



LOCAL AREA NETWORK

Installation Manual

071-8070-00

NOVEMBER 2000

PROFILE FAMILY
VIDEO FILE SERVERS

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Grass Valley Group Product Support

You can get technical assistance, check on the status of problems, or report new problems by contacting our Product Support Group.

United States and Canada

Monday–Friday 5:30AM–5:00PM Pacific Time
(800) 547-8949

Europe

Monday–Friday 9:00AM–5:30PM

France	01 45 29 73 00	United Kingdom	01628 405830
Germany	49 221 1791 234	Other	+44 1753 218 777
Italy	02 25086606		

Asia and South America

Australia	02-9888 0100	Japan	81-3-3448-3111
- from overseas	61-2-9888 0100	Korea	82-2-528-5299
Beijing	86-10-62351230	Mexico	52-5-666-6333
	ext. 711	Singapore	65-356-3900
Brazil	55-11-3741-8422	Taiwan	886-2-27571571
Hong Kong	852-2585-6579		

World Wide

24-hour Emergency Hotline (530) 478-4148 (Contract and warranty customers)

World Wide Web	http://www.grassvalleygroup.com/support/
FTP Site	ftp.grassvalleygroup.com
E-mail	profile-users@grassvalleygroup.com



General Safety Summary

Review the following safety precautions to avoid personal injury and prevent damage to this product or any products connected to it.

Only qualified personnel should perform service procedures.

While using this product, you may need to access other parts of the system. Read the general safety summary in other system manuals for warnings and cautions related to operating the system.

Injury Precautions

**Do Not Operate
Without Product
Covers in Place**

To avoid electric shock or fire hazard, do not operate this product with covers or panels removed.

**Do Not Operate in
Wet/Damp
Conditions**

To avoid electric shock, do not operate this product in wet or damp conditions.

**Do Not Operate in an
Explosive
Atmosphere**

To avoid injury or fire hazard, do not operate this product in an explosive atmosphere.

**Avoid Exposed
Circuitry**

To avoid injury while serving, remove jewelry such as rings, watches, and other metallic objects. Do not touch exposed connections and components when power is present.

Product Damage Precautions

Use the Proper Voltage Setting	Ensure that the line selector is in the proper position for the power source before applying power.
Provide Proper Ventilation	Prevent product overheating by providing proper ventilation.
Do Not Operate If You Suspect Product Failures	If you suspect there is damage to this product, have it inspected by qualified service personnel.

Safety Terms and Symbols

Terms in This Manual These terms may appear in this manual:



WARNING: Warning statements identify conditions or practices that can result in personal injury or loss of life.



CAUTION: Caution statements identify conditions or practices that can result in damage to the equipment or other property.

Terms on the Product These terms may appear on the product:

DANGER indicates a personal injury hazard immediately accessible as you read the marking.

WARNING indicates a personal injury hazard not immediately accessible as you read the marking.

CAUTION indicates a hazard to property, including the product.



Symbols on the Product

The following symbols may appear on the product:



DANGER high voltage



Protective ground (earth) terminal



ATTENTION – refer to manual

Service Safety Summary



WARNING: These instructions are for use by qualified service personnel only. To avoid personal injury, do not perform any servicing unless you are qualified to do so. Refer to all safety summaries before performing service.

Do Not Service Alone

Do not perform internal service or adjustment of this product unless another person capable of rendering first aid and resuscitation is present.

Disconnect Power

To avoid electric shock, disconnect the main power by means of the power cord.

Use Care When Servicing With Power On

Dangerous voltages or currents may exist in this product. Disconnect power and remove battery (if applicable) before removing protective panels, soldering, or replacing components.

To avoid electric shock, do not touch exposed connections.

Certifications and Compliances

FCC Emission Control

This equipment has been tested and found to comply with the limits for a Class A digital device, pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference when the equipment is operated in a commercial environment. This equipment generates, uses, and can radiate radio frequency energy and, if not installed and used in accordance with this installation manual, may cause harmful interference to radio communications. Operation of this equipment in a residential area is likely to cause harmful interference in which case the user will be required to correct the interference at his or her own expense. Changes or modifications not expressly approved by Grass Valley Group can affect emission compliance and could void the user's authority to operate this equipment.

