

D-Link DWA-566

D-Link Wireless N300 Dual Band PCI Express Desktop Adapter (DWA-566)

User Manual

1. INTRODUCTION

The D-Link Wireless N300 Dual Band PCI Express Desktop Adapter (DWA-566) provides high-speed wireless connectivity for your desktop computer. Utilizing Wireless N technology, it maximizes the speed and range of your wireless signal, offering superior performance compared to Wireless G devices. The dual-band capability supports both 2.4GHz and 5GHz wireless signals, allowing for flexible network usage, such as browsing on 2.4GHz and HD streaming or gaming on the clearer 5GHz band.

This adapter is designed to fit into any standard PCI Express slot, offering a higher performance interface than legacy PCI. It supports secure wireless networks with WPA or WPA2 encryption.



Figure 1.1: D-Link DWA-566 Wireless N300 Dual Band PCI Express Desktop Adapter with antennas.

2. FEATURES

The DWA-566 adapter includes the following key features:

- IEEE 802.11n, 802.11g, and 802.11a Compliant
- Dual Band Technology for Superior Wireless Performance (2.4GHz or 5GHz)

- Access secure wireless networks using advanced WPA or WPA2 encryption
- Fits into any standard PCI Express slot
- PCI Express Interface provides higher performance than a legacy PCI interface



WIRELESS N 300 DUAL BAND PCI EXPRESS DESKTOP ADAPTER

Wireless stream HD videos,
share files and surf the web

Intelligent antenna for
great wireless coverage

Connects to any standard
PCI Express (PCIe) slot



Wireless N Technology for Fast Speeds

The D-Link Wireless N 300 Dual Band Desktop PCI Express Adapter with Wireless N technology maximizes the speed and range of your wireless signal to significantly outperform Wireless G devices¹. The DWA-566 fits into any standard PCI Express slots – x1, x4, x8, or x16.

Get Connected, Stay Connected

The Wireless N 300 Dual Band Desktop PCI Express Adapter is powered by Wireless N technology and uses two external antennas to provide superior wireless reception in your home or office. This adapter is designed for use in larger homes and offices, or for users running multiple bandwidth-intensive applications. This adapter enables you to simultaneously make or receive Internet phone calls (VoIP), surf the Web, transfer files, and stream High-Definition (HD) media when connected to an Xtreme N Gigabit Router (DIR-825 or DIR-855). The DWA-566 supports WPA™ and WPA2™ encryption that allow you to connect securely to a wireless network.

The Benefits of Dual Band

The dual band N technology in the DWA-566 supports selectable 2.4GHz or 5GHz wireless signals. This allows you to check e-mail and browse the Internet using the 2.4GHz band or stream HD movies and other media on the 5GHz band. The 5GHz wireless band is the best technology available for wirelessly streaming HD videos across your network. It achieves this by operating in a clear wireless band to help avoid interference that may slow down and limit the range of current wireless technologies like 802.11g. The DWA-566 is also backward compatible to 802.11g, which means it can be used in existing 802.11g networks.

WIRELESS

DWA-566

Figure 2.1: Overview of DWA-566 features and benefits.

3. PACKAGE CONTENTS

Verify that your package contains the following items:

- Wireless N 300 Dual Band PCI Express Adapter (DWA-566)
- Two detachable antennas
- Low-profile mounting bracket
- Quick Install Guide
- CD-ROM with:
 - D-Link Wireless Connection Manager
 - Drivers
 - Product Documentation

4. SYSTEM REQUIREMENTS

Before installing the DWA-566, ensure your system meets the following minimum requirements:

- Computer with an available PCI Express slot
- Windows operating system (Windows XP, Vista, 7, 8, 10)
- CD-ROM drive (for driver installation from included CD)
- Internet Explorer 7 or Firefox 3.0 and above (for viewing documentation)
- Subscription with an Internet Service Provider (ISP)

For optimal performance, a D-Link Wireless N router (DIR-655 or DIR-825) is recommended.

