



## **DIR-320**

**Wireless N150 Router with 3G/CDMA/LTE Support  
and USB Port**

## BEFORE YOU BEGIN

### *Delivery Package*

- Router DIR-320
- 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 [www.dlink.ru](http://www.dlink.ru)).

**!** 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*

<b>IP address of wireless router</b>	<b>192.168.0.1</b>
<b>Username (login)</b>	<b>admin</b>
<b>Password</b>	<b>admin</b>
<b>Name of wireless network (SSID)</b>	<b>DIR-320</b>
<b>Network key (PSK)</b>	see WPS PIN on the barcode label on the bottom panel of the device

For security reasons, router DIR-320 with default settings cannot connect to the Internet. To get started, please set your own password used to access the web-based interface and, if needed, configure other settings recommended by your ISP.

## System Requirements and Equipment

- 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 5 and later
  - Google Chrome 5 and later
  - Microsoft Internet Explorer 8 and later
  - Mozilla Firefox 5 and later
  - Opera 10 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 identification card (SIM or R-UIM) 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 LTE and CDMA USB modems, it is required to disable the PIN code check on the identification card prior to connecting the USB modem to the router.

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<sup>1</sup> Contact your operator to get information on the service coverage and fees.

## ***Supported USB Modems***

### **GSM modems**

- Alcatel X500
- D-Link DWM-152C1
- D-Link DWM-156A6
- D-Link DWM-156A7
- D-Link DWM-156C1
- D-Link DWM-157B1
- D-Link DWM-157B1 (Velcom)
- D-Link DWM-158D1
- Huawei E150
- Huawei E1550
- Huawei E156G
- Huawei E160G
- Huawei E169G
- Huawei E171
- Huawei E173 (Megafon)
- Huawei E220
- Huawei E352 (Megafon)
- Huawei E367 (3G mode)
- Huawei E392 (3G mode)
- ZTE MF112
- ZTE MF192
- ZTE MF626
- ZTE MF627
- ZTE MF652
- ZTE MF667
- ZTE MF668
- ZTE MF752

**CDMA modems<sup>2</sup>**

- Airplus MCD-650
- Airplus MCD-800
- AnyDATA ADU-300A
- AnyDATA ADU-500A
- AnyDATA ADU-510A
- Huawei EC306
- ZTE AC5710
- ZTE AC5730

**LTE modems**

- Huawei E3131
- Huawei E3272
- Huawei E3351
- Huawei E367
- Huawei E392
- Megafon M100-1
- Megafon M100-3
- Megafon M100-4
- Megafon M150-1
- MTS 824F
- Yota LU-150
- Yota WLTUBA-107
- ZTE MF823
- ZTE MF827



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

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2 Performance of CDMA USB modems is not tested for the current firmware version.

## CONNECTING TO PC

### *PC with Ethernet Adapter*

1. Make sure that your PC is powered off.
2. Connect an Ethernet cable between any of LAN ports located on the back panel of the router and the Ethernet port of your PC.
3. To connect via an LTE, 3G GSM or CDMA network: connect your USB modem to the USB port<sup>3</sup> located on the left side panel of the router.



If you need to connect or change a USB modem to another one when the router is powered on, power off the router, connect the modem to the USB port, and power on the router.

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. Turn on your PC and wait until your operating system is completely loaded.

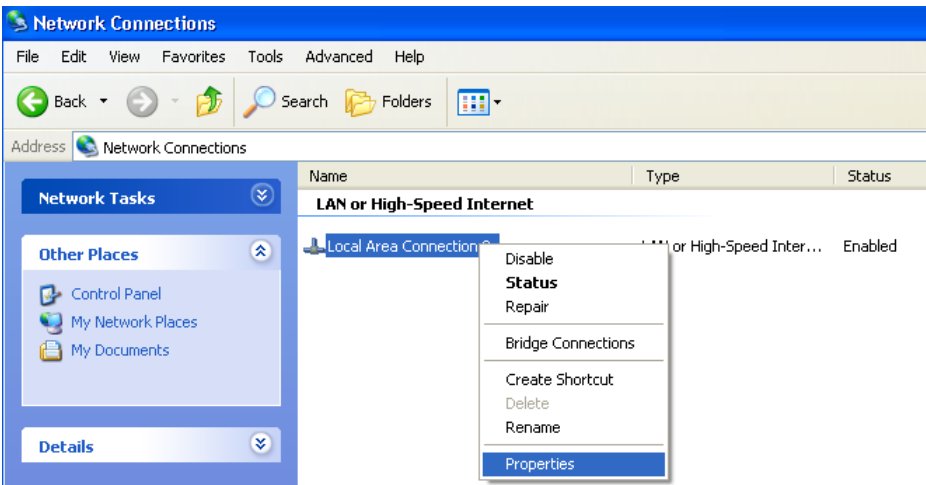
Now you should configure your PC to obtain an IP address automatically (as DHCP client).

