User Manual

Wireless AC1200 Dual Band PCI Express Adapter

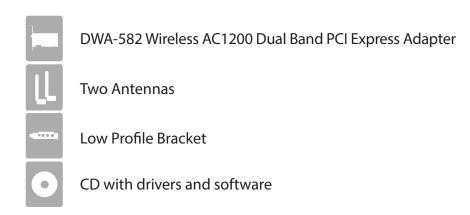
DWA-582

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Package Contents



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

System Requirements

- A desktop computer with an available PCI Express slot
- Windows® 8 or 7
- An 802.11ac or 802.11n wireless network
- 20MB of free hard drive space
- CD-ROM Drive

Introduction

The DWA-582 Wireless AC1200 Dual Band PCI Express Adapter is a convenient wireless connectivity solution for desktops. The device installs into a desktop's PCI Express slot.

The DWA-582 provides a fast wireless connection with superior reception, 802.11ac. The DWA-582 is designed for use in homes and small businesses that demand higher networking. Maximize wireless performance by connecting the Wireless AC1200 Dual Band PCI Express Adapter to a wireless AC router and stay connected. The DWA-582 supports WEP, WPA and WPA2 enhanced security. This feature greatly enhances personal data and prevents outside intrusion.

The dual-band technology in the DWA-582 supports 2.4 GHz or 5 GHz wireless signals. This allows you to check e-mail and browse the Internet using the 2.4 GHz band or stream HD movies and other media on the 5 GHz band. The 5 GHz band helps avoid interference by providing a cleaner wireless band for HD signals.

'Maximum wireless signal rate derived from IEEE Standard 802.11 ac and 802.11 n specifications. 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 will adversely affect wireless signal range.

Features

- Faster Wireless Networking* Enable wireless connectivity on your Desktop PC computer with the DWA-582. With the performance of D-Link's Wireless ac line of wireless products, the DWA-582 delivers an unsurpassed wireless experience. Perform multiple network tasks at once with the speed provided by this Wireless Adapter.
- **Compatible with 802.11n Devices** Fully compatible with the 802.11n standards, the DWA-582 can connect with existing 802.11n compliant routers, access points and cards. That means you can still communicate with colleagues and friends while you have the ability to link to even more wireless networks.
- Better Security with WPA/WPA2 With the DWA-582 in your Desktop PC, you can securely connect to a wireless network using WPA/WPA2 (Wi-Fi Protected Access) for wireless authentication. WPA/WPA2 provides you with a much higher level of security for your data and communication than what has previously been available.
- Total Performance Upgrade your computer with the latest 802.11ac technology.
- Total Wireless Protection Connect to secure wireless networks using WPA and WPA2.
- Total Connection Operates on the 2.4GHz and the 5.15 ~ 5.85GHz frequency.

'Maximum wireless signal rate derived from IEEE Standard 802.11ac and 802.11n specifications. 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 will adversely affect wireless signal range.



1	Antennas	Two antennas for better coverage.
2	WLAN LED	A solid light indicates that wireless is ready. This LED blinks during wireless data transmission.
3	PCIe Connector	The PCIe connector will fit into the PCI Express slot on 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.

To remove any old software, click **Start > Control Panel > Uninstall Programs**.

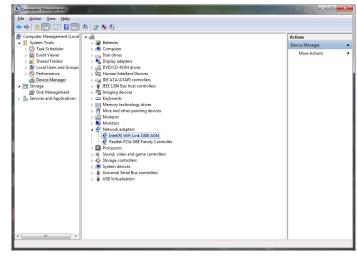
Disable Other Wireless Adapters

To prevent any conflicts with the D-Link wireless adapter, it is recommended to disable any 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**.



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Click **Yes** to disable the adapter.



The adapter is now disabled. When disabled, a red X 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**.

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Event Viewer	Disk drives	More Actions
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Local Users and Groups	DVD/CD-ROM drives	
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🚔 Device Manager	IDE ATA/ATAPI controllers	
🔺 🔠 Storage	IEEE 1394 Bus host controllers	
🗃 Disk Management	> 🖓 Imaging devices	
Services and Applications	> - Keyboards	
	Memory technology driver	
	Mice and other pointing devices	
	Modems Monitors	
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	- P Realtek PCIe GBE Family Controller	
	Processors	
	Sound, video and game controllers	
	- G Storage controllers	
	System devices	
	Universal Serial Bus controllers	
	- USB Virtualization	
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Wireless Installation Considerations