FEATURES

- + IEEE 802.11n, 802.11g and 802.11a Compliant
- + Dual Band Technology for Superior Wireless Performance¹
- + Access secure wireless networks using advanced WPA™ or WPA2™ encryption
- + Fits into any standard PCI Express slot
- + PCI Express Interface Provides Higher Performance than a Legacy PCI Interface²
- + 24/7 Basic Installation Support³
- + 1-Year Limited Warranty⁴

NETWORK DIAGRAM**TECHNICAL SPECIFICATIONS****STANDARDS**

- + IEEE 802.11n
- + IEEE 802.11g
- + IEEE 802.11a

INTERFACE

- + 1 x PCI Express (PCIe)

SECURITY

- + Wi-Fi Protected Access (WPA®, WPA2®)

LED

- + Activity

OPERATING TEMPERATURE

- + 32°F to 104°F (0°C to 40°C)

STORAGE TEMPERATURE

- + 10% to 90% Non-condensing

CERTIFICATIONS

- + FCC Class B.
- + IC Class B

DIMENSIONS (WXDXH)

- + Item: 2.57" x 2.17" x 0.06" (65.3mm x 55mm x 1.5mm)

WEIGHT

- + Item: 0.18 lbs (82 grams)

WARRANTY

- + 1-Year Limited⁴

¹ Maximum wireless signal rate derived from IEEE Standard 802.11 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. Wireless range and speed rates are D-Link RELATIVE performance measurements based on the wireless range and speed rates of a standard Wireless G product from D-Link. Maximum throughput based on D-Link 802.11n devices.

² Maximum throughput and performance derived from PCI and PCI Express specifications.

³ 24/7 Basic Installation Support is available only in the USA for the first 30 days from date of original purchase.

⁴ 1-Year Limited Warranty available only in the USA and Canada.

⁵ Computer must adhere to Microsoft's recommended System Requirements. Please contact Microsoft for details.

⁶ Latest software and documentation are available at <http://support.dlink.com>.

All references to speed and range are for comparison purposes only. Product specifications, size, and shape are subject to change without notice, and actual product appearance may differ from that depicted on the package. See inside package for warranty details.

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WIRELESS**Minimum Requirements**

Computer with:

- + Windows® 7, Windows Vista® or Windows® XP SP3⁵

For Internet Access:

- + Cable or DSL Modem
- + Subscription with Internet Service Provider (ISP)

Recommended Requirements

For Optimal Wireless Performance, use with:

- + Xtreme N Dual Band Router (DIR-825 or DIR-855)

Package Contents

- + Wireless N 300 Dual Band PCI Express Adapter (DWA-566)
- + Low profile mounting bracket
- + 2 Antennas
- + Quick Install Guide
- CD-Rom⁶ with:
 - + Installation Wizard
 - + Product Documentation

Figure 4.1: Detailed technical specifications, minimum requirements, and network diagram.

5. SETUP AND INSTALLATION

5.1 Hardware Installation

1. **Power Off Computer:** Turn off your computer and unplug the power cord.
2. **Open Computer Case:** Remove the computer case cover.

3. **Locate PCI Express Slot:** Find an available PCI Express slot on your motherboard.
4. **Insert Adapter:** Carefully insert the DWA-566 adapter into the PCI Express slot, ensuring it is seated firmly.
5. **Secure Adapter:** Secure the adapter with a screw to the computer chassis.
6. **Attach Antennas:** Screw the two included antennas onto the connectors on the adapter.
7. **Close Case and Power On:** Replace the computer case cover, plug in the power cord, and power on your computer.



Figure 5.1: DWA-566 adapter with antennas attached, ready for installation.