Canadian EMC Notice of Compliance

This digital apparatus does not exceed the Class A limits for radio noise emissions from a digital apparatus set out in the Radio Interference Regulations of the Canadian Department of Communications.

Le présent appareil numérique n'émet pas de bruits radioélectriques dépassant les limites applicables aux appareils numériques de la classe A prescrites dans le Règlement sur le brouillage radioélectrique édicté par le ministère des Communications du Canada.

EN55022 Class A Warning

For products that comply with Class A. In a domestic environment, this product may cause radio interference, in which case the user may be required to take adequate measures.



Certification

Category	Standard
Safety	<i>Designed/tested for compliance with:</i> UL1950 – Safety of Information Technology Equipment, including Electrical Business Equipment (Third Edition, 1995) IEC 950 – Safety of Information Technology Equipment, including Electrical Business Equipment (Second edition, 1991) CAN/CSA C22.2, No. 950-95 – Safety of Information Technology Equipment, including Electrical Business Equipment EN60950 – Safety of Information Technology Equipment, including Electrical Business Equipment (includes Appendix ZB)

Profile LAN Upgrade Installation

Introduction

This product modification kit provides a Local Area Network (LAN) interface card for the PDR 100 or PDR200.

NOTE: You must have Profile System Software version 1.4.X or higher installed to correctly install and configure this LAN card

Please read and follow these instructions in the order given.

Kit Contents

- One LAN card
- One EMI suppression gasket
- One rear panel LAN sticker
- These installation instructions

Pre-Installation Instructions

1. If your Profile is already powered down, skip to Step 2, otherwise perform normal shut down procedures and then power down your Profile and wait a few seconds.
2. Power up the Profile and press and hold the **SHIFT** key. (This interrupts the automatic login feature.)
3. Log in as **administrator** (password **triton**).
4. Open the Windows NT File Manager.
5. If you're using Profile System Software version 1.4.X, insert the *SMC LAN Support files* diskette in drive A and run *a:\update.bat* to update your networking software.
6. Locate and run the **c:\profile\netenabl.bat** file. (This batch file will enable some NT services required to use the LAN card.)
7. After the file has been run, power down the Profile.



Installation Instructions

NOTE: Product upgrades and repairs should only be attempted by qualified service personnel. For further assistance call your nearest Grass Valley Group Service Center.

Label cabling connections prior to removal to facilitate reassembly.

Remove the Profile from the Instrument Rack

1. Remove all cabling connected to the system.
2. Loosen the front-panel retaining screws.
3. Grasp the handles and pull the product out until the slide sections latch. The system is firmly held in this position.
4. Press both track stop latch buttons (visible in the stop latch holes) and carefully slide the system free of the tracks.

CAUTION. Many components in this product are susceptible to static-discharge damage. Service the product only in a static-free environment while observing standard handling precautions for static-sensitive devices. Always wear grounded wrist and foot straps.

Remove the Product Covers

1. Using a driver with a #10 Torx tip, remove the flat-head screws that hold down the top covers. See Figure 1.

NOTE: The illustration shows the location of PDR100 top cover screws. The PDR200 top cover screw are in slightly different locations, and include a row of screws securing the media drives to the cover. These screws must be removed to remove the cover from the PDR200.

