbox"/> Pass WAN Domain <input type="text"/>
NTP Server	<input type="text"/> (option)
Set Time Zone	(GMT+08:00) Hong Kong, Perth, Singapore, Taipei
Daylight Saving	<input type="checkbox"/> Enabled From: FEB 2 To: FEB 2
NAT	<input checked="" type="checkbox"/> Enabled

OK

Cancel

4.2.3 CONFIGURACION DEL ADMINISTRADOR

Con este menú usted puede restringir el acceso a las pantallas de administración definiendo un password. El de fabrica es: admin.

Por favor asigne un password de administrador lo antes posible y guárdelo en lugar seguro. Los password pueden contener caracteres alfanuméricos y son sensibles a Mayúsculas / Minúsculas.

IDLE TIME-OUT: El valor del Tiempo Máximo sin Actividad antes que el Router cierre la sesión de administrador, el valor 0, deshabilita esta función.

ADMINISTRACION REMOTA: Por default, el acceso a la consola de administración solo puede hacerse de forma local. Usted puede administrar el equipo de manera remota agregando la dirección IP del nodo remoto del que se va a administrar.

Wizard System WAN LAN NAT Firewall Routing UPnP DDNS Wireless Logout																	
<h2>System Settings</h2>																	
<ul style="list-style-type: none"> System Status System Settings Administrator Settings Firmware Upgrade Configuration Tools System Log 	<div style="text-align: right;"> <input type="button" value="Help"/> </div> <h3>Administrator Settings</h3> <h4>Password Settings</h4> <table border="1"> <tr> <td>User Name</td> <td><input type="text" value="admin"/></td> </tr> <tr> <td>Current Password</td> <td><input type="password" value="*****"/></td> </tr> <tr> <td>Password</td> <td><input type="password" value="*****"/></td> </tr> <tr> <td>Re-type password</td> <td><input type="password" value="*****"/> (3-12 Characters)</td> </tr> <tr> <td>Idle Time Out</td> <td><input type="text" value="300"/> seconds (0: No timeout)</td> </tr> </table> <h4>Remote Management</h4> <table border="1"> <tr> <td>Enabled</td> <td><input type="checkbox"/></td> </tr> <tr> <td>IP Address</td> <td><input type="text" value="0"/> <input type="text" value="0"/> <input type="text" value="0"/> <input type="text" value="0"/></td> </tr> <tr> <td>Port</td> <td><input type="text" value="81"/></td> </tr> </table> <div style="text-align: right;"> <input type="button" value="OK"/> <input type="button" value="Cancel"/> </div>	User Name	<input type="text" value="admin"/>	Current Password	<input type="password" value="*****"/>	Password	<input type="password" value="*****"/>	Re-type password	<input type="password" value="*****"/> (3-12 Characters)	Idle Time Out	<input type="text" value="300"/> seconds (0: No timeout)	Enabled	<input type="checkbox"/>	IP Address	<input type="text" value="0"/> <input type="text" value="0"/> <input type="text" value="0"/> <input type="text" value="0"/>	Port	<input type="text" value="81"/>
User Name	<input type="text" value="admin"/>																
Current Password	<input type="password" value="*****"/>																
Password	<input type="password" value="*****"/>																
Re-type password	<input type="password" value="*****"/> (3-12 Characters)																
Idle Time Out	<input type="text" value="300"/> seconds (0: No timeout)																
Enabled	<input type="checkbox"/>																
IP Address	<input type="text" value="0"/> <input type="text" value="0"/> <input type="text" value="0"/> <input type="text" value="0"/>																
Port	<input type="text" value="81"/>																

4.2.4 ACTUALIZACION DE FIRMWARE

Esta pantalla nos permite actualizar el firmware, simplemente busque el nuevo firmware y seleccione OK.

System Settings

The screenshot shows the 'Firmware Upgrade' section of a router's configuration page. On the left is a sidebar menu with options: System Status, System Settings, Administrator Settings, Firmware Upgrade (highlighted in blue), Configuration Tools, and System Log. The main content area is titled 'Firmware Upgrade' and includes a 'Help' button. Below the title, it displays the current firmware version as 'V0.1.2.103' and the date as 'build:11 @ Sat Jul 22 06:17:05 2006'. A text instruction reads: 'Enter the path and name of the upgrade file then click the OK button below.' There is a text input field followed by a '浏览...' (Browse...) button. At the bottom right, there are 'OK' and 'Cancel' buttons.

4.2.5 HERRAMIENTAS DE CONFIGURACION

- **RESET FACTORY DEFAULT:** Esta opción restaura los valores de configuración a los de fábrica. Esta opción debería ser la última medida a tomar y solo en caso que todo lo antes realizado no haya funcionado. Una vez que el equipo esta restaurado, tendrá que volver a configurar todos los parámetros.
- **BACKUP SETTINGS:** Esta opción le permite guardar todos los parámetros de configuración en un archivo.
- **RESTORE SETTINGS:** Esta opción le permite insertar automáticamente todos los parámetros previamente salvados con la opción anterior.
- **RESTART SYSTEM:** Esta opción le permite reiniciar el Router.

System Settings

System Status

System Settings

Administrator Settings

Firmware Upgrade

Configuration Tools

System Log

Configuration Tools Help

- Restart System
- Restore Factory Default
- Backup Settings
- Restore Settings

浏览...

OK Cancel

4.2.6 BITACORA DEL SISTEMA (SYSTEM LOG)

Nos sirve para revisar los intentos ilegales de acceso a su red.

Con el **REMOTE LOG SETTING** usted podrá configurar los parámetros para que el equipo envíe un email con la información.

Wizard System WAN LAN NAT Firewall Routing UPnP DDNS Wireless Logout

System Settings

System Status

System Settings

Administrator Settings

Firmware Upgrade

Configuration Tools

System Log

System Log Help

Download Clear Refresh

```
[Wed May 17 16:31:27 2006]:[SYS] System start
[Wed May 17 16:31:27 2006]:[SYS] Ver 0.1.2.103 build:11 @ Sat Jul 22 06:17:05 2006
[Wed May 17 16:40:11 2006]:[HTTP] login (192.168.1.109)
[Wed May 17 16:41:12 2006]:[HTTP] logout (192.168.1.109)
[Wed May 17 16:41:44 2006]:[HTTP] login (192.168.1.109)
[Wed May 17 16:42:47 2006]:[HTTP] logout (192.168.1.109)
[Wed May 17 16:57:19 2006]:[HTTP] login (192.168.1.107)
[Wed May 17 17:05:14 2006]:[HTTP] logout (192.168.1.107)
[Wed May 17 17:05:17 2006]:[HTTP] login (192.168.1.107)
[Wed May 17 17:05:19 2006]:[DHCPD] received REQUEST
```

Remote Log Setting

Remote Log	<input type="checkbox"/> Enabled
Send log to	<input type="text" value="0"/> <input type="text" value="0"/> <input type="text" value="0"/> <input type="text" value="0"/>
Email Log	<input type="checkbox"/> Enabled
Send Email to	<input type="text"/>
SMTP Server	<input type="text" value="0.0.0.0"/>

4.3 CONFIGURACION WAN

El Router cuenta con Soporte para 5 tipos de conexión: **Dynamic IP Address, Static IP Address, PPPoE, PPTP & L2TP**. Cada pantalla difiere entre sí del tipo de conexión que elija.

4.3.1 CONNECTED TYPE (TIPO DE CONEXIÓN)

Cada tipo cuenta con un asistente (wizard)

WAN Settings

Connected Type DNS Help

<input type="radio"/> Dynamic IP Address	Obtain an IP address automatically from your service provider.
<input type="radio"/> Static IP Address	Uses a static IP address. Your service provider gives a static IP address to access Internet services.
<input checked="" type="radio"/> PPPoE	PPP over Ethernet is a common connection method used for xDSL.
<input type="radio"/> PPTP	PPP Tunneling Protocol can support multi-protocol Virtual Private Networks (VPN).
<input type="radio"/> L2TP	Layer 2 Tunneling Protocol can support multi-protocol Virtual Private Networks (VPN).

PPPOE

User Name	<input type="text" value="sz26515336@163.gd"/>
Password	<input type="password" value="*****"/>
Please retype your password	<input type="password" value="*****"/>
Service Name	<input type="text"/>
MTU (546-1492)	<input type="text" value="1492"/>
Maximum Idle Time (60-3600)	<input type="text" value="0"/> (seconds)
Connection Mode	<input type="text" value="keep-alive"/>

4.3.2 DNS

Los Domain Name Servers se utilizan para “mapear” una dirección IP que es equivalente al nombre de un dominio. Su ISP le tiene que proporcionar las direcciones IP necesarias para uno o mas DNS.

Wizard System **WAN** LAN NAT Firewall Routing UPnP DDNS Wireless Logout

WAN Settings

Connected Type
DNS

Help

DNS Proxy	<input checked="" type="checkbox"/> Enabled
Static DNS Server	<input checked="" type="checkbox"/> Enable
Domain Name Server (DNS) Address	<input type="text"/> . <input type="text"/> . <input type="text"/> . <input type="text"/>
Secondary DNS Address (optional)	<input type="text"/> . <input type="text"/> . <input type="text"/> . <input type="text"/>
Search Static DNS Firstly	<input type="checkbox"/> Enabled

OK Cancel

4.4 LAN

4.4.1 CONFIGURACION LAN

- **IP ADDRESS:** Este valor se refiere a la dirección interna de su red. En caso que tenga alguna necesidad específica y especial sugerimos NO cambiar este valor.
- **EL GATEWAY HACE LAS FUNCIONES DE SERVIDOR DHCP:** La configuración del ambiente TCP IP incluye: Host IP, Subnet Mask, Gateway, y configuración DNS. La tarea de configurar todas las computadoras no es simple. Afortunadamente la función DHCP nos permite manejar estas configuraciones de forma automática. Activando la función DHCP le asignará una dirección IP y a todos los parámetros mencionados a cada PC en el momento que estas entren a la Red Lan.
- **IP POOL START ADDRESS** en esta pantalla se consigna el intervalo INICIAL de los valores posibles que el DHCP Server puede asignar a las PC. Dicho valor es 192.168.16.2 o mayor, por que el valor default es 192.168.16.1.
- **IP POOL END ADDRESS** en esta pantalla se consigna el intervalo FINAL de los valores posibles que el DHCP Server puede asignar a las PC. Este valor TIENE que ser mayor que el de inicio.

- **LEASE TIME** es la cantidad de tiempo que la red le permitirá a un usuario la conexión con una IP Dinámica. Medido en minutos.

Wizard System WAN LAN NAT Firewall Routing UPnP DDNS Wireless Logout

LAN Settings

LAN Settings Help

LAN Settings
DHCP Client List

IP Address	192 . 168 . 3 . 1
Subnet Mask	255.255.255.0
The Gateway acts as DHCP Server	<input checked="" type="checkbox"/> Enabled
IP Pool Starting Address	192.168.3. 2
IP Pool Ending Address	192.168.3. 254
Lease Time	One day ▾

OK Cancel

4.4.2 DHCP CLIENT LIST: LISTADO DE CLIENTES DHCP

Wizard System WAN LAN NAT Firewall Routing UPnP DDNS Wireless Logout

LAN Settings

LAN Settings
DHCP Client List

DHCP Client List Help

Refresh

Host Name	IP Address	MAC Address	Remaining Time	Static
Static client				
Host Name	<input type="text"/>			
IP address	192.168.3.	<input type="text"/>		
MAC Address	<input type="text"/>	: <input type="text"/>	: <input type="text"/>	: <input type="text"/>
Add				

OK Cancel

4.5 NAT: NETWORK ADDRESS TRANSLATION.

Esta función nos permite a todas las PC de una red utilizar una sola dirección IP. El NAT también le permite acceso a Internet desde cualquier computadora sin la necesidad de “comprar” direcciones IP del ISP. También sirve para darle acceso a múltiples usuarios con una sola cuenta de acceso a Internet o para “mapear” las direcciones locales para un servidor IP como por ejemplo un servidor FTP o WEB a una dirección pública. Esto asegura su red de recibir ataques de Hackers y provee una administración flexible ya que puedo cambiar las direcciones IP internas sin afectar el acceso desde afuera a su red. El NAT debe ser activado para permitir a múltiples usuarios acceder a Internet o utilizar el Virtual Server.

4.5.1 VIRTUAL SERVER

Si usted configura el 2615 como Virtual Server los usuarios remotos accedendo servicios como Web o FTP en el sitio local vía una IP pública, pueden ser automáticamente redirigidos

a servidores privados configurados con una IP privada.

En otras palabras, dependiendo del servicio solicitado (TCP/UDP port number), el router redirige esa solicitud de servicio externa hacia el servidor apropiado.

NAT Settings

Virtual Server Help

Special Application
Port Mapping
ALG
DMZ

	Private IP	Private Port	Type	Public Port	Comment	Enabled
1.	192.168.3.	<input type="text"/>	TCP	<input type="text"/>	<input type="text"/>	<input type="checkbox"/>
2.	192.168.3.	<input type="text"/>	TCP	<input type="text"/>	<input type="text"/>	<input type="checkbox"/>
3.	192.168.3.	<input type="text"/>	TCP	<input type="text"/>	<input type="text"/>	<input type="checkbox"/>
4.	192.168.3.	<input type="text"/>	TCP	<input type="text"/>	<input type="text"/>	<input type="checkbox"/>
5.	192.168.3.	<input type="text"/>	TCP	<input type="text"/>	<input type="text"/>	<input type="checkbox"/>
6.	192.168.3.	<input type="text"/>	TCP	<input type="text"/>	<input type="text"/>	<input type="checkbox"/>
7.	192.168.3.	<input type="text"/>	TCP	<input type="text"/>	<input type="text"/>	<input type="checkbox"/>
8.	192.168.3.	<input type="text"/>	TCP	<input type="text"/>	<input type="text"/>	<input type="checkbox"/>
9.	192.168.3.	<input type="text"/>	TCP	<input type="text"/>	<input type="text"/>	<input type="checkbox"/>
10.	192.168.3.	<input type="text"/>	TCP	<input type="text"/>	<input type="text"/>	<input type="checkbox"/>
11.	192.168.3.	<input type="text"/>	TCP	<input type="text"/>	<input type="text"/>	<input type="checkbox"/>
12.	192.168.3.	<input type="text"/>	TCP	<input type="text"/>	<input type="text"/>	<input type="checkbox"/>
13.	192.168.3.	<input type="text"/>	TCP	<input type="text"/>	<input type="text"/>	<input type="checkbox"/>
14.	192.168.3.	<input type="text"/>	TCP	<input type="text"/>	<input type="text"/>	<input type="checkbox"/>
15.	192.168.3.	<input type="text"/>	TCP	<input type="text"/>	<input type="text"/>	<input type="checkbox"/>
16.	192.168.3.	<input type="text"/>	TCP	<input type="text"/>	<input type="text"/>	<input type="checkbox"/>
17.	192.168.3.	<input type="text"/>	TCP	<input type="text"/>	<input type="text"/>	<input type="checkbox"/>
18.	192.168.3.	<input type="text"/>	TCP	<input type="text"/>	<input type="text"/>	<input type="checkbox"/>
19.	192.168.3.	<input type="text"/>	TCP	<input type="text"/>	<input type="text"/>	<input type="checkbox"/>
20.	192.168.3.	<input type="text"/>	TCP	<input type="text"/>	<input type="text"/>	<input type="checkbox"/>

4.5.2 APLICACIONES ESPECIALES

Algunas aplicaciones requieren de múltiples conexiones. Por ejemplo: Internet gaming, video conferencia & VoIP entre otros. Esta aplicación NO puede funcionar si la función NAT está activada. En caso de necesitar correr aplicaciones que requieren de múltiples conexiones, hay que especificar el puerto normalmente asociado con una aplicación en el campo "Trigger Port", seleccione el protocolo TCP o UDP, entre a los puertos asociados con el "trigger port" para abrirlos al tráfico entrante.

