eicon
networks

Diva Server Adapters

Installation Guide

diva server

Fourth Edition (August 2002)   203-201-04

Diva ISDN is a registered trademark of Eicon Networks Corporation.

Microsoft, Windows, and Windows NT are registered trademarks of Microsoft Corporation.

Linux is a registered trademark of Linus Torvalds.

OS/2 is a registered trademark of International Business Machines Corporation.

NetWare is a registered trademark of Novell Incorporated.

Adobe and Acrobat are registered trademarks of Adobe Systems Incorporated.

All other brand and product names are trademarks or registered trademarks of their respective owners.

Changes are periodically made to the information herein; these changes will be incorporated into new editions of the publication. Eicon Networks may make improvements and/or changes in the products and/or programs described in this publication at any time.

If you wish to make comments about your Eicon Networks server adapter or the corresponding software, address them by E-mail to:
divaserver@eicon.com.

To contact Eicon Networks customer support, refer to the 'Customer Services' section in this manual.

Eicon Networks may use or distribute whatever information you supply in any way it believes appropriate without incurring any obligations to you.

EICON NETWORKS CORPORATION SINGLE USER LICENSE AGREEMENT FOR USE OF SOFTWARE

This is a legal agreement between you, the end user, and Eicon Networks Corporation ('Eicon Networks') . You should carefully read the following terms and conditions before installing this software. Installing the software indicates your acceptance of these terms and conditions. You assume responsibility for the selection of the program to achieve your intended results, and for the installation, use, and results obtained from the program.

Copyright

The software to be installed and documentation are owned by Eicon Networks and its suppliers and are protected by copyright laws and international treaty provisions. Therefore, you must treat the software like any other copyrighted material except as expressly permitted in this license agreement.

License

Under the terms and conditions of this license agreement:

- The software may be used only in conjunction with a legally acquired Eicon Networks ISDN adapter;
- You may make as many copies of the Eicon Networks software components and documentation as you wish for your own personal use;
- You may not redistribute the Eicon Networks software components or documentation without prior written permission from Eicon Networks;
- You may use the additional application software provided by Eicon Networks' suppliers with the Eicon Networks ISDN adapter with which they were originally sold. You may not copy or redistribute these applications without prior written permission from the associated supplier;
- You may transfer the software, documentation and license to another party if the other party agrees to accept the terms and conditions of this agreement. If you transfer the software and documentation you must at the same time either transfer all copies whether in printed or machine readable form to the same party or destroy any copies not transferred to that party;
- You may not rent or lease the software. You may not reverse engineer, decompile or disassemble the software. You may not use, copy, modify, or transfer the software and documentation, or any copy, in whole or in part, except as expressly provided for in this license agreement;
- If you transfer possession of any copy of the software or documentation to another party in any way other than that which is expressly permitted in this license agreement, your license is automatically terminated.

Term

The license is effective until terminated. You may terminate it at any time by destroying the software program and documentation together with all copies, modifications and merged portions in any form. It will also terminate upon conditions set forth elsewhere in this agreement or if you fail to comply with any term or condition of this agreement.

You agree upon such termination to destroy the program and documentation together with all copies thereof, modifications and merged portions in any form.

U.S. Government Restricted Rights

The program and documentation are provided with RESTRICTED RIGHTS. Use, duplication, or disclosure by the Government is subject to restrictions as set forth in subparagraph (c)(1)(ii) of The Rights in Technical Data and Computer Software clause at DFARS 252.227-7013 or in subparagraphs (c)(1) and (2) of the Commercial Computer Software -- Restricted Rights at 48 CFR 52.227-19, as applicable.

Contractor/Manufacturer is: Eicon Networks Corporation
9800 Cavendish Blvd., Montreal, Quebec, H4M 2V9.

Limited Warranty (Software)

The only warranty Eicon Networks makes is that the medium on which the program is recorded will be replaced without charge if Eicon Networks, in good faith, determines that it was defective in materials or workmanship and if returned to your supplier with a copy of your receipt within ninety (90) days from the date you purchased it. Eicon Networks offers no warranty for your reproduction of the program. This limited warranty is void if failure of the program has resulted from accident, misuse, abuse or misapplication.

