

DrayTek

VigorSwitch P2121/G2121 L2 Managed Gigabit Switch



Quick Start Guide

V1.1

VigorSwitch P2121/G2121 L2 Managed Gigabit Switch Quick Start Guide

Version: 1.1

Firmware Version: V2.5.1

(For future update, please visit [DrayTek web site](http://www.draytek.com))

Date: December 25, 2019

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Safety Instructions and Approval

Safety

Instructions

- Read the installation guide thoroughly before you set up the switch.
- The switch is a complicated electronic unit that may be repaired only by authorized and qualified personnel. Do not try to open or repair the switch yourself.
- Do not place the switch in a damp or humid place, e.g. a bathroom.
- Do not stack the switches.
- The switch should be used in a sheltered area, within a temperature range of 0 to +45 Celsius.
- Do not expose the switch 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 switch, please follow local regulations on conservation of the environment.

Warranty

We warrant to the original end user (purchaser) that the switch will be free from any defects in workmanship or materials for a period of one (1) year 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.



EU Declaration of Conformity

We DrayTek Corp. , office at No.26, Fu Shing Road, HuKou County, Hsin-Chu Industry Park, Hsinchu 300, Taiwan , R.O.C., declare under our sole responsibility that the product

- **Product name:** 8 + 4 Combo GbE Ports PoE Switch
- **Model number:** VigorSwitch P2121
- **Manufacturer:** DrayTek Corp.
- **Address:** No.26, Fu Shing Road, HuKou County, Hsin-Chu Industry Park, Hsinchu 300, Taiwan , R.O.C.


is in conformity with the relevant Union harmonisation legislation:

EMC Directive 2014/30/EU, Low Voltage Directive 2014/35/EU and RoHS 2011/65/EU with reference to the following standards

Standard	Version / Issue date
EN 55032	2012+AC:2013 class A
EN 61000-3-2	2014 Class A
EN 61000-3-3	2013
EN 55035	2017
EN 62368-1	2014 +A11:2017 (Second Edition)

Hsinchu
(place)

October 3, 2019
(date)


Calvin Ma / President
(Legal Signature)



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Regulatory Information

Federal Communication Commission Interference Statement

This equipment has been tested and found to comply with the limits for a Class A 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.

USA Local Representative	Company name	ABP International Inc.		
	Address	13988 Diplomat Drive Suite 180 Dallas TX 75234		
	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.



More update, please visit www.draytek.com.

Be a Registered Owner

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

Firmware & Tools Updates

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

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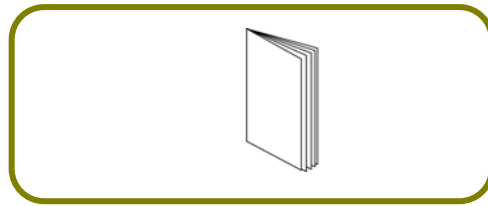
Package Content

The 8 ports + 4 Combo UTP/SFP ports, L2 Managed Gigabit Ports Switch is a standard switch that meets both IEEE 802.3u/ab Fast Ethernet and Gigabit Ethernet specifications.

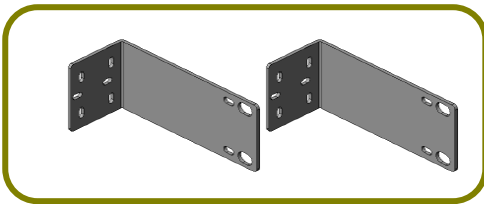
The network administrator can logon the switch to monitor, configure and control each port's activity. In addition, the switch implements the QoS (Quality of Service) and VLAN. It is suitable for office application.



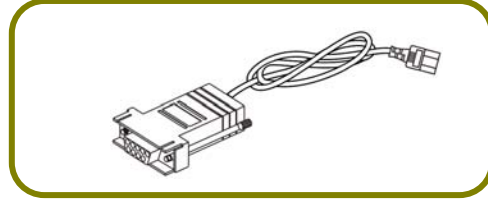
VigorSwitch



Quick Start Guide



Rack Mount Kit (brackets)



Console Cable

The type of the power cord depends on the country that the switch will be installed.



