



User's Guide

Wireless 150 N Home Router W150NR

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Before you Begin

Please read and make sure you understand all the prerequisites for proper installation of your new Wireless Router. Have all the necessary information and equipment on hand before beginning the installation.

Installation Notes

In order to establish a connection to the Internet it will be necessary to provide information to the Router that will be stored in its memory. For some users, only their account information (Username and Password) is required. For others, various parameters that control and define the Internet connection will be required. You can print out the two pages below and use the tables to list this information. This way you have a hard copy of all the information needed to setup the Router. If it is necessary to reconfigure the device, all the necessary information can be easily accessed. Be sure to keep this information safe and private.

Low Pass Filters

Since ADSL and telephone services share the same copper wiring to carry their respective signals, a filtering mechanism may be necessary to avoid mutual interference. A low pass filter device can be installed for each telephone that shares the line with the ADSL line. These filters are easy to install passive devices that connect to the ADSL device and/or telephone using standard telephone cable. Ask your service provider for more information about the use of low pass filters with your installation.

Operating Systems

The Router uses an HTML-based web interface for setup and management. The web configuration manager may be accessed using any operating system capable of running web browser software, including Windows 98 SE, Windows ME, Windows 2000, Windows XP, and Windows Vista.

Web Browser

Any common web browser can be used to configure the Router using the web configuration management software. The program is designed to work best with more recently released browsers such as Opera, Microsoft Internet Explorer® version 6.0, Netscape Navigator® version 6.2.3, or later versions. The web browser must have JavaScript enabled. JavaScript is enabled by default on many browsers. Make sure JavaScript has not been disabled by other software (such as virus protection or web user security packages) that may be running on your computer.

Ethernet Port (NIC Adapter)

Any computer that uses the Router must be able to connect to it through the Ethernet port on the Router. This connection is an Ethernet connection and therefore requires that your computer be equipped with an Ethernet port as well. Most notebook computers are now sold with an Ethernet port already installed. Likewise, most fully assembled desktop computers come with an Ethernet NIC adapter as standard equipment. If your computer does not have an Ethernet port, you must install an Ethernet NIC adapter before you can use the Router. If you must install an adapter, follow the installation instructions that come with the Ethernet NIC adapter.

WLAN Ethernet Adapter

Any computer that uses the Wireless ADSL Router must be able to connect to it through the Wireless Ethernet (WLAN) on the Wireless ADSL Router. This connection is a Wireless Ethernet (WLAN or WiFi) connection and therefore requires that your computer be equipped with a Wireless Ethernet Adapter as well. Many notebook computers are now sold with a Wireless Ethernet Adapter already installed. There is also a Wired Ethernet port that is used to connect the WLAN adapter to your wired network. This port can be used to configure the Wireless ADSL Router. Most fully assembled desktop computers come with an Ethernet NIC adapter as standard equipment. If your computer does not have an Ethernet port, you must install an Ethernet NIC adapter before you can configure the Wireless ADSL Router. If you must install an adapter, follow the installation instructions that come with the Ethernet NIC adapter.

Additional Software

It may be necessary to install software on your computer that enables the computer to access the Internet. Additional software must be installed if you are using the device a simple bridge. For a bridged connection, the information needed to make and maintain the Internet connection is stored on another computer or gateway device, not in the Router itself.

If your ADSL service is delivered through a PPPoE or PPPoA connection, the information needed to establish and maintain the Internet connection can be stored in the Router. In this case, it is not necessary to install software on your computer. It may however be necessary to change some settings in the device, including account information used to identify and verify the connection.

All connections to the Internet require a unique global IP address. For bridged connections, the global IP settings must reside in a TCP/IP enabled device on the LAN side of the bridge, such as a PC, a server, a gateway device such as a router or similar firewall hardware. The IP address can be assigned in a number of ways. Your network service provider will give you instructions about any additional connection software or NIC configuration that may be required.

Information you will need from your ADSL service provider

Username

This is the Username used to log on to your ADSL service provider's network. Your ADSL service provider uses this to identify your account.

Password

This is the Password used, in conjunction with the Username above, to log on to your ADSL service provider's network. This is used to verify the identity of your account.

WAN Setting / Connection Type

These settings describe the method your ADSL service provider uses to transport data between the Internet and your computer. Most users will use the default settings. You may need to specify one of the following WAN Setting and Connection Type configurations (Connection Type settings listed in parenthesis):

- PPPoE/PPoA (PPPoE LLC, PPPoA LLC or PPPoA VC-Mux)
- Bridge Mode (1483 Bridged IP LLC or 1483 Bridged IP VC Mux)
- IPoA/MER (Static IP Address) (Bridged IP LLC, 1483 Bridged IP VC Mux, 1483 Routed IP LLC, 1483 Routed IP VC-Mux or IPoA)
- MER (Dynamic IP Address) (1483 Bridged IP LLC or 1483 Bridged IP VC-Mux)

Modulation Type

ADSL uses various standardized modulation techniques to transmit data over the allotted signal frequencies. Some users may need to change the type of modulation used for their service. The default DSL modulation (ADSL2+ Multi-Mode) used for the Router automatically detects all types of ADSL, ADSL2, and ADSL2+ modulation.

Security Protocol

This is the method your ADSL service provider will use to verify your Username and Password when you log on to their network. Your Router supports the PAP and CHAP protocols.

VPI

Most users will not be required to change this setting. The Virtual Path Identifier (VPI) is used in conjunction with the Virtual Channel Identifier (VCI) to identify the data path between your ADSL service provider's network and your computer. If you are setting up the Router for multiple virtual connections, you will need to configure the VPI and VCI as instructed by your ADSL service provider for the additional connections. This setting can be changed in the WAN Settings window of the web management interface.

VCI

Most users will not be required to change this setting. The Virtual Channel Identifier (VCI) used in conjunction with the VPI to identify the data path between your ADSL service provider's network and your computer. If you are setting up the Router for multiple virtual connections, you will need to configure the VPI and VCI as instructed by your ADSL service provider for the additional connections. This setting can be changed in the WAN Settings window of the web management interface.

VCI

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Information you will need about the Router

Username

This is the Username needed access the Router's management interface. When you attempt to connect to the device through a web browser you will be prompted to enter this Username. The default Username for the Router is "admin." The user cannot change this.

Password

This is the Password you will be prompted to enter when you access the Router's management interface. The default Password is blank The user may change this.

LAN IP addresses for the Router

This is the IP address you will enter into the Address field of your web browser to access the Router's configuration graphical user interface (GUI) using a web browser. The default IP address is 192.168.10.1. This may be changed to suit any IP address scheme the user desires. This address will be the base IP address used for DHCP service on the LAN when DHCP is enabled.

LAN Subnet Mask for the Router

This is the subnet mask used by the Router, and will be used throughout your LAN. The default subnet mask is 255.255.255.0. This can be changed later.

Information you will need about your LAN or computer

Ethernet NIC

If your computer has an Ethernet NIC, you can connect the Router to this Ethernet port using an Ethernet cable. You can also use the Ethernet ports on the Router to connect to other computer or Ethernet devices.

DHCP Client status

The ADSL Router is configured, by default, to be a DHCP server. This means that it can assign an IP address, subnet mask, and a default gateway address to computers on your LAN. The default range of IP addresses the Router will assign are from 192.168.1.2 to 192.168.1.254. Your computer (or computers) needs to be configured to obtain an IP address automatically (that is, they need to be configured as DHCP clients.)

It is recommended that your collect and record this information here, or in some other secure place, in case you have to re-configure your ADSL connection in the future.

Once you have the above information, you are ready to setup and configure the Router.

Wireless Tips

The following are some general wireless tips to help minimize the impact of interference within an environment.

Assign your network a unique SSID. Do not use anything that would be identifying like "Smith Family Network". Choose something that you would easily identify when searching for available wireless networks.

Do **not** turn off the SSID broadcast. The SSID broadcast is intended to be on and turning it off can cause connectivity issues. The preferred method of securing a wireless network is to choose a strong form of encryption with a strong and varied encryption key.

Note: after setting up the SSID, encryption type and encryption key/passphrase, please make a note of them for future reference. You will need this information to connect your wireless computers to the wireless router/access point.

