

# Vigor2760 Series High Speed VDSL2 Router



FOY LER

F- F- F- 74 (2)



### **Dray** Tek

## Vigor2760 Series High Speed VDSL2 Router Quick Start Guide

Version: 1.03

Firmware Version: V3.7.5.1 (For future update, please visit DrayTek web site) Date: August 15, 2014



#### **Copyright Information**

Copyright Informa	ition			
Copyright Declarations	© 2014 All rights reserved. This publication contains information that is protected by copyright. No part may be reproduced, transmitted, transcribed, stored in a retrieval system, or translated into any language without written permission from the copyright holders.			
Trademarks	<ul> <li>The following trademarks are used in this document:</li> <li>Microsoft is a registered trademark of Microsoft Corp.</li> <li>Windows, Windows 95, 98, Me, NT, 2000, XP, Vista and Explorer are trademarks of Microsoft Corp.</li> <li>Apple and Mac OS are registered trademarks of Apple Inc.</li> <li>Other products may be trademarks or registered trademarks of their respective manufacturers.</li> </ul>			
Safety Instruction	s and Approval			
Safety Instructions	<ul> <li>Read the installation guide thoroughly before you set up the router.</li> <li>The router is a complicated electronic unit that may be repaired only be authorized and qualified personnel. Do not try to open or repair the router yourself.</li> <li>Do not place the router in a damp or humid place, e.g. a bathroom.</li> <li>Do not stack the routers.</li> <li>The router should be used in a sheltered area, within a temperature range of +5 to +40 Celsius.</li> <li>Do not expose the router to direct sunlight or other heat sources. The housing and electronic components may be damaged by direct sunlight or heat sources.</li> <li>Do not deploy the cable for LAN connection outdoor to prevent electronic shock hazards.</li> <li>Keep the package out of reach of children.</li> <li>When you want to dispose of the router, please follow local regulations on conservation of the environment.</li> </ul>			
Warranty	We warrant to the original end user (purchaser) that the router will be free from any defects in workmanship or materials for a period of two (2) years from the date of purchase from the dealer. Please keep your purchase receipt in a safe place as it serves as proof of date of purchase. During the warranty period, and upon proof of purchase, should the product have indications of failure due to faulty workmanship and/or materials, we will, at our discretion, repair or replace the defective products or components, without charge for either parts or labor, to whatever extent we deem necessary tore-store the product to proper operating condition. Any replacement will consist of a new or re-manufactured functionally equivalent product of equal value, and will be offered solely at our discretion. This warranty will not apply if the product is modified, misused, tampered with, damaged by an act of God, or subjected to abnormal working conditions. The warranty does not cover the bundled or licensed software of other vendors. Defects which do not significantly affect the usability of the product will not be covered by the warranty. We reserve the right to revise the manual and online documentation and to make changes from time to time in the contents hereof without obligation to notify any person of such revision or changes.			
Be a Registered Owner	Web registration is preferred. You can register your Vigor router via http://www.draytek.com.			
Firmware & Tools Updates	Due to the continuous evolution of DrayTek technology, all routers will be regularly upgraded. Please consult the DrayTek web site for more information on newest firmware, tools and documents.			

http://www.draytek.com

#### **European Community Declarations**

Manufacturer:	DrayTek Corp.
Address:	No. 26, Fu Shing Road, HuKou Township, HsinChu Industrial Park, Hsin-Chu, Taiwan
	303
Product:	Vigor2760 Series Router

DrayTek Corp. declares that Vigor2760 Series of routers are in compliance with the following essential requirements and other relevant provisions of R&TTE Directive 1999/5/EEC.

The product conforms to the requirements of Electro-Magnetic Compatibility (EMC) Directive 2004/108/EC by complying with the requirements set forth in EN55022/Class B and EN55024/Class B.

The product conforms to the requirements of Low Voltage (LVD) Directive 2006/95/EC by complying with the requirements set forth in EN60950-1.

This product is designed for POTS, DSL, 2.4GHz WLAN network throughout the EC region and Switzerland with restrictions in France. Please see the user manual for the applicable networks on your product.

#### **Regulatory Information**

Federal Communication Commission Interference Statement

This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one of the following measures:

- Reorient or relocate the receiving antenna.
- Increase the separation between the equipment and receiver.
- Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
- Consult the dealer or an experienced radio/TV technician for help.

This device complies with Part 15 of the FCC Rules. Operation is subject to the following two conditions:

(1) This device may not cause harmful interference, and

(2) This device may accept any interference received, including interference that may cause undesired operation.

#### **RF Exposure Warning**

This equipment must be installed and operated in accordance with provided instructions and the antenna(s) used for this transmitter must be installed to provide a separation distance of at least 20 cm from all persons and must not be co-located or operating in conjunction with any other antenna or transmitter. End-users and installers must be provided with antenna installation instructions and transmitter operating conditions for satisfying RF exposure compliance.

#### Caution

Any changes or modifications not expressly approved by the grantee of this device could void the user's authority to operate the equipment.

The antenna/transmitter should be kept at least 20 cm away from human body.

DrayTek Vigor2760 series VDSL2/ADSL2+ routers are compliant with 47 C.F.R. Part 68.



More update, please visit www.draytek.com.



#### **Table of Contents**

1.	Introduction	1
	1.1 Panel Explanation	2
	1.1.1 For Vigor2760 1.1.2 For Vigor2760n 1.1.3 For Vigor2760Vn	4
	1.2 Package Content	8
2.	Installing Your Router	9
	2.1 Hardware Installation	9
	2.2 Printer Installation	. 11
3.	Quick Setup	19
	3.1 Accessing Web User Interface	19
	3.2 Basic Configuration – Quick Start Wizard	20
	3.2.1 For WAN1 (ADSL/VDSL2) 3.2.2 For WAN2 (Ethernet) 3.2.3 For WAN3 (USB)	26
	3.3 Wireless Configuration	36
	3.3.1 Basic Wireless LAN Concept 3.3.2 Wireless Wizard	
4.	Trouble Shooting	39
	4.1 Checking If the Hardware Status Is OK or Not	39
	4.2 Checking If the Network Connection Settings on Your Computer Is OK or N	ot
	4.3 Pinging the Router from Your Computer	
	4.4 Checking If the ISP Settings are OK or Not	44
	4.5 Problems for 3G Network Connection	44
	4.6 Backing to Factory Default Setting If Necessary	45
	4.7 Contacting DrayTek	46

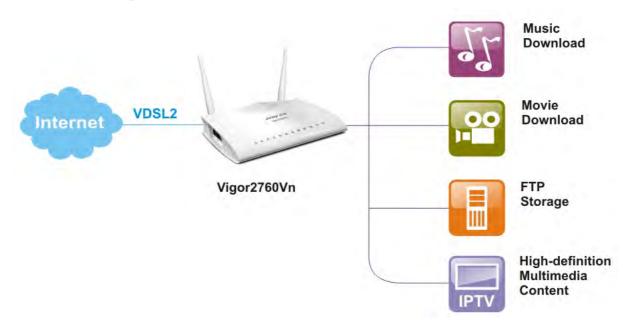
### **Dray** Tek

### 1. Introduction

The Vigor2760 series are the routers with high speed in data transmission through DSL port and LAN ports.

