



DIR-632

**Multifunction Wireless Router
Supporting WiMAX, 3G GSM/CDMA
with Built-in 8-port Switch**

BEFORE YOU BEGIN

Delivery Package

- Wireless router DIR-632
- Power adapter DC 5V/2.5A
- Straight-through Ethernet cable (CAT 5E)
- CD-ROM with “*User Manual*” and “*Quick Installation Guide*”
- “*Quick Installation Guide*” (brochure)

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

! 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 wireless router	192.168.0.1
Username (login)	admin
Password	admin
Name of wireless network (SSID)	DIR-632


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: Windows Internet Explorer, Mozilla Firefox, or Opera.
- 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 to connect to the Internet¹.

- A WiMAX USB modem to connect to the Internet via a WiMAX network.

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

- A 3G USB modem to connect to the Internet via a 3G GSM or CDMA network.

 Your USB modem should be equipped with an active identification card (SIM or R-UIM) of your operator.

It is recommended to disable the PIN code check on the identification card prior to connecting the USB modem to the router.

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

Supported USB Modems

GSM modems

- Huawei E150
- Huawei E1550
- Huawei E160G
- Huawei E169G
- Huawei E173
- Huawei E220
- ZTE MF112
- ZTE MF192
- ZTE MF626
- ZTE MF627
- ZTE MF652.

CDMA modems

- Anydata ADU-500A
- Celot CT-650.

WiMAX modem

- Samsung SWC-U200 (firmware version *u200_rev1-2.7.40-C114*).



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

CONNECTING TO PC (OS WINDOWS XP)

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 a WiMAX, 3G GSM or CDMA network: connect your USB modem to the USB port² located on the back 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.

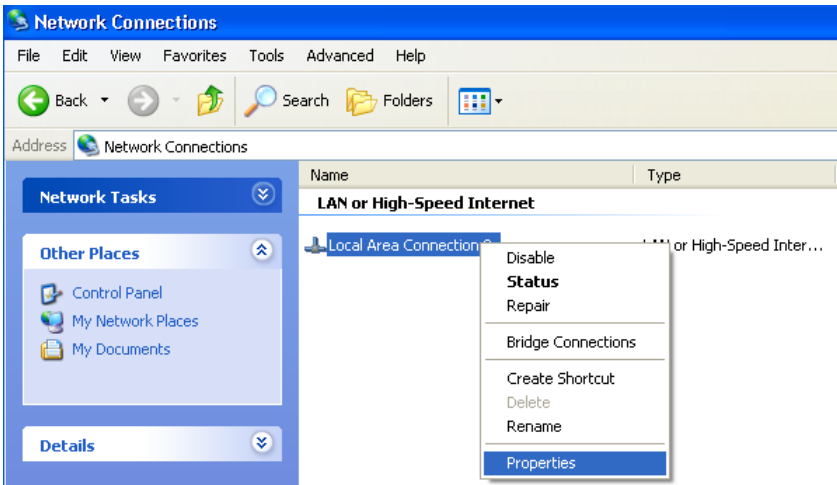
4. Connect the power cord to the power connector port on the back panel of the router, then plug the power adapter into an electrical outlet or power strip.
5. Turn on your PC and wait until your operating system is completely loaded.

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

1. Click the **Start** button and proceed to the **Control Panel > Network and Internet Connections > Network Connections** window.

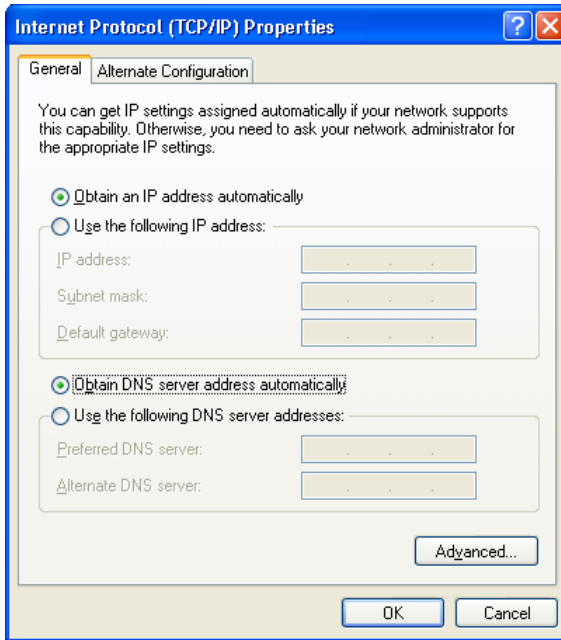
2 It is recommended to use a USB extension cable to connect a USB modem to the router.

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, in the **This connection uses the following items** section, select the **Internet Protocol (TCP/IP)** line. Click the **Properties** button.

4. Select the **Obtain an IP address automatically** radio button. Click the **OK** button.



Click the **OK** button. Now your computer is configured to obtain an IP address automatically.

PC with Wi-Fi Adapter

1. To connect via a WiMAX, 3G GSM or CDMA network: connect your USB modem to the USB port³ located on the back panel of the router.