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<sup>3</sup> It is recommended to use a USB extension cable to connect a USB modem to the router.

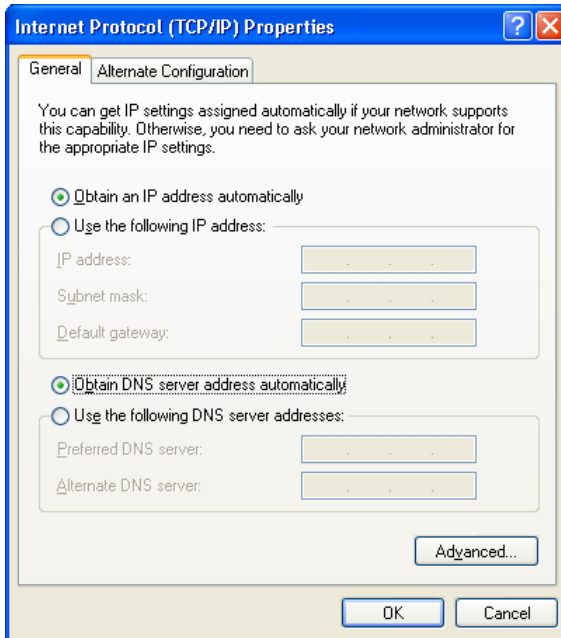
## Obtaining IP Address Automatically in OS Windows XP

1. Click the **Start** button and proceed to the **Control Panel > Network and Internet Connections > Network Connections** window.
2. In the **Network Connections** window, right-click the relevant **Local Area Connection** icon and select the **Properties** line in the menu displayed.



3. In the **Local Area Connection Properties** window, on the **General** tab, select the **Internet Protocol (TCP/IP)** line. Click the **Properties** button.

4. Select the **Obtain an IP address automatically** and **Obtain DNS server address automatically** radio buttons. Click the **OK** button.

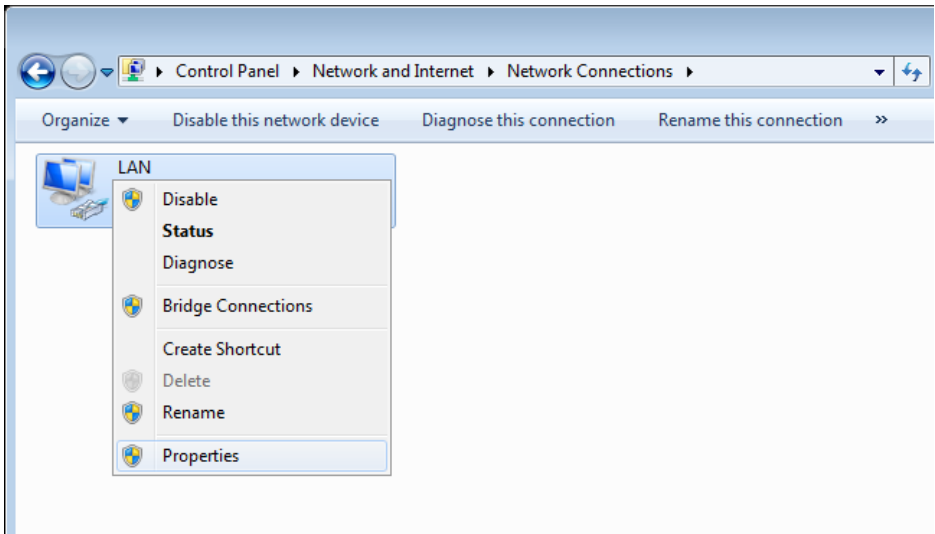


5. Click the **OK** button in the connection properties window.  
Now your computer is configured to obtain an IP address automatically.



