



# **DIR-620S**

Wireless N300 Router with 3G/LTE Support and USB Port

# **BEFORE YOU BEGIN**

### **Delivery Package**

- Router DIR-620S
- Power adapter DC 12V/1A
- 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.** 

3

### **Default Settings**

Domain name of device	dlinkrouter.local.
IP address of device	192.168.0.1
Username (login)	admin
Password	admin
Name of wireless network (SSID)	DIR-620S
Network key (PSK password)	see WPS PIN on the barcode label on the bottom panel of the device

Router DIR-620S 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 web browser to access the web-based interface of the router:
  - 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 802.11b, g, or n Wi-Fi adapter to create a wireless network.
- A USB modem (when it is necessary to connect to the Internet via mobile operators' networks).<sup>1</sup>

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

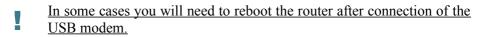
operator when concluding the agreement or placed on its website. For some models of USB modems, it is required to disable the PIN code check on the SIM card prior to connecting the USB modem to the router.

<sup>1</sup> 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 via USB modem*: connect your USB modem to the USB port<sup>2</sup> located on the side panel of the router.



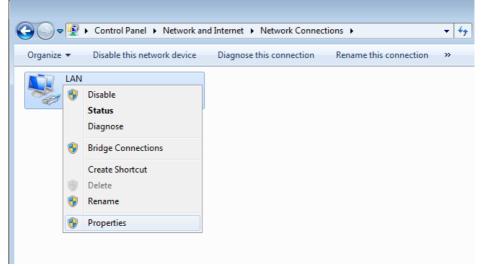
- 3. Connect the power cord to the power connector port on the back panel of the router, then plug the power adapter into an electrical outlet or power strip.
- 4. Turn on the router by pressing the **POWER** button on its back panel.

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

<sup>2</sup> 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.



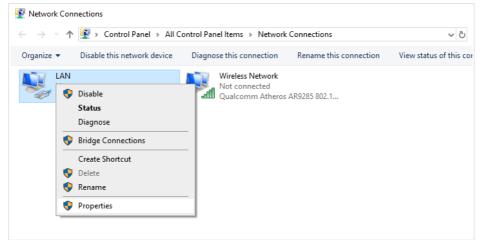
 In the Local Area Connection Properties window, on the Networking tab, select the Internet Protocol Version 4 (TCP/IPv4) line. Click the Properties button. 6. Make sure that the **Obtain an IP address automatically** and **Obtain DNS server address automatically** choices of the radio buttons are selected. Click the **OK** button.

Internet Protocol Version 4 (TCP/IPv4)	Properties
General Alternate Configuration	
You can get IP settings assigned auto this capability. Otherwise, you need to for the appropriate IP settings.	
) <u>O</u> btain an IP address automatica	Ily
OUse the following IP address:	
IP address:	· · · · · ·
Subnet mask:	
Default gateway:	
Obtain DNS server address autor	matically
OUSE the following DNS server add	dresses:
Preferred DNS server:	
Alternate DNS server:	
Valjidate settings upon exit	Ad <u>v</u> anced
	OK 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.



 In the Local Area 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 F	Protocol Version 4 (TCP/IPv4	) Propertie	5		×
General	Alternate Configuration				
this cap	n get IP settings assigned auto bability. Otherwise, you need to appropriate IP settings.				
() O	otain an IP address automatica	lly			
-OUs	e the following IP address: —				
IP ac	ddress:		1.		]
Subr	iet mask:				]
Defa	ult gateway:				]
() O	otain DNS server address auto	matically			
-O Us	e the following DNS server add	dresses:			
Prefe	erred DNS server:		1.	1.0	]
Alter	nate DNS server:				]
v	alidate settings upon exit			Advar	nced
			OK		Cancel

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

### PC with Wi-Fi Adapter

- 1. *To connect via USB modem*: connect your USB modem to the USB port<sup>3</sup> located on the side panel of the router.
- In some cases you will need to reboot the router after connection of the USB modem.
- 2. 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.
- 3. Turn on the router by pressing the **POWER** button on its back panel.
- 4. 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).