TRIGGER PORT: Este es el puerto utilizado para “Disparar” la aplicación. Puede ser un puerto o un rango de puertos.

TRIGGER TYPE: Este indica el protocolo utilizado para “Disparar” la aplicación especial.

PUBLIC PORT (Puerto Público): Este es el número de puerto del lado WAN que se utilizará para acceder a la aplicación. Puede ser un puerto o un rango de puertos. Puede usar “comas” para agregar varios puertos o un rango de puertos.

PUBLIC TYPE: Protocolo utilizado para “Disparar” la aplicación especial.

	Trigger Port	Trigger Type	Public Port	Public Type	Comment	Enabled
1.	~	TCP		TCP		<input type="checkbox"/>
2.	~	TCP		TCP		<input type="checkbox"/>
3.	~	TCP		TCP		<input type="checkbox"/>
4.	~	TCP		TCP		<input type="checkbox"/>
5.	~	TCP		TCP		<input type="checkbox"/>
6.	~	TCP		TCP		<input type="checkbox"/>
7.	~	TCP		TCP		<input type="checkbox"/>
8.	~	TCP		TCP		<input type="checkbox"/>
9.	~	TCP		TCP		<input type="checkbox"/>
10.	~	TCP		TCP		<input type="checkbox"/>

4.5.3 PORT MAPPING / MAPEO DE PUERTOS

Esta función nos permite mapear puertos disponibles en el servidor Proxy para ser configurados. Especifique el puerto normalmente asociado con una aplicación en la campo "**Mapping Port**", seleccione el tipo de protocolo **TCP** o **UDP**.

Wizard System WAN LAN NAT Firewall Routing UPnP DDNS Wireless Logout

NAT Settings

Virtual Server

Special Application

Port Mapping

ALG

DMZ

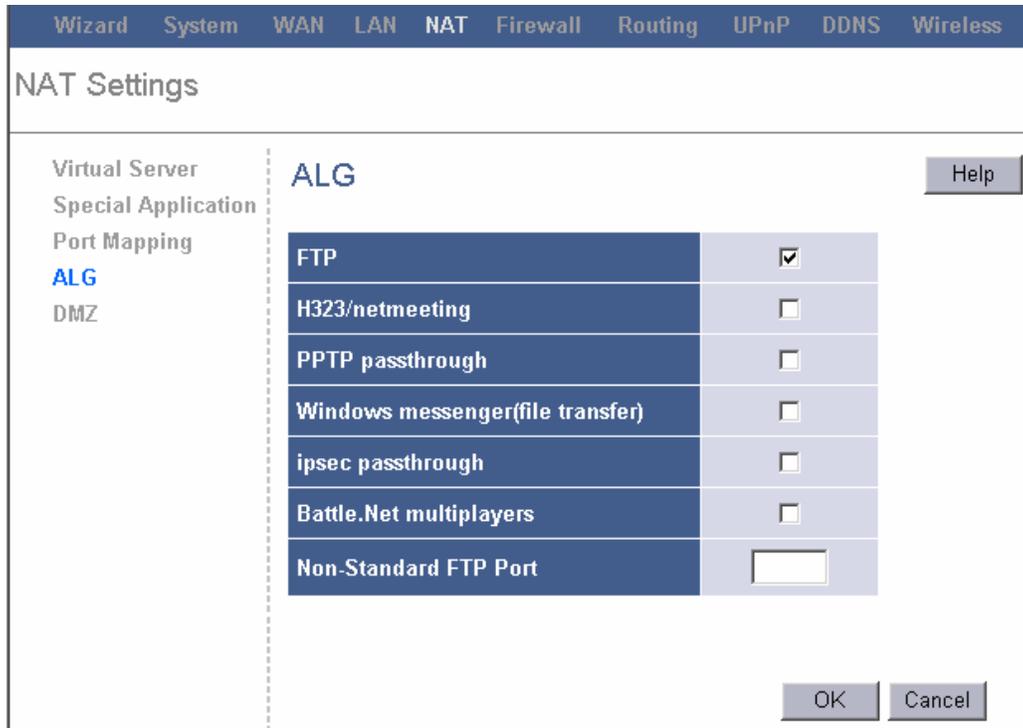
Port Mapping Help

	Server IP	Mapping Ports	Type	Comment	Enabled
1.	192.168.3.		TCP		<input type="checkbox"/>
2.	192.168.3.		TCP		<input type="checkbox"/>
3.	192.168.3.		TCP		<input type="checkbox"/>
4.	192.168.3.		TCP		<input type="checkbox"/>
5.	192.168.3.		TCP		<input type="checkbox"/>
6.	192.168.3.		TCP		<input type="checkbox"/>
7.	192.168.3.		TCP		<input type="checkbox"/>
8.	192.168.3.		TCP		<input type="checkbox"/>
9.	192.168.3.		TCP		<input type="checkbox"/>
10.	192.168.3.		TCP		<input type="checkbox"/>

OK Cancel

4.5.4 ALG

Si requiere algunas de las funciones siguientes, por favor selecciónela de la lista: **FTP, H323/Netmeeting, PPTP passthrough, windows messenger(file tansfer), Ipsec passthrough, Battle.Net multiplayer, Non-Standard FTP Port**, luego presione **OK**.



4.5.5 DMZ

Si cuenta con una PC en la red que no puede correr una aplicación adecuadamente y se encuentra ubicada detrás de NAT Firewall o después de configurar la Función de Aplicaciones Especiales, usted puede abrir a ese cliente un acceso irrestricto a Internet de dos vías. Introduzca la dirección IP del DMZ en esta pantalla.

Agregar un cliente al DMZ puede exponer su red a una variedad de situaciones de inseguridad y riesgos, por esta razón solo utilice esta opción como último recurso.

Wizard System WAN LAN NAT Firewall Routing UPnP DDNS Wireless

NAT Settings

Virtual Server
Special Application
Port Mapping
ALG
DMZ

DMZ Help

Enabled

DMZ table

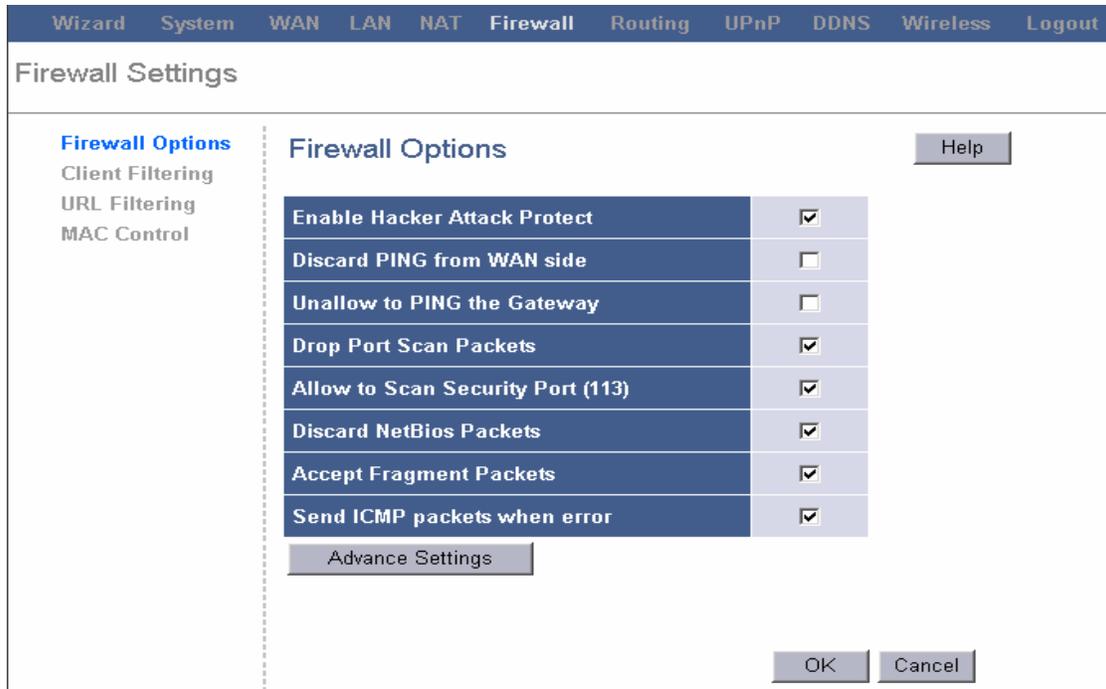
Public IP Address	IP Address of Virtual DMZ Host	Action
192.168.1.26	192.168.3.	<< Add

OK Cancel

4.6 CONFIGURACION DEL FIREWALL

El router cuenta con un avanzado y eficiente Firewall que lo protege restringiendo parámetros de conexión para limitar el riesgo de intrusos y de una gran variedad de ataques de hackers. Asimismo, si usted requiere aplicaciones con acceso a Internet ilimitado puede configurar un cliente/servidor específico como DMZ.

4.6.1 OPCIONES DEL FIREWALL



4.6.2 FILTRADO DE CLIENTES

Usted puede filtrar al acceso a Internet a Clientes Locales basado en direcciones IP, tipos de aplicación, en cualquier momento que lo desee.

- Firewall Options
- Client Filtering**
- URL Filtering
- MAC Control

Client Filtering

Help

Enable Client Filter

	IP	Port	Type	Block Time	Day	Time	Comments
1.	192.168.3. [] ~ []	[] ~ []	TCP	<input checked="" type="radio"/> Always <input type="radio"/> Block	<input type="checkbox"/> SUN <input type="checkbox"/> MON <input type="checkbox"/> TUE <input type="checkbox"/> WED <input type="checkbox"/> THU <input type="checkbox"/> FRI <input type="checkbox"/> SAT	[0:00am] ~ [0:00am]	[]
2.	192.168.3. [] ~ []	[] ~ []	TCP	<input checked="" type="radio"/> Always <input type="radio"/> Block	<input type="checkbox"/> SUN <input type="checkbox"/> MON <input type="checkbox"/> TUE <input type="checkbox"/> WED <input type="checkbox"/> THU <input type="checkbox"/> FRI <input type="checkbox"/> SAT	[0:00am] ~ [0:00am]	[]
3.	192.168.3. [] ~ []	[] ~ []	TCP	<input checked="" type="radio"/> Always <input type="radio"/> Block	<input type="checkbox"/> SUN <input type="checkbox"/> MON <input type="checkbox"/> TUE <input type="checkbox"/> WED <input type="checkbox"/> THU <input type="checkbox"/> FRI <input type="checkbox"/> SAT	[0:00am] ~ [0:00am]	[]
4.	192.168.3. [] ~ []	[] ~ []	TCP	<input checked="" type="radio"/> Always <input type="radio"/> Block	<input type="checkbox"/> SUN <input type="checkbox"/> MON <input type="checkbox"/> TUE <input type="checkbox"/> WED <input type="checkbox"/> THU <input type="checkbox"/> FRI <input type="checkbox"/> SAT	[0:00am] ~ [0:00am]	[]
5.	192.168.3. [] ~ []	[] ~ []	TCP	<input checked="" type="radio"/> Always <input type="radio"/> Block	<input type="checkbox"/> SUN <input type="checkbox"/> MON <input type="checkbox"/> TUE <input type="checkbox"/> WED <input type="checkbox"/> THU <input type="checkbox"/> FRI <input type="checkbox"/> SAT	[0:00am] ~ [0:00am]	[]
6.	192.168.3. [] ~ []	[] ~ []	TCP	<input checked="" type="radio"/> Always <input type="radio"/> Block	<input type="checkbox"/> SUN <input type="checkbox"/> MON <input type="checkbox"/> TUE <input type="checkbox"/> WED <input type="checkbox"/> THU <input type="checkbox"/> FRI <input type="checkbox"/> SAT	[0:00am] ~ [0:00am]	[]
7.	192.168.3. [] ~ []	[] ~ []	TCP	<input checked="" type="radio"/> Always <input type="radio"/> Block	<input type="checkbox"/> SUN <input type="checkbox"/> MON <input type="checkbox"/> TUE <input type="checkbox"/> WED <input type="checkbox"/> THU <input type="checkbox"/> FRI <input type="checkbox"/> SAT	[0:00am] ~ [0:00am]	[]
8.	192.168.3. [] ~ []	[] ~ []	TCP	<input checked="" type="radio"/> Always <input type="radio"/> Block	<input type="checkbox"/> SUN <input type="checkbox"/> MON <input type="checkbox"/> TUE <input type="checkbox"/> WED <input type="checkbox"/> THU <input type="checkbox"/> FRI <input type="checkbox"/> SAT	[0:00am] ~ [0:00am]	[]
9.	192.168.3. [] ~ []	[] ~ []	TCP	<input checked="" type="radio"/> Always <input type="radio"/> Block	<input type="checkbox"/> SUN <input type="checkbox"/> MON <input type="checkbox"/> TUE <input type="checkbox"/> WED <input type="checkbox"/> THU <input type="checkbox"/> FRI <input type="checkbox"/> SAT	[0:00am] ~ [0:00am]	[]
10.	192.168.3. [] ~ []	[] ~ []	TCP	<input checked="" type="radio"/> Always <input type="radio"/> Block	<input type="checkbox"/> SUN <input type="checkbox"/> MON <input type="checkbox"/> TUE <input type="checkbox"/> WED <input type="checkbox"/> THU <input type="checkbox"/> FRI <input type="checkbox"/> SAT	[0:00am] ~ [0:00am]	[]

4.6.3 FILTRADO URL

Para configurar esta herramienta utilice la tabla para especificar cuales son las direcciones Web (www.somesite.com) y / o web URLs que contengan la palabra clave que usted quiere filtrar. Seleccione **OK** para guardar los cambios.

Firewall Settings

- Firewall Options
- Client Filtering
- URL Filtering**
- MAC Control

URL Filtering

Help

Enable URL Filter

	IP	URL filter string	Enable
1.	192.168.3. <input type="text"/> ~ <input type="text"/>	<input type="text"/>	<input type="checkbox"/>
2.	192.168.3. <input type="text"/> ~ <input type="text"/>	<input type="text"/>	<input type="checkbox"/>
3.	192.168.3. <input type="text"/> ~ <input type="text"/>	<input type="text"/>	<input type="checkbox"/>
4.	192.168.3. <input type="text"/> ~ <input type="text"/>	<input type="text"/>	<input type="checkbox"/>
5.	192.168.3. <input type="text"/> ~ <input type="text"/>	<input type="text"/>	<input type="checkbox"/>
6.	192.168.3. <input type="text"/> ~ <input type="text"/>	<input type="text"/>	<input type="checkbox"/>
7.	192.168.3. <input type="text"/> ~ <input type="text"/>	<input type="text"/>	<input type="checkbox"/>
8.	192.168.3. <input type="text"/> ~ <input type="text"/>	<input type="text"/>	<input type="checkbox"/>
9.	192.168.3. <input type="text"/> ~ <input type="text"/>	<input type="text"/>	<input type="checkbox"/>
10.	192.168.3. <input type="text"/> ~ <input type="text"/>	<input type="text"/>	<input type="checkbox"/>

OK

Cancel

4.6.4 MAC Control

Usted puede bloquear PC en base a su dirección MAC.