5.2 Software Installation

After hardware installation, proceed with driver and utility installation:

1. **Insert Installation CD:** Insert the DWA-566 installation CD into your computer's CD-ROM drive. The setup wizard should launch automatically. If not, navigate to the CD drive and run the 'Setup.exe' file.
2. **Follow On-Screen Instructions:** Follow the prompts of the D-Link setup wizard to install the drivers and the D-Link Wireless Connection Manager utility.
3. **Restart Computer:** After the installation is complete, restart your computer when prompted.

Note: For Windows 7/8 64-bit systems, ensure you are using the latest drivers available from the official D-Link support website to avoid potential compatibility issues.

6. OPERATING INSTRUCTIONS

Once the drivers are installed, you can connect to a wireless network:

1. **Launch Connection Manager:** Open the D-Link Wireless Connection Manager utility or use the built-in Windows wireless network utility.

2. **Scan for Networks:** The utility will scan for available wireless networks in your area.
3. **Select Network:** Choose your desired wireless network (SSID) from the list.
4. **Enter Security Key:** If the network is secured, enter the correct WPA/WPA2 security key or passphrase.
5. **Connect:** Click 'Connect' to establish a wireless connection.

A successful connection will be indicated by a strong signal strength and internet access.

7. MAINTENANCE

To ensure optimal performance and longevity of your DWA-566 adapter:

- **Keep Drivers Updated:** Periodically check the D-Link support website for the latest drivers and firmware updates.
- **Ensure Proper Ventilation:** Make sure your computer case has adequate airflow to prevent overheating of internal components, including the wireless adapter.
- **Antenna Positioning:** Adjust the antennas for the best possible signal reception.
- **Environmental Factors:** Avoid placing your computer near large metal objects or other devices that may cause wireless interference.

8. TROUBLESHOOTING

If you encounter issues with your DWA-566 adapter, consider the following:

8.1 No Wireless Connection

- **Verify Hardware Installation:** Ensure the adapter is correctly seated in the PCI Express slot and antennas are securely attached.
- **Check Drivers:** Confirm that the drivers are installed correctly. Check Device Manager for any error symbols next to the network adapter. Reinstall drivers if necessary.
- **Router Status:** Ensure your wireless router is powered on and broadcasting a signal.
- **Security Key:** Double-check that the correct wireless security key (WPA/WPA2 passphrase) is entered.
- **Firewall Settings:** Temporarily disable your computer's firewall to see if it is blocking the connection. If it resolves the issue, configure your firewall to allow the D-Link utility.

8.2 Slow Connection Speed or Frequent Disconnections

- **Antenna Adjustment:** Try repositioning the antennas for better signal reception.
- **Interference:** Move the computer away from potential sources of interference (e.g., cordless phones, microwaves, Bluetooth devices).
- **Router Proximity:** Ensure the computer is within the effective range of your wireless router.
- **Dual Band Usage:** If your router supports it, try connecting to the 5GHz band for less interference and potentially higher speeds, especially for streaming or gaming.
- **Driver Update:** Update the adapter drivers to the latest version from the D-Link website.

9. SPECIFICATIONS

Feature	Specification
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Brand	D-Link
Model Number	DWA-566
Hardware Interface	PCI Express
Data Link Protocol	IEEE 802.11n, 802.11g, 802.11a
Data Transfer Rate	Up to 300 Megabits Per Second
Frequency Band	2.4 GHz / 5 GHz (Dual Band)
Security	WPA, WPA2
Compatible Devices	Desktop Computers
Item Weight	0.4 Pounds (approx. 181 grams)
External Testing Certification	FCC B, IC B, CE, C-Tick

10. WARRANTY AND SUPPORT

The D-Link Wireless N300 Dual Band PCI Express Desktop Adapter (DWA-566) comes with a **1-year limited warranty**. For specific terms and conditions, please refer to the warranty documentation included with your product or visit the official D-Link website.

D-Link provides **24/7 Basic Installation Support** to assist with initial setup and configuration. For technical assistance, driver downloads, and further product information, please visit the D-Link support website or contact their customer service.

D-Link Support Website: <https://support.dlink.com/>