



DIR-825/GF

Wireless AC1200 MU-MIMO Dual Band Gigabit **Router with Fiber WAN Port, 3G/LTE Support** and USB Port

BEFORE YOU BEGIN

Delivery Package

- Router DIR-825/GF
- Power adapter DC 12V/1.5A
- Ethernet cable
- "Quick Installation Guide" (brochure).

If any of the items are missing, please contact your reseller.

The "*User Manual*" and "*Quick Installation Guide*" documents are available on D-Link website (see <u>www.dlink.ru</u>).

Using a power supply with a different voltage rating than the one included will cause damage and void the warranty for this product.

Default Settings

IP address	of device	192.168.0.1
Userna	me (login)	admin
	Password	admin
Name of wireless network	2.4GHz	DIR-825
(SSID)	5GHz	DIR-825-5G
Network key (PSK	bassword)	see WPS PIN on the barcode label on the bottom panel of the device

Router DIR-825/GF with default settings cannot connect to the Internet. To get started, please set your own password for access to the webbased interface and change the WLAN name (SSID); then, if needed, configure other settings recommended by your ISP.

System Requirements and Equipment

- An Android or iPhone mobile device (smartphone or tablet) or a computer with any operating system that supports a web browser.
- A PC web browser to access the web-based interface:
 - Apple Safari 8 and later
 - Google Chrome 48 and later
 - Microsoft Internet Explorer 10 and later
 - Microsoft Edge 20.10240 and later
 - Mozilla Firefox 44 and later
 - Opera 35 and later.
- A NIC (Ethernet or Wi-Fi adapter) to connect to the router.
- An 802.11a, b, g, n, or ac Wi-Fi adapter to create a wireless network.
- An SFP transceiver to connect to a fiber optic line.
- A USB modem (when it is necessary to connect to the Internet via mobile operators' networks).¹

Your USB modem should be equipped with an active SIM card of your operator.

Some operators require subscribers to activate their USB modems prior to using them. Please, refer to connection guidelines provided by your operator when concluding the agreement or placed on its website.

For some models of USB modems, it is required to disable the PIN code check on the SIM card prior to connecting the USB modem to the router.

¹ Contact your operator to get information on the service coverage and fees.

CONNECTING TO PC

PC with Ethernet Adapter

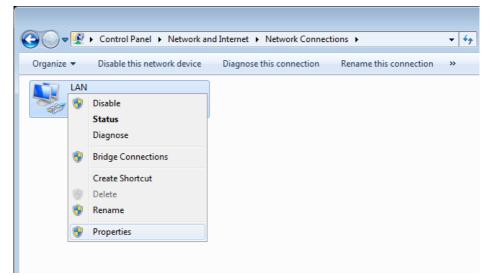
- 1. Connect an Ethernet cable between any of LAN ports located on the back panel of the router and the Ethernet port of your PC.
- 2. *To connect the device to a fiber optic line*: connect your SFP transceiver to the SFP port, then connect the fiber optic cable to the SFP transceiver.
- 3. *To connect via USB modem*: connect your USB modem to the USB port² located on the back panel of the router.
- In some cases you will need to reboot the router after connection of the USB modem.
- 4. *To connect the device to an Ethernet line*: please connect the router to the ISP's Ethernet line only after setting the WAN port and creating the Internet connection (see the *Initial Configuration Wizard* section, page 21).
- 5. Connect the power cord to the power connector port on the back panel of the router, then plug the power adapter into an electrical outlet or power strip.
- 6. Turn on the router by pressing the **ON/OFF** button on its back panel.

Then make sure that your PC is configured to obtain an IP address automatically (as DHCP client).

² It is recommended to use a USB extension cable to connect a USB modem to the router.

Obtaining IP Address Automatically (OS Windows 7)

- 1. Click the **Start** button and proceed to the **Control Panel** window.
- 2. Select the **Network and Sharing Center** section. (If the Control Panel has the category view (the **Category** value is selected from the **View by** drop-down list in the top right corner of the window), choose the **View network status and tasks** line under the **Network and Internet** section.)
- 3. In the menu located on the left part of the window, select the **Change** adapter settings line.
- 4. In the opened window, right-click the relevant **Local Area Connection** icon and select the **Properties** line in the menu displayed.



5. In the Local Area Connection Properties window, on the Networking tab, select the Internet Protocol Version 4 (TCP/IPv4) line. Click the Properties button.

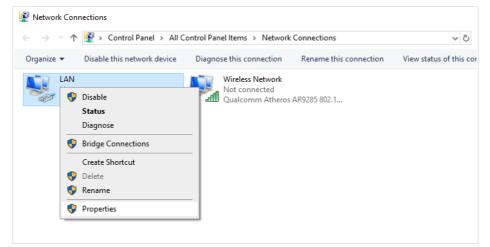
6. Make sure that the **Obtain an IP address automatically** and **Obtain DNS server address automatically** choices of the radio buttons are selected. Click the **OK** button.

Internet P	rotocol Version 4 (TCP/IPv4)) Propert	ies		? 🗙
General	Alternate Configuration				
this cap	n get IP settings assigned auto ability. Otherwise, you need t appropriate IP settings.				
<u>o</u>	otain an IP address automatica	lly.			
U§	e the following IP address: —				
<u>I</u> P ad	ldress:				
Subr	et mask:				
Defa	ult gateway:				
o o	otain DNS server address auto	matically			
- O Us	e the following DNS server ad	dresses:-			
Prefe	erred DNS server:				
Alter	nate DNS server:				
V	aļidate settings upon exit			Ad <u>v</u> a	nced
			ОК		Cancel

7. Click the **OK** button in the connection properties window.

Obtaining IP Address Automatically (OS Windows 10)

- 1. Click the **Start** button and proceed to the **Settings** window.
- 2. Select the Network & Internet section.
- 3. In the Change your network settings section, select the Change adapter options line.
- 4. In the opened window, right-click the relevant **Local Area Connection** icon and select the **Properties** line in the menu displayed.



5. In the Local Area Connection Properties window, on the Networking tab, select the Internet Protocol Version 4 (TCP/IPv4) line. Click the Properties button.

6. Make sure that the **Obtain an IP address automatically** and **Obtain DNS server address automatically** choices of the radio buttons are selected. Click the **OK** button.