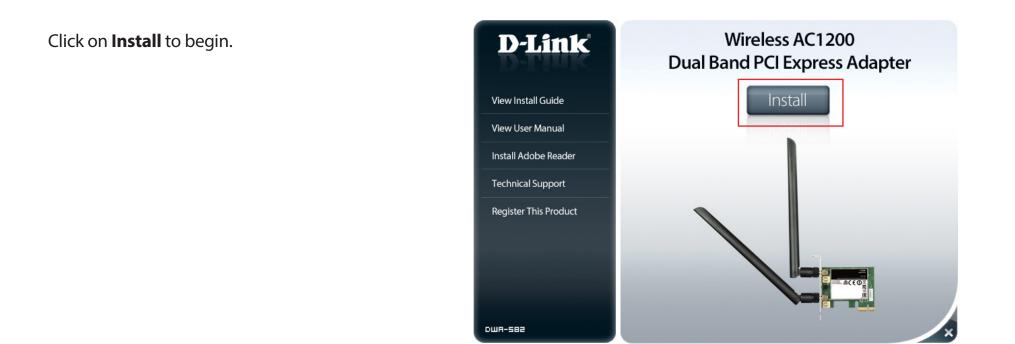
The D-Link wireless adapter lets you access your network using a wireless connection from virtually anywhere within the operating range of your wireless network. Keep in mind that the number, thickness and location of walls, ceilings, or other objects that the wireless signals must pass through, may 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:

- 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.

Driver/Software Installation

Note: Please install the drivers before physically installing the adapter into your computer.

Turn on the computer and insert the D-Link DWA-582 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).

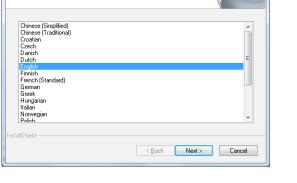


By default setup will install to the default location: C:\Program Files\D-Link

By default setup will install to the default location: C:\Program Files\D-Link\DWA-582, where C: represents the drive letter of your hard drive. To install to a different location click **Browse** and specify the location. Click **Next**.

Select your language and click **Next** to continue.

At the Welcome Wizard screen, click **Next** to continue.



- - X

D-Link DWA-566 - InstallShield Wizard

Select the language for the installation from the choices below.

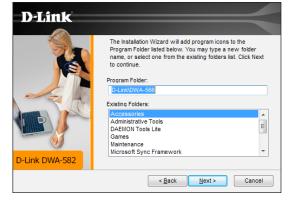
Choose Setup Language





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Select the Program Files folder location. Click **Next** to continue. The drivers will install. This may take 1-2 minutes.



Once the drivers are installed, click **Next** to continue.

Click **Finish** to complete the driver installation. You can now install the adapter into your computer. Please turn off and unplug the power to your computer.

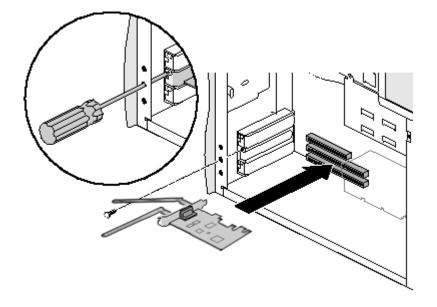


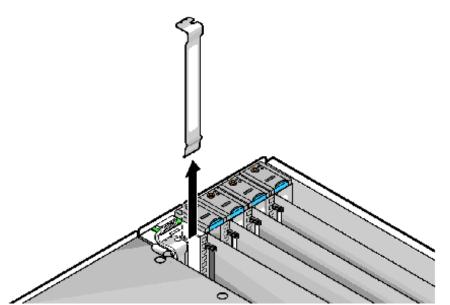


Hardware Installation

Step 1 - Open the side panel of your computer and then remove the metal cover bracket on your PCI Express slot.

- **Step 2** Insert the DWA-582 firmly into the PCI Express slot and screw it in place. You may either leave the antennas on or unscrew them to make it easier to install.
- **Step 3** Replace the computer case cover and plug the power back. If you took off the antennas during installation, re-attach them now.





Connect to your Wireless Network Windows® 8

It is recommended to enable wireless security (WPA/WPA2) on your wireless router or access point before configuring your wireless adapter. If you are joining an existing network, you will need to know the security key (Wi-Fi password) being used.

To join an existing network, locate the wireless network icon in the taskbar, next to the time display.

Clicking on this icon will display a list of wireless networks which are within connecting proximity of your computer. Select the desired network by clicking on the network name.

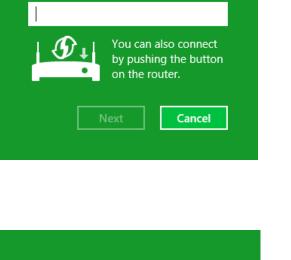




You will then be prompted to enter the network security key (Wi-Fi password) for the wireless network. Enter the password into the box and click Next.

If you wish to use Wi-Fi Protected Setup (WPS) to connect to the router, you can also press the WPS button on your router at this point to enable the WPS function.

When you have established a successful connection to a wireless network, the word **Connected** will appear next to the name of the network to which you are connected.

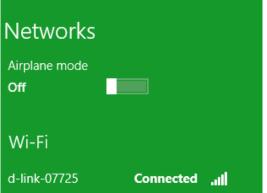


.all

• Networks

Enter the network security key

d-link-07725



Windows[®] 7

Windows® 7 users may use the built-in wireless utility to connect to a wireless network.

