D-Link®

DI-1750

Router

Installation Guide

Rev. 01 (April 2003)

RECYCLABLE

LIMITED WARRANTY

D-Link Systems, Inc. ("D-Link") provides this limited warranty for its product only to the person or entity who originally purchased the product from D-Link or its authorized reseller or distributor**.**

Limited Hardware Warranty: D-Link warrants that the hardware portion of the D-Link products described below ("Hardware") will be free from material defects in workmanship and materials from the date of original retail purchase of the Hardware, for the period set forth below applicable to the product type ("Warranty Period") if the Hardware is used and serviced in accordance with applicable documentation; provided that a completed Registration Card is returned to an Authorized D-Link Service Office within ninety (90) days after the date of original retail purchase of the Hardware. If a completed Registration Card is not received by an authorized D-Link Service Office within such ninety (90) period, then the Warranty Period shall be ninety (90) days from the date of purchase.

Product Type	***Warranty Period***
Product	One (1) Year
Power Supplies and Fans	One (1) Year
Spare parts and spare kits	Ninety (90) days

D-Link's sole obligation shall be to repair or replace the defective Hardware at no charge to the original owner. Such repair or replacement will be rendered by D-Link at an Authorized D-Link Service Office. The replacement Hardware need not be new or of an identical make, model or part; D-Link may in its discretion may replace the defective Hardware (or any part thereof) with any reconditioned product that D-Link reasonably determines is substantially equivalent (or superior) in all material respects to the defective Hardware. The Warranty Period shall extend for an additional ninety (90) days after any repaired or replaced Hardware is delivered. If a material defect is incapable of correction, or if D-Link determines in its sole discretion that it is not practical to repair or replace the defective Hardware, the price paid by the original purchaser for the defective Hardware will be refunded by D-Link upon return to D-Link of the defective Hardware. All Hardware (or part thereof) that is replaced by D-Link, or for which the purchase price is refunded, shall become the property of D-Link upon replacement or refund**.**

Limited Software Warranty: D-Link warrants that the software portion of the product ("Software") will substantially conform to D-Link's then current functional specifications for the Software, as set forth in the applicable documentation, from the date of original delivery of the Software for a period of ninety (90) days ("Warranty Period"), if the Software is properly installed on approved hardware and operated as contemplated in its documentation. D-Link further warrants that, during the Warranty Period, the magnetic media on which D-Link delivers the Software will be free of physical defects. D-Link's sole obligation shall be to replace the non-conforming Software (or defective media) with software that substantially conforms to D-Link's functional specifications for the Software. Except as otherwise agreed by D-Link in writing, the replacement Software is provided only to the original licensee, and is subject to the terms and conditions of the license granted by D-Link for the Software. The Warranty Period shall extend for an additional ninety (90) days after any replacement Software is delivered. If a material nonconformance is incapable of correction, or if D-Link determines in its sole discretion that it is not practical to replace the non-conforming Software, the price paid by the original licensee for the non-conforming Software will be refunded by D-Link; provided that the non-conforming Software (and all copies thereof) is first returned to D-Link. The license granted respecting any Software for which a refund is given automatically terminates.

What You Must Do For Warranty Service*:*

Registration Card. The Registration Card provided at the back of this manual must be completed and returned to an Authorized D-Link Service Office for each D-Link product within ninety (90) days after the product is purchased and/or licensed. The addresses/telephone/fax list of the nearest Authorized D-Link Service Office is provided in the back of this manual. FAILURE TO PROPERLY COMPLETE AND TIMELY RETURN THE REGISTRATION CARD MAY AFFECT THE WARRANTY FOR THIS PRODUCT.

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product (such as a copy of the dated purchase invoice for the product) before the warranty service is provided. After an RMA number is issued, the defective product must be packaged securely in the original or other suitable shipping package to ensure that it will not be damaged in transit, and the RMA number must be prominently marked on the outside of the package. The packaged product shall be insured and shipped to D-Link, with all shipping costs prepaid. D-Link may reject or return any product that is not packaged and shipped in strict compliance with the foregoing requirements, or for which an RMA number is not visible from the outside of the package. The product owner agrees to pay D-Link's reasonable handling and return shipping charges for any product that is not packaged and shipped in accordance with the foregoing requirements, or that is determined by D-Link not to be defective or non-conforming.

What Is Not Covered?

This limited warranty provided by D-Link does not cover: Products that have been subjected to abuse, accident, alteration, modification, tampering, negligence, misuse, faulty installation, lack of reasonable care, repair or service in any way that is not contemplated in the documentation for the product, or if the model or serial number has been altered, tampered with, defaced or removed; Initial installation, installation and removal of the product for repair, and shipping costs; Operational adjustments covered in the operating manual for the product, and normal maintenance; Damage that occurs in shipment, due to act of God, failures due to power surge, and cosmetic damage; and Any hardware, software, firmware or other products or services provided by anyone other than D-Link.

Disclaimer of Other Warranties: EXCEPT FOR THE LIMITED WARRANTY SPECIFIED HEREIN, THE PRODUCT IS PROVIDED "AS-IS" WITHOUT ANY WARRANTY OF ANY KIND INCLUDING, WITHOUT LIMITATION, ANY WARRANTY OF MERCHANTABILITY, FITNESS FOR A PARTICULAR PURPOSE AND NON-INFRINGEMENT. IF ANY IMPLIED WARRANTY CANNOT BE DISCLAIMED IN ANY TERRITORY WHERE A PRODUCT IS SOLD, THE DURATION OF SUCH IMPLIED WARRANTY SHALL BE LIMITED TO NINETY (90) DAYS. EXCEPT AS EXPRESSLY COVERED UNDER THE LIMITED WARRANTY PROVIDED HEREIN, THE ENTIRE RISK AS TO THE QUALITY, SELECTION AND PERFORMANCE OF THE PRODUCT IS WITH THE PURCHASER OF THE PRODUCT.