With the development of NGN (Next Generation Network), you may recently hear the news about FTTx deployment in your local area or even have already subscribed the unbundling last mile service (e.g. VDSL2) from local ITSP for FTTx. As adopting FTTx, the main question for end users is whether your legacy router could fully utilize its bandwidth or not.

DrayTek launches Vigor2760 series – High speed router, perfectly complied with VDSL2 environment including Vigor2760, Vigor2760n and Vigor2760Vn for speed-wanted customers. With high throughput performance and secured broadband connectivity provided by Vigor2760 series, you can simultaneously engage these bandwidth-intensive applications, such as high-definition video streaming, online gaming, and Internet telephony / access.



Vigor2760 supports up to 2 VPN tunnels using advanced protocols such as IPSec/PPTP (for remote dial-in only) with AES/3DES for encryption and MD5/SHA-1 for authentication.

Vigor2760 'n' models comply with 802.11n standards. They support WEP/WPA/WPA2 encryption and MAC Address Control.

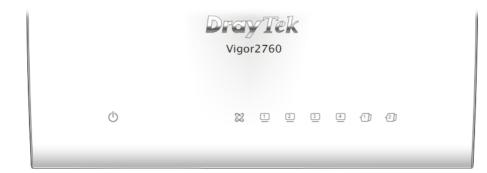
Vigor2760 'V' models provide two analogue phone connectors. It supports multiple SIP registrars with high flexible configuration and call handing options.



In addition, Vigor2760 series supports two USB interfaces for connecting USB printer to share the printer or USB storage device for sharing files and 3G/4G backup services.

### **1.1 Panel Explanation**

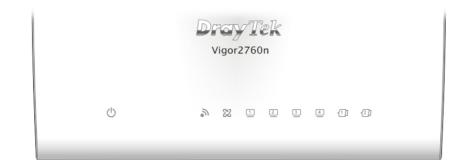
### 1.1.1 For Vigor2760



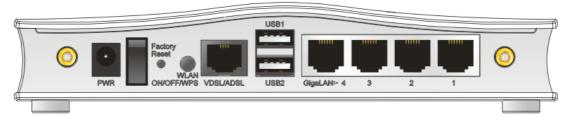
LED	Status	Explanation
(ACT)	Blinking	The router is powered on and running normally.
	Off	The router is powered off.
79.	On	The DSL port is connected.
DSL (Green)	Blinking (Slowly)	The router is ready.
. ,	Blinking (Quickly)	The connection is training.
1 4	On	The port is connected.
LAN1/2/3/4 (Green)	Blinking (Green)	The data is transmitting.
-1] -2]	On	A USB device is connected and active.
USB1/2		

PWR	Factory Reset VDSL/ADSL US82 GigeLAN> 4 3 2 1
Interface	Description
PWR	Connector for a power adapter.
Ι/Ο	Power switch.
Factory Reset	Restore the default settings. Usage: Turn on the router (ACT LED is blinking). Press the hole and keep for more than 5 seconds. When you see the ACT LED begins to blink rapidly than usual, release the button. Then the router will restart with the factory default configuration.
VDSL/ADSL	Connector for accessing the Internet.
USB (1-2)	Connector for USB storage device or printer or 3G backup.
LAN (1-4)	Connectors for local network devices.

### 1.1.2 For Vigor2760n



LED	Status	Explanation
Ċ	Blinking	The router is powered on and running normally.
(ACT)	Off	The router is powered off.
2	On (Green)	The wireless access point is ready.
(Wireless LAN	Blinking (Green)	The data is transmitting via wireless connection.
On/Off/WPS)	Blinking (Orange)	Blinks with one second cycle for two minutes. The WPS function is active.
	Off	The wireless access point is turned off.
20	On	The DSL port is connected.
ZZ DSL (Green)	Blinking (Slowly)	The router is ready.
× ,	Blinking (Quickly)	The router is trying to connect to Internet.
	On	The port is connected.
	Blinking	The data is transmitting.
LAN1/2/3/4		
-(1)] ~ -(2)]	On	A USB device is connected and active.
USB1/2		



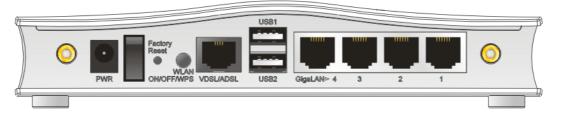
Interface	Description
PWR	Connector for a power adapter.
Ι/Ο	Power switch.
Factory Reset	Restore the default settings. Usage: Turn on the router (ACT LED is blinking). Press the hole and keep for more than 5 seconds. When you see the ACT LED begins to blink rapidly than usual, release the button. Then the router will restart with the factory default configuration.
WLAN ON/OFF/WPS	<ul> <li>WLAN WPS - Press this button for 2 seconds to wait for client device making network connection through WPS. When the LED lights up, the WPS connection will be on.</li> <li>WLAN ON/OFF - Press the button once to enable (WLAN LED on) or disable (WLAN LED off) wireless connection.</li> </ul>
VDSL/ADSL	Connector for accessing the Internet.
USB (1-2)	Connector for USB storage device or printer or 3G/4G backup.
LAN (1-4)	Connectors for local network devices.

### 1.1.3 For Vigor2760Vn

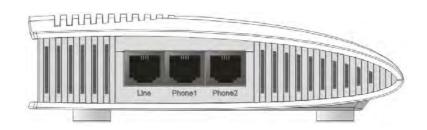
					2	7 760						
0	6	6	C2	°°	22	1	2	3	4	1	2]	

LED	Status	Explanation				
ch	Blinking	The router is powered on and running				
		normally.				
(ACT)	Off	The router is powered off.				
<i>P</i>	On	A PSTN phone call comes (in and out).				
€⇒		However, when the phone call is				
(LINE)		disconnected, the LED will be off for				
		awhile.				
	Off	There is no PSTN phone call.				
66	On	The phone connected to this port is				
∉1 ∉2		off-hook.				
(Phone1/Phone2)	Off	The phone connected to this port is				
		on-hook.				
	Blinking	A phone call comes.				
2	On (Green)	The wireless access point is ready.				
• <sup>11</sup>	Blinking	The data is transmitting via wireless				
(Wireless LAN	(Green)	connection.				
On/Off/WPS)	Blinking	Blinks with one second cycle for two				
	(Orange)	minutes. The WPS function is active.				
	Off	The wireless access point is turned off.				
22	On	The DSL port is connected.				
66	Blinking	The router is ready.				
DSL (Green)	(Slowly)					
	Blinking	The router is trying to connect to				
	(Quickly)	Internet.				
1 4	On	The port is connected.				
	Blinking	The data is transmitting.				
LAN1/2/3/4						
-1]2]	On	A USB device is connected and active.				
USB1/2						