Internet Protocol Version 4 (TCP/IPv4)	Properties	\times
General Alternate Configuration		
You can get IP settings assigned autor this capability. Otherwise, you need to for the appropriate IP settings.		
Obtain an IP address automatical	ly	
O Use the following IP address:		
IP address:		
Subnet mask:	· · · · · · ·	
Default gateway:		
Obtain DNS server address auton	natically	
Use the following DNS server add	resses:	
Preferred DNS server:	· · · · · · · ·	
Alternate DNS server:		
Validate settings upon exit	Advanced	
	OK Cancel	

7. Click the **Close** button in the connection properties window.

PC with Wi-Fi Adapter

- 1. *To connect the device to a fiber optic line*: connect your SFP transceiver to the SFP port, then connect the fiber optic cable to the SFP transceiver.
- 2. *To connect via USB modem*: connect your USB modem to the USB port³ located on the back panel of the router.
- In some cases you will need to reboot the router after connection of the USB modem.
- 3. *To connect the device to an Ethernet line*: please connect the router to the ISP's Ethernet line only after setting the WAN port and creating the Internet connection (see the *Initial Configuration Wizard* section, page 21).
- 4. Connect the power cord to the power connector port on the back panel of the router, then plug the power adapter into an electrical outlet or power strip.
- 5. Turn on the router by pressing the **ON/OFF** button on its back panel.
- 6. Make sure that the Wi-Fi adapter of your PC is on. As a rule, modern notebooks with built-in wireless NICs are equipped with a button or switch that turns on/off the wireless adapter (refer to your PC documents). If your PC is equipped with a pluggable wireless NIC, install the software provided with your Wi-Fi adapter.

Then make sure that your Wi-Fi adapter is configured to obtain an IP address automatically (as DHCP client).

³ It is recommended to use a USB extension cable to connect a USB modem to the router.

Obtaining IP Address Automatically and Connecting to Wireless Network (OS Windows 7)

- 1. Click the **Start** button and proceed to the **Control Panel** window.
- 2. Select the **Network and Sharing Center** section. (If the Control Panel has the category view (the **Category** value is selected from the **View by** drop-down list in the top right corner of the window), choose the **View network status and tasks** line under the **Network and Internet** section.)
- 3. In the menu located on the left part of the window, select the **Change** adapter settings line.
- 4. In the opened window, right-click the relevant **Wireless Network Connection** icon. Make sure that your Wi-Fi adapter is on, then select the **Properties** line in the menu displayed.
- In the Wireless Network Connection Properties window, on the Networking tab, select the Internet Protocol Version 4 (TCP/IPv4) line. Click the Properties button.

6. Make sure that the **Obtain an IP address automatically** and **Obtain DNS server address automatically** choices of the radio buttons are selected. Click the **OK** button.

Internet Protocol Version 4 (TCP/IPv4)) Properties 💦 💦 🗾 🔀
General Alternate Configuration	
You can get IP settings assigned autor this capability. Otherwise, you need to for the appropriate IP settings.	
Obtain an IP address automatical	ally
OUse the following IP address:	
IP address:	· · · · · · · · ·
Subnet mask:	· · · · · · ·
Default gateway:	· · ·
Obtain DNS server address auton	matically
OUSe the following DNS server add	dresses:
Preferred DNS server:	· · · · · · · · · ·
Alternate DNS server:	· · ·
Vaļidate settings upon exit	Ad <u>v</u> anced
	OK Cancel

- 7. Click the **OK** button in the connection properties window.
- 8. To open the list of available wireless networks, select the icon of the wireless network connection and click the **Connect To** button or left-click the network icon in the notification area located on the right side of the taskbar.



 In the opened window, in the list of available wireless networks, select the wireless network DIR-825 (for operating in the 2.4GHz band) or DIR-825-5G (for operating in the 5GHz band) and click the Connect button.

Not connected	÷
Connections are available	
Wi-Fi	^
wireless router Connect automatically Conr	, still nect
Open Network and Sharing Center	

- 10. In the opened window, enter the network key (see WPS PIN on the barcode label on the bottom panel of the device) in the **Security key** field and click the **OK** button.
- 11. Wait for about 20-30 seconds. After the connection is established, the network icon will be displayed as the signal level scale.

If you perform initial configuration of the router via Wi-Fi connection, note that immediately after changing the wireless default settings of the

router you will need to reconfigure the wireless connection using the newly specified settings.

Obtaining IP Address Automatically and Connecting to Wireless Network (OS Windows 10)

- 1. Click the **Start** button and proceed to the **Settings** window.
- 2. Select the Network & Internet section.
- 3. In the Change your network settings section, select the Change adapter options line.
- 4. In the opened window, right-click the relevant **Wireless Network Connection** icon. Make sure that your Wi-Fi adapter is on, then select the **Properties** line in the menu displayed.
- In the Wireless Network Connection Properties window, on the Networking tab, select the Internet Protocol Version 4 (TCP/IPv4) line. Click the Properties button.
- Make sure that the Obtain an IP address automatically and Obtain DNS server address automatically choices of the radio buttons are selected. Click the OK button.

Internet Protocol Version 4 (TCP/IPv	4) Properties	×
General Alternate Configuration		
You can get IP settings assigned aut this capability. Otherwise, you need for the appropriate IP settings.		
Obtain an IP address automatic	ally	
Use the following IP address:		
IP address:		
Subnet mask:	· · · · · · · ·	
Default gateway:		
Obtain DNS server address auto	omatically	
Use the following DNS server ac	ldresses:	
Preferred DNS server:	and the second second	
Alternate DNS server:		
Validate settings upon exit	Advanced	
	OK Cancel	

7. Click the **Close** button in the connection properties window.

8. To open the list of available wireless networks, select the icon of the wireless network connection and click the **Connect To** button or left-click the network icon in the notification area located on the right side of the taskbar.



 In the opened window, in the list of available wireless networks, select the wireless network DIR-825 (for operating in the 2.4GHz band) or DIR-825-5G (for operating in the 5GHz band) and click the Connect button.

RD_DLINK Secured	
Connect automatica	ally
	Connect

- 10. In the opened window, enter the network key (see WPS PIN on the barcode label on the bottom panel of the device) in the **Security key** field and click the **Next** button.
- 11. Allow or forbid your PC to be discoverable by other devices on this network (**Yes / No**).



12. Wait for about 20-30 seconds. After the connection is established, the network icon will be displayed as a dot with curved lines indicating the signal level.

