

# **D-Link<sup>®</sup>**

Model DFE-500FX  
Fast Ethernet Adapter,  
with Fiber Optic Interface,  
for PCI Bus  
User's Guide

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RECYCLABLE

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Concentrators	One year
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# ***Introduction***

Thank you for choosing D-Link DFE-500FX, the value leader among Fast Ethernet adapters for PCI-Bus personal computers.

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## **Features**

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Designed for versatility and performance, the DFE-500FX Adapter provides the following features:

- Operates in a 32 bit PCI Local Bus Master slot of the computer, independent of CPU speed.
- PCI Bus Master memory access, for high throughput and low CPU demand.
- Supports PCI clock speed up to 33Mhz, independent of network clock.
- Complies with IEEE 802.3u 100Base-FX and Ethernet industry standards.
- Plug-and-Play installation.
- SC connector for network cable connection.
- 100Mbps Fast Ethernet data transfer rate.
- Full-duplex or half-duplex operation.

- Built-in FIFO buffers reduce overhead of memory transfers and optimize operating bandwidth, throughput, and network data integrity.
- Digital Equipment Corporation DC21140 32-bit Intelligent Ethernet controller.
- Four LED indicators: Full/Half Duplex, Link, Active, and Collision.
- Driver<sup>†</sup> support for:
  - √ Novell Netware 3.12 ODI
  - √ Novell Netware 4.X ODI
  - √ Microsoft Windows 95
  - √ Microsoft Windows 98
  - √ Microsoft Windows NT 3.51
  - √ Microsoft Windows NT 4.0
  - √ ODI DOS

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<sup>†</sup> Check <http://www.dlink.com> for newest release of drivers.



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## **Installation**

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### **Unpack and Inspect**

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**CAUTION:** *Under ordinary circumstances, a DFE-500FX card will not be affected by static charge as may be received through your body during handling of the unit. In special circumstances where you may carry an extraordinarily high static charge, it is good practice to reduce the charge by touching a ground before handling the adapter card.*

Open the shipping carton and carefully remove all items. In addition to this User's Guide, ascertain that you have:

- One DFE-500FX Ethernet Adapter Card.
- One 3.5" diskette: DFE-500FX Software Diskette.

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### **Installing the Adapter**

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1. Shut down the computer, unplug its power cord, and remove the chassis cover.
2. Insert the contact edge of the DFE-500FX card into the connector of any available PCI Bus Master expansion slot.

Press the card firmly into the connector such that the card's contacts are fully seated in the connector.

3. Install the bracket screw which secures the card to the computer chassis.
4. Replace the computer's chassis cover.
5. Reconnect the computer's power cord, and switch computer power on. If the BIOS section of your computer's boot program is Plug-and-Play compliant, then at power-up the BIOS will automatically configure any newly installed DFE-500FX adapter.

**NOTE:** *Due to a fault in some Plug-n-Play BIOS programs, it happens occasionally that a newly installed adapter is assigned an Interrupt Number which is already assigned to another device. In such a case, the conflict of Interrupt Number will cause faults in the behavior of both devices. Then it is necessary to run the CMOS Setup utility, and manually assign a non-conflicting Interrupt Number.*

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## **Connecting the Network Cable**

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Multimode (62.5/125µm or 50/125µm) fiber cabling with an IEEE recommended SC connector is required for the adapter. Use either one duplex SC connector, or two simplex SC connectors, and observe the correct relationship between the receive (Rx) and transmit (Tx) ports on the adapter and repeater. If there is a need to monitor the adapter's faceplate LEDs, make the rear of the PC or workstation accessible and leave sufficient clearance for cabling and service. The maximum length of fiber cable between any station and its supporting hub is 2,000 meters at full-duplex and 412 meters at half-duplex.

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## **Software Installation**

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Vast varieties of network architecture considered, the instruction for driver<sup>‡</sup> software installation are given as README files in the DFE-500FX Software Diskette. Review the root directory README for overview information, and for full installation details, see the README and referenced instruction files in the subdirectory appropriate to your network operating system.

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<sup>‡</sup> Check <http://www.dlink.com> for newest release of drivers.



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# ***Troubleshooting***

If you experience any problems with the adapter, first: ascertain that the appropriate driver is loaded; that the proper grade of cable is employed for the network connection; and that the supporting hub is properly qualified for the application (such as 100Base-FX).

