

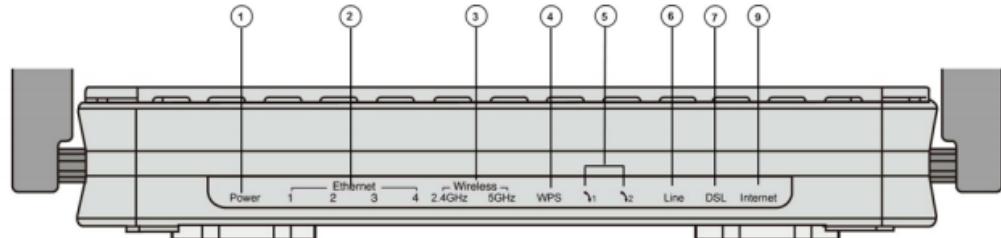
# Billion BiPAC 7800VDOX

## Setup Guide



## MODEM REFERENCE & LIGHT STATUS SHEET

On the front of your modem you will notice a number of lights. The below table explains what each of these lights mean:



LABEL	ACTION	DESCRIPTION
[1] Power	Solid Green	Power is on
	Solid Red	Boot failure
	Off	Power is off
[2] Ethernet (1-4)	Blinking Green	Transmitting data 1000Mbps
	Blinking Orange	Transmitting data 10/100Mbps
	Off	No Ethernet connection
[3] Wireless	Solid Green	Wireless connection enabled
	Blinking Green	Data flow
[4] WPS	Blinking Green	WPS in progress
	Off	WPS disabled
[5] VoIP Ports	Solid Green	Phone is off the hook
[6] PSTN	Solid Green	Phone is off the hook and call is in progress
[7] DSL	Solid Green	DSL signal established
	Blinking Green	Trying to achieve DSL signal
	Off	No DSL signal
[8] Internet	Solid Green	Device has connected to the Internet
	Blinking Green	Data flow
	Solid Red	Authentication failed

# 1. Getting started

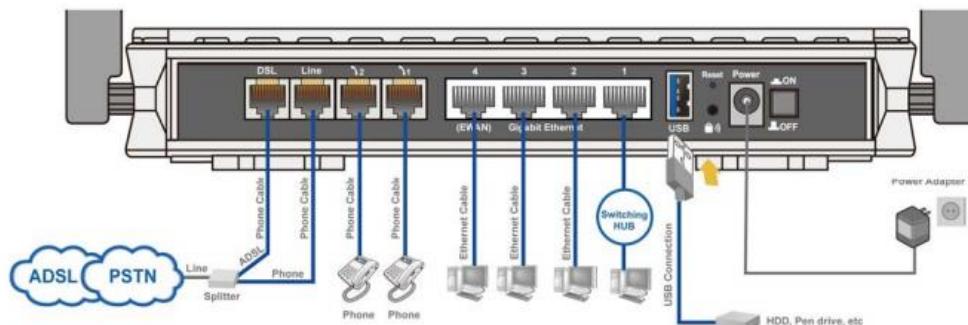
## Requirements

1. Any operating system is compatible, however depending on the version this may affect your internet experience
2. Internet Explorer 6.0 or higher / Firefox 2.0 or higher
3. Ethernet network adapter
4. Wireless enabled computer if you are using the wireless feature

## Connecting the Billion BiPAC 7800VDOX to your computer

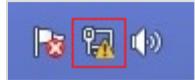
1. Connect the network cable to one of the yellow ports located at the back of the modem; the other end will connect to your computer
2. Connect a telephone cable to the grey port labeled DSL at the back of the modem; the other end to your telephone wall socket
3. Finally, connect the power cable to your modem and the power adapter to your power point. Press the power button to the "ON" state

The diagram below shows how the modem connects physically to your phone line, computer and power point



4. Now that the modem is connected to your computer, phone line and powered on, you need to ensure that the lights on the modem indicate the following:
  - Power ON
  - DSL ON
  - Ethernet (1-4) ON or Blinking

A network icon will appear in your task bar, and you are now ready to setup your Internet connection



Note: If you have already connected via Wi-Fi you will see icon below instead.



