



# **User Manual**

## Wireless AC1200 Dual Band USB Adapter

DWA-182

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## Package Contents



D-Link DWA-182 Wireless AC1200 Dual Band USB Adapter

Cradle (only available in some regions)

CD with drivers and software

## **System Requirements**

- A computer or laptop with an available USB 2.0 or USB 3.0 port
- Windows<sup>®</sup> 8, 7, Vista or XP (Service Pack 3)
- CD-ROM Drive
- A 802.11ac, 802.11n, 802.11g or 802.11a access point or wireless router

## Introduction

The Wireless AC1200 Dual Band USB Adapter (DWA-182) delivers powerful wireless AC technology to your desktop or notebook computer. Simply plug the adapter into an available USB port and connect to a wireless network to access a secure, high-speed internet connection – 2.4GHz (300Mbps) or 5GHz (up to 867Mbps). And with integrated Dual Band technology, you'll have reduced Wi-Fi interference to maximize throughput for faster streaming, gaming, and Skype calls.

#### **Interference-Free Bandwidth**

The Wireless AC1200 Dual Band USB Adapter(DWA-182) delivers Dual Band technology to your home network for intelligent, versatile, interferencefree bandwidth. Check your email and surf the Internet on the 2.4GHz band; or game, make Skype calls and stream HD movies to multiple devices using the cleaner, interference-free 5GHz band. Whatever you like to do online, Dual Band has you covered.

#### **Easy WPS Push Button Setup**

Quickly and easily establish a fast, secure home network that will have you browsing, streaming, and watching in minutes. It's as easy as push and connect!

#### **Compatible With All Your Wireless Products**

While the Wireless AC1200 Dual Band USB Adapter delivers cutting-edge 802.11ac speed to your home network, it's also backward compatible with all of your current wireless products – no updates or adapters necessary.

#### What is wireless AC?

802.11ac is a new networking standard that produces high-throughput wireless speed on the 5GHz band. What does this mean for your home network? Flawless HD video streaming, faster gaming, and lag-free Skype and Facetime calls, all with less Wi-Fi interference for smooth, lightning-fast performance. And while your home gains all the cutting-edge benefits of 11ac, D-Link's Wireless AC1200 Dual Band USB Adapter is also compatible with all of your current Wireless N products.

"Maximum wireless signal rate derived from IEEE 802.11ac specification and IEEE Standard 802.11n specification. D-Link makes no warranties as to forward compatibility with future standards or compatibility with 802.11ac devices from other manufacturers. Actual data throughput will vary. Network conditions and environmental factors, including volume of network traffic, building materials and construction, and network overhead, lower actual data throughput rate. Environmental factors may adversely affect wireless signal range. Up to 867Mbps wireless speeds achieved when connecting to other 802.11ac devices. Data throughput may also be limited by the product's interface, less than 480 Mbps for a USB 2.0 interface. The inclusion of a specific product or manufacturer does not imply its endorsement of D-Link or the D-Link product. Computer must adhere to Microsoft's recommended System Requirements."

## Features

- IEEE 802.11ac, 802.11n, 802.11g and 802.11a Compliant
- Dual Band N Technology for use in 2.4GHz or 5GHz Networks
- Wireless AC Technology for Superior Wireless Performance
- Access Secure Networks using WPA<sup>™</sup> or WPA2<sup>™</sup>
- Wi-Fi Protected Setup<sup>™</sup> (WPS) Push Button for Easy Connection to a Wireless Network
- USB\* Extension Cradle for Placement Flexibility

\* Using a USB 1.1 port will adversely affect throughput.

#### NOTE

#### Labeling Instructions for OEM Integrator

When the module is installed into a system, the final product shall have a label showing

"Contains FCC ID: KA2WA180A1"

## **Hardware Overview**



1	WPS Button	Press the WPS button to automatically connect to a WPS-enabled wireless router or access point and establish connectivity. Refer to page 19.
2	USB Connector	Used to connect the DWA-182 to your computer.

# Installation

This section will walk you through the installation process. If you have a built-in wireless adapter, please disable it in device manager before installing your D-Link adapter. Also, if you have previously installed another wireless adapter, please make sure any software is uninstalled.

## **Getting Started**

Before installing your new D-Link wireless adapter, please verify the following:

- Remove any previous installations of wireless adapters
- Disable any built-in wireless adapters
- Verify the settings such as the SSID and security settings of the network(s) you want to connect to

### **Remove Existing Installations**

If you've installed a different manufacture's adapter or a different model D-Link adapter, make sure the software is uninstalled before installing the new software. Some utilities may cause a conflict with the new software. If you plan to use multiple adapters at different times, make sure the utilities are not set to load when your computer boots up. Windows<sup>\*</sup> 7, Vista and XP users may use the built-in wireless utility for all adapters.

