Gigabit Router with 1x PD WAN and 4x PoE LAN 802.3af/at

ALL-PR4014P

USER MANUAL

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Before Starting

In Before Starting:

This section contains introductory information, which includes:

- **Intended Readers**
- **Icons for Note, Caution, and Warning**

Before Starting

Intended Readers

This manual provides information regarding to all the aspects and functions needed to install, configure, use, and maintain the product you've purchased.

This manual is intended for technicians who are familiar with in-depth concepts of networking management and terminologies.

Icons for Note, Caution, and Warning

To install, configure, use, and maintain this product properly, please pay attention when you see these icons in this manual:

A **Note** icon indicates important information which will guide you to use this product properly.

A **Caution** icon indicates either a potential for hardware damage or data loss, including information that will guide you to avoid these situations.

A **Warning** icon indicates potentials for property damage and personal injury.

Chapter 1:

Product Overview

In Product Overview:

This section will give you an overview of this product, including its feature functions and hardware/software specifications.

- **Product Brief Description**
- **Product Specification**
- **Hardware Description**
- **Hardware Installation**

1.1. Product Brief Description

Introduction

This NAT router is a 4 Gigabit PSE (Power Source Equipment) LAN ports & 1 Gigabit (Powered Device) WAN port PoE+ NAT router that is designed for small or medium network environment to strengthen its network connection. This product is compact size, making it ideal for Desktop users with limited space.

IEEE 802.3at Power over Ethernet (PoE) PSE & PD Ports

This NAT router features 4-port PoE+ IEEE 802.3at supplying up to 30 watts per port. This product can convert standard 100~240V/AC power into low-voltage DC that runs over existing LAN cable to power up IEEE 802.3at compliant network accessories. By adding this NAT router to existing networking, installing networking products such as Access Points and IP cameras can be easily managed and set up. Wireless device deployments are easily located with available power outlets and network administrators don't need to use heavy AC power adapters anymore.

When connected with a PSE to its PD WAN port, this NAT router can be power without its external power adaptor, therefore eliminating the need to find a power outlet for the router.

Various Type of WAN Connection

This router can accommodate different types of WAN connection provided by different ISPs (Internet Service Provider). The WAN connection types that this router supports include static IP (with a set of IP addresses provided by your ISP), dynamic IP (with cable modem), PPPoE (for DSL modem), L2TP and PPTP (both VPN connections).
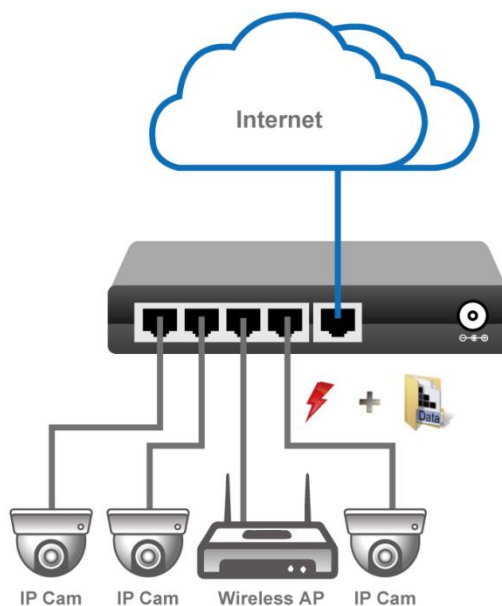
1.2. Product Specification

Interface		
10M/100M/1000M RJ45 PSE LAN Ports		4
10M/100M/1000M RJ45 PD WAN Ports		1
System Capacity & Performance		
Processor		880 MHz, Dual-Core
L2 Cache		256 KB L2 Cache shared by Dual-Core
Key Software Features		
Operation Mode		Bridge/Gateway
Hardware NAT	Wired Speed	2Gbps
	L2 bridge	•
	IPv4 routing, NAT, NAPT	•
	IPv6 routing, DS-Lite, 6RD, 6to4	•
Accessible MAC Address Table Size		2K MAC entries with auto aging & learning capabilities
WAN	Static/Dynamic IP	•
	PPPoE	•
	PPTP/L2TP	•
VPN Pass-through		IPSec, L2TP, PPTP
QoS Features	SP (Strict-Priority), WFQ (Weighted Fair Queue), and SP+WFQ latency scheduler	•
	Max/Min Bandwidth Scheduler	•
	Ingress/Egress Rate Control	•
Firewall	MAC/IP/Port Filtering	•
	Content Filtering	•
	Port Forwarding/Virtual Server	•
	Port Trigger	•
	DMZ	•
IPv4 and IPv6 multicast frames hardware forwarding		•
Jumbo Frame		9K
PoE		
IEEE 802.3 af/at		IEEE 802.3 af/at
Remote PoE On/Off per Port		•
Number of PSE LAN Ports		4
PD Alive		•
PD WAN Port		1 PD WAN Port
Mechanical		
Power Supply		External Power Adaptor or powered by PD WAN Port
Input Power		AC100~240V, 50/60Hz
LED		Power, PoE In/Out, Link/Act
Button		Reset Button
Operating Temperature		0°C to 50°C
Operating Humidity		90% (non-condensing)
Certification		CE, FCC

Standard	
IEEE 802.3 – 10BaseT	•
IEEE 802.3u - 100BaseTX	•
IEEE 802.3ab - 1000BaseT	•
IEEE 802.3af Power over Ethernet (PoE)	•
IEEE 802.3at Power over Ethernet (PoE+)	•
IEEE 802.3az - Energy Efficient Ethernet (EEE)	•
IEEE 802.3x - Flow Control	•
IEEE 802.1p - Class of Service	•

1.3. Hardware Description

This section mainly describes the hardware of this NAT router and gives a physical and functional overview.