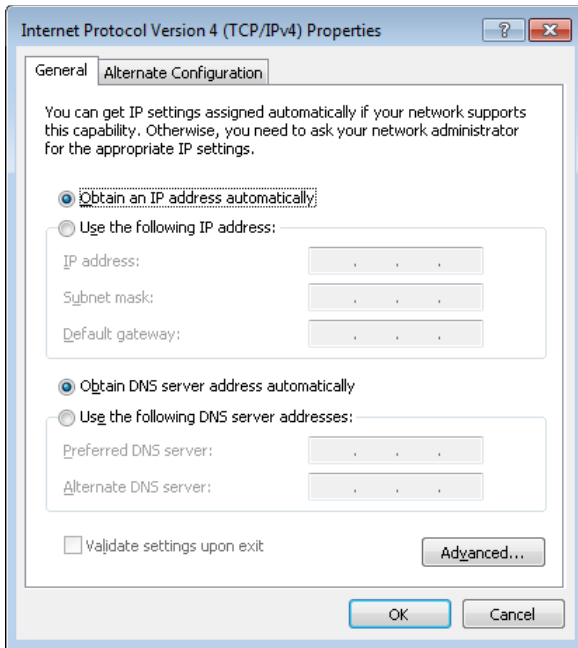
## Obtaining IP Address Automatically in OS Windows 7

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. Select the **Obtain an IP address automatically** and **Obtain DNS server address automatically** radio buttons. Click the **OK** button.



7. Click the **OK** button in the connection properties window.  
Now your computer is configured to obtain an IP address automatically.

## *PC with Wi-Fi Adapter*

1. To connect via an LTE, 3G GSM or CDMA network: connect your USB modem to the USB port<sup>4</sup> located on the left side panel of the router.



If you need to connect or change a USB modem to another one when the router is powered on, power off the router, connect the modem to the USB port, and power on the router.

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 **ON/OFF** button on its back panel.
4. Turn on your PC and wait until your operating system is completely loaded.
5. Turn on your Wi-Fi adapter. 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.

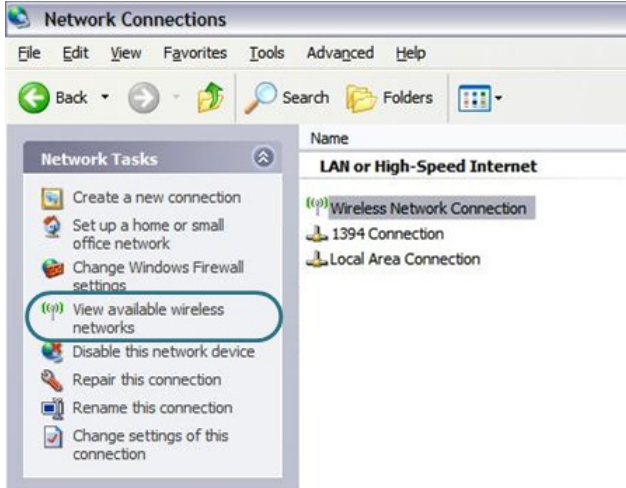
Now you should configure your Wi-Fi adapter.

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<sup>4</sup> It is recommended to use a USB extension cable to connect a USB modem to the router.

## Configuring Wi-Fi Adapter in OS Windows XP

1. Click the **Start** button and proceed to the **Control Panel > Network and Internet Connections > Network Connections** window.
2. Select the icon of the wireless network connection and make sure that your Wi-Fi adapter is on.



3. Search for available wireless networks.
4. In the opened **Wireless Network Connection** window, select the wireless network **DIR-320** and click the **Connect** button.
5. In the opened window, enter the network key (see WPS PIN on the barcode label on the bottom panel of the device) in the **Network key** and **Confirm network key** fields and click the **Connect** button.

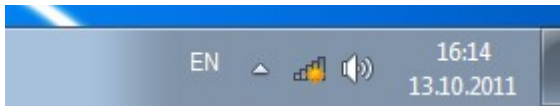
After that the **Wireless Network Connection Status** window appears.