If you perform initial configuration of the router via Wi-Fi connection, note that immediately after changing the wireless default settings of the router you will need to reconfigure the wireless connection using the newly specified settings.

CONFIGURING ROUTER

Connecting to Web-based Interface

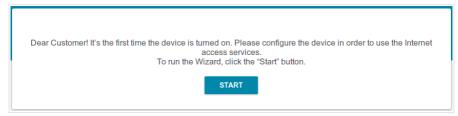
Start a web browser. In the address bar of the web browser, enter the IP address of the router (by default, the following IP address is specified: **192.168.0.1**). Press the **Enter** key.

File	Edit	View	Bookmarks	Widgets	Tools Help	
	4	⇒	Ø 😚	/	192.168.0.1	-

If the error "The page cannot be displayed" (or "Unable to display the

page"/"Could not connect to remote server") occurs upon connecting to the web-based interface of the router, make sure that you have properly connected the router to your computer.

If the device has not been configured previously or the default settings have been restored, after access to the web-based interface the Initial Configuration Wizard opens (see the *Initial Configuration Wizard* section, page 21).



If you configured the device previously, after access to the web-based interface the login page opens. Enter the username (**admin**) in the **Username** field and the password you specified in the **Password** field, then click the **LOGIN** button.

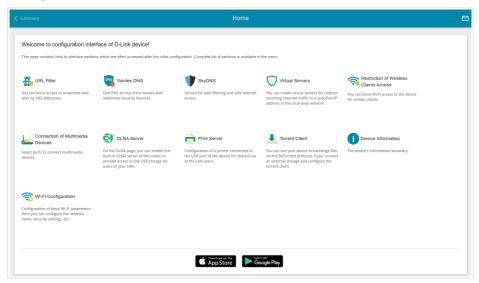
Authoriz	zation	
Username*		
Password*		
•		2
Sta	y signed in	
Forgot pass	word?	
	Authorization error	
	Attempts remaining: 4	
LOGIN	CLEAR	

In order not to log out, move the **Stay signed in** switch to the right. After closing the web browser or rebooting the device, you need to enter the username and the password again.

If you enter a wrong password several times, the web-based interface will be blocked for a while. Please wait for one minute and reenter the password you specified. The **Summary** page displays general information on the router and its software.

✔ Home	Sum	ummary E		
Device Information		WAN IPv4		
Model:	DIR-825	Connection type:	Dynamic IPv4	
Hardware version:	R3	Status:	Cable disconnected	
Firmware version:	4.0.1			
Build time:	Tue Jul 21 2020 3:09:43 PM MSK	LAN		
UI version:	1.15.0.17397b7-embedded	LAN		
Vendor:	D-Link Russia	LAN IPv4:	192.168.0.1	
Serial number:	1234567890123	MAC address:	00:11:33:57:79:9c	
Support:	support@dlink.ru	Wireless connections:		
Summary:	Root filesystem image for DIR_825GF_RT9607C	Wired connections:	5	
Uptime:	4 min.			
Device mode:	Router			
		LAN Ports		
Wi-Fi 2.4 GHz		LAN1:	1000M-Full	
WHITZ:4 GHZ		LANZ:	Off O	
Status:	On 🕒	LAN3:	1000M-Full 😒 🔵	
Broadcasting:	On 🕒	LAN4:	Off	
Additional networks:	0			
Network name (SSID):	DIR-825-799B			
Security:	WPA2-PSK 🔒	USB Devices		
		No connected devices		
Wi-Fi 5 GHz				
Status:	On 🖷	Yandex Yandex.DNS		
Broadcasting:	On •	Idiluex Discrete Enable		
Additional networks:	0			
Network name (SSID):	DIR-825-5G-7998	Safe	0 devices 😺	
Security:	WPA2-PSK	Child	0 devices	
		Protection off	2 devices 🛞	

The **Home** page displays links to the most frequently used pages with device's settings.

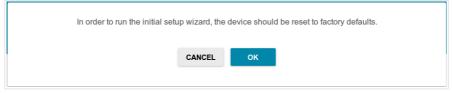


The web-based interface of the router is multilingual. You can select the needed language upon the initial configuration of the web-based interface of the router or in the **System / Configuration** section of the menu.

Other settings of the router are available in the menu in the left part of the page. Go to the relevant section and select the needed page or run the wizard in the **Initial Configuration** section.

Initial Configuration Wizard

In order to start the Initial Configuration Wizard manually, go to the **Initial Configuration** section.



Click the **OK** button and wait until the factory default settings are restored.



If you perform initial configuration of the router via Wi-Fi connection, please make sure that you are connected to the wireless network of DIR-825/GF (see the WLAN name (SSID) in the *Default Settings* section, page 3) and click the **NEXT** button. Then click the **START** button.

If the device has not been configured previously or the default settings have been restored, the Initial Configuration Wizard starts automatically upon access to the web-based interface or upon opening a web site on the Internet.

ſ	
	Dear Customer! It's the first time the device is turned on. Please configure the device in order to use the Internet access services. To run the Wizard, click the "Start" button.
	START

1. Click **YES** in order to leave the current language of the web-based interface or click **NO** to select another language.

Maybe your la	anguage is English?	
NO	YES	

2. On the next page, click the **CONTINUE** button.

Selecting Operation Mode

Select the needed operation mode and click the **NEXT** button.

Router

In order to connect your device to a fiber optic line, on the **Device mode** page, from the **Connection method** list, select the **Fiber (SFP)** value. In this mode you can configure a WAN connection, set your own settings for the wireless network in the 2.4GHz and 5GHz bands, configure LAN ports to connect an STB or VoIP phone, and set your own password for access to the web-based interface of the device.

Fiber (SFP)	-	
Work mode		ssid
Router	A	. 20
	< BACK	NEXT >

In order to connect your device to a private Ethernet line, on the **Device mode** page, from the **Connection method** list, select the **Ethernet (LAN)** value. Then from the **Work mode** list, select the **Router** value. In this mode you can configure one of the router's LAN port as the WAN port, configure a WAN connection, set your own settings for the wireless network, configure LAN ports to connect an STB or VoIP phone, and set your own password for access to the web-based interface of the device.

Connection method			
Ethernet (LAN)	-		
Select this method of connection if an agreement for provision of the Interr Ethernet. One of the LAN ports will be a port.	net service via	Internet	
Nork mode Router			
Noulei			

In order to connect your device to the network of a 3G or LTE operator, on the **Device mode** page, from the **Connection method** list, select the **Mobile Internet** value. In this mode you can configure a 3G/LTE WAN connection, set your own settings for the wireless network in the 2.4GHz and 5GHz bands, and set your own password for access to the web-based interface of the device.