Front Panel

The LED Indicators are located on the front panel.

LED DISPLAY   RESET BUTTON
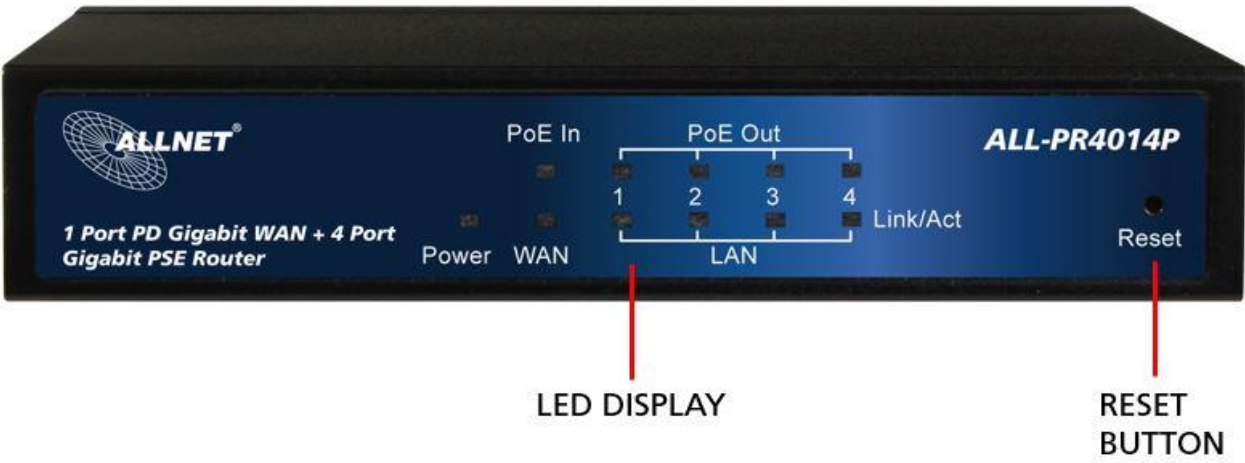
LED Indicators

The LED Indicators present real-time information of systematic operation status. The following table provides description of LED status and their meaning.

LED	Status	Description
Power	On	Power on
	Off	Power off
PoE In	On	The NAT router is powered by PoE
	Off	The NAT router is off or not powered by PoE
WAN	On	WAN port Linked
	Flashing	Data activating
	Off	No device is attached
Link/ ACT	On	Linked
	Flashing	Data activating
	Off	No device is attached
PoE	On	Port is linked to Powered Device
	Off	No Powered Device is connected

The reset button is located in the front panel as well. To reset all settings back to default value, please press and hold the reset button for 10 seconds.

Rear Panel

The LAN ports, WAN port and the DC power jack are located in the rear panel of the NAT router, as shown in the figure down below.
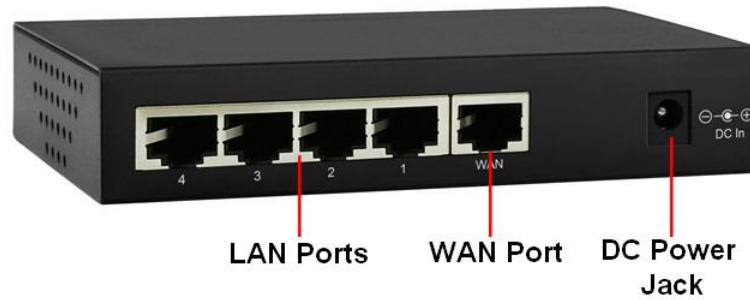
1.4. Hardware Installation

To install this NAT router, please place it on a large flat surface with a power socket close by. This surface should be clean, smooth, and level. Also, please make sure that there is enough space around this router for RJ45 cable, power cord and ventilation.

Ethernet cable Request
The wiring cable types are as below:

• 10 Base-T: 2-pair UTP/STP CAT. 3, 4, 5 cable, EIA/TIA-568 100-ohm (Max. 100m)

• 100 Base-TX: 2-pair UTP/STP CAT. 5 cable, EIA/TIA-568 100-ohm (Max. 100m)

• 1000 Base-T: 4-pair UTP/STP CAT. 5 cable, EIA/TIA-568 100-ohm (Max. 100m)

• PoE: To delivery power properly, it is recommended to use CAT 5e and CAT 6 cable. Ethernet cables of higher qualities can reduce the power lost during transmission.

For more information regarding to the product safety and maintenance guide, please refer to **Appendix A: Product Safety**.

