







# 802.11a/b/g Tri-Mode Dualband Wireless Router

# With Built-in 4-Port Switch

The D-Link AirXpert DI-774 wireless router is a four-port, tri-mode, dualband device that provides the most expanded user bandwidth available in a router. Hundreds of wireless clients can connect to this router using any one of its non-overlapping channels to transfer data at speeds up to 5 times faster than previous wireless devices.

#### **Dualband Operation**

The DI-774 operates seamlessly and simultaneously in both the 2.4GHz and 5GHz frequency spectrums supporting the 802.11b and the newer, faster 802.11a and 802.11g wireless standards. For offices, schools or public hotspots that already use 802.11b devices, the DI-774 is a great way to expand an existing network that enables more users to communicate with one another, access data and the Internet. Now, you can have a router that compliments your existing network and protects the investment you made when you provide the convenience of wireless networking.

#### Fast Network Data Transfer

The DI-774 offers network data transfer rates of up to 54Mbps in either the 2.4GHz or 5GHz bands. So, now large data packets can travel from the router to a remote desktop or roaming laptop PC at up to 5 times the speed of previous wireless devices, enabling everyone to work faster and more efficiently or watch a streaming video smoothly.

#### **Network Segmentation**

Network administrators can partition the usage of the DI-774 by segmenting users on the wireless network by frequency band. Users who require special networking privilege access to sensitive company data, video conferencing, or connectivity to specific departments may use just the 802.11a channels, while other employees may just use the

802.11b and 802.11g channels. This type of user segmentation optimizes the router's performance and delivers the best network experience to each set of users.

#### **Enhanced Security**

The DI-774 is ideal for those who require additional management, firewall, and other network security features such as the 802.1x standard for wireless user authentication and WPA\* (Wi-Fi Protected Access) which dynamically encrypts data as it's being sent. And because the DI-774 allows the pass-through of multiple, concurrent IPSec and PPTP VPN sessions, IT managers can deploy the DI-774 to their company's telecommuters and other remote employees who need to access sensitive information from a server or database or to communicate to a colleague confidentially. Filters on the router can be set to restrict access based on the specific MAC addresses of wireless laptop or desktop cards on the network, or restrict the access of IP addresses, specific web sites and/or web domain names. All of the router's settings are easily accessible in the operating system independent, Web-based software user interface that also features a step-by-step Setup Wizard to get the DI-774 up and running in just a matter of minutes.

#### **Built-in 4-Port Switch**

The DI-774 features an integrated 4-port switch allowing direct Ethernet connection to up to four computers for additional Internet or resource sharing at wire speeds.

#### **Features**

- 802.11a/b/g industry standard
- Dual 5GHz and 2.4GHz frequency bands
- Up to 54Mbps network data transfer rate on both frequency bands, 5 times faster than 802.11b
- Strong 64/128-bit WEP data encryption security
- Compatible with existing 802.11b wireless devices
- Advanced security with WPA, 802.1x authentication, TKIP and Pre-Shared Key function support
- Multi-user wireless broadband access

- Advanced firewall security with Stateful Packet Inspection (SPI), security event log
- User level control, domain filtering, URL blocking
- Powerful integrated antennas provide 100-meter indoor, 400-meter outdoor operation range
- Integrated 4-port Fast Ethernet switch
- Network Timing Protocol (NTP), UPnP support
- Easy-to-use web-based configuration/management
- Setup Wizard for quick installation
  - \* WPA features available as a firmware upgrade download in the future.

## **Technical Specifications**

### 5GHz & 2.4GHz Wireless LAN

#### Wireless LAN

#### Standards

- IEEE 802.11g
- IEEE 802.11b
- IEEE 802.11a

#### Wireless Data Rates

(With Automatic Fallback)

54Mbps, 48Mbps, 36Mbps, 24Mbps, 18Mbps, 12Mbps, 11Mbps, 9Mbps, 6Mbps, 5.5Mbps, 2Mbps, 1Mbps

#### **Media Access Control**

CSMA/CA with ACK

#### Wireless Frequency Range (802.11b)

- 2412 to 2462 MHz (North America)
- 2412 to 2472 MHz (General Europe)
- 2412 to 2484 MHz (Japan)

#### Operation Channels (802.11b and 802.11g)

- 11 channels (North America)
- 13 channels (General Europe)

#### Wireless Frequency Range & Operation Channels (802.11a)

- 4 channels: 5.12 to 5.25 GHz for channel 36, 40, 44, 48 4 channels: 5.25 to 5.35 GHz for channel 52, 56, 60, 64
- 4 channels: 5.725 to 5.825 GHz for channel 149, 153, 157, 161
- Europe 5GHZ wireless frequency: 5.15GHz to 5.875GHz 3
- \* Software configurable as allowable frequency will vary from country to country in the