Change the channel. Most wireless access points and routers are defaulted to channel 6. If you have a site survey tool that will display the channels you can plan your channel selection around neighboring access points to minimize interference from them. If your site survey tool does not display the channel try using channels 1 or 11.

If using 802.11n you should be securing the network with WPA2 security.

Note: Due to Wi-Fi certification considerations if you choose WEP, WPA or WPA2-TKIP encryption this device may operate in legacy wireless mode (802.11b/g). You may not get 802.11n performance as these forms of encryption are not supported by the 802.11n specification.

Please also make sure that the wireless hardware is not placed in any type of shelving or enclosures.

Avoid stacking hardware on top of each other to prevent overheating issues. Maintain enough free space around the hardware for good ventilation and airflow. There should also be plenty of free space around the antennas to allow the wireless signal to propagate.

There are a number of other environmental factors that can impact the range of wireless devices.

- 1. Adjust your wireless devices so that the signal is traveling in a straight path, rather than at an angle. The more material the signal has to pass through the more signal you will lose.
- Keep the number of obstructions to a minimum. Each obstruction can reduce the range of a wireless device. Position the wireless devices in a manner that will minimize the amount of obstructions between them.
- Building materials can have a large impact on your wireless signal. In an indoor environment, try
 to position the wireless devices so that the signal passes through less dense material such as
 dry wall. Dense materials like metal, solid wood, glass or even furniture may block or
 degrade the signal.
- 4. Antenna orientation can also have a large impact on your wireless signal. Use the wireless adapter's site survey tool to determine the best antenna orientation for your wireless devices.

- Interference from devices that produce RF (radio frequency) noise can also impact your signal. Position your wireless devices away from anything that generates RF noise, such as microwaves, HAM radios, Walkie-Talkies and baby monitors.
- 6. Any device operating on the 2.4GHz frequency will cause interference. Devices such as 2.4GHz cordless phones or other wireless remotes operating on the 2.4GHz frequency can potentially drop the wireless signal. Although the phone may not be in use, the base can still transmit wireless signal. Move the phone's base station as far away as possible from your wireless devices.

If you are still experiencing low or no signal consider repositioning the wireless devices or installing additional access points. The use of higher gain antennas may also provide the necessary coverage depending on the environment.

Device Installation

The Router connects two separate physical interfaces, an ADSL (WAN) and an Ethernet (LAN) interface. Place the Router in a location where it can be connected to the various devices as well as to a power source. The Router should not be located where it will be exposed to moisture or excessive heat. Make sure the cables and power cord are placed safely out of the way so they do not create a tripping hazard. As with any electrical appliance, observe common sense safety procedures.

The Router can be placed on a shelf or desktop, ideally you should be able to see the LED indicators on the front if you need to view them for troubleshooting.

Power on Router

The Router must be used with the power adapter included with the device.

- 1. Insert the AC Power Adapter cord into the power receptacle located on the rear panel of the Router and plug the adapter into a suitable nearby power source.
- 2. You should see the Power LED indicator light up green.
- 3. If the Ethernet port is connected to a working device, check the LAN LED indicators to make sure the connection is valid. The Router will attempt to establish the ADSL connection, if the ADSL line is connected and the Router is properly configured this should light up after several seconds. If this is the first time installing the device, some settings may need to be changed before the Router can establish a connection.

Factory Reset Button

The Router may be reset to the original factory default settings by using a ballpoint or paperclip to gently push down the reset button in the following sequence:

- 1. Ensure the Router is powered on.
- 2. Press and hold the reset button on the back of the device for approximately 5 to 8 seconds.
- 3. This process should take around 1 to 2 minutes.

Remember that this will wipe out any settings stored in flash memory including user account information and LAN IP settings. The device settings will be restored to the factory default IP address **192.168.10.1** and the subnet mask is **255.255.255.0**, the default management Username is "admin" and the default Password is "admin."

Network Connections

Connect ADSL Line

Use the ADSL cable included with the Router to connect it to a telephone wall socket or receptacle. Plug one end of the cable into the ADSL port (RJ-11 receptacle) on the rear panel of the Router and insert the other end into the RJ-11 wall socket. If you are using a low pass filter device, follow the instructions included with the device or given to you by your service provider. The ADSL connection represents the WAN interface, the connection to the Internet. It is the physical link to the service provider's network backbone and ultimately to the Internet.

Connect Router to Ethernet

The Router may be connected to a single computer or Ethernet device through the 10BASE-TX Ethernet port on the rear panel. Any connection to an Ethernet concentrating device such as a switch or hub must operate at a speed of 10/100 Mbps only. When connecting the Router to any Ethernet device that is capable of operating at speeds higher than 10Mbps, be sure that the device has auto-negotiation (NWay) enabled for the connecting port. Use standard twisted-pair cable with RJ-45 connectors. The RJ-45 port on the Router is a crossed port (MDI-X). Follow standard Ethernet guidelines when deciding what type of cable to use to make this connection. When connecting the Router directly to a PC or server use a normal straight-through cable. You should use a crossed cable when connecting it to an uplink (MDI-X) port on a switch or hub. Use a normal straight-through cable when connecting it to an uplink (MDI-II) port on a hub or switch. The rules governing Ethernet cable lengths apply to the LAN to Router connection. Be sure that the cable connecting the LAN to the Router does not exceed 100 meters.

Hub or Switch to Router Connection

Connect the Router to an uplink port (MDI-II) on an Ethernet hub or switch with a straight-through cable. If you wish to reserve the uplink port on the switch or hub for another device, connect to any on the other MDI-X ports (1x, 2x, etc.) with a crossed cable.

Computer to Router Connection

You can connect the Router directly to a 10/100BASE-TX Ethernet adapter card (NIC) installed on a PC using the Ethernet cable provided.

Package Contents

- Keebox Wireless 11n Router
- Power Adapter
- Ethernet Cable
- Manual and Warranty on CD

Warning: Using a power supply with a different voltage rating than the one included with the Router will cause damage and void the warranty for this product.

System Requirements

- Ethernet-based Cable or DSL Modem
- Computers with Windows®, Macintosh®, or Linux-based operating systems with an installed Ethernet adapter
- Internet Explorer 6 or Firefox 2.0 or above (for configuration)

Hardware Overview Connections



LEDs



WPS Button



The WPS Push Button is located at the right side of the Router. Press the button to enable the WPS function. Refer to WPS section for more detail. The blue light blinks when searching for the connection. The blue light remains for 300 seconds when successfully connected.

Installation

This section will walk you through the installation process. Placement of the router is very important. Do not place the router in an enclosed area such as a closet, cabinet, or in the attic or garage.

Configuration

This section will show you how to set up and configure your new D-Link Router using the Web-based configuration utility.

Web-based Configuration Utility

To access the configuration utility, open a web-browser such as Internet Explorer and enter the IP address of the Router (192.168.10.1).

🌈 KEEBOX SYSTEMS, INC. WIRELESS ROUTER HOME - Windows Internet Explo	rer
SnagIt ≝ ⁴	
😤 🏟 🌈 KEEBOX SYSTEMS, INC. WIRELESS ROUTER HOME	

The following screen appears.

KEE	BOX	
	LOGIN	
	Login to the router : User Name : admin Password : Login	

Enter the user name, admin, and leave the password blank by default.

System

This chapter provides basic system information and settings of the Router.

Status

This window displays the current information about the Router, including the basic system information, WAN, LAN and WLAN settings.

KEEBOX		W150NR	
SYSTEM	Status		<
Status LAN DHCP Schedule	You can use the Status pa firmware, hardware version your network.	age to monitor the connection status for the WAN/LAN interfaces, numbers and information on all DHCP client PCs currently connected to	1400 - 1400 - 1400 - 1400 - 1400 - 1400 - 1400 - 1400 - 1400 - 1400 - 1400 - 1400 - 1400 - 1400 - 1400 - 1400 -
Event Log	System		
WIZARD	Model	W150NR	
INTERNET	Date and Time	2000/01/02 00:00:24	
WIRFLESS 2 4GHZ	Uptime	0 Day 0 Hour 0 Min 33 Sec	
WITCHE	Hardware version	0A1	
FIREWALL	Kernel version	Linux version 2.6.21	
ADVANCED	Application version	1.00.keebox	
	WAN Settings		
TOOLS	Attain IP Protocol	DHCP Client	
	IP Address	0.0.0.0	
	C		>

LAN

This section allows you to change the local network settings of the Router and to configure the DHCP settings.