Eicon Networks' entire liability and your exclusive remedy shall be repair or replacement of the program that does not meet the above limited warranty. Any replacement program will be warranted for the remainder of the original warranty period.

Limited Warranty (Hardware)

Eicon Networks warrants to the original purchaser of this Eicon Networks hardware product that it is to be in good working order for a period of five (5) years from the date of purchase from Eicon Networks or an authorized Eicon Networks dealer. Should this product, in Eicon Networks' opinion, fail to be in good working order at any time during this five year warranty period, Eicon Networks will, at its option, repair or replace this product at no additional charge except as set forth below. Repair parts and replacement products will be furnished on an exchange basis and will be either reconditioned or new. All replaced parts and products become property of Eicon Networks. This limited warranty does not include service to repair damage to the product resulting from accident, disaster, misuse, abuse, or non-authorized alterations, modifications, and/or repairs.

Products requiring limited warranty service during the warranty period should be delivered to Eicon Networks with proof of purchase. If the delivery is by mail, you agree to insure the product or assume the risk of loss or damage in transit. You also agree to prepay shipping charges to Eicon Networks and to use the original shipping container or equivalent.

No Other Warranties (Hardware and Software)

EICON NETWORKS DISCLAIMS ALL OTHER WARRANTIES, EITHER EXPRESS OR IMPLIED, INCLUDING BUT NOT LIMITED TO IMPLIED WARRANTIES OF MERCHANTABILITY, FITNESS FOR A PARTICULAR PURPOSE, LATENT DEFECTS AND NON-INFRINGEMENT, WITH RESPECT TO THE HARDWARE, PROGRAM, AND THE ACCOMPANYING DOCUMENTATION. THIS LIMITED WARRANTY GIVES YOU SPECIFIC LEGAL RIGHTS. YOU MAY HAVE OTHERS, WHICH MAY VARY FROM PROVINCE TO PROVINCE OR FROM STATE TO STATE.

No Liability For Consequential Damages

IN NO EVENT SHALL EICON NETWORKS OR ITS SUPPLIERS BE LIABLE FOR ANY DAMAGES WHATSOEVER (INCLUDING, WITHOUT LIMITATION, DAMAGES FOR LOSS OF BUSINESS PROFITS, BUSINESS INTERRUPTION, LOSS OF BUSINESS INFORMA-TION OR OTHER PECUNIARY LOSS AND INDIRECT, SPECIAL, CONSEQUENTIAL, INCI-DENTAL, ECONOMIC OR PUNITIVE DAMAGES ARISING OUT OF THE USE OF OR INABILITY TO USE THIS PRODUCT, EVEN IF EICON NETWORKS OR ITS SUPPLIERS HAVE BEEN ADVISED OF THE POSSIBILITY OF SUCH DAMAGES). BECAUSE SOME JURISDICTIONS DO NOT ALLOW THE EXCLUSION OR LIMITATION OF LIABILITY FOR CONSEQUENTIAL OR INCIDENTAL DAMAGES, THE PRECEDING LIMITATION MAY NOT APPLY TO YOU IF YOU LIVE IN ONE OF THOSE JURISDICTIONS.

Third-Party Software

In addition to the above-mentioned restrictions on liability, Eicon Networks emphasizes that it shall be responsible for absolutely no liability for any damage caused by or malfunction of software licensed from third parties. Third-party software (including the bonus software) is provided to you on a strictly AS IS basis. Eicon Networks makes absolutely no representations and provides no warranties whatsoever for third-party software and explicitly does not warrant that third-party software is Year 2000 compliant.

Contents

Introduction

Eicon Networks' Diva Server adapters provide high-speed digital connections to support a variety of network applications.

> **Important:** All Diva Server adapters have been tested and found to comply with the Electromagnetic compatibility, Safety and Network connection regulations within North America and other major territories. Read the regulatory information in the section 'Regulatory Information' on page 20 before installing and using your adapter.

This installation guide describes how to physically install your Diva Server adapter. To install the Diva Server adapter software, see the online documentation on the Diva Server Software Suite CD-ROM or on the Eicon Web Site.