#### **Dynamic Channel Selection**

Auto-selecting the least utilized channel of operation

#### **Modulation Technology**

Direct Sequence Spread Spectrum (DSSS)

#### **Modulation Scheme**

- Orthogonal Frequency Division Multiplexing (OFDM)
- Complementary Code Keying (CCK)
- BPSK/QPSK/16-QAM/64-QAM

#### **Antennas**

- 1 embedded 2dBi Gain antenna for 2.4GHz frequency band
- 1 embedded 2dBi Gain antenna for 5GHz frequency band
- 1 external non-detachable dipole 2dBi Gain antenna for 2.4GHz frequency band
- 1 external non-detachable dipole 2dBi Gain antenna for 5GHz Frequency band

#### **Operation Range**

- Indoors: up to 100 meters (328 feet) \*
- Outdoors: up to 400 meters (1,312 feet) \*

#### Receiver Sensitivity (802.11a and 802.11g)

(typically @PER < 8% packet size 1024 @ 25° C +/- 5° C)

- 54Mbps: -68 dBm
- 48 Mbps: 68 dBm
- 36 Mbps: -72 dBm
- 24 Mbps: -76 dBm - 18 Mbps: -82 dBm
- 12 Mbps: -86 dBm
- 9 Mbps: -89 dBm
- 6 Mbps: -90 dBm

### Wireless Transmit Power Output

15dBm to 17dBm (typical)

#### Wireless LAN Security

- 64/128-bit WEP
- 802.1x
- WPA\* Wi-Fi Protected Access (64/128-bit WEPwith TKIP, MIC, IV Expansion, Shared Key Authentication)
- Advanced Encryption Standard (AES)
- \* WPA and AES support in software will be available in future upgrade

#### LAN

#### **Number of Ports**

4 10/100BASE-TX ports

#### **Function Support**

Auto MDI/MDIX for each port

#### Router, Security & Management

#### Standards & Protocols

- TCP/IP v4, UDP, ICMP
- Management: HTTP, TFTP DHCP, NAT, DNS
- Routing: RIP v.1, RIP v.2
- Security: PAP, CHAP
- VPN pass through: L2TP, PPTP, IPSec

#### Network

- Automatic configuration to use DNS, NAT and Web services
- DHCP Server/Client, Static Router, PPoE, PPTP support
- VPN pass-through support for L2TP, PPTP, IPSec
- UPnP support

#### NAT/PAT

- Virtual DMZ host (1 entry)
- Virtual Server Mapping (10 entries)
- Shares single IP addresses/ISP account from the cable or DSL on local

#### PPPoE Support

- Compatible with most cable and DSL ISP
- PPP connection on demand to save ISP connection fee

#### Router & Firewall Security

- Password Protect
- MAC Filtering
- SSID broadcast disable
- Access-list control and rules
- Stateful Packet Inspection (SPI)
- Domain Filtering
- URL Filtering
- Packet Filtering
- Ping of Death prevention
- IP spoofing
- Intrusion Detection
- Security event log

#### **Configuration & Management**

- Web-based configuration utility
- PC Utility supporting Windows 98SE, ME, 2000, XP
- TFTP for software upgrade available
- Network Timing Protocol (NTP)

### **Diagnostic LEDs**

- Power
- LAN (10/100Mbps)
- WLAN (wireless connection): 802.11a, 802.11g

#### Physical & Environmental

#### **Power Input**

- DC 5V, 3.0A
- Through external power adapter

233 mm (L) x 165 mm (W) x 35mm (H) (9.25 x 6.5 x 1.375 inches) (device only)

### Weight

907 grams (2.0 lbs) (device only)

### Operating Temperature

0° to 55 °C

#### Storage Temperature

-20° to 65 °C

<sup>\*</sup> Environmental factors may adversely affect range

## **Technical Specifications**

### 5GHz & 2.4GHz Wireless LAN

#### Humidity

5% to 95% (non-condensing)

#### Emission (EMI)

- FCC part 15 class B, Sec. 15.247, 15.109
- ETS 300 328, ETS 301 489-1&17, and CE mark
- EN 60950, EN 55022 Class B, EN 50082-1 1998



### **Ordering Information**

802.11a/b/g Wireless Router With Built-in 4-Port Switch

Please specify your order as follows:

**BDI-774** For USA (USA packaging)

**CDI-774** For Canada **TDI-774** For Taiwan **DI-774/CN** For China DI-774/NAU For Australia **DI-774/ESG** For Singapore

**DI-774/ALA** For Latin America (with US standard power adapter) **DI-774/ELA** For Latin America (with EU standard power

adapter)

DI-774/EFR For France **DI-774/EEU** 

For Denmark, Germany, Iceland, Finland, Netherlands, Norway, Sweden, Poland, Slovenia, Luxembourg, South Africa

DI-774/BEU For UK, Ireland

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RECYCLABLE Rev. 02 (Jul. 2003)