To remove any old software:

Windows<sup>®</sup> 7 users: Click Start > Control Panel > Uninstall Programs.

Windows Vista<sup>®</sup>/XP users: Click Start > Control Panel > Add or Remove Programs.

## **Disable Other Wireless Adapters**

Most newer laptops may include a built-in wireless adapter. To prevent any conflicts with the D-Link wireless adapter, it is recommended to disable the wireless adapter (as well as any unused Ethernet adapters).

From the desktop, right-click on the My Computer icon and select Properties.

Click the **Hardware** tab and then click **Device Manager**. Scroll down the list and click the + sign to the left of **Network Adapters**.

Right-click the adapter you would like to disable and select **Disable**.





Click Yes to disable the adapter.

When the adapter is disabled, a down arrow or a grayed icon will be displayed.

Disabling the adapter will not remove the drivers. If you would like to use the adapter, simply right-click it and select **Enable**.





## **Wireless Installation Considerations**

The D-Link wireless adapter lets you access your network using a wireless connection from virtually anywhere within the operating range of your wireless network. Keep in mind, however, that the number, thickness and location of walls, ceilings, or other objects that the wireless signals must pass through, may limit the range. Typical ranges vary depending on the types of materials and background RF (radio frequency) noise in your home or business. The key to maximizing wireless range is to follow these basic guidelines:

- 1. Keep the number of walls and ceilings between the D-Link adapter and other network devices to a minimum each wall or ceiling can reduce your adapter's range from 3-90 feet (1-30 meters.) Position your devices so that the number of walls or ceilings is minimized.
- 2. Be aware of the direct line between network devices. A wall that is 1.5 feet thick (.5 meters), at a 45-degree angle appears to be almost 3 feet (1 meter) thick. At a 2-degree angle it looks over 42 feet (14 meters) thick! Position devices so that the signal will travel straight through a wall or ceiling (instead of at an angle) for better reception.
- 3. Building materials make a difference. A solid metal door or aluminum studs may have a negative effect on range. Try to position access points, wireless routers, and computers so that the signal passes through drywall or open doorways. Materials and objects such as glass, steel, metal, walls with insulation, water (fish tanks), mirrors, file cabinets, brick, and concrete will degrade your wireless signal.
- 4. Keep your product away (at least 3-6 feet or 1-2 meters) from electrical devices or appliances that generate RF noise.
- 5. If you are using 2.4GHz cordless phones or X-10 (wireless products such as ceiling fans, lights, and home security systems), your wireless connection may degrade dramatically or drop completely. Make sure your 2.4GHz phone base is as far away from your wireless devices as possible. The base transmits a signal even if the phone in not in use.

## **Adapter Installation**

#### Warning: Do NOT install the DWA-182 adapter into your computer before installing the driver software from the D-Link CD.

Turn on the computer and Insert the D-Link DWA-182 Driver CD in the CD-ROM drive.

If the CD Autorun function does not automatically start on your computer, go to **Start** > **Run**. In the run box type "**D**:\**autorun.exe**" (where **D**: represents the drive letter of your CD-ROM drive).

When the autorun screen appears, click Install.



The welcome window will appear. Click Next to continue.



By default setup will install to the default location: C:\Program Files\D-Link\ DWA-182, where C: represents the drive letter of your hard drive. To install to a different location click **Browse** and specify the location, then click **Next**.

Select the Program Files folder location and click Next.





#### Section 2 - Installation

Insert the adapter into an available USB port on your computer. Click **Next** to continue.

If the Found New Hardware Wizard appears, click Cancel.



The drivers and software will now install. Please allow 1-2 minutes for this process to finish.

The Wireless Connection Wizard will now appear.

If you want to manually connect to a wireless network, refer to page 15. The following instructions will connect you to a wireless network using Wi-Fi<sup>°</sup> Protected Setup (WPS). Click **Next** to continue.



### Push Button Configuration (PBC)

To connect to your network using the WPS push button configuration method, click the virtual button as shown in the screenshot.

**Note:** You may also connect to your network by pressing the WPS button on the adapter and holding for two seconds until the wizard screen comes up. Then, press the WPS button on the router/access point to continue.

Press the WPS button on your access point or wireless router within 2 minutes to establish connectivity.

**Note:** Some d evices may require you to launch WPS from software or a web interface. Please refer to your router or access point's user manual for more information.

When this screen appears, you have successfully connected to your wireless network. Click **Next** to complete your setup.