Online documentation on the Diva Server CD-ROM is available for the following operating systems under which you can run your Diva Server adapter:

Operating system	Documentation
Windows$^®$ 2000	Diva Server for Windows 2000/XP Reference Guide
Windows XP	Diva Server for Windows 2000/XP Reference Guide
Windows NT$^®$ 4.0	Diva Server for Windows NT Reference Guide

Online documentation on the Eicon Web Site is available for the following operating systems under which you can run your Diva Server adapter:

Operating system	Documentation
Linux$^®$	Diva Server for Linux Reference Guide
NetWare$^®$	Diva Server for NetWare Reference Guide

Note: The Diva Server VoIP Gateway is only available with Diva Server Voice adapters under Windows NT, Windows 2000, and Windows XP.

Online documentation

Your Diva Server Software Suite CD-ROM includes comprehensive online manuals in Adobe$^®$ Acrobat$^®$ portable document format (PDF). These manuals describe all configuration parameters in detail. You should print the required pages before you start the installation.

Your Diva Server Software Suite CD-ROM also includes readme files. The readme files contain the most up-to-date information which did not make it into other manuals.

Note: To view and print the online documentation properly, you must use Acrobat Reader version 3.0 or later. You can install the Acrobat Reader version 5.0 from your Diva Server Software Suite CD-ROM.

To install Acrobat Reader 4.0 under a Windows operating system:

1. Insert your Diva Server Software Suite CD-ROM into your CD-ROM drive. The front end will automatically start. If the front end fails to start, double-click `SETUP.EXE` in the root folder on the CD-ROM.

2. From the Welcome screen, click the 'Bonus Software' button.

3. From the presented screen, you can install Acrobat Reader 4.0.

To view a PDF manual under a Windows operating system:

1. Insert your Diva Server Software Suite CD-ROM into your CD-ROM drive. The front end will automatically start. If the front end fails to start, double-click `SETUP.EXE` in the root folder on the CD-ROM.

2. From the Welcome screen, click the 'Documentation' button.

3. From the presented screen, you can view the documentation for your hardware and software.

Introduction

Ordering Your ISDN PRI or T1 Line

This chapter will assist you in ordering an ISDN PRI or a T1 line for your Diva Server T1/PRI adapter. It provides recommended settings for a number of the configuration settings on Diva Server T1/PRI adapters. You should specify these settings when you order your line from your service provider.

Line types

The Diva Server T1/PRI adapters can be configured to support an ISDN PRI line or a T1 line.

ISDN PRI

In North America and Japan, an ISDN PRI line typically supports 23 B-channels and one D-channel. PRI configurations are used to receive multiple, simultaneous ISDN calls from analog-modem and digital-services dial-in traffic. Another common use of ISDN PRI is to connect a PBX (Private Branch Exchange) to a central office switch.

Channelized T1 (robbed-bit signaling)

Robbed-bit signaling, which uses bits from specified frames in the user data channel for signaling, fits into the in-band signaling category. In this scenario, bits are 'stolen' from each channel for signaling purposes, as opposed to ISDN PRI (out-of-band signaling) which dedicates a specific channel (D-channel) to signaling.

Connecting to a PBX

In some installations, the ISDN line is connected to a PBX instead of the Diva Server T1/PRI adapter. In these cases, you must correctly configure the PBX to communicate with the Diva Server T1/PRI adapter.

Power Supply

When ordering your ISDN PRI or T1 line, make sure that a power supply is available for the NT1 of this line. Usually, a PBX is installed in the same area as the NT1 and the telephone company can use the power supply of the PBX for the ISDN PRI or T1 line as well. If this is not the case, you have to order a combo device from your local telephone company. This device consists of an installation rack into which an NT1 module and a power supply module is mounted.

Provisioning an ISDN PRI connection

This section explains how to order an ISDN PRI line for your Diva Server T1/PRI adapter.

