NT3BB-4PWN

Quick Installation Guide

1 Introduction

The NT3BB-4PWN device is an ADSL access device that supports multiple line modes. With four 10/100Base-T Ethernet interfaces at the user end, it provides high-speed ADSL broadband connection to the Internet or Intranet for high-end users such as net cafes and office users. The device provides high performance access to the Internet with a downlink of 24 Mbps and an uplink of 1 Mbps.

As a WLAN AP or WLAN router, the device supports WLAN access to the Internet. It complies with the IEEE 802.11b/g/n specifications, WEP, WPA and WPA2 security specifications.

2 System Requirements

Recommended system requirements are as follows:

- A 10/100 base-T Ethernet card is installed on your PC
- A hub or Switch. (connected to several PCs through one of Ethernet interfaces on the device)
- Operating system: Windows 98 SE, Windows 2000, Windows ME, Windows XP, Windows Vista, Windows 7
- Internet Explorer V5.0 or higher, Netscape V4.0 or higher, or Firefox 1.5 or higher

3 Hardware Installation

Step 1 Connect the **DSL** interface of the device and the **Modem** interface of the splitter through a telephone cable. Connect the phone to the **Phone** interface of the splitter through a cable. Connect the incoming line to the **Line** interface of the splitter.

The splitter has three interfaces:

- **Line**: Connect to a wall phone jack (RJ-11 jack).
- **Modem**: Connect to the ADSL jack of the device.
- **Phone**: Connect to a telephone set.

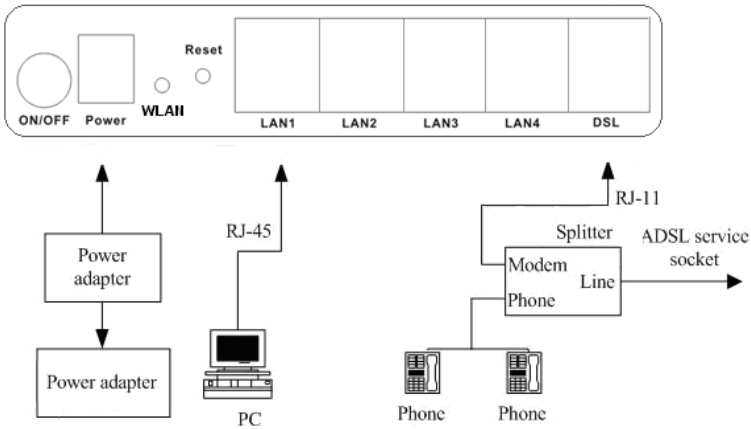
Step 2 Connect the **LAN** interface of the device to the network card of the PC through an Ethernet cable (MDI/MDIX).

Note:

Use twisted-pair cables to connect with the hub or switch.

Step 3 Plug one end of the power adapter to the wall outlet and connect the other end to the **Power** interface of the device.

The following is the application diagram for the connection of the router, PC, splitter and the telephone sets.



The following table describes the interfaces of the device:

Items	Description
○	Power switch for powering on/off the device.
Power	Power interface for connecting to the power adapter.
WLAN	Press the button gently and let go after 2 seconds to enable WLAN function.
Reset	Reset to the factory defaults. To reset to the factory

Items	Description
	defaults, keep the device powered on and push a paper clip in to the hole for over 3 seconds. Then release it, the configuration is reset to the factory defaults.
LAN1/2/3/4	RJ-45 interface for connecting to the Ethernet interface of PC or other Ethernet devices through the Ethernet cable.
DSL	RJ-11 interface for connecting to the ADSL interface or a splitter through the telephone cable.

4 Web Configuration

4.1 Configuring IP Address of Network Card

Configure TCP/IP properties of your network card to **Obtain an IP address automatically from modem**, or set the IP address of the computer with the same network mask of the modem.

