# **Dray** Tek

# Vigor2865 Series

35b Security Firewall



# Vigor2865 Series 35b Security Firewall Quick Start Guide (for RF Model)

Version: 1.6

Firmware Version: V4.4.1

(For future update, please visit DrayTek web site)

Date: November 22, 2022

# Intellectual Property Rights (IPR) Information

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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.



Hereby, DrayTek Corporation declares that the radio equipment type Vigor2865 is in compliance with Directive 2014/53/EU.

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

https://fw.draytek.com.tw/Vigor2865/Document/CE/

Manufacturer: DrayTek Corp.

Address: No. 26, Fushing Rd., Hukou, Hsinchu Industrial Park, Hsinchu 303, Taiwan

Product: Vigor2865 Wireless Series

Frequency Information for Europe area:

2.4GHz WLAN	For ac series, 2400MHz - 2483MHz, max. TX power: 19.78dBm *1
2.40HZ WLAN	For ax series, 2400MHz - 2483MHz, max. TX power: 19.86dBm *1
5GHz WLAN	For ac series, 5150MHz - 5350MHz, max. TX power: 22.84dBm *2 5470MHz - 5725MHz, max. TX power: 27.88dBm *2
JOHZ WEAN	For ax series, 5150MHz - 5350MHz, max. TX power: 22.79dBm *2 5470MHz - 5725MHz, max. TX power: 29.78dBm *2
LTE	B1[1920-1980 MHz (TX); 2110-2170 MHz (RX)]; B3[1710-1785 MHz (TX); 1805-1880 MHz (RX)]; B7[2500-2570 MHz (TX); 2620-2690 MHz (RX)]; B8[880-915 MHz (TX); 925-960 MHz (RX)]; B20[832-862 MHz (TX); 791-821 MHz (RX)]; B28[703-748 MHz (TX); 758-803 MHz (RX)]; B38[2570-2620 MHz (TX); 2570-2620 MHz (RX)]; B40[2300-2400 MHz (TX); 2300-2400 MHz (RX)]*3
3G	B1[1920-1980 MHz (TX); 2110-2170 MHz (RX)]; B8[880-915 MHz (TX); 925-960 MHz (RX)] *3
	Requirements in AT/BE/BG/CZ/DZ/DK/EE/FR/DE/IS/IE/IT/EL/ES/CY/LV/LI/LT/LU/HU/MT/NL/NO/PL/PT/RO/SI/SK/TR/FI/SE/CH/HR. 5150MHz~5350MHz is for indoor use only.

(\*1: for 2.4GHz WLAN model; \*2: for 5GHz WLAN model; \*3: for LTE model)

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



# **Declaration of Conformity**

Hereby, DrayTek Corporation declares that the radio equipment type Vigor2865 is in compliance with Regulation SI 2017 No. 1206.

Manufacturer: DrayTek Corp.

Address: No. 26, Fushing Rd., Hukou, Hsinchu Industrial Park, Hsinchu 303, Taiwan

Product: Vigor2865 Wireless Series

Importer: CMS Distribution Ltd: Bohola Road, Kiltimagh, Co Mayo, Ireland

Frequency Information for UK area:

	<del>-</del>
2.4GHz WLAN	For ac series, 2400MHz - 2483MHz, max. TX power: 19.78dBm *1
2.40HZ WEAR	For ax series, 2400MHz - 2483MHz, max. TX power: 19.86dBm *1
5GHz WLAN	For ac series, 5150MHz - 5350MHz, max. TX power: 22.84dBm *2 5470MHz - 5725MHz, max. TX power: 27.88dBm *2
	For ax series, 5150MHz - 5350MHz, max. TX power: 22.79dBm
LTE	B1[1920-1980 MHz (TX); 2110-2170 MHz (RX)]; B3[1710-1785 MHz (TX); 1805-1880 MHz (RX)]; B7[2500-2570 MHz (TX); 2620-2690 MHz (RX)]; B8[880-915 MHz (TX); 925-960 MHz (RX)]; B20[832-862 MHz (TX); 791-821 MHz (RX)]; B28[703-748 MHz (TX); 758-803 MHz (RX)]; B38[2570-2620 MHz (TX); 2570-2620 MHz (RX)]; B40[2300-2400 MHz (TX); 2300-2400 MHz (RX)]*3
3G	B1[1920-1980 MHz (TX); 2110-2170 MHz (RX)]; B8[880-915 MHz (TX); 925-960 MHz (RX)] *3
	Requirements in UK. 5150MHz~5350MHz is for indoor use only.

(\*1: for 2.4GHz WLAN model; \*2: for 5GHz WLAN model; \*3: for LTE model)

This product is designed for LTE, DSL and 2.4GHz /5GHz WLAN network use in the UK & Ireland.

\*The external power supply used for each product will be model dependent.

	1							-		
		1	2	3	4	5	6	1	8	9
Α	Manufacturer	CWT	CWT	CWT	CWT	CWT	APD	APD	APD	APD
В	Address	No. 222, Sec.	No.5, Lane 83,	No.5, Lane 83,	No.5, Lane 83,	No.5, Lane 83,				
		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,								
		Taiwan	Taiwan	Taiwan	Taiwan	Taiwan				
С	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								
E	Input AC frequency	50/60Hz								
	Output voltage DC	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									
1	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.