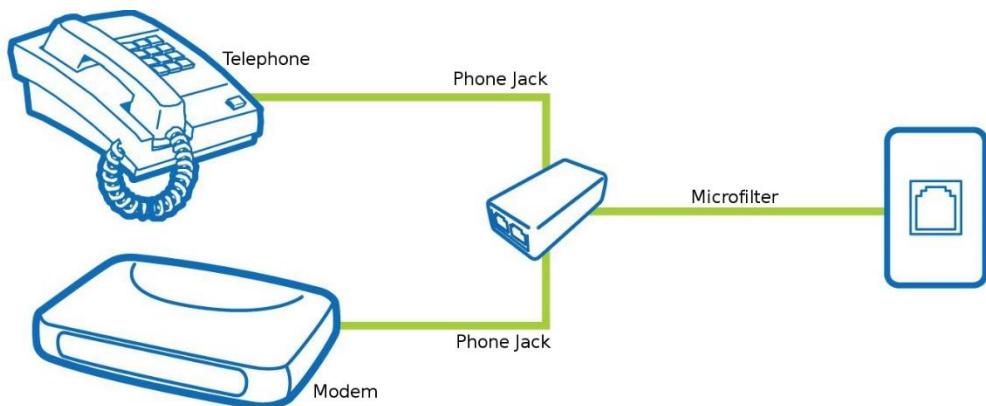
## Connecting filters

This filter is used when you need to plug a telephone and the modem in the same telephone wall socket.

There are three ports on the central filter as follows:

- Line              This port connects to your telephone wall socket
- ADSL              This port connects to the modem's grey port labeled ADSL
- Phone              This port connects to a telephone or other telephony device

In the following diagram, you can see the splitter filter act as a double adapter and filter.



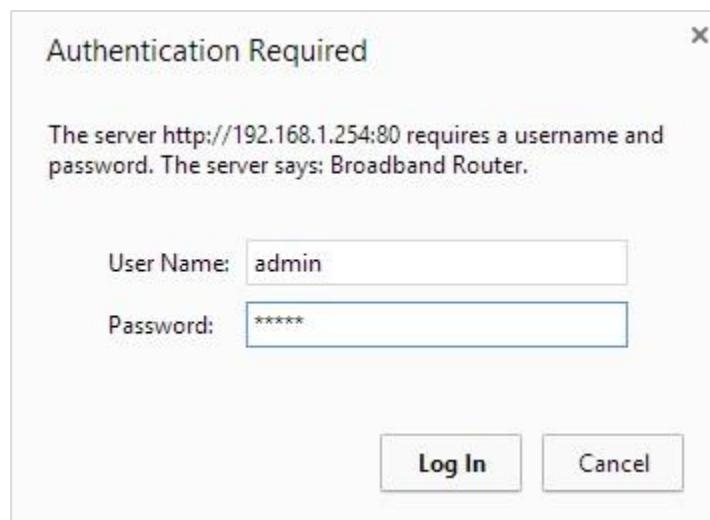
## 2. Configuring your modem

### Logging in to your modem

1. Open your web browser (typically Internet Explorer/Chrome/Firefox/Safari) and in the address bar enter the details:
  - <http://192.168.1.254>

2. You will be asked for a Username and Password. Enter the following login details:

Username      admin  
Password      admin



## Configuring your ADSL modem to access the Internet

- Once you have logged into your modem, the Billion home page will appear as shown below. Click on the Quick Start tab on the left hand side to begin the setup



- Ensure following settings are set:

- Main Port DSL
- Layer2 Interface ATM
- VPI/VCI 8/35
- Type PPPoE
- WAN IP Address Obtain an IP Address Automatically

A screenshot of the 'Quick Start' configuration page. The 'WAN Interface' section is expanded. The 'Select WAN Interface' table contains the following data:

Main Port	DSL (Current Main Port: DSL)
Layer2 Interface	<input checked="" type="radio"/> ATM <input type="radio"/> PTM
VPI/VCI	8/35
Type	PPPoE
Username	username
WAN IP Address	Obtain an IP Address Automatically

At the bottom left is a red-bordered 'Continue' button.

3. Keep the option Manually selected for work type and click Continue

▼ WAN Interface (WAN > Wireless)

ADSL Line Is Ready.

Select One Work  Manually  IPTV

**Continue**

4. Enter the Username and Password provided to you and click on Continue

▼ WAN Interface (WAN > Wireless)

WAN Service

Type	PPP over Ethernet (PPPoE)
VPI / VCI	8 [0-255] / 35 [32-65535]
Username	username
Password	.....
Service Name	
Encapsulation Mode	LLC/SNAP-BRIDGING
Authentication Method	AUTO
IPv4 Address	<input type="checkbox"/> Static
IP Address	
IPv6 for this service	<input checked="" type="checkbox"/> Enable
IPv6 Address	<input type="checkbox"/> Static
IP Address	
MTU	1492