Please connect your ADSL modem (or your Internet access device) to the router's WAN port. The LAN ports are for connecting to your network devices such as PC, IP CAM, or access points.

If you're connecting the router's WAN port to a PSE (Power Source Equipment), the router will be powered by the PSE instead of the DC power adaptor.
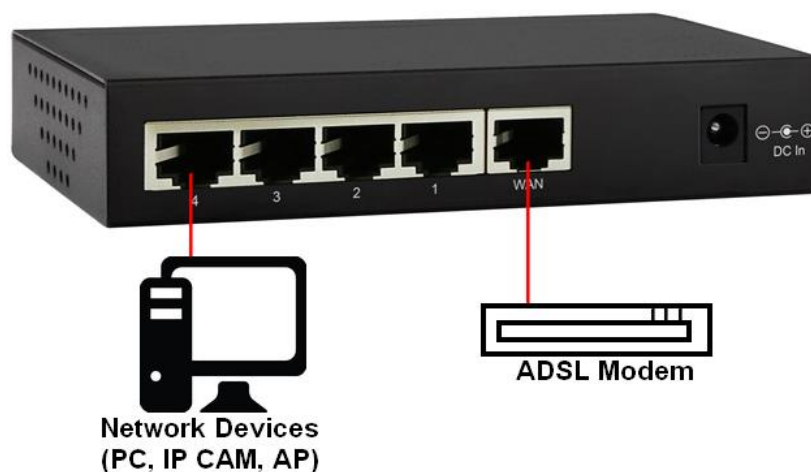
Chapter 2:

Preparing for Management

In Preparing for Management:

This section will guide your how to manage this product via management web page.

- **Preparation for Web Interface**

2.1. Preparation for Web Interface

The management web page allows you to use a web browser (such as Microsoft IE, Google Chrome, or Mozilla Firefox) to configure and monitor the router from anywhere on the network.

Before using the web interface to manage your router, please verify that your switch and your PC are on the same network. Please follow the steps down below to configure your PC properly:

1. Verify that the network interface card (NIC) of your PC is operational and properly installed, and that your operating system supports TCP/IP protocol.
2. Connect your PC with the switch via an RJ45 cable.
3. In default setting, the router is set to the "Gateway" mode. Under this mode, the router will assign IP addresses to devices that are connected to it. Please make sure that the setting of your PC's NIC is set to "Obtain an IP address automatically" as shown in the figure down below.

4. The router will assign a set of IP address to your PC. Please check the network connection detail information of your PC, and write down the IPv4 Default Gateway IP address. The default should be "192.168.2.1".

5. Launch the web browser (IE, Firefox, or Chrome) on your PC.

6. Type the default gateway IP address you've written down in step 4 in the web browser's URL field, and press Enter.

7. The web browser will prompt you to log in. The default username/password for the configuration web page is **admin/admin**.

Chapter 3:

<u>Web Management</u>

In Web Management:

As mentioned in *Chapter 2.1. Preparation for Web Interface*, This router provides a web-based management interface. You can make all settings and monitor system status with this management web page.

Configuration/Monitor options included in the management web page can be divided into the following 4 categories, which will be discussed in detail in this chapter:

- **Web Management – Operation Mode**
- **Web Management – Internet Settings**
- **Web Management – Firewall**
- **Web Management – Administration**

3.1. Web Management - Overview

This router's setting options can be divided into four main categories:

- **Operation Mode:** Here you can set the router to work under different modes. The modes available here include Bridget mode and Gateway mode.
- **Internet Settings:** This section of settings allows you to set WAN and LAN, as well as other settings regarding to network connection.
- **Firewall:** Firewall section allows you to make settings regarding to the router's firewall function, thus securing your network.
- **Administration:** This section contains settings regarding to the router's system, including system password, updating firmware, system reboot and reset all settings back to factory default.

The following section will discuss all the functions in detail.

3.2. Web Management

3.2.1. Web Management – Operation Mode

This router can run under two different modes, which are:

- **Bridge:** All ports are bridged into one single bridge interface, which means the router works as a switch, connecting all network devices together in a LAN network. Devices connected to the router running under Bridge mode won't acquire IP addresses via the router.
- **Gateway:** One of the ports will work as the WAN port and connect to the Wide Area Network (Internet), while other ports will work as LAN ports. Devices connected to the router running under Gateway mode will acquire IP addresses via the router.
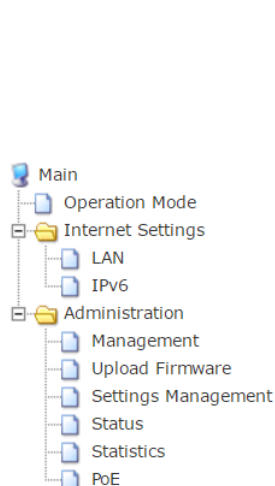
Function Menu under Bridge Mode   **Function Menu under Gateway Mode**
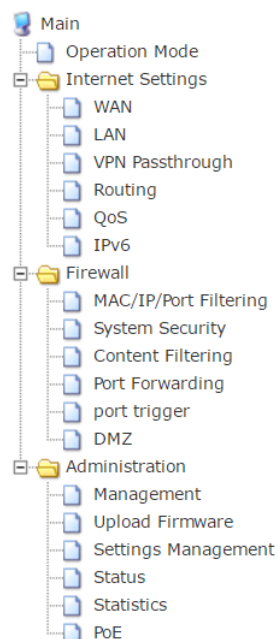
As shown in the figures above, the function menu will change according to the router's running mode. Some of the functions available in the Gateway mode are not available in the router's Bridge mode.