UK-type Power Cord



EU-type Power Cord



USA/Taiwan-type Power Cord

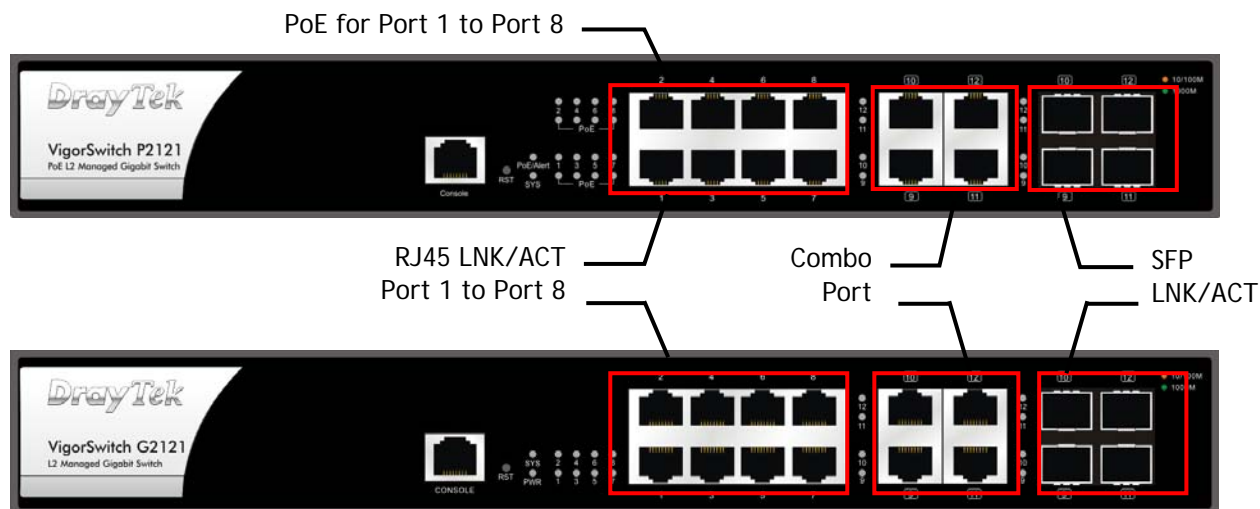


AU/NZ-type Power Cord

If any of these items is found missing or damaged, please contact your local supplier for replacement.


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Panel Explanation



LED	Status	Explanation
PoE/Alert (for P2121)	On (Green)	Devices connected over the PoE maximum power budget.
	Blinking (Green)	More than 80% of maximum power budget is supplied for PoE device(s).
	Off	Devices connected within the PoE maximum power budget.
SYS	On (Green)	The switch finishes system booting and the system is ready.
	Blinking (Green)	The switch is powered on and starts system booting.
	Off	The power is off or the system is not ready / malfunctioning.
PWR	On	The device is powered on.
	Off	The device is powered off.
PoE 1-8	On (Green)	The port is supplied with PoE power.
	Off	No PoE power is supplied on the port.
RJ 45 LNK/ACT Port 1 ~ 8	On (Green)	The device is connected with 1000Mbps.
	On (Amber)	The device is connected with 10/100Mbps.
	Blinking	The system is sending or receiving data through the port.
	Off	The port is disconnected or the link is failed.

Combo for Port 9 ~ 12 (RJ 45 LNK/ACT)	On (Green)	The device is connected with 1000Mbps.
	On (Amber)	The device is connected with 10/100Mbps.
	Blinking	The system is sending or receiving data through the port.
	Off	The port is disconnected or the link is failed.
SFP LNK/ACT	On (Green)	The device is connected with 1000Mbps.
	On (Amber)	The device is connected with 10/100Mbps.
	Blinking	The system is sending or receiving data through the port.
	Off	The port is disconnected or the link is failed.

Interface	Description
Console	Used to perform telnet command control.
RST	<p>Factory reset button.</p> <ul style="list-style-type: none"> ● Press it to reboot the system. (<5 seconds) The PoE/Alert and SYS LEDs will blink too. ● Press it to reset the system with factory default settings. (5~20 seconds) The PoE/Alert and SYS LEDs will be off if RST button is pressed between 5 seconds and 10 seconds.
RJ 45 LNK/ACT Port 1 ~ 8 PoE for Port 1 ~ 8	Port 1 to Port 8 can be used for Ethernet connection and PoE connection, depending on the device connected.
SFP LNK/ACT Port 9 ~ 12	Port 9 to Port 12 are used for fiber connection.
	Power inlet for AC input (100~240V/AC, 50/60Hz).



Note

The following limitation is suitable for VigorSwitch P2121

Power Output --

- IEEE 802.3af Max. 15.4W Output Supported
- IEEE 802.3at Max. 30W Output Supported

PoE Power Budget --

- 140 Watts (Max)

3

Hardware Installation

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

Before starting to configure the switch, you have to connect your devices correctly.

