

# DrayTek

## Vigor2862 Series VDSL2 Security Firewall



## Quick Start Guide

V1.0

# **Vigor2862 Series**

## **VDSL2 Security Firewall**

### **Quick Start Guide**

Version: 1.0

Firmware Version: V3.8.5\_RC3a

(For future update, please visit DrayTek web site)

Date: December 28, 2016

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## Safety Instructions and Approval

<b>Safety Instructions</b>	<ul style="list-style-type: none"><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 by 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>
<b>Warranty</b>	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 to restore 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.

## European Community Declarations

Manufacturer: DrayTek Corp.

Address: No. 26, Fu Shing Road, HuKou Township, HsinChu Industrial Park, Hsin-Chu County, Taiwan 303

Product: Vigor2862 Series

DrayTek Corp. declares that Vigor2862 Series of routers are in compliance with the following essential requirements and other relevant provisions of RED 2014/53/EC ErP 2009/125/EC and RoHS 2011/65/EU.

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

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

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

## Regulatory Information

FCC ID:VGY2862

Contains FCC ID:XMR2016EC25A

### 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.

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

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.

DrayTek Vigor2862 series VDSL2/ADSL2+ routers are compliant with 47 C.F.R. Part 68.



More update, please visit [www.draytek.com](http://www.draytek.com).

## **Be a Registered Owner**

Web registration is preferred. You can register your Vigor router via <http://www.draytek.com>.

## **Firmware & Tools Updates**

Due to the continuous evolution of DrayTek technology, all routers will be regularly upgraded. Please consult the DrayTek web site for more information on newest firmware, tools and documents. <http://www.draytek.com>

## **Operation Frequency**

LTE: Band II, IV, XII

3G: Band II, V

2.4G WLAN: 2412MHz - 2462 MHz

5G WLAN: Band 1, 4

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# 1. Introduction

Vigor2862 series is a VDSL2 router with multi-subnet for secure and efficient workgroup management. It integrates IP layer QoS, NAT session/bandwidth management to help users control works well with large bandwidth.

By adopting hardware-based VPN platform and hardware encryption of AES/DES/3DES, and hardware key hash of SHA-1/MD5, the router increases the performance of VPN greatly and offers several protocols (such as IPSec/PPTP/L2TP) with up to 32 VPN tunnels.

The object-based design used in SPI (Stateful Packet Inspection) firewall allows users to set firewall policy with ease. CSM (Content Security Management) provides users control and management in IM (Instant Messenger) and P2P (Peer to Peer) more efficiency than before. In addition, DoS/DDoS prevention and URL/Web content filter strengthen the security outside and control inside.

Vigor2862 series supports USB interface for connecting USB printer to share printing function, 3G/4G USB modem for network connection, connectivity for network FTP service, or thermometer for monitoring the temperature change.

Vigor2862 "B" series can enhance the transmission rate and enlarge the bandwidth by combining two standard VDSL2 lines, thus it is able to provide low line prices instead of expensive leased lines. Meanwhile, the speed of existing connection established for customers can be increased.

## 2. Package Content

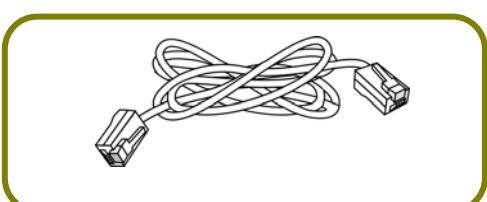
Take a look at the package content. If there is anything missed or damaged, please contact DrayTek or dealer immediately.