SYSTEM LAN Status You can enable the Broadband routers DHCP server to dynamically allocate IP Addresses LAN client PCs. The broadband router must have an IP Address for the Local Area Network Schedule LAN IP Event Log IP address VIZARD IP address NTERNET DHCP Server VIRELESS 2.4GHZ DHCP Server DHCP Server Enabled 💌 Status One week 💌 Start IP 192.168.10.100 End IP 192.168.10.200		
Status LAN You can enable the Broadband routers DHCP server to dynamically allocate IP Addresses DHCP Schedule Event Log NIZARD NIZARD IP address 192.168.10.1 IP subnet Mask 255.255.255.0 DHCP Server DHCP Server DHCP Server DHCP Server Enabled ♥ Start IP 192.168.10.100 End IP 192.168.10.200	LAN	
You can enable the Broadband routers DHCP server to dynamically allocate IP Addresses DHCP Schedule Event Log VIZARD IP address 192.168.10.1 IP Subnet Mask 255.255.255.0 DHCP Server		
Schedule Event Log WIZARD NTERNET WIRELESS 2.4GHZ =IREWALL ADVANCED	You can enable the Broadband routers DHCP server to dynamically allocate IP Addres LAN client PCs. The broadband router must have an IP Address for the Local Area N	etwork.
Event Log LAN IP WIZARD IP address 192.168.10.1 IP Subnet Mask 255.255.255.0 INTERNET DHCP Server DHCP Server DHCP Server DHCP Server Enabled ♥ Lease time One week ♥ Start IP 192.168.10.100 End IP 192.168.10.200		
WIZARD IN TERNET WIRELESS 2.4GHZ FIREWALL ADVANCED IP address IP a	LAN IP	
IP Subnet Mask 255.255.0 INTERNET WIRELESS 2.4GHZ FIREWALL ADVANCED IP Subnet Mask 255.255.0 DHCP Server Enabled One week 192.168.10.100 End IP 192.168.10.200	IP address 192.168.10.1	
INTERNET WIRELESS 2.4GHZ DHCP Server DHCP Server DHCP Server Lease time One week Start IP 192.168.10.100 End IP 192.168.10.200	IP Subnet Mask 255.255.255.0	
DHCP Server DHCP Server Enabled Chromage DHCP Server Enabled Chromage Start IP End IP 192.168.10.200		
DHCP Server Enabled Lease time One week Start IP 192.168.10.100 End IP 192.168.10.200	DHCP Server	
FIREWALL Lease time One week ADVANCED Start IP 192.168.10.100 End IP 192.168.10.200	DHCP Server Enabled 👻	
ADVANCED Start IP 192.168.10.100 End IP 192.168.10.200	Lease time One week 💌	
End IP 192.168.10.200	Start IP 192.168.10.100	
	End IP 192.168.10.200	
Domain name	Domain name	

Fields	Description
IP address	Enter the IP address of the Router. The default IP address is 192.168.10.1.
IP Subnet Mask	Enter the subnet mask. The default subnet mask is 255.255.255.0.

DHCP stands for Dynamic Host Control Protocol. The Router has a built-in DHCP server. The DHCP Server will automatically assign an IP address to the computers on the LAN/private network. Be sure to set your computers to be DHCP clients by setting their TCP/IP settings to **Obtain an IP Address Automatically**. When turning your computers on, they will automatically load the proper TCP/IP settings provided by the Router. The DHCP Server will automatically allocate an unused IP address from the IP address pool to the requesting computer. You must specify the starting and ending address of the IP address pool.

Fields	Description
DHCP Server	Use the drop-down list to enable or disable the DHCP server function.
Lease time	The length of time for the IP address lease.
Start IP	Enter the starting IP address for the DHCP server's IP assignment.
End IP	Enter the ending IP address for the DHCP server's IP assignment.
Domain name	Enter the domain name.

DHCP

This window allows you to configure the DHCP client information.

KEEBOX					
SYSTEM	DHCP				^
Status	DHCP				
LAN	This DHCP Client	Table shows client IP addr	ess assigned by the	DHCP Server.	
DHCP	DHCP Client Ta	ble			
Schedule	IP address	MAC ac	Idress	Expiratio	n
Event Log	Refresh			Time	
WIZARD					
INTERNET	Enable Stati You can assign	c DHCP IP an IP address to the s	specific MAC addre	:55	
WIRELESS 2.4GHZ	-	IP address		MAC addres	5
FIREWALL	Add Reset				
ADVANCED	Current Static	DHCP Table			
TOOLS	NO.	IP address	MAC add	lress	Select
	Delete Selecte	d Delete All			
				A	pply Cancel
	<		100		>

The DHCP Client Table displays all the client IP address assigned by the DHCP server.

To assign an IP address to a specific MAC address, tick **Enable Static DHCP IP** check box, enter the IP and MAC addresses in the fields and click the **Add** button. The information will display in the Current Static DHCP Table.

To remove specific static DHCP IP addresses, tick the corresponding check boxes under **Select**, and click **Delete Selected**. To remove all entries, click **Delete All**.

Schedule

The Router allows the user the ability to manage schedule rules for various wireless settings, filter features, firewall features and virtual server settings.

KEEBOX						
SYSTEM	Schee	dules				<
LAN DHCP Schedule	The Schec Server", "F	dule configuration Port Forwarding", '	option is used to m "Network Filter", "V	anage schedule rules for "W Vebsite Filter" and "Firewall".	/AN", "Wireless", "Virtual	
Event Log	Name	Schedule Kule				
WIZARD	Day(s)		O All Week	Select Day(s)		=
INTERNET	_		Sun Mor	n 🗌 Tue 🗌 Wed 🗌 Thu 🗌]Fri 🔲 Sat	
WIRELESS 2.4GHZ	All Day - Start Tim	24 hrs Ie	12 0	AM 💌 (hour:minute, 1	2 hour time)	_
FIREWALL	End Time	9	11 :59	PM 🚩 (hour:minute, 1	2 hour time)	
ADVANCED	Add Re	eset				-
TOOLS	Scheduk	e Rules List				11
	NO.	Name	Day(s)	Time Frame	Select	~

Fields	Description
Name	Enter a name for the schedule.
Day(s)	Click the radio button to choose the desired day(s), either All Week or Select Day(s).
	If the latter is selected, use the checkboxes directly below to specify the individual
	days.
All Day – 24 hrs	Tick the check box to apply the new schedule rule to a full day.
Start Time	If the schedule rule is not applied to a full day, specify the starting time of the schedule
	rule in this field.
End Time	If the schedule rule is not applied to a full day, specify the ending time of the schedule
	rule in this field.

Click **Add** to save the changes and see the rule in the Schedule Rules List. To remove specific schedule rules, tick the corresponding check boxes under **Select**, and click **Delete Selected**. To remove all entries, click **Delete All**. Click **Reset** to clear all the information that has not been saved.

Event Log

The system log displays chronological event log data. You may also save a simple text file containing the log to your computer. Click the **Save** button and follow the prompts to save the file. Click **Clear** to remove all the event log. Click **Refresh** to update the information.

KEEBOX		W150NR
SYSTEM	EventLog	
Status	Event Log	
LAN	View the system operation information	
DHCP	view the system operation monnation.	
Schedule	Sun Jan 2 00:04:20 2000 [SYSTEM] DHCP: Client send DISCOVER.	
Event Log	Sun Jan 2 00:03:48 2000 [SYSTEM] DHCP: Client send DISCOVER.	
WIZARD	[SYSTEM] DHCP: Client send DISCOVER. Sun Jan 2 00:03:24 2000	
INTERNET	[SYSTEM] DHCP: Client send DISCOVER. Sun Jan 2 00:03:20 2000	H
WIRELESS 2.4GHZ	Sun Jan 2 00:01:16 2000 [SYSTEM] DHCP: Client send DISCOVER.	
FIREWALL	Sun Jan 2 00:00:44 2000 [SYSTEM] DHCP: Client send DISCOVER. Sun Jan 2 00:00:28 2000	
ADVANCED	[SYSTEM] DHCP: Client send DISCOVER. Sun Jan 2 00:00:20 2000	
TOOLS	[SYSTEM] DHCP: Client send DISCOVER.	2
	Save Clear Refresh	

Wizard

This window guides the user the set up the Internet connections of the Router.