Wizard System WAN LAN NAT **Firewall** Routing UPnP DDNS Wireless Logout

Firewall Settings

Firewall Options
Client Filtering
URL Filtering
MAC Control

MAC Control Help

MAC Address Control Enabled
Filter out or only accept the following MAC address connect to Internet. Filter out Accept

Configure MAC Address

MAC Address	Comment	Action
<input type="text"/> : <input type="text"/>	<input type="text"/>	Manual Setting <input type="button" value="Add"/>

4.7 CONFIGURACION DEL ROUTER

4.7.1 TABLA DE RUTEO

Wizard System WAN LAN NAT Firewall **Routing** UPnP DDNS Wireless Logout

Routing Settings

Routing Table Help
Static Routing

Destination LAN IP	Subnet Mask	Gateway	Metric	Interface	<input type="button" value="Refresh"/>
0.0.0.0	0.0.0.0	192.168.1.1	0	eth1	
192.168.1.0	255.255.255.0	192.168.1.0	0	eth1	
192.168.3.0	255.255.255.0	192.168.3.0	0	eth0	

4.7.2 RUTEO ESTATICO

Wizard System WAN LAN NAT Firewall Routing UPnP DDNS Wireless Logout

Routing Settings

Routing Table
Static Routing

Static Routing Help

Destination LAN IP	Subnet Mask	Gateway	Action
<input type="text"/>	<input type="text"/>	<input type="text"/>	<< Add

Cancel

4.8 UPnP

UPnP (Universal Plug and Play) nos permite encontrar y configurar, de forma automática, equipos en la red. Soporta Windows ME, XP, o posterior.

Wizard System WAN LAN NAT Firewall Routing UPnP DDNS Wireless Logout

UPnP Settings

UPnP Settings Help

UPnP Settings
Port Mapping

Enable UPnP	<input type="checkbox"/> Enabled
UPnP Port Number	<input type="text" value="1780"/>
Advertise Time (60 - 1800)	<input type="text" value="1800"/> seconds
Subscribe Timeout (60 -- 1800)	<input type="text" value="1800"/> seconds

OK Cancel

4.8.1 MAPEO DE PUERTOS

Wizard System WAN LAN NAT Firewall Routing UPnP DDNS Wireless Logout

UPnP Settings

UPnP Settings
Port Mapping

Help

Refresh

Remote Host	External Port	Internal Client	Internal Port	Protocol	Duration	Description
-------------	---------------	-----------------	---------------	----------	----------	-------------

4.9 DDNS

Dynamic **DNS** (DDNS) le permite a cualquiera acceder a nuestro servidor utilizando un nombre DNS registrado en vez de una dirección IP. Antes de habilitar el DDNS necesita registrar una cuenta con algún proveedor que se lista en el menú drop down.

Wizard System WAN LAN NAT Firewall Routing UPnP DDNS Wireless Logout

DDNS Settings

DDNS Settings

Help

Enabled
 Disable

Host Name	<input type="text"/>
DDNS Server	no-ip.com
User Name	<input type="text"/>
Password	<input type="text"/>
DDNS Retry Time	<input type="text"/> hours

OK Cancel

4.10 CONFIGURACION WIRELESS

Los parámetros que se consignan abajo son los valores default del Router. Usted debe configurar

las tarjetas de red de las computadoras con los mismos parámetros para lograr conectividad adecuada.

- **SSID (Network Name):** MIMO
- **Operating Mode:** AP
- **Channel #:** 11
- **Encryption:** Disabled

4.10.1 CONFIGURACION BASICA

Si quiere cambiar la configuración básica del equipo, entre al router y seleccione: "Wireless-Basic Configuration" asegúrese de oprimir OK para guardar los cambios.

WLAN Mode: Elija entre Access Point y AP Client.

SSID: Usted puede cambiar los datos en este campo. Una vez que haya cambiado el SSID, los clientes de la red deberán volverse a conectar utilizando el nuevo SSID.

CHANNEL: Seleccione el canal deseado, todos los clientes de la red tiene que estar en el mismo canal para poder operar.

SSID BROADCAST: Elija habilitar o deshabilitar la publicación de su SSID.

The screenshot shows the 'Wireless Settings' page in a router's web interface. The top navigation bar includes 'Wizard', 'System', 'WAN', 'LAN', 'NAT', 'Firewall', 'Routing', 'UPnP', 'DDNS', 'Wireless', and 'Logout'. The main title is 'Wireless Settings'. On the left, there is a sidebar menu with 'Basic Configuration' selected, and other options like 'WEP', 'Advanced', 'MAC Filter', 'Station List', 'Security', and 'RADIUS'. The main content area is titled 'Basic Configuration' and contains a table of settings:

WLAN Mode	Access Point
SSID	MIMO
Channel	11 - 2.462GHz
BSSID	00:0C:43:26:61:00
SSID Broadcast	<input checked="" type="checkbox"/> Enabled

At the bottom right of the form, there are 'OK' and 'Cancel' buttons. A 'Help' button is also present in the top right corner of the configuration area.

4.10.2 WEP

Usted puede configurar la encriptación WEP en esta pantalla.

ENCRYPTION: Elija entre 64 bits (10 dígitos hexadecimales) ó 128 bits (26 dígitos hexadecimales)

PASSPHRASE: Introduzca una frase y presione el botón “Generate” y el 2615 generará automáticamente 4 llaves WEP.

WEP KEY 1 – 4: Asigna manualmente una frase para cada llave. Si eligió 64 bits encryption, introduzca 10 caracteres HEX (0-F) para cada llave. Si seleccionó 128 bits encryption, introduzca 26 caracteres HEX (0-F) para cada llave.

DEFAULT TRANSMIT KEY: Seleccione una llave para activar una llave. Presione **OK** para salvar los cambios.

Wizard System WAN LAN NAT Firewall Routing UPnP DDNS Wireless Logout

Wireless Settings

Basic Configuration WEP Help

Advanced
MAC Filter
Station List
Security
RADIUS

WEP Encryption	64 bits 10 hex digits
Passphrase	passphrase Generate
Key 1	
Key 2	
Key 3	
Key 4	
Default Transmit key	<input checked="" type="radio"/> 1 <input type="radio"/> 2 <input type="radio"/> 3 <input type="radio"/> 4

OK Cancel

4.10.3 ADVANCED

RATE MODE: Elija entre Mixed, B only, G only, or Disable.

REGULACIONES

TIPO DE AUTENTICACION

BEACON INTERVAL: Paquetes de datos enviados por el router para sincronizar otros dispositivos inalámbricos. Especifique un intervalo entre 20 y 1000 milisegundos. El valor default es 100 milisegundos.

RTS Threshold: El valor de este campo debe ser 2347. Si encuentra inconsistencias en el flujo de datos sugerimos hacer pequeñas modificaciones entre los valores 0 y 2347.

FRAGMENTACION : El valor de este campo debe ser 2346. Configurar este valor con un valor muy bajo puede redundar en muy bajo performance,

PERIODO DTIM: Un DTIM es un contador descendente para informarle a los clientes de la próxima ventana para escuchar la transmisión y enviar mensajes multicast. El valor default es 1, el rango en el que se puede configurar oscila entre 1 y 255.

Wireless Settings

Basic Configuration
WEP
Advanced
MAC Filter
Station List
Security
RADIUS

Advanced

Help

Rate Mode	G-Only
Regulatory Domain	ETSI (channel 1-13)
Authentication Type	Open System
Beacon Period	100 (Default: 100, Milliseconds, Range: 1 - 65535)
RTS Threshold	2347 (Default: 2347, Range: 0 - 2347)
Fragmentation	2346 (Default: 2346, Range: 256 - 2346)
DTIM Period	1 (Default: 3, Range: 1 - 255)
Basic Rate Set	Default(1-2-5.5-11)
Control Tx Rates	Auto
CTS Protection	Auto
Preamble	<input checked="" type="radio"/> Long Preamble <input type="radio"/> Short Preamble
Tx Burst	Enable
Packet Aggregation	Enable
Antenna	Diversity

OK

Cancel

4.10.4 FILTRO MAC

Elija Enabled y seleccione los clientes que van a ser aceptados o denegados en su acceso a la red. Presione Apply para guardar los cambios.

Basic Configuration
WEP
Advanced
MAC Filter
Station List
Security
RADIUS

MAC Filter Help

Status Enabled

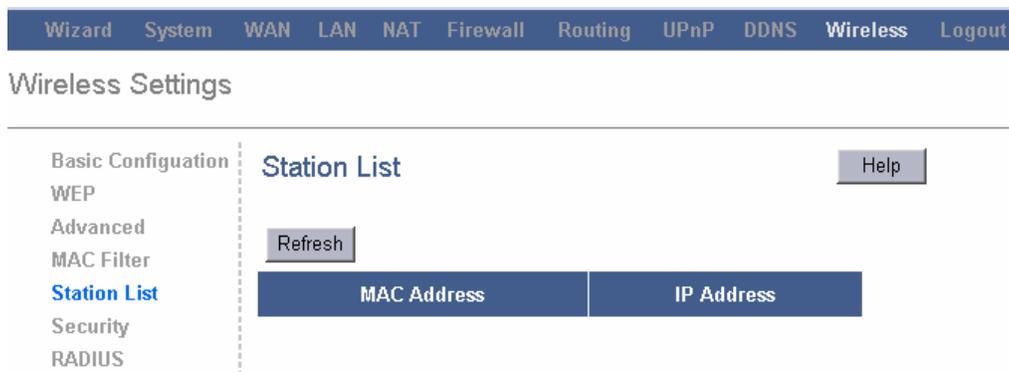
Action
 Prevent MAC addresses listed from accessing the wireless network
 Allow only MAC addresses listed to access the wireless network

MAC Address List

MAC 1		MAC 2	
MAC 3		MAC 4	
MAC 5		MAC 6	
MAC 7		MAC 8	
MAC 9		MAC 10	
MAC 11		MAC 12	
MAC 13		MAC 14	
MAC 15		MAC 16	
MAC 17		MAC 18	
MAC 19		MAC 20	
MAC 21		MAC 22	
MAC 23		MAC 24	
MAC 25		MAC 26	
MAC 27		MAC 28	

4.10.5 LISTADO DE COMPUTADORAS

Aparecen las PC que están conectadas a la red vía Inalámbrica.

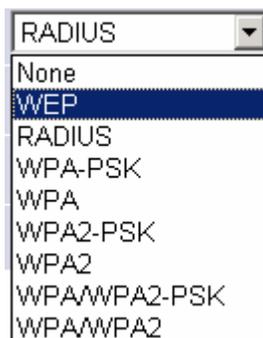


4.10.6 SEGURIDAD

Usted puede configurar la seguridad según la herramienta que requiera: WEP o WPA.

NOTA: En caso que los clientes soporten Encriptación WPA, sugerimos la utilicen en vez de WEP. Todos los clientes deben utilizar la misma herramienta de encriptación.

MODO DE SEGURIDAD : Elija alguno de los que se detallan.



WPA

Para habilitar WPA, elija WPA-PSK,WPA; WPA2-PSK,WPA2, WPA/WPA2-PSK,WPA/WPA2 del modo de seguridad.

WPA G-Rekey Interval: Introduzca el tiempo de renovación.

WPA Data Encryption: Elija TKIP, AES, TKIP/AES como método de encriptación.



RADIUS

Si utiliza Radius para autenticación elija el modo de seguridad RADIUS.

Wizard System WAN LAN NAT Firewall Routing UPnP DDNS Wireless Logout

Wireless Settings

Basic Configuration
WEP
Advanced
MAC Filter
Station List
Security
RADIUS

Security

Help

Security Mode	None (Default: None)
WPA-PSK Pass Phrase	passphrase
WPA G-Rekey Interval	0 (0: Disable)
WPA Data Encryption	TKIP (Default: TKIP)

OK Cancel

4.10.7 RADIUS

RADIUS SERVER: Introduzca la dirección IP del servidor RADIUS.

PUERTO RADIUS: Introduzca el número de puerto del servidor RADIUS.

SECRETO COMPARTIDO: Introduzca la llave compartida.

Wizard System WAN LAN NAT Firewall Routing UPnP DDNS **Wireless** Logout

Wireless Settings

Basic Configuration **RADIUS** Help

WEP
Advanced
MAC Filter
Station List
Security
RADIUS

Radius Server	<input type="text" value="0.0.0.0"/>
Radius Server Port	<input type="text" value="1812"/>
Shared Secrete	<input type="password" value="*****"/>
Comfirm Shared Secerte	<input type="password" value="*****"/>

OK Cancel

4.11 LOGOUT



SECCION 5 ESPECIFICACIONES

General	
Estandarres	IEEE 802.3, 802.3u, 802.11b and 802.11g
Protocolos	TCP/IP, PPPoE, DHCP, ICMP, NAT, SNTP
Puertos	1 puerto WAN RJ45, 10/100M con Auto-Negociación, 4 puertos LAN RJ45 10/100M con Auto-Negociación, soportan Auto MDI/MDIX
Tipo de Cable	10BASE-T: Cable UTP categoria 3, 4, 5 (máximo 100m) EIA/TIA-56100Ω STP (máximo 100m) 100BASE-TX: Cable UTP categoría 5, 5e (máximo 100m) EIA/TIA-568 100Ω STP (máximo 100m)
Tasa de transferencia de datos	54/48/36/24/18/12/9/6/11/5.5/3/2/1Mbps
Antena	2 antenas fijas, 1 antena removible
Fuente de poder	DC9V1000mA
LEDs	Power, M1, WAN , WLAN, 1,2,3,4
Ambiente y parámetros físicos	
Temperatura de Operación	0°~40° (32°~104°)
Humedad de Operación	10% - 95% RH, Sin condensación
Dimensiones (W×D× H)	7.9×4.7×1.2 in. (201×120×31.10 mm) (sin antena)

SECCION 6: SOLUCION DE PROBLEMAS COMUNES

Si usted tiene problemas para conectarse a Internet, siga los siguientes pasos:

1. Apague el Router, Cable /DSL MODEM, y la computadora, espere 5 minutos.
- 2 Encienda el Cable /DSL MODEM y espere a que los led's dejen de parpadear.
- 3 Encienda el router y espere a que los led's dejen de parpadear.
- 4 Encienda la Computadora.
- 5 Reconfigure el Router como se establece en la sección 3.
- 6 Entre al Router y seleccione "System Status".
- 7 Verifique que la dirección IP, Default Gateway, y al menos uno de los campos del DNS tienen información válida.

System Settings

System Status

System Settings
Administrator Settings
Firmware Upgrade
Configuration Tools
System Log

System Status

INTERNET

Cable/DSL	Disconnected
WAN IP	0.0.0.0
Subnet Mask	0.0.0.0
Gateway	0.0.0.0
DNS	202.96.128.166
Secondary DNS	0.0.0.0
Domain Name	
Connection Type	PPPoE
Connection Time	00:00:00

Si usted solo ve 0's, apriete el botón Refresh (para usuarios de Cable MODEM) o el botón Connect (para usuarios DSL).