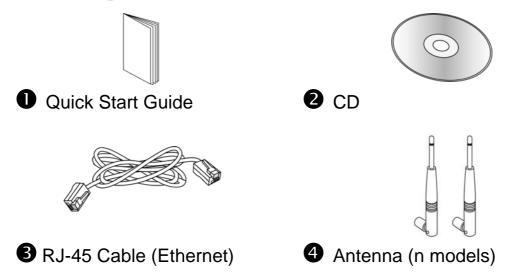


Interface	Description
PWR	Connector for a power adapter.
Ι/Ο	Power switch.
Factory Reset	Restore the default settings. Usage: Turn on the router (ACT LED is blinking). Press the hole and keep for more than 5 seconds. When you see the ACT LED begins to blink rapidly than usual, release the button. Then the router will restart with the factory default configuration.
WLAN ON/OFF/WPS	<ul> <li>WLAN WPS - Press this button for 2 seconds to wait for client device making network connection through WPS. When the LED lights up, the WPS connection will be on.</li> <li>WLAN ON/OFF - Press the button once to enable (WLAN LED on) or disable (WLAN LED off) wireless connection.</li> </ul>
VDSL/ADSL	Connector for accessing the Internet.
USB (1-2)	Connector for USB storage device or printer or 3G/4G backup.
LAN (1-4)	Connectors for local network devices.



Interface	Description
Line	Connector for PSTN life line.
Phone1/Phone2	Connector of analog phone for VoIP communication.

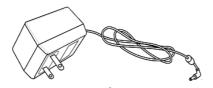
### **1.2 Package Content**



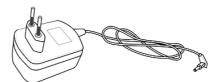
**5** The type of the power adapter depends on the country that the router will be installed. \* The maximum power consumption is *17-23 Watt*.



**UK-type Power Adapter** 



USA/Taiwan-type Power Adapter



EU-type Power Adapter



AU/NZ-type Power Adapter

#### Firmware Updates

Firmware updates for your product ensure that you have the latest set of features, security updates and improvements for your product.

Please note that if your Vigor 2760 product has firmware version 1.x.x or earlier then it can only update to later 1.x.x firmware. If your Vigor 2760 has firmware version 3.7.5 or later ('Delight/DrayOS' hardware) then you can upgrade to any compatible later firmware. You cannot use Delight/DrayOS firmware on original (classic) Vigor 2760 hardware or vice-versa. This manual applies only to DrayOS/Delight hardware/firmware.



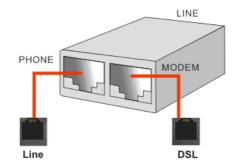
### 2. Installing Your Router

This section will guide you to install the router through hardware connection and configure the router's settings through web browser.

### 2.1 Hardware Installation

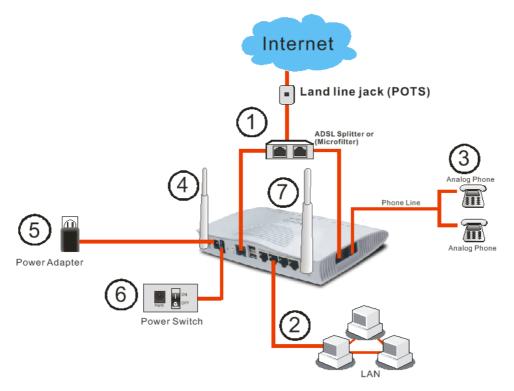
Before starting to configure the router, you have to connect your devices correctly. (For the hardware connection, we take "Vn" model as an example.)

1. Connect the XDSL interface to the external XDSL splitter with an XDSL line cable for all models. For Vigor2760Vn, also connect Line interface to external XDSL splitter.



- 2. Connect one port of 4-port switch to your computer with a RJ-45 cable. This device allows you to connect 4 PCs directly.
- 3. Connect Phone port to a conventional analog telephone (for V model only).
- 4. Connect detachable antennas to the router for Vigor2760 series (for n model only).
- 5. Connect one end of the power cord to the power port of this device. Connect the other end to the wall outlet of electricity.
- 6. Power on the router.
- 7. Check the ACT and DSL, LAN LEDs to assure network connection.

**Dray** Tek

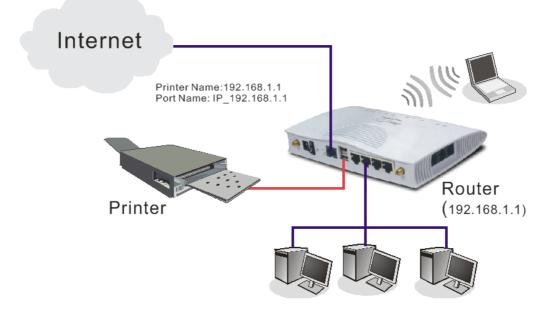


(For the detailed information of LED status, please refer to section 1.1.)



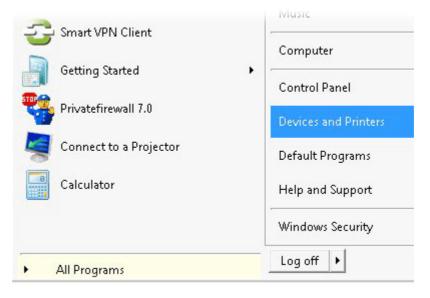
### **2.2 Printer Installation**

You can install a printer onto the router for sharing printing. All the PCs connected this router can print documents via the router. The example provided here is made based on Windows XP/2000. For Windows 98/SE/Vista, please visit www.draytek.com.



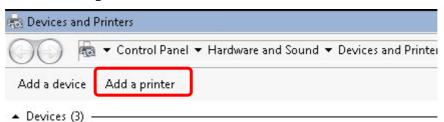
Before using it, please follow the steps below to configure settings for connected computers (or wireless clients).

- 1. Connect the printer with the router through USB/parallel port.
- 2. Open All Programs>>Getting Started>>Devices and Printers.



**Dray** Tek

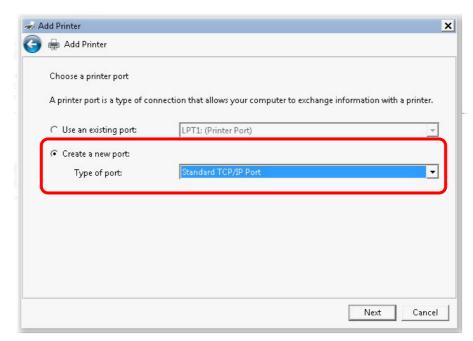
3. Click Add a printer.