#### Section 2 - Installation

To manually connect to your wireless network, select **Manually type your Network Name (SSID)** and then click **Next**.

Enter the network name (SSID) manually. If you enter the SSID incorrectly, you will automatically be brought to the site survey page. Click **Scan** to display the site survey page.

Click the **Scan** button to display a list of wireless networks (site survey). Click on the network name (SSID) and click **Next**.







When this screen appears, you are successfully connected to your wireless network. Click **Next** to complete your setup.



Click **Finish** to continue. If you are prompted to reboot your computer, select **Yes, I want to restart my computer now**.



# Configuration

This section will show you how to configure your new D-Link wireless adapter using the D-Link Utility as well as Windows® wireless utility.

# **D-Link Wireless Connection Manager**

The D-Link DWA-182 uses the Wireless Connection Manager as the management software. The manager provides the user an easy interface to change any settings related to the wireless adapter. Clicking on the Wireless Connection Manager icon on the desktop will start the Configuration.

If you are using Windows<sup>®</sup> 8, 7, Vista or XP, please skip to pages 28 or 29 respectively.

Double-click the **Wireless Connection Manager** icon on your desktop.



### **Wireless Networks**

The Wireless Networks (Site Survey) page will display all wireless networks that are available in your area. To connect to a network, simply highlight the wireless network (SSID) and click **Connect**.

- **SSID:** The SSID (Service Set Identifier) is the name of the wireless network.
- MAC: Displays the MAC address of the wireless device.
- Signal: Displays the Link Quality of the wireless connection.
- Security: If there is a "lock" icon, this means the wireless network is secure. You must know the encryption key/security settings to connect.
- **Channel:** Displays the channel of the wireless network.
- WPS Button: Connect to a wireless network using Wi-Fi<sup>®</sup> Protected Setup. Refer to the next page.
- **Refresh Button:** Rescans for available wireless networks in your area.
- **Connect Button:** Highlight a wireless network and click the **Connect** button. If the network is secure, a pop-up window will appear. Enter the security information to connect (refer to the *Wireless Security* section for more information).
- Activate Button: Select a wireless network profile from the drop-down menu and click Activate to connect. Allow up to 30 seconds to connect.

D-Link Wireless Conr	nection Manager		×
Connected	Network Name: dlink IP Address: 192.168.0.10	Si <u>c</u> )1 Char	mal: 🚛
D-Link			=
DWA-182	WIRELESS NETWORKS	MY WIRELESS NETWORKS	SUPPORT>>
SSID	MAC(BSSID)	Signal $ abla$ Security	Channel 🔺
🔜 dlinka504	B8:A3:86:1C:A5:04	98% 🔒	11
m-lounge	00:1F:F3:C3:AF:3A	70%	3
🔜 vanilla	00:24:01:AB:C7:D9	62%	1
			-
,		WPS Refresh	Connect
dlink - dlink		•	Activate

### Wi-Fi<sup>®</sup> Protected Setup (WPS)

Wi-Fi Protected Setup (WPS) System is designed for easy setup of security-enabled Wi-Fi networks. It is recommended to have the access point or wireless router nearby during setup.

For more information on WPS, visit the Wi-Fi Alliance website at www.wi-fi.org.

"**Push Button Configuration**" (PBC) is a virtual button in the utility that connects you to other WPS-enabled devices. A connection can be established by clicking on the virtual button, then pushing the physical button on the access point or wireless router within 120 seconds. Refer to page 14.

**Note:** You may also use the physical button on the DWA-182 instead of using the D-Link software. Refer to the next page.

"**Personal Identification Number**" (PIN) is a unique number generated randomly by the wireless adapter's utility. Entering this number in the utility of the WPS-enabled wireless router or access point connects you with the intended wireless network. Refer to page 22 for more information.



### **Push Button**

1. To connect to your network, press the WPS button on the adapter and hold for two seconds until the wizard screen appears.

2. Press the WPS button located on your access point or router to continue. This screen will appear once you have successfully established connection with your network.





### **Personal Identification Number (PIN)**

If you want to connect using the PBC method, refer to page 14. To use the PIN method, select PIN (Personal Identification Number) and click **Next**.



Make sure your access point or wireless router is close by. Write down the number on the screen. Enter this number in your access point or wireless router. Please refer to the manufacture's manual for instructions.

Once you click **Next**, you will have 2 minutes to enter this number in your access point or wireless router.



The adapter will try to establish connectivity to your access point or wireless router.



When this screen appears, you have successfully established connectivity. Click **Finish** to complete your setup.