Limitation of Liability: TO THE MAXIMUM EXTENT PERMITTED BY LAW, D-LINK IS NOT LIABLE UNDER ANY CONTRACT, NEGLIGENCE, STRICT LIABILITY OR OTHER LEGAL OR EQUITABLE THEORY FOR ANY LOSS OF USE OF THE PRODUCT, INCONVENIENCE OR DAMAGES OF ANY CHARACTER, WHETHER DIRECT, SPECIAL, INCIDENTAL OR CONSEQUENTIAL (INCLUDING, BUT NOT LIMITED TO, DAMAGES FOR LOSS OF GOODWILL, WORK STOPPAGE, COMPUTER FAILURE OR MALFUNCTION, LOSS OF INFORMATION OR DATA CONTAINED IN, STORED ON, OR INTEGRATED WITH ANY PRODUCT RETURNED TO D-LINK FOR WARRANTY SERVICE) RESULTING FROM THE USE OF THE PRODUCT, RELATING TO WARRANTY SERVICE, OR ARISING OUT OF ANY BREACH OF THIS LIMITED WARRANTY, EVEN IF D-LINK HAS BEEN ADVISED OF THE POSSIBILITY OF SUCH DAMAGES. THE SOLE REMEDY FOR A BREACH OF THE FOREGOING LIMITED WARRANTY IS REPAIR, REPLACEMENT OR REFUND OF THE DEFECTIVE OR NON-CONFORMING PRODUCT.

GOVERNING LAW: This Limited Warranty shall be governed by the laws of the state of California.

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Table of Contents

Introduction

Congratulations on your purchase of D-Link DI-1750 Modular Multi-Service Access Router. D-Link DI-1750 router offers an inexpensive yet a complete Internetworking solution with Voice support for your Corporate office, Business or Enterprise.

Overview

Today LAN, WAN and Internet connectivity are being rapidly accepted as the most used media for business. A growing percentage of business transactions, including data & voice communications, are being carried on Intranets and the Internet. At the same time, LAN and WAN technologies are evolving rapidly to meet the ever growing demand for faster connections, higher capacity and more robust security with sophisticated policy controls. Interconnecting the company through Intranet and Internet is becoming a competitive necessity for SOHO businesses and Enterprise branch offices.

Such Enterprise & SOHO businesses also require solutions that provide reliable, secure, high-performance access to their private WANs and the Internet, with flexibility to upgrade to new services easily in the near future. Service providers are interested in meeting this demand for new network services, to capitalize on opportunities in the growing SOHO & Enterprise market.

D-Link DI-1750 modular router provides a cost-effective solution for small and medium-sized businesses and Enterprise small branch offices. DI-1750 delivers a flexible, scalable, integrated data access solution supporting multiple types of WAN interfaces providing a tailored access solution for both data & voice.

The D-Link DI-1750 Internetwork Operating System, includes Routing, Firewall, and Virtual Private Network (VPN) functions (including GRE, L2TP) and provides IPSec (IP Security), thus guaranteeing the security of WAN network in the Internet environment.

For voice applications, DI-1750 routers supports 3 different modules including Foreign Exchange Station (FXS) interface which connects directly to a standard analog telephone, Foreign Exchange Office (FXO) interface allowing an analog connection to be directed at the PSTN's central office or to a station interface on a private branch exchange (PBX) and, Ear & Mouth (E&M) interface allowing analog connection to be directed at the E&M station on a private branch exchange (PBX).

Key Features

Flexibility

- Interchangeable WAN interface cards enable easy additions or changes in WAN technologies without a forklift upgrade of the entire platform.
- Modular data and voice slots enable users to tailor data and voice services as needed
- Supports different cards, such as Fast Ethernet, Asynchronous serial port, sync/async serial port, ISDN BRI, ISDN PRI/E1 etc.

Integrated voice and data networking

- Reduces long-distance toll charges by allowing the data network to carry interoffice voice and fax traffic.
- Works with existing handsets, key units, and PBXs, eliminating the need for a costly phone-equipment upgrade.
- Provides a path to migrate to IP telephony.

Security

- Support Firewall/VPN Function.

Quality-Of -Service

- Allocates WAN bandwidth to priority applications for improved performance.
- End-to-end quality of service (QoS).
- Policy Routing.

Product Specifications:

Hardware Features:

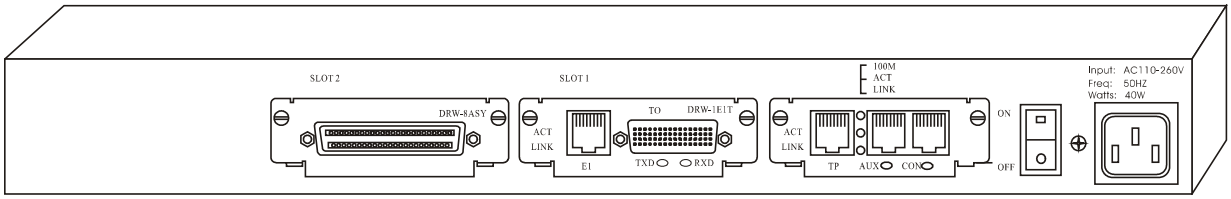
Feature	Detailed Description
Chassis	Rack mount 1U size
RISC Processor	Motorola MPC860T at 50MHz
Memory:	
EEPROM	512K Bytes
Flash memory	8MB
SDRAM	64MB
Physical interface (Default)	
10/100M Fast Ethernet port	One port RJ-45 Supports IEEE802.3u, IEEE802.3
Console port	One port RJ-45 with RS-232 interface - Asynchronous serial
Auxiliary port	One port RJ-45 with RS-232 interface - Asynchronous serial
Modular slots	Two slots Supports WAN interface cards (WICs) and Voice interface cards (VICs)
WAN Interface Cards	
One port E1	DB-15 One E1/ISDN PRI (30B+D) Supports G.703 / G.704
One ISDN BRI S/T	One ISDN BRI port (S/T interface, requires external NT-1) RJ-45 Support ITU I.430, Q.921, Q.931
One serial, async, and sync (T1/E1)	DB-60 One serial port provides serial connections to remote sites or legacy serial network devices such as Synchronous Data Link Control (SDLC) Supports V.24/V.28, RS232-D X.21bit, V.35, RS422/RS449
Two serial, async, and sync (T1/E1)	DB-60 Two serial port provides serial connections to remote sites or legacy serial network devices such as Synchronous Data Link Control (SDLC) Supports V.24/V.28, RS232-D X.21bit, V.35, RS422/RS449
One Ethernet + one serial, async, and sync (T1/E1)	RJ-45 Supports IEEE802.3u, IEEE802.3 Supports V.24/V.28, RS232-D X.21bit, V.35, RS422/RS449
One/Two port Ethernet	RJ-45 10Mbps Ethernet port Supports IEEE802.3u, IEEE802.3
8 ports asynchronous serial	DB68 Supports V.24/V.28, RS232-D
Voice Interface Cards	
Two ports FXS	RJ-11 A Foreign Exchange Station (FXS) interface connects directly to a standard telephone; fax machine, or similar device
Two ports FXO	RJ-11 Foreign Exchange Office (FXO) allows an analog connection to be directed at the PSTN's central office or to a station interface on a private branch exchange (PBX).
Two ports E&M	RJ-11 Supports 2 and 4 wire, E&M signaling types I, II, III, V

Software Features:

Feature	Detailed Description
Link layer protocol	Frame relay
	X.25
	LAPB
	PPP
	PPPoE
	HDLC

	SLIP
	ISDN (PRI/BRI)
	LLC2
	SDLC
	DLSW-SSP
	VLAN
Network layer protocol	ARP
	ARP Proxy
	DNS
	NAT
	IP Filtering
	ICMP
	IGMP
	DHCP client
	NHRP
Routing protocol	Static routing
	Policy-based routing
	RIP v1, v2
	OSPF v1, v2
	BEIGRP (compatible with Cisco EIGRP)
	BGP-4
	DDR
	IP Multicasting
	DVMRP
	PIM-DM/SM
Security	
AAA	Radius
	PAP
	CHAP
	TACAS+
Firewall	ACL
	NAT
VPN	L2TP
	GRE
	IPSec
Quality of Service (QoS)	FIFO
	PQ
	CQ
	CBWFQ
	WFQ
	RED
	WRED
	RTS
	RSVP
Network reliability	HSRP
	Port backup
Management	SNMP v1, v2, v3
	RMON
	Telnet
Voice application	Voice over IP FAX over IP
	H.323
	G.729/G.729A/G.729B
	G.723.1/G.723.1A
	G.726
	G.727
	G.711
	Gatekeeper client

Mechanical design:



External Outlook

Dimension: 445mm x 310mm x 45mm (L x W x H)

Power:

Feature	Detailed Description
Power input	110 ~ 264VAC
Power frequency	47 ~ 63Hz
Power dissipation	Max. 50W

Environmental specifications:

Feature	Detailed Description
Operating Temperature	0 ~ 40°C
Storage Temperature	-20 ~ 65°C
Operating Humidity	10% ~ 85%, noncondensing

Identifying External Components

D-Link DI-1750 Router is shipped with the following standard configuration which includes a 10/100Mbps Fast Ethernet LAN Port, a Console Port and an AUX Port.

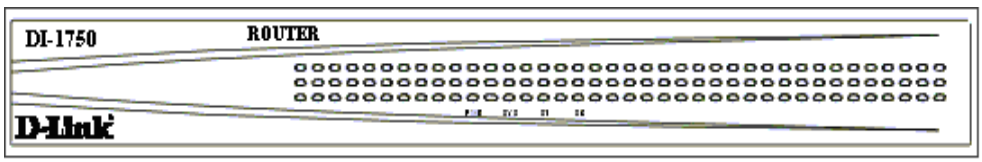
Table of Standard Configuration Ports of DI-1750:

Name	Features
Fast Ethernet Port	Rate: 10/100M auto-negotiation, STP (RJ45) port, with Active, Link & 100Mbps indicator LED's
Console Port	Rate: 1200bps—115200bps, RJ45 interface, with Active indicator light
AUX Port	Rate: 1200bps—115200bps, RJ45 interface, with Active indicator light

Besides, there are two Network/Voice interface card slots, a power plug, a power On/Off switch, a ground pole and a vent for proper air circulation to avoid overheating.