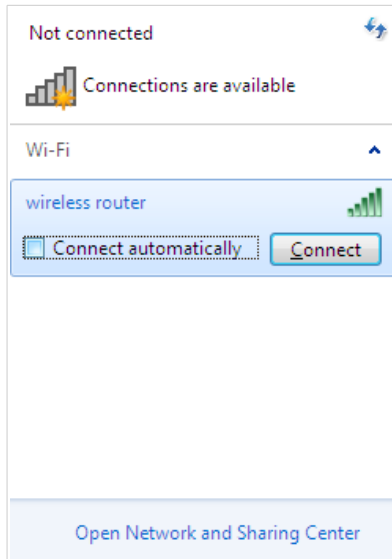
If you perform initial configuration of the router via Wi-Fi connection, note that immediately after changing the wireless default settings of the router you will need to reconfigure the wireless connection using the newly specified settings.

## Configuring Wi-Fi Adapter in 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, select the icon of the wireless network connection and make sure that your Wi-Fi adapter is on.
5. 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-320** and click the **Connect** button.



- 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.
- 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.

## 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.



! 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.

After the first access to the web-based interface you need to change the default administrator password. Enter the new password in the **Password** and **Confirmation** fields. You may set any password except **admin**. Use digits, Latin letters (uppercase and/or lowercase), and characters available on the keyboard. Then click the **Apply** button.

A screenshot of a web form titled 'Please, change default password'. It contains two input fields: 'Password' and 'Confirmation'. Below the fields is an 'Apply' button.

! 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.

When the web-based interface is accessed the next time and after, the login page opens. Enter the username (**admin**) in the **Login** field and the password you specified in the **Password** field, then click the **Enter** button.



The image shows a login form for a D-LINK DEVICE. The form has a title bar that says "D-LINK DEVICE". Below the title bar, there are two input fields: "Login" and "Password". Below the input fields, there are two buttons: "Clear" and "Enter".

D-LINK DEVICE	
Login	<input type="text"/>
Password	<input type="password"/>
<input type="button" value="Clear"/>	<input type="button" value="Enter"/>



After successful registration the **Home / Information** page opens. The page displays general information on the router and its software.

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## Home / Information

### Device information

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Vendor:	D-Link Russia
Model:	DIR-320
Firmware version:	<a href="#">2.5.15</a>
Build time:	Tue Jan 20 17:23:49 MSK 2015
Summary:	Root filesystem image for DIR-320
Web revision:	c03ec87ad85bd457b76bb7098f10716947aad8ec
Support:	8-800-700-5465 <a href="mailto:support@dlink.ru">support@dlink.ru</a>

### Network information

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LAN IPv4:	<a href="#">192.168.0.1</a>
LAN IPv6:	<a href="#">fd01::1/64</a>
LAN MAC:	<a href="#">00:11:22:33:44:56</a>
SSID:	<a href="#">DIR-320</a>
Security:	<a href="#">WPA2PSK</a>
WAN connection status (IPv4):	192.168.161.229; WAN type: Dynamic IP;
WAN connection status (IPv6):	No connection is created or no installed default gateway

### internet protection by Yandex

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Enabled:	No, <a href="#">Enable</a>
Child mode:	0 devices
Safe mode:	1 device default
Protection off:	0 devices

### USB

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Status:	Connected
Devices:	USB storage device

The web-based interface of the router is multilingual. If you need to select another language for the web-based interface, place the mouse pointer over the **English** caption in the top part of the page and select a language from the menu displayed.



To configure the router use the menu in the left part of the page. Go to the relevant section and select the needed page or run the needed Wizard in the **Home** section.

Also you can find a specific page via search. To do this, enter the name of the page, wholly or partly, in the search bar in the top part of the web-based interface page, and then select a needed link in the search results.

## Configuring Connection to the Internet

! 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.

### LTE WAN Connection

If the PIN code check is enabled for the SIM card inserted into your LTE USB modem, it is required to disable the PIN code check on the identification card prior to connecting the USB modem to the router.

An active LTE WAN connection will be automatically created on the **Net / WAN** page when connecting a USB modem to the router. If the connection has not been created automatically, create a new connection manually.

! For the USB modem Megafon M100-1, please reboot the router after creating the WAN connection.