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.

	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	
Representative	Contact Person	Mr. Robert	Tel.	19728311600	
		Messer			

#### 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.

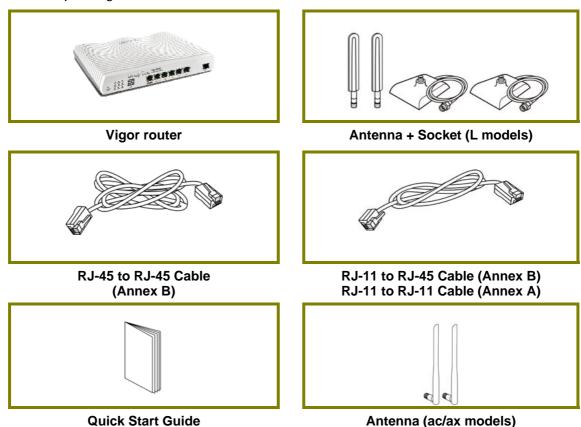
More update, please visit www.draytek.com.

# Table of Contents

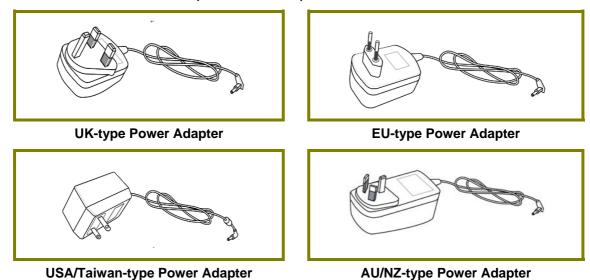
1. Package Content	
2. Panel Explanation	2
2.1 Vigor2865L	2
2.2 Vigor2865ac / Vigor2865Lac / Vigor2865ax	4
2.3 Vigor2865Vac	8
3. Hardware Installation	10
3.1 Network Connection	10
3.2 Wall-Mounted Installation	11
3.3 Antenna Installation (for "L" model)	12
4. Software Configuration	14
4.1 Quick Start Wizard for Network Connection	14
5. Customer Service	20
Be a Registered Owner	20
Firmware & Tools Updates	20

# 1. Package Content

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 Watts*.



# 2. Panel Explanation

# 2.1 Vigor2865L

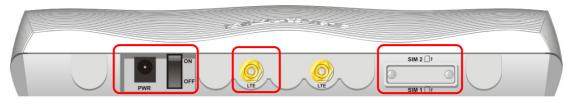


LED		Status	Explanation
ACT		Off	The router is powered off.
		Blinking	The router is powered on and running
			normally.
WAN2		On	Internet connection is ready.
		Off	Internet connection is not ready.
		Blinking	The data is transmitting.
QoS		On	The QoS function is active.
		Off	The QoS function is inactive.
LTE		On	LTE device is connected and ready for use.
		Off	LTE device is not detected, or has serious
			problem (e.g., no SIM card, SIM pin error, SIM
			deactivated, and etc.).
		Blinking	Slowly: LTE device is in dialing up.
			Quickly: The data is transmitting.
DSL		On	The router is ready to access Internet through
			DSL link.
		Blinking	Slowly: The DSL connection is ready.
			Quickly: The connection is training.
WCF		On	The Web Content Filter is active. (It is enabled
		0.55	from Firewall >> General Setup).
		Off	WCF is disabled.
USB		On	USB device is connected and ready for use.
		Off	No USB device is connected.
		Blinking	The data is transmitting.
VPN		On	The VPN tunnel is active.
		Off	VPN services are disabled
		Blinking	Traffic is passing through VPN tunnel.
DMZ		On	The DMZ function is enabled.
		Off	The DMZ function is disabled.
			The data is transmitting.
LED on Connector			
	Left	On	The port is connected.
WAN2	LED	Off	The port is disconnected.
/ P6		Blinking	The data is transmitting.

	Right	On	The port is connected with 1000Mbps.
	LED	Off	The port is connected with 10/100Mbps.
	Left	On	The port is connected.
LAN P1~P5	LED	Off	The port is disconnected.
P1~P5		Blinking	The data is transmitting.
	Right	On	The port is connected with 1000Mbps.
	LED	Off	The port is connected with 10/100Mbps.

The port "WAN2 / P6" is switchable. It can be used for LAN connection or WAN connection according to the settings configured in WUI.





Interface	Description
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.
USB	Connecter for a USB device (for 3G/4G USB Modem or printer or thermometer).
WAN2 / P6	Connecter for local network devices or modem for accessing Internet.
LAN P1-P5	Connecters for local network devices.
DSL	Connecter for accessing the Internet.
PWR	Connecter for a power adapter.
ON/OFF	Power Switch.
LTE	Connecter for installing LTE antennas.
SIM 2/ SIM 1	Slots for installing SIM card.

