# **Dray** Tek

# Vigor2866 Series

**G.Fast Security Firewall** 



# Vigor2866 Series G.Fast Security Firewall Quick Start Guide (for RF Model)

Version: 1.0\_(03)

Firmware Version: V4.2.2

(For future update, please visit DrayTek web site)

Date: March 12, 2021

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# Safety Instructions and Approval

### Safety Instructions

- Read the installation guide thoroughly before you set up the router.
- 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.
- Do not place the router in a damp or humid place, e.g. a bathroom.
- Do not stack the routers.
- The router should be used in a sheltered area, within a temperature range of +5 to +40 Celsius.
- 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.
- Do not deploy the cable for LAN connection outdoor to prevent electronic shock hazards.
- Keep the package out of reach of children.
- When you want to dispose of the router, please follow local regulations on conservation of the environment.

### 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.



# **Declaration of Conformity**

Hereby, DrayTek Corporation declares that the radio equipment type Vigor2866 is in compliance with Directive 2014/53/EU.

The full text of the EU Declaration of Conformity is available at the following internet address:

http://www.draytek.com.tw/ftp/Vigor2866/Document/CE/

Manufacturer: DrayTek Corp.

Address: No. 26, Fu Shing Road, HuKou Township, HsinChu Industrial Park, Hsin-Chu County,

Taiwan 303

Product: Vigor2866 Series

Frequency Information for Europe area:

2.4G WLAN	2412MHz - 2472 MHz, max. TX power: 19.98dBm	*1	
5G WLAN	5160MHz - 5340 MHz, max. TX power: 22 dBm	*2	
	5480MHz - 5720 MHz, max. TX power: 27 dBm		

(\*1: for 2.4G WLAN model; \*2: for 5G WLAN model)

This product is designed for DSL and 2.4GHz /5GHz WLAN network throughout the EC region.



# **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.

**User Manual Information Agreement** 

This equipment complies with Part 68 of the FCC rules. Located on the equipment is a label that contains, among other information, the ACTA registration number and ringer equivalence number (REN.) If requested, this information must be provided to the telephone company.

The REN is used to determine the quantity of devices which may be connected to the telephone line. Excessive REN's on the telephone line may result in the devices not ringing in response to an incoming call. In most, but not all areas, the sum of the REN's should not exceed five (5.0). To be certain of the number of devices that may be connected to the line, as determined by the total REN's contact the telephone company to determine the maximum REN for the calling area.

This equipment cannot be used on the telephone company-provided coin service. Connection to Party Line Service is subject to State Tariffs.

If this equipment causes harm to the telephone network, the telephone company will notify you in advance that temporary discontinuance of service may be required. If advance notice isn't practical, the telephone company will notify the customer as soon as possible. Also, you will be advised of your right the file a complaint with the FCC if you believe it is necessary.

The telephone company may make changes in its facilities, equipment, operations, or procedures that could affect the operation of the equipment. If this happens, the telephone company will provide advance notice in order for you to make the necessary modifications in order to maintain uninterrupted service.

If trouble is experienced with this equipment, please contact:

Company Name: ABP International Inc.

Address: 13988 Diplomat Drive Suite 180 Dallas TX75234

TEL: 1-972-831-1600

FAX:

If the trouble is causing harm to the telephone network, the telephone company may request you to remove the equipment from the network until the problem is resolved.

This equipment uses the following USOC jacks: RJ11

It is recommended that the customer install an AC surge arrester in the AC outlet to which this device is connected. This is to avoid damaging the equipment caused by local lightening strikes and other electrical surges.

	Company name	ABP International Inc.		
USA Local	Address	13988 Diplomat Drive Suite 180 Dallas TX 75234		
Representative	ZIP Code	75234	E-mail	rmesser@abptech.com
	Contact Person	Mr. Robert Messer	Tel.	19728311600

### Caution:

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

Any changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate this equipment.

This transmitter must not be co-located or operating in conjunction with any other antenna or transmitter.

Radiation Exposure Statement: This equipment complies with FCC radiation exposure limits set forth for an uncontrolled environment. This equipment should be installed and operated with minimum distance 20cm between the radiator & your body.