What to order

Specify the following requirements when you place your order:

- 23 B-channels + 1 D-channel
- D-channel on channel 24 (timeslot 24). Do not order NFAS (non-facility associated signaling service), which enables you to use channel 24 as a data-carrying B-channel.
- Layer 1 line code is B8ZS with ESF (Extended SuperFraming)
- Data rate of 1.544 Mbps
- 64 kbps clear channel service which ensures calls will not be routed over 56 kbps channels
- Companding type is μ-law
- A CSU is not required (Diva supplies the function of the CSU internally). However, you can connect to a CSU if present.
- The T1 interface number must be 0.
- The D-channel must be specified as the terminal endpoint identifier (TEI) 0.
- If the switch type is AT&T/Lucent, request that allocation of channels for incoming calls is in descending order, high to low (23 to 1).

Information to obtain when you order

Obtain the following information when you place your order. You will need this information to properly configure your Diva Server T1/PRI adapter.

- The type of ISDN switch your line is connected to.
  - AT&T/Lucent 4ESS
  - AT&T/Lucent 5ESS
  - Nortel DMS-250
  - Nortel DMS-100
  - Nortel DMS-250
  - National ISDN-2 (any switch running NI-2)
  - Japan INS-1500
- Directory number assigned to the PRI line
- Line build out setting (LBO). Only if you are going to use the Diva Server's on-board CSU.

Provisioning a channelized T1 connection (robbed-bit)

This section explains how to order a T1 line that uses robbed-bit signaling for your Diva Server T1/PRI adapter.

What to order

Specify the following when you place your order:

- Switched T1 service for 56 kbps voice calls
- No multichannel services (switchtec 384/H0 or 1536/H11)
- Extended SuperFrame (ESF)
- B8ZS line encoding
- Wink Start E&M signaling
- DTMF dialing
- Answer supervision required for outgoing calls

Information to obtain when you order

Obtain the following information when you place your order. You will need this information to properly configure your Diva Server T1/PRI adapter.

- The type of ISDN switch your line is connected to.
  - AT&T/Lucent 4ESS
  - AT&T/Lucent 5ESS
  - Nortel DMS-250
  - Nortel DMS-100
  - Nortel DMS-250
  - National ISDN-2 (any switch running NI-2)
  - Japan INS-1500
- Directory number assigned to the T1 line

Installation

This chapter will assist you in installing your Diva Server adapter and connecting it to your ISDN PRI or T1 line.

How to proceed with the installation

1. Make sure you have all the items you need, as listed below.
2. Install your Diva Server adapter, as described on page 13.
3. Connect your ISDN PRI or T1 line, as described on page 14.
4. Install the software, as described in the corresponding online guide.

Before you start

Before you start, make sure you have the items you need to install your Diva Server adapter and the corresponding software.

Item	Description
Computer	Your computer must have: • a free PCI slot • an installed operating system: Windows 2000, Windows XP, Windows NT 4.0 (Service Pack 5 or higher) Linux Novell NetWare 4.1 or higher • at least 15 MBytes of free hard-disk space for the software
Server adapter package	This includes: • Diva Server adapter • cable(s) needed to connect your ISDN PRI or T1 line • Diva Server Software Suite CD-ROM • Diva Server Adapters Installation Guide
CD-ROM for your operating system	You might be prompted to provide the CD-ROM for your operating system during the software installation.
ISDN Primary Rate Interface (PRI) or channelized T1 interface	The lines are installed by your local telephone company. Make sure that you get the appropriate line(s) for your adapter. **Note:** In some countries, you might need a network terminating device (NT1).
Information about your ISDN PRI or T1 line	Your telecommunications service provider has to supply the following information: • switch type: This usually depends on your geographic location. Common switch types include NI-1 and 5ESS. • phone numbers for each line

Installation

Installing Your Diva Server Adapter

The installation procedure below applies for the following Plug&Play PRI adapters:

• Diva Server T1/PRI PCI: Diva Server T1/PRI PCI, Diva Server T1/PRI-4M PCI, Diva Server T1/PRI-8M PCI, Diva Server T1/PRI-24M PCI

• Diva Server Voice T1/PRI PCI: Diva Server Voice T1/PRI-4M PCI, Diva Server Voice T1/PRI-8M PCI, Diva Server Voice T1/PRI-24M PC

⚠️ **Warning:** PRI signals can have telephone network voltages (TNV). Therefore, PRI and T1 lines should be installed and maintained by service personnel only. It may be hazardous if your computer is not properly plugged in and grounded.