Front Panel

The following figure shows the front panel of the D-Link DI-1750:

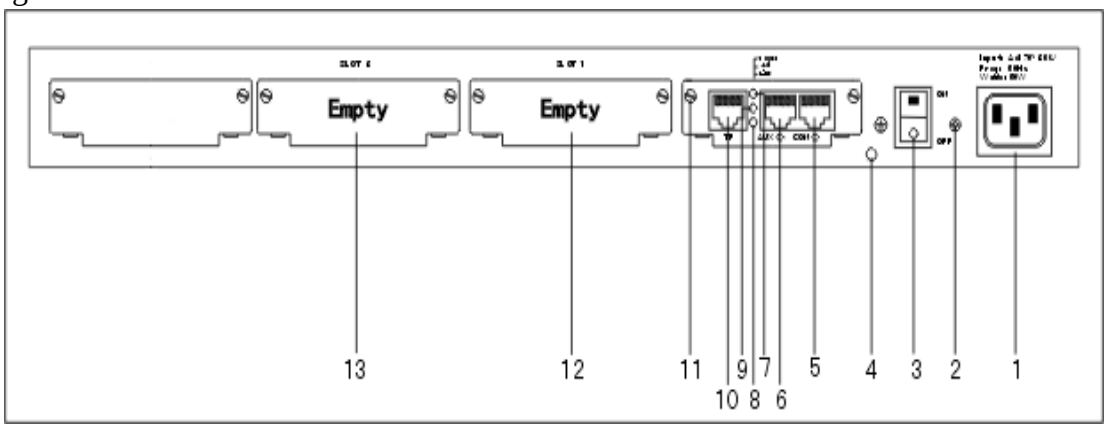


The following table describes the components on the Router's front panel:

Serial No.	Name	Description
1	PWR	Light ON indicates that the Router is powered ON
2	SYS	Light ON indicates that the system has started successfully
3	S1	Light ON indicates that there is an interface card in first slot
4	S2	Light ON indicates that there is an interface card in second slot

Rear Panel

The following is the illustration of the Rear Panel:



The following table describes the components on the Router's rear panel:

ID No.	Name	Description
1	Power plug	AC110-264V power input
2	Power supply screw	Secures the Power Supply to Router Chassis
3	Power switch	Press upwards to turn the Router ON, press downwards to turn it OFF
4	Ground point	Router Grounding point. Needs to be properly grounded
5	CON	Console Port with LED. Blinking LED indicates that there's data transmit/receive on the Console Port
6	AUX	Auxiliary Port with LED. Blinking LED indicates that there's data transmit/receive on the AUX Port
7	100M	The LED glows Green when the 10/100Mbps LAN port operates at 100Mbps
8	LINK	This LED glows green when a valid connection is established between the LAN port and Hub/Switch via a twisted-pair CAT5 cable
9	ACT	Blinking LED indicates that there is data transmit/receive on the Ethernet port
10	TP	Connect the 10/100Mbps LAN through this port using twisted-pair CAT5 cable
11	SLOT0	Standard configuration card (include a 10/100Mbps Ethernet port, a Console port and a AUX port by DEFAULT)
12	SLOT1	Supports Single WAN Interface card or Voice Interface Card. For details refer Interface Combination matrix page.
13	SLOT2	Supports single WAN Interface Card or Voice Interface Card. For details refer Interface Combination matrix page.

Router Installation

Before you Begin

Warning: Only trained & qualified technician is allowed to install & maintain the equipment

This Chapter instructs you on how to install D-Link DI-1750 Series Router.

The Chapter is divided into following sections:-

- **Unpacking the Router.**
- **Safety Warnings and Recommendations.**
- **Tools and equipments required for installation.**
- **Installing the Router Case.**
- **Connecting Power to the Router**
- Connecting to the Console & Auxiliary Port of the Router.
- Connecting the Fast Ethernet interface.
- **Connecting WAN and Voice Interface Cards.**

Unpacking the Router

Before you proceed further, please check all items you received with your DI-1750 Router with this list to make sure the package is complete. The complete package should include:

- One DI-1750 Router.
- One 100~240V AC power cord.
- One Console Cable (DRC-0001) for console connection.
- Rack mount kit including six screws and two mounting brackets.
- Installation Guide.

If any item is found missing or damaged, please contact your local D-Link Reseller.

Safety Warnings & Recommendations

Follow these guidelines to ensure general safety:

1. Keep the environment clear, dry, safe and dust-free during and after installation.
2. Avoid pulling power supply cable and interface cable vigorously.
3. Ensure that the AC mains power is conditioned using a Standard Power Surge suppressor.
4. It is recommended to use a UPS for continuous uninterrupted power.
5. Wear safety glasses when working under any conditions that might be hazardous to your eyes.
6. Do not touch the uncovered telephone-network cable directly.
7. Do not insert telephone-network cable connector to the Ethernet/Fast Ethernet port.
8. Do not work on the system or connect or disconnect cables during periods of lightning activity.
9. Console, Auxiliary & Ethernet connection is RJ-45 based, therefore before plugging corresponding cable it is important that you properly check the cable type.
10. ISDN and Ethernet Cables are very similar to each other. It is important that you use the correct cable for each connection else your router could get damaged.

Tools and equipments required for installation

Following are the tools required for router installation:-

1. Screwdriver
2. ESD-preventive wrist strap
3. Appropriate connecting cable (the cable required for each card)
4. Console cable
5. Power supply cable
6. Terminal

Installing the Router Case

The router can be placed on a desktop or mounted in a 19" rack, depending upon your need. Regardless of where you place the router make sure its cable jacks are accessible, LED indicators are visible and its ventilation holes are never blocked.