Click the Next button to continue. The following window appears.

Se	tup Wizard
Plea	ase choose the Operation Mode.
0	AP Router Mode AP Router is the most common Wireless LAN device with which you will work as a Wireless LAN administrator and Internet Access Point. AP Router provides clients with a point of access into the Internet.
0	AP Mode AP Mode provides a wireless upstream link into a network instead of being hard-wired to the network and using its Ethernet port.
	Next

Click the radio button to select one of the operation modes and click **Next** to continue.

AP Router Mode – WAN Configuration

In this window, select various WAN connections to configure. The available selections are DHCP, PPPoE Dynamic PPTP and Others.

lease	choose your	service type or select C	Others to setup WAN configurations manually.
	No.	Service	Description
۲	1.	DHCP	DHCP is used when your Modem is controling your internet connection the Username & Password is stored on the Modem.
0	2.	PPP₀E	PPPoE is used when your modem is set in Bridge Mode and your Router is used to control the internet connection. IE: router houses ISP's Username & Password.
0	3.	Dynamic PPTP	
0	4.	Others	

If selecting DHCP, click Next and the following window appears.

Please, enter the data w	which is supplied by your IS	iP.	
Login Method:	Dynamic IP Addre	ss 📝	
Hostname	W150NR		
MAC address		Clone MAC	

You may need to enter the MAC address of the computer that was last connected directly to your modem. If you are currently using that computer, click **Clone MAC** and then click **Next** to continue. The Host Name is optional but may be required by some ISPs. The default host name is the device name of the Router and may be changed.

If selecting **PPPoE**, click **Next** and the following window appears.

Setup Wizard					
s supplied by your	ISP.				
PPP over Ethern	et 👻				
1454	(512<=MTU Value<=1492)				
	s supplied by your PPP over Ethern	s supplied by your ISP. PPP over Ethernet Image: supplied by your ISP. Image: supplied by your ISP.			

Type in the **Username** and **Password** used to identify and verify your account to the ISP. Leave the **MTU** value at the default setting unless you have specific reasons to change this. Click Next to continue

If selecting Dynamic PPTP, click Next and the following window appears.

Please, enter the data whic	ch is supplied b	y you	r ISP.		
Login Method:	PPTP		~		
WAN Interface Setting	js				
WAN Interface Type	Dynamic IP 🐱				
Hostname	W150NR				
MAC address	Clone MAC				
PPTP Settings					
Login					
Password					
Service IP address	0.0.0.0				
МТИ	1454		(576<=MT	U Value<=1400)	

In WAN Interface Settings, use the drop-down list to choose Dynamic or Static IP. If **Dynamic IP** is selected, you may need to enter the MAC address of the computer or click **Clone MAC** to directly copy the MAC address of the computer. If **Static IP** is selected, enter the IP address, its subnet mask and gateway's IP address.

In PPTP Settings, enter the username in Login, its Password, and Service IP address. Leave the **MTU** value at the default setting unless you have specific reasons to change this. Click **Next** to continue.

If selecting Others, click Next and the following window appears.

Setup Wizar	d	
Please, enter the data w	/hich is supplied by your ISP.	
	Select one Static IP Address Dynamic IP Address PPP over Ethernet PPTP	Next

Use the drop-down list to select a WAN mode and configure the settings. Click Next to continue.

	security level.
None ○ WEP	Open System OWEP Shared Key OWPA-PSK OWPA2-PSK
Encryption me Authenticatio Please input	thod: None n Type: None SSID in the following box.
Please set your d	esired SSID and encryption Key below.

Configure the wireless security settings in the window. Click the radio buttons to select the wireless security type, and enter the SSID and encryption in the lower half of the window. Click **Next** to continue.

System Configuratio	n				
Operation Mode	AP Router Mode				
WAN Configuration					
Connection Type	Dynamic IP Address				
WLAN Configuration					
SSID	KEEBOX W150NR				
Security	None				
WLAN Key					

The final step of wizard displays the settings you just made. Click **Apply** to save the settings.

Internet

This chapter provides more manual settings about Internet connection.

Status

This window displays the current Internet connection of the Router.

KEEBOX			
SYSTEM	Status		
WIZARD			
INTERNET	View the current internet of	connection status and related information.	
	WAN Settings		
Status	Attain IP Protocol	DHCP Client	
Dynamic IP	IP Address	0.0.0.0	
Static IP	Subnet Mask	0.0.0.0	
PPPOE		0.0.0.0	
PPTP	Default Gateway	0.0.0	
L2TP	MAC address	5c:33:8e:28:08:63	
WIRELESS 2.4GHZ	Primary DNS	0.0.0.0	
	Secondary DNS	0.0.0.0	
FIREWALL			2.
ADVANCED	Renew Release		
ADVANCED			
TOOLS			

Dynamic IP Use this window to configure the dynamic IP.

KEEBOX				
SYSTEM WIZARD	Dynamic IP			
INTERNET	You can select the typ Dynamic IP	e of the account you have with	your ISP provider.	_
Status Dynamic IP Static IP	Hostname MAC address	W150NR	Clone MAC	
PPPOE PPTP				Apply Cancel
L2TP WIRELESS 2.4GHZ				_
FIREWALL				_
ADVANCED TOOLS				

Fields	Description
Hostname	This field is optional, but may be required by some ISPs. The default host name is the
	device name of the Router and may be changed.
MAC address	The default MAC address is set to the WAN's physical interface MAC address on the Router. You can use the Clone MAC button to copy the MAC address of the Ethernet Card installed by your ISP and replace the WAN MAC address with the MAC address of the Router. It is not recommended that you change the default MAC address unless required by your ISP.

Static IP

Use this window to configure the static IP.

KEEBOX				
SYSTEM WIZARD	Static IP			
INTERNET	You can select the type Static IP	of the account you have with	n your ISP provider.	_
Status Dynamic IP	IP address IP Subnet Mask	0.0.0.0		
PPPOE PPTP	Default Gateway Primary DNS			
	Secundary DNS			
FIREWALL				Apply Cancel
ADVANCED				
TOOLS				

Fields	Description
IP address	Enter the IP address assigned by your ISP.
IP Subnet Mask	Enter the subnet mask assigned by your ISP.
Default	Enter the Gateway assigned by your ISP.
Gateway	
Primary DNS	Enter the primary DNS server IP address assigned by your ISP.
Secondary DNS	Enter the secondary DNS server IP address. This is optional.

PPPoE

Choose PPPoE (Point to Point Protocol over Ethernet) if the ISP uses a PPPoE connection. The ISP will provide you with a username and password. This option is typically used for DSL services. Make sure to remove your PPPoE software from your computer. The software is no longer needed and will not work through a router.

KEEBOX				
SYSTEM	PPPoE			
WIZARD				
INTERNET	PPPoF	or the account you hav	e with your ISP provider.	_
Status	Login			
Dynamic IP Static IP	Password			
PPPOE	Service Name			
РРТР	MTU	1454	(512<=MTU Va	alue<=1492)
L2TP	Туре		~	
WIRELESS 2.4GHZ	Idle Timeout		(1-1000 Minute	is)
FIREWALL				Apply Cancel
ADVANCED				
TOOLS				

Fields	Description
Login	Enter the PPPoE login name.
Password	Enter the PPPoE password.
Service Name	Enter the ISP service name. This is optional.
MTU	Maximum Transmission Unit is for optimal performance with some ISPs.
Туре	Use the drop-down list to select Keep Connection, Automatic Connection or Manual
	Connection.
Idle Timeout	This is an age-out value, in minutes, before the Router times out.

Click **Apply** to save the changes.