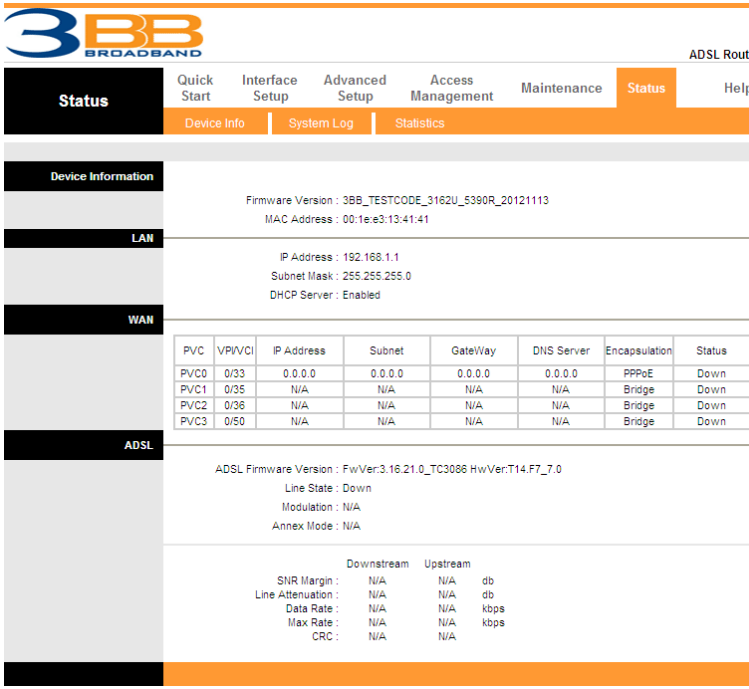
For example, if the IP address of Router is 10.0.0.2/255.255.255.0, you can set the IP address of the computer to **10.0.0.x/255.255.255.0**. The range for x is from 3 to 254.

4.2 Accessing the Router

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

Step 2 In the **Login** page that is displayed, enter the username and password. The username and password of the user are **admin** and **3bb**.

After logging in to the DSL router as a super user, you will see the following interface. You can check, configure and modify all the settings.

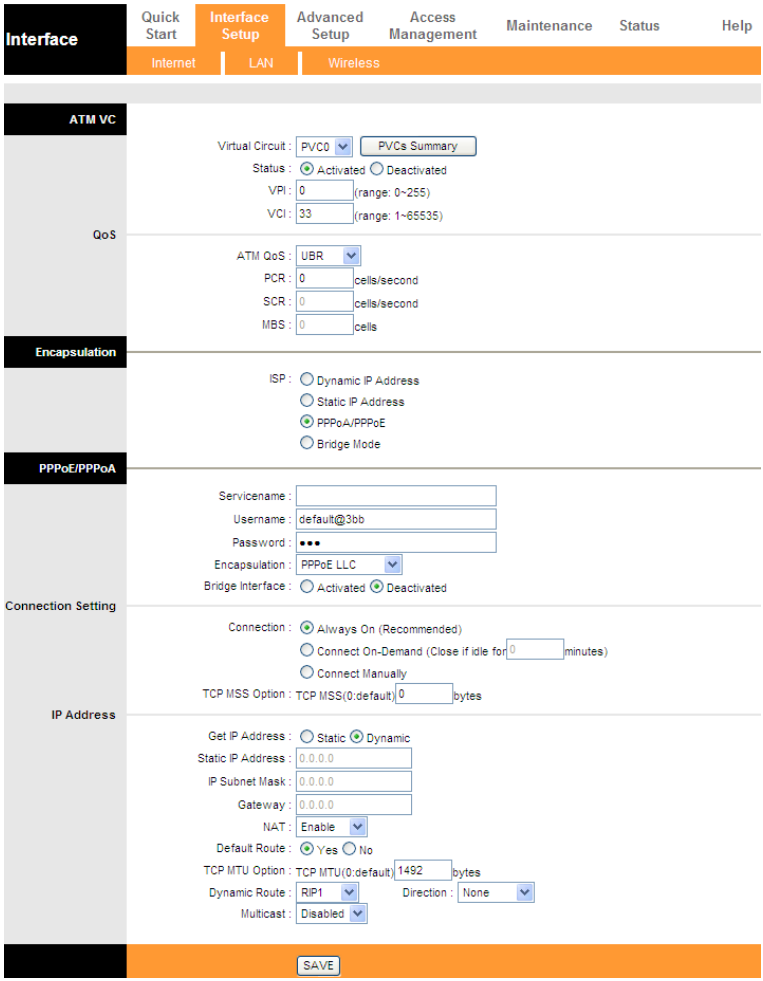


Note:

In the Web configuration page, the settings can be saved permanently.

4.3 Internet Settings

Choose **Interface Setup** > **Internet**. Click **Internet** pane, the page shown in the following figure appears. In this page, you can configure WAN interface of your router.



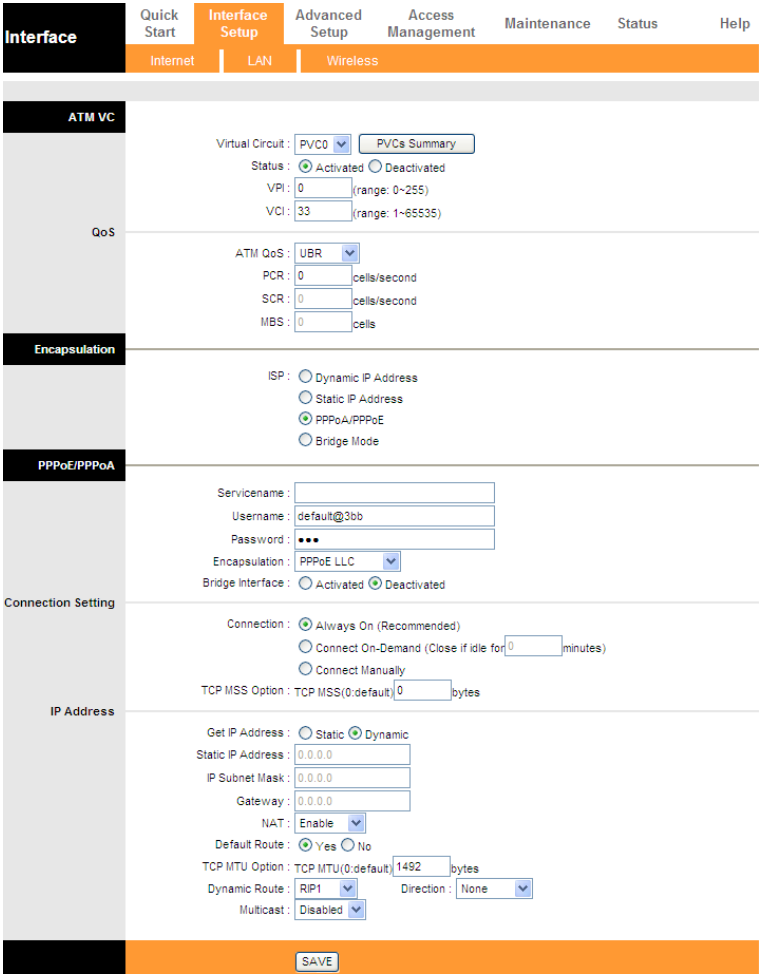
The following table describes the parameters of this page:

Field	Description
Virtual Circuit	You can select a virtual circuit from the

Field	Description
	drop-list. Click PVCs Summary you can view eight PVCs (from PVC0 to PVC7), and only PVC0 status is activated by default.
Status	You can select **Activated** or **Deactivated** for currently selected virtual circuit.
VPI	The virtual path between two points in an ATM network, ranging from **0** to **255**.
VCI	The virtual channel between two points in an ATM network, ranging from **1** to **65535**.
ATM QoS	Select the Quality of Service types for this Virtual Circuit. The ATM QoS types include CBR (Constant Bit Rate), VBR (Variable Bit Rate) and UBR (Unspecified Bit Rate). These QoS types are all controlled by the parameters specified below, including PCR, SCR and MBS. You can choose **CBR**, **UBR**, **rt-VBR** or **nrt-VBR**.
PCR	Peak cell rate (PCR) is the maximum rate at which cells can be transmitted along a connection in the ATM network.
SCR	Sustain cell rate (SCR) is the maximum rate that traffic can pass over PVC without the risk of cell loss.
MBS	Maximum burst size (MBS) is the maximum number of cells that can be transmitted at the PCR.
ISP	You can choose **Dynamic IP Address**, **Static IP Address**, **PPPoA/PPPoE** or **Bridge Mode**.

Select **PPPoA/PPPoE** in the **ISP** encapsulation if your ISP requires you to use a PPPoE connection. This option is typically used for DSL services. Select Dynamic PPPoE to obtain an IP address automatically for your PPPoE

connection. Select Static PPPoE to use a static IP address for your PPPoE connection. Please enter the information accordingly.



The following table describes the parameters of this page:

Field	Description
Username	Enter the username for PPPoE dial-up, which is provided by your ISP.
Password	Enter the password for PPPoE dial-up, which is provided by your ISP.
Encapsulation	You can choose **PPPoE LLC**, **PPPoE VC-Mux**, **PPPoA LLC** or **PPPoA VC-Mux**.
Bridge Interface	You can choose **Activated** or **Deactivated**.
Connection	You can choose **Always On (Recommended)**, **Connect On-Demand** or **Connect Manually**.
TCP MSS Option	You can set a tcp mss value. The range is from **100** to **1452**. The default is **0**.
Get IP Address	You can choose **Static** or **Dynamic**.
Static IP Address	You can enter the ip address for dial-up, which is provided by your ISP.
IP Subnet Mask	Enter the ip subnet mask for dial-up, which is provided by your ISP.
Gateway	You can enter the gateway ip for dial-up, which is provided by your ISP.
NAT	Select it to enable Network Address Translation (NAT) function. If you do not select it and you want to access the Internet normally, you must add a route on the uplink equipment. Otherwise, the access to the Internet fails. Normally, it is enabled.
Default Route	You can enable or disable default route.
TCP MTU Option	You can set a **TCP MTU** value. The range is from 100 to 1500. The default is **0**.
Dynamic Route	You can select **RIP1**, **RIP2-B** or **RIP2-M**.
Direction	You can select **None**, **Both**, **IN Only** or **OUT Only**.
Multicast	**IGMP** (Internet Group Multicast Protocol) is a session-layer protocol used to establish membership in a multicast group. The ADSL Router supports IGMP version 1 (**IGMP-v1**),

Field	Description
	IGMP-v2 and **IGMP-v3** .Select **Disabled** to disable it.

After finishing, click **SAVE** to apply the settings of this PVC.

4.4 Wireless

Choose **Interface Setup** > **Wireless**. The page as shown in the following figure appears.