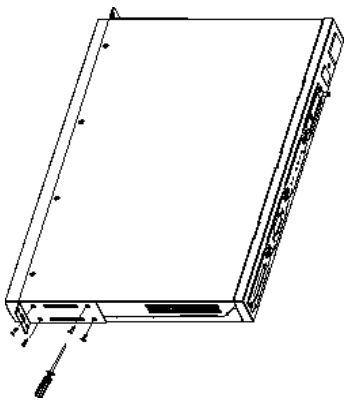
Installing the Router Case on Table

D-Link DI-1750 router may be placed on a smooth and secured table. Please check the access of power & communication cables to the installation workplace.

Note: Do not place any heavy object on the router, this may damage the router.

Installing the Router Case in a 19" Rack

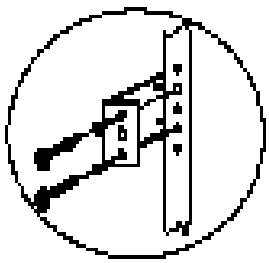
D-Link DI-1750 router can be fixed in a 19" rack using brackets provided with the router. When locking the case, ensure the front panel of the router faces front. As illustrated below:



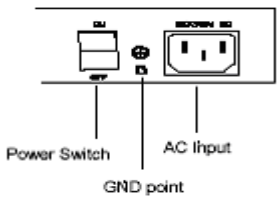
Note:

The above example illustrates only one side of the installation; the other side of the router bracket installation will be at a corresponding location of the case.

After the bracket is installed, you can install the router on the rack, the operation is illustrated in the following figure:



Connecting Power to the Router



Recommended AC power socket

A Three-pin power socket with a neutral point connector or a special power socket for the computer is recommended. The neutral point of the power supply system in a building must be reliably grounded before connecting the AC power cord of the router. Normally, the neutral point of the power supply system in a building will have been grounded during the construction and wiring.

Connecting AC power cord

1. Confirm that the GND wire is correctly grounded.
2. Make sure that the power switch of the router is turned off, connect one end of the power cord to the AC input socket on the router's rear panel, and connect the other end to the AC outlet.

3. Switch the power switch of the router to ON position.
4. Check that the PWR LED on the front panel of the router is ON.

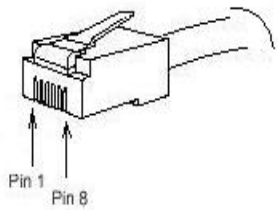
Connecting to the Console & Auxiliary Port of the Router

There is one Console port and one AUX port on D-Link DI-1750 Router. This section describes the features and usage of these two ports.

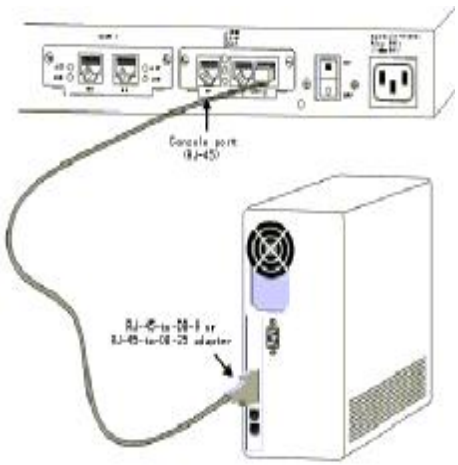
Console Port

Transmission Rate supported is 1200bps-to-115200bps and it has a standard RJ45 Connector, Parity Check is optional, and has Flow Control. A dedicated Console cable, **DRC-0001**, provided with the router is used to connect this port to a terminal device like VT-100, or to the serial port of PC, and then use a terminal emulator (such as Windows Hyper terminal software) to configure & monitor the D-Link DI-1750 Router functions. The communication parameter of the serial port on a PC has to be set as: Rate: 9600bps rate, eight-bit data bits, one-bit stop bit, no Parity Check bit, and no flow control as shown in Figure :

The RJ-45 connector of the Console port is shown in the following figure, the male and female connectors are pin-to-pin corresponding and the pin numbers 1-8 start from left to right.



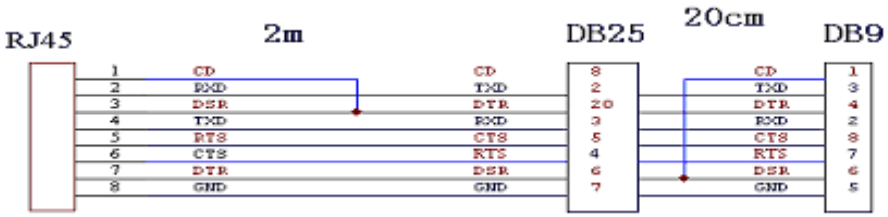
The connection between the Console port of D-Link 1750 Router and the terminal device or PC serial port is illustrated as below:



The pin details of the Console port is given in the following table:

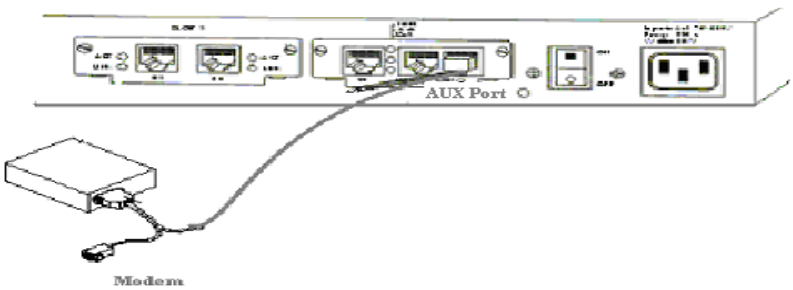
Sr. No.	Name	Description
1	CD	Carrier Detect
2	RXD	Receive
3	DSR	Data Send Ready
4	TXD	Transmit
5	RTS	Request to Send
7	DTR	Data Ready
8	SG	Signal Ground

The DRC-0001 cable is used to connect the Console port of D-Link DI-1750 Router with the external Console terminal equipment or serial port of PC. One end of the DRC-0001 cable is a standard RJ45 eight-pin connector & the other end is DB25 and DB9 connector. The RJ45 connector gets connected to the Console port of D-Link DI-1750 series router, the other end you can choose one from the DB25 or DB9 port according to your serial port on terminal or PC. The pin connection of the console cable DRC-0001 is showed in the following figure.