# 2.2 Vigor2865ac / Vigor2865Lac / Vigor2865ax



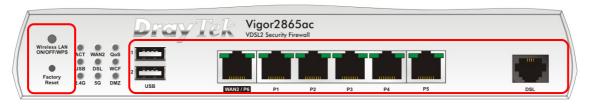




LED	Status	Explanation
ACT	Off	The router is powered off.
	Blinking	The router is powered on and running
		normally.
WAN2	On	Internet connection is ready.
	Off	Internet connection is not ready.
	Blinking	The data is transmitting.
QoS	On	The QoS function is active.
	Off	The QoS function is inactive.
USB	On	USB device is connected and ready for use.
	Off	No USB device is connected.
	Blinking	The data is transmitting.
LTE	On	LTE device is connected and ready for use.
	Off	LTE device is not detected, or has serious
		problem (e.g., no SIM card, SIM pin error, SIM
		deactivated, and etc.).
	Blinking	Slowly: LTE device is in dialing up.
		Quickly: The data is transmitting.
DSL	On	The router is ready to access Internet through
		DSL link.
	Blinking	Slowly: The DSL connection is ready.
		Quickly: The connection is training.
WCF	On	The Web Content Filter is active. (It is
	0.55	enabled from Firewall >> General Setup).
0.10/50	Off	WCF is disabled.
2.4G/5G	On	2.4G/5G: Wireless access point with
		bandwidth of 2.4GHz/5GHz is ready.

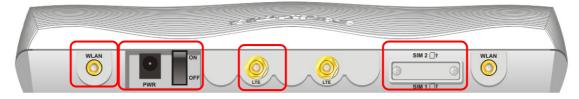
		WLAN: Wireless access point is ready.		
	Off	Wireless function is disabled.		
	Blinking	It will blink slowly while wireless traffic goes through.		
		ACT and WLAN LEDs blink quickly and simultaneously when WPS is working, and will return to normal condition after two minutes.  (You need to setup WPS within 2 minutes.)		
	On	The DMZ function is enabled.		
	Off	The DMZ function is disabled.		
Blinking		The data is transmitting.		
Connect	or			
Left LED	On	The port is connected.		
	Off	The port is disconnected.		
	Blinking	The data is transmitting.		
Right	On	The port is connected with 1000Mbps.		
LED	Off	The port is connected with 10/100Mbps.		
Left	On	The port is connected.		
LED	Off	The port is disconnected.		
	Blinking	The data is transmitting.		
Right	On	The port is connected with 1000Mbps.		
LED	Off	The port is connected with 10/100Mbps		
	Left LED Right LED Left LED	On Off Blinking  Connector  Left On LED Off Blinking  Right On LED Off Left On LED Off Blinking  Right On		

The port "WAN2 / P6" is switchable. It can be used for LAN connection or WAN connection according to the settings configured in WUI.









Interface	Description
Wireless LAN ON/OFF/WPS	Wireless band will be switched /changed according to the button pressed and released. For example,
	• 2.4G (On) and 5G (On) - in default.
	<ul> <li>2.4G (Off) and 5G (On) - pressed and released the button once.</li> </ul>
	<ul> <li>2.4G (On) and 5G (Off) - pressed and released the button twice.</li> </ul>
	<ul> <li>2.4G (Off) and 5G (Off) - pressed and released the button three times.</li> </ul>
	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.
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.
USB1~2 / USB	Connecter for a USB device (for 3G/4G USB Modem or printer or thermometer).
WAN2 / P6	Connecter for local network devices or modem for accessing Internet.

LAN P1-P5	Connecters for local network devices.		
DSL	Connecter for accessing the Internet.		
WLAN	Connecter for installing WLAN antennas. (For ac/ax model).		
PWR	Connecter for a power adapter.		
ON/OFF	Power Switch.		
LIE	Connecter for installing LTE antennas. (For L model).		
SIM 2/ SIM 1	Slot for installing SIM card. (For L model).		

