

FiberHome AN5506-04-FA

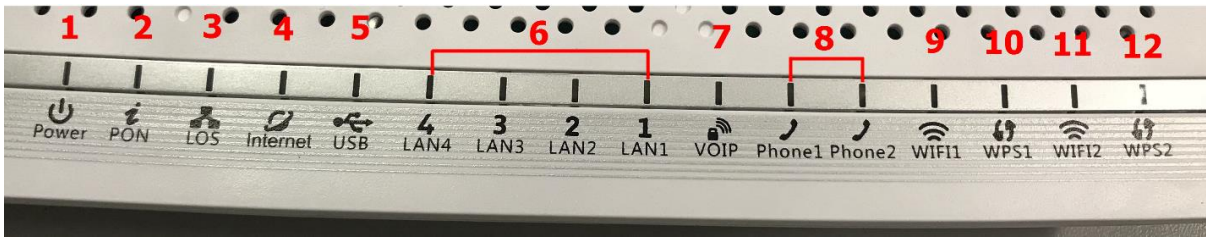
Instruction



Version FiberHome AN5506-04-FA

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1. AN5506-04-FA Router power status



| หมายเลข | ชื่อสัญลักษณ์ | สถานะไฟ | รายละเอียด |
|---------|-------------------------|--|---|
| 1 | POWER | Steady green | The terminal is powered on. |
| | | Steady orange | The device is powered by a backup battery. |
| | | Off | The power supply is cut off. |
| 2-3 | 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. |
| | Blinks once two seconds | Blinks once two seconds | The hardware is faulty. |
| 4 | Internet | Steady on | Able to connect to the Internet |
| | | Off | Unable to connect to the Internet |
| | | Blinking | The device is in the process of receiving / sending Internet data. |
| 5 | USB | USB connection status indicator | |
| 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 | VOIP | VoIP connection indicator | |
| 8 | Phone1-Phone2 | Indicator light connecting to VoIP | |
| 9,11 | WIFI1,WIFI2 | Wireless connection Indicator light If it is in use, sending/receiving data, the light will be flashing green. | |
| 10,12 | WPS1,WPS2 | Steady on | The device has an unencrypted wireless connection, it is ready to use |
| | | Blinking | The device has an unencrypted wireless connection, it's ready to use and Currently connected |
| | | Off | The device is not connected to WPS. |

2. Internet connection Settings

There are 2 type to set the Internet connection

Type 1. Shortcut

- Open the browser and enter 192.168.1.1/3bb
- In the Quick Configuration page that is displayed, enter Username/Password that you can check from installation report
- Enter validate code as shown.
- Click Apply
- After finished, enter URL Website to access Internet

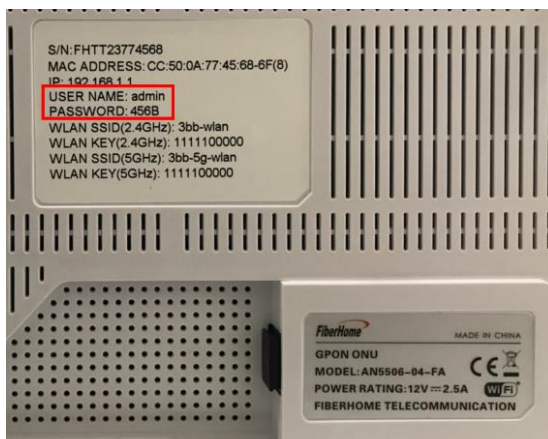


Type 2. General

- Open the browser and enter 192.168.1.1
- In the login window, enter the username, password (They are located on the sticker attached to the bottom of the router)
- Enter the Validate Code as shown.
- Click Login to enter the WAN, Wireless settings



Sample picture: The username and password are located on the sticker attached to the bottom of the router.