<sup>3</sup> 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	lγ
OUse the following IP address:	
IP address:	· · · · · ·
Sybnet mask:	
Default gateway:	
Obtain DNS server address auton	matically
OUSE the following DNS server add	dresses:
Preferred DNS server:	
<u>A</u> lternate 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.



9. In the opened window, in the list of available wireless networks, select the wireless network **DIR-620S** and click the **Connect** button.

Not connected	÷,
Connections are available	
Wi-Fi	^
Connect automatically     Connect	addl lect
Open Network and Sharing Cer	nter

- 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.
  - <u>If you perform initial configuration of the router via Wi-Fi connection</u>, 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.
- 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.

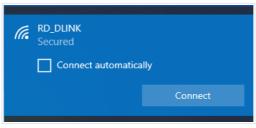
Internet P	rotocol Version 4 (TCP/IPv4)	Properties			×
General	Alternate Configuration				
this cap	get IP settings assigned auton ability. Otherwise, you need to appropriate IP settings.				
() Ob	tain an IP address automatical	у			
-O Us	e the following IP address:				
IP ad	dress:				
Subn	et mask:				
Defa	ult gateway:				
() Ob	tain DNS server address autom	atically			
Us	e the following DNS server add	resses:			
Prefe	rred DNS server:				
Alterr	nate DNS server:		÷.,		
Va	alidate settings upon exit			Advan	ced
			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.



9. In the opened window, in the list of available wireless networks, select the wireless network **DIR-620S** and click the **Connect** button.



- 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

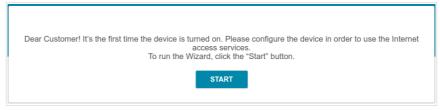
Start a web browser. In the address bar of the web browser, enter the domain name of the router (by default, **dlinkrouter.local**) with a dot at the end and press the **Enter** key. Also you can enter the IP address of the device (by default, **192.168.0.1**).



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.

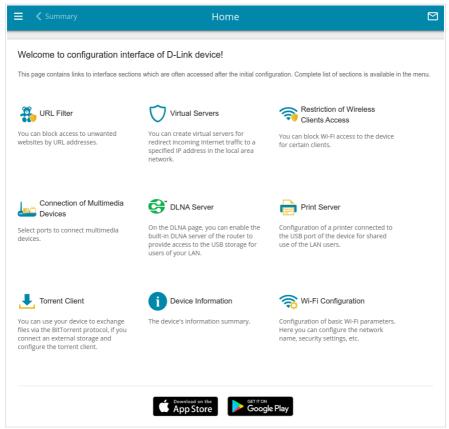
Username*		
Password*		
••		2
Sta	ay signed in	
Forgot pas	sword?	
	Authorization error	
	Attempts remaining:	

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.

Device Informatior	1	WAN IPv4	
Model:	DIR-620S	Connection type:	Dynamic IPv
Hardware version:	B1	Status:	Connected
Firmware version:	4.0.1	IP address:	192.168.161.22
Build time:	Tue Jan 26 2021 1:40:40 PM MSK		
UI version:	1.21.0.584c536-embedded		
Vendor:	D-Link Russia	LAN	
Serial number:	1234567890123	LAN IPv4:	192.168.0.
Support:	support@dlink.ru	MAC address:	a0:78:ba:13:33:2
Summary:	Root filesystem image for DIR_620S_MT7628	Wireless connections:	
Uptime:	20 min.	Wired connections:	
Device mode:	Router	LAN Ports	
Wi-Fi 2.4 GHz		LAN1:	Off
Status:	On 🌘	LAN2:	100M-Full 🖼 🌗
Broadcasting:	On 🌒	LAN3:	Off
Additional networks:	0	LAN4:	Off
Network name (SSID):	DIR-6205-3323		
Security:	WPA2-PSK	USB 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.

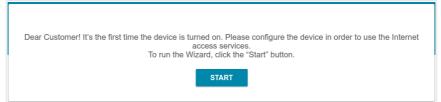


Click the **OK** button and wait until the factory default settings are restored.



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-620S (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.



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



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 wired ISP, on the **Device mode** page, from the **Connection method** list, select the **Wired connection** value. Then from the **Work mode** list select the **Router** value. In this mode you can 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.

