

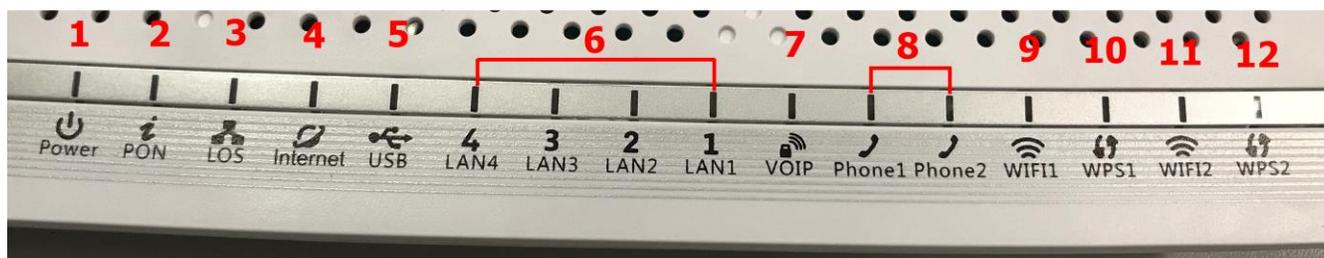
FiberHome AN5506-04-FA
Instruction



Version FiberHome AN5506-04-FA

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1. AN5506-04-FA Router power status



Status No.	Indicator	Status	Description
1	POWER	Steady green	The terminal is powered on.
		Off	The power supply is cut off.
2-3	PON	LOS	
	Off	Off	The GPON terminal is prohibited by the upper-layer device, contact the service provider for help.
	Blinks twice a second	Off	The GPON terminal attempts to set up a connection with its upper-layer device.
	Steady on	Off	A connection is set up between the GPON terminal and its upper-layer device.
	Off	Blinks once two seconds	The GPON terminal is not connected to optical fibers or does not receive optical signals.
	Blinks twice a second	Blinks twice a second	The GPON terminal is a rogue terminal, contact the service provider for help.
4	TEL	Steady on	The terminal is registered with the softswitch but no service flows are transmitted.
		Blinking	Service flows are transmitted.
		Off	The terminal is not powered on or fails to be registered to the softswitch.
5	USB	Steady on	The USB port is connected and is working in the host mode, but no data is transmitted.
		Blinking	Data is being transmitted on the USB port.
		Off	The USB port is not connected.
6	LAN1-LAN4	Steady on	The Ethernet connection is in the normal state.
		Blinking	Data is being transmitted on the Ethernet port.
		Off	The Ethernet connection is not set up.
7	WLAN	Steady on	The WLAN function is enabled.
		Blinking	Data is being transmitted on the WLAN port.
		Off	The WLAN function is disabled.
8	WPS	Steady on	The WPS function is enabled.
		Blinking	A Wi-Fi terminal is accessing the system.
		Off	The WPS function is disabled.

2. Internet connection Settings

There are 2 type to set the Internet connection

Type 1. Shortcut

Step 1 Open the Internet Explorer (IE) browser and enter <http://192.168.1.1/3bb>.

Step 2 In the Quick Configuration page that is displayed, enter the username, password (for surf internet) and validate code.

After finishing, click Save to apply the internet settings.

Step 3 In the Quick Configuration page appears pop-up "Save Completed", click OK to close this page.

Step 4 In the Quick Configuration page that is displayed, click Close to close this page.



Type 2. General

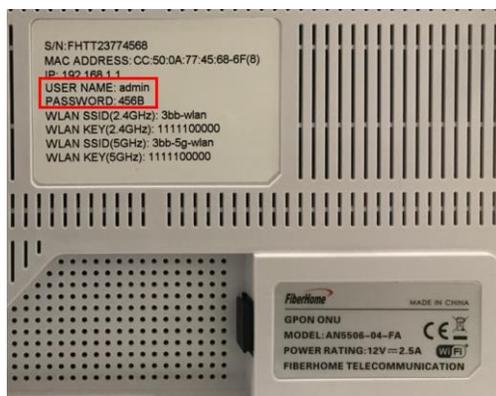
Step 1 Open the Internet Explorer (IE) browser and enter <http://192.168.1.1>.

