D-Link®

2.4GHz Wireless Broadband Router





—— DI-624+

802.11g High-Speed Wireless Cable/DSL Router

With 4-Port Switch

The DI-624+ AirPlusXtreme $G^{+^{TM}}$ is a high-speed 2.4GHz 802.11g wireless broadband Router with a built-in 4-port Fast Ethernet Switch. It incorporates high-speed wireless LAN with speeds of up to 54Mbps. This router lets you quickly share DSL or cable modem Internet connection, with or without the network wires. With advanced functions traditionally found in business-class routers, this router gives your business a cost-effective way to install a secure and fast network with bottleneck-free link to the outside world.

Simplified, Cost-saving Broadband Internet Connection

As the most basic function, the router allows you to share your broadband line and cable/DSL modem in your office or home. To let everybody logon, this device automatically creates and assigns an IP number for each user, simplifying every one's logon operation.

Ready Connection

With built-in wireless LAN connections and 10/100Mbps switch, this router provides ready connection for workstations and servers, with or without the network wires. These built-in functions save you the cost and trouble of installing a separate wireless access point and Ethernet switch.

Enhanced Wireless Speeds

At up to 54Mbps, the router provides wireless LAN users a very high data transfer rate. This compares favorably with the 11Mbps speed of 802.11b wireless devices, and the 22Mbps rate of 802.11b+ equipment. In addition, adoption of the 2.4GHz frequency, now available for public use in most countries, makes this router an ideal solution for bandwidth intensive WLAN applications.

Compatible With 802.11b and 802.11b+

In addition to providing 54Mbps rate when operating with wireless users using D-Link AirPlusXtremeG+ equipment, this router is also compatible with existing 802.11b and 802.11b+ wireless devices. This means that you may sacrifice some of the router's high speed when you mix with your existing 802.11b and 802.11b+ devices, but you will not lose any ability to communicate.

Firewall and VPN Protection

The router provides NAT protection for your office and home users from Internet intruders and hacker attacks. For telecommuters or anyone who needs to transmit sensitive information more securely, the router supports multiple concurrent VPN sessions IPSec, L2TP and PPTP pass-through. The router also blocks and re-directs certain ports to limit the services that outside users can access your network. Virtual Server Mapping is used to re-task services to

multiple servers. The router can be set to allow separate FTP, Web, and Multiplayer game servers to share the same Internet-visible IP address while still protecting your servers and workstations from hackers.

DMZ Host to Open Public Domain

You can configure any of the built-in LAN ports to function as a DMZ port. A DMZ setting can be applied to a single client (such as a Web server) behind the router to fully expose it to the Internet and ensure complete Internet application compatibility even if the specific port is not known. This allows you to set up web sites and e-commerce business from your office while maintaining protection for the rest of your office LAN.

Access Control

Access to the router from your home/office can be set based on users' MAC addresses and IP addresses. Parental control to filter certain URL and block web sites can be set through URL keywords and domain names. Outbound link scheduling can be made in conjunction with NTP. The router supports the Network Time Protocol (NTP), allowing you to install a time server behind the router to synchronize time for your network environment. This protects you from the risks inherent in obtaining Internet, minimizes security risks from the outside, and maximizes timing accuracy on your network.

Enhanced Wireless Security

To protect transmitted data in the air, the router employs the enhanced 64/128/256-bit industry-standard WEP (Wired Equivalent Privacy) encryption protocol. WPA (Wi-Fi M Protected Access) provides users a higher level of security for data and communications than has previously been available.*

* WPA functions available in future firmware upgrade release

UPnP Enabled for Compatibility

The router is designed for easy and robust connectivity among heterogeneous standards-based network devices. Computers can communicate directly with the router for automatic opening and closing of UDP/TCP ports to take full advantage of security provided without sacrificing functionality of on-line applications.

Key Features

- 802.11g wireless LAN standard
- 54Mbps high-speed wireless broadband Internet access *
- Real throughput 8 times faster than 802.11b devices **
- PPPoE support for DSL saves ISP charge through dial-out connection-on-demand
- Built-in 4-port Fast Ethernet switch for ready server connection
- Dual detachable dipole antennas allow easy replacement
- Virtual Private Network (VPN) security for multiple telecommuters
- Enhanced 64/128/256-bit WEP data encryption for wireless users
- DHCP server for automatic user IP assignment
- Firewall protection with NAT, DMZ and Virtual Server Mapping support
- User access control through MAC/IP address filtering and 802.1x authentication ***
- Parental control with URL filtering and domain blocking
- Network schedule control with Network Time Protocol support
- Easy web-based management from any browser
 - * When used with other 802.11g devices
- ** When used with AirPlus XtremeG+TM products
 *** Functions available in future firmware upgrade

Technical Specifications

2.4GHz Wireless Broadband Router

Router

WAN Interface

- 10/100BASE-TX port
- Supports PPPoE for dial-out connection

LAN Interfaces

4 10/100BASE-TX ports

Memory

- SDRAM: 8MB
- Flash: 1MB

Routed Packet Type

IP packets

Routing Protocol

RIP-1, RIP-2

VPN Support

- IPSec pass-through
- L2TP pass-through
- PPTP pass-through

Internet Gateway Functions

- Network Address Translation (NAT)
- DHCP server (for automatic IP assignment)

PPP Authentication

PAP, CHAP, MS-CHAP

Firewall Features

- Access-list Control
- Stateful Packet Inspection (SPI)
- Domain Filtering
- URL Filtering
- Packet Filtering
- Ping of Death
- IP spoofing
- Intrusion Detection
- Network access rules
- Security event log

Number of DMZ Ports

1 port (user-assignable to any LAN port)