### **My Wireless Networks**

The My Wireless Networks page will allow you to create, edit, and delete wireless network profiles. Every time you connect to a network using the *Wireless Networks* page, a profile will automatically be created.

- New Button: Click New to create a new wireless network profile (refer to page 24).
  - Modify: Click Modify to edit a current profile (refer to page 25).
  - Delete: Click Delete to remove a profile.
  - Activate: Click Activate to use a profile. Allow up to 30 seconds to connect to the wireless network.
- Profile Details: The Profile Details section will display information about the wireless network such as the network name (SSID), network type (Infrastructure), and if the network is secured.

D-Link Wireless Cor	nection Manager		<b>—</b> ×
Connected	Network Name: dlink IP Address: 192.168.0.1	S 101 Cha	ignal: <b>,    </b>
D-Link			
DWA-182	WIRELESS NETWORKS	MY WIRELESS NETWORKS	SUPPORT>>
SSID	MAC(BSSID)	Signal $\nabla$ Security	Channel 🔺
📕 dlinka504	B8:A3:86:1C:A5:04	98%	11
m-lounge	00:1F:F3:C3:AF:3A	70%	3
🚤 vanilla	00:24:01:AB:C7:D9	62% 🔂	1
			-
		WPS Refresh	Connect
My Wireless Networks			
dlink - dlink		•	Activate

#### **Add Profile**

You may add a new network by clicking the **New** button from the *My Wireless Networks* page.

Profile Name: Enter a name for your profile (e.g. Home, Office, Coffee Shop).

**SSID:** Enter the SSID of the wireless network.

- **Network Type:** Select the network type. If you are connecting to a wireless router or access point, select **Infrastructure**.
  - Set Security Select the type of security used. Please refer to the Option: Wireless Security section for more information.

**OK Button:** Click **OK** to save your settings.

Profile Name: dir	k	
SSID: dir	k	
Network Type: @	Infrastructure C Ad h	oc
Set Security Option	Passphrase Settings -	
None		KIP C AES
) wep	Key:	
WPA/WPA2-Personal		
C WPA/WPA2-Enterprise		
	Show text in the pas	sword field

#### **Modify Profile**

You may edit an existing profile by selecting the profile and clicking the **Modify** button from the *My Wireless Networks* page.

**Profile Name:** Enter a name for your profile (e.g. Home, Office, Coffee Shop).

**SSID:** Displays the SSID of the network.

**Network Type:** Displays the network type.

Set Security Select the type of security used. Please refer to the Option: Wireless Security section for more information.

**OK Button:** Click **OK** to save your settings.

Profile Name:	dink		
SSID:	dink		
Network Type:	Infrastructure	C Ad hoc	
- Set Security Option	Passphrase S	ettings	
C None	Auto	C TKIP	C AES
C WEP	Key:		
WPA/WPA2-Personal			
C WPA/WPA2-Enterprise			
	Show text in	n the password field	

### Support

If you need help, click the **Support** button. A panel will appear to the right of the utility which will display information about the utility.

D-Link Wireless Con	nection Manager		X	Support
Connected	Network Name: dlink IP Address: 192.168.0.10	01 Ch	Signal: 📲	About
<b>D</b> -Link			$ \rightarrow $	Wireless Networks
DWA-182	WIRELESS NETWORKS	MY WIRELESS NETWORKS	SUPPORT>>	tab 🗉
SSID	MAC(BSSID)	Signal $ abla$ Security	/ Channel 🔺	
📥 dlinka504	B8:A3:86:1C:A5:04	98% 🔒	11	
m-lounge	00:1F:F3:C3:AF:3A	70%	3	
🛁 vanilla	00:24:01:AB:C7:D9	62%	E	How to connect to your wireless network
				Double click the wireless network you wish to join. The status bar on the top of this window will let you know the real time status of
My Wireless Networks		WPS Refresh	Connect Activate	your wireless network that you are currently participating in. Once joined, the utility will automatically create a profile for future use. This

### About

The About screen gives you information about the Firmware and Utility Versions of the DWA-182.



## Connect to a Wireless Network Windows® 8

- 1. Click on the wireless computer icon in your system tray (lower-right corner next to the time).
- 2. A list of available wireless networks will appear.

3. Click the wireless network (SSID) you want to connect to and then click **Connect**.

4. If the network is secure/encrypted, enter the Wi-Fi password (security key) and click **Next**.



- 5. Click either to enable or disable file sharing.
- 6. You will now be connected to your wireless network.



If you get a good signal but cannot access the Internet, confirm the encryption by reviewing the profile or check the TCP/IP settings for your wireless adapter. Refer to the *Networking Basics* section in this manual for more information.