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)** You can check from installation report

- **Click Apply(7)**

- After finished, 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 informational 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 columns for 'WAN Name', 'VID/Priority', and 'WAN IP Mode'. The table contains one entry: 'INTERNET_R_VID_33' with '33/0' and 'PPPoE'. The configuration form below has several fields: 'Service Type' (dropdown, 'INTERNET', labeled '3'), 'Connection Type' (dropdown, 'Route'), 'VLAN ID' (text, '33'), 'Priority' (text, '0'), 'NAT' (dropdown, 'Enable'), 'DNS Relay' (dropdown, 'Enable'), 'MTU' (text, '1492', '* (1280-1492)'), 'LAN Binding' (checkboxes for LAN 1-4, all checked), 'SSID Binding' (checkboxes for SSID 1-4, all checked), '5G SSID Binding' (checkboxes for SSID 1-4, all checked), 'IP Mode' (dropdown, 'IPv4', labeled '4'), 'WAN IP Mode' (dropdown, 'PPPoE', labeled '5'), 'PPPoE Mode' section with 'User Name' (text, '* (You can input 1-31 characters)', labeled '6') and 'Password' (text, '* (You can input 1-31 characters)'), 'Operation Mode' (dropdown, 'Keep Alive'), 'State', 'IP Address', 'Subnet Mask', 'Default Gateway', 'Primary DNS Server', and 'Secondary DNS Server'. At the bottom, there are 'Apply' and 'Cancel' buttons, with 'Apply' highlighted by a red box and labeled '7'.

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 'Network' tab in the 3BB Broadband interface. The 'Wlan Settings' menu is open, and the 'Basic' sub-tab is selected. The 'Wireless Network' section is highlighted with a red box and labeled '5'. The settings are as follows:

| | |
|---------------------|---|
| Radio On/Off | <input type="button" value="RADIO ON"/> |
| Network Mode | 802.11 b/g/n |
| Domain | THAILAND |
| Frequency Bandwidth | 40MHz |
| Frequency (Channel) | AutoSelect |
| Guard Interval | Short |

The 'Apply' button is highlighted with a red box and labeled '6'. There is also a 'Cancel' button next to it.

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 finished, enter URL Website to access the internet

The screenshot shows the 'Advanced' sub-tab under 'Wlan Settings'. The 'Wireless Network' section is highlighted with a red box and labeled '5'. The settings are as follows:

| | | | |
|----------------|---|---|------------------------------------|
| SSID Choice | 1 | <input checked="" type="radio"/> Enable <input type="radio"/> Disable * | 9 |
| SSID Name | 3bb | *(1-32 Characters) | Hidden <input type="checkbox"/> 10 |
| Security Mode | WPAPSKWPA2PSK | | |
| WPA Algorithms | <input type="radio"/> TKIP <input checked="" type="radio"/> AES <input type="radio"/> TKIPAES | | |
| Passphrase | | *(You can input 8-64 characters) | 11 |

The 'Apply' button is highlighted with a red box and labeled '12'. There is also a 'Cancel' button next to it.

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 finished

3BB BROADBAND Status **1** Network Security Application Management Logout

Wlan Settings LAN Settings BroadBand Settings **DHCP Server 2** DHCP Service Authentication IPV6

Network » DHCP Server » DHCP Service

You may enable/disable DHCP functions and configure the parameters as your wish, and become effective after reboot.

DHCP Service

Type Server **3**

DHCP Start IP 192.168.1.2

DHCP End IP 192.168.1.30

DHCP Subnet Mask 255.255.255.0

DHCP Primary DNS 192.168.1.1

DHCP Secondary DNS

DHCP Default Gateway 192.168.1.1

DHCP Lease Time 2 Hour 0 Min (1 min - 99 hours)

Option60 Server

Option 60 Start IP 192.168.1.100

Option 60 End IP 192.168.1.255

4 Apply Cancel

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** ; **VLAN ID NODE**
- **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

3BB BROADBAND Status **1** Network Security Application Management Logout

Wlan Settings LAN Settings **BroadBand Settings 2** Internet Settings DHCP Server Authentication IPV6

Network » BroadBand Settings » Internet Settings

You may choose different connection type suitable for your environment. Besides, you may also configure parameters according to the selected connection type.