# 2.3 Vigor2865Vac



ACT Off The router is powered off.  Blinking The router is powered on and running normally.  WAN2 On Internet connection is ready.  Off Internet connection is not ready.  Blinking The data is transmitting.  Oos On The QoS function is active.  Off No USB device is connected and ready for use.  Off No USB device is connected.  Blinking The data is transmitting.  DSL On The router is ready to access Internet through DSL link.  Blinking Slowly: The DSL connection is ready.  Quickly: The connection is training.  Phone1/2 On The phone connected to this port is off-hook.  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.  WLAN: 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.)  LED off The port is connected.  Blinking The data is transmitting.  Right On The port is connected with 10/100Mbps.  LET UNITED OFF The port is connected with 10/100Mbps.  LET UNITED OFF The port is connected.  Blinking The data is transmitting.  The port is disconnected.  Blinking The data is transmitting.	. =5			
WAN2 On Internet connection is ready. Off Internet connection is not ready. Off Internet connection is not ready.  Off Internet connection is not ready.  Off Internet connection is not ready.  Off The QoS function is active. Off No USB device is connected and ready for use.  Off No USB device is connected and ready for use.  Off No USB device is connected.  Blinking The data is transmitting.  DSL On The router is ready to access Internet through DSL link.  Blinking Slowly: The DSL connection is ready. Quickly: The connection is training.  Phone1/2 On The phone connected to this port is off-hook. Off The phone connected to this port is on-hook. Blinking A phone call comes.  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.  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.)  LED or Connector  WAN2 / P6 Blinking The data is transmitting. On The port is connected. Blinking The data is transmitting. On The port is connected with 1000Mbps. LED Off The port is connected.	LED		Status	Explanation
WAN2 On Internet connection is ready.  Off Internet connection is not ready.  Blinking The data is transmitting.  On The QoS function is inactive.  Off No USB device is connected and ready for use.  Off No USB device is connected.  Blinking The data is transmitting.  On The router is ready to access Internet through DSL link.  Blinking Slowly: The DSL connection is ready.  Ouickly: The connection is training.  Phone 1/2 On The phone connected to this port is off-hook.  Off The phone connected to this port is on-hook.  Blinking A phone call comes.  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.  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.)  LED or Connector  WAN2 / P6  Right On The port is connected.  Blinking The data is transmitting.  On The port is disconnected.  Blinking The data is transmitting.  On The port is connected with 1000Mbps.  LED Off The port is connected with 1001Mbps.  LED Off The port is connected.  Doff The port is connected.	ACT			
WAN2 On Internet connection is ready. Off Internet connection is not ready. Blinking The data is transmitting. On The QoS function is active. Off The OoS function is inactive. On USB device is connected and ready for use. Off No USB device is connected. Blinking The data is transmitting.  DSL On The router is ready to access Internet through DSL link. Blinking Slowly: The DSL connection is ready. Ouickly: The connection is training.  Phone1/2 On The phone connected to this port is off-hook. Off The phone connected to this port is on-hook. Blinking A phone call comes.  2.4G/5G Off Wireless access point with bandwidth of 2.4GHz/5GHz is ready. 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.)  LED or Connector  WAN2 / P6 Right On The port is connected. Blinking The data is transmitting. Con The port is connected with 10/100Mbps.  LAN LED Off The port is connected with 10/100Mbps.  LED Off The port is disconnected. LED Off The port is disconnected. CON The port is connected.			Blinking	· · · · · · · · · · · · · · · · · · ·
Off Internet connection is not ready.  Blinking The data is transmitting.  On The QoS function is active.  Off The QoS function is inactive.  Off No USB device is connected and ready for use.  Off No USB device is connected.  Blinking The data is transmitting.  DSL  On The router is ready to access Internet through DSL link.  Blinking Slowly: The DSL connection is ready.  Quickly: The connection is training.  Phone1/2 On The phone connected to this port is off-hook.  Off The phone connected to this port is on-hook.  Blinking A phone call comes.  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.  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.)  LED or Connector  WAN2 / P6  Right On The port is connected.  Blinking The data is transmitting.  Off The port is disconnected with 1000Mbps.  LAN LED Off The port is connected with 100100Mbps.  LED Off The port is disconnected.  LED Off The port is disconnected.  Off The port is connected.				3
Blinking The data is transmitting.  On The QoS function is active.  Off The QoS function is inactive.  Off No USB device is connected and ready for use.  Off No USB device is connected.  Blinking The data is transmitting.  DSL  On The router is ready to access Internet through DSL link.  Blinking Slowly: The DSL connection is ready.  Ouickly: The connection is training.  Phone1/2 On The phone connected to this port is off-hook.  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.  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.)  LED off The port is connected.  WAN2 / P6  Blinking The data is transmitting.  Right On The port is connected with 1000Mbps.  LED Off The port is connected with 10100Mbps.  LED Off The port is connected.  Off The port is connected with 10100Mbps.  LED Off The port is connected.  DALED Off The port is connected.  Off The port is connected with 10100Mbps.	WAN2			