Device mode		
Connection method		
Wired connection	•	
Work mode		SSID
Router	•	2
	< BACK	NEXT >

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, and set your own password for access to the web-based interface of the device.

Connection method	
Mobile Internet -	
① Connect a USB modem with an active SIM card of you mobile operator to the device or install an active SIM card not the relevant slot, if your device is equipped with a built BG/LTE modem.	SSID

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, 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 **Wired connection** 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, and set your own password for access to the web-based interface of the device.

Connection method Wired connection	-		
Wied connection			
Work mode			SSID
Access point	•		
		•• ·····	

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, 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 webbased interface of the device.

### **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: <b>E3131</b>	
Modem E3131	•
Please enter the PIN code of the SIM card Modem: E3131 Attempts left: 2	
PIN*	8
	APPLY
	K BACK NEXT

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

Modem se	ettings				
Vendor: Model:	E3131				
Modem E3131		•			
	ion has been created automatical to continue configuration	ly.			
		< ВАСК	NEXT >		

3. Click the **NEXT** button.

If the router failed to create a WAN connection automatically, click the **CONFIGURE MANUALLY** button. On the **Modem settings** 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-620S 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-620S, 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.

Automatic obtainment of IPv4 address Automatic obtainment of IPv4 address sufficiently protects against use of the same addresses in one LAN. In order to assigned by an upper-level router (or a local DHCP server).  P address* 192.168.0.1  Subnet mask* 255.255.255.0  Gateway IP address DNS IP address* 8.8.8. Hostname*
avoid IPv4 address conflicts, static IPv4 addresses of LAN devises should not coincide with addresses from the address range assigned by an upper-level router (or a local DHCP server). IP address* 192.168.0.1 Subnet mask* 255.255.0 Gateway IP address DNS IP address* 8.8.8.8
192.168.0.1         Subnet mask*         255.255.255.0         Gateway IP address         DNS IP address*         8.8.8.8
Subnet mask* 255.255.255.0 Gateway IP address DNS IP address* 8.8.8.8
255.255.25.0 Gateway IP address DNS IP address* 8.8.8.8
255.255.25.0 Gateway IP address DNS IP address* 8.8.8.8
Gateway IP address DNS IP address* 8.8.8.8
DNS IP address* 8.8.8.8
8.8.8.8
Hostname*
Hostname*
dlinkap18c6.local
③ Specify a domain name ending with .local. In order to access the web-based interface using the domain name, enter this name with a dot and slash at the end in the address bar of the web browser (for example, dlinkap12ab.local./)
SACK NEXT >

3. Click the **NEXT** button.

#### **Wi-Fi Client**

This configuration step is available for the **WISP Repeater**, **Repeater**, and **Client** 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

icon ( 📿 ).

2. If a password is needed to connect to the selected network, fill in the relevant field. Click the **Show** icon ( **N**) to display the entered password.

Network name (SSID)*	
RD_DLINK	Attention! Upon connection to networks with WEP or TKI encryption, basic settings of WI-FI networks will be changed:
BSSID	the standards 802.11b and g will be used in the 2.4GHz band and the standard 802.11a will be used in the 5GHz band.
74:da:da:0a:8f:c9	Network authentication
	WPA2-PSK
	Password PSK*
	Password should be between 8 and 63 ASCII characters
	Encryption type*
	AES
WIRELESS NETWORKS	

If you connect to a hidden network, 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 **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 **Router** 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.

*Static IPv6:* Fill in the following fields: IP address, Prefix, Gateway IP address, and 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*	8
IP address*	
Subnet mask*	
Gateway IP address*	
DNS IP address*	

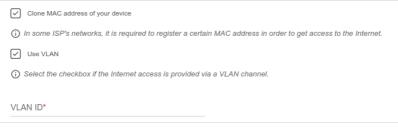
**PPTP** + **Dynamic IP or L2TP** + **Dynamic IP:** Enter authorization data provided by your ISP (the username (login) in the **Username** field and the password in the **Password** field). Click the **Show** icon () to display the entered password. If authorization is not required, select the **Without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

Username*	
Password*	S.