WAN List

| WAN Name | VID/Priority | WAN IP Mode |
|-------------------|--------------|-------------|
| INTERNET_R_VID_33 | 33/0 | PPPoE |

Service Type INTERNET **3**

Connection Type Bridge

VLAN ID 2069

Priority 0

LAN Binding LAN 1 LAN 2 LAN 3 LAN 4

SSID Binding SSID 1 SSID 2 SSID 3 SSID 4

5G SSID Binding SSID 1 SSID 2 SSID 3 SSID 4

4 Apply Cancel

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 |
|-----|-------------|-------------|----|--------------|----------|--------|
| --- | | | | | | |

4

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

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 and the information provided will show more results

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 type="checkbox"/> |

6

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

Apply Cancel

7. Dynamic DNS

Example: You apply DynDNS's Host by use "contact2nma.dyndns.org" name, that is a domain that you 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 finished

3BB BROADBAND

Status Network Security **Application** Management Logout

VPN Application » DDNS » DDNS Settings

DDNS 2

DDNS Settings

Port Forwarding

Port Triggering

NAT

UPNP

DMZ

WEB Port

Diagnosis

You could configure DDNS here.

DDNS 3

| | | |
|---------------|------------------------|-------------------------|
| Username | contact2nma | *(1-32 Characters) |
| Password | | *(1-32 Characters) |
| Host | contact2nma.dyndns.org | *(eg. abc.dyndns.co.za) |
| WAN Interface | INTERNET_R_VID_33 | |
| DDNS Provider | www.dyndns.org | |

4 Apply Cancel Remove Configuration

8. Power Checking

To check Optical Power when you 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 finished

3BB BROADBAND

Status 1 Network Security Application Management Logout

Device Information Status » Optical Info » Optical Info

Wireless Status

Wan Status

Lan Status

Optical Info 2

Optical Info

VoIP Call History

On this page, you can query state of optical power.

Optical Info

| | |
|-----------------------|---------------------|
| Transmitted Power | -40.00 dBm |
| Received Power | -40.00 dBm 3 |
| Operating Temperature | 42.10 °C |
| Supply Voltage | 3.30 V |
| 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 web interface. The 'Status' tab is highlighted with a red box and labeled '1'. Below it, the 'Device Information' link is highlighted with a red box and labeled '2'. The main content area shows a table of device information, which is also highlighted with a red box and labeled '3'. The table contains the following data:

| 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

It 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 the required file after that the system will upgrade automatically
- After upgrade finish, you can Login to other settings

The screenshot shows the 3BB Broadband web interface. The 'Management' tab is highlighted with a red box and labeled '1'. Below it, the 'Device Management' link is highlighted with a red box and labeled '2'. Under 'Device Management', the 'Local Upgrade' link is highlighted with a red box and labeled '3'. The main content area shows a 'Choose file and Upgrade' section with a 'Browse...' button highlighted with a red box and labeled '4'. The page also contains a warning message: '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

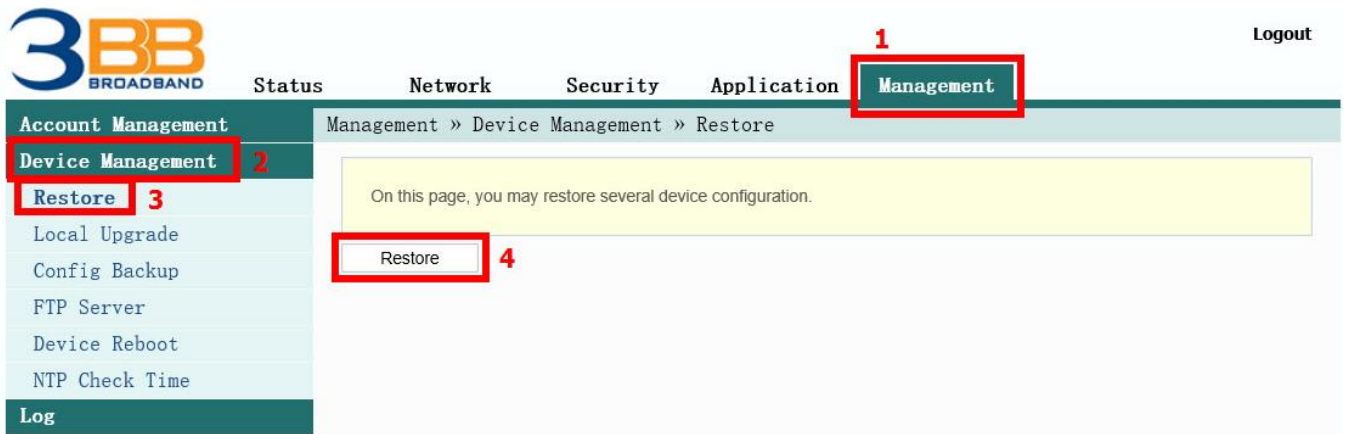
Step 1 Hardware (Device reset)