On The QoS function is active.  Off The QoS function is inactive.  Off No USB device is connected and ready for use.  Off No USB device is connected.  Blinking The data is transmitting.  DSL On The router is ready to access Internet through DSL link.  Blinking Slowly: The DSL connection is ready.  Ouickly: The connection is training.  Phone1/2 On The phone connected to this port is off-hook.  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.  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.)  LED off The port is connected.  WAN2 / P6 Blinking The data is transmitting.  Right On The port is connected with 1000Mbps.  LED Off The port is connected with 10100Mbps.  LED Off The port is connected.  LED Off The port is connected with 10100Mbps.  LED Off The port is connected.  LED Off The port is connected with 1000Mbps.				
USB On USB device is connected and ready for use. Off No USB device is connected. Blinking The data is transmitting.  DSL On The router is ready to access Internet through DSL link. Blinking Slowly: The DSL connection is ready. Quickly: The connection is training.  Phone1/2 On The phone connected to this port is off-hook. 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. WLAN: Wireless access point is ready. Off Wireless function is disabled.  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.)  LED on Connector  WAN2 / P6  Right LED On The port is connected. Blinking The data is transmitting. On The port is connected with 1000Mbps. LED Off The port is connected.  LED Off The port is connected. UNAN2 LED Off The port is connected. Off The port is connected with 10/100Mbps.  LED Off The port is connected.				<u> </u>
USB On USB device is connected and ready for use.  Off No USB device is connected.  Blinking The data is transmitting.  On The router is ready to access Internet through DSL link.  Blinking Slowly: The DSL connection is ready. Quickly: The connection is training.  Phone1/2 On The phone connected to this port is off-hook.  Off The phone connected to this port is on-hook.  Blinking A phone call comes.  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.  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.)  LED on Connector  WANN2 / P6  Right LED On The port is connected.  Blinking The data is transmitting.  On The port is connected with 1000Mbps.  LED Off The port is connected.  Off The port is connected with 10/100Mbps.  LED Off The port is connected.  Off The port is connected.	QoS			
Off Blinking The data is transmitting.  DSL On The router is ready to access Internet through DSL link.  Blinking Slowly: The DSL connection is ready. Quickly: The connection is training.  Phone1/2 On The phone connected to this port is off-hook.  Off The phone connected to this port is on-hook.  Blinking A phone call comes.  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.  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.)  LED on Connector  WAN2 / P6  Right On The port is connected.  Blinking The data is transmitting.  Right On The port is connected with 1000Mbps.  LED Off The port is connected.  LED Off The port is connected.  LED Off The port is connected with 10/100Mbps.  LED Off The port is disconnected.  The port is connected.  LED Off The port is connected.  The port is disconnected.			Off	The QoS function is inactive.
Blinking The data is transmitting.  DSL On The router is ready to access Internet through DSL link.  Blinking Slowly: The DSL connection is ready. Quickly: The connection is training.  Phone1/2 On The phone connected to this port is off-hook.  Off The phone connected to this port is on-hook.  Blinking A phone call comes.  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.  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.)  LED on Connector  WAN2 / P6  LED Off The port is connected.  Blinking The data is transmitting.  Right On The port is connected with 1000Mbps.  LED Off The port is connected.  LED Off The port is connected.  LED Off The port is connected.  The port is connected.  LED Off The port is connected.  The port is connected with 10/100Mbps.  LED Off The port is connected.  The port is connected.	USB			· ·
DSL On The router is ready to access Internet through DSL link.  Blinking Slowly: The DSL connection is ready. Quickly: The connection is training.  Phone1/2 On The phone connected to this port is off-hook.  Off The phone connected to this port is on-hook.  Blinking A phone call comes.  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.  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.)  LED on Connector  WAN2 / P6  Right LED Off The port is connected.  Disconnected With 1000Mbps.  The port is connected with 1000Mbps.  The port is connected with 10/100Mbps.  The port is connected.  The port is connected.  The port is connected.  The port is connected with 10/100Mbps.  The port is connected.  The port is connected.			Off	No USB device is connected.
DSL link.  Blinking Slowly: The DSL connection is ready. Quickly: The connection is training.  Phone1/2 On The phone connected to this port is off-hook. Off The phone connected to this port is on-hook. Blinking A phone call comes.  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.  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.)  LED on Connector  WAN2 / P6  Blinking The port is connected.  Off The port is connected with 1000Mbps. LED Off The port is connected with 10/100Mbps.  LAN LED Off The port is disconnected.  The port is connected.	-	В		The data is transmitting.
Phone1/2 On The phone connected to this port is off-hook.  Off The phone connected to this port is on-hook.  Blinking A phone call comes.  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.  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.)  LED on Connector  WAN2 / P6  Right LED Off The port is connected.  Right LED Off The port is connected with 1000Mbps.  Left On The port is connected with 10/100Mbps.  Left On The port is connected.  The port is connected.  The port is connected.  The port is connected with 10/100Mbps.  The port is connected.	DSL		On	,
Phone1/2 On The phone connected to this port is off-hook.  Off The phone connected to this port is on-hook.  Blinking A phone call comes.  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.  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.)  LED on Connector  WAN2 / P6  Right LED Off The port is connected.  Right LED Off The port is connected with 1000Mbps.  LET On The port is connected with 10/100Mbps.  The port is connected.  The port is disconnected.			Blinking	Slowly: The DSL connection is ready.