If you receive the Wireless Networks Detected bubble, click on the center of the bubble to access the utility. You can also click on the wireless icon in your system tray (lower right corner).



The utility will display any available wireless networks in your area.



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Highlight the wireless network (SSID) you would like to connect to and click the **Connect** button.

If you get a good signal but cannot access the Internet, check your TCP/IP settings for your wireless adapter.

Enter the same security key or passphrase that is on your router and click **OK**.

It may take 20-30 seconds to connect to the wireless network. If the connection fails, please verify that the security settings are correct. The key or passphrase must be exactly the same as on the wireless router.



😰 Connect to a Netwo	ork	X	J
Type the WPS se	curity key		
WPS Security key:	Hide characters		
		OK Cancel	

18

Wireless Security

This section will show you the different levels of security you can use to protect your data from intruders. The DWA-582 offers the following types of security:

- WPA/WPA2-Personal
- WPA/WPA2-Enterprise

What is WPA[™]?

WPA, or Wi-Fi[®] Protected Access, is a Wi-Fi standard that was designed to improve the security features of WEP (Wired Equivalent Privacy).

The 2 major improvements over WEP:

- Improved data encryption through the Temporal Key Integrity Protocol (TKIP). TKIP scrambles the keys using a hashing algorithm and, by adding an integrity-checking feature, ensures that the keys haven't been tampered with. WPA2[™] is based on 802.11i and uses Advanced Encryption Standard instead of TKIP.
- User authentication, which is generally missing in WEP, through the extensible authentication protocol (EAP). WEP regulates access to a wireless network based on a computer's hardware-specific MAC address, which is relatively simple to be sniffed out and stolen. EAP is built on a more secure public-key encryption system to ensure that only authorized network users can access the network.

WPA/WPA2-Personal uses a passphrase or key to authenticate your wireless connection. The key is an alpha-numeric password between 8 and 63 characters long. The password can include symbols (!?*&_) and spaces. This key must be the exact same key entered on your wireless router or access point.

WPA/WPA2-Enterprise incorporates user authentication through the Extensible Authentication Protocol (EAP). EAP is built on a more secure public key encryption system to ensure that only authorized network users can access the network.

Troubleshooting

This chapter provides solutions to problems that can occur during the installation and operation of the DWA-582. Read the following descriptions if you are having problems.

1. How do I know if my adapter is installed properly?

Go to **Start > My Computer > Properties.**

Select the Hardware Tab.



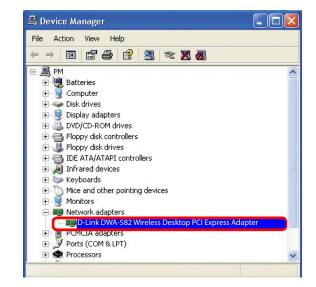
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Click the + sign next to **Network Adapters.**

Right-click on **D-Link DWA-582 Desktop PCI Express Adapter.**

Select **Properties** to check that the drivers are installed properly.

Look under **Device Status** to check that the device is working properly. Click **OK** to continue.



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tere and	Device type: Manufacturer: Location:	Network adapters D-Link PCI bus 129, device 0, function 0
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2. I cannot connect to the access point or the wireless router.

- Make sure that the SSID on the DWA-582 Desktop PCI Express Adapter is exactly the same as the SSID on the Access Point or wireless router.
- Move the DWA-582 and Access Point or Wireless router into the same room and then test the wireless connection.
- Disable all security settings (e.g., encryption and MAC Address Control)
- Make sure that the Radio is not locked down to a different frequency
- Turn off your Access Point and the computer with the DWA-582. Turn on the Access Point, and then turn on the computer with the DWA-582.
- Refresh the DWA-582 Utility

3. The DWA-582 Power and Link lights are not on.

• Check to see if the DWA-582 desktop adapter is firmly inserted into the PCI Express slot of your laptop computer.

4. I forgot my encryption key.

• Reset the Access Point to its factory default settings and restore the DWA-582 Desktop PCI Express Adapter to the factory default settings. The default settings are listed in the Configuration section in this manual.

