

## VigorLTE 200 Series LTE Router



## QUICK START GUIDE (RF MODEL)

# VigorLTE 200 Series LTE Router Quick Start Guide (For RF Model)

Version: 1.2 Firmware Version: V3.9.8.2 (For future update, please visit DrayTek web site) Date: October 13, 2022

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### Safety Instructions 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.

# **CE** Declaration of Conformity

Hereby, DrayTek Corporation declares that the radio equipment type VigorLTE 200 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/VigorLTE 200/Document/CE

Manufacturer: DrayTek Corp.

Address:	No.26, Fushing Rd., Hukou, Hsinchu Industrial Park, Hsinchu 303, Taiwan
Product:	VigorLTE 200 Series

Frequency Information for Europe area:

2.4G WLAN	2412MHz - 2472 MHz, max. TX power: 19.98dBm *1
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)]; *2
3G	B1[1920-1980 MHz (TX); 2110-2170 MHz (RX)]; B8[880-915 MHz (TX); 925-960 MHz (RX)] *2

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

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



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.

	Company name	ABP International Inc.				
USA Local	Address	13988 Diplomat	Orive 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 party responsible for compliance could void the user's authority to operate the equipment.

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.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				
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								
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	04.7/0	00.2/0	07.0%	07.0%	07.0%	05.7%	03.4%	00.0%	00.270
1	Efficiency at low load	73.6%	78.0%	81.3%	83.3%	83.7%	74.5%	80.5%	86.4%	85.4%
	10%	, 5.0%	,	01.5%	00.0%	00.770	/	00.0%	00.470	00.470
J	No-load power	0.07W	0.07W	0.07W	0.07W	0.07W	0.07W	0.10W	0.07W	0.10W
	consumption									

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

For more update, please visit www.draytek.com.



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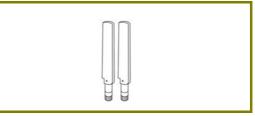
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### 1. Package Content

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







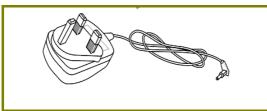
LTE Antenna



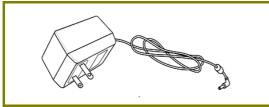
Quick Start Guide

**RJ-45 Cable (Ethernet)** 

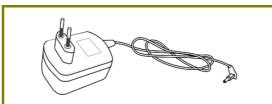
The type of the power adapter depends on the country that the router will be installed.



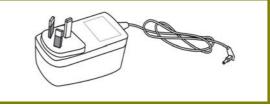
**UK-type Power Adapter** 



USA/Taiwan-type Power Adapter



**EU-type Power Adapter** 



AU/NZ-type Power Adapter

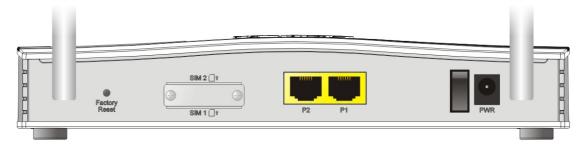
Note Remove the protective film from the router before use to ensure ventilation.

### 2. Panel Explanation

↺	22	고 rLTE 2			)
Ф	22	⊇ ∙LTE 2		3)	)

LED		Status	Explanation
		Off	The router is powered off.
$\bigcirc$		Blinking	The router is powered on and running normally.
		On	The router is ready to access Internet.
		Off	The router is not ready to access Internet.
22		Blinking	Slowly: The network connection is ready. Quickly: The network connection is establishing.
		On	The LAN port is connected.
<u> </u>	<u> </u>	Blinking	The data is transmitting through the LAN port.
		On	LTE device is connected and ready for use.
() LTE		Off	LTE device is not detected, or has serious problem (e.g., no SIM card, SIM pin error, SIM deactivated, and etc.).
		Blinking	Vigor device performs initial access procedure.
Ħ		On	SIM card is inserted into the slot and detected by Vigor device.
		Blinking	No SIM card in detected.
		On	Wireless function is enabled.
		Off	Wireless function is disabled.
2		Blinking	The data is transmitting via wireless connection. Blinks with one second cycle for two minutes. The WPS function is active.

VigorLTE 200,



VigorLTE 200n,

	91/ 1.011			Ð
Factory Reset WLAN ON/OFF/WPS	SIM 2 ] ? SIM 1 ] ?	P2 P1	PWR L	
				#

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.
SIM2/SIM1	SIM card slot(s).
P2-P1	Connecters for local network devices.
ON/OFF	Power Switch.
PWR	Connecter for a power adapter.

### 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.

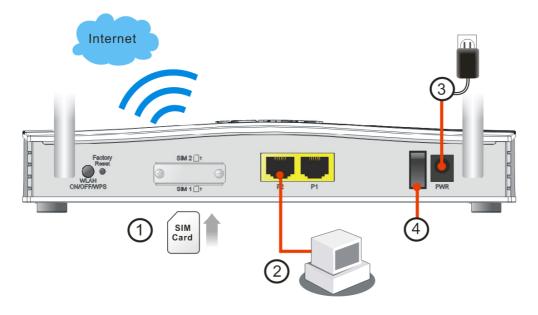
#### **3.1 Network Connection**

1. Install the SIM card into the card slot. The back plate of the SIM card slot must be removed first and the direction of card notch must be on the left side.



After installing the SIM card, fasten the back plate again.