4. A dialog will appear. Click **Add a local printer** and click **Next**.

🦂 A	dd Printer	×
0	🖶 Add Printer	
	What type of printer do you want to install?	
	Add a local printer Use this option only if you don't have a USB printer. (Windows automatically installs USB printers when you plug them in.)	
	Add a network, wireless or Bluetooth printer Make sure that your computer is connected to the network, or that your Bluetooth or wireless printer is turned on.	
	Next Cancel	

5. In this dialog, choose **Create a new port.** In the field of **Type of port**, use the drop down list to select **Standard TCP/IP Port**. Then, click **Next**.



6. In the following dialog, type **192.168.1.1** (router's LAN IP) in the field of **Hostname or IP Address** and type **192.168.1.1** as the **Port name**. Then, click **Next**.

n 🖗	dd Printer		×
0	🖶 Add Printer		
	Type a printer hostname or IP	address	
	Device type:	TCP/IP Device	
	Hostname or IP address:	192.168.1.1	
	Port name:	192.168.1.1	
	Query the printer and auto	imatically select the driver to use	
		Next Cancel	

7. Click Standard and choose Generic Network Card.

Add Pr	inter		
	Add Printer		
Add	litional port informatic	n required	
т	he device is not found	on the network. Be sure that:	
	. The device is turned		
	. The network is conn		
	. The device is proper		
		revious page is correct. s not correct click Back to return to the previou	s name. Then correct the
If ar d	you think the address ddress and perform an evice type below. Device Type	revious page is correct. s not correct, click Back to return to the previou other search on the network. If you are sure the eric Network Card	
If ar d	you think the address ddress and perform an evice type below. Device Type ⓒ Standard Gen	s not correct, click Back to return to the previou other search on the network. If you are sure the	
If ar d	you think the address ddress and perform an evice type below. Device Type ⓒ Standard Gen	s not correct, click Back to return to the previou other search on the network. If you are sure the eric Network Card	

**Dray** Tek

8. Now, your system will ask you to choose right name of the printer that you installed onto the router. Such step can make correct driver loaded onto your PC. When you finish the selection, click **Next**.

13	Choose your print	er from the list. Click <sup>v</sup>	Windows Update to see more mor	dels.
SI.	To install the drive	r from an installation	CD. click Have Disk.	
	to motor are and			
	afactare.	- Drinterr		<b>_</b>
Bro			er DCP-116C	
Car			er DCP-117C er DCP-128C	
	/Tek		er DCP-128C er DCP-129C	
Eps	on Xerox		er DCP-129C	-
<b>1</b>	This driver is digitally si	laned.	Windows Update	Have Disk

9. Type a name for the chosen printer. Click **Next.** 

差 Add Printer		
🌀 🖶 Add Printer		
Type a printer name		
Printer name: Brother DCP-116C		
This printer will be installed with the Brother DCP-116C driver.		
	Next	Cancel

10. Choose **Do not share this printer** and click **Next**.

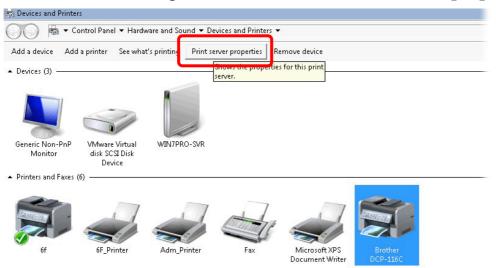
🖶 Add Printer				
Printer Sharing				
If you want to share this printer, you must provide a share name. You can use the suggested name or type a new one. The share name will be visible to other network users.				
Do not share this private the second seco	inter			
C Share this printer so	that others on your ne	etwork can find and	use it	
Share name:				
Location:				
Comment:				

11. Then, in the following dialog, click **Finish**.

🧩 Ac	dd Printer
0	👼 Add Printer
	You've successfully added Brother DCP-116C
	☐ Set as the default printer
	To check if your printer is working properly, or to see troubleshooting information for the printer, print a test page.
	Print a test page
	Finish Cancel

**Dray** Tek

12. The new printer has been added and displayed under **Printers and Faxes**. Click the new printer icon and click **Printer server properties**.



13. Edit the property of the new printer you have added by clicking **Configure Port**.

	n this se					
Port		Description	Print	er		<u> </u>
TS002		Inactive TS Port				
TS001		Inactive TS Port				
TPVM		ThinPrint Print Port f				
10000		Standard TCP/IP Por				
		Standard TCP/IP Por		_Printer		
		Standard TCD/ID Don	70) - 70 - 70	rinter		
192.16		Standard TCP/IP Por		her DCP-1		
Xh2h0	irt:	Local Port	Micr	osoft XPS	Document W	/riter 👻
	Add Po	+   D	elete Port		Configure	Dout
	Auu Po	n D	elete Fort		Configure	Forun

14. Select "LPR" on Protocol, type **p1** (number 1) as **Queue Name**. Then click **OK**. Next please refer to the red rectangle for choosing the correct protocol and LPR name.

Ē					×
	Configure Standard TCP/IP F Port Settings	Port Moniti	Jr		
Ł					
[	Port Name:		192.168.1.1		
	Printer Name or IP Addre	ESS:	192.168.1.1		
	Protocol				
	C Raw			€ LPR	
	Raw Settings				
	Port Number:	9100			
	LPR Settings				
-	Queue Name:	рЦ			
	🔲 LPR Byte Counting	Enabled			
	SNMP Status Enabl	ed —			
	Community Name:	public			
_	SNMP Device Index:	1			

The printer can be used for printing now. Most of the printers with different manufacturers are compatible with vigor router.

Note 1: Some printers with the fax/scanning or other additional functions are not supported. If you do not know whether your printer is supported or not, please visit www.draytek.com to find out the printer list. Open **Support** >FAQ/Application Notes; find out the link of USB>>Printer Server and click it.

<b>Dray</b> Tek	MyVigor Register E-newsletter DrayTek.HQ Media Center Global (English)	Y Log in
About DrayTek Proc	Jucts Supports Solutions Multi-Media Demo Contact Us Q Search	
FAQ / Application	You are here: Home > Supports > FAQ / Application Notes > Printer Server	ລ
USB Printer Server 3G/4G Internet		
Connection		
AQ / Application	You are here: Home > Supports > FAQ / Application Notes > Printer Server	ຸລ
Basic	Printer Server	
Firmware Upgrade	What types of printers are compatible with Vigor router?	2012/01/12
IPv6	How do I configure LPR printing on Windows7?	2012/08/20
Triple-Play	How do I configure LPR printing on My Windows Vista ?	2009/01/20
Dual WAN	How do Loopfiguro LPD printing on Linux boxes 2	

**Note 2:** Vigor router supports printing request from computers via LAN ports but not DSL port.



### 3. Quick Setup

To access Internet, please finish basic configuration after completing the hardware installation.