5. The computer with the DWA-582 installed is unable to connect to the wireless network and/or the Internet.

- Check that the LED indicators for the broadband modem are indicating normal activity. If not, there may be a problem with the broadband connection.
- Check that the LED indicators on the wireless router are functioning properly. If not, check that the AC power and Ethernet cables are firmly connected.
- Check that the IP Address, subnet mask, gateway, and DNS settings are correctly entered for the network.
- In **Infrastructure** mode, make sure the same Service Set Identifier (SSID) is specified on the settings for the wireless clients and access points. The SSID factory default setting for D-Link products is default.
- In Ad-Hoc mode, both wireless clients will need to have the same SSID. Please note that it might be necessary
 to set up one client to establish a BSS (Basic Service Set) and wait briefly before setting up other clients. This
 prevents several clients from trying to establish a BSS at the same time, which can result in multiple singular
 BSSs being established, rather than a single BSS with multiple clients associated to it.
- Check that the Network Connection for the wireless client is configured properly. Select AP (Infrastructure) when connecting to an access point and select Ad-Hoc mode when connecting without an access point. Double-click on the WLAN icon in the taskbar > click on Configuration to change the settings for the wireless adapter.
- If Security is enabled, make sure that the correct encryption keys are entered on both the DWA-582 and the access
 point. Double-click on the WLAN icon in the taskbar > click Encryption. Check to see that the key selected is set
 to the same key as other devices on the network.

7. How can I troubleshoot distance issues using the DWA-582?

- Move the DWA-582 and Access Point or Wireless router into the same room and then test the wireless connection.
- Change the channel of the Access Point/wireless router.
- Move devices within the line of sight.

Wireless Basics

D-Link wireless products are based on industry standards to provide easy-to-use and compatible high-speed wireless connectivity within your home, business or public access wireless networks. Strictly adhering to the IEEE standard, the D-Link wireless family of products will allow you to securely access the data you want, when and where you want it. You will be able to enjoy the freedom that wireless networking delivers.

A wireless local area network (WLAN) is a cellular computer network that transmits and receives data with radio signals instead of wires. Wireless LANs are used increasingly in both home and office environments, and public areas such as airports, coffee shops and universities. Innovative ways to utilize WLAN technology are helping people to work and communicate more efficiently. Increased mobility and the absence of cabling and other fixed infrastructure have proven to be beneficial for many users.

Wireless users can use the same applications they use on a wired network. Wireless adapter cards used on laptop and desktop systems support the same protocols as Ethernet adapter cards.

Under many circumstances, it may be desirable for mobile network devices to link to a conventional Ethernet LAN in order to use servers, printers or an Internet connection supplied through the wired LAN. A Wireless Router is a device used to provide this link.

What is Wireless?

Wireless or Wi-Fi technology is another way of connecting your computer to the network without using wires. Wi-Fi uses radio frequency to connect wirelessly, so you have the freedom to connect computers anywhere in your home or office network.

Why D-Link Wireless?

D-Link is the worldwide leader and award winning designer, developer, and manufacturer of networking products. D-Link delivers the performance you need at a price you can afford. D-Link has all the products you need to build your network.

How does wireless work?

Wireless works similar to how cordless phone work, through radio signals to transmit data from one point A to point B. But wireless technology has restrictions as to how you can access the network. You must be within the wireless network range area to be able to connect your computer. There are two different types of wireless networks Wireless Local Area Network (WLAN), and Wireless Personal Area Network (WPAN).

Wireless Local Area Network (WLAN)

In a wireless local area network, a device called an Access Point (AP) connects computers to the network. The access point has a small antenna attached to it, which allows it to transmit data back and forth over radio signals. With an indoor access point as seen in the picture, the signal can travel up to 300 feet. With an outdoor access point the signal can reach out up to 30 miles to serve places like manufacturing plants, industrial locations, college and high school campuses, airports, golf courses, and many other outdoor venues.

Wireless Personal Area Network (WPAN)

Bluetooth is the industry standard wireless technology used for WPAN. Bluetooth devices in WPAN operate in a range up to 30 feet away.

Compared to WLAN the speed and wireless operation range are both less than WLAN, but in return it doesn't use nearly as much power which makes it ideal for personal devices, such as mobile phones, PDAs, headphones, laptops, speakers, and other devices that operate on batteries.

Who uses wireless?

Wireless technology as become so popular in recent years that almost everyone is using it, whether it's for home, office, business, D-Link has a wireless solution for it.

Home

- Gives everyone at home broadband access
- Surf the web, check email, instant message, and etc
- Gets rid of the cables around the house
- Simple and easy to use

Small Office and Home Office

- Stay on top of everything at home as you would at office
- Remotely access your office network from home
- Share Internet connection and printer with multiple computers
- No need to dedicate office space

Where is wireless used?

Wireless technology is expanding everywhere not just at home or office. People like the freedom of mobility and it's becoming so popular that more and more public facilities now provide wireless access to attract people. The wireless connection in public places is usually called "hotspots".

Using a D-Link wireless desktop adapter with your laptop, you can access the hotspot to connect to Internet from remote locations like: Airports, Hotels, Coffee Shops, Libraries, Restaurants, and Convention Centers.

Wireless network is easy to setup, but if you're installing it for the first time it could be quite a task not knowing where to start. That's why we've put together a few setup steps and tips to help you through the process of setting up a wireless network.

Tips

Here are a few things to keep in mind, when you install a wireless network.