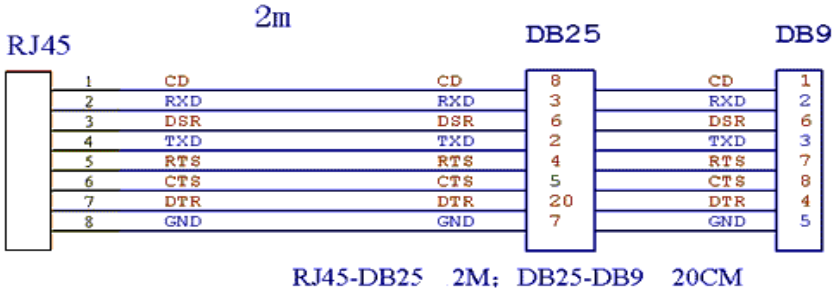


AUX Port—Auxiliary Port

The Transmission rate supported by AUX Port is 1200bps-to-115200bps and it has a standard RJ45 Connector, Parity Check is optional, and has Flow Control. AUX Port can be directly connected to an asynchronous modem for remote console configuration support or as a backup link. The communication parameter of the AUX port can be set as: Rate—115200bps, eight-bit data bits, one-bit stop bit, no Parity Check, no hardware Flow Control.

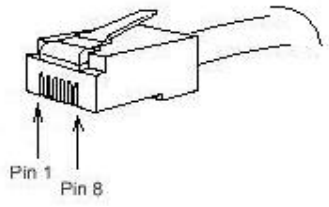


The auxiliary cable, DRC-0011 is used to connect the AUX Port with an external asynchronous modem. One end of the DRC-0011 cable is a standard RJ45 eight pin connector and the other end is DB25 and DB9 female connector. The RJ45 connector gets connected to the AUX Port of the router and on the other end you choose one from DB25 or DB9 according to the requirement of asynchronous serial port of Modem. The pin connection of the AUX cable DRC-0011 is showed in the following figure.

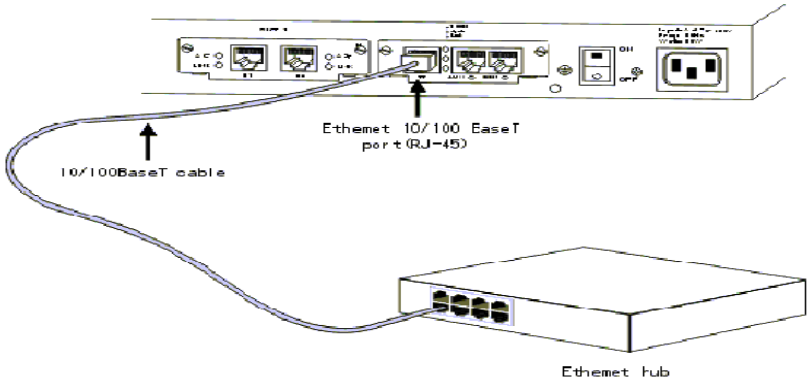


Connecting the Fast Ethernet Interface

The Fast Ethernet port of the router provides a STP (RJ45) interface and ACT, Link, 100Mbps LED indicators. The STP LAN interface port supports 10/100Mbps auto-negotiation speed. A Hub/Switch can be connected through the router's STP Port using a CAT5 UTP/STP cable. The UTP pin numbering is shown in the following figure.



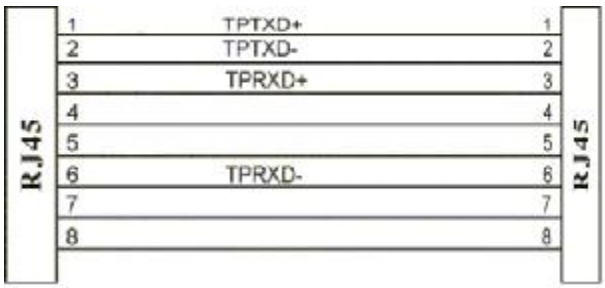
The connection between 10/100Mbps auto-negotiation Ethernet Port and the Hub/Switch is illustrated in the following figure.



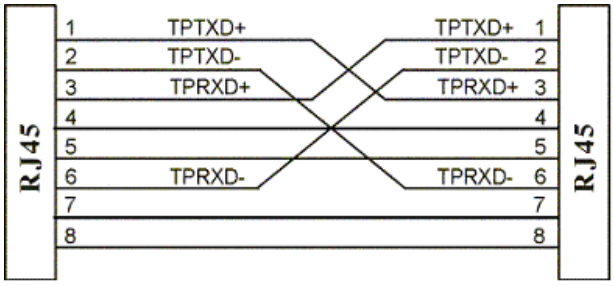
UTP Port (twist-pair) pin description table:

Sr. No.	Name	Description
1	TPTXD+	Transmit+
2	TPTXD-	Transmit-
3	TPRXD+	Receive+
6	TPRXD-	Receive-

The UTP Port can be connected to a Hub/Switch through a Category 5 twisted-pair cable. The connection is illustrated in the following figure.