### 3.1 Accessing Web User Interface

- 1. Make sure your PC connects to the router correctly.
  - **Notice:** You may either simply set up your computer to get IP dynamically from the router or set up the IP address of the computer to be the same subnet as **the default IP address of Vigor router 192.168.1.1**. For the detailed information, please refer to the later section Trouble Shooting of the guide.
- 2. Open a web browser on your PC and type http://192.168.1.1.
- 3. The following window will be open to ask for username and password. Please type "admin/admin" on Username/Password and click **Login** for opening the web user interface.

Dray Tek Vigor 2760 Series
Login
Username admin Password •••••
Login
Delight Copyright © 2013 DrayTek Corp. All Rights Reserved.



**Notice:** If you fail to access to the web configuration, please go to "Trouble Shooting" for detecting and solving your problem.

The home page will change slightly in accordance with the router model you have.



### **3.2 Basic Configuration – Quick Start Wizard**

The **Quick Start Wizard** is designed for you to easily set up your router for Internet access.





Open Wizards>>Quick Start Wizard to get the following page.

Quick Start Wizard

Quick Start Wizard

Please enter an alpha-hum	ric string as your <b>Password</b> (Max 23 characters).	
Old Password	••••	
New Password	••••	
Confirm Password	••••	

On the next page as shown below, please select the WAN interface that you use. If DSL interface is used, please choose WAN1; if Ethernet interface is used, please choose WAN2; if 3G/4G USB modem is used, please choose WAN3. Then click **Next** for next step.

WAN Interface:	WAN1 💌
Display Name:	
Physical Mode:	ADSL / VDSL2
Physical Type:	Auto negotiation 🖂
VLAN Tag insertion	Disable 💌

WAN1, WAN2 and WAN3 will bring up different configuration page. Refer to the following for detailed information.

### 3.2.1 For WAN1 (ADSL/VDSL2)

WAN1 is specified for ADSL or VDSL2 connection.

#### Quick Start Wizard

WAN Interface:	WAN1 💌
Display Name:	
Physical Mode:	ADSL / VDSL2
Physical Type:	Auto negotiation 🖂
VLAN Tag insertion	Enable 💌
Tag value	0 (0~4095)
Priority	0 (0~7)

Click **Next** to go to the following page. You have to select the appropriate Internet access type **according to the information from your ISP**. For example, you should select PPPoE mode if the ISP provides you PPPoE interface. In addition, the field of **For ADSL Only** will be available only when ADSL is detected. Then click **Next** for next step.

Quick	Start	Wizard

WAN 1	
Protocol	MPoA / Static or Dynamic IP 💌
For ADSL Only:	
Encapsulation	1483 Bridged IP LLC
VPI	0 Auto detect
νсі	88
Fixed IP	⊙ Yes ○ No(Dynamic IP)
IP Address	192.16.20.86
Subnet Mask	255.255.255.0
Default Gateway	192.16.20.1
Primary DNS	8.8.4.4
Second DNS	168.95.192.1



#### **PPPoE/PPPoA**

1. Choose **WAN1** as WAN Interface and click the **Next** button; you will get the following page.

Quick Start Wizard

WAN 1	
Protocol	PPPoE / PPPoA
For ADSL Only:	
Encapsulation	PPPoE LLC/SNAP
VPI	0 Auto detect
VCI	88
Fixed IP	💿 Yes 🛛 No(Dynamic IP)
IP Address	192.16.20.86
Subnet Mask	255.255.255.0
Default Gateway	192.16.20.1
Default Gateway Primary DNS	8.8.4.4

2. After finished the above settings, simply click Next.

#### Quick Start Wizard

WAN 1		
Service Name (Optional)	2760	
Username	84005755@hinet.net	
Password		
Confirm Password		

3. Please manually enter the Username/Password provided by your ISP. Then click **Next** for viewing summary of such connection.

```
Please confirm your settings:
      WAN Interface:
                                    WAN1
      Physical Mode:
                                   ADSL / VDSL2
      VPI:
                                   8
     VCI:
                                   35
                                   PPPoE / LLC
      Protocol / Encapsulation:
     Fixed IP:
                                   No
     Primary DNS:
                                   8.8.8.8
      Secondary DNS:
                                   8.8.4.4
                                           Sack Next > Finish Cancel
```

- 4. Click **Finish.** A page of **Quick Start Wizard Setup OK!!!** will appear. Then, the system status of this protocol will be shown.
- 5. Now, you can enjoy surfing on the Internet.

#### **MPoA / Static or Dynamic IP**

1. Choose **WAN1** as WAN Interface and click the **Next** button; you will get the following page.

Quick	Start	Wizard	

Quick Start Wizard

WAN 1	
Protocol	MPoA / Static or Dynamic IP 💌
For ADSL Only:	
Encapsulation	1483 Bridged IP LLC
VPI	0 Auto detect
VCI	88
Fixed IP	💿 Yes 🛛 No(Dynamic IP)
IP Address	192.16.20.86
Subnet Mask	255.255.255.0
Default Gateway	192.16.20.1
Primary DNS	8.8.4.4
Second DNS	168.95.192.1

2. Please type in the IP address/mask/gateway information originally provided by your ISP. Then click **Next** for viewing summary of such connection.

WAN Interface:	WAN1
Physical Mode:	ADSL / VDSL2
VPI:	8
VCI:	35
Protocol / Encapsulation:	1483 Bridge LLC
Fixed IP:	No
Primary DNS:	8.8.8.8
Secondary DNS:	8.8.4.4

- 3. Click **Finish.** A page of **Quick Start Wizard Setup OK!!!** will appear. Then, the system status of this protocol will be shown.
- 4. Now, you can enjoy surfing on the Internet.

#### 3.2.2 For WAN2 (Ethernet)

WAN2 is dedicated to physical mode in Ethernet. If you choose WAN2, please specify physical type. Then, click **Next**.

Quick Start Wizard

Interface	
WAN Interface:	WAN2 V
Display Name:	
Physical Mode:	Ethernet
Physical Type:	Auto negotiation 💌
VLAN Tag insertion	Disable 💌
	<pre>&lt; Back Next &gt; Finish Can</pre>

On the next page as shown below, please select the appropriate Internet access type according to the information from your ISP. For example, you should select PPPoE mode if the ISP provides you PPPoE interface. Then click **Next** for next step.

#### PPPoE

1. Choose **WAN2** as the WAN Interface and click the **Next** button. The following page will be open for you to specify Internet Access Type.

Quick Start Wizard

Connect to Internet	
WAN 2	
Select one of the following Internet Access	s types provided by your ISP.
PPPoE	
O PPTP	
O Static IP	
O DHCP	
	Sack Next > Finish Cancel

2. Click **PPPoE** as the Internet Access Type. Then click **Next** to continue.

Quick Start Wizard

Quick Start Wizard

WAN 2	
Enter the user name and pase	sword provided by your ISP.
Service Name (Optional)	2760
Username	84005657@hinet.net
Password	
Confirm Password	

3. Please manually enter the Username/Password provided by your ISP. Click **Next** for viewing summary of such connection.