1. Go to the **Net / WAN** page and click the **Add** button.
2. In the **General settings** section, in the **Provider** drop-down list, leave the **Manually** value.
3. From the **Connection Type** drop-down list, select the **LTE** value.
4. Make sure that the **USB** value is selected from the **Interface** drop-down list.
5. Specify a name for your connection (any name for easier identification) in the **Name** field.

#### General settings

Provider:	Manually
Connection Type:	LTE
Interface:	USB
Name:*	<input type="text"/>
Enable:	<input checked="" type="checkbox"/>
Direction:	WAN

6. If your operator requires to specify the access point name, in the **USB modem** section, fill in the **APN** field.

**USB-modem**

Mode:

APN:

7. If your operator has provided the address of the DNS server, in the **IP** section, deselect the **Obtain DNS server addresses automatically** checkbox and fill in the **Primary DNS server** field.

**IP**

Obtain DNS server addresses automatically:

Primary DNS server:\*

Secondary DNS server:

Vendor ID:

Hostname:

8. Click the **Apply** button.
9. On the **Net / WAN** page, select the choice of the **Default gateway** radio button corresponding to the new LTE WAN connection.

## 3G WAN Connection

If the PIN code check is enabled for the SIM card inserted into your USB modem, then prior to creating a 3G WAN connection, proceed to the **3G/LTE modem / PIN** menu and enter the PIN code on the page displayed<sup>5</sup>.

If the PIN code check for the SIM card inserted into your USB modem is disabled, an active 3G WAN connection will be automatically created on the **Net / WAN** page when connecting a USB modem to the router<sup>6</sup>. If the connection has not been created automatically, create a new connection manually.

1. Go to the **Net / WAN** page and click the **Add** button.
2. In the **General settings** section, from the **Provider** drop-down list, select your country and operator to automatically specify all settings required to connect to the Internet. To specify all settings independently, leave the **Manually** value.
3. From the **Connection Type** drop-down list, select the **3G** value.
4. Make sure that the **USB** value is selected from the **Interface** drop-down list.
5. Specify a name for your connection (any name for easier identification) in the **Name** field.

**General settings**

Provider:	Manually ▼
Connection Type:	3G ▼
Interface:	USB ▼
Name:*	<input type="text"/>
Enable:	<input checked="" type="checkbox"/>
Direction:	WAN

5 For GSM USB modems only. For CDMA USB modems, it is required to disable the PIN code check on the identification card prior to connecting the USB modem to the router.

6 For GSM USB modems only.

- If you need to specify other settings, in the **PPP** section, enter authorization data provided by your operator (the username (login) in the **Username** field and the password in the **Password** and **Password confirmation** fields), or select the **Without authorization** checkbox if authorization is not required. If you need to specify the access point name, fill in the **APN** field. In the **Dial number** field, enter the number dialed to connect to the authorization server of the operator.

**PPP**

Username:\*

Without authorization:

Password:\*

Password confirmation:\*

APN:

Dial number:\*

Authentication algorithm:



- Click the **Apply** button.
- On the **Net / WAN** page, select the choice of the **Default gateway** radio button corresponding to the new 3G WAN connection.

## Wired WAN Connection

1. Go to the **Net / WAN** page, select the **WAN** connection and click the **Delete** button.
2. Click the **Add** button.
3. In the **General settings** section, in the **Provider** drop-down list, leave the **Manually** value.
4. From the **Connection Type** drop-down list, select the needed value.
5. From the **Interface** drop-down list, select the **Internet** value.
6. Specify a name for your connection (any name for easier identification) in the **Name** field.

### General settings



Provider:	<input type="text" value="Manually"/>
Connection Type:	<input type="text" value="PPPoE"/>
Interface:	<input type="text" value="Internet"/>
Name:*	<input type="text"/>
Enable:	<input checked="" type="checkbox"/>
Direction:	WAN

7. If your ISP uses MAC address binding, in the **Ethernet** section, in the **MAC** field, enter the MAC address registered by your ISP upon concluding the agreement. To set the MAC address of the network interface card (of the computer that is being used to configure the router at the moment) as the MAC address of the WAN interface, click the **Clone MAC address of your computer** icon (  ). To set the address of a device connected to the router's LAN at the moment, select the relevant value from the drop-down list (the field will be filled in automatically). To set the router's MAC address as the MAC address of the WAN interface, click the **Restore default MAC address** icon (  ).