Before you install your Diva Server adapter or remove the cover from your computer for any reason, disconnect the cable from the ISDN network or T1 line.
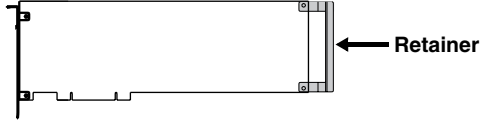
⚠️ **Warning:** The Diva Server T1/PRI and Diva Server Voice T1/PRI adapters need up to 20 Watts of power. If you have installed several adapters in your system, make sure that the power supply will not be overloaded when you install your Diva Server adapter. Make also sure that your PC provides sufficient cooling.

To install your adapter:

(A) Insert the adapter into your computer

1. For your safety, turn off the power to your computer and all peripheral devices.
2. Drain static electricity from your body by touching the metal chassis (the unpainted metal at the back of your computer).
3. Remove the power cord from your computer.
4. Remove the cover of the computer as described in your computer's manual.
5. Firmly insert the adapter into a free PCI slot, allowing the retainer to slide between the guides. Make sure that the adapter does not touch the CPU, memory modules, or any other parts on the motherboard.

Note: If space does not permit the use of the retainer, simply remove it, and then insert the adapter. The retainer is only an installation aid and does not add functionality to the adapter.

← **Retainer**

Warning: To avoid damaging your hardware, insert your Diva Server T1/PRI adapter only into a PCI slot. Inserting the adapter into any other type of slot can damage your adapter, your computer, or both.

6. Firmly secure the adapter with the screw (or clip).

Warning: For your safety, make sure that the adapter's bracket is properly secured to the PC's chassis by fastening the adapter with the screw (or clip). This will ensure proper grounding.

7. Replace the cover of the computer as described in your computer's manual.

(B) Connect your Diva Server T1/PRI adapter

Note: The Diva Server T1/PRI adapters have a built-in CSU (channel service unit) to protect the adapters from damage due to power surges. However, you can also use an external CSU, which allows you to test your line.

Use one of the cables included with the adapter. The cable you use depends on how you want to apply your adapter:
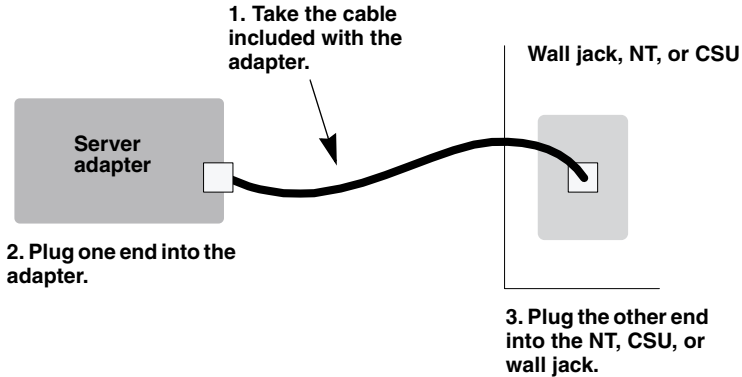
• RJ-45 to RJ-45 for connection to an ISDN PRI or T1 line with an RJ-45 jack or for connection as network termination to a PBX
• RJ-45 to open-ended cables for connection to your an ISDN PRI or T1 line with open-ended wire connections or for back-to-back connection

If the ISDN PRI or T1 line is installed with an RJ-45 jack:

Use the supplied RJ-45 to RJ-45 cable:

Diva Server T1/PRI Adapter	Signals	RJ-45 Terminal
Pin 1	Receive + (RX +)	Pin 1
Pin 2	Receive - (RX -)	Pin 2
Pin 4	Transmit + (TX +)	Pin 4
Pin 5	Transmit - (TX -)	Pin 5
shielded plug	overall shielded	shielded plug

Connect your ISDN PRI or T1 line as shown:

1. Take the cable included with the adapter.

Wall jack, NT, or CSU

Server adapter

2. Plug one end into the adapter.

3. Plug the other end into the NT, CSU, or wall jack.

If the Diva Server T1/PRI adapter in NT mode is connected to a PBX

The Diva Server software enables you to configure Diva Server T1/PRI adapters as network termination (NT). This means your adapter can serve as an NT for PBXs that act as terminal equipment and therefore require an NT to provide a clocking signal. For example, the Diva Server adapter can act as an NT when coupling PBXs with the Q-Sig protocol.