PPTP

Choose PPTP (Point-to-Point-Tunneling Protocol) if your ISP uses a PPTP connection. Your ISP will provide you with a username and password. This option is typically used for DSL services.

KEEBOX		W150NR	
SYSTEM	рртр		
WIZARD			-
INTERNET	You can select the type of WAN Interface Setting	the account you have with your ISP provider.	
Status	WAN Interface Type	Dynamic IP 🗸	
Dynamic IP	Hostname	W150NR	4
Static IP	MAC address		4
PPPOE	MAC address		
PPTP	PPTP Settings		
L2TP	Login		
WIRELESS 2.4GHZ	Password		
	Service IP address		
FIREWALL	МТИ	1454 (576<=MTU Value<=1400)	1
ADVANCED	Туре	Keep Connection	
	Idle Timeout	(1-1000 Minutes)	
TOOLS		Apply Cancel	
	<	w	

Fields	Description
WAN Interface Type	Use the drop-down list to choose between Dynamic IP and Static IP.
Hostname	The selection appears when choosing Dynamic IP in WAN Interface Type. This
	field is optional, but may be required by some ISPs. The default host name is the
	device name of the Router and may be changed.
MAC address	The selection appears when choosing Dynamic IP in WAN Interface Type . The
	default MAC address is set to the WAN's physical interface MAC address on the
	Router. You can use the Clone MAC button to copy the MAC address of the
	Ethernet Card installed by your ISP and replace the WAN MAC address with the
	MAC address of the Router. It is not recommended that you change the default
	MAC address unless required by your ISP.
My IP address	The selection appears when choosing Static IP in WAN Interface Type. Enter
	the IP address assigned by your ISP.
My Subnet Mask	Enter the subnet mask assigned by your ISP.
Gateway IP Address	Enter the Gateway assigned by your ISP.
Login	Enter the PPTP login name.
Password	Enter the PPTP password.
Service IP address	Enter the ISP service IP address.
MTU	Maximum Transmission Unit is for optimal performance with some ISPs.
Туре	Use the drop-down list to select Keep Connection, Automatic Connection or
	Manual Connection.
Idle Timeout	This is an age-out value, in minutes, before the Router times out.

L2TP

Choose L2TP (Layer 2 Tunneling Protocol) if your ISP uses a L2TP connection. Your ISP will provide you with a username and password. This option is typically used for DSL services.

KEEBOX		W150NR	
SYSTEM	L2TP		>
WIZARD			-
INTERNET	You can select the type of	the account you have with your ISP provider.	
Status	WAN Interface Setting		
Dynamic IP	Wan interface Type		-
Static IP	Hostname	VV ISUNR	-
PPPOE	MAC address	Clone MAC	
РРТР	PPTP Settings		
L2TP	Login		
WIRELESS 2.4GHZ	Password		
	Service IP address		
FIREWALL	мти	1454 (512<=MTU Value<=1492)	
ADVANCED	Туре	Keep Connection	
	Idle Timeout	(1-1000 Minutes)	
TOOLS		Apply Cancel	
	<		>

Fields	Description
WAN Interface Type	Use the drop-down list to choose between Dynamic IP and Static IP.
Hostname	The selection appears when choosing Dynamic IP in WAN Interface Type . This field is optional, but may be required by some ISPs. The default host name is the
	device name of the Router and may be changed.
MAC address	The selection appears when choosing Dynamic IP in WAN Interface Type . The default MAC address is set to the WAN's physical interface MAC address on the Router. You can use the Clone MAC button to copy the MAC address of the Ethernet Card installed by your ISP and replace the WAN MAC address with the MAC address of the Router. It is not recommended that you change the default MAC address unless required by your ISP.
My IP address	The selection appears when choosing Static IP in WAN Interface Type. Enter
-	the IP address assigned by your ISP.
My Subnet Mask	Enter the subnet mask assigned by your ISP.
Gateway IP Address	Enter the Gateway assigned by your ISP.
Login	Enter the L2TP login name.
Password	Enter the L2TP password.
Service IP address	Enter the ISP service IP address.
MTU	Maximum Transmission Unit is for optimal performance with some ISPs.
Туре	Use the drop-down list to select Keep Connection, Automatic Connection or Manual Connection.

Idle Timeout This is an age-out value, in minutes, before the Router times out.

Click **Apply** to save the changes.

Wireless 2.4GHZ

This chapter provides more manual settings about Wireless connection.

Basic

This window allows you to define SSID and the channel for the wireless connection.

KEEBOX		W150NR
SYSTEM	Basic	
WIZARD		
INTERNET	This page allows you to used for the wireless sta	define SSID, and Channel for the wireless connection. These parameters are tions to connect to the Wireless Router.
	Radio	
WIRELESS 2.4GHZ	Schedule	Always Vew Schedule
Basic	Wireless Mode	2.4 GHz (802.11b/g/n) 👻
Security	SSID	KEEBOX W150NR
WPS	Auto channel	Enable Disable
Client List	Channel	7 🖂
FIREWALL	WMM Enable	✓ (Wireless QoS)
ADVANCED TOOLS		Apply Cancel

Fields	Description
Radio	Use the radio buttons to enable or disable the wireless function.
Schedule	Use the drop-down list to choose the appropriate time to enable the wireless function.
	Select Always to enable the function all the time. To create a new schedule, click New
	Schedule to link to System > Schedule.
Wireless Mode	Use the drop-down list to choose the type of wireless.
SSID	Service Set Identifier (SSID) is the name of the wireless network.
Auto channel	Click Enable to allow the Router to select the channel with the least amount of
	interference. Click Disable to manually select the channel below.
Channel	Use the drop-down list to select the channel of wireless network.
WMM Enable	Tick the check box to enable Wi-Fi Multimedia to enjoy basic quality of service
	features.

Advanced

This window allows you to change the behavior of the 802.11g wireless radio from the standard settings. Be aware that any changes to the factory default settings may adversely affect the behavior of your network.

KEEBOX			WISONR
SYSTEM	Advanced		
WIZARD			
INTERNET	These settings are only for wireless LAN. These setting on your Broadband router.	more technicall s should not be	y advanced users who have a sufficient knowledge about changed unless you know what effect the changes will have
WIRELESS 2.4GHZ	Fragment Threshold:	2346	(1500-2346)
Basic	RTS Threshold:	2346	(256-2346)
Advanced	Beacon Interval:	100	(200-1000)
Security	DTIM Period:	1	(1-225)
WPS	Preamble Type:	O Short P	reamble SLong Preamble
Client List	CTS Protection:	⊙ Auto C	Always 🔿 None
FIREWALL	Band Width:	20/40 MHz	(Auto) 🔽
ADVANCED	Tx Power:	100% 🗸	
	Short Guard Interval:		
TOOLS			
			Apply Cancel

Fields	Description
Fragment Threshold	The fragmentation threshold, which is specified in bytes, determines whether
_	packets will be fragmented.
RTS Threshold	This value should remain at its default setting of 2346. If inconsistent data flow is
	a problem, only a minor modification should be made.
Beacon Interval	Beacons are packets sent by an Access Point to synchronize a wireless network.
	Specify a value. 100 is the default setting and is recommended.
DTIM Period	A DTIM is a countdown informing clients of the next window for listening to
	broadcast and multicast messages.
Preamble Type	Select Short or Long Preamble. The Preamble defines the length of the CRC
	block for communication between the wireless router and the roaming wireless
	network adapters.
CTS Protection	CTS is a function used to minimize collisions among wireless devices on a
	wireless local area network (LAN). CTS will make sure the wireless network is
	clear before a wireless client attempts to send wireless data. Enabling CTS will
	add overhead and may lower wireless through put.
Band Width	Use the drop-down list to select the bandwidth. Select 20/40 MHz (Auto) if you
	are using both 802.11n and non-802.11n wireless devices. Select 20 MHz if you
	are not using any 802.11n wireless clients.

Tx Power	Use the drop-down list to select the percentage of Tx Power.
Short Guard Interval	Check this box to reduce the guard interval time therefore increasing the data
	capacity. However, it's less reliable and may create higher data loss.

Security This window allows you to configure the wireless security settings.