Mobile Internet	
① Connect a USB modem with an active SIM card of your mobile operator to the device or install an active SIM card into the relevant slot, if your device is equipped with a built-in	
3G/LTE modem.	

In order to connect your device to a wireless ISP (WISP), on the **Device mode** page, from the **Connection method** list, select the **Wi-Fi** value. Then from the **Work mode** list select the **WISP Repeater** value. In this mode you can connect your device to another access point, configure a WAN connection, set your own settings for the wireless network in the 2.4GHz and 5GHz bands, and set your own password for access to the web-based interface of the device.

Access Point or Repeater

In order to connect your device to a wired router for adding a wireless network to the existing local network, on the **Device mode** page, from the **Connection method** list, select the **Ethernet (LAN)** value. Then from the **Work mode** list select the **Access point** value. In this mode you can change the LAN IP address, set your own settings for the wireless network in the 2.4GHz and 5GHz bands, and set your own password for access to the web-based interface of the device.

In order to connect your device to a wireless router for extending the range of the existing wireless network, on the **Device mode** page, from the **Connection method** list, select the **Wi-Fi** value. Then from the **Work mode** list select the **Repeater** value. In this mode you can change the LAN IP address, connect your device to another access point, set your own settings for the wireless network in the 2.4GHz and 5GHz bands, and set your own password for access to the web-based interface of the device.

In order to let wired PCs connected to your device access the network of a wireless router, on the **Device mode** page, from the **Connection method** list, select the **Wi-Fi** value. Then from the **Work mode** list select the **Client** value. In this mode you can change the LAN IP address, connect your device to another access point and set your own password for access to the web-based interface of the device.

Configuring LAN Port as WAN Port

This configuration step is available for the **Router** mode.

1. On the **Device connection** page, select a free LAN port which will be used as the WAN port.

Device connection
Select a port which will be used to connect to the Internet; then plug in the WAN cable to the selected port of the device:
SFP LAN1 LAN2 LAN3 LAN4
< BACK NEXT >

2. Click the **NEXT** button.

Creating 3G/LTE WAN Connection

This configuration step is available for the **Mobile Internet** mode.

1. If the PIN code check is enabled for the SIM card inserted into your USB modem, enter the PIN code in the **PIN** field and click the **APPLY** button.

Modem settings	
Vendor: Model: E3131	
Modem	
E3131	•
Please enter the PIN code of the SIM card Modem: E3131 Attempts left: 2	
PIN*	Q
	APPLY

2. Please wait while the router automatically creates a WAN connection for your mobile operator.

Modem se	ttings			
Vendor: Model:	E3131			
Modem E3131		•		
The connect	on has been created auto to continue configuration		NEXT >	

3. Click the **NEXT** button.

If the router failed to create a WAN connection automatically, click the **CONFIGURE MANUALLY** button. On the **Internet connection type** page, configure all needed settings and click the **NEXT** button.

Changing LAN IPv4 Address

This configuration step is available for the **Access point**, **Repeater** and **Client** modes.

- 1. Select the **Automatic obtainment of IPv4 address** to let DIR-825/GF automatically obtain the LAN IPv4 address.
- 2. In the **Hostname** field, you should specify a domain name of the router using which you can access the web-based interface after finishing the Wizard. Enter a new domain name of the router ending with **.local** or leave the value suggested by the router.

In order to access the web-based interface using the domain name, in the address bar of the web browser, enter the name of the router with a dot at the end.

If you want to manually assign the LAN IPv4 address for DIR-825/GF, do not select the **Automatic obtainment of IPv4 address** checkbox and fill in the **IP address**, **Subnet mask**, **DNS IP address**, **Hostname** fields and, if needed, the **Gateway IP address** field. Make sure that the assigned address does not coincide with the LAN IPv4 address of the router to which your device connects.

LAN	
Automatic obtainment of IPv4 address	
	acts against use of the same addresses in one LAN. In order to avoid IPv4 uld not coincide with addresses from the address range assigned by an upper-
IP address*	
192.168.0.1	
Subnet mask*	
255.255.255.0	
Gateway IP address	
DNS IP address*	
8.8.8.8	
Hostname*	
dlinkapcf03.local	
③ Specify a domain name ending with .local. In order to an and slash at the end in the address bar of the web browser	ccess the web-based interface using the domain name, enter this name with a dot (for example, dlinkap12ab.local./)
< -	BACK NEXT >

3. Click the **NEXT** button.

Wi-Fi Client

This configuration step is available for the **WISP Repeater** and **Repeater** modes.

1. On the **Wi-Fi Client** page, click the **WIRELESS NETWORKS** button and select the network to which you want to connect in the opened window. When you select a network, the **Network name (SSID)** and **BSSID** fields are filled in automatically.

If you cannot find the needed network in the list, click the **UPDATE LIST**



2. If a password is needed to connect to the selected network, fill in the relevant field. Click the **Show** icon (**No**) to display the entered password.

2.4 GHz	-	Attention! Upon connection to networks with WEP or T encryption, basic settings of Wi-Fi networks will be changed
letwork name (SSID)*		the standards 802.11b and g will be used in the 2.4GHz bai and the standard 802.11a will be used in the 5GHz band.
RD_DLINK		Network authentication
ISSID		WPA2-PSK
4:DA:DA:0A:8F:C9		
		Password PSK*
		③ Password should be between 8 and 63 ASCII charact
		Encryption type*
		AES
WIRELESS NETWORKS		
WIRELESS NETWORKS		

If you connect to a hidden network, select the band where the hidden network operates from the **Frequency band** list and enter the network name in the **Network name (SSID)** field. Then select a needed value from the **Network authentication** list and then, if needed, enter the password in the relevant field.

3. Click the **NEXT** button.

Configuring Wired WAN Connection

This configuration step is available for the **Fiber (SFP)**, **Router** and **WISP Repeater** modes.

You should configure your WAN connection in accordance with data provided by your Internet service provider (ISP). Make sure that you have obtained all necessary information prior to configuring your connection. Otherwise contact your ISP.

1. On the **Internet connection type** page, click the **SCAN** button (available for the **Fiber (SFP)** mode only) to automatically specify the connection type used by your ISP or manually select the needed value from the **Connection type** list.