Buttons

- **Apply:** Apply and save all the settings you've made on this page.
- **Reset:** Discard the setting you've made here.

3.2.2. Web Management – Internet Settings

3.2.2.1. Internet Settings – WAN (Only Available in Gateway Mode)
Here you can set the WAN connection for your router. Please note that this function is only available in router's Gateway mode.

This router supports the following WAN connection:

- **Static Mode (Fixed IP):** The ISP (Internet Service Provider) provides a fixed set of IP address.
- **DHCP (Auto Config):** The router will acquire a set of IP address automatically via a DHCP server that's connected to the router's WAN port.
- **PPPoE (ADSL):** PPPoE stands for Point-to-Point Protocol Over Ethernet. ISP will provide you a set of account and password for connecting to the Internet.
- **L2TP:** Layer 2 Tunneling Protocol, a tunneling protocol used for virtual private networks (VPNs) and can work as Internet service provided by ISPs.
- **PPTP:** Point-to-Point Tunneling Protocol, another protocol used for virtual private networks, and can work as Internet service provided by ISPs.

Configuration web page will change according to the type of the WAN connection you've chosen.

Static Mode (Fixed IP)

Static Mode (fixed IP) ⌄	
Static Mode	
IP Address	192.168.2.195
Subnet Mask	255.255.240.0
Default Gateway	192.168.1.1
Primary DNS Server	192.168.1.1
Secondary DNS Server	192.168.1.1
MAC Address Clone	
Enabled	Disable ⌄
	Apply Cancel

IP Address

The fixed IP address for the router's WAN connection interface.

Subnet Mask

The subnet mask for the router's WAN connection interface.

Default Gateway

The gateway for the router's WAN connection interface.

Primary/Secondary DNS Server

The primary/secondary DNS (Domain Name Server) IP address.

MAC Address Clone

Some ISPs only provide Internet service to a certain set of MAC address. You can input the MAC address manually or press the "Fill My MAC" button to copy the MAC address of your PC to the router.

Buttons

- **Apply:** Apply and save all the settings you've made on this page.
- **Cancel:** Discard all the settings you've made.

DHCP (Auto Config)

Host Name

Here you can input the network host name. This field is optional and not a necessity.

MAC Address Clone

Some ISPs only provide Internet service to a certain set of MAC address. You can input the MAC address manually or press the "Fill My MAC" button to copy the MAC address of your PC to the router.

Buttons

- **Apply:** Apply and save all the settings you've made on this page.
- **Cancel:** Discard all the settings you've made.

PPPoE

User Name

The user name that the ISP provides.

Password/Verify Password

The password that the ISP provides. After inputting the password, please type in the password again in the "Verify Password" field.

Operation Mode

You can set the PPPoE operation mode via the scroll-down menu. The operation modes available include:

- **Keep Alive:** The router will keep the PPPoE connection, never disconnect.
- **On Demand:** The router will only make PPPoE connection when Internet connection is required. You can set the idle time here as well. The router will disconnect if Internet connection is not used after the set amount of time.
- **Manual:** The router will make PPPoE connection upon requested by the user manually.

MAC Address Clone

Some ISPs only provide Internet service to a certain set of MAC address. You can input the MAC address manually or press the "Fill My MAC" button to copy the MAC address of your PC to the router.

Buttons

- **Apply:** Apply and save all the settings you've made on this page.
- **Cancel:** Discard all the settings you've made.

L2TP

L2TP Server IP Address

The IP address of L2TP server.

User Name

The user name of the L2TP server.

Password

The password of the L2TP server.

Address Mode

This scroll-down menu allows you to set the mode for the router to acquire its WAN IP address.

- **Static:** The router will use the IP address settings you've made down below.
- **Dynamic:** The router will acquire a set of IP address from L2TP server.

Operation Mode

You can set the operation mode via the scroll-down menu.

- **Keep Alive:** The router will keep the L2TP connection, never disconnect.
- **Manual:** The router will make L2TP connection upon requested by the user manually.

MAC Address Clone

Some ISPs only provide Internet service to a certain set of MAC address. You can input the MAC address manually or press the "Fill My MAC" button to copy the MAC address of your PC to the router.

Buttons

- **Apply:** Apply and save all the settings you've made on this page.

- **Cancel:** Discard all the settings you've made.

PPTP

PPTP ⌄

PPTP Mode	
PPTP Server IP Address	pptp_server
User Name	pptp_user
Password	••••••••••
Address Mode	Static ⌄
IP Address	192.168.1.1
Subnet Mask	255.255.255.0
Default Gateway	192.168.1.254
Operation Mode	Keep Alive ⌄ Keep Alive Mode: Redial Period 60 senconds
MAC Address Clone	
Enabled	Disable ⌄

[Apply] [Cancel]

PPTP Server IP Address

The IP address of PPTP server.