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. 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.)  LED on Connector  WAN2 / P6  Blinking The port is connected.  Con The port is disconnected. Blinking The data is transmitting.  Right On The port is connected with 1000Mbps.  Con The port is connected with 10/100Mbps.  Con The port is connected.				
Blinking A phone call comes.  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.  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.)  LED on Connector  WAN2 / P6  Blinking The port is connected.  Blinking The data is transmitting.  Right On The port is connected with 1000Mbps. LED Off The port is connected with 10/100Mbps.  LED Off The port is connected.  LED The port is connected.  LED The port is connected.  The port is connected.  The port is connected.  The port is connected.	Phone 1.	/2	On	The phone connected to this port is off-hook.
2.4G/5G  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.  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.)  LED on Connector  WAN2  / P6  Blinking  The port is connected.  Blinking  The data is transmitting.  Right  On  The port is connected with 1000Mbps.  LED  Off  The port is connected with 10/100Mbps.  The port is connected.  LED  Off  The port is connected.  The port is connected.			Off	The phone connected to this port is on-hook.
bandwidth of 2.4GHz/5GHz is ready.  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.)  LED on Connector  WAN2 / P6  WAN2 / P6  LED Off The port is connected.  Blinking The data is transmitting.  Right LED Off The port is connected with 1000Mbps.  LED Off The port is connected with 10/100Mbps.  Left LED Off The port is connected.  LAN LED Off The port is connected.  The port is connected.  The port is connected.			Blinking	A phone call comes.
bandwidth of 2.4GHz/5GHz is ready.  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.)  LED on Connector  WAN2 / P6  LED Off The port is connected.  Blinking The data is transmitting.  Right LED Off The port is connected with 1000Mbps.  LED Off The port is connected with 10/100Mbps.  LED The port is connected.  LED The port is connected.	2.4G/5G		Ωn	2.4G/5G: Wireless access point with
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.)  LED on Connector  WAN2 / P6  LED Off The port is connected.  Blinking The data is transmitting.  Right LED Off The port is connected with 1000Mbps.  LED Off The port is connected with 10/100Mbps.  LED The port is connected.  LED The port is connected.				bandwidth of 2.4GHz/5GHz is ready.
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.)  LED on Connector  WAN2 / P6  Left On The port is connected.  Blinking The data is transmitting.  Right On The port is connected with 1000Mbps.  LED Off The port is connected with 10/100Mbps.  LED Off The port is connected.  LAN LED Off The port is connected.  The port is connected.  The port is connected.  The port is connected.				WLAN: Wireless access point is ready.
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.)  LED on Connector  WAN2 / P6  Left On The port is connected.  Blinking The data is transmitting.  Right On The port is connected with 1000Mbps.  LED Off The port is connected with 10/100Mbps.  LED Off The port is connected.  LAN LED Off The port is connected.  LAN LED Off The port is connected.  The port is connected.  LAN LED Off The port is connected.			Off	Wireless function is disabled.
simultaneously when WPS is working, and will return to normal condition after two minutes. (You need to setup WPS within 2 minutes.)  LED on Connector  WAN2 / P6  Left LED Off The port is connected.  Blinking The data is transmitting.  Right On The port is connected with 1000Mbps.  LED Off The port is connected with 10/100Mbps.  LED Off The port is connected.  LAN LED Off The port is connected.  The port is connected.  The port is connected.			Blinking	<u> </u>
return to normal condition after two minutes. (You need to setup WPS within 2 minutes.)  LED on Connector  WAN2 / P6  Left				ACT and WLAN LEDs blink quickly and
(You need to setup WPS within 2 minutes.)  LED on Connector  WAN2 / P6  Left LED Off The port is connected.  Blinking The data is transmitting.  Right LED Off The port is connected with 1000Mbps.  The port is connected with 10/100Mbps.  The port is connected.  LAN P1-P5  (You need to setup WPS within 2 minutes.)  The port is connected.  The port is connected.  The port is connected.  The port is connected.  The port is disconnected.				
WAN2 / P6  Left LED Off The port is connected.  Blinking The data is transmitting.  Right On The port is connected with 1000Mbps.  LED Off The port is connected with 10/100Mbps.  LED Off The port is connected.  The port is disconnected.				
WAN2 / P6  Left LED Off The port is connected.  The port is disconnected.  Blinking The data is transmitting.  Right LED Off The port is connected with 1000Mbps.  The port is connected with 10/100Mbps.  The port is connected.  LAN P1-P5  Left LED Off The port is disconnected.				(You need to setup WPS within 2 minutes.)
WAN2 / P6  LED Off The port is disconnected.  Blinking The data is transmitting.  Right LED Off The port is connected with 1000Mbps.  The port is connected with 10/100Mbps.  The port is connected.  LAN P1-P5  D1-P5  The port is disconnected.  The port is disconnected.	LED on	Connect	tor	
P6   Blinking   The data is transmitting.   Right   On   The port is connected with 1000Mbps.	14/4110		On	The port is connected.
Right On The port is connected with 1000Mbps.  LED Off The port is connected with 10/100Mbps.  Left On The port is connected.  LAN D1-D5 Off The port is disconnected.		LED	Off	The port is disconnected.
LED Off The port is connected with 10/100Mbps.  Left On The port is connected.  LAN D1-D5 Off The port is disconnected.	/ P0		Blinking	The data is transmitting.
LAN D1-D5 Confidence of the port is disconnected.  The port is disconnected.  The port is disconnected.		Right	On	The port is connected with 1000Mbps.
LAN D1 D5 The port is disconnected.		LED	Off	The port is connected with 10/100Mbps.
D1. D5		Left	On	The port is connected.
Blinking The data is transmitting.		LED	Off	The port is disconnected.
- · · · · · · · · · · · · · · · · · · ·	P1~P5		Blinking	The data is transmitting.