WAN Interface: Physical Mode: Physical Type: Internet Access:	WAN2 Ethernet Auto negotiation PPPoE
Physical Type: Internet Access:	Auto negotiation
Internet Access:	-
	PPPoE
settings and restart the Vigor i	; if necessary. Otherwise, click <b>Finish</b> to save the current router.

- 4. Click **Finish.** A page of **Quick Start Wizard Setup OK!!!** will appear. Then, the system status of this protocol will be shown.
- 5. Now, you can enjoy surfing on the Internet.



#### PPTP

1. Choose **WAN2** as the WAN Interface and click the **Next** button. The following page will be open for you to specify Internet Access Type.

WAN 2						
Select one of	the following In		ess types pro	ivided by you	r ISP.	
		PPPoE				
	۲	PPTP				
	$\circ$	Static IP				
	0	DHCP				

2. Click **PPTP** as the Internet Access Type. Then click **Next** to continue.

Quick Start Wizard

Quick Start Wizard

WAN 2 Enter the username, nas	sword, WAN IP configuration	n and PPTP server IP provided
by your ISP.		
Username	5477aec	
Password	•••••	
Confirm Password		
WAN IP Configuration		
💿 Obtain an IP addres	s automatically	
🔵 Specify an IP addres	·s	
IP Address	10.39.0.13	
Subnet Mask	255.255.255.0	
Gateway	10.39.0.1	
Primary DNS	8.8.8.8	
Second DNS	8.8.4.4	
PPTP Server		

3. Please type in the IP address/mask/gateway information originally provided by your ISP. Then click **Next** for viewing summary of such connection.

confirm your settings:	
WAN Interface:	WAN2
Physical Mode:	Ethernet
Physical Type:	Auto negotiation
Internet Access:	РРТР
settings and restart the V	nges if necessary. Otherwise, click <b>Finish</b> to save the current igor router.

- 4. Click **Finish.** A page of **Quick Start Wizard Setup OK!!!** will appear. Then, the system status of this protocol will be shown.
- 5. Now, you can enjoy surfing on the Internet.

#### **Static IP**

Quick Start Wizard

1. Choose **WAN2** as the WAN Interface and click the **Next** button. The following page will be open for you to specify Internet Access Type.

WAN 2				
Select one of the	e following Internet A	ccess types provid	led by your ISP.	
	🔘 PPPoE			
	🔘 PPTP			
	💿 Static IF	P		
	🔘 DHCP			

2. Click **Static IP** as the Internet Access type. Simply click **Next** to continue.

3. Please type in the IP address information originally provided by your ISP. Then click **Next** for next step.

uick Start Wizard	
ease confirm your settings:	
WAN Interface:	WAN2
Physical Mode:	Ethernet
Physical Type:	Auto negotiation
Internet Access:	Static IP
Click <b>Back</b> to modify char settings and restart the V	nges if necessary. Otherwise, click <b>Finish</b> to save the current igor router.
	<pre>&lt; Back Next &gt; Finish Cancel</pre>

- 4. Click **Finish.** A page of **Quick Start Wizard Setup OK!!!** will appear. Then, the system status of this protocol will be shown.
- 5. Now, you can enjoy surfing on the Internet.

**Dray** Tek

#### DHCP

Quick Start Wizard

1. Choose **WAN2** as WAN Interface and click the **Next** button. The following page will be open for you to specify Internet Access Type.

WAN 2				
Select one of the f	ollowing Internet Acc	ess types provi:	ded by your ISP.	
	🔘 PPPoE			
	🔘 РРТР			
	🔘 Static IP			
	OHCP			
	· · · · ·			

2. Click **DHCP** as the Internet Access type. Simply click **Next** to continue. <sub>Quick Start Wizard</sub>

DHCP Client Mode	
WAN 2	
enter it in.	uires you to enter a specific host name or specific MAC address, please
Host Name	(optional)
MAC	00 - 1D - AA - A8 - B7 - 6A (optional)
	< Back Next > Finish Cancel

3. After finished the settings above, click **Next** for viewing summary of such connection.

ck Start Wizard	
ase confirm your settings:	
WAN Interface:	WAN2
Physical Mode:	Ethernet
Physical Type:	Auto negotiation
Internet Access:	DHCP
Click <b>Back</b> to modify chan settings and restart the V	nges if necessary. Otherwise, click <b>Finish</b> to save the current igor router.
	<pre>&lt; Back Next &gt; Finish Can</pre>

- 4. Click **Finish.** A page of **Quick Start Wizard Setup OK!!!** will appear. Then, the system status of this protocol will be shown.
- 5. Now, you can enjoy surfing on the Internet.

**Dray** Tek

### 3.2.3 For WAN3 (USB)

Quick Start Wizard

WAN3 is dedicated to physical mode in USB. If WAN3 is selected, it is not necessary for you to type any information for such connection.

1. Choose **WAN3** as WAN Interface.

Interface	
WAN Interface:	WAN3 💌
Display Name:	
Physical Mode:	USB

2. Then, click **Next** for getting the following page. Choose 3G/4G USB Modem (PPP mode) or 4G USB Modem (DHCP mode) according to the modem you use.

WAN 3	
Internet Access :	3G/4G USB Modem(PPP mode) 🔽
	3G/4G USB Modem(PPP mode)
3G/4G USB Modem(PPP mode)	4G USB Modem(DHCP mode)
SIM PIN code	
Modem Initial String	AT&FE0V1X1&D2&C1S0=0
_	(Default:AT&FE0V1X1&D2&C1S0=0)
APN Name	Apply

3. Then, click **Next** for viewing summary of such connection.

#### Quick Start Wizard

ase confirm your settings:	
WAN Interface: Physical Mode:	WAN3 USB
Internet Access:	DHCP
Click <b>Back</b> to modify char settings and restart the V	nges if necessary. Otherwise, click <b>Finish</b> to save the current Vigor router.
	<pre>&lt; Back Next &gt; Finish Canc</pre>

- 4. Click **Finish.** A page of **Quick Start Wizard Setup OK!!!** will appear. Then, the system status of this protocol will be shown.
- 5. Now, you can enjoy surfing on the Internet.



### **3.3 Wireless Configuration**

圁

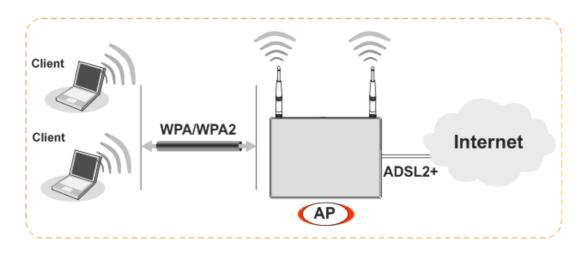
For the user of Viogr2760, please skip this section.

For operating Viogr2760n/Viogr2760Vn well, it is necessary for you to set the wireless LAN settings for using wireless function. Please read the following section carefully for configuring the settings for this router.

(The default value of Frequency Domain was set by factory depends on the reselling region.)