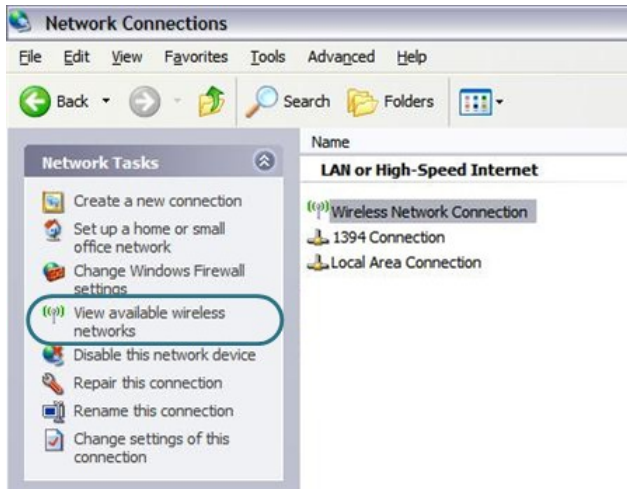
If you need to connect or change a USB modem to another one when the router is powered on, power off the router, connect the modem to the USB port, and power on the router.

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 your PC and wait until your operating system is completely loaded.
4. 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.

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

Now you should configure your Wi-Fi adapter.

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 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 needed wireless network (**DIR-632**) and click the **Connect** button.

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

CONFIGURING ROUTER

Connecting to Web-based Interface

1. Start a web browser.
2. 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.

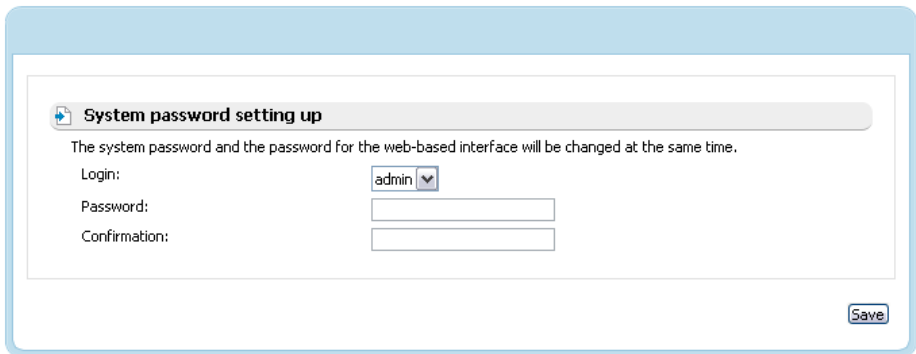


3. On the opened page, enter the username (login) and password for the administrator account (by default, the following username and password are specified: **admin**, **admin**). Then click the **Enter** link.

A screenshot of the D-Link DIR-632 web-based interface login page. The page features the D-Link logo and the model number 'DIR-632'. There is a 'Language' dropdown menu in the top right corner. Below the logo, there are two input fields: 'Login:' with the text 'admin' and 'Password:' with masked characters '.....'. At the bottom of the form, there are two links: 'Enter' and 'Clear'.

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.

Right after the first access to the web-based interface you are forwarded to the page for changing the administrator password specified by default.



System password setting up

The system password and the password for the web-based interface will be changed at the same time.

Login:

Password:

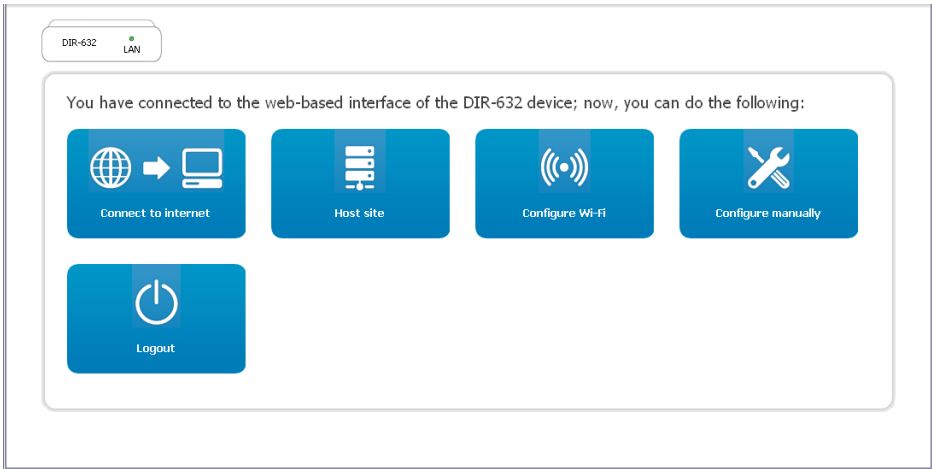
Confirmation:

Enter the new password in the **Password** and **Confirmation** fields. Then click the **Save** button.



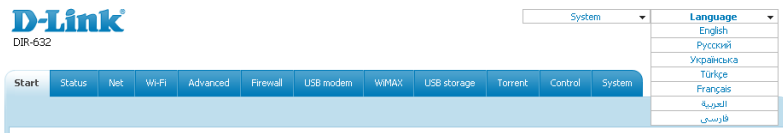
Remember or write down the new password for the administrator account. In case of losing the new password, you can access the settings of the router only after restoring the factory default settings via the hardware Reset button. This procedure wipes out all settings that you have configured for your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

After successful registration the router's quick settings page opens.