**Continue**

5. Please wait while the device is being configured

6. Once the settings have been successfully configured, you will now get a message to configure your wireless connection

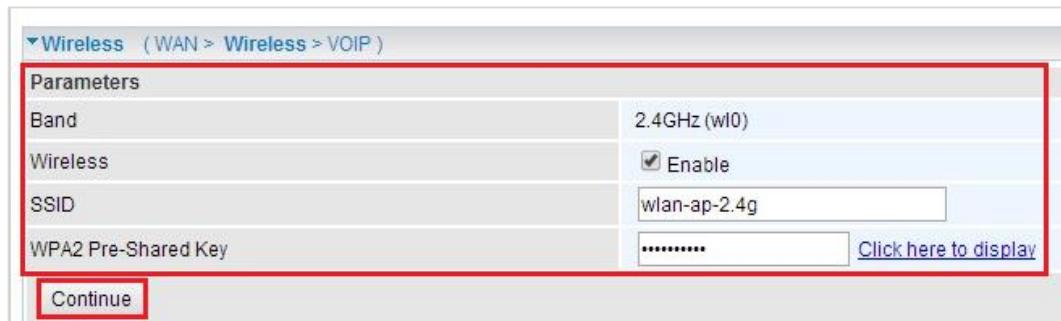
Congratulations !

Your WAN port has been successfully configured.

**Next to Wireless**

7. To configure the Wireless connection, ensure the following settings are entered.

- Wireless check box ticked to Enable
- SSID is named (this will be any name you wish to give to your Wireless Network. By default this is set to wlan-ap-2.4g)
- WPA2 Pre Shared Key: This will ensure that in order to connect to your wireless network a password will be required. Please enter a password between 8 - 63 characters; this can contain letters and numbers.



Wireless (WAN > Wireless > VOIP)

Parameters	
Band	2.4GHz (wlo)
Wireless	<input checked="" type="checkbox"/> Enable
SSID	wlan-ap-2.4g
WPA2 Pre-Shared Key	..... <a href="#">Click here to display</a>

[Continue](#)

8. You will now receive a message that the process is finished. At the bottom of the page you will see an option to Restart the modem, please click on restart.



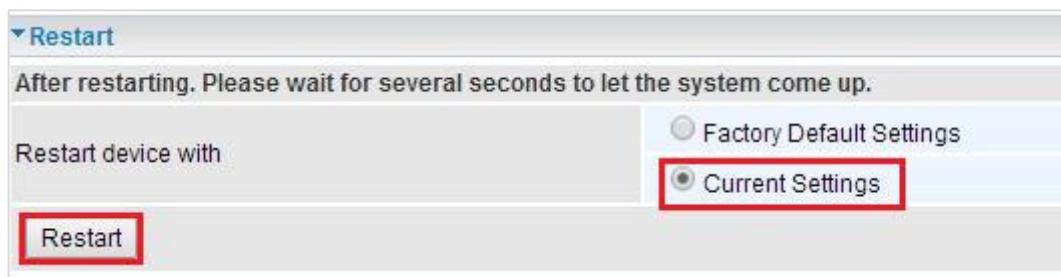
Process finished

Success.

[Restart](#)

Copyright @ Billion Electric Co., Ltd. All rights reserved.

9. Please click on Restart with Current Settings to restart the modem



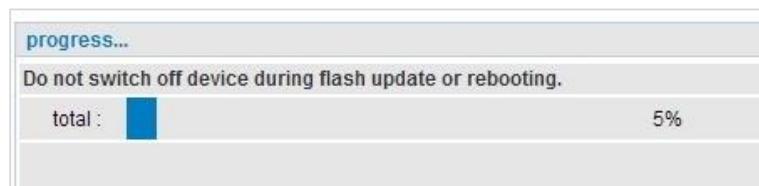
Restart

After restarting. Please wait for several seconds to let the system come up.

Restart device with  Current Settings

[Restart](#)

10. Please wait while the modem is restarting. This can take a minutes so please be patient. The following page will appear when the modem's updating your details.



11. Once connected the Internet, the modem light will turn on and flash to indicate there is internet traffic. Try browsing to a website such as [www.google.com](http://www.google.com) to test your connection

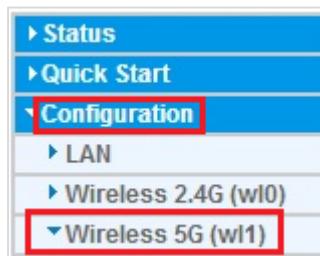
## How to configure the 5GHz wireless connection on your modem

The Billion 7800VDOX has the extra capability to configure a wireless connection in the 5GHz range.