### 3.3.1 Basic Wireless LAN Concept

In an Infrastructure Mode of wireless network, Vigor wireless router plays a role as an **Access Point (AP)** connecting to lots of wireless clients or Stations (STA). All the STAs (clients) will share the same Internet connection with other wired hosts via Vigor wireless router.



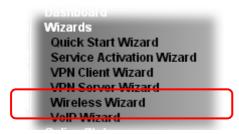


### 3.3.2 Wireless Wizard

The wireless wizard allows you to configure settings specified for a host AP (for home use or internal use for a company) and specified for a guest AP (for any wireless clients accessing into Internet).

Follow the steps listed below:

1. Open Wireless Wizard.



2. The screen of wireless wizard will be shown as follows. This page will be used for internal users in a company or your home.

Mode:	Mixed(11b+11g+11n) 💌
Channel:	Channel 6, 2437MHz 🛛 💌
Password:	*****

3. After typing the required information, click **Next**. The settings in the page limit the wireless station (guest) accessing into Internet but not being allowed to share the LAN network and VPN connection.

🔿 Enable	⊙ Disable
Name:	DrayTek_Guest
Password:	****
Rate Control	: Enable Upload30000 kbps Download30000 kbps
communicate AP will be co	ifigured guest AP will not be able to access VPN connections or with wireless devices connecting to the router's other APs. The guest nfigured to be not able to connect to LAN interfaces also. However if the irations were already made, then the guest AP will be able to connect to

- 4. After typing the required information, click Next.
- 5. The following page will display the configuration summary for wireless setting.

Wireless Wizard



# 4. Trouble Shooting

This section will guide you to solve abnormal situations if you cannot access into the Internet after installing the router and finishing the web configuration. Please follow sections below to check your basic installation status stage by stage.

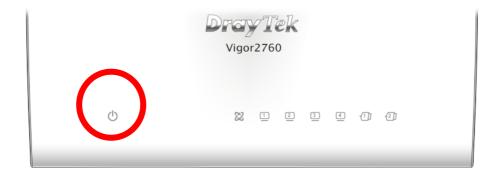
- > Checking if the hardware status is OK or not.
- Checking if the network connection settings on your computer are OK or not.
- Pinging the router from your computer.
- > Checking if the ISP settings are OK or not.
- Backing to factory default setting if necessary.

If all above stages are done and the router still cannot run normally, it is the time for you to contact your dealer for advanced help.

### 4.1 Checking If the Hardware Status Is OK or Not

Follow the steps below to verify the hardware status.

- 1. Check the power line and LAN cable connections. Refer to "2.1 Hardware Installation" for details.
- 2. Turn on the router. Make sure the **ACT LED** blink once per second and the correspondent **LAN LED** is bright.



3. If not, it means that there is something wrong with the hardware status. Simply back to **"2.1 Hardware Installation"** to execute the hardware installation again. And then, try again.



# 4.2 Checking If the Network Connection Settings on Your Computer Is OK or Not

Sometimes the link failure occurs due to the wrong network connection settings. After trying the above section, if the link is stilled failed, please do the steps listed below to make sure the network connection settings is OK.

### **For Windows**

Ē.

The example is based on Windows XP. As to the examples for other operation systems, please refer to the similar steps or find support notes in **www.draytek.com**.

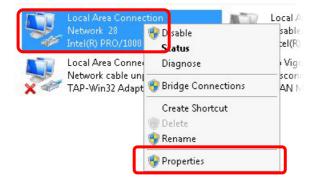
1. Open All Programs>>Getting Started>>Control Panel. Click Network and Sharing Center.

🙀 Fonts	
🕌 Java	
🚆 Network and Sharing Center	
Personalization	
P Recovery	

2. In the following window, click Change adapter settings.



3. Icons of network connection will be shown on the window. Right-click on Local Area Connection and click on Properties.





4. Select Internet Protocol Version 4 (TCP/IP) and then click Properties.

📮 Local Area Connection Properties 👘	×
Networking Sharing	
Connect using:	
🔮 Intel(R) PRO/1000 MT Network Co	nnection
	Configure
This connection uses the following items:	
🗹 🧏 Client for Microsoft Networks	
🗹 🖳 Privacyware Filter Driver	
🗹 🖳 QoS Packet Scheduler	
🔲 🗆 📇 File and Printer Sharing for Micros	soft Networks
Internet Protocol Version 6 (TCP/	(IPvc)
🗹 🔺 Internet Protocol Version 4 (TCP)	/IP∨4)
Link-Layer Topology Discovery iv	tapper 1/0 Driver
🔲 🗖 📥 Link-Layer Topology Discovery R	lesponder
Install Uninstall	Properties
- Description	

5. Select **Obtain an IP address automatically** and **Obtain DNS server address automatically**. Finally, click **OK**.

neral Alternate Configuration					
ou can get IP settings assigned his capability. Otherwise, you ne or the appropriate IP settings.					
or the appropriate IP settings.					
Obtain an IP address autom	natically				
Use the following IP addres	s:				_
IP address:			9		
Subnet mask:			2		
Default gateway:	Γ		÷.		
Obtain DNS server address	automati	ally			
-C Use the following DNS serve	er addres:	ses:			
Preferred DNS server:		- 24	а. Г	7	
Alternate DNS server:		2	2		
🔽 Validate settings upon exit				Adv	anced

**Dray** Tek

### For Mac OS

- 1. Double click on the current used Mac OS on the desktop.
- 2. Open the **Application** folder and get into **Network**.
- 3. On the **Network** screen, select **Using DHCP** from the drop down list of Configure IPv4.

	Network	
how All Displays		
now All 🕴 Displays	s Sound Network Startup Disk	
	Location: Automatic	
	Show: Built-in Ethernet	
	TCP/IP PPPoE AppleTalk Proxies Ethernet	
Configure	IPv4: Using DHCP	
IP Add	ress: 192.168.1.10 Renew D	HCP Lease
Subnet M	lask: 255.255.255.0 DHCP Client ID:	
Ro	uter: 192.168.1.1 (If require	d)
DNS Ser	vers:	(Optional)
Search Dom	ains:	(Optional)
IPv6 Add	ress: fe80:0000:0000:0000:020a:95ff:fe8d:72e4	
	Configure IPv6	(?)



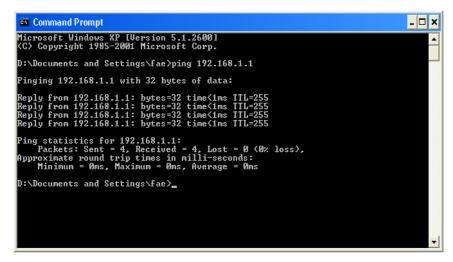
### **4.3 Pinging the Router from Your Computer**

The default gateway IP address of the router is 192.168.1.1. For some reason, you might need to use "ping" command to check the link status of the router. **The most important thing is that the computer will receive a reply from 192.168.1.1.** If not, please check the IP address of your computer. We suggest you setting the network connection as **get IP automatically**. (Please refer to the section 4.2)

Please follow the steps below to ping the router correctly.