**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 (available for the **Router** mode only).
- 3. If the Internet access is provided via a VLAN channel, select the **Use VLAN** checkbox and fill in the **VLAN ID** field (available for the **Router** mode only).



4. Click the **NEXT** button.

#### **Configuring Wireless Network**

This configuration step is available for the **Mobile Internet, 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 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*
DIR-XXX
Open network
Password*
ŵ
<ul> <li>Password should be between 8 and 63 ASCII characters</li> <li>RESTORE</li> <li>You can restore network name and security that was set before applying factory settings.</li> </ul>

5. If you want to create an additional wireless network isolated from your LAN, select the **Enable guest network** checkbox (available for the **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*
DIR-XXX_Guest
Open network
Max associated clients*
0

- 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. Click the **NEXT** button.

### **Configuring LAN Ports for IPTV/VoIP**

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

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



- 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.

VolP
S an IP phone connected to the device?
<ul> <li>If your ISP provides VoIP service, you can connect an IP phone directly to the router without additional equipment</li> <li>Use VLAN ID</li> </ul>
VLAN ID*
() Information about the VLAN ID can be found in the contract.
LAN1 LAN2 LAN3 LAN4 WAN
K BACK NEXT >

- 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.<sup>4</sup>

Changing web-based inte	ace password
For security reasons, please cha	ge the password used to access the device's settings.
User's interface password*	Q
Password should be between 1	d 31 ASCII characters
Password confirmation*	\$
	<b>K</b> BACK NEXT

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.

<sup>4 0-9,</sup> 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	

3. 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	+ 1
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).

Server	nic IP address assignment	
Start IP*		
192.168.0.	100	
End IP*		
192.168.0.	199	
Lease time (in	minutes)*	
1440		
	, KODV	
	S relay	

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). If you want to manually assign IPv6 addresses to devices of the LAN, select the Disable value from the Mode of dynamic IPv6 addresses assignment drop-down list).

lode of dynamic IP\ Stateful	/6 address assignmer	it	
	(1-FFFF)*		(1-FFFF)*
Address range	2	_	64
ease time (in minut 5	es)*		
5	es)* ault route for LA	N clients	
5	ault route for LA	N clients	

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

# **SPECIFICATIONS**<sup>\*</sup>

Hardware	
Processor	· MT7628NN (580MHz)
RAM	· 64MB, DDR2 SDRAM
Flash	· 16MB, SPI
Interfaces	<ul> <li>10/100BASE-TX WAN port</li> <li>4 10/100BASE-TX LAN ports</li> <li>USB 2.0 port</li> </ul>
LEDs	<ul> <li>Power</li> <li>Internet</li> <li>1-4 LAN LEDs</li> <li>WLAN</li> <li>WPS</li> <li>USB</li> </ul>
Buttons	<ul> <li>POWER button to power on/power off</li> <li>RESET button to restore factory default settings</li> <li>WLAN/WPS button to set up wireless connection and enable/disable wireless network</li> </ul>
Antenna	· Two external non-detachable antennas (5dBi gain)
МІМО	· 2x2
Power connector	· Power input connector (DC)

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

Software	
WAN connection types	<ul> <li>Mobile Internet (via supported USB modem)</li> <li>PPPoE</li> <li>IPv6 PPPoE</li> <li>PPPoE Dual Stack</li> <li>Static IPv6 / Dynamic IPv4</li> <li>Static IPv6 / Dynamic IPv6</li> <li>PPPoE + Static IP (PPPoE Dual Access)</li> <li>PPPoE + Dynamic IP (PPPoE Dual Access)</li> <li>PPTP/L2TP + Static IP</li> <li>PPTP/L2TP + Dynamic IP</li> </ul>
Network functions	<ul> <li>DHCP server/relay</li> <li>Advanced configuration of built-in DHCP server</li> <li>Stateful/Stateless mode for IPv6 address assignment, IPv6 prefix delegation</li> <li>Automatic obtainment of LAN IP address (for access point/repeater/client modes)</li> <li>DNS relay</li> <li>Dynamic DNS</li> <li>Static IPv4/IPv6 routing</li> <li>IGMP Proxy</li> <li>Support of UPnP IGD</li> <li>Support of VLAN</li> <li>WAN ping respond</li> <li>Support of SIP ALG</li> <li>Support of RTSP</li> <li>LAN/WAN conversion</li> <li>Multi-WAN support</li> <li>WAN failover</li> <li>Autonegotiation of speed, duplex mode, and flow control / Manual speed and duplex mode setup for each Ethernet port</li> <li>Built-in UDPXY application</li> <li>XUPNPD plug-in</li> </ul>
Firewall functions	<ul> <li>Network Address Translation (NAT)</li> <li>Stateful Packet Inspection (SPI)</li> <li>IPv4/IPv6 filter</li> <li>MAC filter</li> <li>URL filter</li> <li>DMZ</li> <li>Virtual servers</li> </ul>
VPN	· IPsec/PPTP/L2TP/PPPoE pass-through