The DFE-500FX Adapter features four LED indicators:

- **FULL/HALF DUPLEX MODE**  
Steady green indicates the adapter is operating in Full Duplex mode. A dark LED indicates the adapter is operating in Half Duplex mode.
- **LINK**  
Steady green indicates good linkage between the DFE-500FX and its supporting hub.
- **ACTIVE**  
Flashing green indicates activity (transmitting or receiving) within the adapter.
- **COLLISION**  
A yellow flash indicates data collisions in the segment. Intermittent flashing of the collision LED is normal.

**B**

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## ***Specifications***

Network Type:

- Ethernet 100Base-FX  
Ethernet IEEE 802.3u standard for 100Mbps baseband CSMA/CD local area network

Jumperless Hardware

Media interface: FDDI Transceiver SC Connector

LAN Chip Set:

- Interface controller: DEC DC21140
- Transceiver interface: Level One LXT970

EMI Certifications:

FCC Class B

CE Certification, Class B

Host interface: PCI Bus (Bus Master)

I/O base address assigned by Plug and Play system

Interrupt Number Assigned by Plug and Play system

Physical Dimensions: 14 cm x 7.4 cm

Environment:

Storage: -20° to 80°C, (-4° to 176° F)

Operating: 0° to 55° C, (32° to 131° F)

Humidity: 10% to 90% non-condensing

Weight: 76 grams

Power Consumption: 4W (Max.)

PCB Layer: 4 layers

Device Drivers<sup>§</sup>

√ Novell Netware 3.12 ODI

√ Novell Netware 4.X ODI

√ Microsoft Windows 95

√ Microsoft Windows 98

√ Microsoft Windows NT 3.51

√ Microsoft Windows NT 4.0

√ ODI DOS

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<sup>§</sup> Check <http://www.dlink.com> for newest release of drivers.

PLEASE  
PLACE STAMP  
HERE

**TO:** \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

**D-Link®**

## Registration Card

**Print, type or use block letters.**

Your name: Mr./Ms \_\_\_\_\_  
 Organization: \_\_\_\_\_ Dept. \_\_\_\_\_  
 Your title at organization: \_\_\_\_\_  
 Telephone: \_\_\_\_\_ Fax: \_\_\_\_\_  
 Organization's full address: \_\_\_\_\_  
 \_\_\_\_\_  
 Country: \_\_\_\_\_ Date of purchase (Month/Day/Year): \_\_\_\_\_

Product Model	Product Serial No.	* Product installed in type of computer (e.g., Compaq 486)	* Product installed Computer serial No.

(\* Applies to adapters only)

**Product was purchased from:**

Reseller's name: \_\_\_\_\_  
 Telephone: \_\_\_\_\_ Fax: \_\_\_\_\_  
 Reseller's full address: \_\_\_\_\_  
 \_\_\_\_\_

1. **Where and how will the product primarily be used?**  
Home Office Travel Company Business Home Business Personal
2. **How many employees work at installation site?**  
1 employee 2-9 10-49 50-99 100-499 500-999 1000 or more
3. **What network protocol(s) does your organization use ?**  
XNS/IPX TCP/IP DECnet Other \_\_\_\_\_
4. **What network operating system(s) does your organization use ?**  
D-Link LANsmart Novell NetWare NetWare Lite SCO Unix/Xenix  
PC NFS 3Com 3+Open Banyan Vines DECnet Pathwork  
Windows NT Windows NTAS Windows '95 Other \_\_\_\_\_
5. **What network management program does your organization use ?**  
D-View HP OpenView/Windows HP OpenView/Unix SunNet Manager Novell NMS  
NetView 6000 Other \_\_\_\_\_
6. **What network medium/media does your organization use ?**  
Fiber-optics Thick coax Ethernet Thin coax Ethernet  
10BASE-T UTP/STP 100BASE-TX 100BASE-T4 100VGAnyLAN  
Other \_\_\_\_\_
7. **What applications are used on your network?**  
Desktop publishing Spreadsheet Word processing CAD/CAM  
Database management Accounting Other \_\_\_\_\_
8. **What category best describes your company?**  
Aerospace Engineering Education Finance Hospital Legal Insurance/Real Estate Manufacturing  
Retail/Chainstore/Wholesale Government Transportation/Utilities/Communication VAR  
Systemhouse/company Other \_\_\_\_\_
9. **Would you recommend your D-Link product to a friend?**  
Yes No (why?) \_\_\_\_\_ I don't know yet
10. **Your comments on this product:**



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