BELKIN®
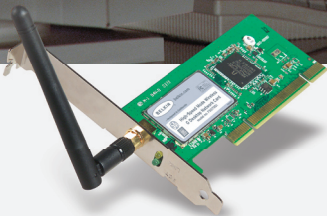
High-Speed Mode Wireless G Desktop Network Card

Connect your desktop computer to a FASTER wireless network

User Manual

125® HIGH SPEED MODE™

((G)) 802.11g **125** 2.4GHz • Wireless *High-Speed Mode*

35% FASTER

F5D7001

Table of Contents

Introduction

Thank you for purchasing the Belkin High-Speed Mode Wireless
G Desktop Network Card (the Card). Now you can take advantage
of this great new technology and gain the freedom you need
around the home or office without using cables. The Card works
like a conventional network card, but without the wires. The easy
installation and setup will have you networking wirelessly in minutes.
Please be sure to read through this User Manual completely, and pay
special attention to the section entitled "Placement of your Wireless
Networking Hardware for Optimal Performance". By following our
simple setup instructions your Belkin Home Network will allow you to:

• Share one high-speed Internet connection with all the computers
  in your home

• Share resources, such as files, and hard drives among all the
  connected computers in your home

• Share a single printer with the entire family

• Share documents, music, video, and digital pictures

• Store, retrieve, and copy files from one computer to another

• Simultaneously play games online, check Internet e-mail,
  and chat

**Here are some of the advantages of setting up a Belkin
Wireless Network:**

• **Mobility** –you'll no longer need a dedicated "computer room"—
  now you can work on a networked laptop or desktop computer
  anywhere within your wireless range

• **Easy installation** – Belkin Easy Installation Wizards make
  setup simple

• **Flexibility** – set up and access printers, computers, and other
  networking devices from anywhere in your home

• **Easy Expansion** – the wide range of Belkin networking products
  let you expand your network to include devices such as printers
  and gaming consoles

• **No cabling required** – you can spare the expense and hassle of
  retrofitting Ethernet cabling throughout the home or office

• **Widespread industry acceptance** – choose from a wide range
  of interoperable networking products

Introduction

Placement of your Wireless Networking Hardware for Optimal Performance

Your wireless connection will be stronger the closer your computer is to your Wireless Router (or Access Point). Typical indoor operating range for your wireless devices is between 100 and 200 feet. In the same way, your wireless connection and performance will degrade somewhat as the distance between your Wireless Router (or Access Point) increases. This may or may not be noticeable to you. As you move further from your Wireless Router (or Access Point), connection speed may decrease. Factors that can weaken signals simply by getting in the way of your network's radio waves are metal appliances or obstructions, and walls.

If you have concerns about your network's performance that might be related to range or obstruction factors, try moving the computer to a position between five and ten feet from the Wireless Router (or Access Point), in order to see if distance is the problem. If difficulties persist even at close range, please contact Belkin Technical Support.

Placement of your Wireless Networking Hardware

Note: While some of the items listed below can affect network performance, they will not prohibit your wireless network from functioning; if you are concerned that your network is not operating at its maximum effectiveness, this checklist may help.

1.   Placement of your Wireless Router or Access Point

Place your Wireless Router (or Access Point), the central connection point of your network, as close as possible to the center of your wireless network devices.

To achieve the best wireless network coverage for your "wireless clients," (i.e. computers enabled by Belkin Wireless Notebook Network Cards, Wireless Desktop Network Cards, and Wireless USB Adapters):

• Ensure that your Wireless Router (or Access Point) antennas are parallel to each other, and are positioned vertically (toward the ceiling). If your Wireless Router (or Access Point) itself is positioned vertically, point the antennas as much as possible in an upward direction.

• In multistory homes, place the Wireless Router (or Access Point) on a floor that is as close to the center of the home as possible. This may mean placing the Wireless Router or Access Point on an upper floor.

• Try not to place the Wireless Router (or Access Point) near a cordless 2.4GHz phone.

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2.   Avoid Obstacles and Interference

Avoid placing your Wireless Router (or Access Point) near devices that may emit radio "noise", such as microwave ovens. Other objects that can inhibit Wireless communication can include:

- Refrigerators
- Washers and/or dryers
- Metal cabinets
- Large aquariums
- Metallic-based UV tinted windows

If your wireless signal seems weak in some spots, make sure that objects such as these are not blocking the signal's path between your computers and Wireless Router (or Access Point)

3.   Cordless Phone Placement

If the performance of your wireless network is impaired after attending to the above issues, and you have a cordless phone:

- Try moving cordless phones away from your Wireless Router or Access Point and your wireless-enabled computers

- Unplug and remove the battery from any cordless phone that operate on the 2.4GHz band (check manufacturers information). If this fixes the problem, your phone may be interfering.

- If your phone supports channel selection, change the channel on the phone to the furthest channel from your wireless network, as possible. For example, change the phone to channel 1 and move your Wireless Router to channel 11. See your phone's user manual for detailed instructions.

- If necessary, consider switching to a 900MHz or 5GHz cordless phone.

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4. Choose the "quietest" channel for your wireless network

In locations where homes or offices are close together, such as apartment buildings or office complexes, there may be wireless networks nearby that can conflict with yours. Use the Site Survey capabilities of your Wireless LAN Utility to locate any other wireless networks, and move your Wireless Router (or Access Point) and computers to a channel as far away from other networks as possible.

Experiment with more than one of the available channels, in order to find the clearest connection and avoid interference from neighboring cordless phones or other wireless devices.

Use the detailed Site Survey and wireless channel information included in your User Guide for more information.