User Name

The user name of the PPTP server.

Password

The password of the PPTP server.

Address Mode

This scroll-down menu allows you to set the mode for the router to acquire its WAN IP address.

- **Static:** The router will use the IP address settings you've made down below.
- **Dynamic:** The router will acquire a set of IP address from PPTP server.

Operation Mode

You can set the operation mode via the scroll-down menu.

- **Keep Alive:** The router will keep the PPTP connection, never disconnect.
- **Manual:** The router will make PPTP connection upon requested by the user manually.

MAC Address Clone

Some ISPs only provide Internet service to a certain set of MAC address. You can input the MAC address manually or press the "Fill My MAC" button to copy the MAC address of your PC to the router.

Buttons

- **Apply:** Apply and save all the settings you've made on this page.

- **Cancel:** Discard all the settings you've made.

3.2.2.2. Internet Settings – LAN

Host Name

The host name of the network.

IP Address

The IP address of the router.

Subnet Mask

The subnet mask IP address of the router.

LAN 2

Enable the second LAN on this router.

LAN 2 IP Address

LAN 2 IP address.

LAN 2 Subnet Mask

The subnet mask IP address of LAN 2.

MAC Address

The MAC address of the router.

DHCP Type

You can enable or disable the DHCP server here with the scroll-down menu.

- **Disable:** Disable DHCP server. Devices connected to the router won't acquire IP address from the router.
- **Server:** Enable DHCP server. Devices connected to the router will acquire IP address from the router.

DHCP Start/End IP

The start/end IP address of the DHCP IP pool. The router will assign IP addresses starting from the DHCP Start IP.

DHCP Subnet Mask

The subnet mask IP address of DHCP.

DHCP Primary/Secondary DNS

The first and second DNS (Domain Name Server) for the router.

DHCP Default Gateway

The default gateway IP address for the DHCP server.

DHCP Lease Time

The lease time for the DHCP IP lease period.

Statically Assigned

Here you can bind a device to a certain IP address. Input the MAC address of the network device and the IP address that you would like to assign to. You can set up to 3 sets here.

802.1d Spanning Tree

Spanning tree is a protocol that will create a loop-free network. You can enable Spanning Tree here with the scroll-down menu.

LLTD

LLTD stands for Link Layer Topology Discovery, a protocol for network topology discovering.

IGMP Proxy

IGMP stands for Internet Group Management Protocol, a protocol for reducing video/audio streaming traffic load.

UPnP

UPnP stands for Universal Plug-n-Play, a protocol that allows all network devices to discover all devices on the network.

Router Advertisement

Router Advertisement allows the router to send advertisement packets for IPv6

network.

DNS Proxy

When DNS proxy is enabled, system will relay DNS requests to the currently configured DNS server, and reply as a DNS resolver to the client devices on the network.

Buttons

- **Apply:** Apply and save all the settings you've made on this page.
- **Cancel:** Discard all the settings you've made.

3.2.2.3. Internet Settings – DHCP Clients

DHCP Clients				
Hostname	MAC Address	IP Address	Expires in	OS of Device
Lin_Writer	96:1B:D6	10.10.10.100	23:59:54	Microsoft Windows 8

Here the router will display all DHCP clients on the network.

Host Name
The host name of the network device.

MAC Address
The MAC address of the network device.

IP Address
The IP address of the router.

Expires in
The DHCP lease expire time of the DHCP client.

OS of Device
The operating system of the network device (if the network device is a PC).

3.2.2.4. Internet Settings – Routing (Only Available in Gateway Mode)

Static routing allows you to route two networks of different network segment together.

Destination
The destination IP network or host address of this route.

Host/Net
This scroll-down menu allows you to select the static route as Host or Net.

Subnet Mask (When set to Net)
The subnet mask of the static route.

Gateway
The gateway of the static route.

Interface
The interface type of the static route. The interface types available here include LAN, WAN, and Custom.

Comment
Side note for the static route.

Buttons
- **Apply:** Apply and save all the settings you've made on this page.
- **Cancel:** Discard all the settings you've made.

3.2.2.5. Internet Settings – VPN Pass Through

VPN Pass Through function allows VPN data stream to pass through the router, allowing devices connected to the router to communicate with other devices not in the LAN network via VPN.

L2TP Pass Through

Enable L2TP pass through.

IPSec Pass Through

Enable IPSec pass through.

PPTP Pass Through

Enable PPTP pass through.

Buttons

- **Apply:** Apply and save all the settings you've made on this page.
- **Cancel:** Discard all the settings you've made.

3.2.2.6. Internet Settings – QoS (Only Available in Gateway Mode)

Quality of Service Settings

You may setup rules to provide Quality of Service guarantees for specific applications.

QoS Setup	
Quality of Service	Disable
Upload Bandwidth:	User defined Bits/sec
Download Bandwidth:	User defined Bits/sec
QoS Type:	AUTO QoS
QoSModel:	DRR
Reserved Bandwidth:	0% (10% is recommended)

Submit

QoS stands for Quality of Service. The router will regulate the network transmitting rate according to the settings you've made here.

Quality of Service

Here you can enable/disable QoS function or set the QoS type.