CONTACTO :

Si tiene alguna duda o requiere alguna asesoría respecto a su equipo puede mandar un correo a: sopORTE@ansel.com.mx o en www.ansel.com.mx Tel: 52714421 para hacer válida su garantía requerimos de copia de factura o remisión donde aparezca el No. de serie del equipo en cuestión.

Apendice 3: Glosario

802.11b - The 802.11b standard specifies a wireless networking at 11 Mbps using direct-sequence spread-spectrum (DSSS) technology and operating in the unlicensed radio spectrum at 2.4GHz, and WEP encryption for security. 802.11b networks are also referred to as Wi-Fi networks.

802.11g - specification for wireless networking at 54 Mbps using direct-sequence spread-spectrum (DSSS) technology, using OFDM modulation and operating in the unlicensed radio spectrum at 2.4GHz, and backward compatibility with IEEE 802.11b devices, and WEP encryption for security.

DDNS(Dynamic Domain Name System) - The capability of assigning a fixed host and domain name to a dynamic Internet IP Address.

DHCP(Dynamic Host Configuration Protocol) - A protocol that automatically configure the TCP/IP parameters for the all the PCs that are connected to a DHCP server.

DMZ (Demilitarized Zone) - A Demilitarized Zone allows one local host to be exposed to the Internet for a special-purpose service such as Internet gaming or videoconferencing.

DNS (Domain Name Server) - An Internet Service that translates the names of websites into IP addresses.

Domain Name - A descriptive name for an address or group of addresses on the Internet.

DoS(Denial of Service) - A hacker attack designed to prevent your computer or network from operating or communicating.

DSL(Digital Subscriber Line) - A technology that allows data to be sent or received over existing traditional phone lines.

ISP (Internet Service Provider) - A company that Provide access to the Internet

MTU (Maximum Transmission Unit) - The size in bytes of the largest packet that can be transmitted.

NAT (Network Address Translation) - NAT technology translates IP addresses of a local area network to a different IP address for the Internet.

PPPoE (Point to Point Protocol over Ethernet) - PPPoE is a protocol for connecting remote hosts to the Internet over an always-on connection by simulating a dial-up connection.

SSID - A Service Set Identification is a thirty-two character (maximum) alphanumeric key identifying a wireless local area network. For the wireless devices in a network to communicate with each other, all devices must be configured with the same SSID. This is typically the configuration parameter for a wireless PC card. It corresponds to the ESSID in the wireless Access Point and to the wireless network name.

WEP (Wired Equivalent Privacy) - A data privacy mechanism based on a 64-bit or 128-bit or 152-bit shared key algorithm, as described in the IEEE 802.11 standard.

Wi-Fi - A trade name for the 802.11b wireless networking standard, given by the Wireless Ethernet Compatibility Alliance (WECA, see <http://www.wi-fi.net>), an industry standards group promoting interoperability among 802.11b devices.

WLAN (Wireless Local Area Network) - A group of computers and associated devices communicate with each other wirelessly, which network serving users are limited in a local area.

RADIUS(Remote Authentication Dial-In User Service)allows for remote users to dial into a central server and be authenticated in order to access resources on a network

Infrastructure – In terms of a wireless network, this is when wireless clients use an Access Point to gain access to the network

MIMO Multiple-Input Multiple-Output (MIMO) wireless systems represent an economical way to increase user capacity in a variety of environments. The use of antennas at both transmitter and receiver allows.

MIMO XR™ Wireless Broadband Router

**User's Manual
Ver1.0**

Section One. Introduction

1.1 About MIMO Router

Congratulations on your purchase of this MIMO XR™ Wireless Broadband Router. The MIMO XR™ Wireless Broadband Router allows Internet sharing and creates a dynamic wireless network for you to access your network with greater mobility. When used with other MIMO XR™ wireless products, the wireless signal range extends farther than standard 802.11g products. Best of all the MIMO XR™ Wireless Broadband Router is backwards-compatible with existing 802.11g and 802.11b network devices.

This product is specifically designed for Small Office and Home Office needs. It provides a complete SOHO solution for Internet surfing and is easy to configure and operate even for non-technical users. Instructions for installing and configuring this product can be found in this manual. Before you install and use this product, please read this manual carefully for proper operation of this product.

Multiple-Input Multiple-Output (MIMO) wireless systems represent an economical way to increase user capacity in a variety of environments. The use of antennas at both transmitter and receiver allows

- Multiplicative increase in capacity and spectral efficiency
- Dramatic reductions of fading thanks to diversity
- Increased system capacity (number of users)
- Lower probability of detection
- Improved resistance to interference

1.2 Package Contents

Before you begin the installation, please check the items of your package:

- One MIMO XR™ Wireless Broadband Router
- Three Antennas
- One Power Adapter
- One User's Manual

If any item contained is damaged or missing, please contact your local dealer immediately. Also, keep the box and packaging materials in case you need to ship the unit in the future.

1.3 Features

The MIMO Wireless Router has the following features that make it excellent for network connections.

- Complies with IEEE802.11g, IEEE802.11b, 802.11b/g MIMO, IEEE802.3, IEEE802.3u standards
- 1 10/100M Auto-Negotiation WAN RJ45 port, 4 10/100M Auto-Negotiation LAN RJ45 ports
- Provide advanced smart multiple input multiple output antenna technology
- Supports Wireless Roaming, can move among different AP and no break
- Supports 54/48/36/24/18/12/9/6/11/5.5/3/2/1Mbps wireless LAN data transfer rates
- Provides 64/128 bit WEP and 802.11i encryption security
- Supports wireless AP, AP Client mode
- Provides WPA and WPA2 authentication and TKIP/AES encryption security
- Provides wireless LAN ACL (Access Control List) filtering
- Built-in NAT and DHCP server supporting static IP address distributing
- Supports Virtual Server, Special Application, and DMZ host
- Built-in firewall supporting IP address filtering, Domain Name filtering, and MAC address filtering
- Supports CSMA/CA、CSMA/CD、TCP/IP、PPPoE、DHCP、ICMP、NAT
- Supports UPnP, Dynamic DNS, Static Routing,
- Supports ICMP-FLOOD, UDP-FLOOD, TCP-SYN-FLOOD filter
- Supports firmware upgrade
- Supports Remote and Web management

Section Two Hardware Installation

2.1 Panel Layout

2.1.1 The Front Panel

The front panel of the MIMO Wireless Router consists of several LED indicators, which is designed to indicate connections. Viewed from left to right. The table describes the LEDs on the front panel of the router.

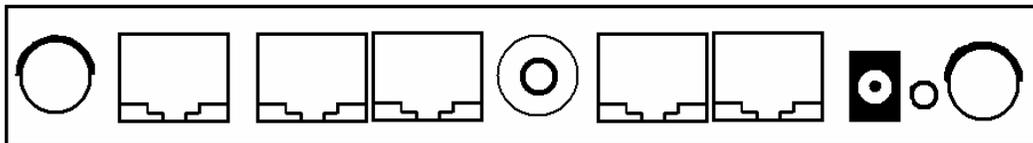


Name	Action	Description
Power	OFF	No Power
	ON	Power on
	ON	The router is initializing

	Flashing	The router is working properly
	OFF	The router has a hardware error
WAN	OFF	There is no WAN linked to the corresponding port
	ON	There is a device linked to the corresponding port but no activity
	Flashing	There is an active device linked to the corresponding port
WLAN	On	The Wireless Radio function is enabled
	Flashing	The Wireless Radio function is transmitting data.
1/2/3/4	OFF	There is no device linked to the corresponding port
	ON	There is a device linked to the corresponding port but no activity
	Flashing	There is an active device linked to the corresponding port

2.1.2 The Rear Panel

The rear panel contains the following features. (Viewed from left to right:)



Fix Antenna WAN 1 2 Unfix Antenna 3 4 Power Jack Reset Fix Antenna

1. Wireless antenna, two fix antenna and one Unfix antenna.
2. WAN RJ45 port for connecting the router to a cable, DSL modem or Ethernet
3. Four LAN 10/100Mbps RJ45 ports for connecting the router to the local PCs or switches.
4. DC power jack: only use the power adapter supplied with the MIMO Wireless Router, use of a different adapter may result in product damage.
5. Factory Default Reset button

There is a way to reset the router's factory defaults:

1. Use the Factory Default Reset button: First, turn off the router's power. Second, press and hold the default reset button, until the system LED lights up (about 5 seconds). Last, release the reset button and wait for the router to reboot.

Notice: Ensure the router is powered on before it restarts completely.

2.2 System Requirements

- Broadband Internet Access Service (DSL/Cable/Ethernet)
- One DSL/Cable modem that has an RJ45 connector (you do not need it if you connect the router to Ethernet)
- Each PC on the LAN needs a working Ethernet Adapter and an Ethernet cable with RJ45 connectors
- TCP/IP protocol must be installed on each PC
- Web browser, such as Microsoft Internet Explorer 5.0 or later, Netscape Navigator 6.0 or later

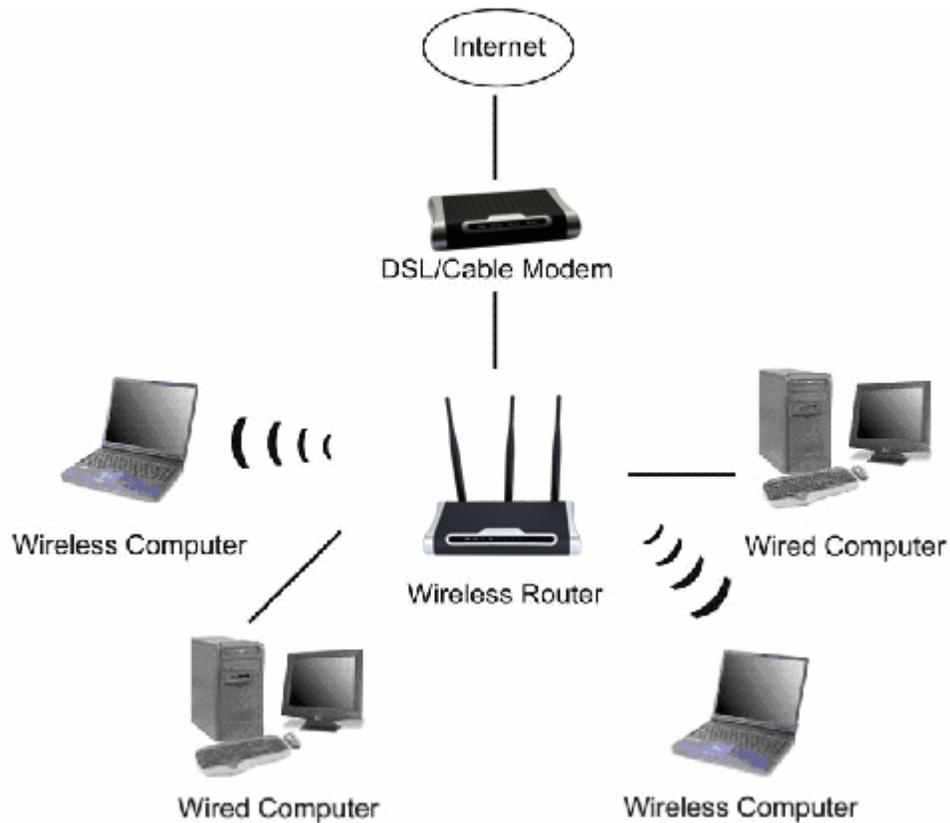
2.3 Installation Environment Requirements

- Not in direct sunlight or near a heater or heating vent
- Not cluttered or crowded. There should be at least 2 inches (5 cm) of clear space on all sides of the router
- Well ventilated (especially if it is in a closet)
- Operating temperature: 0°~40°
- Operating Humidity: 5%~90%RH, Non-condensing

2.4 Connecting the Router

Note: Prior to connecting the router, be sure to power off your computer, DSL/Cable modem, and the router. To achieve maximum wireless coverage, tilt the router's antennas outward at 45° angle.

1. Connect one end of a network cable to the WAN port of the router and connect the other end of the cable to the DSL/Cable modem.
2. With another network cable, connect one end of the cable to your computer's network card and connect the other end to one of the LAN ports of the router.
3. Power on the DSL/Cable modem and wait for the lights on the modem to settle down.
4. Power on the router by connecting one end of the supplied power adapter to the power jack of the router and connecting the other end to an electrical outlet.
5. Power on your computer.
6. Make sure the WAN, WLAN, and the LAN ports that the computer is connected to are lit. If not, try the above steps again.



Section Three: Configure your Computer

After connecting the MIMO Wireless Router into your network, you should configure it. This chapter describes how to configure the basic functions of your MIMO Wireless Router. These procedures only take you a few minutes. You can access the Internet via the router immediately after successfully configured.

3.1 TCP/IP configuration

The default IP address of the MIMO Wireless Router is 192.168.1.1, and the default Subnet Mask is 255.255.255.0. These values can be seen from the LAN. They can be changed as you desire, as an example we use the default values for description in this guide.

Connect the local PCs to the LAN ports on the router. There are then two means to configure

the IP address for your PCs.

Configure the IP address manually

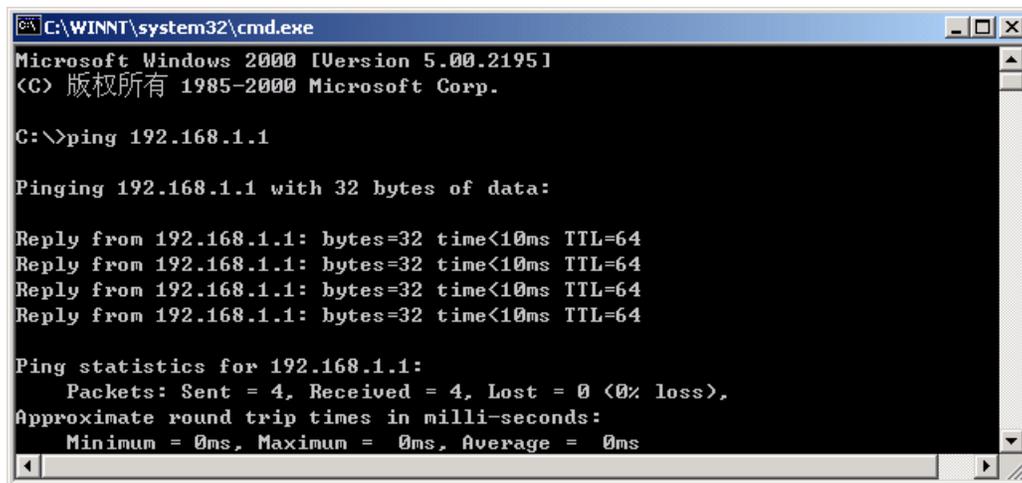
- 1) Set up the TCP/IP Protocol for your PC(s). If you need instructions as to how to do this.
- 2) Configure the network parameters. The IP address is 192.168.1.xxx ("xxx" is from 2 to 254), Subnet Mask is 255.255.255.0, and Gateway is 192.168.1.1(The router's default IP address)

Obtain an IP address automatically

- 1) Set up the TCP/IP Protocol in "Obtain an IP address automatically" mode on your PC(s). If you need instructions as to how to do this,
- 2) Power off the router and PC(s). Then turn on the router, and restart the PC(s). The built-in DHCP server will assign IP addresses for the PC(s).

Go to Start, Run, type command (for Windows 95/98/ME) or cmd (for Windows2000/XP) and click OK. You will see the command prompt as below.