- 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

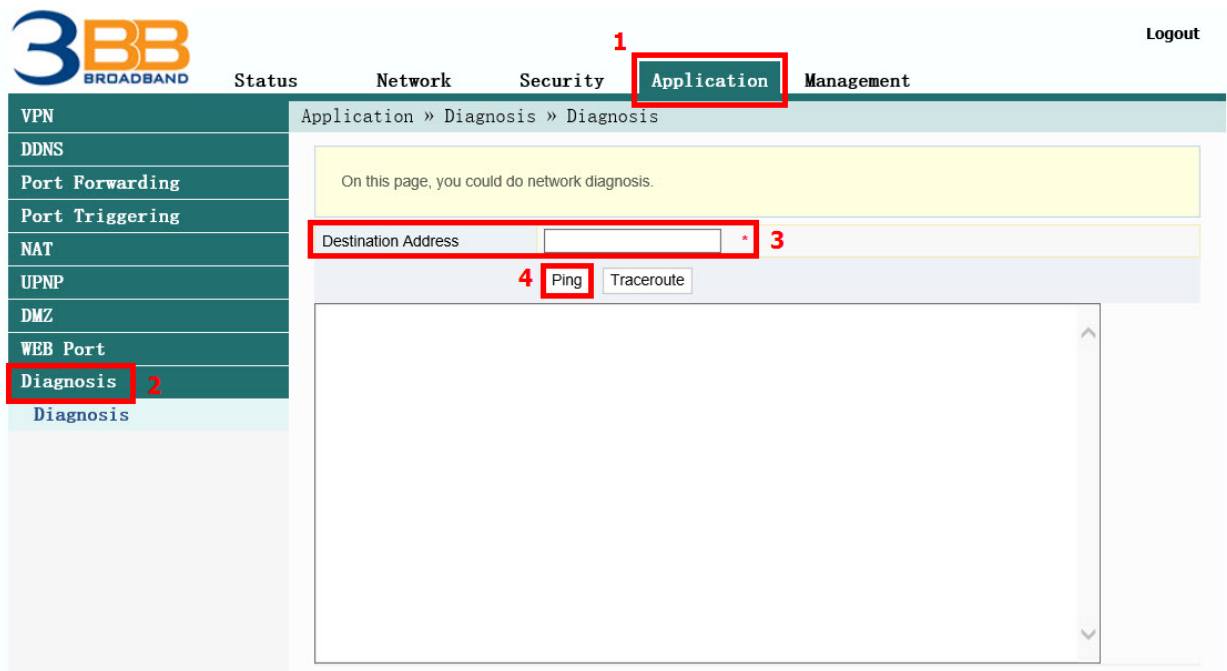


12. Ping and Traceroute

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

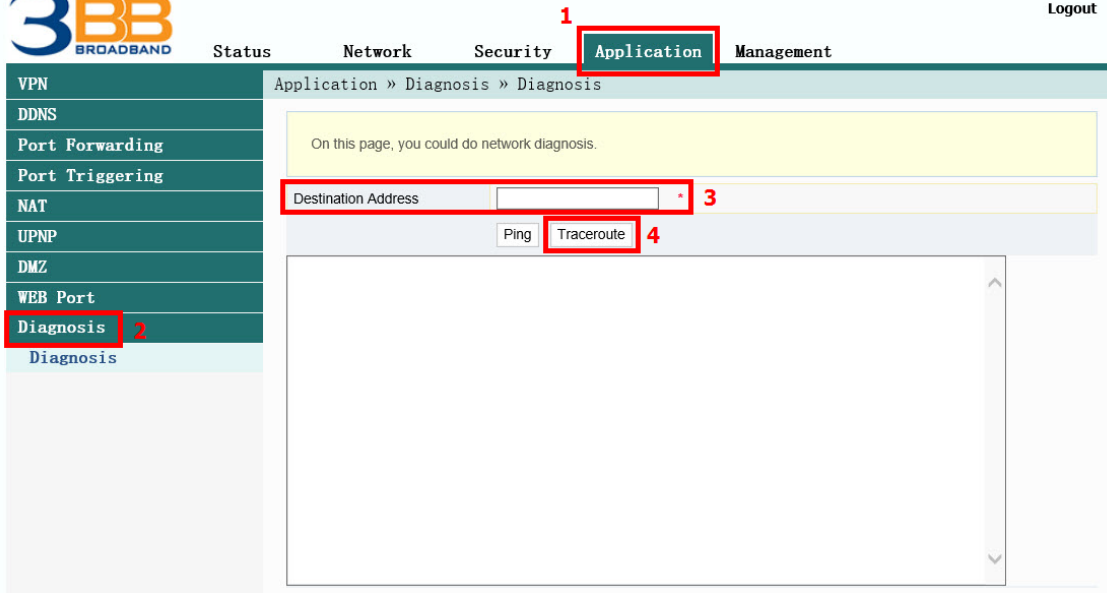
- Click **Application(1)** --> Click **Diagnosis(2)** --> Screen showing **Diagnosis**
- **Destination Address(3)** ; fill in **IP, Host Name** or **Website**
- Click Ping(**4**) to start connection test



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)**