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

# **External Power Supply ErP Information**

		1	2	3	4	5	6	7	8	9
Α	Manufacturer	CWT	CWT	CWT	CWT	CWT	APD	APD	APD	APD
В	Address	No. 222, Sec.	No. 222, Sec.	No. 222, Sec.	No. 222, Sec.	No. 222, Sec.	No.5, Lane 83,	No.5, Lane 83,	No.5, Lane 83,	
			2, Nankan Rd.,	2, Nankan Rd.,		2, Nankan Rd.,	Lung-Sou St.,	Lung-Sou St.,	Lung-Sou St.,	Lung-Sou St.,
		Lujhu	Lujhu	Lujhu	Lujhu	Lujhu	Taoyuan City	Taoyuan City	Taoyuan City	Taoyuan City
		Township,	Township,	Township,	Township,	Township,	330, Taiwan	330, Taiwan	330, Taiwan	330, Taiwan
		Taoyuan	Taoyuan	Taoyuan	Taoyuan	Taoyuan				
		County 338,	County 338,	County 338,	County 338,	County 338,				
		Taiwan	Taiwan	Taiwan	Taiwan	Taiwan				
C	Model identifier	2ABB012F UK	2ABB018F UK	2ABL024F UK	2ABL030F UK	2ABN036F UK	WA-12M12FG	WB-18D12FG	WA-24Q12FG	WA-36A12FG
		2ABB012F EU	2ABB018F EU	2ABL024F EU	2ABL030F EU	2ABN036F EU	WA-12M12FK	WB-18D12FK	WA-24Q12FK	WA-36A12FK
D	Input voltage	100~240V	100~240V	100~240V	100~240V	100~240V	100~240V	100~240V	100~240V	100~240V
E	Input AC frequency	50/60Hz	50/60Hz	50/60Hz	50/60Hz	50/60Hz	50/60Hz	50/60Hz	50/60Hz	50/60Hz
	Output voltage DC	12.0V	12.0V	12.0V	12.0V	12.0V	12.0V	12.0V	12.0V	12.0V
F	Output current	1.0A	1.5A	2.0A	2.5A	3.0A	1.0A	1.5A	2.0A	3.0A
G	Output power	12.0W	18.0W	24.0W	30.0W	36.0W	12.0W	18.0W	24.0W	36.0W
Н	Average active	84.9%	86.2%	87.6%	87.8%	89.8%	83.7%	85.4%	88.6%	88.2%
	efficiency									
T	Efficiency at low load	73.6%	78.0%	81.3%	83.3%	83.7%	74.5%	80.5%	86.4%	85.4%
	10%									
J	No-load power	0.07W	0.07W	0.07W	0.07W	0.07W	0.07W	0.10W	0.07W	0.10W
	consumption									

External power supply (Power Adapter) information. For more update, please visit www.draytek.com.



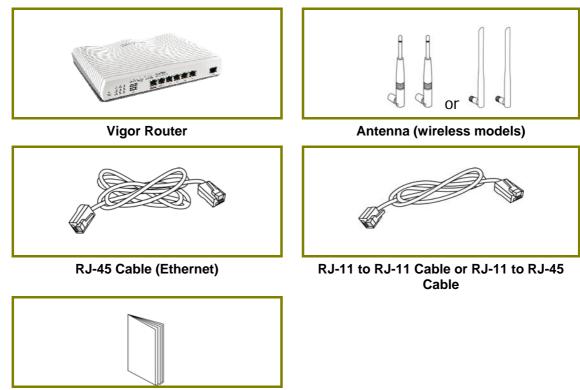
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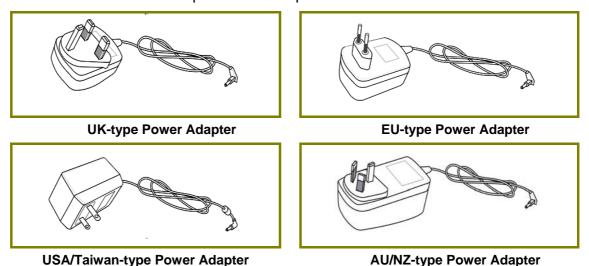
# 1. Package Content

**Quick Start Guide** 

Take a look at the package content. If there is anything missed or damaged, please contact DrayTek or dealer immediately. Besides, the content is subject to the real package.

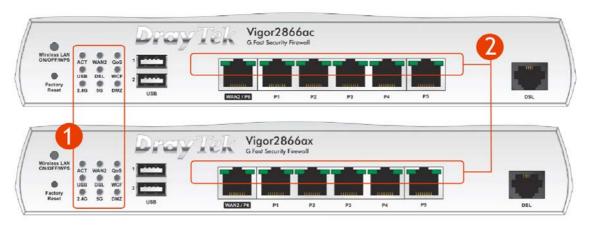


The type of the power adapter depends on the country that the router will be installed. \* The maximum power consumption is *28 Watt*.