**Ethernet**

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MTU:\*

MAC:   

8. If your ISP uses authorization via the 802.1x protocol, in the **Authorization via 802.1x protocol** section, select the **Authorization in the ISP's network via 802.1x protocol** checkbox. Fill in the fields of the section in accordance with data provided by your ISP. *The section is not displayed for the connection of PPPoE, IPv6 PPPoE, PPPoE Dual Stack, Static IPv6, and Dynamic IPv6 types.*

**Authorization via 802.1x protocol**

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Authorization in the ISP's network via 802.1x protocol:

Authentication method:

Username:

Password:



9. *For connection of PPPoE type:* in the **PPP** section, enter authorization data provided by your ISP (the username (login) in the **Username** field and the password in the **Password** and **Password confirmation** fields), or select the **Without authorization** checkbox if authorization is not required.

**PPP**

Username:\*

Without authorization:

Password:\*

Password confirmation:\*

10. *For connection of IPv6 PPPoE or PPPoE Dual Stack type:* in the **PPP** section, enter authorization data provided by your ISP (the username (login) in the **Username** field and the password in the **Password** and **Password confirmation** fields), or select the **Without authorization** checkbox if authorization is not required. If you need to specify the gateway address manually, in the **IPv6 gateway** section, deselect the **SLAAC** checkbox and fill in the **Static IPv6 gateway address** field.

**PPP**

Username:\*

Without authorization:

Password:\*

Password confirmation:\*

**IPv6 gateway**

SLAAC:

Static IPv6 gateway address:

11. *For connection of Static IP type:* in the **IP** section, fill in the **IP Address**, **Netmask**, **Gateway IP address**, and **Primary DNS server** fields.

**IP**

IP Address:\*

Netmask:\*

Gateway IP address:\*

Primary DNS server:\*

Secondary DNS server:

12. *For connection of Dynamic IP type:* if your ISP has provided the address of the DNS server, in the **IP** section, deselect the **Obtain DNS server addresses automatically** checkbox and fill in the **Primary DNS server** field.

**IP**

Obtain DNS server addresses automatically:

Primary DNS server:\*

Secondary DNS server:

Vendor ID:

Hostname:

13. **For connection of Static IPv6 type:** in the **IP** section, fill in the **IPv6 address** and **Gateway IPv6 address** fields.

**IP**

IPv6 address:\*

Gateway IPv6 address:\*

Primary IPv6 DNS server:

Secondary IPv6 DNS server:

14. **For connection of Dynamic IPv6 type:** if your ISP has provided the address of the DNS server, in the **IP** section, deselect the **Obtain DNS server addresses automatically** checkbox and fill in the **Static primary DNS server** field.

**IP**

Get IPv6:

Gateway by SLAAC:

Static IPv6 gateway address:

Obtain DNS server addresses automatically:

Static primary DNS server:

Static secondary DNS server:

15. **For connection of PPPoE + Static IP type:** in the **IP** section, fill in the **IP Address**, **Netmask**, **Gateway IP address**, and **Primary DNS server** fields. Then in the **PPP** section, enter authorization data provided by your ISP (the username (login) in the **Username** field and the password in the **Password** and **Password confirmation** fields), or select the **Without authorization** checkbox if authorization is not required.

IP	
IP Address:*	<input type="text"/>
Netmask:*	<input type="text"/>
Gateway IP address:*	<input type="text"/>
Primary DNS server:*	<input type="text"/>
Secondary DNS server:	<input type="text"/>

PPP	
Username:*	<input type="text"/>
Without authorization:	<input type="checkbox"/>
Password:*	<input type="password"/>
Password confirmation:*	<input type="password"/>

16. *For connection of PPPoE + Dynamic IP type:* if your ISP has provided the address of the DNS server, in the **IP** section, deselect the **Obtain DNS server addresses automatically** checkbox and fill in the **Primary DNS server** field. Then in the **PPP** section, enter authorization data provided by your ISP (the username (login) in the **Username** field and the password in the **Password** and **Password confirmation** fields), or select the **Without authorization** checkbox if authorization is not required.