Interface
Quick Start
Interface Setup
Advanced Setup
Access Management
Maintenance
Status
Help
Internet
LAN
Wireless
Access Point Settings
Access Point : Activated Deactivated
Channel : THAILAND Auto Current Channel: 12
Beacon Interval(ms) : 100 (range: 20~1000)
RTS/CTS Threshold : 2347 (range: 1500~2347)
Fragmentation Threshold (bytes) : 2346 (range: 256~2346, even numbers only)
DTIM(ms) : 1 (range: 1~255)
Wireless Mode : 802.11b+g+n
11n Settings
Channel Bandwidth : 20/40 MHz
Extension Channel : above the control channel
Guard Interval : AUTO
MCS : AUTO
Multiple SSIDs Settings
SSID Index : 1
Broadcast SSID : Yes No
Use WPS : Yes No
SSID : 3bb-wlan
Authentication Type : WEP-64Bits
WEP
WEP 64-bits : For each key, please enter either (1) 5 characters excluding symbols, or (2) 10 characters ranging from 0~9, a, b, c, d, e, f.
WEP 128-bits : For each key, please enter either (1) 13 characters excluding symbols, or (2) 26 characters ranging from 0~9, a, b, c, d, e, f.
Key#1 : 0x1111100000
Key#2 : 0x0000000000
Key#3 : 0x0000000000
Key#4 : 0x0000000000
WDS Settings
WDS Mode : On Off
Mac Address #1 : 00:00:00:00:00:00
Mac Address #2 : 00:00:00:00:00:00
Mac Address #3 : 00:00:00:00:00:00
Mac Address #4 : 00:00:00:00:00:00
Wireless MAC Address Filter
Active : Activated Deactivated
Action : Allow Association the follow Wireless LAN station(s) association.
Mac Address #1 : 00:00:00:00:00:00
Mac Address #2 : 00:00:00:00:00:00
Mac Address #3 : 00:00:00:00:00:00
Mac Address #4 : 00:00:00:00:00:00
Mac Address #5 : 00:00:00:00:00:00
Mac Address #6 : 00:00:00:00:00:00
Mac Address #7 : 00:00:00:00:00:00
Mac Address #8 : 00:00:00:00:00:00
SAVE
CANCEL

The following table describes the parameters of this page:

Field	Description
Access Point	You may choose **Activated** or **Deactivated**.
Channel	Countries apply their own regulations to both the allowable channels, allowed users and maximum power levels within these frequency ranges. The default is **12**.
Beacon Interval	Beacon Interval range is from **20** to **1000**.
RTS/CTS Threshold	RTS/CTS Threshold range is from **1500** to **2347**.
Fragmentation Threshold	Fragmentation Threshold range are only even numbers between **256** and **2346**.
DTIM	DTIM range is from **1** to **255**. A delivery traffic indication message is a kind of traffic indication message (TIM) which informs the clients of the presence of buffered multicast/broadcast data on the access point.
Wireless Mode	Comply with the IEEE 802.11b/g and IEEE802.11n standards. You can select **802.11b**, **802.11g**, **802.11b+g**, **802.11n**, **802.11g+n** or **802.11b+g+n**.
Channel Bandwidth	Supporting 20MHz/40MHz Dual Channel.
Extension Channel	You can set **below the control channel** or **above the control channel**.
Guard Interval	You can set **800 nsec** or **AUTO**.
MCS	You can set an MCS index between **0** and **7**, or select **AUTO**.
SSID index	Supporting only a root SSID to be modified
Broadcast SSID	Select whether the router broadcasts SSID or not. You can select **Yes** or **No**. ● Select **Yes**, and the wireless client searches the router through broadcasting SSID. ● Select **No** to hide SSID, and the wireless client can not search the SSID.
Use WPS	WPS technology allows new customers without a previously-established account to securely

Field	Description
	connect to your network at the Wi-Fi hotspot, create and pay for an account, and access the Internet.
SSID	The service set identification (SSID) is a unique name to identify the router in the wireless LAN. You may modify the SSID.
Authentication Type	You can set a type from **Disabled**, **WEP-64Bits**, **WEP-128Bits**, **WPA-PSK**, **WPA2-PSK**, **WPA-PSK/WPA2-PSK**.
Key#1~4	When **WEP-64Bits** is selected, enter 5 characters or 10 hexadecimal digits ("0-9", "A-F") preceded by “0x” for each Key. When **WEP -128Bits** is selected, enter 13 characters or 26 hexadecimal digits("0-9", "A-F") preceded by “0x” for each Key.
WDS Mode	Choose to enable or disable WDS (Wireless Distribution System).
Mac Address #1~4	Enter the MAC address of the opposite end.
Active	Activate or deactivated Wireless MAC Address Filter.
Action	You can set **Allow** or **Deny** to make Wireless LAN station(s) association. This function can be used to allow or deny access to certain wireless clients based on their MAC Address.
Mac Address #1~8	You can set eight Mac Addresses at most.