Step 2 In the login window, enter the username, password (see the device nameplate for the default username and password Last 4 digit of Mac address) and validate code.

Step 3 Click Login. After the password is authenticated, the Web configuration window is displayed.



Sample picture: The username and password are located at the bottom of the sticker.



3. WAN, Wireless Settings

3.1 WAN settings

When you login to the system, you will see various menu.

Follow these steps:

- Click **Network(1)** → Click BroadBand Settings(2) Screen showing Internet Settings

Follow these settings(3)

- **Service Type** ; Choose **INTERNET**

- **Connection Type** ; **Route**

- **VLAN ID** ; **33**

- **Priority** ; **0**

- **MTU** ; **1492**(set between 1280-1492)

- **IP Mode(4)** ; **IPv4** (Choose by device's capacity that customer use for example IPv4,IPv6 or IPV4&IPV6)

- **WAN IP Mode(5)** ; Choose **PPPoE**

- Enter **Username/Password(6)** for surf internet

- **Click Apply(7)**

- After finishing, enter URL Website to access Internet

The screenshot displays the 3BB Broadband Settings interface. The top navigation bar includes 'Status', 'Network', 'Security', 'Application', and 'Management'. The 'Network' menu is highlighted with a red box and labeled '1'. The left sidebar contains 'Wlan Settings', 'LAN Settings', 'BroadBand Settings' (highlighted with a red box and labeled '2'), 'Internet Settings', 'DHCP Server', 'Authentication', and 'IPv6'. The main content area is titled 'Network » BroadBand Settings » Internet Settings'. A yellow warning box states: 'You may choose different connection type suitable for your environment. Besides, you may also configure parameters according to the selected connection type.' Below this is a 'WAN List' table with one entry: 'INTERNET_R_VID_33' with 'VID/Priority' '33/0' and 'WAN IP Mode' 'PPPoE'. The configuration form below has several fields: 'Service Type' (INTERNET, labeled '3'), 'Connection Type' (Route), 'VLAN ID' (33), 'Priority' (0), 'NAT' (Enable), 'DNS Relay' (Enable), and 'MTU' (1492, with a note '* (1280-1492)'). There are checkboxes for LAN Binding (LAN 1-4) and SSID Binding (SSID 1-4). 'IP Mode' is set to 'IPv4' (labeled '4') and 'WAN IP Mode' is 'PPPoE' (labeled '5'). The 'PPPoE Mode' section includes 'User Name' and 'Password' (both with a note '* (You can input 1-31 characters)' and labeled '6'), 'Operation Mode' (Keep Alive), and fields for 'State', 'IP Address', 'Subnet Mask', 'Default Gateway', 'Primary DNS Server', and 'Secondary DNS Server'. At the bottom, the 'Apply' button is highlighted with a red box and labeled '7', next to a 'Cancel' button.

3.2 Wireless Settings

There are 2 step to set wireless connection

Step 1: Set all for Wireless 2.4G or Wireless 5G

- Click **Network(1)** → Click **Wlan Settings(2)**
- Click **Basic(3)** for Wireless 2.4G or **5G Basic(4)** for **Wireless 5G** (You can choose to set both or just one signal)

Follow these settings(5)

- **Radio ON/Off** ; Choose **RADIO ON** to open WiFi signal
- **Network Mode** ; **802.11 b/g/n** (Choose the signal channel that you want)
- **Frequency Bandwidth** ; **40 MHz** (Choose the signal's broadness that you want)
- **Frequency (Channel)** ; **AutoSelect** (Choose the signal that you want)
- **Guard interval** ; Set usage time and signal quality that you want
(Short ; to use near device / Long ; to use far from device)
- Click **Apply(6)** after that go to step 2 to set password