Static IPv4: Fill in the following fields: IP address, Subnet mask, Gateway IP address, and DNS IP address.

P address*
Subnet mask*
Gateway IP address*
DNS IP address*

Static IPv6: Fill in the following fields: IP address, Prefix, Gateway IP address, and DNS IP address.

IP address*	
Prefix*	
Gateway IP address*	
DNS IP address*	

PPPOE, **IPv6 PPPOE**, **PPPOE Dual Stack**, **PPPOE** + **Dynamic IP** (**PPPOE Dual Access**): Enter authorization data provided by your ISP (the username (login) in the **Username** field and the password in the **Password** field). Click the **Show** icon (\bigotimes) to display the entered password. If authorization is not required, select the **Without authorization** checkbox.

Without authorization	
Username*	
Password*	Ø.

PPPoE + Static IP (PPPoE Dual Access): Enter authorization data provided by your ISP (the username (login) in the **Username** field and the password in the **Password** field). Click the **Show** icon (()) to display the entered password. If authorization is not required, select the **Without authorization** checkbox. Also fill in the following fields: **IP address**, **Subnet mask**, **Gateway IP address**, and **DNS IP address**.

Without authorization		
Username*		
Password*	Ø	
IP address*		
Subnet mask*		
Gateway IP address*		
DNS IP address*		

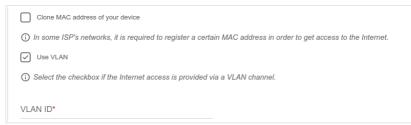
PPTP + **Dynamic IP** or **L2TP** + **Dynamic IP**: Enter authorization data provided by your ISP (the username (login) in the **Username** field and the password in the **Password** field). Click the **Show** icon (\bigotimes) to display the entered password. If authorization is not required, select the **Without authorization** checkbox. In the **VPN server address** field, enter the IP or URL address of the PPTP or L2TP authentication server.

Username*		
Password*	Ø	
VPN server address*		

PPTP + Static IP or L2TP + Static IP: Enter authorization data provided by your ISP (the username (login) in the **Username** field and the password in the **Password** field). Click the **Show** icon (()) to display the entered password. If authorization is not required, select the **Without authorization** checkbox. In the **VPN server address** field, enter the IP or URL address of the PPTP or L2TP authentication server. Also fill in the following fields: IP address, Subnet mask, Gateway IP address, and DNS IP address.

Without authorization	
Username*	
Password*	Ø
VPN server address*	
IP address*	
Subnet mask*	
Gateway IP address [◆]	
DNS IP address*	

- 2. If your ISP uses MAC address binding, select the **Clone MAC address** of your device checkbox.
- 3. If the Internet access is provided via a VLAN channel, select the **Use VLAN** checkbox and fill in the **VLAN ID** field.



4. Click the **NEXT** button.

Configuring Wireless Network

This configuration step is available for the Fiber (SFP), Router, Access point, WISP Repeater, and Repeater modes.

- 1. On the **Wireless Network 2.4 GHz** page, in the **Network name** field, specify your own name for the wireless network in the 2.4GHz band or leave the value suggested by the router.
- 2. In the **Password** field, specify your own password for access to the wireless network or leave the value suggested by the router (WPS PIN of the device, see the barcode label).
- 3. If the router is used as a Wi-Fi client, you can specify the same parameters of the wireless network as specified for the network to which you are connecting. To do this, click the **USE** button (available for the **WISP Repeater** and **Repeater** modes only).
- 4. You can restore the parameters of the wireless network specified before resetting to factory defaults. To do this, click the **RESTORE** button.

Wireless Network 2.4 GHz
Enable
Broadcast wireless network 2.4 GHz
() Disabling broadcast does not influence the ability to connect to another WI-Fi network as a client.
Network name* my wi-fi
① The number of characters should not exceed 32
Open network
Password*
Q
③ Password should be between 8 and 63 ASCII characters
USE Use the same parameters as on the root access point.
RESTORE You can restore network name and security that was set before applying factory settings.

5. If you want to create an additional wireless network isolated from your LAN in the 2.4GHz band, select the **Enable guest network** checkbox (available for the **Fiber (SFP)**, **Mobile Internet**, **Router** and **WISP Repeater** modes only).

Enable guest network
① Guest Wi-Fi network allows connection to your device and getting access to the Internet. Upon that computers connected to this wireless network will be isolated from the resources of your main local area network.
This helps to secure your LAN while you provide access to the Internet for temporary users.
Network name*
my wi-fi_Guest
① The number of characters should not exceed 32
Open network
Max associated clients*
0
Enable shaping

- 6. In the **Network name** field, specify your own name for the guest wireless network or leave the value suggested by the router.
- 7. If you want to create a password for access to the guest wireless network, deselect the **Open network** checkbox and fill in the **Password** field.
- 8. If you want to limit the bandwidth of the guest wireless network, select the **Enable shaping** checkbox and fill in the **Shaping** field.
- 9. Click the **NEXT** button.
- 10. On the **Wireless Network 5 GHz** page, specify needed settings for the wireless network in the 5GHz band and click the **NEXT** button.

Configuring LAN Ports for IPTV/VoIP

This configuration step is available for the **Fiber (SFP)** and **Router** modes.

1. On the **IPTV** page, select the **Is an STB connected to the device** checkbox.

IPTV
Is an STB connected to the device?
() If your ISP provides IPTV service, you can connect an STB directly to the router without additional equipment
Use VLAN ID
SFP LAN1 LAN2 LAN3 LAN4
< BACK NEXT >

- 2. Select a free LAN port for connecting your set-top box.
- 3. If the IPTV service is provided via a VLAN channel, select the **Use VLAN ID** checkbox and fill in the **VLAN ID** field.
- 4. Click the **NEXT** button.

5. On the VoIP page, select the Is an IP phone connected to the device checkbox.



- 6. Select a free LAN port for connecting your IP phone.
- 7. If the VoIP service is provided via a VLAN channel, select the **Use VLAN ID** checkbox and fill in the **VLAN ID** field.
- 8. Click the **NEXT** button.