5.   Secure connections, VPNs, and AOL

Secure connections are connections that typically require a user name and password, and are used where security is important. Secure connections include:

•   Virtual Private Network (VPN) connections, often used to connect remotely to an office network

•   The "Bring Your Own Access" program from America Online (AOL), which lets you use AOL through broadband provided by another cable or DSL service

•   Most on-line banking websites

•   Many commercial websites which require a username and password to access your account

Secure connections can be interrupted by a computer's power management setting, which causes it to "go to sleep." The simplest solution to avoid this is to simply reconnect by re-running the VPN or AOL software, or by re-logging into the secure web site.

A second alternative is to change your computer's power management settings so it does not go to sleep; however, this may not be appropriate for portable computers. To change your power management setting under Windows, see the "Power Options" item in the Control Panel.

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If you continue to have difficulty with Secure Connection, VPNs and AOL please review steps 1-4 above to be sure you have addressed these issues.

These guidelines should allow you to cover the maximum possible area with your Wireless Router. Should you need to cover an even wider area, we suggest Belkin's Wireless Range Extender/Access Point.

For more information regarding our networking products, visit our website at www.belkin.com/networking or call Belkin Technical Support.

Overview

Product Features

The Card complies with the IEEE 802.11g standard in order to communicate with other 802.11g-compliant wireless devices at 54Mbps or the faster 125 High-Speed Mode (HSM). The Card is compatible with all 802.11g devices as well as other 802.11b products at 11Mbps. 802.11g products run at speeds of up to 54Mbps (or 125Mbps* using HSM) and operate on the same 2.4GHz frequency band as 802.11b Wi-Fi products.

• 2.4GHz ISM (Industrial, Science, and Medical) band operation

• Integrated easy-to-use Wireless Configuration Utility

• PCI interface, for operation in virtually any desktop computer

• WPA, 64-bit WEP (Wired Equivalent Privacy), or 128-bit encryption

• Wireless access to networked resources

• Support for both Infrastructure and Ad-Hoc (peer-to-peer) networking modes

• Data rate of up 125Mbps* in High-Speed Mode (802.11g 125HSM), 54Mbps (802.11g), or 11Mbps (802.11b)

• Easy installation and use

• External antenna

• LED power and network link indicators

*When operating in High-Speed Mode, this Wi-Fi device may achieve an actual throughput of up to or greater than 34.1 Mbps, which is the equivalent throughput of a system following 802.11g protocol and operating at a signaling rate of 125 Mbps. Actual throughput will vary depending on environmental, operational and other factors.

Overview

Applications and Advantages

- **Wireless roaming with a laptop around the home or office**
  Offers the freedom of networking without cables

- **Connection rates of up to 54Mbps or 125Mbps* using HSM**
  Provides immediate, higher-speed wireless connectivity at home, work, and hot spot locations without compromising the use of existing 802.11b and 802.11g products

- **Compatibility with 802.11b products**
  802.11g and 125HSM wireless LAN solutions are backward-compatible with existing Wi-Fi (IEEE 802.11b) products and with other products that display the 54g and/or 125HSM mark

- **Difficult-to-wire environments**
  Enables networking in buildings with solid or finished walls, or open areas where wiring is difficult to install

- **Frequently changing environments**
  Adapts easily in offices or environments that frequently rearrange or change locations

- **Temporary LANs for special projects or peak time**
  Sets up temporary networks such as at trade shows, exhibitions, and constructions sites, which need networks on a short-term basis; also companies who need additional workstations for a peak activity

- **SOHO (Small Office/Home Office) networking needs**
  Provides the easy and quick, small network installation SOHO users need

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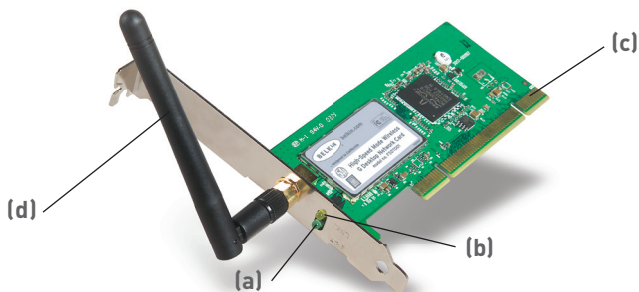
Overview

(a) Activity LED (green)
Indicates wireless activity when blinking.

(b) Link LED (orange)
Lights up when the Card links to a wireless network.

(c) Card Connector
Indicates the side of the Card that fits into your computer's PCI slot.

(d) Detachable Antenna

Product Specifications

Host Interface:	32-bit PCI
Power Consumption:	Tx/Rx peak 550/350mA@3.3VDC (max.)
Certification:	FCC Class B, CE Mark, C-Tick
Operating Temperature:	32–185 degrees F (0–85 degrees C)
Storage Temperature:	-40–194 degrees F (-40–90 degrees C)
Humidity:	Max. 95% (non-condensing)
Typical Operating Range:	Up to 200 feet (Wireless performance may vary depending on the networking environment)

Overview

section

System Requirements

• PC-compatible desktop with one available PCI slot

• Windows® 98SE, 2000, Me, XP

Package Contents

• High-Speed Mode Wireless G Desktop Network Card

• Quick Installation Guide

• Installation Software CD

• User Manual

Installing and Setting Up the Card

WARNING: Install the software before inserting the Card.

1.1 Insert the CD into your CD-ROM drive.

1.2 The Belkin Setup Utility screen will automatically appear.

Note: If the Setup Utility screen does not appear within 20 seconds, open up your CD-ROM drive by double-clicking on the "My Computer" icon. Then, double-click on the folder named "Files". Next, double-click on the icon named "Setup.exe".

1.3 In the "Menu" window, drag your mouse over the "Install" button, then click on the words "Click here" located to the right side of the "Install" button to start the software installation program.