

#### Quick Installation Guide



# DAP-1325 N300 Wi-Fi Range Extender

# **BEFORE YOU BEGIN**

#### **Delivery Package**

- Extender DAP-1325
- "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 different parameters than those indicated on the device will cause damage and void the warranty for this product.

### **Default Settings**

Domain name of device	dlinkap.local.
IP address of device	192.168.0.50
Username (login)	admin
Password	admin
Name of wireless network (SSID)	DAP-1325
Network key (PSK password)	see WPS PIN on the barcode label on the back panel of the device

### System Requirements and Equipment

- A router enabled to access the Internet.
- A computer with any operating system that supports a web browser.
- A web browser to access the web-based interface of the device:
  - 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 extender.
- An 802.11b, g, or n Wi-Fi adapter to create a wireless network.

# **CONNECTING TO PC**

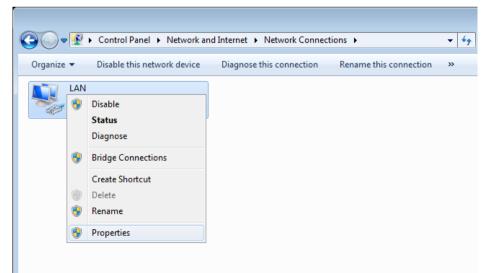
### PC with Ethernet Adapter

- 1. Connect an Ethernet cable between the Ethernet port of the extender and the Ethernet port of your PC.
- 2. Plug the device into an electrical outlet or power strip.

Now you need to configure an IP address for the Ethernet adapter of your PC.

### **Configuring IP Address 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.



- In the Local Area Connection Properties window, on the Networking tab, select the Internet Protocol Version 4 (TCP/IPv4) line. Click the Properties button.
- Select the Use the following IP address radio button and enter the value 192.168.0.51 in the IP address field. The Subnet mask field will be filled in automatically. Click the OK button.

Internet Protocol Version 4 (TCP/IPv4)	Properties		
General			
You can get IP settings assigned automatically if your network supports this capability. Otherwise, you need to ask your network administrator for the appropriate IP settings.			
Obtain an IP address automatical	ly		
Use the following IP address:			
IP address:	192.168.0.51		
S <u>u</u> bnet mask:	255.255.255.0		
Default gateway:			
Obtain DNS server address autor	natically		
• Us <u>e</u> the following DNS server add	Iresses:		
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.

Now you can connect to the web-based interface of DAP-1325 for configuring all needed parameters. To gain access to an external network (to the Internet), you also need to specify the default gateway and the addresses of DNS servers.

### PC with Wi-Fi Adapter

- 1. Plug the device into an electrical outlet or power strip.
- 2. 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.

Now you should configure your Wi-Fi adapter.

### 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, 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.

Select the Use the following IP address radio button and enter the value 192.168.0.51 in the IP address field. The Subnet mask field will be filled in automatically. Click the OK button.

Internet Protocol Version 4 (TCP/IPv4)	Properties
General	
You can get IP settings assigned auton this capability. Otherwise, you need to for the appropriate IP settings.	
🔘 Obtain an IP address automatical	ly 🛛
O Use the following IP address:	
IP address:	192.168.0.51
Subnet mask:	255.255.255.0
Default gateway:	· · ·
Obtain DNS server address autom	natically
• Use the following DNS server add	resses:
Preferred DNS server:	
<u>A</u> lternate DNS server:	· · ·
🔲 Validate 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 **DAP-1325** and click the **Connect** button.



- 10. In the opened window, enter the network key (see WPS PIN on the barcode label on the back 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.

Now you can connect to the web-based interface of DAP-1325 for configuring all needed parameters. To gain access to an external network (to the Internet), you also need to specify the default gateway and the addresses of DNS servers.

If you perform initial configuration of the extender via Wi-Fi

- connection, note that immediately after changing the wireless default settings of the extender you will need to reconfigure the wireless
- connection using the newly specified settings.

## **CONFIGURING EXTENDER**

#### Connecting to Web-based Interface

Start a web browser. In the address bar of the web browser, enter the domain name of the extender (by default, **dlinkap.local**) with a dot at the end and press the **Enter** key. Also you can enter the IP address of the device (by default, **192.168.0.50**).

← → C ::: 🕑 192.168.0.50

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 extender, make sure that you have properly connected the device 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 12).



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.

Login		
Username		
Password		8
Wrong usernan	ne/password or the expired	session is
Atte	empts remaining: 3	
	LOGIN	CLEAR

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 extender and its software.