**IP**

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Obtain DNS server addresses automatically:

Primary DNS server:\*

Secondary DNS server:

Vendor ID:

Hostname:

**PPP**

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Username:\*

Without authorization:

Password:\*

Password confirmation:\*

17. **For connection of PPTP + Static IP or L2TP + Static IP type:** in the **IP** section, fill in the **IP Address**, **Netmask**, **Gateway IP address**, and **Primary DNS server** fields. Then in the **VPN** section, enter authorization data provided by your ISP (the username (login) in the **Username** field and the password in the **Password** and **Password confirmation** fields), or select the **Without authorization** checkbox if authorization is not required. In the **VPN server address** field, enter the IP or URL address of the PPTP or L2TP authentication server. If your ISP applies encryption, select a needed value from the **Encryption** drop-down list.

**IP**

IP Address:*	<input type="text"/>
Netmask:*	<input type="text"/>
Gateway IP address:*	<input type="text"/>
Primary DNS server:*	<input type="text"/>
Secondary DNS server:	<input type="text"/>

**VPN**

Connect automatically:	<input checked="" type="checkbox"/>
Username:*	<input type="text"/>
Without authorization:	<input type="checkbox"/>
Password:*	<input type="password"/>
Password confirmation:*	<input type="password"/>
VPN server address:*	<input type="text"/>
Service name:	<input type="text"/>
Encryption:	<input type="text" value="No encrypt"/>

18. **For connection of PPTP + Dynamic IP or L2TP + Dynamic IP type:** if your ISP has provided the address of the DNS server, in the **IP** section, deselect the **Obtain DNS server addresses automatically** checkbox and fill in the **Primary DNS server** field. Then in the **VPN** section, enter authorization data provided by your ISP (the username (login) in the **Username** field and the password in the **Password** and **Password confirmation** fields), or select the **Without authorization** checkbox if authorization is not required. In the **VPN server address** field, enter the IP or URL address of the PPTP or L2TP authentication server. If your ISP applies encryption, select a needed value from the **Encryption** drop-down list.

**IP**

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Obtain DNS server addresses automatically:

Primary DNS server:\*

Secondary DNS server:

Vendor ID:

Hostname:

**VPN**

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Connect automatically:

Username:\*

Without authorization:

Password:\*

Password confirmation:\*

VPN server address:\*

Service name:

Encryption:

19. If needed, fill in other fields on the page in accordance with data provided by the ISP.
20. Click the **Apply** button.

## Configuring WAN Backup Function

1. Go to the **Net / WAN** page and create the main WAN connection.

**General settings**

Provider:	Manually
Connection Type:	Dynamic IP
Interface:	Internet
Name:*	WAN
Enable:	<input checked="" type="checkbox"/>
Direction:	WAN

2. On the **Net / WAN** page, create the reserve WAN connection.

**General settings**

Provider:	Manually
Connection Type:	LTE
Interface:	USB
Name:*	LTE
Enable:	<input checked="" type="checkbox"/>
Direction:	WAN

3. Proceed to the **Net / WAN reservation** page and select the **Enable reservation** checkbox.

**WAN reservation**

Enable reservation:	<input checked="" type="checkbox"/>
Basic connection:	WAN
Backup connection:	LTE

4. From the **Basic connection** drop-down list, select a WAN connection which will be used as the main one.
5. From the **Backup connection** drop-down list, select a WAN connection which will be used as the reserve one.
6. If needed, specify new values in the fields displayed on the page.
7. Click the **Save** button.



## Example of Connection via VLANs

If your ISP provides:

- access to the Internet via the VLAN with the tag (VLAN ID) **2**, the **PPPoE** connection type, the login **user**, and the password **user\_password**,
- access to IPTV service via the VLAN with the tag (VLAN ID) **10**,
- access to IP telephony via the VLAN with the tag (VLAN ID) **20**,

and your set-top box is connected to the LAN port 3, your VoIP phone is connected to the LAN port 4 of the router, then follow the next steps to configure the router.

1. Go to the **Net / WAN** page, select the **WAN** connection and click the **Delete** button on the opened page.
2. Go to the **Advanced / VLAN** page.
3. Select the **lan** group.
4. Deselect the **port3** checkbox.
5. Deselect the **port4** checkbox.
6. Click the **Save** button.
7. Select the **wan** group and click the **Delete** button.
8. Click the **Add** button.
9. In the **Name** field, enter a name for the group (**INTERNET**).
10. From the **Type** drop-down list, select the **Tagged NAT** value.
11. From the **Tagged port** drop-down list, select the value **internet** (corresponds to the **INTERNET** port of the router).
12. In the **VLAN ID** field, enter **2**.
13. Click the **Save** button.