KEEBOX			
SYSTEM	Security		
WIZARD			
INTERNET	This page allows you se could prevent any unauth	tup the wireless security. Turn on WEP norized access to your wireless network	or WPA by using Encryption Keys
	Broadcast SSID	Enable 💌	
WIRELESS 2.4GHZ	WMM	Enable 💙	
Basic	Encryption	Disable 👻	
Security	-		
WPS			Apply Cancel
Client List			
FIREWALL			_
ADVANCED			
TOOLS			

Fields	Description
Broadcast SSID	Use the drop-down list to broadcasting the SSID or not.
WMM	Use the drop-down list to enable or disable Wi-Fi Multimedia.
Encryption	Use the drop-down list to select the wireless security mode. The available choices are
	WEP, WEA Only, WPA2 Only and WPA/WPA2 Mixed.

WEP

Select **WEP** from the **Encryption** drop-down list to see the following window.

Security		
This page allows you setu could prevent any unautho	op the wireless security. Turn on WEP or WPA by using Encryption Keys prized access to your wireless network.	
Broadcast SSID	Enable 💌	
wмм	Enable Y	
Encryption	WEP 💌	
Authentication type	Open System O Shared Key	
Key Length	64-bit 💌	
Key type	ASCII (5 characters)	
Default key	Key1 💌	
Encryption Key 1		
Encryption Key 2		
Encryption Key 3		

Fields	Description
Authentication type	Click the radio buttons to select Open System or Shared Key. Shared key provide
	greater security.
Key Length	Select either 64Bit or 128Bit encryption from the drop-down list.
Key type	Select ASCII (5 characters) or ASCII (10 characters) from the drop-down list.
Default key	Select the default key for the wireless from the drop-down list.
Encryption Key 1 to	Enter WEP key here. Make sure you enter this key exactly on all your wireless
4	devices.

WPA Only / WPA2 Only / WPA/WPA2 Mixed Select other types of wireless security modes from the Encryption drop-down list to see the following window.

Broadcast SSID	Enable 🕑
WMM	Enable 💟
Encryption	WPA Only
PSK / EAP type	O PSK O EAP
WPA type	◯ TKIP ◯ AES ⊙ Mixed
RADIUS Server IP address	
RADIUS Server port	
RADIUS Server password	

Fields	Description
PSK / EAP type	Use the radio button to select PSK or EAP type.
WPA type	Use the radio button to select TKIP , AES or Mixed type.
RADIUS Server IP	Enter the IP address of a RADIUS server.
address	
RADIUS Server	Enter the port you are using with the RADIUS server.
port	
RADIUS Server	Enter the passport of the RADIUS server.
password	

WPS

Wi-Fi Protected Setup (WPS) provides an easier way to allow your wireless clients to connection to your network, using PIN or Push Button (PBC) method.

KEEBOX		WISONR	
SYSTEM	WPS		
WIZARD			
INTERNET	WPS (Wi-Fi Protected Sett your network, using using F access the unit's Wi-Fi Pro	up) provides an easier way to allow your wireless clients to connect to PIN or Push Button (PBC) method.This page allows you to setup and tected Setup settings.	
WIRELESS 2.4GHZ	WPS	✓ Enable	
Basic	Wi-Fi Protected Setup Information		
Advanced	WPS Current Status:	Enabled/Unconfigured	
Security	Self Pin Code	68460600	
WPS	SSID	KEEBOX W150NR	
Client List	Authentication Mode	Disabled	
FIREWALL	Passphrase Key		
	WPS Via Push Button	Start to Process	
	WPS via PIN	Start to Process	
TOOLS	2		
		Apply Cancel	
	<		

The following fields can be configured:

Fields	Description
WPS	Tick the Enable check box to enable the Wi-Fi protected setup function. Deselect to
	disable the function.
Passphrase Key	Enter a key for connecting the wireless network.
WPS via Push	This virtual Start to Process button has the same function as the physical WPS
button	button on the hardware device. Click to start WPS connection.
WPS via PIN	Enter the password for WPS connection and click Start to Process to start WPS
	connection.

Click **Apply** to save the changes.

Client List

This window displays all the clients of wireless connection.

EEBOX				
STEM	Client List			
ZARD	7. 10 11.00			•
TERNET	WLAN Client Tab	able shows client MAC address as	ssociate to this Broadband Ro	outer
RELESS 2.4GHZ	Interface	MAC address	Signal (%)	ldle Time
asic		No client connecting	g to the Router.	Trime
dvanced	-		-	
ecurity	Refresh			
/PS				
lient List				
REWALL				
VANCED				
REWALL				

Click the **Refresh** button to update the status.

Firewall

This chapter provides more choices for firewall setup.

Advanced

This window allows you to choose more firewall settings.

KEEBOX		
SYSTEM	Advaced Firewall Settings	
WIZARD		
INTERNET	Description	Select
	VPN PPTP Pass-Through	
WIRELESS 2.4GHZ	VPN IPSec Pass-Through	
FIREWALL		
Advanced		Apply Cancel
DMZ		
Dos		
MAC Filter		
URL Filter		
ADVANCED		
TOOLS		

Tick the check box to select the firewall settings. Click **Apply** to save the changes.

DMZ

This window allows you to set up a DMZ host and to set up firewall rules. If you have a client PC that cannot run Internet applications properly from behind the Router, then you can set the client up for unrestricted Internet access. It allows a computer to be exposed to the Internet. Enter the IP address of the internal computer that will be the DMZ host. 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.

KEEBOX				W150NR
SYSTEM	DMZ			
WIZARD				
INTERNET	If you have a local client PC that firewall,you can open unrestricte	cannot run an Internet d two-way Internet	ernet application properly from t access for this client by defini	behind the NAT ng a Virtual DMZ Host.
	Enable DMZ			
WIRELESS 2.4GHZ	Local IP Address :	0.0.0.0	Please select a PC.	~
FIREWALL				
Advanced				Apply Cancel
DMZ				
Dos				
MAC Filter				
URL Filter				
ADVANCED				
TOOLS				

Fields	Description
Enable DMZ	Check this box to enable DMZ.
Local IP Address	Enter the IP address of the computer you would like to open all ports to.

DoS

The firewall can detect and block Denial of Service (DoS) attackes.

KEEBOX		W150NR
SYSTEM	DoS	
WIZARD		
INTERNET	The Firewall can detec Connection with invalid resourcess that Interne	t and block DOS attacks, DOS (Denial of Service) attacks can flood your Internet I packets and connection requests, using so much bandwidth and so many at access becomes unavailable.
WIRELESS 2.4GHZ	Block DoS :	○ Enable ④ Disable
FIREWALL		Apply Cancel
Advanced		
DMZ		
Dos		
MAC Filter		
URL Filter		
ADVANCED		
TOOLS		

Click the **Enable** radio button to detect and block the DoS attacks. Click **Apply** to save the changes.

MAC Filter

Use MAC (Media Access Control) Filters to allow or deny LAN (Local Area Network) computers by their MAC addresses from accessing the Network.

KEEBOX				
SYSTEM	MAC Fil	ter		
WIZARD	101011			
INTERNET	MAC Filters and Enable M	re used to deny or allow LAN comp AC filtering	uters from accessing the	Internet.
WIRELESS 2.4GHZ	Deny all clie	nts with MAC address listed below to	o access the network	
FIREWALL	Allow all clie	nts with MAC address listed below to	o access the network	
Advanced	D	escription LAN MA	C Address	Schedule
DMZ	2		Always	New Schedule
Dos	Add Rese	t		
MAC Filter	11000			
URL Filter	MAC Filteri	ng table:		
ADVANCED	NO.	Description	LAN MAC Address	Schedule Select
TOOLS	Delete Se	ected Delete All Rese	t.	
				Apply Cancel

Fields	Description
Enable MAC	Tick Enable Wireless MAC Filter check box and click the Deny all clients with
filtering	MAC address listed below to access the network, or Allow all clients with
	MAC address listed below to access the network of the filtering policy.
Description	Enter the description for this MAC filtering rule.
LAN MAC address	Enter the MAC address of LAN to block.
Schedule	Use the drop-down list to choose the appropriate time to enable the MAC filtering
	function. Select Always to enable the function all the time. To create a new
	schedule, click New Schedule to link to System > Schedule .