**Vigor Router**



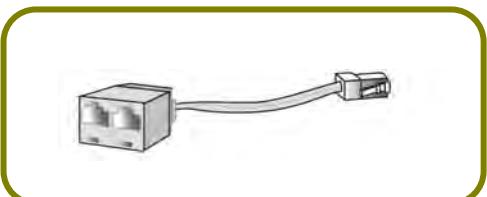
**Quick Start Guide**



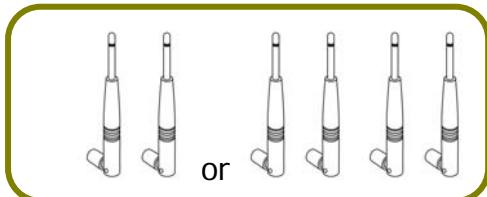
**RJ-45 to RJ-45 Cable  
(Annex B)**



**RJ-11 to RJ-45 Cable (Annex B)  
RJ-11 to RJ-11 Cable (Annex A)**

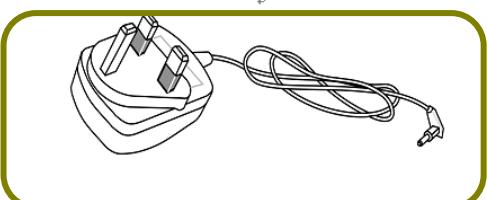


**Y Cable (B models)**

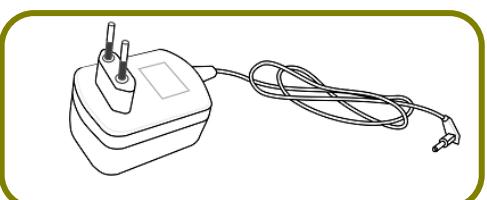


**Antenna (n or ac models)**

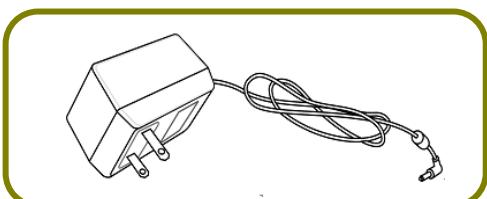
The type of the power adapter depends on the country that the router will be installed. \* The maximum power consumption is **30 Watt**.



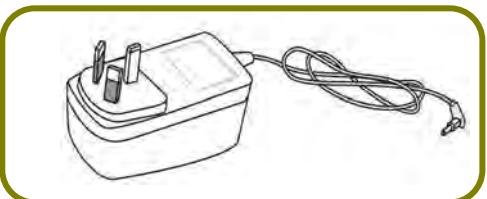
**UK-type Power Adapter**



**EU-type Power Adapter**



**USA/Taiwan-type Power Adapter**



**AU/NZ-type Power Adapter**

### 3. Panel Explanation

#### Vigor2862 Series



Switch on Rear Side

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.
DSL	Connector for accessing the Internet.
LAN	Connectors for local network devices.
WAN	Connector for local network devices or modem for accessing Internet.
USB Port	Connector for a USB device (for 3G/4G USB Modem or printer or thermometer).
PWR	Connector for a power adapter.
ON/OFF	Power Switch.

#### DIFFERENCE INFORMATIONS

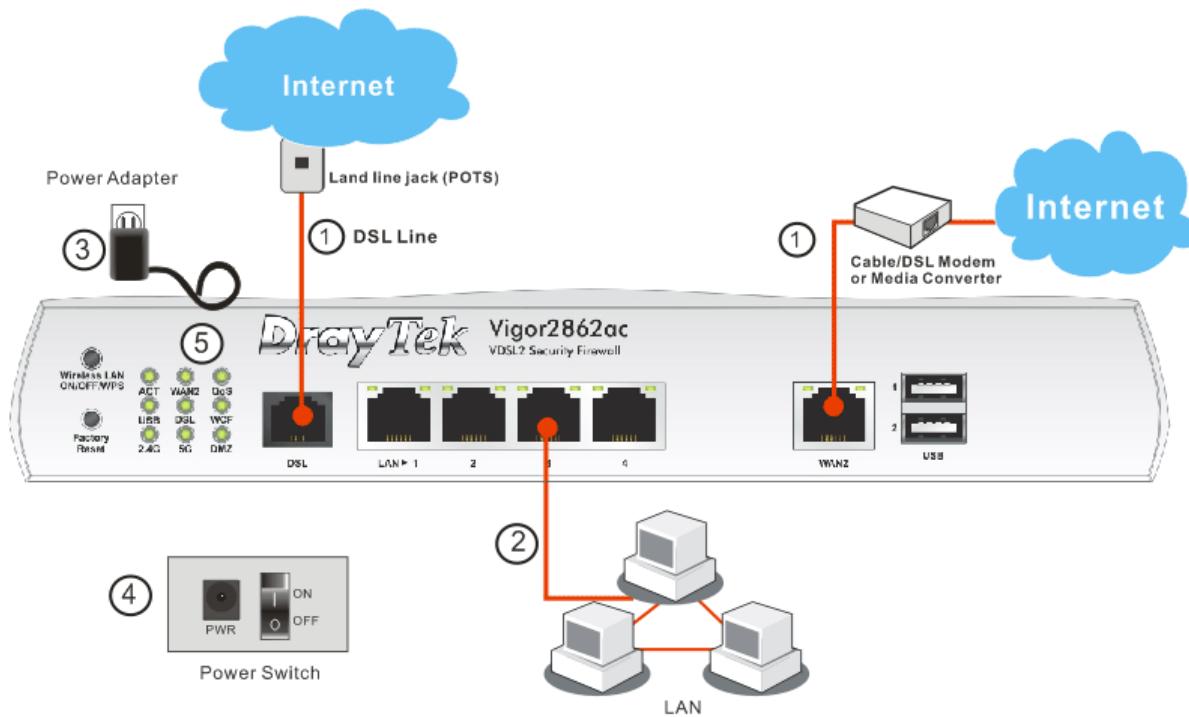
VigorXXXXYYYYYYYY (where "XXXX" can be 0-9, "YYYYYYYY" can be any combination of "A-Z", "a-z" or blank)

2862 ,2860 ,2832	has dsl function
2926 ,2925	didn't has dsl function
2862 ,2860 ,2832	for different marketing
2926 ,2925	for different marketing
ac	2.4G Wi-fi function and 5G Wi-fi function
F	Fiber function
V	VoIP function
L	LTE function
B	Bonding VDSL function
g	GPS function

## 4. 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.)



1. Connect the DSL interface to the land line jack with a DSL line cable, or 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 3. Panel Explanation)

## 5. Software Configuration

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

### 5.1 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.



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#### 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.