#### **For Windows**

- 1. Open the **Command** Prompt window (from **Start menu> Run**).
- 2. Type **command** (for Windows 95/98/ME) or **cmd** (for Windows NT/ 2000/XP/Vista/7). The DOS command dialog will appear.



- 3. Type **ping 192.168.1.1** and press [Enter]. If the link is OK, the line of "**Reply from 192.168.1.1:bytes=32 time<1ms TTL=255**" will appear.
- 4. If the line does not appear, please check the IP address setting of your computer.

### For Mac OS (Terminal)

- 1. Double click on the current used Mac OS on the desktop.
- 2. Open the **Application** folder and get into **Utilities**.
- 3. Double click **Terminal**. The Terminal window will appear.
- 4. Type **ping 192.168.1.1** and press [Enter]. If the link is OK, the line of **"64 bytes from 192.168.1.1: icmp\_seq=0 ttl=255 time=xxxx ms**" will appear.



000	Terminal - bash - 80x24	
64 bytes from 192,168 64 bytes from 192,168 64 bytes from 192,168 64 bytes from 192,168	ng 192.168.1.1 .168.1.1): 56 data bytes .1.1: icmp_seq=0 ttl=255 time=0.755 ms .1.1: icmp_seq=1 ttl=255 time=0.697 ms .1.1: icmp_seq=2 ttl=255 time=0.716 ms .1.1: icmp_seq=3 ttl=255 time=0.731 ms	3
AC 192.168.1.1 ping 5 packets transmitted	.1.1: icmp_seq=4 ttl=255 time=0.72 ms statistics , 5 packets received, 0% packet loss x = 0.697/0.723/0.755 ms	

# 4.4 Checking If the ISP Settings are OK or Not

OpenWAN>>Internet and check whether the ISP settings are set correctly.

ashboard	Internet	Access				
izards	Index	Display Name	Physical Mode	Access Mode		
nline Status	WAN1		ADSL / VDSL2	None	*	Details Page
AN eneral Setup	WAN2		Ethernet	Static or Dynamic IP	*	Details Page IPv6
nternet Access Iulti-PVCs	WAN3		USB	None	~	Details Page

# 4.5 Problems for 3G Network Connection

When you have trouble in using 3G network transmission, please check the following:

### Check if USB LED lights on or off

You have to wait about 15 seconds after inserting 3G USB Modem into your Vigor2760. Later, the USB LED will light on which means the installation of USB Modem is successful. If the USB LED does not light on, please remove and reinsert the modem again. If it still fails, restart Vigor2760.

### USB LED lights on but the network connection does not work

Check the PIN Code of SIM card is disabled or not. Please use the utility of 3G USB Modem to disable PIN code and try again. If it still fails, it might be the compliance problem of system. Please open DrayTek Syslog Tool to capture the connection information (WAN Log) and send the page (similar to the following graphic) to the service center of DrayTek.



<b>Dray</b> 1	ek		Syslog Utility
····		Refresh	V () VAN Information TX Rate RX Rate V () VAN Information TX Packets RX Packets VAN IP Gateway IP
	ccess Connection	11101	
Show Syslog List		🔘 Show Tra	affic Graph Pause
System Time	Router Time	Host	Message
2013-08-27 15:11:09	Aug 27 07:10:53	Vigor-router	statistic: Session Usage: 123 (5 min average)
2013-08-27 15:11:09	Aug 27 07:10:53	Vigor-router	statistic: WAN1: Tx 81 Kbps, Rx 12 Kbps (5 min average)
2013-08-27 15:10:07	Aug 27 07:09:51	Vigor-router	
2013-08-27 15:10:06	Aug 27 07:09:51	Vigor-router	
2013-08-27 15:10:06	Aug 27 07:09:51	Vigor-router	
2013-08-27 15:10:06	Aug 27 07:09:51	Vigor-router	
2013-08-27 15:10:06	Aug 27 07:09:51	Vigor-router	
2013-08-27 15:10:06	Aug 27 07:09:51	Vigor-router	
2013-08-27 15:10:06	Aug 27 07:09:51	Vigor-router	
2013-08-27 15:10:06	Aug 27 07:09:51	Vigor-router	
2013-08-27 15:10:06	Aug 27 07:09:51	Vigor-router	
2013-08-27 15:10:06	Aug 27 07:09:51	Vigor-router	
2013-08-27 15:10:06	Aug 27 07:09:51	Vigor-router	
2013-08-27 15:10:06	Aug 27 07:09:51	Vigor-router	
2013-08-27 15:10:06	Aug 27 07:09:51	Vigor-router	
2013-08-27 15:10:06	Aug 27 07:09:51	Vigor-router	[USB]usb_set_configuration: configuration=1
2013-08-27 15:10:06	Aug 27 07:09:51	Vigor-router	[USB]Usb Device Connected at Port 0

### Transmission Rate is not fast enough

Please connect your Notebook with 3G USB Modem to test the connection speed to verify if the problem is caused by Vigor2760. In addition, please refer to the manual of 3G USB Modem for LED Status to make sure if the modem connects to Internet via HSDPA mode. If you want to use the modem indoors, please put it on the place near the window to obtain better signal receiving.

# 4.6 Backing to Factory Default Setting If Necessary

Sometimes, a wrong connection can be improved by returning to the default settings. Try to reset the router by software or hardware.



**Warning:** After pressing **factory default setting**, you will loose all settings you did before. Make sure you have recorded all useful settings before you pressing.

#### Software Reset

You can reset the router to factory default via Web page.



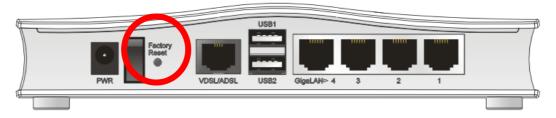
Open **System Maintenance**>> **Reboot System**. The following screen will appear. Choose **Using factory default configuration** and click **OK**. After few seconds, the router will return all the settings to the factory settings.

Reboot System	
	Do you want to reboot your router ?
	<ul> <li>Using current configuration</li> <li>Using factory default configuration</li> </ul>
Auto Reboot Ti	Reboot Now
	Index(1-15) in <u>Schedule</u> Setup:,,,,,,
L	OK Cancel

#### **Hardware Reset**

System Maintenance >> Reboot System

While the router is running (ACT LED blinking), press the **Factory Reset** button and hold for more than 5 seconds. When you see the **ACT** LED blinks rapidly, please release the button. Then, the router will restart with the default configuration.



After restore the factory default setting, you can configure the settings for the router again to fit your personal request.

# 4.7 Contacting DrayTek

If the router still cannot work correctly after trying many efforts, please contact DrayTek for further help right away. For any questions, please feel free to send e-mail to support@draytek.com.