The screenshot shows the 3BB Broadband management interface. The top navigation bar includes 'Status', 'Network' (highlighted with a red box and '1'), 'Security', 'Application', and 'Management'. Below this, the 'Wlan Settings' menu (highlighted with a red box and '2') is expanded to show 'Basic' (highlighted with a red box and '3') and '5G Basic' (highlighted with a red box and '4'). The main content area displays the 'Wireless Network' settings (highlighted with a red box and '5'). The settings are as follows:

Setting	Value
Radio On/Off	RADIO ON
Network Mode	802.11 b/g/n
Domain	THAILAND
Frequency Bandwidth	40MHz
Frequency (Channel)	AutoSelect
Guard Interval	Short

At the bottom of the settings area, the 'Apply' button (highlighted with a red box and '6') and 'Cancel' button are visible.

Step 2 : SSID Settings for Wireless 2.4G or Wireless 5G

- Click **Advanced(7)** for Wireless 2.4G or **5G Advanced(8)** for Wireless 5G (You can choose to set both or just one signal)
- **SSID Choice(9)** ; 1 (Choose the required number of signals)
; Choose Enable to open the signal
- **SSID Name(10)** ; Named that you want (not more than 32 characters)
- **Passphrase(11)** ; Enter the required password (8-63 characters can enter both letters and numbers depend on Security Mode)
- Click **Apply(12)** to record Wireless settings
- After finishing, you can try searching for SSID name that you set and enter the password to test connection
- If the signal is connected, enter URL Website to access the internet

The screenshot shows the 3BB Broadband router configuration interface. The left sidebar has a menu with 'Advanced' (7) and '5G Advanced' (8) highlighted. The main content area is titled 'Network » Wlan Settings » Advanced'. It contains several sections: 'Select SSID' with 'SSID Choice' set to 1 and 'Enable' selected (9); 'SSID Name' with '3bb' entered (10); 'Security Policy' with 'WPA2PSK' selected; and 'WPA(Wi-Fi Protected Access)' with 'AES' selected and a 'Passphrase' field (11). At the bottom, an 'Apply' button is highlighted (12).

4. DHCP Settings

DHCP Settings and IP Address management is IP management and distribution that do not give duplicate IP to protect the problem when you using

- Click **Network(1)** --> Click **DHCP Server(2)** --> screen showing **DHCP Service**

Follow these settings(3)

- **Type** ; Choose **Server**
- **DHCP Start IP** ; Set the begin IP Address that you want to use
- **DHCP End IP** ; Set the end IP Address that you want to use
- **DHCP Subnet Mask** ; 255.255.255.0 You can change or use as Default
- Click **Apply(4)**
- DHCP Settings finishing

The screenshot shows the 3BB Broadband router configuration interface for DHCP settings. The left sidebar has 'DHCP Server' (2) highlighted. The main content area is titled 'Network » DHCP Server » DHCP Service'. It contains a 'DHCP Service' section with 'Type' set to 'Server' (3). Below this, 'DHCP Start IP' (192.168.1.2), 'DHCP End IP' (192.168.1.30), and 'DHCP Subnet Mask' (255.255.255.0) are highlighted (3). Other fields include 'DHCP Primary DNS' (192.168.1.1), 'DHCP Secondary DNS', 'DHCP Default Gateway' (192.168.1.1), 'DHCP Lease Time' (2 hours), and 'Option60' (Server). At the bottom, an 'Apply' button is highlighted (4).

5. Bridge Mode Settings

Click Network(1) --> Click BroadBand Settings(2) Screen showing Internet Settings

Follow these settings(3)

- **Service Type** ; Choose **INTERNET**

- **Connection Type** ; Choose **Bridge**

- **VLAN ID** ; **33**

- **Priority** ; **0**

- Click **Apply(4)**

- Set up the router that you want to connect to Internet, then connect both device by connecting Lan cable to the Prepared WAN