Click **Add** to save the changes and see the rule in the MAC Filtering table. To remove a specific entry, tick the corresponding check boxes under **Select**, and click **Delete Selected**. To remove all entries, click **Delete All**. Click **Reset** to clear all the information that has not been saved.

URL Filter

Use this window to deny access to specified websites.

KEEBOX			
SYSTEM	URL Filter		
WIZARD			
INTERNET	You can block account the Web site.	ess to certain Web sites by entering either a full	I URL address or just a keyword of
WIRELESS 2.4GHZ	Enable URL	Blocking	
FIREWALL	Schedule	Always 😪 New Schedule	
Advanced DMZ	Add Reset		
MAC Filter	Current URL Blo	ocking Table:	12 12
URL Filter	NO.	URL/keyword	Schedule Select
ADVANCED	Delete Selecter	d Delete All Reset	
TOOLS			Apply Cancel

Fields	Description	
Enable URL Blocking	Tick the check box to enable the function.	
URL/keyword	Enter the IP address or keyword to block.	
Schedule	Use the drop-down list to choose the appropriate time to enable the MAC	
	filtering function. Select Always to enable the function all the time. To create a	
	new schedule, click New Schedule to link to System > Schedule .	

Click **Add** to save the changes and see the rule in the MAC Filtering table. To remove a specific entry, tick the corresponding check boxes under **Select**, and click **Delete Selected**. To remove all entries, click **Delete All**. Click **Reset** to clear all the information that has not been saved.

Advanced

This chapter include the more advanced features used for network management and security.

NAT

Network Address Translation (NAT) re-writes the source and/or destination addresses of IP packets as they pass through a Router or firewall. NAT enables multiple hosts on a private network to access the Internet using a single public IP address.

KEEBOX				
SYSTEM	NAT			
WIZARD				
INTERNET	NAT(Network Addre packets as they pas access the Internet	ss Translation) involves re-w ss though a Router or firewa using a single public IP add	vriting the source and/or des ill, NAT enable multiple hos Iress.	stination addresses of IP ts on a private network to
WIRELESS 2.4GHZ	NAT	⊙ Enable (Disable	
FIREWALL				Apply Cancel
ADVANCED				
NAT				
Port Forwarding				
Port Trigger				
UPnP				
Qos				
Routing				
TOOLS				

Click the **Enable** radio button and the **Apply** button to enable the NAT function.

Port Forwarding Port Forwarding is used to redirect data to a single PC.

SYSTEM	Port Forwar	rdina
WIZARD		
INTERNET	You can configure the Web or FTP at your loo will redirect the externa PCs)	router as a Virtual Server allowing remote users to access services such as cal PC. Depending on the requested service (TCP/UDP) port number, the router al service request to the appropriate internal server (located at one of your local
WIRELESS 2.4GHZ	Enable Port For	warding
FIREWALL	Description	
ADVANCED	Local IP	
NAT	Protocol	Both 💌
Port Forwarding	Local Port	
Port Trigger	Public Port	
UPnP	Schedule	Always 👻 New Schedule
Qos		
Routing	Add Reset	

Fields	Description	
Enable Port	Tick the check box to enable the function.	
Forwarding		
Description	Enter the description of this rule.	
Local IP	Enter a local IP address.	
Protocol	Use the drop-down list to select the protocol as TCP, UDP or Both.	
Local Port	Enter the local port.	
Public Port	Enter a public port.	
Schedule	Use the drop-down list to choose the appropriate time to enable the MAC filtering	
	function. Select Always to enable the function all the time. To create a new schedule,	
	click New Schedule to link to System > Schedule.	

Click Add to save the changes and see the rule in the MAC Filtering table. To remove a specific entry, tick the corresponding check boxes under Select, and click Delete Selected. To remove all entries, click Delete All. Click Reset to clear all the information that has not been saved.

Port Trigger

Some applications require multiple connections, such as Internet gaming, video conferencing, Internet telephony and others. These applications have difficulties working through NAT (Network Address Translation). Special Applications makes some of these applications work with the Router.

KEEBOX								
SYSTEM	Port Trigger							^
WIZARD	. ort mygor							
INTERNET	Port Triggering, also called normally do not function w	Special A hen used I	Applications allow behind a firewall.	s you to use In	ternet app	lications whic	ch	
WIRELESS 2 4GHZ	🛛 Enable Trigger Port	t						
	Description							
FIREWALL	Popular applications	Appl	lication Name 🛛 🛉	Add				-
ADVANCED	Trigger port		~					
NAT	Trigger type	Both	n 🛩					
Port Forwarding	Public Port	1						
Port Trigger	Public type	Both	1 🕶					
UPnP	Schedule	Alwa	ays 🔽 🗌 New S	Schedule				
Qos								
Routing	Add Reset							
TOOLS	24-Current Trigger-Po	ort Table	:					
	NO Trigger port Trig	ner tvoe	Public Port	Public type	Name	Schedule	Select	>

Fields	Description
Enable Trigger	Tick the check box to enable the function.
Port	
Description	Enter the description of this rule.
Popular	Use the drop-down list to select an application or click Add to create a new one.
applications	
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	Use the drop-down list to select the trigger type as TCP, UDP or Both.
Public port	This is the port number on the WAN side that will be used to access the application.
Public type	Use the drop-down list to select the pblic type as TCP, UDP or Both.
Schedule	Use the drop-down list to choose the appropriate time to enable the MAC filtering
	function. Select Always to enable the function all the time. To create a new schedule,
	click New Schedule to link to System > Schedule.

Click **Add** to save the changes and see the rule in the MAC Filtering table. To remove a specific entry, tick the corresponding check boxes under **Select**, and click **Delete Selected**. To remove all entries, click **Delete All**. Click **Reset** to clear all the information that has not been saved.

UPnP

UPnP supports zero-configuration networking and automatic discovery for many types of networked devices. When enabled, it allows other devices that support UPnP to dynamically join a network, obtain an IP address, convey its capabilities, and learn about the presence and capabilities of other devices. DHCP and DNS service can also be used if available on the network. UPnP also allows supported devices to leave a network automatically without adverse effects to the device or other devices on the network. UPnP is a protocol supported by diverse networking media including Ethernet, Firewire, phone line, and power line networking.

KEEBOX			
SYSTEM	UPnP		
WIZARD			
INTERNET	Universal Plug and discovery for a rang a network, obtain a	Play is designed to support zero-configuration, 'invisibl e of device from a wide range of vendors. With UPnP, n IP address and learn about the presence and capabil	e' networking, and automatic a device can dynamically join lities of other devices all
WIRELESS 2.4GHZ	UPnP	Enable Disable	rectly
FIREWALL			
ADVANCED			Apply Cancel
NAT			
Port Forwarding			
Port Trigger			
UPnP			
Qos			
Routing			
TOOLS			

To enable UPnP for any available connection, click the **Enable** radio button, and click the **Apply** button.

QoS

The QoS Engine option helps improve your network gaming performance by prioritizing applications. By default the QoS Engine settings are disabled and application priority is not classified automatically

KEEBOX		W150NR		
SYSTEM	OoS			
WIZARD				
	Quality of Service (QoS) refer network traffic.The primary go	Quality of Service (QoS) refers to the capability of a network to provide better service to selected network traffic. The primary goal of QoS is to provide priority including dedicated bandwidth, controlled		
WIRELESS 2.4GHZ	characteristics. Also importan other flows fail.	some real-time and interactive traffic), and improved loss it is making sure that providing priority for one or more flows does not make		
FIREWALL	Enable QoS Engine			
	Automatic Uplink Speed			
ADVANCED	Measured Uplink Speed	Not Estimated		
NAT	Manual Uplink Speed	kbps << Select Transmission Rate		
Port Forwarding	Connection Type	~		
Port Trigger	Detected xDSL or Other			
UPnP	Frame Relay Network			
Qos				
Routing		Apply Cancel		
TOOLS				

Fields	Description
Enable QoS	Tick the check box to enable this option for better performance and experience with
Engine	online games and other interactive applications, such as VoIP.
Automatic	Tick the check box to automatically determine the uplink speed of your Internet
Uplink Speed	connection.
Measured	The speed at which data can be transferred from the Router to your ISP. This is
Uplink Speed	determined by your ISP.
Manual Uplink	Enter the uplink speed.
Speed	
Connection	Use the drop-down menu to select the connection type among Auto-detect, xDSL Or
Туре	Other Frame Relay Network and Cable or Other Broadband Network.
Detected xDSL	When Connection Type is set to Auto-detect, the automatically detected connection
or Other Frame	type is displayed here.
Relay Network	

Routing

This window allows you to define static routes to defined destinations.