When connecting the DI-1750 Router directly to Ethernet port of single host computer, a UTP cross-over cable can be used. Thus you can eliminate the Fast-Ethernet Hub/Switch in the connection example above. But, when you need to connect more than one computer to the router, you must use an Ethernet Hub or switch. The illustration of the UTP cross -over connection is showed as following:



Note: The color code of the twisted-pair cable connection should comply with EIA/TIA 568A/B standard.

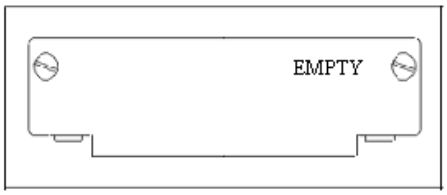
Installing WAN Interface Cards

This section describes how to install WAN interface cards (WICs) and Voice Interface Cards (VICs) in D-Link DI-1750 router. Before performing any of the following procedures, ensure that power supply of the router is put OFF and the power mains cable is removed from the power mains outlet.

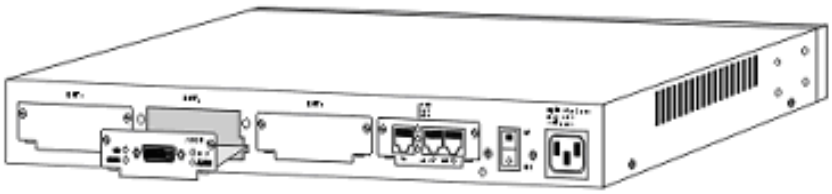
Caution: Do not insert any interface card into the module slot when the router is powered ON or when cable is connected to the Interface card.

To install an interface card in D-Link DI-1750 router, please follow the steps below:

1. Power OFF the router. To avoid damage due to ESD voltages, channel the router chassis to ground.
2. Remove all network interface cables, including telephone cables, from the rear panel.
3. Use a flat-blade screwdriver to remove the blank filler panel from the slot where you plan to install the card. Save the filler panel for possible future use.



4. Align the module with the guides in the chassis and slide it gently into the slot.



5. Push the module into place until the edge connector is securely seated in the connector on the motherboard. Ensure that each of the module's captive screw lines up with its corresponding hole in the chassis.
6. Secure the captive mounting screws into the holes of the chassis using a flat-blade screwdriver.
7. Please refer the Interface Card Installation Guide for detailed WAN & VIC Interface installation procedure.
8. After completing the hardware installation, please refer the Software Configuration Guide to configure the Router parameters.

Interface Combination Matrix :-

Please refer to the Interface Card Hardware Installation Manual for detailed description of each interface card.

Model	Name	Description	Protocol/Standard
DRW-1T	1 port Serial	1 port Asynchronous/Synchronous V28/V35 serial interface card.	V.24/V.28; RS232-D X.21bis;V.35; RS422/RS449
DRW-2T	2 port Serial	2 port Asynchronous/Synchronous V28/V35 serial interface card.	V.24/V.28; RS232-D X.21bis;V.35; RS422/RS449
DRW-1ETH	1 port Ethernet	1 port 10M Ethernet interface card.	Ethernet 10BaseT
DRW-2ETH	2 port Ethernet	2 port 10M Ethernet interface card.	Ethernet 10BaseT
DRW-1E1T	1 port Ethernet+1 port Serial	1 port 10M Ethernet interface plus 1 port Asynchronous/Synchronous V28/V35 serial interface card.	Ethernet 10BaseT V.24/V.28; RS232-D X.21bis;V.35; RS422/RS449
DRW-8ASY	8 port Asynchronous	8 port V.28 serial interface card.	V.24/V.28; RS232-D

DRW-1B-S/T	1 port ISDN BRI S/T	1 port ISDN BRI S/T interface card.	ITU I.430, Q.921,Q.931
DRW-1B-U	1 port ISDN BRI U	1 port ISDN BRI U interface.	
DRW-1DTU	1 port DDN Lease Line	1 port DDN Lease Line.	
DRW-1CE1	1 port Channelized E1	1 port E1/ISDN PRI (30B+D) interface card.	G.703/G.704
DRW-2FXS	2 port FXS	2 port telephone interface card.	Voice Signaling
DRW-2FXO	2 port FXO	2 port trunk line interface card used to connect to PSTN.	
DRW-2E&M	2 port E&M	2 port E&M voice interface card used to connect to PBX.	

Troubleshooting

This chapter describes some troubleshooting techniques, incase of malfunctioning of DI-1750 router. After each description, we have provided some instructions to help you to diagnose and resolve the problem. If you are not able to locate source of problem, contact your local reseller or D-Link support center for further help.

The LED indicators indicate the current operation of the Router. The standard configuration indicators on the rear panel of the router case are described in the following table:-

No.	Indication	Description	Remarks
1	100M	100Mbps Ethernet LED indicator	LED ON indicates this port operates at 100Mbps.
2	ACT	10/100M Ethernet LED indicates receiving and transmitting data	Blinking LED indicates that there's data receive/transmit on the Fast Ethernet port
3	LINK	10/100M Ethernet TP port link active indicator	When valid connection is established between the LAN port and the Switch/Hub through a CAT5 cable, this LED indicator will turn ON.