- Bridge Mode Settings finished, you can access the internet

The screenshot shows the 3BB Broadband router configuration interface. The top navigation bar includes 'Status', 'Network' (highlighted with a red box and '1'), 'Security', 'Application', and 'Management'. The left sidebar contains 'Wlan Settings', 'LAN Settings', 'BroadBand Settings' (highlighted with a red box and '2'), 'Internet Settings', 'DHCP Server', 'Authentication', and 'IPV6'. The main content area is titled 'Network » BroadBand Settings » Internet Settings'. A yellow box contains the text: 'You may choose different connection type suitable for your environment. Besides, you may also configure parameters according to the selected connection type.' Below this is a 'WAN List' table with columns 'WAN Name', 'VID/Priority', and 'WAN IP Mode'. The table shows one entry: 'INTERNET_R_VID_33' with '33/0' and 'PPPoE'. Below the table is a form with fields: 'Service Type' (dropdown menu set to 'INTERNET'), 'Connection Type' (dropdown menu set to 'Bridge'), 'VLAN ID' (text box with '33'), and 'Priority' (text box with '0'). These four fields are grouped by a red box and labeled '3'. Below the form are checkboxes for 'LAN Binding' (LAN 1, 2, 3, 4), 'SSID Binding' (SSID 1, 2, 3, 4), and '5G SSID Binding' (SSID 1, 2, 3, 4). At the bottom, there are 'Apply' and 'Cancel' buttons, with 'Apply' highlighted by a red box and labeled '4'.

6. Forward Port Settings

Forward Port Settings is Port setting for IP Address to use with other device required internal LAN to connect from external LAN such as Mobile phone, Notebook or Computer etc

- Click **Application(1)** --> Click **Port Forwarding(2)** --> Screen showing **Port Forwarding**

- Click **Add(3)** to set other settings to Forward Port

The system will show screen to set other settings as follows(4)

- **WAN** ; Choose **INTERNET_R_VID_33**

- **Description** ; **3BBTEST** (Named that you want)

- **Public Port** ; **8080** (It is the inside Port number that use to view camera)

- **IP** ; **192.168.1.1** (It is the inside IP number that use to view camera)

- **Private Port** ; **8080** (It is the outside Port number that use to view camera)

- **Protocol** ; Choose **TCP** (Named that you want)

- **Enable** ; Set to be **Enable**

- Click **Apply(5)**

3BB BROADBAND Status Network Security **Application** Management Logout

Application » Port Forwarding » Port Forwarding

On this page, you could configure port forwarding.

3 Add Delete Delete All

Port Forwarding Rules List

WAN	Description	Public Port	IP	Private Port	Protocol	Enable
INTERNET_R_VID_33	3BBTEST	8080	192.168.1.1	8080	TCP	Enable

4

5 Apply Cancel

- When done, the setting's information will show above (6)
- You can use CCTV after Forward Port settings finished
- In case if you want to set more Port numbers click **Add** (7) To add additional port numbers

3BB BROADBAND Status Network Security Application Management Logout

Application » Port Forwarding » Port Forwarding

On this page, you could configure port forwarding.

7 Add Delete Delete All

Port Forwarding Rules List

WAN	Description	Public Port	IP	Private Port	Protocol	Enable
INTERNET_R_VID_33	3BBTEST	8080-8080	192.168.1.1	8080-8080	TCP	Enable <input checked="" type="checkbox"/>

6

Apply Cancel

7. Dynamic DNS

Example: Customer apply DynDNS's Host by use "contact2nma.dyndns.org" name, that is a domain that customers can use to view the camera from any point that no need to remember IP's received from service providers.

- Click **Application(1)** --> Click **DDNS(2)** --> Screen showing DDNS Settings
The system will show the screen to fill in as follows(3)
- **Username/Password** ; As customer defined on the web of DDNS service provider (not more than 32 characters)
- **Host** ; **contact2nma.dyndns.org** (The name given on the web of DDNS service provider.)
- **WAN Interface** ; **INTERNET_R_VID_33** (Choose the required WAN Name)
- **DDNS Provider** ; **www.dyndns.org** (Choose a registered DDNS provider)
- **Click Apply(4)**
- DDNS settings step finished