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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.



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#### 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.

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

**DrayTek Vigor2862 Series**

**Dashboard**

**System Information**

Model Name	Vigor2862Vac	System Up Time	4:35:22
Router Name	DrayTek	Current Time	2000 Jan 1 Sat 4:35:18
Firmware Version	3.8.5_RC2	Build Date/Time	Nov 2 2016 03:38:49
DSL Version	07-07-02-08-00-01	LAN MAC Address	00-1D-AA-F7-C0-F0

**IPv4 LAN Information**

	IP Address	DHCP	IP Address	DHCP
LAN1	192.168.1.1/24	v	LAN2	192.168.2.1/24
LAN3	192.168.3.1/24	v	LAN4	192.168.4.1/24
LAN5	192.168.5.1/24	v	LAN6	192.168.6.1/24
LAN7	192.168.7.1/24	v	LAN8	192.168.8.1/24
DMZ PORT	192.168.17.1/24	v	IP Routed Subnet	192.168.0.1/24

**IPv4 Internet Access**

	Line / Mode	IP Address	MAC Address	Up Time
WAN1	ADSL / ---	Disconnected	00-1D-AA-F7-C0-F1	00:00:00

**Quick Access**

- System Status
- Dynamic DNS
- TR-069
- User Management
- IM/P2P Block
- Schedule
- System Log / Mail Alert
- LDAP
- RADIUS
- Firewall Object Setting
- Data Flow Monitor



#### Note

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

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 23 characters).

Old Password

.....

New Password

.....

Confirm Password

.....

< 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 3G USB modem is used, please choose WAN3 or WAN4.

Then click **Next** for next step. WAN1, WAN2, WAN3 and WAN4 will bring up different configuration page. Here, we take **WAN1 (ADSL/VDSL2)** as an example.

**Quick Start Wizard**

**WAN Interface**

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

< Back    Next >    Finish    Cancel

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

**Quick Start Wizard**

**Connect to Internet**

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

< Back    Next >    Finish    Cancel

**PPPoE/PPPoA**

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

## Quick Start Wizard

### Connect to Internet

<b>WAN 1</b>	
Protocol	PPPoE / PPPoA
<b>For ADSL Only:</b>	
Encapsulation	PPPoE LLC/SNAP
VPI	0 <input type="button" value="Auto detect"/>
VCI	88
Fixed IP <input checked="" type="radio"/> Yes <input type="radio"/> No(Dynamic IP)	
IP Address	192.16.20.86
Subnet Mask	255.255.255.0
Default Gateway	192.16.20.1
Primary DNS	8.8.4.4
Second DNS	168.95.192.1

< Back

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

## Quick Start Wizard

### Set PPPoE / PPPoA

<b>WAN 1</b>	
Service Name (Optional)	CHTI
Username	77494727@hinet.net
Password	*****
Confirm Password	*****

< Back

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

## Quick Start Wizard

Please confirm your settings:

WAN Interface:	WAN1
Physical Mode:	ADSL / VDSL2
VPI:	0
VCI:	33
Protocol / Encapsulation:	PPPoE / LLC
Fixed IP:	No
Primary DNS:	8.8.8.8
Secondary DNS:	8.8.4.4

[« Back](#)

[Next >](#)

[Finish](#)

[Cancel](#)

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

## MPoA / Static or Dynamic IP

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

Quick Start Wizard

---

Connect to Internet

**WAN 1**

Protocol

**For ADSL Only:**

Encapsulation	<input type="button" value="1483 Bridged IP LLC"/>
VPI	<input type="text" value="0"/> <input type="button" value="Auto detect"/>
VCI	<input type="text" value="88"/>

Fixed IP  Yes  No(Dynamic IP)

IP Address	<input type="text" value="192.16.20.86"/>
Subnet Mask	<input type="text" value="255.255.255.0"/>
Default Gateway	<input type="text" value="192.16.20.1"/>
Primary DNS	<input type="text" value="8.8.4.4"/>
Second DNS	<input type="text" value="168.95.192.1"/>

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

Quick Start Wizard

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Please confirm your settings:

WAN Interface:	WAN1
Physical Mode:	ADSL / VDSL2
VPI:	0
VCI:	33
Protocol / Encapsulation:	1483 Route LLC
Fixed IP:	No
Primary DNS:	8.8.8.8
Secondary DNS:	8.8.4.4

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

## 6. 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](mailto:support@draytek.com).