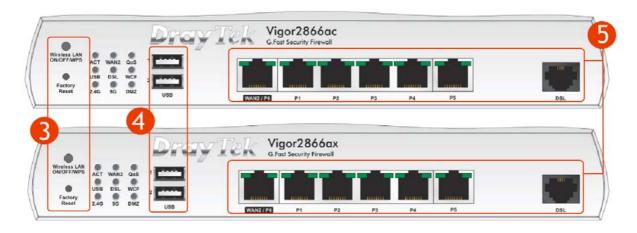
# 2. Panel Explanation

# 2.1 Vigor2866ac / Vigor2866 ax



No.	LED	Status	Explanation
	ACT	Off	The router is powered off.
	ACT	Blinking	The router is powered on and running normally.
		On	Internet connection is ready.
	WAN2	Off	Internet connection is not ready.
		Blinking	The data is transmitting.
	QoS	On	The QoS function is active.
	203	Off	The QoS function is inactive.
		On	USB device is connected and ready for use.
	USB	Off	No USB device is connected.
(1)		Blinking	The data is transmitting.
	DSL	On	The router is ready to access Internet through DSL link.
	DSL	Blinking	Slowly: The DSL connection is ready.  Quickly: The connection is training.
	WCF	On	The Web Content Filter is active. (It is enabled from Firewall >> General Setup).
		Off	WCF is disabled.
		On	2.4G/5G: Wireless access point with bandwidth of 2.4GHz/5GHz is ready.
			WLAN: Wireless access point is ready.
		Off	Wireless function is disabled.
	2.4G/5G	Blinking	It will blink slowly while wireless traffic goes through.  ACT and WLAN LEDs blink quickly and simultaneously when WPS is working, and will return to normal condition after two minutes. (You need to setup WPS within 2 minutes.)
		On	The DMZ function is enabled.
	DMZ	Off	The DMZ function is disabled.
		Blinking	The data is transmitting.

	WAN2 / P6		
		On	The port is connected.
	Left LED	Off	The port is disconnected.
		Blinking	The data is transmitting.
(2)	Right LED	On	The port is connected with 1000Mbps.
		Off	The port is connected with 10/100Mbps.
	LAN P1-P5		
		On	The port is connected.
	Left LED	Off	The port is disconnected.
		Blinking	The data is transmitting.
	Dight LED	On	The port is connected with 1000Mbps.
	Right LED	Off	The port is connected with 10/100Mbps

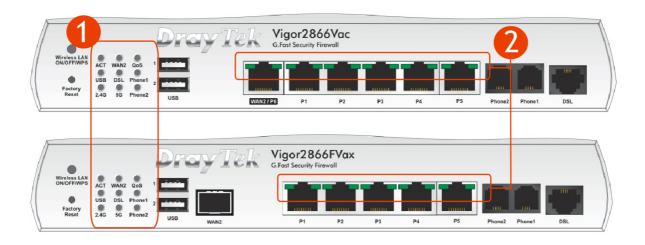




No.	Interface	Description
(3)	Wireless LAN ON/OFF/WPS	<ul> <li>Wireless band will be switched /changed according to the button pressed and released. For example,</li> <li>2.4G (On) and 5G (On) - in default.</li> <li>2.4G (Off) and 5G (On) - pressed and released the button once.</li> <li>2.4G (On) and 5G (Off) - pressed and released the button twice.</li> <li>2.4G (Off) and 5G (Off) - pressed and released the button three times.</li> <li>When WPS function is enabled by web user interface, press this button for more than 2 seconds to wait for client's device making network connection through WPS.</li> </ul>
	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.
(4)	USB1~2 / USB	Connecter for a USB device (for 3G/4G USB Modem or printer or thermometer).
(5)	WAN2 / P6	Connecter for local network devices or modem for accessing Internet. The port "WAN2 / P6" is switchable. It can be used for LAN connection or WAN connection according to the settings configured in WUI.
	LAN P1-P5	Connecters for local network devices.