You have created the group of ports for connection to the Internet.

14. Click the **Add** button.
15. In the **Name** field, enter a name for the new group (**IPTV**).
16. From the **Type** drop-down list, select the **Bridge** value.
17. From the **Tagged port** drop-down list, select the **internet** value.
18. Select the **port3** checkbox.
19. In the **VLAN ID** field, enter **10**.
20. Click the **Save** button.

You have created the group of ports for IPTV service.

21. Click the **Add** button.
22. In the **Name** field, enter a name for the new group (**VOIP**).
23. From the **Type** drop-down list, select the **Bridge** value.
24. From the **Tagged port** drop-down list, select the **internet** value.
25. Select the **port4** checkbox.
26. In the **VLAN ID** field, enter **20**.
27. Click the **Save** button.

You have created the group of ports for access to IP telephony.

#### Advanced / VLAN

Name	Type	Untagged ports	Tagged port	VLAN ID	Enable
Ian	LAN	port1,port2,wifi1			Yes
INTERNET	Tagged NAT		internet	2	Yes
IPTV	Bridge	port3	internet	10	Yes
VOIP	Bridge	port4	internet	20	Yes

28. Log into the web-based interface and go to the **Net / WAN** page.
29. Click the **Add** button.
30. On the opened page, select the **PPPoE** value from the **Connection Type** drop-down list.
31. From the **Interface** drop-down list, select the **Internet.2** value.
32. In the **Username** field, enter **user**.
33. In the **Password** and **Password confirmation** fields, enter **user\_password**.
34. Deselect the **Without authorization** checkbox.
35. Click the **Apply** button.

## Configuring Local Area Network

1. Go to the **Net / LAN** page. If needed, change the IP address of the router's LAN interface and the mask of the local subnet in the **IP Address** and **Netmask** fields. To change the IPv6 address of the router's LAN interface, deselect the **DHCP PD** checkbox in the **IPv6 DHCP server** section.

IP Address:*	<input type="text" value="192.168.0.1"/>
Netmask:*	<input type="text" value="255.255.255.0"/>
IPv6 address:	<input type="text" value="fd01::1/64"/>

2. By default, the DHCP server of the router is enabled. In the **DHCP server** section, you can change the parameters of the DHCP server. If you want to manually assign IP addresses to devices of your LAN, disable the DHCP server (select the **Disable** value from the **Mode** drop-down list).

DHCP server	
Mode:	<input type="text" value="Enable"/>
DNS Relay:	<input checked="" type="checkbox"/>
Start IP:*	<input type="text" value="192.168.0.2"/>
End IP:*	<input type="text" value="192.168.0.100"/>
Lease time (min):*	<input type="text" value="1440"/>

3. By default, the DHCPv6 server of the router is enabled. In the **IPv6 DHCP server** section, you can disable the DHCPv6 server or change its operating mode.

IPv6 DHCP server	
Enable DHCPv6 Server:	<input checked="" type="checkbox"/>
DHCP PD:	<input checked="" type="checkbox"/>
State mode:	<input type="text" value="Statefull"/>
Start interface IP:*	<input type="text" value="fd01::2"/>
End interface IP:*	<input type="text" value="fd01::ffff:ffff:ffff:ffff"/>
Leased Time (minutes):*	<input type="text" value="5"/>

4. After specifying the needed parameters on the **Net / LAN** page, click the **Apply** button.

## ***Saving Settings to Non-volatile Memory***

In order to avoid losing the new settings upon hardware reboot (accidental or intentional power-off of the device), it is recommended to save the settings to the non-volatile memory of the router.

Place the mouse pointer over the **System** caption in the top part of the page



and click the icon (**Save**) in the menu displayed. Then again place the



mouse pointer over the **System** caption and click the icon (**Reboot device**).

Wait until the router is rebooted. Now you can use it to access the Internet or access the web-based interface of the router to configure additional parameters. For detailed description of every page of the web-based interface, see the “*User Manual*” document (see [www.dlink.ru](http://www.dlink.ru)).

## 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.

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