Open a command prompt, and type ping 192.168.1.1, then press Enter. You should get four reply responses back.



```
C:\WINNT\system32\cmd.exe
Microsoft Windows 2000 [Version 5.00.2195]
(C) 版权所有 1985-2000 Microsoft Corp.

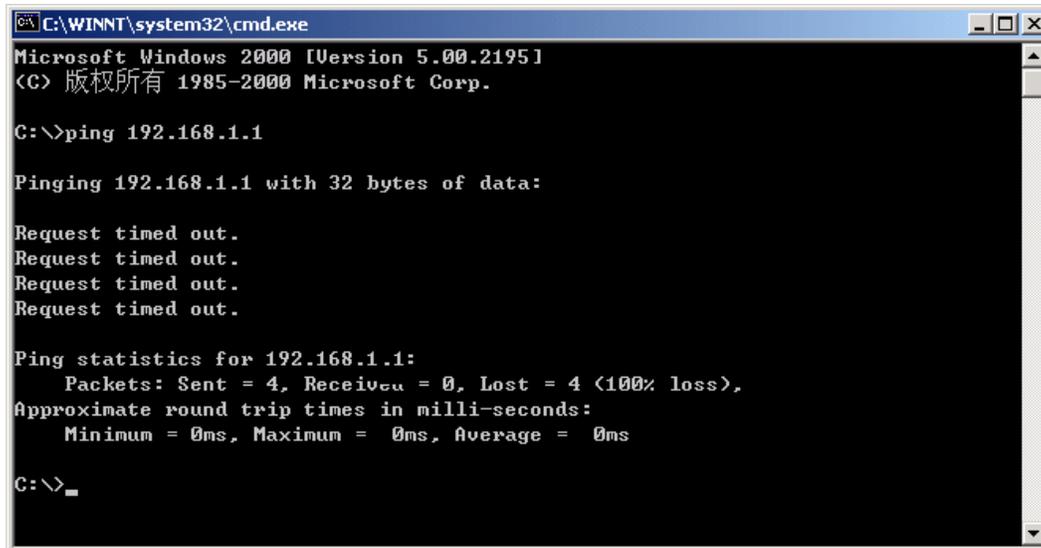
C:\>ping 192.168.1.1

Pinging 192.168.1.1 with 32 bytes of data:

Reply from 192.168.1.1: bytes=32 time<10ms TTL=64

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

If the result displayed is similar to that shown in the top of figure, the connection between your PC and the router has been established.

A screenshot of a Windows command prompt window titled "C:\WINNT\system32\cmd.exe". The window shows the following text:

```
Microsoft Windows 2000 [Version 5.00.2195]
<C> 版权所有 1985-2000 Microsoft Corp.

C:\>ping 192.168.1.1

Pinging 192.168.1.1 with 32 bytes of data:

Request timed out.
Request timed out.
Request timed out.
Request timed out.

Ping statistics for 192.168.1.1:
    Packets: Sent = 4, Received = 0, Lost = 4 (100% loss),
    Approximate round trip times in milli-seconds:
        Minimum = 0ms, Maximum = 0ms, Average = 0ms

C:\>_
```

If the result displayed is similar to that shown in the top of figure, it means that your PC has not connected to the router. Please check it following these steps:

1. Is the connection between your PC and the router correct?

Notice: The 1/2/3/4 LEDs of LAN port on the router and LEDs on your PC's adapter should be lit.

2. Is the TCP/IP configuration for your PC correct?

Notice: If the router's IP address is 192.168.1.1, your PC's IP address must be within the range of 192.168.1.2 ~ 192.168.1.254, the gateway must be 192.168.1.1

For Windows 2000/XP, type ipconfig/release and press Enter

```
C:\WINDOWS\System32\cmd.exe
Microsoft Windows XP [Version 5.1.2600]
(C) Copyright 1985-2001 Microsoft Corp.

C:\Documents and Settings\ipconfig/release

Windows IP Configuration

Ethernet adapter Local Area Connection:

    Connection-specific DNS Suffix  . : 
    IP Address . . . . . : 0.0.0.0
    Subnet Mask . . . . . : 0.0.0.0
    Default Gateway . . . . . : 

C:\Documents and Settings\
```

Type ipconfig/renew and press Enter. You should get an IP address of 192.168.1.x (where x is a number between 2 - 254). Proceed to Section 3, Configure the Router. If you don't get an IP address, reset the router by holding in the reset button at the back of the router for 10 seconds while it is ON and try ipconfig/renew again.

```
C:\WINDOWS\System32\cmd.exe
Microsoft Windows XP [Version 5.1.2600]
(C) Copyright 1985-2001 Microsoft Corp.

C:\Documents and Settings\ipconfig/renew

Windows IP Configuration

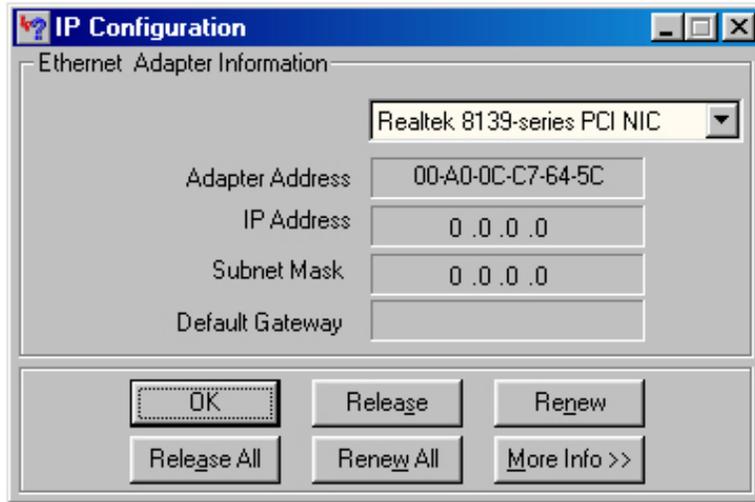
Ethernet adapter Local Area Connection:

    Connection-specific DNS Suffix  . : 
    IP Address . . . . . : 192.168.1.5
    Subnet Mask . . . . . : 255.255.255.0
    Default Gateway . . . . . : 192.168.1.1

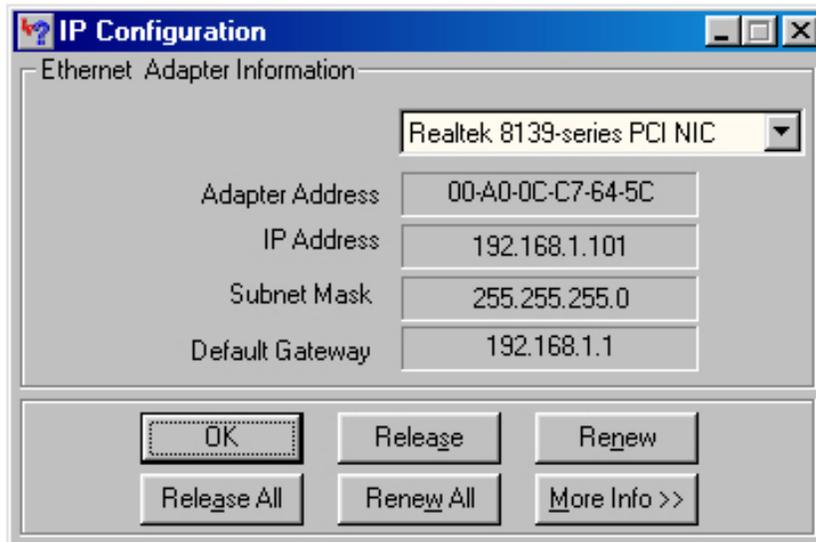
C:\Documents and Settings\
```

For Windows 95/98/ME go to Start, Run, type winipcfg and click OK.

Select your network card from the drop-down menu and click Release.



After your IP address is released, click Renew. You should get an IP address of 192.168.1.x (where x is a number between 2-254). If you don't get an IP address, reset the router by holding in the reset button at the back of the router for 10 seconds while it is ON and try Renew again.



Section Four: Configure the Router

This product provides Web based configuration scheme, which is, configuring by Netscape Communicator or Internet Explorer. Take example for Microsoft Internet Explorer.

1. Activate your browser, select Tools, point to Internet option, click connect , select

dial-up network never, affirm inspect setting automatically, configure scrip automatically and use agency server on LAN setting not to be selected.

2. Type http://192.168.1.1 in Address field and press Enter Key in the user name and password (if you use it first, you can type the factory default setting .User name is admin and password is admin), click on the OK button.



After login successfully, web-configuration will be displayed.



4.1 Wizard

4.1.1 Host Setting

Time Zone Set your local time zone here.

Wizard	System	WAN	LAN	NAT	Firewall	Routing	UPnP	DDNS	Wireless
--------	--------	-----	-----	-----	----------	---------	------	------	----------

Wizard

1. **Host Settings**

2. WAN Settings

3. DNS

Wizard

Host Name	<input type="text" value="router"/>
Domain Name	<input type="text" value="router"/>
Time Zone	(GMT+08:00) Hong Kong, Perth, Singapore, Taipei
Daylight Saving	<input type="checkbox"/> Enabled From: FEB 2 To: FEB 2

Next

4.1.2 WAN Settings

These values refer to the outside network you connect to every time you access your Broadband Internet connection. Most Broadband ISPs assign their clients with a different IP address each time they log on. Please select the case with your ISPs.

1. If you are connected to the Internet through **Cable Modem**, click **Cable Modem** and continue to next step, If your ISP requires a registered **MAC Address**, select Enabled, Enter your Mac address, click on the **Clone MAC Address**, Click **Next** to save the setting.

Wizard	System	WAN	LAN	NAT	Firewall	Routing	UPnP	DDNS	Wireless
--------	--------	-----	-----	-----	----------	---------	------	------	----------

Wizard

1. **Host Settings**

2. **WAN Settings**

3. DNS

Wizard

Cable Modem

MAC Cloning	<input checked="" type="checkbox"/> Enabled
MAC Address	00 : 13 : D3 : 1F : 5F : 56

Clone MAC Address

Back Next

2. If your ISP assigns you're a **fixed IP address**, click **Fixed-IP xDSL** and enter the address into the **IP address assigned by your ISP**, **Subnet Mask**, **ISP Gateway Address** and **DNS**(next Page) fields provided by the ISP.

Wizard

- 1. Host Settings
- 2. WAN Settings
- 3. DNS

Wizard

Fixed-IP xDSL

IP address assigned by your ISP	<input type="text" value="0"/>	<input type="text" value="0"/>	<input type="text" value="0"/>	<input type="text" value="0"/>
Subnet Mask	<input type="text" value="255"/>	<input type="text" value="255"/>	<input type="text" value="255"/>	<input type="text" value="0"/>
ISP Gateway Address	<input type="text" value="0"/>	<input type="text" value="0"/>	<input type="text" value="0"/>	<input type="text" value="0"/>

Back

Next

3. If you are connected to the Internet through a DSL line, check with your ISP to see if they use PPPoE. If they do, click **PPPoE xDSL** and enter the User Name and Password.

MTU: Maximum Transmission Unit-1492 is the default setting-you may need to change the MTU for optimal performance with your ISP. If you are using AOL DSL+ service, you may need to set the MTU to 1400.

Maximum Idle Time: The Maximum Idle Time value is only used for the On Demand connection mode. It specifies how many minutes the WAN connection can be idle before the connection is dropped. A value of zero means the connection will not be dropped due to idle time.

Wizard

- 1. Host Settings
- 2. WAN Settings
- 3. DNS

Wizard

Dial-Up xDSL(PPPoE)

User Name	<input type="text" value="sz26515336@163.gd"/>
Password	<input type="password" value="*****"/>
Retype password	<input type="password" value="*****"/>
Service Name	<input type="text"/>
MTU (546-1492)	<input type="text" value="1492"/>
Maximum Idle Time	<input type="text" value="0"/> (seconds)

Back Next

4. If you are connected to the Internet through **PPTP**, please enter this information provided by the ISP

- 1. Host Settings
- 2. WAN Settings
- 3. DNS

Wizard

PPTP

PPTP Account	<input type="text" value="pptp_user"/>
PPTP Password	<input type="password" value="*****"/>
Retype password	<input type="password" value="*****"/>
Service IP Address	<input type="text" value="0"/> . <input type="text" value="0"/> . <input type="text" value="0"/> . <input type="text" value="0"/>
My IP Address	<input type="text" value="0"/> . <input type="text" value="0"/> . <input type="text" value="0"/> . <input type="text" value="0"/>
My Subnet Mask	<input type="text" value="255"/> . <input type="text" value="255"/> . <input type="text" value="255"/> . <input type="text" value="0"/>
Connection ID	<input type="text" value="5"/> (Optional)
MTU (546-1460)	<input type="text" value="1460"/>
Maximum Idle Time	<input type="text" value="300"/> seconds

Back Next

5. If you are connected to the Internet through **PPTP**. Please enter this information provided by the ISP.

- 1. Host Settings
- 2. WAN Settings
- 3. DNS

Wizard

L2TP

L2TP Account	<input type="text" value="l2tp_user"/>			
L2TP Password	<input type="password" value="*****"/>			
Retype password	<input type="password" value="*****"/>			
Service IP Address	<input type="text" value="0"/>	<input type="text" value="0"/>	<input type="text" value="0"/>	<input type="text" value="0"/>
My IP Address	<input type="text" value="0"/>	<input type="text" value="0"/>	<input type="text" value="0"/>	<input type="text" value="0"/>
My Subnet Mask	<input type="text" value="255"/>	<input type="text" value="255"/>	<input type="text" value="255"/>	<input type="text" value="0"/>
MTU (546-1460)	<input type="text" value="1460"/>			
Maximum Idle Time	<input type="text" value="300"/>	seconds		

4.1.3 DNS

Domain Name Servers are used to map an IP address to the equivalent domain name. Your ISP should provide the IP address for one or more domain name servers.

Wizard System WAN LAN NAT Firewall Routing UPnP DDNS Wireless

Wizard

- 1. Host Settings
- 2. WAN Settings
- 3. DNS

Wizard

DNS Settings

Static DNS Server	<input checked="" type="checkbox"/> Enable			
Primary DNS address	<input type="text" value="202"/>	<input type="text" value="96"/>	<input type="text" value="134"/>	<input type="text" value="133"/>
Secondary DNS address	<input type="text" value="202"/>	<input type="text" value="96"/>	<input type="text" value="128"/>	<input type="text" value="68"/>

4.2 System

This option provides the current status of the device and enables you change the administrator password. Besides, you can configure the router's parameter.

4.2.1 System Status

You can use the Status screen to see the connection status for the routers WAN/LAN interfaces, firmware and hardware version numbers, and the number of connected clients to your network. The following items are included in this screen:

INTERNET: Displays WAN connection type and status.

GATEWAY: Displays system IP settings, as well as DHCP, NAT and Firewall status.

INFORMATION: Displays the number of connected clients, as well as the Router's hardware and firmware version numbers.

System Settings

- System Status**
- System Settings
- Administrator Settings
- Firmware Upgrade
- Configuration Tools
- System Log

System Status

INTERNET Refresh

Cable/DSL	Disconnected
WAN IP	0.0.0.0
Subnet Mask	0.0.0.0
Gateway	0.0.0.0
DNS	202.96.128.166
Secondary DNS	0.0.0.0
Domain Name	
Connection Type	PPPoE
Connection Time	00:00:00

Connection Disconnected

GATEWAY

IP Address	192.168.1.1
Subnet Mask	255.255.255.0
DHCP Server	Enabled
NAT	Enabled
Firewall	Enabled

INFORMATION

System Up Time	02:06:16
System Date	5/17/2006 18:37:42
Connected Clients	0
Runtime Code Version	V0.1.2.103

4.2.2 System Settings

The screenshot shows the 'System Settings' page in a router's web interface. At the top, there is a navigation bar with tabs for Wizard, System, WAN, LAN, NAT, Firewall, Routing, UPnP, DDNS, Wireless, and Log. Below the navigation bar, the page title is 'System Settings'. On the left side, there is a sidebar menu with the following items: System Status, System Settings (highlighted in blue), Administrator Settings, Firmware Upgrade, Configuration Tools, and System Log. The main content area is titled 'System Settings' and contains a table of configuration options. At the top right of this area is a 'Help' button. At the bottom right are 'OK' and 'Cancel' buttons.

System Settings	
Host Name	<input type="text"/>
Domain Name	<input type="checkbox"/> Pass WAN Domain <input type="text"/>
NTP Server	<input type="text"/> (option)
Set Time Zone	(GMT+08:00) Hong Kong, Perth, Singapore, Taipei
Daylight Saving	<input type="checkbox"/> Enabled From: FEB 2 To: FEB 2
NAT	<input checked="" type="checkbox"/> Enabled

4.2.3 Administrator Settings

Use this menu to restrict management access based on a specific password. The factory setting is admin. So please assign a password to the Administrator as soon as possible, and store it in a safe place. Passwords can contain alphanumeric characters, and are case sensitive.

Idle Time-out: The amount of time of inactivity before the router will automatically close the Administrator session. Set this to zero to disable it.

Remote Management: By default, management access is only available to users on your local network. However, you can also manage the router from a remote host by adding the IP address of an administrator to this screen.

Wizard System WAN LAN NAT Firewall Routing UPnP DDNS Wireless Logout																	
<h2>System Settings</h2>																	
<ul style="list-style-type: none"> System Status System Settings Administrator Settings Firmware Upgrade Configuration Tools System Log 	<div style="text-align: right;"> <input type="button" value="Help"/> </div> <h3>Administrator Settings</h3> <h4>Password Settings</h4> <table border="1"> <tr> <td>User Name</td> <td><input type="text" value="admin"/></td> </tr> <tr> <td>Current Password</td> <td><input type="password" value="*****"/></td> </tr> <tr> <td>Password</td> <td><input type="password" value="*****"/></td> </tr> <tr> <td>Re-type password</td> <td><input type="password" value="*****"/> (3-12 Characters)</td> </tr> <tr> <td>Idle Time Out</td> <td><input type="text" value="300"/> seconds (0: No timeout)</td> </tr> </table> <h4>Remote Management</h4> <table border="1"> <tr> <td>Enabled</td> <td><input type="checkbox"/></td> </tr> <tr> <td>IP Address</td> <td><input type="text" value="0"/> . <input type="text" value="0"/> . <input type="text" value="0"/> . <input type="text" value="0"/></td> </tr> <tr> <td>Port</td> <td><input type="text" value="81"/></td> </tr> </table> <div style="text-align: right;"> <input type="button" value="OK"/> <input type="button" value="Cancel"/> </div>	User Name	<input type="text" value="admin"/>	Current Password	<input type="password" value="*****"/>	Password	<input type="password" value="*****"/>	Re-type password	<input type="password" value="*****"/> (3-12 Characters)	Idle Time Out	<input type="text" value="300"/> seconds (0: No timeout)	Enabled	<input type="checkbox"/>	IP Address	<input type="text" value="0"/> . <input type="text" value="0"/> . <input type="text" value="0"/> . <input type="text" value="0"/>	Port	<input type="text" value="81"/>
User Name	<input type="text" value="admin"/>																
Current Password	<input type="password" value="*****"/>																
Password	<input type="password" value="*****"/>																
Re-type password	<input type="password" value="*****"/> (3-12 Characters)																
Idle Time Out	<input type="text" value="300"/> seconds (0: No timeout)																
Enabled	<input type="checkbox"/>																
IP Address	<input type="text" value="0"/> . <input type="text" value="0"/> . <input type="text" value="0"/> . <input type="text" value="0"/>																
Port	<input type="text" value="81"/>																

4.2.4 Firmware Upgrade

The Firmware Upgrade screen allows you to upgrade the router's firmware. Click on Browse to browse to the new firmware, and click OK.

System Settings

The screenshot shows the 'Firmware Upgrade' page within the 'System Settings' menu. On the left, a vertical navigation pane lists 'System Status', 'System Settings', 'Administrator Settings', 'Firmware Upgrade' (highlighted in blue), 'Configuration Tools', and 'System Log'. The main content area is titled 'Firmware Upgrade' and includes a 'Help' button. Below the title, it displays 'Current Firmware Version: V0.1.2.103' and 'Firmware Date: build:11 @ Sat Jul 22 06:17:05 2006'. A text instruction reads: 'Enter the path and name of the upgrade file then click the OK button below.' Below this is a text input field with a '浏览...' (Browse...) button to its right. At the bottom right of the main area are 'OK' and 'Cancel' buttons.

4.2.5 Configuration Tools

Reset Factory Default: If you select the Reset Factory Default option and click the OK button, you will clear all of the router's settings.

Do not restore the factory default unless you are difficulties with the router and have exhausted all other troubleshooting measures. Once the router is reset, you will have to re-enter all of your configuration data.

Backup Settings: Select the Backup Settings option; you can save your configuration data to a file.

Restore Settings: Select the Restore Settings option, you can restore your configuration data from a file.

Restart System: If you select the Restart System option and click the OK button, you will restart the router.

System Settings

System Status

System Settings

Administrator Settings

Firmware Upgrade

Configuration Tools

System Log

Configuration Tools Help

- Restart System
- Restore Factory Default
- Backup Settings
- Restore Settings

浏览...

OK Cancel

4.2.6 System Log

Security Logs Displays any illegal attempts to access your network.

Remote Log Setting You can configure the parameter to send the log to a remote host or send email to someone.

Wizard System WAN LAN NAT Firewall Routing UPnP DDNS Wireless Logout

System Settings

System Status

System Settings

Administrator Settings

Firmware Upgrade

Configuration Tools

System Log

System Log Help

Download Clear Refresh