1. Log in to your router by opening your internet browser and entering [192.168.1.254](http://192.168.1.254) in the address bar. Enter the following credentials:

Username admin  
Password admin

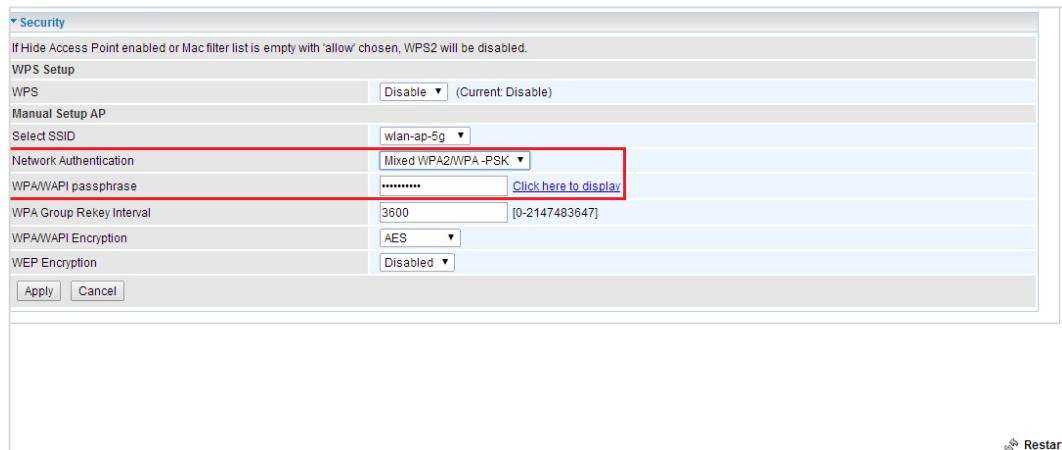
2. On your left hand side click on Configuration, then select Wireless 5G (wl1)



3. Under your basic settings you can either keep the SSID name as default wlan-ap-5g or change it to a name of your choosing. Once this is done, click on Apply

Basic	
Parameters	
Wireless	<input checked="" type="checkbox"/> Enable
Hide SSID	<input type="checkbox"/> Enable
Clients Isolation	<input type="checkbox"/> Enable
Disable WMM Advertise	<input type="checkbox"/> Enable
Wireless Multicast Forwarding (WMF)	<input type="checkbox"/> Enable
SSID	wlan-ap-5g
BSSID	60:03:47:00:CF:78
Country	AUSTRALIA
Max Clients	16 [1-16]

4. Now click on Security on the left hand side. Select the Network Authentication method as Mixed WPA2/WPA-PSK and your passphrase to one of your choosing. Once finished click on Apply



The screenshot shows a configuration interface for a network access point. The 'Security' tab is selected. A note at the top states: 'If Hide Access Point enabled or Mac filter list is empty with 'allow' chosen, WPS2 will be disabled.' The 'WPS' section shows 'Disable' selected. Under 'Select SSID', 'wlan-ap-5g' is chosen. The 'Network Authentication' dropdown is set to 'Mixed WPA2/WPA-PSK', which is highlighted with a red box. The 'WPA/WAPI passphrase' field contains a redacted password and a link 'Click here to display'. The 'WPA Group Rekey Interval' is set to 3600. The 'WPA/WAPI Encryption' and 'WEP Encryption' dropdowns are set to 'AES' and 'Disabled' respectively. At the bottom, there are 'Apply' and 'Cancel' buttons, and a 'Restart' button with a gear icon.

5. Once the settings have been applied click on Restart at the bottom of the page

### 3. Connecting the Billion 7800NXL to your devices using wireless

In the previous section you have configured the wireless connection for your modem.

Please use your Wi-Fi Network Name (SSID) and Pre Shared Key (Password) to connect to any wireless compatible devices you have.

#### **How to connect to your Windows computer**

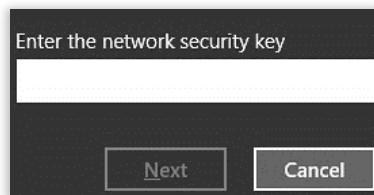
1. In Windows, click on the Network icon located at the bottom right hand corner of your screen as shown below. This will provide you with a list of available wireless networks in your range



2. Look for the default Wi-Fi Network Name (SSID) in your wireless networks list. The default Wi-Fi Network Name (SSID) is wlan-ap-2.4g (or wlan-ap-5g if you have set that up). If, in the previous section you have chosen your own SSID, this name will be shown in the list instead. Once you have selected the right connection, click Connect to continue. You may want to also tick the box to connect automatically, so that you will automatically connect to this Wi-Fi access point when you are within range



3. Enter the Security Key or Pre Shared Key and click OK, Connect, or Next to connect



4. Once connected it will indicate that you are now connected to wlan-ap-2.4g (wlan-ap-5g) or your chosen Wi-Fi Network Name (SSID)



5. Repeat steps 1-3 to add other wireless devices such as laptops, tablets, and smart phones