Centralize your router or Access Point

Make sure you place the router/access point in a centralized location within your network for the best performance. Try to place the router/access point as high as possible in the room, so the signal gets dispersed throughout your home. If you have a two-story home, you may need a repeater to boost the signal to extend the range.

Eliminate Interference

Place home appliances such as cordless telephones, microwaves, and televisions as far away as possible from the router/access point. This would significantly reduce any interference that the appliances might cause since they operate on same frequency.

Security

Don't let your next-door neighbors or intruders connect to your wireless network. Secure your wireless network by turning on the WPA or WEP security feature on the router. Refer to product manual for detail information on how to set it up.

Networking Basics

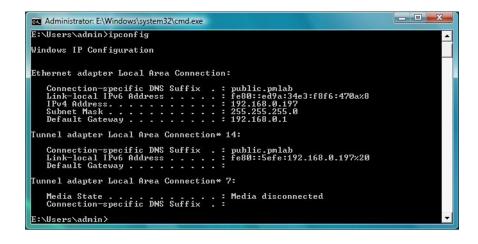
Check your IP address

Windows[®] 8

- Press the Windows key and R together. Type cmd in the box and click OK.
- At the prompt, type **ipconfig** and press **Enter**.
- This will display the IP address, subnet mask, and default gateway of your adapter.

Windows® 7

- Click Start, type cmd in the search box and then click OK.
- At the prompt, type **ipconfig** and press **Enter**.
- This will display the IP address, subnet mask, and default gateway of your adapter.



Statically Assign an IP address

If you are not using a DHCP capable gateway/router, or you need to assign a static IP address, please follow the steps below:

Windows® 8

- Press the Windows key and then type IP. Click Settings on the right side and then click View Network Connections.
- Right-click on the adapter which represents your D-Link wireless network adapter.
- Highlight Internet Protocol Version 4 (TCP /IPv4) and click Properties.
- Click **Use the following IP address** and enter an IP address that is on the same subnet as your network or LAN IP address on your router or network.

Example: If the router's LAN IP address is 192.168.0.1, make your IP address 192.168.0.X where X is a number between 2 and 99. Make sure that the number you choose is not in use on the network.

- Set **Default Gateway** the same as the LAN IP address of your router or gateway.
- Set **Primary DNS** the same as the LAN IP address of your router or gateway.
- The **Secondary DNS** is optional (you may enter a DNS server from your ISP).
- Click **OK** to save your settings.

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Obtain an IP address autom	natically
• Use the following IP addres	s:
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Default gateway:	192.168.0.1
Obtain DNS server address	automatically
Use the following DNS serve	er addresses:
Preferred DNS server:	192.168.0.1
Alternate DNS server:	
	Ad <u>v</u> anced

Windows® 7

- Click on Start > Control Panel (make sure you are in Classic View). Double-click on the Network and Sharing Center icon. Click on Change adapter settings.
- Right-click on the Local Area Connection which represents your D-Link wireless network adapter which will be connected to your network.
- Highlight Internet Protocol Version 4 (TCP /IPv4) and click Properties.
- Click **Use the following IP address** and enter an IP address that is on the same subnet as your network or LAN IP address on your router or network.

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- Click **OK** to save your settings.

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192.168.0.52
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Technical Specifications

Standards*

- IEEE 802.11ac
- IEEE 802.11n
- IEEE 802.11g
- IEEE 802.11a

Security

- Wi-Fi Protected Access (WPA[™] & WPA2[™])
- 64/128-bit WEP
- Wi-Fi Protected Setup PIN & PBC

Frequency Range

- 2.4 GHz to 2.483 GHz
- 5.15 GHz to 5.35 GHz

External Antenna Type

• Two external dipole antennas

Temperature

- Operating: 32°F to 104°F (0°C to 40°C)
- Storage: -4° to -167°F (-20° to -75°C)

Humidity

- Operating: 10% to 90% non-condensing
- Storage: 5% to 95% non-condensing

'Maximum wireless signal rate derived from IEEE Standard 802.11ac and 802.11n specifications. 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 will adversely affect wireless signal range.

Dimensions

• 4.8 x 3.1 x 1.0 inches (121.06 x 79.04 x 25.17 mm)

Weight

• 1.7oz (48.8g) with bracket

Warranty

• 1 Year Limited

Contacting Technical Support

U.S. and Canadian customers can contact D-Link technical support through our web site or by phone.

Before you contact technical support, please have the following ready:

- Model number of the product (e.g. DWA-582)
- Hardware Revision (located on the label on the adapter (e.g. rev A1))
- Serial Number (s/n number located on the label on the adapter).

You can find software updates and user documentation on the D-Link website as well as frequently asked questions and answers to technical issues.