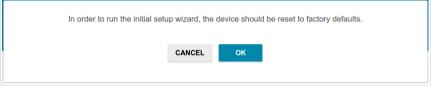
		mary	
Device Informatior	ı	Wi-Fi 2.4 GHz	
Model:	DAP-1325	Status:	On
Hardware revision:	A1	Broadcasting:	On 🧲
Firmware version:	3.0.1	Additional networks:	C
Build time:	Fri Mar 15 2019 12:33:51 PM MSK	Network name (SSID):	DAP-1325-39A4
Vendor:	D-Link Russia	Security:	WPA2-PSK
Serial number:	1234567890123		
Support:	support@dlink.ru		
Phone:	8-800-700-5465	LAN	
Summary:	Root filesystem image for DAP-1325	LAN IPv4:	192.168.0.50
Uptime:	00:21:49	LAN IPv6:	fd01::50/64
		Wireless connections:	
		Wired connections:	1
		LAN Ports	
		LAN1:	

The web-based interface of the extender is bilingual (English/Russian). You can select the needed language upon the initial configuration of the web-based interface of the device or in the **System / Configuration** section of the menu.

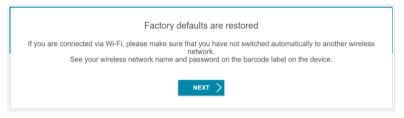
Other settings of the extender are available in the menu in the left part of the page. Go to the relevant section and select the needed page or run the wizard in the **Initial Configuration** section.

### Initial Configuration Wizard

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

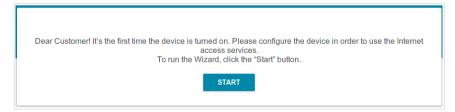


Click the **OK** button and wait until the factory default settings are restored.



If you perform initial configuration of the extender via Wi-Fi connection, please make sure that you are connected to the wireless network of DAP-1325 (see the WLAN name (SSID) in the *Default Settings* section, page 2) 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.



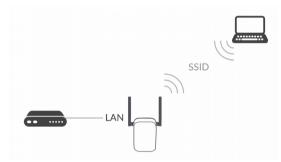
1. Click **YES** in order to leave the current language of the web-based interface or click **NO** to select the other language.



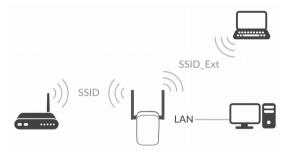
2. On the next page, click the **CONTINUE** button.

#### **Selecting Operation Mode**

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. 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.



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 webbased interface of the device.



In order to let a wired PC 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.



When the operation mode is selected, 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 DAP-1325 automatically obtain the LAN IPv4 address.
- 2. In the **Hostname** field, you should specify a domain name of the extender using which you can access the web-based interface after finishing the Wizard. Enter a new domain name of the extender ending with **.local** or leave the value suggested by the extender.

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 extender with a dot at the end.

If you want to manually assign the LAN IPv4 address for DAP-1325, do not select the **Automatic obtainment of IPv4 address** checkbox and fill in the **IP address**, **Subnet mask**, **Hostname** fields and, if needed, the **Gateway IP address** field. Make sure that the assigned address does not coincide with the LAN IPv4 address of the router to which your device connects.

LAN	
Automatic obtainment of IPv4 address	
▲ Automatic obtainment of IPv4 address sufficiently protects against use of the same addresses in one LAN. In order t avoid IPv4 address conflicts, static IPv4 addresses of LAN devises should not coincide with addresses from the address assigned by an upper-level router of a local DHCP server).	o range
IP address*	
192.168.0.50	
Subnet mask*	
255,255,255,0	
Gateway IP address	
Hostname*	
dlinkap39a4.local	
O Specify a domain name ending with local. In order to access the web-based interface using the domain name, enter name with a dot and slash at the end in the address bar of the web browser (for example, dlinkap12ab.local.)	this
✓ BACK NEXT >	

3. Click the **NEXT** button.

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

This configuration step is available for the **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)*	Network authentication	
RD_DL	WPA2-PSK	-
BSSID	Password PSK*	
74:da:da:0a:8f:c9	••••••	6
	<ol> <li>Password should be between 8 a.</li> </ol>	nd 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 Wireless Network**

This configuration step is available for the **Access point** 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 extender.
- 2. In the **Password** field, specify your own password for access to the wireless network or leave the value suggested by the extender (WPS PIN of the device, see the barcode label).
- 3. If the extender 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 **Repeater** mode only).