```
[Wed May 17 16:31:27 2006]:[SYS] System start
[Wed May 17 16:31:27 2006]:[SYS] Ver 0.1.2.103 build:11 @ Sat Jul 22 06:17:05 2006
[Wed May 17 16:40:11 2006]:[HTTP] login (192.168.1.109)
[Wed May 17 16:41:12 2006]:[HTTP] logout (192.168.1.109)
[Wed May 17 16:41:44 2006]:[HTTP] login (192.168.1.109)
[Wed May 17 16:42:47 2006]:[HTTP] logout (192.168.1.109)
[Wed May 17 16:57:19 2006]:[HTTP] login (192.168.1.107)
[Wed May 17 17:05:14 2006]:[HTTP] logout (192.168.1.107)
[Wed May 17 17:05:17 2006]:[HTTP] login (192.168.1.107)
[Wed May 17 17:05:19 2006]:[DHCPD] received REQUEST
```

Remote Log Setting

Remote Log	<input type="checkbox"/> Enabled
Send log to	<input style="width: 20px;" type="text"/> . <input style="width: 20px;" type="text"/> . <input style="width: 20px;" type="text"/> . <input style="width: 20px;" type="text"/>
Email Log	<input type="checkbox"/> Enabled
Send Email to	<input style="width: 150px;" type="text"/>
SMTP Server	<input style="width: 100px;" type="text" value="0.0.0.0"/>

4.3 WAN Settings

The router supports five connection types: **Dynamic IP Address**, **Static IP Address**, **PPPoE**, **PPTP** and **L2TP**. Each Setup screen and available features will differ depending on what kind of connection type you select.

4.3.1 Connected Type

About each Connect Type, You can refer to **Wizard**.

WAN Settings

Connected Type Help

Connected Type

- Dynamic IP Address: Obtain an IP address automatically from your service provider.
- Static IP Address: Uses a static IP address. Your service provider gives a static IP address to access Internet services.
- PPPoE: PPP over Ethernet is a common connection method used for xDSL.
- PPTP: PPP Tunneling Protocol can support multi-protocol Virtual Private Networks (VPN).
- L2TP: Layer 2 Tunneling Protocol can support multi-protocol Virtual Private Networks (VPN).

PPPOE

User Name	sz26515336@163.gd
Password	*****
Please retype your password	*****
Service Name	
MTU (546-1492)	1492
Maximum Idle Time (60-3600)	0 (seconds)
Connection Mode	keep-alive

4.3.2 DNS

Domain Name Servers are used to map an IP address to the equivalent domain name. Your ISP should provide the IP address for one or more domain name servers.

Wizard System **WAN** LAN NAT Firewall Routing UPnP DDNS Wireless Logout

WAN Settings

Connected Type
DNS

DNS Help

DNS Proxy	<input checked="" type="checkbox"/> Enabled
Static DNS Server	<input checked="" type="checkbox"/> Enable
Domain Name Server (DNS) Address	<input type="text"/> . <input type="text"/> . <input type="text"/> . <input type="text"/>
Secondary DNS Address (optional)	<input type="text"/> . <input type="text"/> . <input type="text"/> . <input type="text"/>
Search Static DNS Firstly	<input type="checkbox"/> Enabled

OK Cancel

4.4 LAN

4.4.1 LAN Settings

IP Address: The value refers to your internal network settings. Unless you have specific internal needs, there should be no reason to change the value.

The Gateway acts as DHCP Server: the settings of TCP/IP environment include Host IP, Subnet Mask, Gateway, and DNS configurations. It is not a simple task to correctly configure all the computers in your LAN environment. Fortunately, DHCP provides a rather simple approach to handle all these settings. This product supports the function of DHCP server. If you enable this product's DHCP server and configure your computers as automatic IP allocation mode, when your computer is powered on, it will automatically load the proper TCP/IP settings from this product.

IP Pool Start Address is the IP pool Starting Address enter a value for the DHCP server to start with when issuing IP addresses. This value must be 192.168.16.2 or greater, because the default IP address for the Router is 192.168.16.1.

IP Pool END Address is the IP pool Ending Address enter a value for the DHCP server to end with when issuing IP addresses. This value must be greater than the IP pool Starting Address.

Lease Time The Lease Time is the amount of time a network user will be allowed connection to the Router with their current dynamic IP address. Enter the amount of time, in minutes, that the user will be “leased” this dynamic IP address.

Configuration	Value
IP Address	192.168.3.1
Subnet Mask	255.255.255.0
The Gateway acts as DHCP Server	<input checked="" type="checkbox"/> Enabled
IP Pool Starting Address	192.168.3.2
IP Pool Ending Address	192.168.3.254
Lease Time	One day

4.4.2 DHCP Client List

The option shows the current DHCP Client data.

Wizard System WAN LAN NAT Firewall Routing UPnP DDNS Wireless Logout

LAN Settings

LAN Settings
DHCP Client List

Help

Refresh

Host Name	IP Address	MAC Address	Remaining Time	Static							
Static client											
Host Name	<input type="text"/>										
IP address	192.168.3.	<input type="text"/>									
MAC Address	<input type="text"/>	:	<input type="text"/>	:	<input type="text"/>	:	<input type="text"/>	:	<input type="text"/>	:	<input type="text"/>
Add											

OK Cancel

4.5 NAT

Network Address Translation. This process allows all of the computers on your home network to use one IP address. The NAT capability of the router, allows you to access the Internet from any computer on your home network without having to purchase more IP addresses from your ISP. Network Address Translation can be used to give multiple users' access to the Internet with a single user account, or to map the local address for an IP server (such as Web or FTP) to a public address. This secures your network from direct attack by hackers, and provides more flexible management by allowing you to change internal IP addresses without affecting outside access to your network. NAT must be enabled to provide multi-user access to the Internet or to use the Virtual Server function.

4.5.1 Virtual Server

If you configure the router as a virtual server, remote users accessing services such as Web or FTP at your local site via public IP addresses can be automatically redirected to local servers configured with private IP address. In other words, depending on the

requested service (TCP/UDP port number), the router redirects the external service request to the appropriate server.

NAT Settings

Virtual Server

Special Application

Port Mapping

ALG

DMZ

Virtual Server Help

	Private IP	Private Port	Type	Public Port	Comment	Enabled
1.	192.168.3.		TCP			<input type="checkbox"/>
2.	192.168.3.		TCP			<input type="checkbox"/>
3.	192.168.3.		TCP			<input type="checkbox"/>
4.	192.168.3.		TCP			<input type="checkbox"/>
5.	192.168.3.		TCP			<input type="checkbox"/>
6.	192.168.3.		TCP			<input type="checkbox"/>
7.	192.168.3.		TCP			<input type="checkbox"/>
8.	192.168.3.		TCP			<input type="checkbox"/>
9.	192.168.3.		TCP			<input type="checkbox"/>
10.	192.168.3.		TCP			<input type="checkbox"/>
11.	192.168.3.		TCP			<input type="checkbox"/>
12.	192.168.3.		TCP			<input type="checkbox"/>
13.	192.168.3.		TCP			<input type="checkbox"/>
14.	192.168.3.		TCP			<input type="checkbox"/>
15.	192.168.3.		TCP			<input type="checkbox"/>
16.	192.168.3.		TCP			<input type="checkbox"/>
17.	192.168.3.		TCP			<input type="checkbox"/>
18.	192.168.3.		TCP			<input type="checkbox"/>
19.	192.168.3.		TCP			<input type="checkbox"/>
20.	192.168.3.		TCP			<input type="checkbox"/>

4.5.2 Special Application

Some applications require multiple connections, such as Internet gaming, video conferencing, Internet telephony and others. These applications cannot work when Network Address Translation (NAT) is enabled. If you need to run applications that require multiple connections, specify the port normally associated with an application in the "Trigger Port" field, select the protocol type as TCP or UDP, then enter the public ports associated with the trigger port to open them for inbound traffic.

Trigger Port: This is the port used to trigger the application. It can be either a single port or a range of ports.

Trigger Type: This is the protocol used to trigger the special application.

Public Port: This is the port number on the WAN side that will be used to access the application. You may define a single port or a range of ports. You can use a comma to add multiple ports or port ranges.

Public Type: This is the protocol used to trigger the special application.

	Trigger Port	Trigger Type	Public Port	Public Type	Comment	Enabled
1.		TCP		TCP		<input type="checkbox"/>
2.		TCP		TCP		<input type="checkbox"/>
3.		TCP		TCP		<input type="checkbox"/>
4.		TCP		TCP		<input type="checkbox"/>
5.		TCP		TCP		<input type="checkbox"/>
6.		TCP		TCP		<input type="checkbox"/>
7.		TCP		TCP		<input type="checkbox"/>
8.		TCP		TCP		<input type="checkbox"/>
9.		TCP		TCP		<input type="checkbox"/>
10.		TCP		TCP		<input type="checkbox"/>

4.5.3 Port Mapping

Port mapping allows for an unused port on the proxy server to be configured, specify the port normally associated with an application in the "**Mapping Port**" field, select the protocol type as **TCP** or **UDP**.

Wizard System WAN LAN NAT Firewall Routing UPnP DDNS Wireless Logout

NAT Settings

Virtual Server
Special Application
Port Mapping
ALG
DMZ

Help

	Server IP	Mapping Ports	Type	Comment	Enabled
1.	192.168.3.		TCP		<input type="checkbox"/>
2.	192.168.3.		TCP		<input type="checkbox"/>
3.	192.168.3.		TCP		<input type="checkbox"/>
4.	192.168.3.		TCP		<input type="checkbox"/>
5.	192.168.3.		TCP		<input type="checkbox"/>
6.	192.168.3.		TCP		<input type="checkbox"/>
7.	192.168.3.		TCP		<input type="checkbox"/>
8.	192.168.3.		TCP		<input type="checkbox"/>
9.	192.168.3.		TCP		<input type="checkbox"/>
10.	192.168.3.		TCP		<input type="checkbox"/>

OK Cancel

4.5.4 ALG

If you need the following function, please select it, such as **FTP, H323/Netmeeting, PPTP passthrough, windows messenger(file transfer), Ipsec passthrough, Battle.Net multiplayer, Non-Standard FTP Port.** then click **OK.**

Wizard System WAN LAN NAT Firewall Routing UPnP DDNS Wireless

NAT Settings

Virtual Server
Special Application
Port Mapping
ALG
DMZ

Help

FTP	<input checked="" type="checkbox"/>
H323/netmeeting	<input type="checkbox"/>
PPTP passthrough	<input type="checkbox"/>
Windows messenger(file transfer)	<input type="checkbox"/>
ipsec passthrough	<input type="checkbox"/>
Battle.Net multiplayer	<input type="checkbox"/>
Non-Standard FTP Port	<input type="text"/>

OK Cancel

4.5.5 DMZ

If you have a client PC that cannot run Internet application properly from behind the NAT firewall or after configuring the Special Applications function, then you can open the client up to unrestricted two-way Internet access. Enter the IP address of a DMZ host to this screen. Adding a client to the DMZ (Demilitarized Zone) may expose your local network to a variety of security risks, so only use this option as a last resort.

Wizard System WAN LAN NAT Firewall Routing UPnP DDNS Wireless

NAT Settings

Virtual Server
Special Application
Port Mapping
ALG
DMZ

DMZ Help

Enabled

DMZ table

Public IP Address	IP Address of Virtual DMZ Host	Action
192.168.1.26	192.168.3.	<< Add

OK Cancel

4.6 Firewall Settings

The router provides extensive firewall protection by restricting connection parameters to limit the risk of intrusion and defending against a wide array of common hacker attacks. However, for applications that require unrestricted access to the Internet, you can configure a specific client/server as a demilitarized zone (DMZ).

4.6.1 Firewall Options

Wizard System WAN LAN NAT Firewall Routing UPnP DDNS Wireless Logout

Firewall Settings

Firewall Options Help

- Client Filtering
- URL Filtering
- MAC Control

Firewall Options	
Enable Hacker Attack Protect	<input checked="" type="checkbox"/>
Discard PING from WAN side	<input type="checkbox"/>
Unallow to PING the Gateway	<input type="checkbox"/>
Drop Port Scan Packets	<input checked="" type="checkbox"/>
Allow to Scan Security Port (113)	<input checked="" type="checkbox"/>
Discard NetBios Packets	<input checked="" type="checkbox"/>
Accept Fragment Packets	<input checked="" type="checkbox"/>
Send ICMP packets when error	<input checked="" type="checkbox"/>

Advance Settings

OK Cancel

4.6.2 Client Filtering

You can filter Internet access for local clients based on IP addresses, application types, (i.e., HTTP port), and time of day.