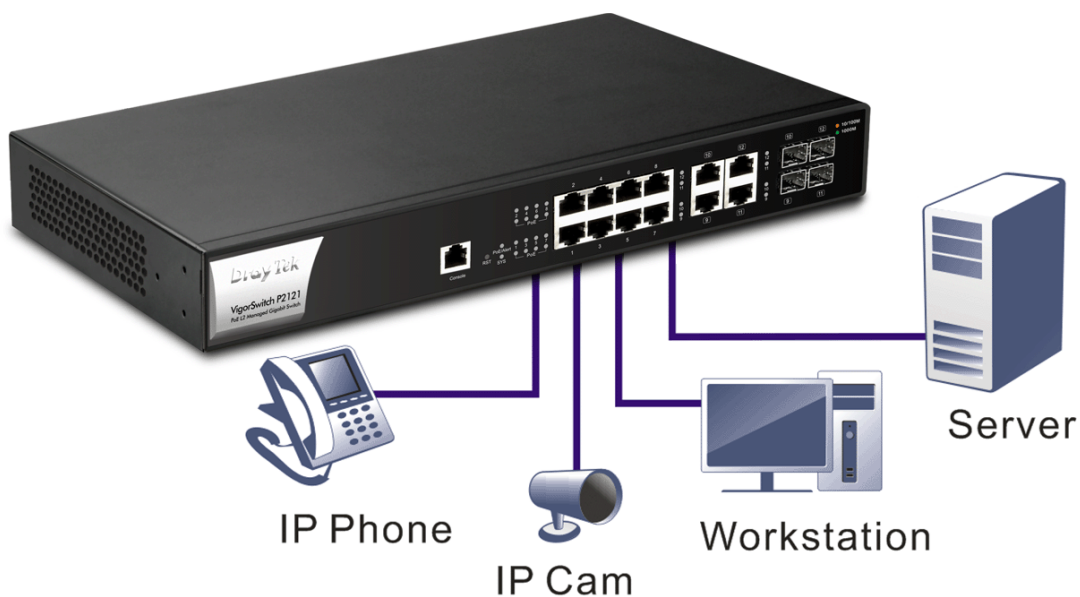


Note

Power the device to this switch and get 54V power source through Cat. 5e Cable.

3.1 Network Connection

- Use a Cat. 5e twisted-pair cable to connect a PoE device to the port (1~8) of this switch.
- The switch will supply power to PoE Device over the twisted-pair cable.
- Please note that Power Device must comply with IEEE 802.3af/at.
- Other PCs, servers and network devices can be connected to the switch using a standard 'straight through' twisted pair cable.

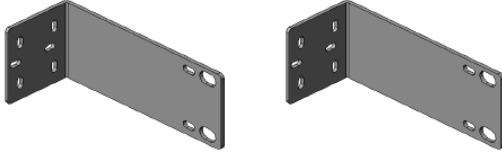


(Take VigorSwitch P2121 as an example.)

3.2 Rack-Mounted Installation

The switch can be installed easily by using rack mount kit.

1. Attach the brackets to the chassis of a 19- or a 23-inch rack. The second bracket attaches the other side of the chassis as above procedure.



2. After the bracket installation, the VigorSwitch's chassis can be installed in a rack by using four screws for each side of the rack.



(Take VigorSwitch P2121 as an example.)

4

Software Configuration

In this section, we take VigorSwitch G2121 as an example:

VigorSwitch, for example:
IP Address: 192.168.1.224
Subnet Mask: 255.255.255.0
Default Gateway: 192.168.1.254



Assign a reasonable IP Address, for example:
IP Address: 192.168.1.100
Subnet Mask: 255.255.255.0
Default Gateway: 192.168.1.254



Ethernet LAN

Before using the switch, perform the following steps:

1. Set up a physical path between the configured the switch and a PC by a qualified UTP Cat. 5e cable with RJ-45 connector.

If a PC directly connects to the switch, you have to setup the same subnet mask for PC and the switch. Default values of the managed switch are listed as follows:

IP Address	192.168.1.224
Subnet Mask	255.255.255.0
DHCP Client	Enabled (On)
Username	admin
Password	admin

2. After configuring correct IP address on your PC, open your web browser and access switch's IP address.

DrayTek VigorSwitch G2121

Login

User

Password

Login

The home page of VigorSwitch will be shown as below:

The screenshot displays the web management interface for a DrayTek VigorSwitch G2121. The interface includes a top navigation bar with the DrayTek logo, user information (Admin), device ID (G2121), and a clock (04:17:36). A left sidebar contains a menu with options like Status, Switch LAN, ONVIF Surveillance, Security, ACL, QoS, System Maintenance, Diagnostics, Mail Alert, and Product Registration. The main dashboard area features a central device image, a 'Refresh' button, and several data panels. The 'Device Information' panel lists details such as Model (VigorSwitch G2121), Firmware (2.5.1), Loader (2.0.0), Revision (1688), Build Date (2019-11-28 17:05:55), System Time (Sun Jan 2 04:17:33 2000), and System Up Time (0 days 20 17:33). The 'System Information' panel shows CPU usage at 3%, Memory usage at 57%, and Cache usage at 28%. Below these are charts for CPU usage and a table for system metrics.

Device Information	
Model	VigorSwitch G2121
Firmware	2.5.1
Loader	2.0.0
Revision	1688
Build Date	2019-11-28 17:05:55
System Time	Sun Jan 2 04:17:33 2000
System Up Time	0 days 20 17:33

System Information		
CPU	3% Usage	Memory
		57% Memory
		Cache
		28% Cached

Customer Service

If the switch 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.

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To download source codes please visit:

<http://gplsource.draytek.com>

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Version 2, June 1991

For any question, please feel free to contact DrayTek technical support at support@draytek.com for further information.