The standard configuration indicators on the front panel of the router case are described in the following table:-

Name	Description
Power	LED ON indicates that the Router is powered ON
SYS	LED ON indicates that the system has started successfully
S1	LED ON indicates that there is an interface card in first slot
S2	LED ON indicates that there is an interface card in second slot

Problem Powering Up the DI-1750 Router

None of the LEDs are ON when you power up the router:-

- Check the AC mains power is turned ON.
- Check Router power switch is turned ON.
- Check whether the power cord is properly connected to the Router.

Problem Configuring Router through Console port

Nothing is displayed on terminal:-

- Check whether router is powered ON properly.
- Check whether the router console port is properly connected to PC serial port.
- Check whether Terminal communication program (Hyperterminal) is configured properly.

Problems Connecting WIC/VIC Cards

Router does not detect the WIC/VIC cards:-

- Confirm that the card is properly inserted in the slot.
- Confirm that the interface is installed in a proper slot please refer to Interface Combination. Matrix for proper slot configuration.

Router reboots after inserting WIC/VIC:-

- Confirm that the interface card is properly inserted in the slot.
- Check whether LED indication is proper in the front panel w.r.t. slot.
- The WIC/VIC Interface card might be faulty. Turn OFF router immediately and consult your reseller.
- Confirm that the interface is installed in the proper slot please refer to Interface Combination Matrix for proper slot configuration.

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	E-MAIL: tech@dlink.com & support@dlink.com

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 in computer serial No.

(* Applies to adapters only)

Product was purchased from:

Reseller's name:_____Telephone:_____ Fax:_____ Reseller's full address:

_____

Answers to the following questions help us to support your product:

1.Where and how will the product primarily be used?

o Home o Office o Travel o Company Business o Home Business o Personal Use

2. How many employees work at installation site?

o 1 employee o 2-9 o 10-49 o 50-99 o 100-499 o 500-999 o 1000 or more

3. What network protocol(s) does your organization use ?

o XNS/IPX o TCP/IP o DECnet o Others_____

4. What network operating system(s) does your organization use ?

o D-Link LANsmart o Novell NetWare o NetWare Lite o SCO Unix/Xenix o PC NFS o 3Com 3+Open o Banyan Vines o DECnet Pathwork ☐Windows NT

☐Windows NTAS ☐Windows '95☐Others_____

5. What network management program does your organization use ?

☐D-View ☐HP OpenView/Windows ☐HP OpenView/Unix ☐SunNet Manager ☐Novell NMS☐NetView 6000

☐Others_____

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

☐Others_____

7. What applications are used on your network?

☐Desktop publishing ☐Spreadsheet ☐Word processing ☐CAD/CAM☐Database management ☐Accounting ☐Others_____ _

8. What category best describes your company?

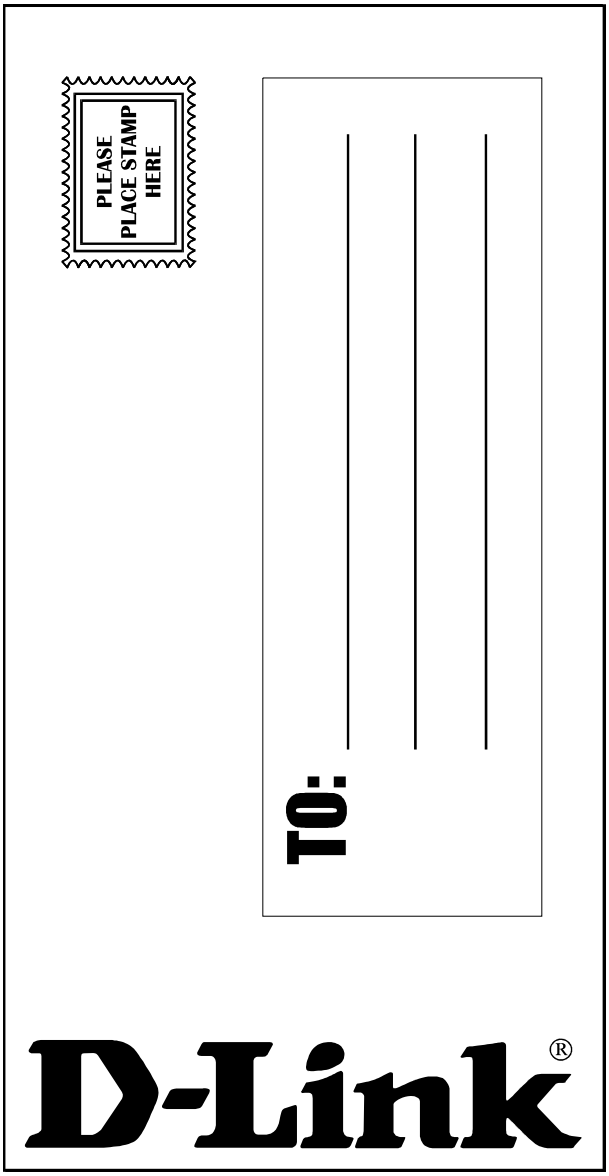
☐Aerospace ☐Engineering ☐Education ☐Finance ☐Hospital ☐Legal ☐Insurance/Real Estate ☐Manufacturing☐Retail/Chainstore/Wholesale ☐Government

☐VAR ☐System house/company ☐Transportation/Utilities/Communication ☐Other_____

9. Would you recommend your D-Link product to a friend?

☐Yes ☐No ☐Don't know yet

10.Your comments on this product?_____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