Firewall Settings

Client Filtering Help

- Firewall Options
- Client Filtering**
- URL Filtering
- MAC Control

Enable Client Filter

	IP	Port	Type	Block Time	Day	Time	Comme
1.	192.168.3. [] ~ []	[] ~ []	TCP	<input checked="" type="radio"/> Always <input type="radio"/> Block	<input type="checkbox"/> SUN <input type="checkbox"/> MON <input type="checkbox"/> TUE <input type="checkbox"/> WED <input type="checkbox"/> THU <input type="checkbox"/> FRI <input type="checkbox"/> SAT	0:00am ~ 0:00am	[]
2.	192.168.3. [] ~ []	[] ~ []	TCP	<input checked="" type="radio"/> Always <input type="radio"/> Block	<input type="checkbox"/> SUN <input type="checkbox"/> MON <input type="checkbox"/> TUE <input type="checkbox"/> WED <input type="checkbox"/> THU <input type="checkbox"/> FRI <input type="checkbox"/> SAT	0:00am ~ 0:00am	[]
3.	192.168.3. [] ~ []	[] ~ []	TCP	<input checked="" type="radio"/> Always <input type="radio"/> Block	<input type="checkbox"/> SUN <input type="checkbox"/> MON <input type="checkbox"/> TUE <input type="checkbox"/> WED <input type="checkbox"/> THU <input type="checkbox"/> FRI <input type="checkbox"/> SAT	0:00am ~ 0:00am	[]
4.	192.168.3. [] ~ []	[] ~ []	TCP	<input checked="" type="radio"/> Always <input type="radio"/> Block	<input type="checkbox"/> SUN <input type="checkbox"/> MON <input type="checkbox"/> TUE <input type="checkbox"/> WED <input type="checkbox"/> THU <input type="checkbox"/> FRI <input type="checkbox"/> SAT	0:00am ~ 0:00am	[]
5.	192.168.3. [] ~ []	[] ~ []	TCP	<input checked="" type="radio"/> Always <input type="radio"/> Block	<input type="checkbox"/> SUN <input type="checkbox"/> MON <input type="checkbox"/> TUE <input type="checkbox"/> WED <input type="checkbox"/> THU <input type="checkbox"/> FRI <input type="checkbox"/> SAT	0:00am ~ 0:00am	[]
6.	192.168.3. [] ~ []	[] ~ []	TCP	<input checked="" type="radio"/> Always <input type="radio"/> Block	<input type="checkbox"/> SUN <input type="checkbox"/> MON <input type="checkbox"/> TUE <input type="checkbox"/> WED <input type="checkbox"/> THU <input type="checkbox"/> FRI <input type="checkbox"/> SAT	0:00am ~ 0:00am	[]
7.	192.168.3. [] ~ []	[] ~ []	TCP	<input checked="" type="radio"/> Always <input type="radio"/> Block	<input type="checkbox"/> SUN <input type="checkbox"/> MON <input type="checkbox"/> TUE <input type="checkbox"/> WED <input type="checkbox"/> THU <input type="checkbox"/> FRI <input type="checkbox"/> SAT	0:00am ~ 0:00am	[]
8.	192.168.3. [] ~ []	[] ~ []	TCP	<input checked="" type="radio"/> Always <input type="radio"/> Block	<input type="checkbox"/> SUN <input type="checkbox"/> MON <input type="checkbox"/> TUE <input type="checkbox"/> WED <input type="checkbox"/> THU <input type="checkbox"/> FRI <input type="checkbox"/> SAT	0:00am ~ 0:00am	[]
9.	192.168.3. [] ~ []	[] ~ []	TCP	<input checked="" type="radio"/> Always <input type="radio"/> Block	<input type="checkbox"/> SUN <input type="checkbox"/> MON <input type="checkbox"/> TUE <input type="checkbox"/> WED <input type="checkbox"/> THU <input type="checkbox"/> FRI <input type="checkbox"/> SAT	0:00am ~ 0:00am	[]
10.	192.168.3. [] ~ []	[] ~ []	TCP	<input checked="" type="radio"/> Always <input type="radio"/> Block	<input type="checkbox"/> SUN <input type="checkbox"/> MON <input type="checkbox"/> TUE <input type="checkbox"/> WED <input type="checkbox"/> THU <input type="checkbox"/> FRI <input type="checkbox"/> SAT	0:00am ~ 0:00am	[]

4.6.3 URL Filtering

To configure the URL Filtering feature, use the table as above to specify the web sites (www.somesite.com) and/or web URLs containing the keyword you want to filter on your network. Click **OK** to save the setting

Wizard System WAN LAN NAT Firewall Routing UPnP DDNS Wireless Logout

Firewall Settings

Firewall Options
Client Filtering
URL Filtering
MAC Control

URL Filtering

Enable URL Filter Help

	IP	URL filter string	Enable
1.	192.168.3. <input type="text"/> ~ <input type="text"/>	<input type="text"/>	<input type="checkbox"/>
2.	192.168.3. <input type="text"/> ~ <input type="text"/>	<input type="text"/>	<input type="checkbox"/>
3.	192.168.3. <input type="text"/> ~ <input type="text"/>	<input type="text"/>	<input type="checkbox"/>
4.	192.168.3. <input type="text"/> ~ <input type="text"/>	<input type="text"/>	<input type="checkbox"/>
5.	192.168.3. <input type="text"/> ~ <input type="text"/>	<input type="text"/>	<input type="checkbox"/>
6.	192.168.3. <input type="text"/> ~ <input type="text"/>	<input type="text"/>	<input type="checkbox"/>
7.	192.168.3. <input type="text"/> ~ <input type="text"/>	<input type="text"/>	<input type="checkbox"/>
8.	192.168.3. <input type="text"/> ~ <input type="text"/>	<input type="text"/>	<input type="checkbox"/>
9.	192.168.3. <input type="text"/> ~ <input type="text"/>	<input type="text"/>	<input type="checkbox"/>
10.	192.168.3. <input type="text"/> ~ <input type="text"/>	<input type="text"/>	<input type="checkbox"/>

OK Cancel

4.6.4 MAC Control

You can block certain client PCs accessing the Internet based on MAC address

Firewall Settings

Firewall Options
 Client Filtering
 URL Filtering
MAC Control

MAC Control Help

MAC Address Control Enabled
 Filter out or only accept the following MAC address connect to Internet. Filter out Accept

Configure MAC Address

MAC Address	Comment	Action
<input type="text"/> : <input type="text"/>	<input type="text"/>	Manual Setting << Add

OK Cancel

4.7 Routing Settings

4.7.1 Routing Table

The current routing table will be listed on.

Routing Settings

Routing Table Help

Static Routing

Destination LAN IP	Subnet Mask	Gateway	Metric	Interface
0.0.0.0	0.0.0.0	192.168.1.1	0	eth1
192.168.1.0	255.255.255.0	192.168.1.0	0	eth1
192.168.3.0	255.255.255.0	192.168.3.0	0	eth0

Refresh

4.7.2 Static Routing

Routing Settings

Routing Table
Static Routing

Help

Destination LAN IP	Subnet Mask	Gateway	Action
<input type="text"/>	<input type="text"/>	<input type="text"/>	<< Add

Cancel

4.8 UPnP

UPnP (**U**niversal **P**lug and **P**lay) allows automatic discovery and configuration of equipment attached to your LAN. UPnP is by supported by Windows ME, XP, or later. It provides compatibility with networking equipment, software and peripherals of the over 400 vendors that cooperate in the Plug and Play forum.

UPnP Settings

UPnP Settings

UPnP Settings Help

Enable UPnP	<input type="checkbox"/> Enabled
UPnP Port Number	<input type="text" value="1780"/>
Advertise Time (60 - 1800)	<input type="text" value="1800"/> seconds
Subscribe Timeout (60 -- 1800)	<input type="text" value="1800"/> seconds

OK Cancel

4.8.1 Port Mapping

Wizard System WAN LAN NAT Firewall Routing UPnP DDNS Wireless Logout

UPnP Settings

UPnP Settings
[Port Mapping](#)

Help

Refresh

Remote Host	External Port	Internal Client	Internal Port	Protocol	Duration	Description
-------------	---------------	-----------------	---------------	----------	----------	-------------

4.9 DDNS

Dynamic **DNS** (DDNS) allows any user who wishes to access your server to reach it by a registered DNS name instead of an IP address. Before you enable DDNS, you need to register an account with one of the DDNS providers listed in the drop-down menu.

To **Enable** DDNS, select the DDNS provider you have registered with and enter the required fields. Click **OK** to save the setting.

Wizard System WAN LAN NAT Firewall Routing UPnP DDNS Wireless Logout

DDNS Settings

DDNS Settings

Help

Enabled Disable

Host Name	<input type="text"/>
DDNS Server	no-ip.com ▾
User Name	<input type="text"/>
Password	<input type="text"/>
DDNS Retry Time	<input type="text"/> hours

OK Cancel

4.10 Wireless Settings

Below are the default wireless settings of the router. You must configure your wireless network card to the same settings in order to establish a wireless connection to the router. Please refer to your wireless network card's manual on how to configure these settings.

SSID (Network Name): MIMO

Operating Mode: AP

Channel #: 11

Encryption: Disabled

4.10.1 Basic Configuration

If you want to change the router's wireless settings, log in to the router and select the Wireless-Basic Configuration. Be sure to click OK to save the setting.

WLAN Mode: Choose from Access Point, AP Client.

SSID: You can change the router's SSID in this field. Once you have changed the SSID, your network clients need to re-connect themselves using the new SSID.

Channel: Select the desired channel. All the network clients need to use the same channel.

SSID Broadcast: Choose to enable or disable the broadcast of your SSID

The screenshot shows the 'Wireless Settings' page with a navigation bar at the top containing 'Wizard', 'System', 'WAN', 'LAN', 'NAT', 'Firewall', 'Routing', 'UPnP', 'DDNS', 'Wireless', and 'Logout'. The main heading is 'Wireless Settings'. On the left is a sidebar menu with 'Basic Configuration' selected, and other options like 'WEP', 'Advanced', 'MAC Filter', 'Station List', 'Security', and 'RADIUS'. The main content area is titled 'Basic Configuration' and contains a table of settings:

WLAN Mode	Access Point
SSID	MIMO
Channel	11 - 2.462GHz
BSSID	00:0C:43:26:61:00
SSID Broadcast	<input checked="" type="checkbox"/> Enabled

Buttons for 'Help', 'OK', and 'Cancel' are visible at the bottom of the configuration area.

4.10.2 WEP

You can configure wireless WEP encryption on this screen.

Encryption: Choose from 64 bits 10 hex digits or 128 bits 26 hex digits

Passphrase: You can enter a passphrase and click on the Generate button and the router will automatically generate four WEP keys for you.

WEP Key 1 – 4: Manually assign a passphrase for each key. If you selected 64 bits encryption, enter 10 HEX characters (0-F) for each key. If you selected 128 bits encryption, enter 26 HEX characters (0-F) for each key.

Default Transmit key: Select a key to be the active key
Click **OK** to save the setting.

The screenshot shows the 'Wireless Settings' page with the 'WEP' tab selected. The interface includes a navigation bar at the top with options like Wizard, System, WAN, LAN, NAT, Firewall, Routing, UPnP, DDNS, Wireless, and Logout. On the left, a sidebar lists configuration categories: Basic Configuration (selected), WEP, Advanced, MAC Filter, Station List, Security, and RADIUS. The main content area is titled 'WEP' and contains the following fields:

WEP Encryption	64 bits 10 hex digits
Passphrase	passphrase <input type="button" value="Generate"/>
Key 1	<input type="text"/>
Key 2	<input type="text"/>
Key 3	<input type="text"/>
Key 4	<input type="text"/>
Default Transmit key	<input checked="" type="radio"/> 1 <input type="radio"/> 2 <input type="radio"/> 3 <input type="radio"/> 4

Buttons for 'Help', 'OK', and 'Cancel' are also visible.

4.10.3 Advanced

Rate Mode: Choose from Mixed, B only, G only, or Disable.

Regulatory Domain:

Authentication Type:

Beacon Interval: Beacons are packets sent by a wireless router to synchronize wireless devices. Specify a Beacon Interval value between 20 and 1000 milliseconds. The default value is 100 milliseconds.

RTS Threshold: This setting should remain at its default value of 2347. If you encounter inconsistent data flow, only minor modifications to the value range between 0 and 2347 are recommended.

Fragmentation : This setting should remain at its default value of 2346. Setting the Fragmentation value too low may result in poor performance.

DTIM Period: A DTIM is a countdown for informing clients of the next window for listening to broadcast and multicast messages. When the wireless router has buffered broadcast or multicast messages for associated clients, it sends the next DTIM with a DTIM Interval value. Wireless clients detect the beacons and awaken to receive the broadcast and multicast messages. The default value is 1. Valid settings are between 1 and 255.

Wireless Settings

Basic Configuration	Advanced	Help																																										
WEP																																												
Advanced																																												
MAC Filter																																												
Station List																																												
Security																																												
RADIUS																																												