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Software	
Management and monitoring	<ul> <li>Local and remote access to settings through TELNET/WEB (HTTP/HTTPS)</li> <li>Multilingual web-based interface for configuration and management</li> <li>Support of D-Link Assistant application for Android and iPhone smartphones</li> <li>Notification on connection problems and auto redirect to settings</li> <li>Firmware update via web-based interface</li> <li>Automatic notification on new firmware version</li> <li>Saving/restoring configuration to/from file</li> <li>Support of logging to remote host/connected USB storage</li> <li>Automatic synchronization of system time with NTP server and manual time/date setup</li> <li>Ping utility</li> <li>Traceroute utility</li> <li>TR-069 client</li> <li>SNMP agent</li> <li>Schedules for rules and settings of firewall, automatic reboot, and enabling/disabling wireless network and Wi-Fi filter</li> <li>Automatic upload of configuration file from ISP's server (Auto Provision)</li> </ul>

Wireless Module Parameters	
Standards	· IEEE 802.11b/g/n
Frequency range The frequency range depends upon the radio frequency regulations applied in your country	· 2400 ~ 2483.5MHz
Wireless connection security	<ul> <li>WEP</li> <li>WPA/WPA2 (Personal/Enterprise)</li> <li>MAC filter</li> <li>WPS (PBC/PIN)</li> </ul>

Wireless Module Parameters	
Advanced functions	<ul> <li>Support of client mode</li> <li>WMM (Wi-Fi QoS)</li> <li>Information on connected Wi-Fi clients</li> <li>Advanced settings</li> <li>Smart adjustment of Wi-Fi clients</li> <li>Guest Wi-Fi / support of MBSSID</li> <li>Periodic scan of channels, automatic switch to least loaded channel</li> <li>Autonegotiation of channel bandwidth in accordance with environment conditions (20/40 Coexistence)</li> <li>Support of STBC</li> </ul>
Wireless connection rate	<ul> <li>IEEE 802.11b: 1, 2, 5.5, and 11Mbps</li> <li>IEEE 802.11g: 6, 9, 12, 18, 24, 36, 48, and 54Mbps</li> <li>IEEE 802.11n: from 6.5 to 300Mbps (from MCS0 to MCS15)</li> </ul>
Transmitter output power	<ul> <li>802.11b (typical at room temperature 25 °C)</li> <li>15dBm (+/-2dB) at 1, 2, 5.5, 11Mbps</li> </ul>
The maximum value of the transmitter output power depends upon the radio	<ul> <li>802.11g (typical at room temperature 25 °C)</li> <li>15dBm (+/-2dB) at 6~12, 18~24, 36, 48, 54Mbps</li> </ul>
frequency regulations applied in your country	<ul> <li>802.11n (typical at room temperature 25 °C)</li> <li>HT20/HT40</li> <li>15dBm (+/-2dB) at MCS0~7</li> </ul>