Changing Web-based Interface Password

On this page you should change the default administrator password. To do this, enter a new password in the **User's interface password** and **Password confirmation** fields. You may set any password except **admin**. Use digits, Latin letters (uppercase and/or lowercase), and other characters available in the US keyboard layout.⁴

Changing web-based interfa	ce password		
For security reasons, please chang	e the password used to access	he device's settings.	
User's interface password*	Ø		
Password should be between 1 and	31 ASCII characters		
Password confirmation*	Q		

Remember or write down the new password for the administrator account. In case of losing the new password, you can access the settings of the router only after restoring the factory default settings via the hardware **RESET** button. This procedure wipes out all settings that you have configured for your router.

Click the **NEXT** button.

On the next page, check all the settings you have just specified.

Also you can save a text file with parameters set by the Wizard to your PC. To do this, click the **SAVE CONFIGURATION FILE** button and follow the dialog box appeared.

To finish the Wizard, click the **APPLY** button. The router will apply settings, reboot, if needed, and check the Internet connection if the Wizard has configured a WAN connection.

^{4 0-9,} A-Z, a-z, space, !"#\$%&'()*+,-./:;<=>?@[\]^_`{|}~.

Configuring Local Area Network

- 1. Go to the Connections Setup / LAN page.
- 2. If needed, change the IPv4 address of the router's LAN interface and the mask of the local subnet. To do this, click the **IPv4** tab and specify needed values in the **IP address** and **Mask** fields in the **Local IP Address** section.

IP address*	
192.168.0.1	
Mask*	
255.255.255.0	
Hostname	
dlinkrouter.local	

If needed, add a static IPv6 address of the router's LAN interface. To do this, click the IPv6 tab. In the Local IPv6 Address section, click the ADD button (+). In the opened window, specify needed values in the IPv6 address and Prefix fields and click the APPLY button.

Local IPv6 Address	+	
IPv6 address		Addressing Type

4. IPv4 address assignment. By default, the built-in DHCP server of the router assigns IPv4 addresses to the devices of the LAN. If you want to manually assign IPv4 addresses, disable the DHCP server (click the IPv4 tab and select the Disable value from the Mode of dynamic IP address assignment drop-down list in the Dynamic IP Addresses section).

Dynamic IP Addresses
Mode of dynamic IP address assignment
Server
Start IP*
192.168.0.100
End IP*
192.168.0.199
Lease time (in minutes)*
1440
DNS relay
ARP Proxy

5. IPv6 address assignment. By default, the devices of the LAN automatically assign IPv6 addresses to themselves (the Stateless value is selected from the Mode of dynamic IPv6 address assignment drop-down list in the Dynamic IPv6 Addresses section on the IPv6 tab). If the devices of the LAN do not support IPv6 address autoconfiguration, use the built-in DHCPv6 server of the router (select the Stateful value from the Mode of dynamic IPv6 address assignment drop-down list).

Aode of dynamic IPv6 address as Stateful	signment		
	(1-FFFF) *		(1-FFFF)*
Address range	2	_	64
Lease time (in minutes)* 5			
The default route	for LAN clients		

6. After specifying the needed parameters on the **Connections Setup** *I* **LAN** page, click the **APPLY** button.

Configuring Network Printer

- 1. Make sure that a driver for your printer which will be used as a network printer is installed on your PC.⁵
- 2. To connect the printer to the router, power off both devices. Connect the printer to the USB port of the router, power on the printer, then power on the router.
- 3. Then access the web-based interface and go to the **Print Server** page.
- 4. Move the **Enable print server** switch to the right, from the **Printer** drop-down list, select the printer connected to the USB port of the router, and click the **APPLY** button.

< Configuration	Print Server	
Print Server You can configure the router as a print server. Being configured in this way, the router will allow your LAN us share the prints connected to the USB port of the router. Image: Control of the context of the contex	sers to In order to operate the print server, you should also configure the client PC. For more information on how to configure the print server please refer to the FAQ section at www.dlink.ru.	
APPLY		

- 5. Click the **Start** button and go to the **Control Panel** window.
- 6. Select the **Hardware and Sound** section. (If the Control Panel has the category view (the **Category** value is selected from the **View by** drop-down list in the top right corner of the window), choose the **View** devices and printers line.)



⁵ Some home printers can work incorrectly as network printers. Contact the technical support of your printer's manufacturer to clarify if your printer supports this function.

7. In the opened window, click the **Add a printer** button.

					×
Contro	ol Panel Hardware and Sound Devices and Printers	- ↓	Search Devic	es and Printers	Q
Add a device Add	a printer			-	0
Devices (1)	Start the Add Printer Wizard, which helps you install a printer				
ASUS-UX303LN					
 ASUS-UX305LN Printers and Faxes 					
	-1				
	Microsoft XPS locument Writer				

8. Select the **Add a local printer** value and click the **Next** button.

Wh	at type of printer do you want to install?
•	Add a local printer Use this option only if you don't have a USB printer. (Windows automatically installs USB printers when you plug them in.)
•	Add a network, wireless or Bluetooth printer Make sure that your computer is connected to the network, or that your Bluetooth or wireless printer is turned on.

 Select the Create a new port choice of the radio button and then select the Standard TCP/IP Port value from the Type of port drop-down list. Click the Next button.

Choose a printer por	t	
A printer port is a type of co printer.	onnection that allows your computer to exchange informatic	on with
Use an existing port:	LPT1: (Printer Port)	
Oreate a new port:		
Type of port:	Local Port	
	Local Port	
	NoMachine Port Monitor	
	Standard TCP/IP Port	

10. Enter the IP address of the router in the **Hostname or IP address** field (by default, **192.168.0.1**). Deselect the **Query the printer and automatically select the driver to use** checkbox and, if needed, change the name of the port in the **Port name** field. Click the **Next** button.

Type a printer hostna	ame or IP address
Device type:	TCP/IP Device
Hostname or IP address:	192.168.0.1
Port name:	192.168.0.1
Query the printer and au	tomatically select the driver to use

11. Wait for about 20-30 seconds. In the opened Additional port information required window, select the Custom choice of the radio button, click the Settings button, and make sure that the RAW choice of the radio button is selected in the Protocol section and the 9100 value is specified in the Raw Settings section. Click the OK button.

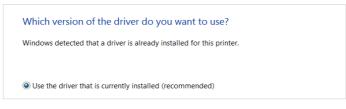
	Configure Standard TCP/IP Port Mo	nitor 📃
he device is not found on the network. Be sure that:	Port Settings	
The device is turned on.		
The network is connected.	Port Name:	192,168,0,1
The device is properly configured.		
The address on the previous page is correct.	Printer Name or IP Address:	192.168.0.1
you think the address is not correct, click Back to return to the previous page. Then	Protocol	
prect the address and perform another search on the network. If you are sure the address	Raw	
correct, select the device type below.	• Raw	C LPR
Device Type	Raw Settings	
Standard Generic Network Card	· · · · · · · · · · · · · · · · · · ·	
	Port Number: 9100	
Custom Settings		

12. Then in the **Additional port information required** window, select the **Standard** choice of the radio button and click the **Next** button.