	<table border="1"> <tr> <td>Rate Mode</td> <td>G-Only</td> <td></td> </tr> <tr> <td>Regulatory Domain</td> <td>ETSI (channel 1-13)</td> <td></td> </tr> <tr> <td>Authentication Type</td> <td>Open System</td> <td></td> </tr> <tr> <td>Beacon Period</td> <td>100</td> <td>(Default: 100, Milliseconds, Range: 1 - 65535)</td> </tr> <tr> <td>RTS Threshold</td> <td>2347</td> <td>(Default: 2347, Range: 0 - 2347)</td> </tr> <tr> <td>Fragmentation</td> <td>2346</td> <td>(Default: 2346, Range: 256 - 2346)</td> </tr> <tr> <td>DTIM Period</td> <td>1</td> <td>(Default: 3, Range: 1 - 255)</td> </tr> <tr> <td>Basic Rate Set</td> <td>Default(1-2-5.5-11)</td> <td></td> </tr> <tr> <td>Control Tx Rates</td> <td>Auto</td> <td></td> </tr> <tr> <td>CTS Protection</td> <td>Auto</td> <td></td> </tr> <tr> <td>Preamble</td> <td colspan="2"> <input checked="" type="radio"/> Long Preamble <input type="radio"/> Short Preamble </td> </tr> <tr> <td>Tx Burst</td> <td>Enable</td> <td></td> </tr> <tr> <td>Packet Aggregation</td> <td>Enable</td> <td></td> </tr> <tr> <td>Antenna</td> <td>Diversity</td> <td></td> </tr> </table>	Rate Mode	G-Only		Regulatory Domain	ETSI (channel 1-13)		Authentication Type	Open System		Beacon Period	100	(Default: 100, Milliseconds, Range: 1 - 65535)	RTS Threshold	2347	(Default: 2347, Range: 0 - 2347)	Fragmentation	2346	(Default: 2346, Range: 256 - 2346)	DTIM Period	1	(Default: 3, Range: 1 - 255)	Basic Rate Set	Default(1-2-5.5-11)		Control Tx Rates	Auto		CTS Protection	Auto		Preamble	<input checked="" type="radio"/> Long Preamble <input type="radio"/> Short Preamble		Tx Burst	Enable		Packet Aggregation	Enable		Antenna	Diversity		
Rate Mode	G-Only																																											
Regulatory Domain	ETSI (channel 1-13)																																											
Authentication Type	Open System																																											
Beacon Period	100	(Default: 100, Milliseconds, Range: 1 - 65535)																																										
RTS Threshold	2347	(Default: 2347, Range: 0 - 2347)																																										
Fragmentation	2346	(Default: 2346, Range: 256 - 2346)																																										
DTIM Period	1	(Default: 3, Range: 1 - 255)																																										
Basic Rate Set	Default(1-2-5.5-11)																																											
Control Tx Rates	Auto																																											
CTS Protection	Auto																																											
Preamble	<input checked="" type="radio"/> Long Preamble <input type="radio"/> Short Preamble																																											
Tx Burst	Enable																																											
Packet Aggregation	Enable																																											
Antenna	Diversity																																											
		OK Cancel																																										

4.10.4 MAC Filter:

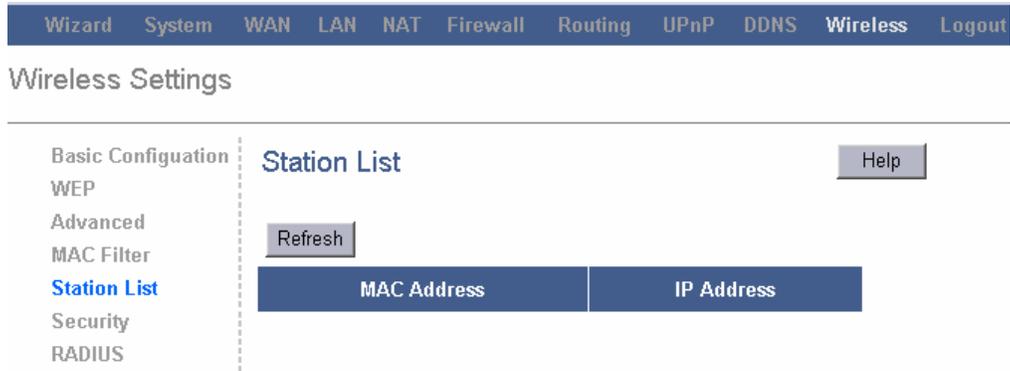
Select Enabled and choose whether the specified wireless clients will be prevented or permitted to access the wireless network. Enter their MAC address in the fields below and click Apply to save the setting.

The screenshot shows a web-based configuration interface for a network device. On the left is a vertical navigation menu with the following items: Basic Configuration, WEP, Advanced, MAC Filter (highlighted in blue), Station List, Security, and RADIUS. The main content area is titled 'MAC Filter' and includes a 'Help' button in the top right corner. Below the title, there are two sections: 'Status' and 'Action'. The 'Status' section contains a checkbox labeled 'Enabled' which is currently unchecked. The 'Action' section contains two radio button options: 'Prevent MAC addresses listed from accessing the wireless network' (which is selected) and 'Allow only MAC addresses listed to access the wireless network'. Below these options is a section titled 'MAC Address List' which contains a table with 28 rows and 2 columns. Each row has a label (MAC 1 through MAC 28) and an empty text input field for the MAC address.

MAC Address List	
MAC 1	<input type="text"/>
MAC 2	<input type="text"/>
MAC 3	<input type="text"/>
MAC 4	<input type="text"/>
MAC 5	<input type="text"/>
MAC 6	<input type="text"/>
MAC 7	<input type="text"/>
MAC 8	<input type="text"/>
MAC 9	<input type="text"/>
MAC 10	<input type="text"/>
MAC 11	<input type="text"/>
MAC 12	<input type="text"/>
MAC 13	<input type="text"/>
MAC 14	<input type="text"/>
MAC 15	<input type="text"/>
MAC 16	<input type="text"/>
MAC 17	<input type="text"/>
MAC 18	<input type="text"/>
MAC 19	<input type="text"/>
MAC 20	<input type="text"/>
MAC 21	<input type="text"/>
MAC 22	<input type="text"/>
MAC 23	<input type="text"/>
MAC 24	<input type="text"/>
MAC 25	<input type="text"/>
MAC 26	<input type="text"/>
MAC 27	<input type="text"/>
MAC 28	<input type="text"/>

4.10.5 Station List

Computers link to the network through wireless are list on this page.

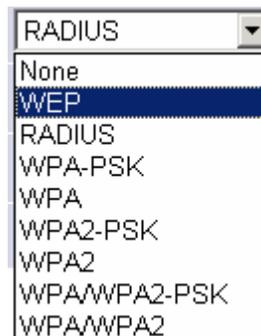


4.10.6 Security

You can configure wireless security such as WEP or WPA WPA encryption on this screen.

Note: It is recommended that you use WPA encryption over WEP if your wireless clients support WPA. All of the wireless clients must use the same security settings in order to connect to the router.

Security Mode : you can select one mode as below.

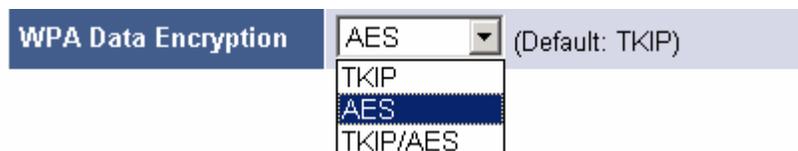


WPA

To enable WPA, select WPA-PSK, WPA; WPA2-PSK, WPA2, WPA/WPA2-PSK, WPA/WPA2 from the Security Mode.

WPA G-Rekey Interval Enter the desired key renewal time in seconds.

WPA Data Encryption Select either TKIP, AES, TKIP/AES as the encryption method.



RADIUS

If you are using a RADIUS server in your network for authentication, you may choose RADIUS from the Security Mode. If you want to know the details, please refer to **4.10.8 RADIUS**

The screenshot shows the 'Wireless Settings' page with the 'Security' tab selected. The left sidebar lists 'Basic Configuration', 'WEP', 'Advanced', 'MAC Filter', 'Station List', 'Security', and 'RADIUS'. The 'Security' section contains the following fields:

Security Mode	None (Default: None)
WPA-PSK Pass Phrase	passphrase
WPA G-Rekey Interval	0 (0: Disable)
WPA Data Encryption	TKIP (Default: TKIP)

Buttons: Help, OK, Cancel

4.10.7 RADIUS

RADIUS Server: Enter the IP Address of your RADIUS server.

RADIUS Port: Enter the port number of your RADIUS server.

Shared Secret: Enter the shared key.

Confirm Shared Secret: Same to Shared Secret

The screenshot shows the 'Wireless Settings' page with the 'RADIUS' tab selected. The left sidebar lists 'Basic Configuration', 'WEP', 'Advanced', 'MAC Filter', 'Station List', 'Security', and 'RADIUS'. The 'RADIUS' section contains the following fields:

Radius Server	0.0.0.0
Radius Server Port	1812
Shared Secret	*****
Confirm Shared Secerte	*****

Buttons: Help, OK, Cancel

4.11 Logout



Section Five: Specifications

General	
Standards	IEEE 802.3, 802.3u, 802.11b and 802.11g
Protocols	TCP/IP, PPPoE, DHCP, ICMP, NAT, SNTP
Ports	One 10/100M Auto-Negotiation WAN RJ45 port, Four 10/100M Auto-Negotiation LAN RJ45 ports supporting Auto MDI/MDIX
Cabling Type	10BASE-T: UTP category 3, 4, 5 cable (maximum 100m) EIA/TIA-568 100Ω STP (maximum 100m) 100BASE-TX: UTP category 5, 5e cable (maximum 100m)
Radio Data Rate	54/48/36/24/18/12/9/6/11/5.5/3/2/1Mbps
Antenna	2 fix antenna, 1 unfix Atenna
Power Supply	DC9V1000mA
LEDs	Power, M1, WAN , WLAN, 1,2,3,4

Environmental and Physical	
Operating Temp.	0℃~40℃ (32℃~104℃)
Operating Humidity	10% - 95% RH, Non-condensing
Dimensions (W×D×H)	7.9×4.7×1.2 in. (201×120×31.10 mm) (without antenna)

Section Six. Troubleshooting

If you have trouble connecting to the Internet, try the following steps.

1. Power off the Cable/DSL modem, router, and computer and wait for 5 minutes.
- 2 Turn on the Cable/DSL modem and wait for the lights on the modem to settle down.
- 3 Turn on the router and wait for the lights on the router to settle down.
- 4 Turn on the computer.
- 5 Reconfigure the router as described in Section 3.
- 6 Log in to the router and select the System Status tab.
- 7 Verify that the IP Address, Default Gateway, and at least one of the DNS fields have valid numbers assigned to them (instead of all 0's).

System Settings

- System Status**
- System Settings
- Administrator Settings
- Firmware Upgrade
- Configuration Tools
- System Log

System Status

INTERNET Refresh

Cable/DSL	Disconnected
WAN IP	0.0.0.0
Subnet Mask	0.0.0.0
Gateway	0.0.0.0
DNS	202.96.128.166
Secondary DNS	0.0.0.0
Domain Name	
Connection Type	PPPoE
Connection Time	00:00:00

Connection Disconnected

If you see all 0's, click on the Refresh button (for Cable Modem users) or the Connect button (for DSL users).

If each field has a valid number assigned, the router is connected to the Internet

Appendix 3: Glossary

802.11b - The 802.11b standard specifies a wireless networking at 11 Mbps using direct-sequence spread-spectrum (DSSS) technology and operating in the unlicensed radio spectrum at 2.4GHz, and WEP encryption for security. 802.11b networks are also referred to as Wi-Fi networks.

802.11g - specification for wireless networking at 54 Mbps using direct-sequence spread-spectrum (DSSS) technology, using OFDM modulation and operating in the unlicensed radio spectrum at 2.4GHz, and backward compatibility with IEEE 802.11b devices, and WEP encryption for security.

DDNS(Dynamic Domain Name System) - The capability of assigning a fixed host and domain name to a dynamic Internet IP Address.

DHCP(Dynamic Host Configuration Protocol) - A protocol that automatically configure the TCP/IP parameters for the all the PCs that are connected to a DHCP server.

DMZ (Demilitarized Zone) - A Demilitarized Zone allows one local host to be exposed to the Internet for a special-purpose service such as Internet gaming or videoconferencing.

DNS (Domain Name Server) - An Internet Service that translates the names of websites into IP addresses.

Domain Name - A descriptive name for an address or group of addresses on the Internet.

DoS(Denial of Service) - A hacker attack designed to prevent your computer or network from operating or communicating.

DSL(Digital Subscriber Line) - A technology that allows data to be sent or received over existing traditional phone lines.

ISP (Internet Service Provider) - A company that provides access to the Internet

MTU (Maximum Transmission Unit) - The size in bytes of the largest packet that can be transmitted.

NAT (Network Address Translation) - NAT technology translates IP addresses of a local area network to a different IP address for the Internet.

PPPoE (Point to Point Protocol over Ethernet) - PPPoE is a protocol for connecting remote hosts to the Internet over an always-on connection by simulating a dial-up connection.

SSID - A Service Set Identification is a thirty-two character (maximum) alphanumeric key identifying a wireless local area network. For the wireless devices in a network to communicate with each other, all devices must be configured with the same SSID. This is typically the configuration parameter for a wireless PC card. It corresponds to the ESSID in the wireless Access Point and to the wireless network name.

WEP (Wired Equivalent Privacy) - A data privacy mechanism based on a 64-bit or 128-bit or 152-bit shared key algorithm, as described in the IEEE 802.11 standard.

Wi-Fi - A trade name for the 802.11b wireless networking standard, given by the Wireless Ethernet Compatibility Alliance (WECA, see <http://www.wi-fi.net>), an industry standards group promoting interoperability among 802.11b devices.

WLAN (Wireless Local Area Network) - A group of computers and associated devices communicate with each other wirelessly, which network serving users are limited in a local area.

RADIUS(Remote Authentication Dial-In User Service)allows for remote users to dial into a central server and be authenticated in order to access resources on a network

Infrastructure – In terms of a wireless network, this is when wireless clients use an Access Point to gain access to the network

MIMO Multiple-Input Multiple-Output (MIMO) wireless systems represent an economical way to increase user capacity in a variety of environments. The use of antennas at both transmitter and receiver allows