When connecting the adapter to a PBX that acts as TE, configure the adapter as an NT. Wire it to the PBX as shown in the diagram on page 16 by applying the appropriate assignment at the PBX connectors.

If the ISDN PRI or T1 line uses open-ended wire connections:

In some cases, you are required to connect to your network termination using the open-ended connectors. The transmission (TX) leads and the receiving (RX) leads are identified by color; transmission leads are blue and white-blue, receiving leads are orange and white-orange.

Use the supplied RJ-45 to open ends cable:

Diva Server T1/PRI Adapter	Signals	Open Ends
Pin 1	Receive + (RX +)	white-orange
Pin 2	Receive - (RX -)	orange
Pin 4	Transmit + (TX +)	white-blue
Pin 5	Transmit - (TX -)	blue
shielded plug	overall shielded	shield

Make sure to connect the transmission leads of your Diva Server T1/PRI adapter to the receiving connectors of the network termination and the receiving leads of your Diva Server T1/PRI adapter to the transmission connectors of the network termination.

Note: If the adapter is not properly connected to the ISDN PRI or T1 line, a layer 1 warning light appears on the NT, the adapter, the external CSU, and at the switching center of the network provider. The network provider might then deactivate the line. If this occurs, you must contact your network provider to re-enable your line.
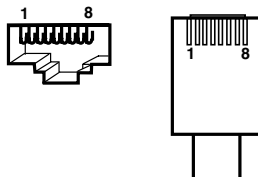
If the Diva Server T1/PRI adapter is run in back-to-back mode:

The Diva Server software enables you to configure Diva Server T1/PRI adapters as network termination (NT). This means you can use two Diva Server adapters in back-to-back operation.

When using Diva Server adapters back-to-back, configure one adapter as an NT and the other one as TE. Connect the adapters with a crossover cable. You can build your own crossover cable using the open-ended cable supplied with your Diva Server T1/PRI adapter. Just crimp the open end according to the NT-Side assignment shown in the diagram below:

	TE side		NT side
Pins on RJ-45	Signals	Wiring	Signals
1	RX +		RX +
2	RX -		RX -
3 not used			
4	TX +		TX +
5	TX -		TX -
6 not used			
7 not used			
8 not used			

Note: Looking at the RJ-45 connector with the cable running towards you and the lock tab at bottom, the pins are numbered from 1 to 8 from left to right (as shown below).

Troubleshooting

If you are having problems with your adapter or with the corresponding software, the following suggestions can help you diagnose and solve the problems. If these suggestions do not work for you, try the suggestions described in the online manual for the corresponding software, or those on the Help Web (see page 23).

Using the Line Check utility

(under Windows NT and Windows 2000/XP)

The Line Check utility performs a check of your adapter, cabling, and ISDN PRI or channelized T1 connection.

To run the Line Check utility, follow the instructions below.

Under Windows NT:

Click 'Start > Programs > Eicon ISDN Tools (Common) > Line Check'.

In the 'Diva Server for Windows NT - Line Check' dialog box, select the adapter you want to test, then click 'Start'.

Under Windows 2000/XP:

Click 'Start > Programs > Diva Server for Windows 2000/XP > Check ISDN Line'.

In the 'Diva Server for Windows 2000/XP - Line Check' dialog box, select the adapter you want to test, then click 'Start'.

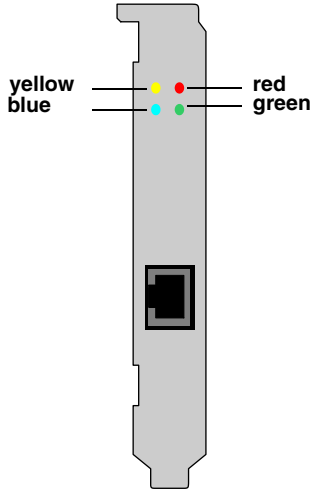If the Line Check returns an error, check the following items:

• cabling
• Diva Server configuration (phone numbers and switch type)
• hardware configuration (for information on resolving hardware conflicts, refer to the README.TXT file on your Diva Server Software Suite CD-ROM)

Note: Take note of the error code returned by the Line Check utility. This error code can help your telecommunications service provider diagnose the problem.