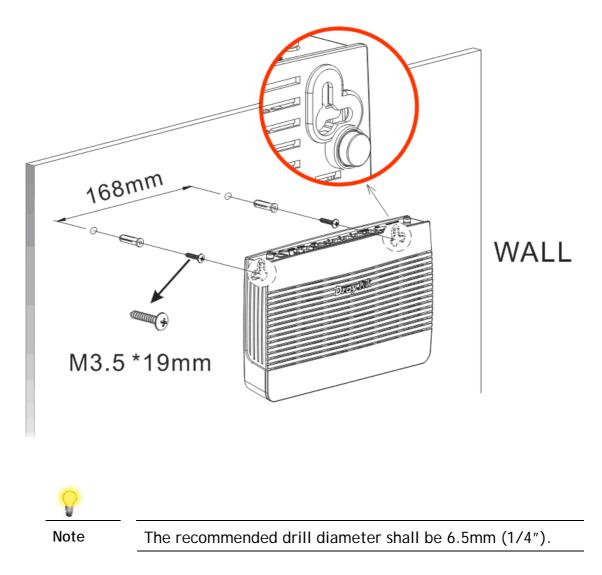
- 2. Connect to your computer with a RJ-45 cable.
- 3. Connect one end of the power cord to the power port of this device. Connect the other end to the wall outlet of electricity.
- 4. Power on the router.
- 5. Check the power, LTE and LAN LEDs to assure network connections.



### 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.



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.

Dro	<b>Tek</b> VigorLTE 200 Serie
L	ogin
	Username
	Password
	Login
Secu	urity Warning: You are logging in without encryption which is not recommended. To login securely <u>click here</u> .
	Copyright © 2000- 2018 DrayTek Corp. All Rights Reserved.
<u> </u>	If you fail to access to the web configuration, please go to "Ti

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

ogout 🕶 🕫	Dashboard							
ard			_					
Status	_			where where				
menu								
		0 8	0		<b>•••</b>			
				VigorLTE 200n				
Setting	System Informa	tion					💮 Status	
dth Management tions	Model Name	VigorLTE200n		System Up Time	1:53:31		Status	
tions d Remote Access	Router Name	DrayTek		Current Time	2020 Jun 9 Tue		Operational	
ite Management	Firmware Version	3.9.0 00-1D-AA-94-F	7.64	Build Date/Time	Apr 28 2020 16	:50:45	Bridge mode Disabled	
LAN	LAN HAC ADDRESS	100-10-AA-34-F)			0		Access Tech	
N Maintenance	IPv4 LAN Inform	nation					LTE	
tics		IP Address	DHCP	T	IP Address	DHCP	Band	
	LAN1	192.168.1.1/24		LAN2	192.168.2.1/24	v	E-UTRA Op Band 3	
Management	IP Routed Subnet	192,168.0.1/24	v		2		Operator Chunghwa Telecom	
and the first state of the second	IPv4 Internet Ad	cess	_			_	Signal	
92:	Line/		IP Address	MAC Addre	55	Up Time	RSSI: -57 d8m (Excellent)	
Area Registration		DHCP Client	10.131.61.	27 00-1E-10-1	IF-AB-D2	1:53:01	New SMS	
registration	WAN2 Ether	net / DHCP Client	Disconnect	ed 00-1D-AA-	94-F7-E6 0	00:00:00	O Current using SIM	
	IPv6 Internet Ad		_				SIM1	
	Mode	Add	1055		Scope	Up Time		
				F:FE94:F7E4/64	Link	op time	Quick Access	
							System Status	
and the second	Interface			20.5			Dynamic DNS TR-069	
and the second		cted : 1, OLTE					IM/P2P Block	
lights Reserved.		ected : 0, Por ected : 0	t1 @Port	2			Schedule	
	La vicent   Comm						SysLog / Mail Alert	
	Security	1 N 1			CALL MARKED AND		RADIUS	
	VPN Conne	ected : 0		Remot	e Dial-in User /	LAN to LAN	Firewall Object Setting Data Flow Monitor	
	System Resour	ce			_			
Admin mode						4%		
Status: Ready	Current Status :	Memory Usage:			_	75%		

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



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

1. 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

login password	
Please enter an alpha-num	neric string as your <b>Password</b> .
Old Password	•••••
New Password	••••••
Confirm Password	•••••
"Next" button to skip this p	the password unchanged, leave the password blank and press process.

2. On the next page, please select the WAN interface that you use. If DSL interface is used, please choose WAN1; if USB interface is used, please choose LTE. Then click Next for next step. WAN1 and LTE will bring up different configuration page. Here, we take LTE as an example.

Quick Start Wizard	
WAN Interface	
WAN Interface: Display Name: Physical Mode:	LTE • USB
L	< Back Next > Finish Cancel

3. Click **Next** to go to the following page.

#### Quick Start Wizard

LTE	
Internet Access :	3G/4G LTE Modem(DHCP mode) ▼
3G/4G LTE Modem(DHCP m	ode)
SIM PIN code	
Network Mode	4G/3G ▼ (Default:4G/3G)
APN Name	

4. Manually enter SIM PIN code and SPM Name provided by your ISP. Then click **Next** for viewing summary of such connection.

e confirm your settings:		
WAN Interface:	LTE	
Physical Mode:	USB	
Internet Access:	DHCP	
settings and restart the V	ges if necessary. Otherwise, click <b>Finish</b> to save the cu gor router.	inent

- 5. Click Finish. A page of Quick Start Wizard Setup OK!!! will appear. Then, the system status of this protocol will be shown.
- 6. 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