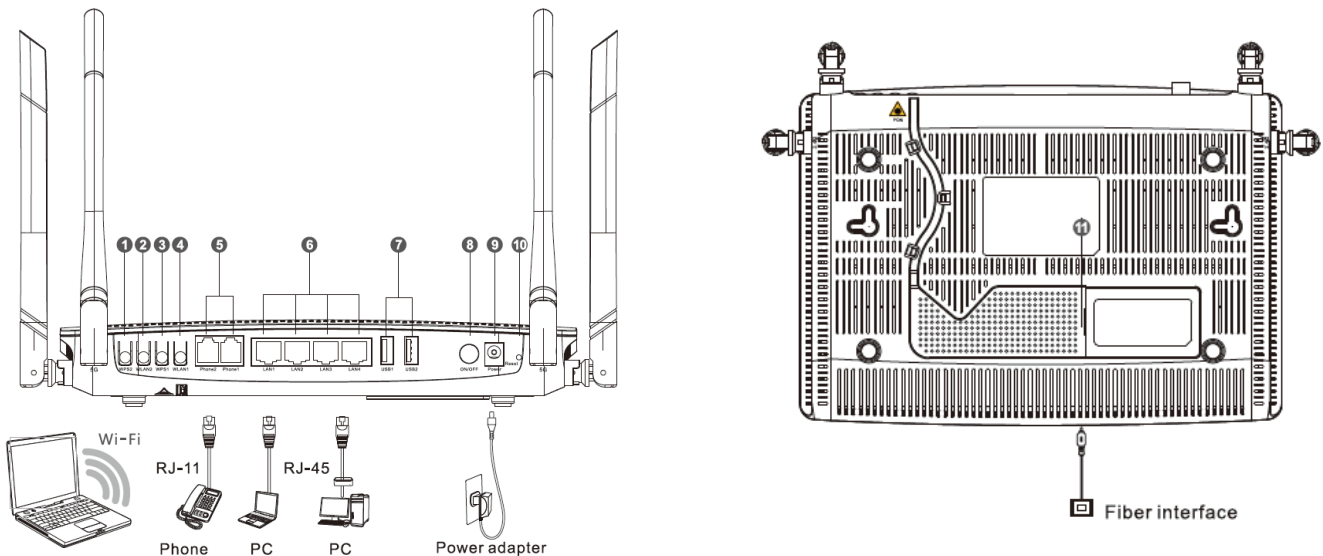


Note :

- 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 optical fiber cable to the PON port of the GPON Terminal. **(11)**
- Step 2 : Connect LAN cable from Port Lan of GPON Terminal to LAN Port of Computer. **(6)**
- Step 3 : Connect the AC Adapter to the Power Port. (DC-IN)**(9)**
- Step 4 : 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 funtion |
| 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 |