The screenshot shows the 3BB Broadband web interface. The top navigation bar includes 'Status', 'Network', 'Security', 'Application' (highlighted with a red box and labeled '1'), and 'Management'. The left sidebar contains 'VPN', 'DDNS' (highlighted with a red box and labeled '2'), 'DDNS Settings', 'Port Forwarding', 'Port Triggering', 'NAT', 'UPNP', 'DMZ', 'WEB Port', and 'Diagnosis'. The main content area shows the 'DDNS Settings' page. A yellow box at the top says 'You could configure DDNS here.' Below it, the 'DDNS' section (labeled '3') contains a form with the following fields: Username (contact2nma), Password (masked), Host (contact2nma.dyndns.org), WAN Interface (INTERNET_R_VID_33), and DDNS Provider (www.dyndns.org). At the bottom of the form, the 'Apply' button is highlighted with a red box and labeled '4', along with 'Cancel' and 'Remove Configuration' buttons.

8. Power Checking

To check Optical Power when customer have internet problem such as low speed or unstable that Optical Power not more than -28

- Click **Status(1)** --> Click **Optical Info(2)** --> Screen showing Optical Power
- **Received Power(3)** ; Check Received Power not more than -28
- Power checking finishing

The screenshot shows the 3BB Broadband web interface. The top navigation bar includes 'Status' (highlighted with a red box and labeled '1'), 'Network', 'Security', 'Application', and 'Management'. The left sidebar contains 'Device Information', 'Wireless Status', 'Wan Status', 'Lan Status', 'Optical Info' (highlighted with a red box and labeled '2'), and 'VoIP Call History'. The main content area shows the 'Optical Info' page. A yellow box at the top says 'On this page, you can query state of optical power.' Below it, the 'Optical Info' section contains a table with the following data: Transmitted Power (-40.00 dBm), Received Power (-40.00 dBm, highlighted with a red box and labeled '3'), Operating Temperature (42.10 °C), Supply Voltage (3.30 V), and Bias Current (0.00 mA).

9. Product version, Hardware and software Checking

- Click **Status tab(1)** → **Device Information(2)** Product version, Hardware and software Checking(3)

The screenshot shows the 3BB Broadband management interface. The top navigation bar includes 'Status' (1), 'Network', 'Security', 'Application', and 'Management'. The left sidebar has 'Device Information' (2) selected. The main content area shows a table of device information (3) with the following details:

Device Information	
Software Version	RP2614
Hardware Version	WKE2.134.285F1A
Device Model	AN5506-04-F
Device Description	GPON
ONU State	O1(STATE_INIT)
ONU Regist State	INIT
LOID	fiberhome
CPU Usage	50.00%
Memory Usage	33.81%
Web Server port	80

10. Firmware Upgrading

Is Upgrading Firmware of device to be a new version to fix a problem of using such as internet unstable or not compatible with other devices

- Click **Management tab(1)** → Click **Device Management(2)** → Click **Local Upgrade(3)**
- Click **Browse...(4)** Choose file after that the system upgrade automatically
- After upgrade finish, you can Login to other settings

The screenshot shows the 3BB Broadband management interface. The top navigation bar includes 'Management' (1). The left sidebar has 'Device Management' (2) selected, and 'Local Upgrade' (3) is highlighted. The main content area shows a 'Choose file and Upgrade' section with a 'Browse...' button (4). A warning message is displayed above the button: 'On this page, you can browse the local file and click the button to upgrade the terminal equipment software. Do not power off during upgrade or do other operations, so as not to cause damage and can not be used.'