For customers within the United States:

Phone Support: (877) 453-5465

Internet Support: http://support.dlink.com For customers within Canada:

Phone Support: (800) 361-5265

Internet Support: http://support.dlink.ca

Warranty

Subject to the terms and conditions set forth herein, D-Link Systems, Inc. ("D-Link") provides this Limited Warranty:

- Only to the person or entity that originally purchased the product from D-Link or its authorized reseller or distributor, and
- Only for products purchased and delivered within the fifty states of the United States, the District of Columbia, U.S. Possessions or Protectorates, U.S. Military Installations, or addresses with an APO or FPO.

Limited Warranty:

D-Link warrants that the hardware portion of the D-Link product described below ("Hardware") will be free from material defects in workmanship and materials under normal use from the date of original retail purchase of the product, for the period set forth below ("Warranty Period"), except as otherwise stated herein.

- Hardware (excluding power supplies and fans): One (1) year imited
- Power supplies and fans: One (1) year limited
- Spare parts and spare kits: Ninety (90) days

The customer's sole and exclusive remedy and the entire liability of D-Link and its suppliers under this Limited Warranty will be, at D-Link's option, to repair or replace the defective Hardware during the Warranty Period at no charge to the original owner or to refund the actual purchase price paid. Any repair or replacement will be rendered by D-Link at an Authorized D-Link Service Office. The replacement hardware need not be new or have an identical make, model or part. D-Link may, at its option, replace the defective Hardware or any part thereof with any reconditioned product that D-Link reasonably determines is substantially equivalent (or superior) in all material respects to the defective Hardware. Repaired or replacement hardware will be warranted for the remainder of the original Warranty Period or ninety (90) days, whichever is longer, and is subject to the same limitations and exclusions. If a material defect is incapable of correction, or if D-Link determines that it is not practical to repair or replace the defective Hardware, the actual price paid by the original purchaser for the defective Hardware will be refunded by D-Link upon return to D-Link of the defective Hardware. All Hardware or part thereof that is replaced by D-Link, or for which the purchase price is refunded, shall become the property of D-Link upon replacement or refund.

Limited Software Warranty:

D-Link warrants that the software portion of the product ("Software") will substantially conform to D-Link's then current functional specifications for the Software, as set forth in the applicable documentation, from the date of original retail purchase of the Software for a period of ninety (90) days ("Software Warranty Period"), provided that the Software is properly installed on approved hardware and operated as contemplated in its documentation. D-Link further warrants that, during the Software Warranty Period, the magnetic media on which D-Link delivers the Software will be free of physical defects. The customer's sole and exclusive remedy and the entire liability of D-Link and its suppliers under this Limited Warranty will be, at D-Link's option, to replace the non-conforming Software (or defective media) with software that substantially conforms to D-Link's functional specifications for the Software or to refund the portion of the actual purchase price paid that is attributable to the Software. Except as otherwise agreed by D-Link in writing, the replacement Software is provided only to the original licensee, and is subject to the terms and conditions of the license granted by D-Link for the Software. Replacement Software will be warranted for the remainder of the original Warranty Period and is subject to the same limitations and exclusions. If a material non-conformance is incapable of correction, or if D-Link determines in its sole discretion that it is not practical to replace the non-conforming Software, the price paid by the original licensee for the non-conforming Software (and all copies thereof) is first returned to D-Link. The license granted respecting any Software for which a refund is given automatically terminates.

Non-Applicability of Warranty:

The Limited Warranty provided hereunder for Hardware and Software portions of D-Link's products will not be applied to and does not cover any refurbished product and any product purchased through the inventory clearance or liquidation sale or other sales in which D-Link, the sellers, or the liquidators expressly disclaim their warranty obligation pertaining to the product and in that case, the product is being sold "As-Is" without any warranty whatsoever including, without limitation, the Limited Warranty as described herein, notwithstanding anything stated herein to the contrary.

Submitting A Claim (USA):

The customer shall return the product to the original purchase point based on its return policy. In case the return policy period has expired and the product is within warranty, the customer shall submit a claim to D-Link as outlined below:

- The customer must submit with the product as part of the claim a written description of the Hardware defect or Software nonconformance in sufficient detail to allow D-Link to confirm the same, along with proof of purchase of the product (such as a copy of the dated purchase invoice for the product) if the product is not registered.
- The customer must obtain a Case ID Number from D-Link Technical Support at 1-877-453-5465, who will attempt to assist the customer in resolving any suspected defects with the product. If the product is considered defective, the customer must obtain a Return Material Authorization ("RMA") number by completing the RMA form and entering the assigned Case ID Number at https:// rma.dlink.com/.