KEEBOX					
SYSTEM	Routing				
WIZARD	Routing				
	The Routing option allows	you to define static	routes to specific des	stinations.	
	STATIC ROUTING	i			
WIRELESS 2.4GHZ	Interface	LAN-1(192.16	8.10.1) 💌		
EIREWALL	Destination				
	Subnet Mask				
ADVANCED	Gateway				
NAT					
Port Forwarding	Add Reset				
Port Trigger				_	_
UPnP	24-Current Static-Ro	uting Table	Ť	~	Î
Qos	NO. Interface	Destination	Subnet Mask	Gateway	Select
Routing					
TOOLS	Delete Selected	Delete All Rese	et	A	pply Cancel

Fields	Description
Static Routing	Tick this checkbox to enable or disable static routes to defined destinations.
Interface	Use the drop-down menu to choose the Interface that the IP packet must use to transit
	out of the Router.
Destination	The IP address of the packets that will take this route.
Subnet Mask	Enter the subnet mask of the IP address
Gateway	Enter the next hop to be taken if this route is used.

Click **Add** to save the changes and see the rule in the MAC Filtering table. To remove a specific entry, tick the corresponding check boxes under **Select**, and click **Delete Selected**. To remove all entries, click **Delete All**. Click **Reset** to clear all the information that has not been saved.

Tools

Password

This window allows you to change the password and default IP address of the Router.

KEEBOX			
SYSTEM	Password		
WIZARD			
INTERNET	You can change the password that you use to password.	o access the router, this <u>is not</u> your	ISP account
	Old Password		
WIRELESS 2.4GHZ	New Password		
FIREWALL	Repeat New Password		
ADVANCED	Remote management allows the rou username and password	iter to be configured from the Interne is still required to access the Web-N	t by a web browser, a Aanagement interface
TOOLS	Host Address	Port	Enable
Password		80 👻	
Time			
DDNS			Apply Capcel
Diagnostic			Apply Cancer
Firmware			
Backup			
Residit			

Fields	Description
Old Password	Enter the existing password when log in the Router.
New Password	Enter a new login password.
Repeat New	Retype the new login password.
Password	
Host Address	Enter the Internet IP address of the computer that has access to the Router.
Port	Enter a port number to access the Router.
Enable	Tick the check box to enable the remote management function.

Time

This window allows you to configure time and date of the Router.

KEEBOX		W150NR
SYSTEM	Time	
WIZARD		
INTERNET	The Router reads the corre accordingly. The Daylight zone setting is used by the	ect time from NTP servers on the Internet and sets its system clock Savings option merely advances the system clock by one hour. The time le system clock when displaying the correct time in schedule and the log files.
WIRELESS 2.4GHZ	Time Setup	Synchronize with PC
FIREWALL	PC Date and Time	Thursday, May 06, 2010 2:52:13 PM
	Time Zone	(GMT-08:00) Pacific Time (US & Canada); Tijuana
ADVANCED	Daylight Saving	
TOOLS		
Password		Apply Cancel
Time		
DDNS		
Diagnostic		
Firmware		
Backup		
Restart		

Fields	Description
Time Setup	Use the drop-down list to synchronize the Router's time with your computer or an NTP
	server.
PC Date and	This field appears when selecting Synchronize with PC in the Time Setup drop-down
Time	list. This field displays the current PC time.
NTP Time	This field appears when selecting Synchronize with the NTP Server in the Time
Server	Setup drop-down list. Enter the IP address of the NTP server.
Time Zone	Use the drop-down list to select your time zone.
Daylight Saving	Tick the Enable check box to enable daylight saving.

DDNS

The Router supports DDNS (Dynamic Domain Name Service). The Dynamic DNS service allows a dynamic public IP address to be associated with a static host name in any of the many domains, allowing access to a specified host from various locations on the Internet. This is enabled to allow remote access to a host by clicking a hyperlinked URL in the form hostname.dyndns.org, Many ISPs assign public IP addresses using DHCP, this can make it difficult to locate a specific host on the LAN using standard DNS. If for example you are running a public web server or VPN server on your LAN, this ensures that the host can be located from the Internet if the public IP address changes. DDNS requires that an account be setup with one of the supported DDNS providers.

KEEBOX			
SYSTEM	DDNS		
WIZARD			
INTERNET	DDNS allows users to m password and your station	ap a static domain name to a dynamic I c domain name from the DDNS service p	P address. You must get an account, rovider.
	Dynamic DNS	⊖ Enable ⊙ Disable	
WIRELESS 2.4GHZ	Server Address	~	
FIREWALL	Host Name		
ADVANCED	Username		
	Password		
TOOLS			-
Password	_		Apply Cancel
Time			
DDNS			
Diagnostic			
Firmware			
Backup			
Restart			

Fields	Description
Dynamic DNS	Click the Enable radio button to enable supporting for DDNS.
Server Address	Select one of the DDNS registration organizations form those listed in the pull-down
	menu.
Host Name	Enter the host name of the DDNS server.
Username	Enter the username given to you by your DDNS server.
Password	Enter the password or key given to you by your DDNS server.

Diagnostic This window is used to test connectivity of the Router.

KEEBOX		W150NR
SYSTEM	Diagnostic	
WIZARD		
	This page can diagnose the current network	status.
INTERNET	Address to Ping	Start
WIRELESS 2.4GHZ	Ping Result	
FIREWALL		
ADVANCED		
TOOLS		
Password		
Time		
DDNS		
Diagnostic		
Firmware		
Backup		

Fields	Description
Address to Ping	Enter the IP Address that you wish to Ping, and click Start.
Ping Result	The field displays the result after pinging.

Firmware

This window is for upgrading firmware of the Router.

is on the ed for your
e is on the ed for your
e is on the ed for your
)
Cancel

Click Browse to locate the new firmware and click Apply to start firmware upgrade.

Backup This window allows you to set the Route to original factory default setting, back up the configurations and restore the configuration you saved in the local computer.

KEEBOX		WISONR
SYSTEM	Backup	
WIZARD		
INTERNET	Use BACKUP to save the rout RESTORE to restore the save DEFAULT to force the router to	er's current configuration to a file named config.dlf. You can use d configuration. Alternatively, you can use RESTORE TO FACTORY o restore the factory default settings.
WIRELESS 2.4GHZ	Restore to factory default	Reset
FIREWALL	Backup Settings	Save
ADVANCED	Restore Settings	Browse Upload
TOOLS		
Password		
Time		
DDNS		
Diagnostic		
Firmware		
Backup		
Restart		

Fields	Description
Restore to factory	Click the Reset button to restore all configuration settings back to its factory default
default	settings. The Router will reboot with the factory default settings including IP settings
	(192.168.10.1) and administrator password.
Backup Settings	Click the Save button to save the current Router configuration settings to a file on the
	hard disk of the computer.
Restore Settings	Click Browse to locate the configuration file you saved for the Router and click the
-	Upload button to transfer the settings to the Router.

Restart

This window is for you to restart the Router.



Click **Apply** to restart the Router.

Limited Warranty

KEEBOX warrants its products against defects in material and workmanship, under normal use and service, for the following lengths of time from the date of purchase.

W150NR – 1 Year Warranty

AC/DC Power Adapter, Cooling Fan, and Power Supply carry 1 year warranty.

If a product does not operate as warranted during the applicable warranty period, KEEBOX shall reserve the right, at its expense, to repair or replace the defective product or part and deliver an equivalent product or part to the customer. The repair/replacement unit's warranty continues from the original date of purchase. All products that are replaced become the property of KEEBOX. Replacement products may be new or reconditioned. KEEBOX does not issue refunds or credit. Please contact the point-of-purchase for their return policies.

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