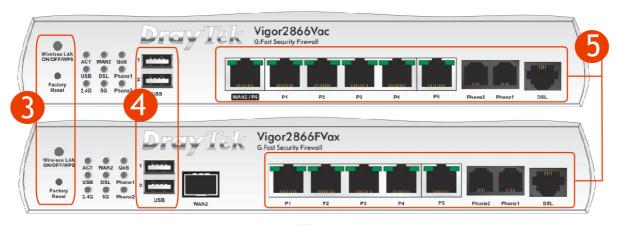
	DSL	Connecter for accessing the Internet.
(6)	WLAN	Connecter for installing WLAN antennas. (For ac model)
(7)	PWR	Connecter for a power adapter.
(7)	ON/OFF	Power Switch.

# 2.2 Vigor2866Vac/Vigor2866FVax



No.	LED	Status	Explanation
	ACT	Off	The router is powered off.
	ACT	Blinking	The router is powered on and running normally.
		On	Internet connection is ready.
	WAN2	Off	Internet connection is not ready.
		Blinking	The data is transmitting.
	QoS	On	The QoS function is active.
	203	Off	The QoS function is inactive.
		On	USB device is connected and ready for use.
	USB	Off	No USB device is connected.
		Blinking	The data is transmitting.
	DSL	On	The router is ready to access Internet through DSL link.
(1)		Blinking	Slowly: The DSL connection is ready.  Quickly: The connection is training.
		On	The phone connected to this port is off-hook.
	Phone1/2	Off	The phone connected to this port is on-hook.
		Blinking	A phone call comes.
	2.4G/5G	On	2.4G/5G: Wireless access point with
			bandwidth of 2.4GHz/5GHz is ready.
		0.55	WLAN: Wireless access point is ready.
		Off	Wireless function is disabled.
		Blinking	It will blink slowly while wireless traffic goes through.
			ACT and WLAN LEDs blink quickly and
			simultaneously when WPS is working, and will
			return to normal condition after two minutes.
			(You need to setup WPS within 2 minutes.)

WAN2 / P6		
	On	The port is connected.
Left LED	Off	The port is disconnected.
	Blinking	The data is transmitting.
D: 1 . 1 ED	On	The port is connected with 1000Mbps.
Right LED	Off	The port is connected with 10/100Mbps
LAN P1-P5		
	On	The port is connected.
Left LED	Off	The port is disconnected.
	Blinking	The data is transmitting.
Dight LED	On	The port is connected with 1000Mbps.
Right LED	Off	The port is connected with 10/100Mbps





No.	Interface	Description
(3)	Wireless LAN ON/OFF/WPS	<ul> <li>Wireless band will be switched /changed according to the button pressed and released. For example,</li> <li>2.4G (On) and 5G (On) - in default.</li> <li>2.4G (Off) and 5G (On) - pressed and released the button once.</li> <li>2.4G (On) and 5G (Off) - pressed and released the button twice.</li> <li>2.4G (Off) and 5G (Off) - pressed and released the button three times.</li> <li>When WPS function is enabled by web user interface, press this button for more than 2 seconds to wait for client's device making network connection through WPS.</li> </ul>
	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.
(4)	USB	Connecter for a USB device (for 3G/4G USB Modem or printer or thermometer).
(5)	WAN2 / P6	Connecter for local network devices or modem for accessing Internet.  It is a switchable port. It can be used for LAN connection or WAN connection according to the settings configured in WUI.
	LAN P1-P5	Connecters for local network devices.
	DSL	Connecter for accessing the Internet.
(6)	WLAN	Connecter for installing WLAN antennas.
(7)	PWR	Connecter for a power adapter.
(7)	ON/OFF	Power Switch.