Wireless Module Param	eters
Receiver sensitivity	<ul> <li>802.11b (typical at PER = 8% at room temperature 25 °C)</li> <li>-80dBm at 1Mbps</li> <li>-80dBm at 2Mbps</li> <li>-76dBm at 5.5Mbps</li> <li>-76dBm at 11Mbps</li> </ul>
	<ul> <li>802.11g (typical at PER = 10% at room temperature 25 °C)</li> <li>-82dBm at 6Mbps</li> <li>-81dBm at 9Mbps</li> <li>-79dBm at 12Mbps</li> <li>-77dBm at 18Mbps</li> <li>-74dBm at 24Mbps</li> <li>-70dBm at 36Mbps</li> <li>-66dBm at 48Mbps</li> <li>-65dBm at 54Mbps</li> </ul>
	<ul> <li>802.11n (typical at PER = 10% at room temperature 25 °C) HT20</li> <li>-82dBm at MCS0</li> <li>-79dBm at MCS1</li> <li>-77dBm at MCS2</li> <li>-74dBm at MCS3</li> <li>-70dBm at MCS5</li> <li>-66dBm at MCS5</li> <li>-65dBm at MCS6</li> <li>-64dBm at MCS7</li> <li>HT40</li> <li>-79dBm at MCS1</li> <li>-74dBm at MCS2</li> <li>-71dBm at MCS0</li> <li>-76dBm at MCS1</li> <li>-74dBm at MCS2</li> <li>-71dBm at MCS5</li> <li>-62dBm at MCS5</li> <li>-62dBm at MCS5</li> <li>-62dBm at MCS4</li> <li>-63dBm at MCS5</li> <li>-62dBm at MCS5</li> <li>-62dBm at MCS5</li> <li>-62dBm at MCS6</li> <li>-61dBm at MCS7</li> </ul>
Modulation schemes	<ul> <li>802.11b: DQPSK, DBPSK, DSSS, and CCK</li> <li>802.11g: BPSK, QPSK, 16QAM, 64QAM with OFDM</li> <li>802.11n: BPSK, QPSK, 16QAM, 64QAM with OFDM</li> </ul>

Physic	al Parameters	S
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Dimensions (L x W x H)

141 x 100 x 32 mm (5.5 x 3.9 x 1.2 in)

Operating Environment		
Power	· Output: 12V DC, 1A	
Temperature	<ul> <li>Operating: from 0 to 40 °C</li> <li>Storage: from -20 to 65 °C</li> </ul>	
Humidity	<ul> <li>Operating: from 10% to 90% (non-condensing)</li> <li>Storage: from 5% to 95% (non-condensing)</li> </ul>	

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Supported USB modems⁵		
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	
	· D-Link DWM-157B1 (Velcom)	
	D-Link DWM-158D1	
	· D-Link DWR-710	
	· Huawei E150	
	· Huawei E1550	
	· Huawei E156G	
	· Huawei E160G	
	· Huawei E169G	
	· Huawei E171	
	· Huawei E173 (Megafon)	
	Huawei E220	
	<ul> <li>Huawei E3131 (MTS 420S)</li> </ul>	
	Huawei E352 (Megafon)	
	Huawei E3531	
	· Prolink PHS600	
	· Prolink PHS901	
	· ZTE MF112	
	· ZTE MF192	
	· ZTE MF626	
	· ZTE MF627	
	· ZTE MF652	
	· ZTE MF667	
	· ZTE MF668	
	· ZTE MF752	

<sup>5</sup> The manufacturer does not guarantee proper operation of the router with every modification of the firmware of USB modems.

Supported USB modems		
LTE	<ul> <li>Alcatel IK40V</li> <li>D-Link DWM-222</li> <li>Huawei E3131</li> <li>Huawei E3272</li> <li>Huawei E3351</li> <li>Huawei E3372s</li> <li>Huawei E3372h-153</li> <li>Huawei E367</li> <li>Huawei E392</li> <li>Megafon M100-1</li> <li>Megafon M100-2</li> <li>Megafon M100-3</li> <li>Megafon M100-4</li> <li>Megafon M150-1</li> <li>Megafon M150-1</li> <li>Megafon M150-2</li> <li>Quanta 1K6E (Beeline 1K6E)</li> <li>MTS 824F</li> <li>MTS 827F</li> <li>Yota LU-150</li> <li>Yota WLTUBA-107</li> <li>ZTE MF823</li> <li>ZTE MF823</li> <li>ZTE MF833T</li> <li>ZTE MF833T</li> </ul>	
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