If the Line Check does not return an error, but you cannot get your Diva Server adapter to work properly, there is probably a problem in the configuration of the application you are using with your Diva Server adapter (such as Dial-Up Networking or faxing software).

Checking the status LEDs

Diva Server T1/PRI and Diva Server Voice T1/PRI adapters have four LEDs, as shown:

yellow ————— red
blue ————— green

The table below describes the function of each LED:

Color	Status	Description
yellow	off	Normal operation.
	lit	Remote site is experiencing synchronization problems (if a remote alarm/yellow alarm is detected).
red	off	Normal operation.
	lit	The receiver does not detect a signal (loss of signal/red alarm).
blue	off	Normal operation.
	lit	Received frames are not synchronized properly (alarm indication signal/blue alarm).
green	off	Layer 2 is not active. (Check your layer 2 configuration, i.e. switch type, switch etc.)
	lit	Layer 2 is active. (If your adapter works properly, layer 2 is always active.)

Technical Specifications

	Diva Server T1/PRI Diva Server Voice T1/PRI
Bus type	PCI (3,3/5 V)
CPU	32 Bit RISC CPU, 180 MHz
Memory	8 MB SDRAM
Interrupt request levels	Allocated by PCI BIOS.
I/O base addresses (hex)	Allocated by PCI BIOS.
Shared memory range	8 MB
DSPs	Diva Server T1/PRI: either 2, 4, 8, or 24 ADSPs 2185L according to model Diva Server Voice T1/PRI: either 4, 8, or 24 ADSPs 2185L according to model
Dimensions	T1/PRI: half size PCI T1/PRI-4M, T1/PRI-8M, T1/PRI-24M: full size PCI
Data transfer rate	23 x 64 kbps B-channel 1 x 64 kbps D-channel (PRI) or 24 x 56 kbps (channelized T1)
Plug&Play	yes
Power safe mode	yes
External interface	Female RJ-45 (PRI)
Performance	Primary rate interface (up to 24 channels @ 64 kbps each) channelized T1 interface (up to 24 channels @ 56 kbps each)
Power requirements	T1/PRI-24M: 1,7 A @ +5 V typ.

Environmental requirements

- Operating temperature: 15 degrees C to 70 degrees C
- Operating humidity: 10 to 85% (non-condensing)
- Barometric operating pressure: 86 to 106 kPascals
- Maximum tolerance in power supply variation: -5% to +5%

Regulatory Information

Regulatory Information for the USA

WARNING. Changes or modifications to this unit not expressly approved by Eicon Networks Corporation could void the user's authority to operate the equipment.

FC

FCC Declaration of Conformity

We:

Eicon Networks Inc.
2155 Chenault Drive
Suite 503
Carrollton, Texas
USA 75006
1-800-80-EICON
(972) 417-5500
Fax: (972) 417-5610

Declare under our sole legal responsibility that the products listed below to which this declaration relates, are in conformity with Part 15 of the FCC Rules. Operation is subject to the following two conditions:

(1) This device may not cause harmful interference, and
(2) this device must accept any interference received, including interference that may cause undesired operation.

Note: This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications.

However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

• Reorient or relocate the receiving antenna.

• Increase the separation between the equipment and receiver.

- Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
- Consult the dealer or an experienced radio/TV technician for help.

FCC Part 68 Notice

This unit complies with Part 68 of the FCC rules. On the bottom of this equipment is a label that contains, among other information, the FCC registration number. If requested, this information must be provided to the telephone company.

An FCC compliant telephone cord and modular plug is provided with this equipment, designed to be connected to the telephone network or premises wiring using a compatible modular jack which is Part 68 compliant.

This equipment cannot be used on telephone company-provided coin service. Connection to party line service is subject to state tariffs.