Right	On	The port is connected with 1000Mbps.
LED	Off	The port is connected with 10/100Mbps

The port "WAN2 / P6" is switchable. It can be used for LAN connection or WAN connection according to the settings configured in WUI.





Interface	Description
Wireless LAN ON/OFF/WPS	Wireless band will be switched /changed according to the button pressed and released. For example,
	• 2.4G (On) and 5G (On) - in default.
	• 2.4G (Off) and 5G (On) - pressed and released the button once.
	<ul> <li>2.4G (On) and 5G (Off) - pressed and released the button twice.</li> </ul>
	<ul> <li>2.4G (Off) and 5G (Off) - pressed and released the button three times.</li> </ul>
	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.
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.
USB1~2	Connecter for a USB device (for 3G/4G USB Modem or printer or thermometer).
WAN2 / P6	Connecter for local network devices or modem for accessing Internet.
LAN P1-P5	Connecters for local network devices.
Phone 1/2	Connecter for analog phone(s).
DSL	Connecter for accessing the Internet.
WLAN	Connecter for installing WLAN antennas.
PWR	Connecter for a power adapter.
ON/OFF	Power Switch.

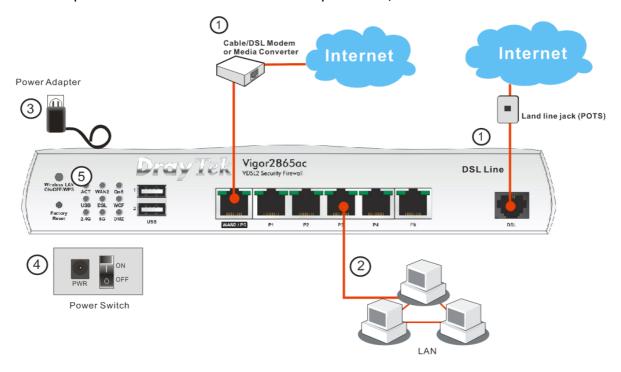
# 3. Hardware Installation

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

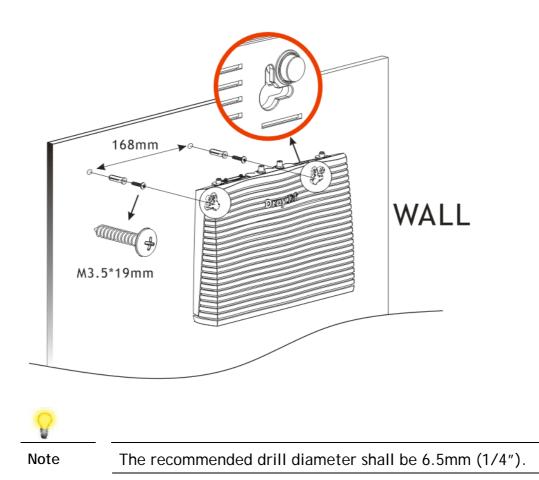
- Connect the DSL interface to the land line jack with a DSL line cable, <u>or</u>
   Connect the cable Modem/DSL Modem/Media Converter to the WAN port of router with Ethernet cable (RJ-45).
- 2. Connect one end of an Ethernet cable (RJ-45) to one of the LAN ports of the router and the other end of the 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.

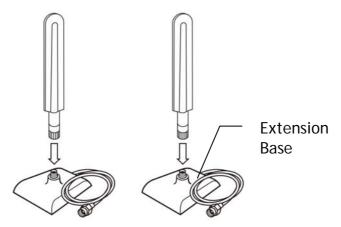
- 1. Drill two holes on the wall. The distance between the holes shall be 168mm.
- 2. Fit screws into the wall using the appropriate type of wall plug.



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

# 3.3 Antenna Installation (for "L" model)

Magnetic antenna must be installed on the extension base before connecting to Vigor router.



There are two mounting holes for installing antennas with extension base on Vigor router. Please install them as shown below.

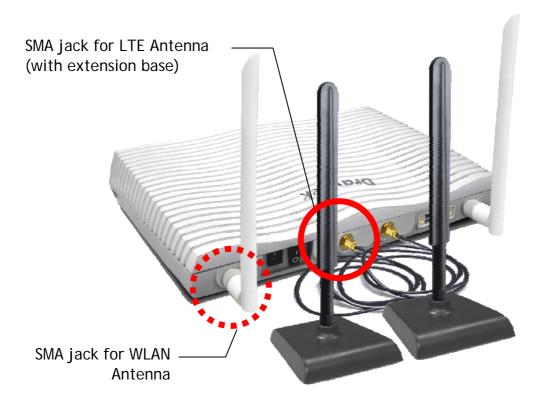


Note, if only one antenna shall be installed, please use the mounting hole (major signal transmitted hole) near to the power switch.

While installing the SIM card into the card slot, note that back plate of the SIM card slot must be removed first and the direction of card notch must be on the left side.



There are two types of antennas provided for Vigor2865Lac, which must be installed in different locations carefully and correctly. Wrong installation might cause bad signal of wireless connection. Therefore, pay attention to the installation of antennas by referring to the following illustration.



# 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 Configurator. 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 type "admin/admin" as the Username/Password and click Login.