Enable		
Broadcast wireless netwo	2.4 GHz	
Disabling broadcast doe	not influence the ability to connect to another W	Vi-Fi network as a client.
Network name*		
<ol> <li>The number of character</li> </ol>	should not exceed 32	
Open network	should not exceed 32	
_	should not exceed 32	
Open network Password*		

4. 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 **Admin 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>1</sup>

Changing web-based interfac	ce password		
For security reasons, please change	e the password used t	o access the device's settings.	
Admin password*	Ø		
(i) Password should be between 1 and	31 ASCII characters		
Password confirmation*	Ø		
	<b>&lt;</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 extender only after restoring the factory default settings via the hardware **RESET** button. This procedure wipes out all settings that you have configured for your extender.

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.

<sup>1 0-9,</sup> A-Z, a-z, space, !"#\$%&'()\*+,-./:;<=>?@[\]^\_`{|}~.

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

Hardware	
Processor	· MT7628NN (580MHz)
RAM	· 64MB, DDR2 SDRAM
Flash	· 8MB, SPI
Interfaces	· 10/100BASE-TX LAN port
LEDs	<ul> <li>POWER/WPS</li> <li>Wi-Fi Signal Strength</li> </ul>
Buttons	<ul> <li>WPS button to set up wireless connection</li> <li>RESET button to restore factory default settings</li> </ul>
Antenna	· Two external non-detachable antennas (2 dBi)
МІМО	· 2x2
Power connector	CEE 7/16 plug for AC power supply

Software	
Network functions	<ul> <li>DHCP server</li> <li>Advanced configuration of built-in DHCP server</li> <li>Automatic obtainment of LAN IP address</li> <li>DNS relay</li> </ul>
Management	<ul> <li>Local and remote access to settings through TELNET/WEB (HTTP/HTTPS)</li> <li>Bilingual web-based interface for configuration and management (Russian/English)</li> <li>Support of D-Link Assistant application for Android and iPhone smartphones</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</li> <li>Automatic synchronization of system time with NTP server and manual time/date setup</li> <li>Ping utility</li> <li>Traceroute utility</li> </ul>

<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.ru</u>.

Wireless Module Parame	ters
Standards	· IEEE 802.11b/g/n
Frequency range	· 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>
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>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> </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 The maximum value of the transmitter output power depends upon the radio frequency regulations applied in your country	<ul> <li>802.11n (typical at room temperature 25 °C)</li> <li>15dBm (+/-1.5 dB)</li> </ul>

Wireless Module Parameters	
Receiver sensitivity	<ul> <li>802.11n (typical at PER = 10% (1000-byte PDUs) at room temperature 25 °C) HT20</li> <li>82dBm at MCS0/8</li> <li>-79dBm at MCS2/10</li> <li>-77dBm at MCS3/11</li> <li>-70dBm at MCS4/12</li> <li>-66dBm at MCS5/13</li> <li>-65dBm at MCS6/14</li> <li>-64dBm at MCS7/15</li> <li>HT40</li> <li>-79dBm at MCS1/9</li> <li>-74dBm at MCS1/9</li> <li>-76dBm at MCS1/9</li> <li>-76dBm at MCS5/13</li> <li>-65dBm at MCS5/13</li> <li>-65dBm at MCS6/14</li> <li>-64dBm at MCS5/13</li> <li>-66dBm at MCS1/9</li> <li>-74dBm at MCS1/9</li> <li>-74dBm at MCS2/10</li> <li>-71dBm at MCS3/11</li> <li>-67dBm at MCS5/13</li> <li>-62dBm at MCS5/13</li> <li>-62dBm at MCS6/14</li> <li>-61dBm at MCS7/15</li> </ul>

Physical Parameters	
Dimensions (L x W x H)	· 51 x 49 x 98 mm (2 x 1.91 x 3.85 in)
Weight	· 97 g (0.21 lb)

Operating Environment		
Power	· Input: 110 to 240 V AC, 50/60 Hz	
Temperature	Operating: from 0 to 40 °C     Storage: from -20 to 70 °C	
Humidity	<ul> <li>Operating: from 10% to 90% (non-condensing)</li> <li>Storage: from 5% to 90% (non-condensing)</li> </ul>	

### SAFETY RULES AND CONDITIONS

Please carefully read this section before installation and connection of the device. Make sure that the device is 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.

Plug the device only into working electrical outlets with parameters indicated on the device.

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.

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/corporate/worldwideoffices/