Number of Virtual Server Mappings

13 entries

RFC Support

- > RFC 0768 User Datagram Protocol
- > RFC 0791 Internet Protocol
- > RFC 0792 Internet Control Message Protocol
- > RFC 0793 Transmission Control Protocol
- > RFC 0821 Simple Mail Transfer Protocol
- > RFC 0826 Ethernet Address Resolution Protocol
- > RFC 1058 Routing Information Protocol
- > RFC 1112 IGMP v1 (for UPNP and IAPP functions)
- > RFC 1157 Simple Network Management Protocol
- > RFC 1213 Management Information Base-II (MIB II)
- > RFC 1332 PPP Internet Control Protocol
- > RFC 1350 TFTP Protocol (Reversion 2)
- > RFC 1514 Dynamic Host Configuration Protocol
- > RFC 1631 IP Network Address Translator
- > RFC 1661 Point-to-Point Protocol (PPP)
- > RFC 1723 RIP-2 Carrying Additional Information > RFC 1945 - Hypertext Transfer Protocol HTTP/1.1 (subset)
- > RFC 1994 PPP Challenge Handshake Authentication Protocol
- > RFC 2132 DHCP Options and BOOTP vender Extensions
- > RFC 2516 PPP Over Ethernet (PPPoE)

IP Number Self-identification

Through DHCP client

Configuration & Management

- HTTP web-based configuration
- Network Time Protocol (NTP)

Firmware Upgrade

TFTP

Built-in Wireless LAN

Add-on Hardware

PC Card Type II CardBus

Wireless LAN Standards

- 802.11b
- 802.11b+
- 802.11g

Data Rates

- 802.11g: up to 54Mbps (6/9/12/18/24/36/48/54Mbps)
- 802.11b+: up to 22Mbps
- 802.11b: up to 11Mbps (1/2/5.5/11Mbps)
- Auto-switch to select 802.11g or 802.11b mode
- Data rate auto fall-back under noisy environment or longer range distance

Transmission Technology

RF Frequency Range

2.4 to 2.4835GHz

Frequency Stability

Within +/- 25ppm

Operating Channels

- 1 to 11 channels (North America)
- 1 to 13 channels (Europe)

Data Modulation Type

DBPSK, DQPSK, CCK, PBCC and OFDM (BPSK/QPSK/16-QAM/ 64-QAM)

Antennas

- 1 detachable external dipole antenna, 2dBi Gain (reverse SMA connector)
- 1 internal antenna, 2dBi Gain

Transmit Output Power

- 802.11g: 14dBm (typical)
- 802.11b: 16dBm (typical)

Receive Sensitivity (for 802.11b)

(typically @PER < 8% packet size 1024 @ 25 °C +/- 5 °C) - 22Mbps (PBCC): -80dBm

- 11Mbps (PBCC): -85dBm
- 11Mbps (CCK): -84 dBm
- 5.5Mbps (CCK): -87 dBm
- 2Mbps (QPSK): -90 dBm
- 1Mbps (BPSK): -92 dBm

Receive Sensitivity (for 802.11g)

(typically @PER < 8% packet size 1024 @ 25 °C +/- 5 °C) - 54Mbps (OFDM): -71 dBm

- 48Mbps (OFDM): -72 dBm
- 36Mbps (OFDM): -77 dBm
- 24Mbps (OFDM): -80 dBm
- 12Mbps (OFDM): -86 dBm - 9Mbps (OFDM): -87 dBm
- 6Mbps (OFDM): -89 dBm

Operating Range *

- Indoors: 100 meters (328 feet)
- Outdoors: 400 meters (1,312 feet)
- * Environmental factors may adversely affect range

Wireless Data Security

- WEP 64/128/256-bit data encryption (user-selectable)
- 802.1x security (MD5 and TLS) (in Windows XP only)
- Wi-Fi Protected Access *
- * Feature supported in future software upgrade

Built-in Fast Ethernet Switch Standards

- IEEE 802.3 10BASE-T Ethernet
- IEEE 802.3u 100BASE-TX Fast Ethernet - ANSI/IEEE 802.3 NWay auto-negotiation

Supported Functions

- Full/half duplex (per port)
- MDI/MDIX auto uplink (per port)

Technical Specifications

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Transmission Method

Store-and-forward

MAC Address Learning

Automatic update

Physical & Environmental

Diagnostic LEDs

- Status
- WAN
- WLAN - 1, 2, 3, 4 LAN ports

Power Input

- DC 5V +/- 5%, 2.5A
- Through external power adapter

Power Consumption

600 mA (max.)

Dimensions

192 x 117 x 31 mm (device only)

Weight

305 grams

Operating Temperature

 0° to 55 $^{\circ}$ C

Storage Temperature

-20° to 65 °C

Humidity

95% maximum non-condensing

Regulation Compliance

- US: FCC Part 15 Class B, Sec. 15.247, 15.109
- Europe: ETS 300 328, ETS 300 826, EN60950 and CE-Mark
- Japan: VCCI, Telec/JATE



Ordering Information

2.4GHz Wireless Router

DI-624+ 1 10/100BASE-TX port (for DSL/cable modem

connection)

802.11g wireless LAN

4 10/100BASE-TX switch ports

Please specify your order as follows:

BDI-624+ For USA For Canada CDI-624+ TDI-624+ For Taiwan DI-624+/CN For China

DI-624+/ANA North America type power adapter, North America

frequency

DI-624+/BEU UK standard power adapter, EU frequency DI-624+/EEU EU standard power adapter, EU frequency DI-624+/NEU Australia standard adapter, EU frequency DI-624+/ENA EU standard power adapter, North America

frequency



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