11. Restore to Default

There are two steps can restore to Default

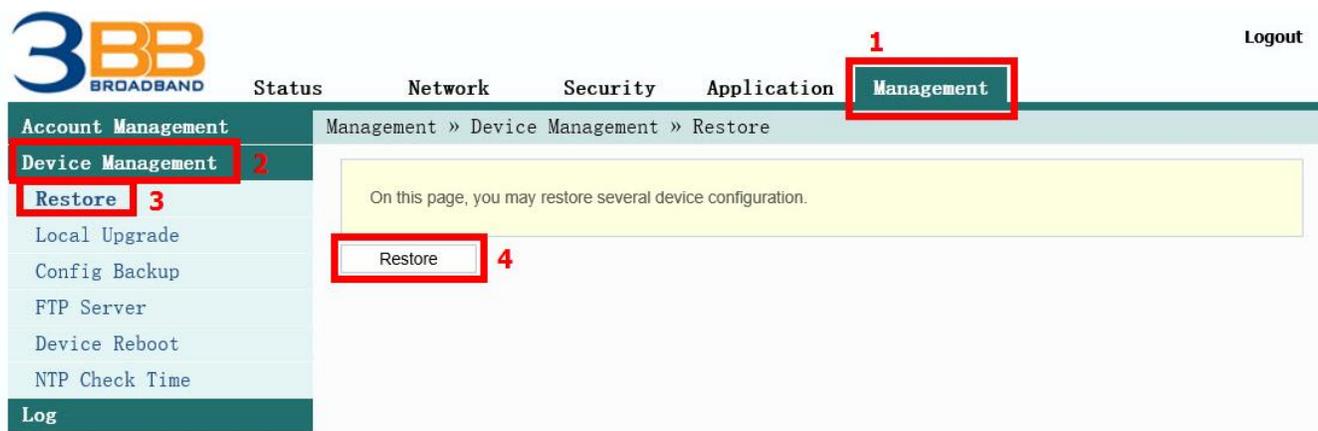
Step 1 Hardware (Device reset)

- Press the Router Hardware(Reset) button and hold for 10 seconds, after that the router will restart to be default



Step 2 Software(System Reset)

- Click **Management(1)** --> **Device Management(2)** --> Click **Restore(3)**
- Click **Restore(4)** Restore factory defaults
- Restore Default finished

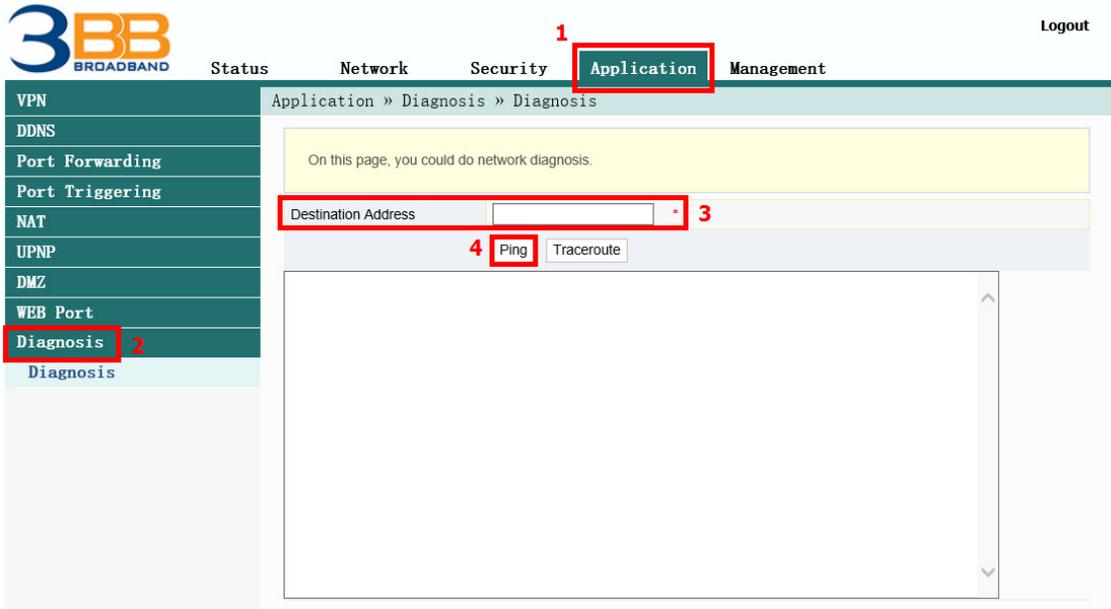


12. Ping and Traceroute

12.1 How to Ping Test

Ping Test is using in case of connection test between ONT and destination website to check that website, if it can use normally