- **Disable:** Disable QoS function.
- **Enable – Bidirection:** Enable QoS function in bidirection mode.
- **Enable – Upload QoS Only:** Enable QoS function for uploading data stream.
- **Enable – Download QoS Only:** Enable QoS function for downloading data stream.

The setting web page will change according to the QoS setting you've enabled the QoS.

Quality of Service Settings

You may setup rules to provide Quality of Service guarantees for specific applications.

QoS Setup	
Quality of Service	Enable - Bidirection
Upload Bandwidth:	User defined Bits/sec
Download Bandwidth:	User defined Bits/sec
QoS Type:	AUTO QoS

Submit

Upload Bandwidth

Here you can set the bandwidth for uploading stream. You can set the bandwidth by the scroll-down menu or enter the bandwidth manually.

Download Bandwidth

Here you can set the bandwidth for downloading stream. You can set the bandwidth by the scroll-down menu or enter the bandwidth manually.

QoS Type

You can set the QoS type by the scroll-down menu. The QoS types include auto QoS or manual QoS. If you set the QoS type to manual QoS, the setting web page will change accordingly.

QoS Model

Here you can set the QoS model with the scroll-down menu. The settings available here include:

- **DRR:** Deficit Round Robin.
- **SPQ:** Strict-Priority Queue.
- **DRR + SPQ:** A combination of ERR and SPQ.
- **Remark Only**

The setting web page will change according to the QoS model you've selected here.

DRR:

SPQ:

DRR + SPQ:

Highest

Set the highest possible download bandwidth.

High

Set the high download bandwidth.

Default

Set the default download bandwidth.

Low

Set the minimal lowest download bandwidth.

Buttons

- **Submit:** Apply and save all the settings you've made on this page.

3.2.2.7. Internet Settings – IPv6

IPv6 Setup

IPv6 Connection Type	
IPv6 Operation Mode	Disable

Apply   Cancel

IPv6 Operation Mode

The IPv6 operation mode. Modes here include:

- **Static IP Connection**
- **Tunneling Connection (6RD)**
- **Tunneling Connection (DS-Lite)**

The setting web page changes according to the operation mode you've chosen.

Static IP Connection

IPv6 Static IP Setup		
LAN IPv6 Address / Subnet Prefix Length		/
WAN IPv6 Address / Subnet Prefix Length		/
Default Gateway		

Apply   Cancel

LAN IPv6 Address/Subnet Prefix Length

Here you can input the LAN IPv6 address and subnet prefix length.

WAN IPv6 Address/Subnet Prefix Length

Here you can input the WAN IPv6 address and subnet prefix length.

Default Gateway

Here you can input the default gateway in IPv6 format.

Tunneling Connection (6RD)

Tunneling Connection (6RD) Setup		
ISP 6rd Prefix / Prefix Length		/
ISP Border Relay IPv4 Address		

Apply   Cancel

ISP 6rd Prefix/Prefix Length

Here you can input the ISP 6rd Prefix/Prefix length.

ISP Border Relay IPv4 Address

Here you can input the ISP border relay IPv4 address.

Tunneling Connection (DS-Lite)

WAN IPv6 Address

Here you can input the IPv6 address for WAN port.

AFTR Server IPv6 Address

Here you can input the AFTR server's IPv6 address.

Gateway IPv6 Address

Here you can input the default gateway in IPv6 format.

Buttons

• **Apply:** Apply and save all the settings you've made on this page.

• **Cancel:** Discard all the settings you've made.

3.2.3. Web Management – Firewall (Only Available in Gateway Mode)

3.2.3.1. Firewall – MAC/IP/Port Filtering (Only Available in Gateway Mode)

MAC/IP/Port Filtering Settings

You may setup firewall rules to protect your network from virus,worm and malicious activity on the Internet.

Basic Settings	
MAC/IP/Port Filtering	Disable
Default Policy -- The packet that don't match with any rules would be:	Dropped.

Apply   Reset

Basic Settings

MAC/IP/Port Filtering

Enable or disable MAC/IP/Port filtering function.

Default Policy

Set which action the router to take when a packet that doesn't match the filtering rules.

Buttons

- **Apply:** Apply and save all the settings you've made on this page.
- **Cancel:** Discard all the settings you've made.

IP/Port Filter Setting

MAC Address

Input MAC address of a device here.

Dest./Source IP Address

The destination & source IP address.

Protocol

You can set the protocol for filtering rule here with this scroll-down menu.

Dest./Src. Port Range

Here you can input the range for destination and source port.

Action

Set which action the router to take when a packet that match the filtering rules.

Comment

Adding note for the filtering rule.

Buttons

- **Apply:** Apply and save all the settings you've made on this page.
- **Cancel:** Discard all the settings you've made.

IP/Port Filtering Rule Table

This table lists all the IP/Port filtering rules.

Buttons

- **Delete Selected:** Delete the filtering rule that you've selected.
- **Reset:** Discard all the settings you've made.

3.2.3.2. Firewall – System Security (Only Available in Gateway Mode)

System Firewall Settings

You may configure the system firewall to protect itself from attacking.