If this equipment causes harm to the telephone network, the telephone company will notify you in advance that temporary discontinuance of service may be required. If advance notice is not practical, the telephone company will notify the customer as soon as possible. Also, you will be advised of your right to file a complaint with the FCC if you believe it is necessary.

The telephone company may make changes in its facilities, equipment, operations, or procedures that could affect the operation of the equipment. If this happens, the telephone company will provide advance notice in order for you to make the necessary modifications in order to maintain uninterrupted service.

If trouble is experienced with this equipment, please contact us for repair and warranty information. If the trouble is causing harm to the telephone network, the telephone company may request you to remove the equipment from the network until the problem is resolved.

Diva Server T1/PRI adapters:

Facility Interface code	Digital Reg. code	Service Order code	USOC Jack Type
04DU9-1SN	DD	6.0F	RJ48-C

Regulatory Information for Canada

NOTICE: The Industry Canada label identifies certified equipment. This certification means that the equipment meets certain telecommunications network protective, operational and safety requirements. Industry Canada does not guarantee the equipment will operate to the user's satisfaction.

Before installing this equipment, users should ensure that it is permissible to be connected to the facilities of the local telecommunications company. The equipment must also be installed using an acceptable method of connection. In

some cases, the company's inside wiring associated with a single line individual service may be extended by means of certified connector assembly (telephone extension cord). The customer should be aware that compliance with the above conditions may not prevent degradation of service in some situations.

⚠️ **Warning:** For your safety, follow these steps before you remove the cover from your PC:
1. Turn off the power to your PC and all peripheral devices.
2. Disconnect the power cable.

Repairs to certified equipment should be made by an authorized Canadian maintenance facility designated by the supplier. Any repairs or alterations made by the user to this equipment, or equipment malfunctions, may give the telecommunications company cause to request the user to disconnect the equipment.

For their own protection, users should ensure that any electrical ground connections of the power utility, telephone lines and internal metallic water pipe system are connected together. This precaution is particularly important in rural areas.

⚠️ **Warning:** Users should not attempt to make such connections themselves, but should contact the appropriate electric inspection authority, or electrician, as appropriate.

This Class B digital apparatus complies with Canadian ICES-003.

Cet appareil numérique de la classe B est conforme à la norme NMB-003 du Canada.

Approvals

To receive detailed approval information, send a request specifying the product name and the relevant countries to the following E-mail address: certification@eicon.com

Customer Services

To obtain technical support for Eicon Networks products, contact either Eicon Networks or your Eicon Networks supplier as indicated below. Please note that in some regions you can save time and long-distance charges by sending a description of your situation by fax. Customer Services personnel will then call you to provide a solution or to request additional information.

• In the United States, Central and South America, Western Canada (Manitoba westward), and the Atlantic Provinces (New Brunswick eastward), call our Dallas office at 972-417-5515 or send a fax marked 'Attn.: Customer Services' to 972-417-5610.

• In Eastern Canada (Ontario and Quebec), call our Montreal office at 514-745-5577 and ask for Customer Services, or send a fax marked 'Attn.: Customer Services' to 514-745-5502.

World Wide Web

Information about Eicon Networks products and services—including documentation and software updates—is available from our international web site at **www.eicon.com**.

Help Web

Visit our Help Web at **www.eicon.com/support/ema**. The Help Web contains detailed instructions for installing and configuring the Diva Server adapter and software for various uses.

The Help Web also contains useful troubleshooting information. If you have problems with your Diva Server adapter or the corresponding software, try the suggestions listed on the Help Web before you call Customer Services.

Comments

If you wish to make comments about your Eicon Networks server adapter or the corresponding software, address them by E-mail to: divaserver@eicon.com.

Free Manuals Download Website

http://myh66.com

http://usermanuals.us

http://www.somanuals.com

http://www.4manuals.cc

http://www.manual-lib.com

http://www.404manual.com

http://www.luxmanual.com

http://aubethermostatmanual.com

Golf course search by state

http://golfingnear.com

Email search by domain

http://emailbydomain.com

Auto manuals search

http://auto.somanuals.com

TV manuals search

http://tv.somanuals.com