- After an RMA number is issued, the defective product must be packaged securely in the original or other suitable shipping package to ensure that it will not be damaged in transit, and the RMA number must be prominently marked on the outside of the package. Do not include any manuals or accessories in the shipping package. DLink will only replace the defective portion of the product and will not ship back any accessories.
- The customer is responsible for all in-bound shipping charges to D-Link. No Cash on Delivery ("COD") is allowed. Products sent COD will either be rejected by D-Link or become the property of D-Link. Products shall be fully insured by the customer and shipped to D-Link Systems, Inc., 17595 Mt. Herrmann, Fountain Valley, CA 92708. D-Link will not be held responsible for any packages that are lost in transit to D-Link. The repaired or replaced packages will be shipped to the customer via UPS Ground or any common carrier selected by D-Link. Return shipping charges shall be prepaid by D-Link if you use an address in the United States, otherwise we will ship the product to you freight collect. Expedited shipping is available upon request and provided shipping charges are prepaid by the customer. D-Link may reject or return any product that is not packaged and shipped in strict compliance with the foregoing requirements, or for which an RMA number is not visible from the outside of the package. The product owner agrees to pay D-Link's reasonable handling and return shipping charges for any product that is not packaged and shipped in accordance with the foregoing requirements, or that is determined by D-Link not to be defective or non-conforming.

Submitting A Claim (Canada):

The customer shall return the product to the original purchase point based on its return policy. In case the return policy period has expired and the product is within warranty, the customer shall submit a claim to D-Link as outlined below:

- Customers need to provide their receipt (proof of purchase) even if the product is registered. Without a receipt, no warranty service will be done. The registration is not considered a proof of purchase.
- The customer must submit with the product as part of the claim a written description of the Hardware defect or Software nonconformance in sufficient detail to allow D-Link to confirm the same, along with proof of purchase of the product (such as a copy of the dated purchase invoice for the product) if the product is not registered.
- The customer must obtain a Case ID Number from D-Link Technical Support at 1-800-361-5265, who will attempt to assist the customer in resolving any suspected defects with the product. If the product is considered defective, the customer must obtain a Return Material Authorization ("RMA") number by completing the RMA form and entering the assigned Case ID Number at https://rma.dlink.ca/.
- After an RMA number is issued, the defective product must be packaged securely in the original or other suitable shipping package to ensure that it will not be damaged in transit, and the RMA number must be prominently marked on the outside of the package. Do not include any manuals or accessories in the shipping package. D-Link will only replace the defective portion of the product and will not ship back any accessories.

- The customer is responsible for all in-bound shipping charges to D-Link. No Cash on Delivery ("COD") is allowed. Products sent COD will be rejected by D-Link. Products shall be fully insured by the customer and shipped to D-Link Networks, Inc., 2525 Meadowvale Boulevard Mississauga, Ontario, L5N 5S2 Canada. D-Link will not be held responsible for any packages that are lost in transit to D-Link. The repaired or replaced packages will be shipped to the customer via Purolator Canada or any common carrier selected by D-Link. Return shipping charges shall be prepaid by D-Link if you use an address in Canada, otherwise we will ship the product to you freight collect. Expedited shipping is available upon request and provided shipping charges are prepaid by the customer. D-Link may reject or return any product that is not packaged and shipped in strict compliance with the foregoing requirements, or for which an RMA number is not visible from the outside of the package. The product owner agrees to pay D-Link's reasonable handling and return shipping charges for any product that is not packaged and shipped in accordance with the foregoing requirements, or that is determined by D-Link not to be defective or non-conforming.
- RMA phone number: 1-800-361-5265 Hours of Operation: Monday-Friday, 9:00AM 9:00PM EST

What Is Not Covered:

The Limited Warranty provided herein by D-Link does not cover:

Products that, in D-Link's judgment, have been subjected to abuse, accident, alteration, modification, tampering, negligence, misuse, faulty installation, lack of reasonable care, repair or service in any way that is not contemplated in the documentation for the product, or if the model or serial number has been altered, tampered with, defaced or removed; Initial installation, installation and removal of the product for repair, and shipping costs; Operational adjustments covered in the operating manual for the product, and normal maintenance; Damage that occurs in shipment, due to act of God, failures due to power surge, and cosmetic damage; Any hardware, software, firmware or other products or services provided by anyone other than D-Link; and Products that have been purchased from inventory clearance or liquidation sales or other sales in which D-Link, the sellers, or the liquidators expressly disclaim their warranty obligation pertaining to the product.

While necessary maintenance or repairs on your Product can be performed by any company, we recommend that you use only an Authorized D-Link Service Office. Improper or incorrectly performed maintenance or repair voids this Limited Warranty.

Disclaimer of Other Warranties:

EXCEPT FOR THE LIMITED WARRANTY SPECIFIED HEREIN, THE PRODUCT IS PROVIDED "AS-IS" WITHOUT ANY WARRANTY OF ANY KIND WHATSOEVER INCLUDING, WITHOUT LIMITATION, ANY WARRANTY OF MERCHANTABILITY, FITNESS FOR A PARTICULAR PURPOSE AND NONINFRINGEMENT.