Remote management	
Remote management (via WAN)	Enable

Ping form WAN Filter	
Ping form WAN Filter	Disable

Block Port Scan	
Block Port Scan	Disable

Block SYN Flood	
Block Syn Flood	Disable

Stateful Packet Inspection (SPI) Firewall	
SPI Firewall	Disable

Apply   Reset

Remote Management

Enable this function to allow the user to access setting web page remotely via Internet.

Ping from WAN Filter

Enable this function so the router won't reply ping request via WAN connection.

Block Port Scan

Enable this function to block port scan.

Block SYN Flood

Enable this function to block SYN flood.

Stateful Packet Inspection (SPI) Firewall

Enable this function to enable stateful packet inspection firewall.

Buttons

- **Apply:** Apply and save all the settings you've made on this page.
- **Cancel:** Discard all the settings you've made.

3.2.3.3. Firewall – Content Filtering (Only Available in Gateway Mode)

Web Content Filter
Here you can set the content of a website that will be blocked by the router.

Web URL Filter Settings
Here you can set the URLs that will be blocked by the router. Input the URL you would like to block, and press the Add button to add the new URL filtering rule.

Web Host Filter Setting
Here you can set the filtering keyword. Any website with the keyword will be blocked by the router.

Buttons

- **Add:** Adding a filtering rule.
- **Delete:** Delete the filtering rule that you've selected.
- **Apply:** Apply and save all the settings you've made on this page.
- **Reset:** Discard all the settings you've made.

3.2.3.4. Firewall – Port Forwarding (Only Available in Gateway Mode)

Port Forwarding

You can enable port forwarding here with this scroll-down menu. When enabled, the router will forward packets to a LAN IP when these packets are sent via the set port and protocol.

IP Address

The LAN IP address that the Internet packets will be forwarded to.

Port Range

The port range of the protocol.

Protocol

The protocols that will be forwarded, include UDP, TCP, and TCP&UDP.

Comment

Note for the port forwarding rule.

Current Port Forwarding in System

This table lists all the port forwarding rules currently set in the router.

Buttons

- **Apply:** Apply and save all the settings you've made on this page.
- **Delete Selected:** Deleting the selected port forwarding rule.
- **Reset:** Discard all the settings you've made.

3.2.3.5. Firewall – Port Trigger (Only Available in Gateway Mode)

Port Trigger

You can enable port trigger here with this scroll-down menu. When enabled, the router will forward packets sent via a certain port to another port.

Trigger Port Protocol

The triggering port protocol.

Trigger Port

The triggering port number.

Incoming Port Protocol

The incoming port protocol.

Incoming Port

The incoming port number.

Comment

Note for the port forwarding rule.

Current Port trigger in System

This table lists all the port trigger rules currently set in the router.

Buttons

- **Apply:** Apply and save all the settings you've made on this page.
- **Delete Selected:** Deleting the selected port trigger rule.
- **Reset:** Discard all the settings you've made.

3.2.3.6. Firewall – DMZ (Only Available in Gateway Mode)

DMZ Settings

You can enable the DMZ function with the scroll-down menu. When enabled, the router will allow all connection from the Internet to access a device on the LAN.

DMZ Address

The LAN IP address for the DMZ.

Buttons

- **Apply:** Apply and save all the settings you've made on this page.
- **Reset:** Discard all the settings you've made.

3.2.4. Web Management – Administration

3.2.4.1. Administration – Management

Administrator Settings

Account

The login username for the setting web page.

Password

The login password for the setting web page.

Buttons

- **Apply:** Apply and save all the settings you've made on this page.
- **Cancel:** Discard all the settings you've made.

NTP Settings

Current Time

This field will display the current system time. You can press the "Sync with host" button to synchronize your PC's time to the router.

Time Zone

This scroll-down menu allows you to change the time zone of the system.

NTP Server

The URL or IP address for the NTP server.

Buttons

- **Apply:** Apply and save all the settings you've made on this page.
- **Cancel:** Discard all the settings you've made.

DDNS Settings

Dynamic DNS Provider

You can select the DNS service provider from the scroll-down menu.

Account

The login username for DDNS.

Password

The login password for DDNS.

Buttons

- **Apply:** Apply and save all the settings you've made on this page.
- **Cancel:** Discard all the settings you've made.

3.2.4.2. Administration – Upload Firmware

Update Firmware		
Location:	Choose File	No file chosen
Apply		

Update Bootloader		
Location:	Choose File	No file chosen
Apply		

Here you can upload firmware to the router. Please note that during firmware uploading, the router must be ON at all times. Your PC and the router must be connected during the process as well.

Choose File

Choose the firmware file that is saved in your PC to upload to the router.

Buttons

- **Apply:** Upload the selected firmware file to the router.

3.2.4.3. Administration – Settings Management

Export Settings	
Select Configuration	All Configuration ⌄
Export Button	Export

Export Settings

Select Configuration
Select the configuration file of the router that you would like to save on your PC.

Export
Press this button to start saving the configuration file you've chosen on the scroll-down menu.

Import Settings	
Reboot After Import Setting	⦿ Immediately ○ Later
Settings file location	Choose File No file chosen

Import   Cancel

Import Settings

Reboot After Import Setting
Setting the router to reboot immediately or later after uploading the setting you've saved on your PC.