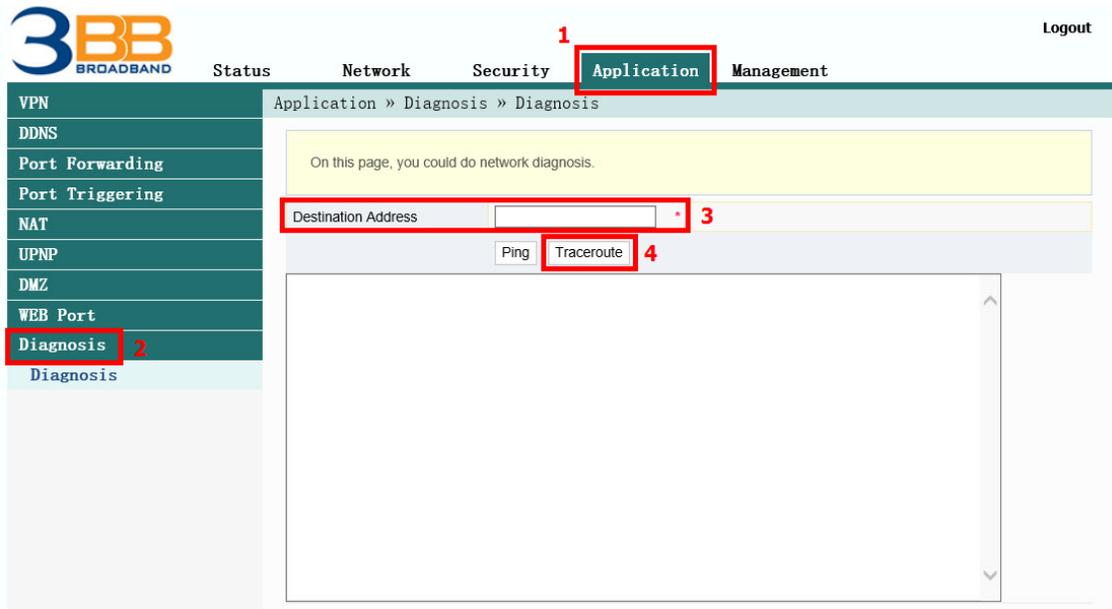
- Click **Application(1)** --> Click **Diagnosis(2)** --> Screen showing **Diagnosis**
- **Destination Address(3)** ; fill in **IP, Host Name** or **Website**
- Click **Ping(4)** to start connection test



12.2 Traceroute Test

You can use Traceroute to check Server route connection use in case of cannot ping (the destination website cannot be connected)

- Click **Application(1)** --> Click **Diagnosis(2)** --> Screen Showing **Diagnosis**
- Destination **Address(3)** ; fill in **IP, Host Name or Website**
- Click **Traceroute(4)**