13. Select your printer and click the **Next** button.

Choose y	your printer from	the list. Click Wi	ndows Update to see mo	re models.
To instal	I the driver from a	an installation C	D, click Have Disk.	
Manufacturer		Printers		
Brother	=	Brother DC	P-116C	
Canon		Brother DC	P-117C	
Epson		Brother DC	P-128C	
Fuji Xerox		Brother DC	P-129C	
	-	Brother DC	P-130C	
Generic				

14. Select the **Use the driver that is currently installed** choice of the radio button and click the **Next** button.



15. Enter a name of the printer (you can specify any name) in the **Printer name** field and click the **Next** button.

Type a printe	r name
Printer name:	My Printer

16. In the **Printer Sharing** window, select the **Do not share this printer** choice of the radio button and click the **Next** button.



17. If you need to print a test page, click the **Print a test page** button. To finish the printer installation, click the **Finish** button.

SPECIFICATIONS^{*}

Hardware	
Processor	· RTL9607C (900MHz)
RAM	· 256MB, DDR3, built in processor
Flash	· 128MB, SPI NAND
Interfaces	 1000BASE-X SFP WAN port 4 10/100/1000BASE-T LAN ports USB 2.0 port
LEDs	 Power SFP Internet LAN 1-4 WLAN 2.4G/5G WPS USB
Buttons	 ON/OFF button to power on/power off RESET button to restore factory default settings WLAN button to enable/disable wireless network WPS button to set up wireless connection
Antenna	· Four external non-detachable antennas (5dBi gain)
МІМО	· 2 x 2, MU-MIMO
Power connector	· Power input connector (DC)

Software		
WAN connection types	 Mobile Internet PPPoE IPv6 PPPoE PPPoE Dual Stack Static IPv4 / Dynamic IPv4 Static IPv6 / Dynamic IPv6 PPTP/L2TP Bridge 	

^{*} The device features are subject to change without notice. For the latest versions of the firmware and relevant documentation, visit <u>www.dlink.ru</u>.

Software	
Network functions	 DHCP server/relay Advanced configuration of built-in DHCP server Stateful/Stateless mode for IPv6 address assignment, IPv6 prefix delegation Automatic obtainment of LAN IP address (for access point/repeater/client modes) DNS relay Dynamic DNS Static IPv4/IPv6 routing IGMP Proxy RIP Support of UPnP IGD Support of VLAN WAN ping respond Support of SIP ALG Support of RTSP WAN failover Built-in UDPXY application Support of ARP Proxy XUPNPD plug-in
Firewall functions	 Network Address Translation (NAT) Stateful Packet Inspection (SPI) IPv4/IPv6 filter MAC filter URL filter Ad blocking function DMZ Virtual servers Built-in Yandex.DNS web content filtering service Built-in SkyDNS web content filtering service
VPN	 IPsec/PPTP/L2TP/PPPoE pass-through PPTP/L2TP tunnels GRE tunnels, EoGRE tunnels IPsec tunnels Transport/Tunnel mode IKEv1/IKEv2 support DES encryption NAT Traversal Support of DPD (Keep-alive for VPN tunnels)

Software		
USB interface functions	 USB modem Auto connection to available type of supported network (4G/3G/2G) Auto configuration of connection upon plugging in USB modem 	
Management and monitoring	 Local and remote access to settings through SSH/TELNET/WEB (HTTP/HTTPS) Multilingual web-based interface for configuration and management Support of D-Link Assistant application for Android and iPhone smartphones Notification on connection problems and auto redirect to settings Firmware update via web-based interface Automatic notification on new firmware version Saving/restoring configuration to/from file Support of logging to remote host/connected USB storage Automatic synchronization of system time with NTP server and manual time/date setup Ping utility Traceroute utility TR-069 client Schedules for filters rules, automatic reboot, and enabling/disabling wireless network Automatic upload of configuration file from ISP's server (Auto Provision) 	

Wireless Module Parame	iters
Standards	· IEEE 802.11a/n/ac · IEEE 802.11b/g/n

⁶ For some models of USB modems.

Wireless Module Parameters		
Frequency range The frequency range depends upon the radio frequency regulations applied in your country	 2400 ~ 2483.5MHz 5150 ~ 5350MHz 5650 ~ 5850MHz 	
Wireless connection security	 WEP WPA/WPA2 (Personal/Enterprise) Latest SAE with 128-bit AES encryption MAC filter WPS (PBC/PIN) 	
Advanced functions	 Support of client mode WMM (Wi-Fi QoS) Information on connected Wi-Fi clients Advanced settings Guest Wi-Fi / support of MBSSID Rate limitation for wireless network Periodic scan of channels, automatic switch to least loaded channel Support of 802.11ac (5GHz) and 802.11n (2.4GHz) TX Beamforming Autonegotiation of channel bandwidth in accordance with environment conditions (20/40 Coexistence) Support of STBC 	
Wireless connection rate	 IEEE 802.11a: 6, 9, 12, 18, 24, 36, 48, and 54Mbps IEEE 802.11b: 1, 2, 5.5, and 11Mbps IEEE 802.11g: 6, 9, 12, 18, 24, 36, 48, and 54Mbps IEEE 802.11n (2.4GHz/5GHz): from 6.5 to 300Mbps (from MCS0 to MCS15) IEEE 802.11ac (5GHz): from 6.5 to 867Mbps (from MCS0 to MCS9) 	

Wireless Module Parameters		
Transmitter output power	 802.11a (typical at room temperature 25 °C) 15dBm at 6, 9, 12, 18, 24, 36, 48, 54Mbps 	
The maximum value of the transmitter output power depends upon the radio frequency regulations applied in your country	 802.11b (typical at room temperature 25 °C) 15dBm at 1, 2, 5.5, 11Mbps 	
	 802.11g (typical at room temperature 25 °C) 15dBm at 6, 9, 12, 18, 24, 36, 48, 54Mbps 	
	 802.11n (typical at room temperature 25 °C) 2.4GHz, HT20/HT40 	
	15dBm at MCS0~7 5GHz, HT20/HT40 15dBm at MCS0~7	
	 802.11ac (typical at room temperature 25 °C) VHT20/VHT40/VHT80 	
	15dBm at MCS0~9	