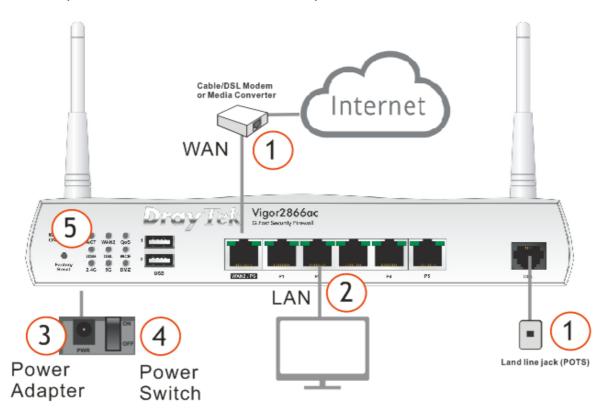
# 3. Hardware Installation

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

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

# 3.1 Network Connection

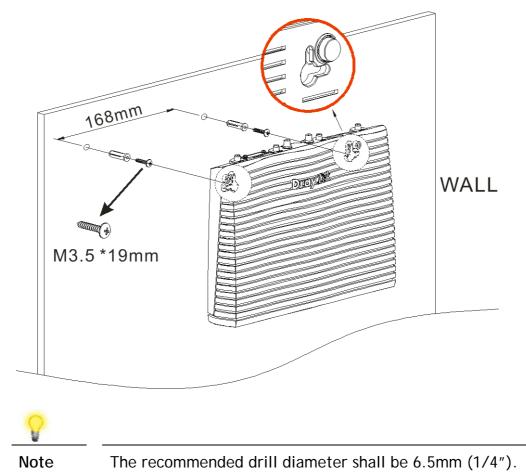
- Connect the DSL interface to the land line jack with a DSL line cable, <u>or</u>
   Connect the cable Modem/DSL Modem/Media Converter to the WAN port of router with Ethernet cable (RJ-45).
- 2. Connect one end of an Ethernet cable (RJ-45) to one of the LAN ports of the router and the other end of the cable (RJ-45) into the Ethernet port on your computer.
- 3. Connect one end of the power adapter to the router's power port on the rear panel, and the other side into a wall outlet.
- 4. Power on the device by pressing down the power switch on the rear panel.
- 5. The system starts to initiate. After completing the system test, the ACT LED will light up and start blinking. (For the detailed information of LED status, please refer to section 2. Panel Explanation)



# 3.2 Wall-Mounted Installation

Vigor router has keyhole type mounting slots on the underside.

- 1. Drill two holes on the wall. The distance between the holes shall be 168mm.
- 2. Fit screws into the wall using the appropriate type of wall plug.



3. When you finished about procedure, the router has been mounted on the wall firmly.

# 4. Software Configuration

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

### 4.1 Quick Start Wizard for Network Connection

The Quick Start Wizard is designed for you to easily set up your router for Internet access. You can directly access the Quick Start Wizard via Web User Interface. Make sure your PC connects to the router correctly.



Note

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 - Trouble Shooting of the user's guide.

Open a web browser on your PC and type http://192.168.1.1. A pop-up window will open to ask for username and password. Please enter "admin/admin" as the Username/Password and click Login.

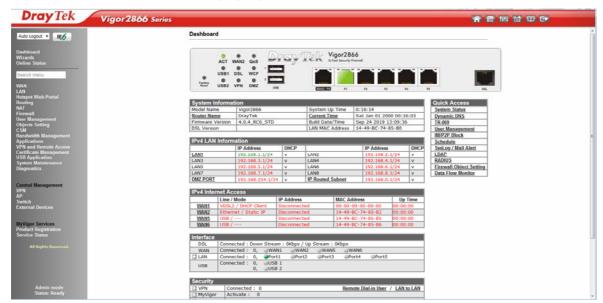




Note

If you fail to access to the web configuration, please go to "Trouble Shooting" on User's Guide for detecting and solving your problem.

Now, the Main Screen will pop up. Click Wizards>>Quick Start Wizard.

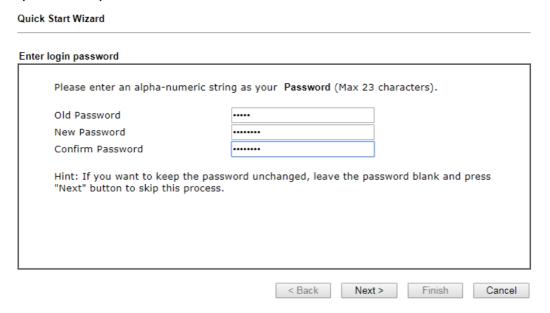




Note

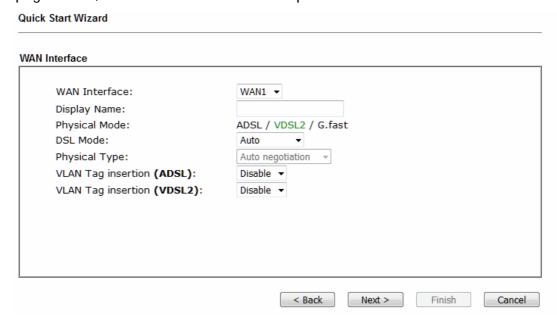
The home page will change slightly in accordance with the router you have. Here we take Vigor2866ac as an example.