On the page, you can proceed to the Wizards (use the **Connect to internet**, **Host site**, and **Configure Wi-Fi** buttons) or switch to the standard web-based interface of the router by clicking the **Configure manually** button. After clicking the button, the system statistics page opens. The page displays general information on the router and its software.

The web-based interface of the router is multilingual. Select a needed language from the menu displayed when the mouse pointer is over the **Language** caption. You can change the language of the web-based interface in any menu item.



After selecting the language, the notification on unsaved changes will be displayed. Click the **Save** button to save the current language of the web-based interface as the default language.

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.

WiMAX WAN Connection

1. If your operator specified an identifier for the WiMAX network, proceed to the **WiMAX / Information** page, enter the required value in the **SSID** field and click the **Connect** button.
2. Go to the **Net / WAN** page and click the **Add** button.
3. In the **General settings** section, leave the **Manual** value.
4. From the **Connection Type** drop-down list, select the needed value.
5. From the **Port** drop-down list, select the **USB-WIMAX** value.
6. Specify a name for your connection (any name for easier identification) in the **Name** field.
7. *For connection of PPPoE type:* in the **PPP** section, enter authorization data provided by your ISP (the username (login) in the **PPP Username** field and the password in the **Password** and **Password confirmation** fields), or select the **Without authorization** checkbox if authorization is not required.
8. *For connection of Static IP type:* in the **IP** section, fill in the **IP Address**, **Netmask**, **Gateway IP Address**, and **Primary DNS server** fields.
9. *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.

10. *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 **PPP 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.
11. *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 **PPP 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.
12. Click the **Save** button.
13. On the **Net / WAN** page, select the choice of the **Default gateway** radio button corresponding to the new WiMAX 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 **USB modem** menu and enter the PIN code on the page displayed.

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 **Manual** value.
3. From the **Connection Type** drop-down list, select the **3G** value.
4. From the **Port** drop-down list, select the **USB** value.
5. Specify a name for your connection (any name for easier identification) in the **Name** field.
6. If you need to specify other settings, in the **PPP Settings** section, enter authorization data provided by your operator (the username (login) in the **PPP 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 **APN** field, enter the access point name, and in the **Dial number** field, enter the number dialed to connect to the authorization server of the operator.
7. Click the **Save** button.
8. 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, leave the **Manual** value.
4. From the **Connection Type** drop-down list, select the needed value.
5. From the **Port** drop-down list, select the **Internet** value.
6. Specify a name for your connection (any name for easier identification) in the **Name** field.
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** button. 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 located to the right of the field.
8. *For connection of PPPoE type:* in the **PPP** section, enter authorization data provided by your ISP (the username (login) in the **PPP Username** field and the password in the **Password** and **Password confirmation** fields), or select the **Without authorization** checkbox if authorization is not required.
9. *For connection of Static IP type:* in the **IP** section, fill in the **IP Address**, **Netmask**, **Gateway IP Address**, and **Primary DNS server** fields.
10. *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.

11. *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 **PPP 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.
12. *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 **PPP 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.
13. Click the **Save** 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 of the **IP** section. Then click the **Save** button.

IP

IP Address:

Netmask:

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:

Start IP:

End IP:

Lease time (min):

3. After specifying the DHCP server settings, click the **Save** button.


Configuring Wireless Network

By default, the wireless network of the router is open (it requires no password to access it). To avoid unauthorized access to your wireless local area network, change the default settings of the router.

Example of Wireless Settings

1. Go to the **Wi-Fi / Security settings** page.
2. Select the **WPA2-PSK** value from the **Network Authentication** drop-down list.

Network Authentication:	<input type="text" value="WPA2-PSK"/>
Encryption Key PSK:	<input type="text"/>
WPA2 Pre-authentication:	<input type="checkbox"/>

 **WPA Encryption settings**

WPA Encryption:	<input type="text" value="AES"/>
WPA renewal:	<input type="text" value="3600"/>

3. Enter a key (a password that will be used to access your wireless network) in the **Encryption Key PSK** field. Use digits and Latin characters.
4. Select the **AES** value from the **WPA Encryption** drop-down list.
5. Click the **Change** button.

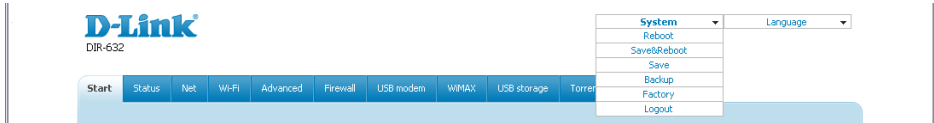


If you perform initial configuration of the router via Wi-Fi connection, note that immediately after changing the wireless default settings you will need to reconfigure the wireless connection using the newly specified settings.

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.

Click the **Save&Reboot** line in the top-page menu displayed when the mouse pointer is over the **System** caption.



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).

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/corporate/worldwideoffices/>