Settings File Location
You can select the file path of the configuration file on your PC by pressing the "Choose File" button.

Buttons
- **Import:** Start uploading configuration file to the router.
- **Cancel:** Discard all the settings you've made.

Load Factory Defaults	
Load Default Button	Load Default

Load Factory Defaults

Load Default Button
Press the "Load Default" button to reset all router's settings back to the default values.

3.2.4.4. Administration – Status

System Info	
Firmware Version	(Jan 18 2017)
System Up Time	2 hours, 37 mins, 48 secs
Operation Mode	Gateway Mode
Internet Configurations	
Connected Type	DHCP
WAN IP Address	192.168.1.189
Subnet Mask	255.255.240.0
Default Gateway	192.168.1.1
Primary Domain Name Server	192.168.1.1
Secondary Domain Name Server	192.168.1.1
MAC Address	:25:7A:66
Local Network	
Local IP Address	10.10.10.254
Local Netmask	255.255.255.0
MAC Address	:25:7A:A6

Here you can view the router's status.

3.2.4.5. Administration – Statistics

Memory	
Memory total:	124920 kB
Memory left:	94108 kB
WAN/LAN	
WAN Rx packets:	255127
WAN Rx bytes:	44062922
WAN Tx packets:	11
WAN Tx bytes:	1834
LAN Rx packets:	1560
LAN Rx bytes:	170718
LAN Tx packets:	4957
LAN Tx bytes:	1751847
All interfaces	
Name	eth2
Rx Packet	1605
Rx Byte	200158
Tx Packet	4960
Tx Byte	1752141
Name	eth3
Rx Packet	255127
Rx Byte	44062922
Tx Packet	11
Tx Byte	1834
Name	br0
Rx Packet	1560
Rx Byte	170718
Tx Packet	4957
Tx Byte	1751847

Here you can view statistics of the network.

3.2.4.6. Administration – PoE

PoE

PoE Status				
Port No.	Enable	Power Consumption (W)	PD Monitoring	PD IP
1	☑	0	☐	0.0.0.0
2	☑	0	☐	0.0.0.0
3	☑	0	☐	0.0.0.0
4	☑	0	☐	0.0.0.0

Apply   Reset

Enable

Check the check-box to enable the port's PoE function, or un-check the check-box to disable the port's PoE function.

Power Consumption (W)

This field displays the power consumption of the PoE port.

PD Monitoring

Check the check-box to enable the port's PD monitoring. The router will ping the PD connected to the port every 30 seconds. If the PD does not reply 3 times, the PoE port will do a PoE power cycle to reboot the PD.

PD IP

The IP address of the PD.
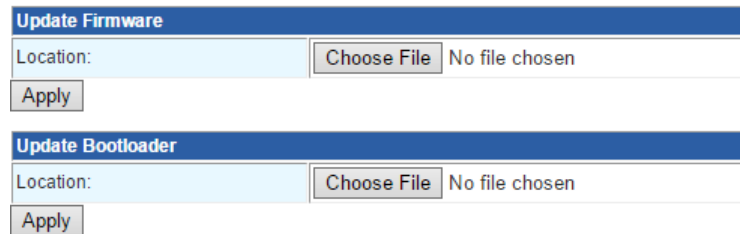
Buttons

- **Apply:** Apply and save all the settings you've made on this page.
- **Cancel:** Discard all the settings you've made.

Appendix A: Product Safety

This appendix describes safety issues regarding to this product. To use this product safely, it is highly recommended to read this appendix before installing and using this product.

Failure to follow these precautions and warnings might cause product malfunction, electrical shock, or even fire. If this product is working abnormally (e.g. generating smoke), please stop using this product and contact your distributor or retailer immediately.

DO NOT install this product under conditions listed below:
- DO NOT install this product in an environment with conditions exceeding its specified operating environment.
- DO NOT install this product in an environment that is subjected to direct sunlight or near any heating equipment.
- DO NOT install this product in an environment with extreme temperature changes. Extreme temperature changes, even within the product's operating temperature range, may cause malfunctions.
- DO NOT install this product in a location near any sources of water or liquid.
- DO NOT stack this product with other network devices directly on top of one another. Stacking network devices directly without applying a mounting rack will cause this product to overheat.
- DO NOT install this product on an unstable surface. Doing so might cause this product to fall, resulting malfunction.

Product Maintenance Guide:
- DO NOT disassemble this product. Doing so might cause malfunction and void your product's warranty.
- It is recommended to keep your product clear of dust. To remove dust from your product, please use a dry brush and brush it off gently.
- When not using this product, please store it in an environment with low humidity, cool temperature, and free of dust. Failure to do so might cause malfunction.
- Before powering up this product, please make sure that the electric power source meets this product's requirement. DO NOT use other power adapters if this product comes with its own power adapter in the package.

ALLNET GmbH Computersysteme declares that the device **ALL-PR4014P** is in compliance with the essential requirements and other relevant provisions of Directive 2004/108/EC or 2014/30/EU. The Declaration of conformity can be found under this link: www.allnet.de/downloads.html

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Preamble

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