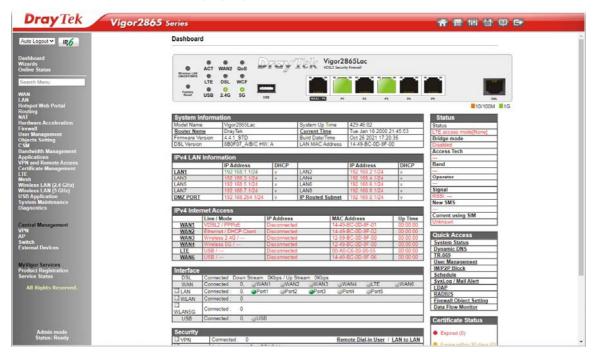




Note

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 Vigor2865Lac as an example.

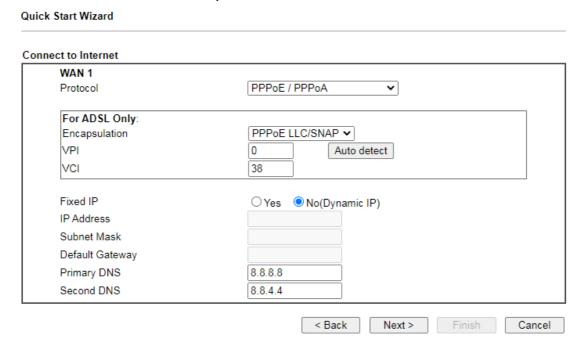
If your router can be under an environment with high speed NAT, the configuration provide here can help you to deploy and use the router quickly. The first screen of **Quick Start Wizard** is entering login password. After typing the password, please click **Next**.

# **Quick Start Wizard** Enter login password Please enter an alpha-numeric string as your Password (Max 83 characters) Old Password New Password Confirm Password Password Strength: Strong password requirements: 1. Have at least one upper-case letter and one lower-case letter. 2. Including non-alphanumeric characters is a plus. Hint: If you want to keep the password unchanged, leave the password blank and press "Next" button to skip this process. < Back Next > Finish Cancel

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.

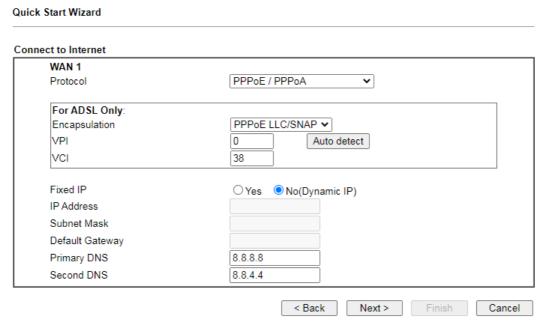
Interface	
WAN Interface:	WAN1 V
Display Name:	
Physical Mode:	ADSL/VDSL2
DSL Mode:	Auto
Physical Type:	Auto negotiation 🗸
VLAN Tag insertion(ADSL):	Disable 🕶
VLAN Tag insertion(VDSL2):	Disable 🕶

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.

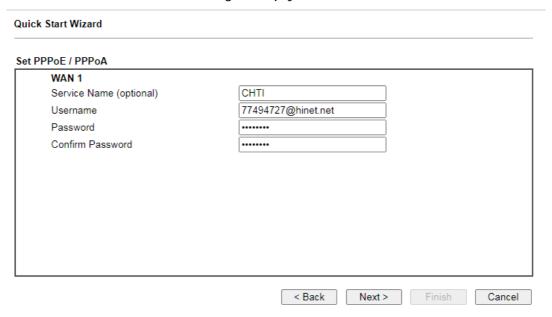


## PPPoE/PPPoA

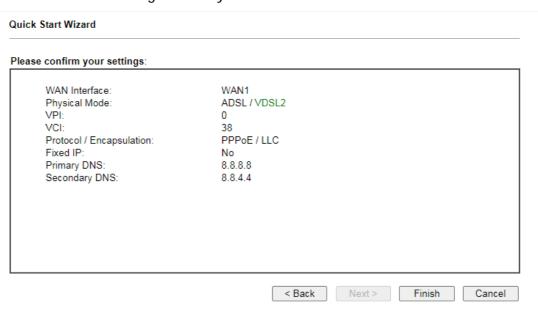
1. Choose WAN1 as WAN Interface and click the Next button; you will get the following page.



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.



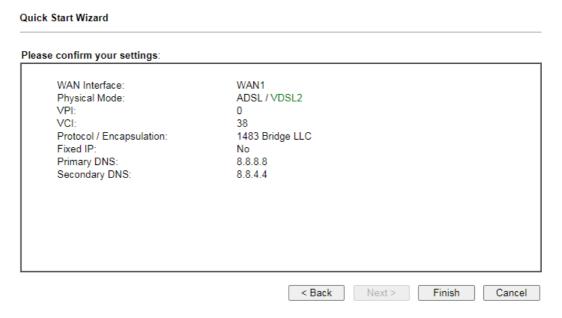
- 4. Click Finish. A page of Quick Start Wizard Setup OK!!! will appear. Then, the system status of this protocol will be shown.
- 5. Now, you can enjoy surfing on the Internet.

## 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	38
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. 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 https://myvigor.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.

https://www.draytek.com