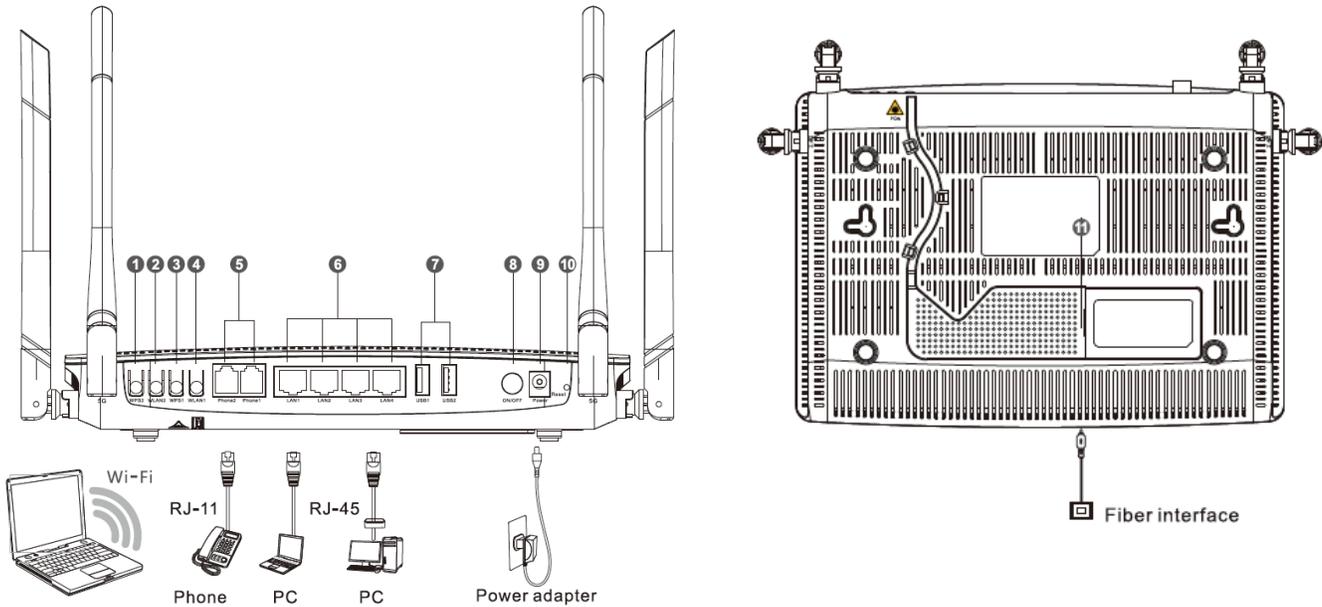


Note :

- If ONT and the destination website can be connected will show connection such as Reply from and usage times.
- If ONT and the destination website cannot be connected will show "Ping request could not find host Please check the name and try again"

13. Hardware Installation

- Step 1 : Connect The **PON** interface and the optical interface on the wall with the optical fiber(11)
- Step 2 : Connect The **LAN** interface and the network interface of a computer through an ethernet cable.(6)
- Step 3 : Connect The **Phone** interface with a telephone through a phone cable.
- Step 4 : Connect The **Power** interface with the power adapter, and the plug to the power socket.
- Step 5 : Press the **ON/OFF** button to turn on the device (8)



The following table describes the interface of the device:

No.	Port/Button		Description
1	Button 5G WPS	WPS2	The Wps1 button to enable or disable the 5 Wi-Fi Protected Setup function
2	Button 5G wireless	WLAN2	The WLAN1 button to enable or disable the 5 WLAN function.
3	Button 2G WPS	WPS1	The Wps1 button to enable or disable the 2.4 Wi-Fi Protected Setup function
4	Button 2G wireless	WLAN1	The WLAN1 button to enable or disable the 2.4 WLAN function.
5	Port Tel	Phone1,Phone2	Indicates VoIP telephone ports (RJ-11), used to connecting to the ports on telephone sets
6	Port Network	LAN1 - LAN4	The USB interface connecting to the USB storage device
7	Port USB	USB1 , USB2	Interface connecting to the power adapter.
8	Button Power	ON/OFF	The Power interface connecting to the DC Power adapter or the storage battery.
9	Port Power	Power	Press the button for a short time to reset the device; press the button for a long time (longer than 10s) to restore the device to the default settings and reset the device.
10	Button Reset	Reset	The fiber interface connecting to the optical fiber.
11	Port Optical	PON	The USB interface connecting to the USB storage device

14. Technical Specification

Type	Item	Description
Mechanical parameter	Dimension	37 mmx252mmx178mm(HxWxD)
	Weight	570 g approximately
Power supply parameter	DC	DC 12V/2.5A
Power consumption parameter	Power consumption	<15W
Environmental parameter	Operating temperature	-5°C to - 45°C
	Storage temperature	-40°C to -70°C
	Environmental humidity	10% to 90% , non-condensing

15. Product Overview

product	Function
AN5506-04-FA	- 4 GE Interfaces
	- 2 Phone Interfaces
	- Wi-Fi Interfaces (2.4GHz, 5GHz)
	- USB Interfaces

16. Packing List

Item	Quantity
GPON Terminal	1
Power Adapter	1
Ethernet Cable	1
Phone Cable	1
Quick Start	1