IF ANY IMPLIED WARRANTY CANNOT BE DISCLAIMED IN ANY TERRITORY WHERE A PRODUCT IS SOLD, THE DURATION OF SUCH IMPLIED WARRANTY SHALL BE LIMITED TO THE DURATION OF THE APPLICABLE WARRANTY PERIOD SET FORTH ABOVE. EXCEPT AS EXPRESSLY COVERED UNDER THE LIMITED WARRANTY PROVIDED HEREIN, THE ENTIRE RISK AS TO THE QUALITY, SELECTION AND PERFORMANCE OF THE PRODUCT IS WITH THE PURCHASER OF THE PRODUCT.

Limitation of Liability:

TO THE MAXIMUM EXTENT PERMITTED BY LAW, D-LINK IS NOT LIABLE UNDER ANY CONTRACT, NEGLIGENCE, STRICT LIABILITY OR OTHER LEGAL OR EQUITABLE THEORY FOR ANY LOSS OF USE OF THE PRODUCT, INCONVENIENCE OR DAMAGES OF ANY CHARACTER, WHETHER DIRECT, SPECIAL, INCIDENTAL OR CONSEQUENTIAL (INCLUDING, BUT NOT LIMITED TO, DAMAGES FOR LOSS OF GOODWILL, LOSS OF REVENUE OR PROFIT, WORK STOPPAGE, COMPUTER FAILURE OR MALFUNCTION, FAILURE OF OTHER EQUIPMENT OR COMPUTER PROGRAMS TO WHICH D-LINK'S PRODUCT IS CONNECTED WITH, LOSS OF INFORMATION OR DATA CONTAINED IN, STORED ON, OR INTEGRATED WITH ANY PRODUCT RETURNED TO D-LINK FOR WARRANTY SERVICE) RESULTING FROM THE USE OF THE PRODUCT, RELATING TO WARRANTY SERVICE, OR ARISING OUT OF ANY BREACH OF THIS LIMITED WARRANTY, EVEN IF D-LINK HAS BEEN ADVISED OF THE POSSIBILITY OF SUCH DAMAGES. THE SOLE REMEDY FOR A BREACH OF THE FOREGOING LIMITED WARRANTY IS REPAIR, REPLACEMENT OR REFUND OF THE DEFECTIVE OR NONCONFORMING PRODUCT. THE MAXIMUM LIABILITY OF D-LINK UNDER THIS WARRANTY IS LIMITED TO THE PURCHASE PRICE OF THE PRODUCT COVERED BY THE WARRANTY. THE FOREGOING EXPRESS WRITTEN WARRANTIES AND REMEDIES ARE EXCLUSIVE AND ARE IN LIEU OF ANY OTHER WARRANTIES OR REMEDIES, EXPRESS, IMPLIED OR STATUTORY.

Governing Law:

This Limited Warranty shall be governed by the laws of the State of California. Some states do not allow exclusion or limitation of incidental or consequential damages, or limitations on how long an implied warranty lasts, so the foregoing limitations and exclusions may not apply. This Limited Warranty provides specific legal rights and you may also have other rights which vary from state to state.

Trademarks:

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Copyright Statement:

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CE Mark Warning:

This is a Class B product. In a domestic environment, this product may cause radio interference, in which case the user may be required to take adequate measures.

FCC Statement:

This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses, and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communication. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the

following measures:

- Reorient or relocate the receiving antenna.
- Increase the separation between the equipment and receiver.
- Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
- Consult the dealer or an experienced radio/TV technician for help.

FCC Caution:

Any changes or modifications not expressly approved by the grantee of this device could void the user's authority to operate the equipment.

This device complies with Part 15 of the FCC Rules. Operation is subject to the following two conditions:

(1) This device may not cause harmful interference, and (2) this device must accept any interference received, including interference that may cause undesired operation.

IMPORTANT NOTICE:

FCC Radiation Exposure Statement:

This equipment complies with FCC radiation exposure limits set forth for an uncontrolled environment. This equipment should be installed and operated with minimum distance 20cm between the radiator & your body. This transmitter must not be co-located or operating in conjunction with any other antenna or transmitter.

The availability of some specific channels and/or operational frequency bands are country dependent and are firmware programmed at the factory to match the intended destination. The firmware setting is not accessible by the end user.

For detailed warranty information applicable to products purchased outside the United States, please contact the corresponding local D-Link office.

Industry Canada Notice:

This device complies with RSS-210 of the Industry Canada Rules. Operation is subject to the following two conditions: (1) This device may not cause harmful interference, and (2) this device must accept any interference received, including interference that may cause undesired operation.

IMPORTANT NOTE:

Radiation Exposure Statement:

This equipment complies with IC radiation exposure limits set forth for an uncontrolled environment. This equipment should be installed and operated with minimum distance 20cm between the radiator & your body.

This device has been designed to operate with an antenna having a maximum gain of 2 dB. Antenna having a higher gain is strictly prohibited per regulations of Industry Canada. The required antenna impedance is 50 ohms.

Registration

Register your product online at registration.dlink.com



Product registration is entirely voluntary and failure to complete or return this form will not diminish your warranty rights.