If your router can be under an environment with high speed NAT, the configuration provide here can help you to deploy and use the router quickly. The first screen of **Quick Start Wizard** is entering login password. After typing the password, please click **Next**.

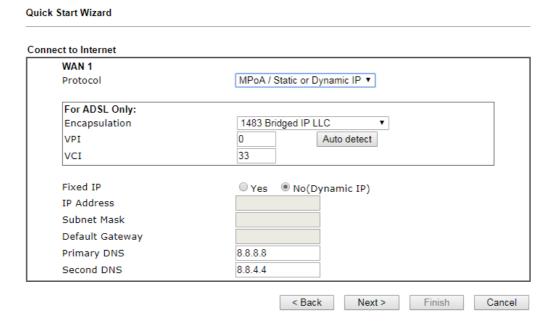


On the next page as shown below, please select the WAN interface that you use. If DSL interface is used, please choose WAN1; if Ethernet interface is used, please choose WAN2; if wireless 2.4G/5G connection is used, please choose WAN3 or WAN4; if 3G USB modem is used, please choose WAN5 or WAN6. Then

click **Next** for next step. Each WAN interface will bring up specific configuration page. Here, we take **WAN1** as an example.



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 PPPoA mode if the ISP provides you PPPoA interface. In addition, the field of **For ADSL Only** will be available only when ADSL is detected. Then click **Next** for next step.

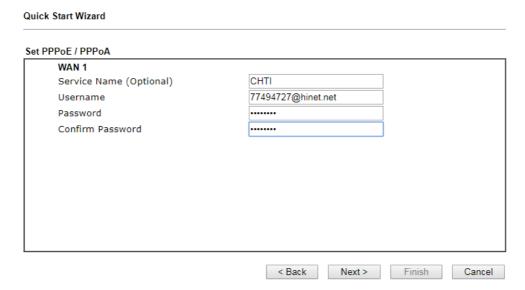


# PPPoE/PPPoA

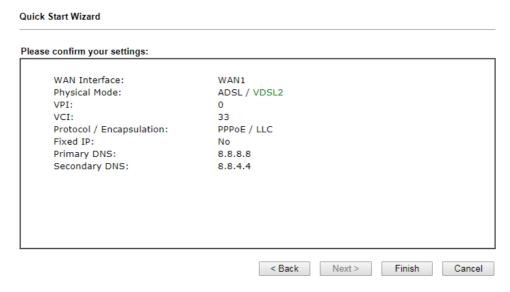
 Choose WAN1 as WAN Interface and click the Next button; you will get the following page.

ct to Internet	
WAN 1	
Protocol	PPPoE / PPPoA ▼
For ADSL Only:	
Encapsulation	PPPoE LLC/SNAP ▼
VPI	0 Auto detect
VCI	33
Fixed IP	○ Yes ● No(Dynamic IP)
IP Address	
Subnet Mask	
Default Gateway	
Primary DNS	8.8.8.8
Second DNS	8.8.4.4

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



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



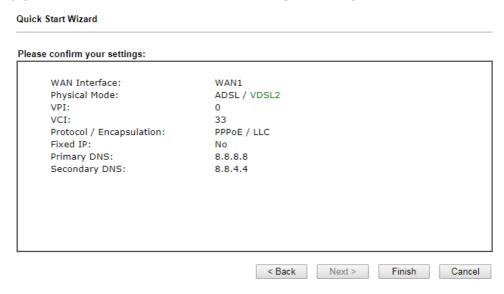
- 4. Click Finish. A page of Quick Start Wizard Setup OK!!! will appear. Then, the system status of this protocol will be shown.
- 5. Now, you can enjoy surfing on the Internet.

# MPoA / Static or Dynamic IP

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

WAN 1	
Protocol	MPoA / Static or Dynamic IP ▼
For ADSL Only:	
Encapsulation	1483 Bridged IP LLC ▼
VPI	0 Auto detect
VCI	33
Fixed IP	
IP Address	- 100 - 100 (b) (table 11 )
Subnet Mask	
Default Gateway	
Primary DNS	8.8.8.8
Second DNS	8.8.4.4

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



- 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.

# 5. Customer Service

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

# Be a Registered Owner

Web registration is preferred. You can register your Vigor router via <a href="https://myvigor.draytek.com">https://myvigor.draytek.com</a>.

# 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.

https://www.draytek.com