Wireless Module Parameters		
Receiver sensitivity	 802.11a (typical at PER < 10% at room temperature 25 °C) -82dBm at 6Mbps -81dBm at 9Mbps -79dBm at 12Mbps -77dBm at 18Mbps -74dBm at 24Mbps -70dBm at 36Mbps -66dBm at 48Mbps -65dBm at 54Mbps 	
	 802.11b (typical at PER = 8% at room temperature 25 °C) -82dBm at 1Mbps -80dBm at 2Mbps -78dBm at 5.5Mbps -76dBm at 11Mbps 	
	 802.11g (typical at PER < 10% at room temperature 25 °C) -82dBm at 6Mbps -81dBm at 9Mbps -79dBm at 12Mbps -77dBm at 18Mbps -74dBm at 24Mbps -70dBm at 36Mbps -66dBm at 48Mbps -65dBm at 54Mbps 	
	802.11n (typical at PER = 10% at room temperature 25 °C) 2.4GHz/5GHz, HT20 2.4GHz/5GHz, HT40 -82dBm at MCS0 -79dBm at MCS0 -79dBm at MCS1 -76dBm at MCS1 -77dBm at MCS2 -74dBm at MCS2 -74dBm at MCS3 -71dBm at MCS3 -70dBm at MCS4 -67dBm at MCS4 -66dBm at MCS5 -63dBm at MCS5 -65dBm at MCS6 -62dBm at MCS6 -64dBm at MCS7 -61dBm at MCS7	

Wireless Module Parameters		
	 802.11ac (typical at PER = 10% at room temperature 25 °C) VHT20 82dBm at MCS0 79dBm at MCS1 77dBm at MCS2 74dBm at MCS3 70dBm at MCS5 66dBm at MCS5 66dBm at MCS6 64dBm at MCS7 56dBm at MCS0 76dBm at MCS1 74dBm at MCS2 71dBm at MCS2 71dBm at MCS3 67dBm at MCS5 62dBm at MCS5 62dBm at MCS0 76dBm at MCS0 76dBm at MCS1 74dBm at MCS2 71dBm at MCS3 67dBm at MCS4 63dBm at MCS5 62dBm at MCS6 61dBm at MCS7 56dBm at MCS8 54dBm at MCS1 77dBm at MCS2 68dBm at MCS3 64dBm at MCS3 64dBm at MCS3 64dBm at MCS4 60dBm at MCS5 59dBm at MCS4 60dBm at MCS5 59dBm at MCS4 60dBm at MCS5 59dBm at MCS4 53dBm at MCS5 54dBm at MCS8 51dBm at MCS9 	
Modulation schemes	 802.11a: BPSK, QPSK, 16QAM, 64QAM with OFDM 802.11b: DQPSK, DBPSK, DSSS, CCK 802.11g: BPSK, QPSK, 16QAM, 64QAM with OFDM 802.11n: BPSK, QPSK, 16QAM, 64QAM with OFDM 802.11ac: BPSK, QPSK, 16QAM, 64QAM, up to 256QAM with OFDM 	

Physical Parameters	
Dimensions (L x W x H)	· 206 x 123 x 32 mm (8.1 x 4.8 x 1.3 in)
Weight	· 330 g (0.73 lb)

Operating Environment		
Power	· Output: 12V DC, 1.5A	
Temperature	 Operating: from 0 to 40 °C Storage: from -20 to 65 °C 	
Humidity	 Operating: from 10% to 90% (non-condensing) Storage: from 5% to 95% (non-condensing) 	

Supported USB modems ⁷	
GSM	 Alcatel X500 D-Link DWM-152C1 D-Link DWM-156A6 D-Link DWM 156A7 D-Link DWM 156A8 D-Link DWM-156C1 D-Link DWM-157B1 (Velcom) D-Link DWM-157B1 (Velcom) D-Link DWM-158D1 D-Link DWR-710 Huawei E150 Huawei E156G Huawei E166G Huawei E169G Huawei E171 Huawei E173 (Megafon) Huawei E3131 (MTS 420S) Huawei E352 (Megafon) Prolink PHS001 ZTE MF12 ZTE MF626 ZTE MF627 ZTE MF667 ZTE MF668 ZTE MF752

⁷ The manufacturer does not guarantee proper operation of the router with every modification of the firmware of USB modems.

Supported USB modems	
LTE	 Alcatel IK40V D-Link DWM-222 Huawei E3131 Huawei E3272 Huawei E3351 Huawei E3372s/E3372h-153 Huawei E367 Huawei E392 Megafon M100-1 Megafon M100-2 Megafon M100-2 Megafon M100-3 Megafon M150-1 Megafon M150-1 Megafon M150-2 Quanta 1K6E (Beeline 1K6E) MTS 824F MTS 827F Yota LU-150 Yota WLTUBA-107 ZTE MF823 ZTE MF827
Smartphones in USB tethering mode	Some models of Android smartphones

SAFETY RULES AND CONDITIONS

Please carefully read this section before installation and connection of the device. Make sure that the power adapter and cables are not damaged. The device should be used only as intended in accordance with the documents.

The device is intended for use in dry, clean, dust-free, and well ventilated areas with normal humidity away from strong heat sources. Do not use the device outdoors or in the areas with high humidity. Do not place foreign objects on the device. Do not obstruct the ventilation openings of the device. The environmental temperature near the device and the temperature inside the device's cover should be within the range from 0 °C to +40 °C.

Only use the power adapter supplied with the device. Do not plug in the adapter, if its case or cable are damaged. Plug the adapter only into working electrical outlets with parameters indicated on the adapter.

Do not open the cover of the device! Unplug the device before dusting and cleaning. Use a damp cloth to clean the device. Do not use liquid/aerosol cleaners or magnetic/static cleaning devices. Prevent moisture getting into the device or the power adapter.

The service life of the device is 2 years.

TECHNICAL SUPPORT

You can find software updates and user documentation on our website.

D-Link provides its customers with free support within the product's warranty period.

Customers can contact the technical support group by phone or by e-mail/Internet.

FOR TELEPHONE NUMBERS AND ADDRESSES OF D-LINK OFFICES WORLDWIDE VISIT

http://www.dlink.com