2. Set aside the covers.

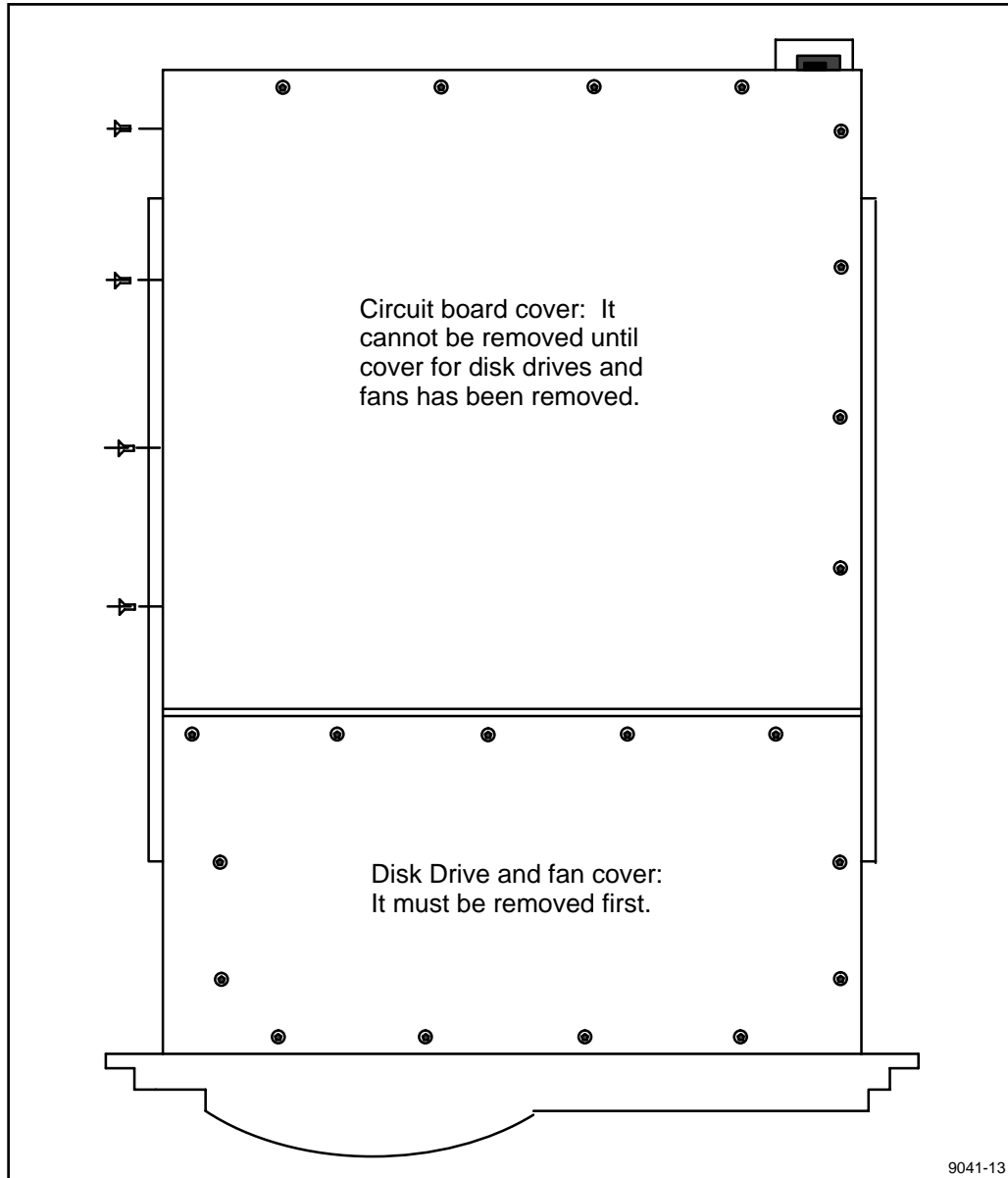


Figure 1. PDR100 Showing Attaching Screws for the Top Covers



Install the LAN Circuit Card

1. Remove the circuit card panel (bracket) that covers the rear panel slot for J3. Be sure to remove the screws from the top and the bottom of the bracket.
2. Skip to step 6 if slot J3 is vacant and you are not installing any additional options at this time.

NOTE: *If slot J3 is currently occupied by another card, you must remove the short and tall circuit card supports (if present) and move the card to another slot.*

3. Remove the screw that attaches the tall circuit card retainer to the left side of the chassis and pull the retainer straight up.

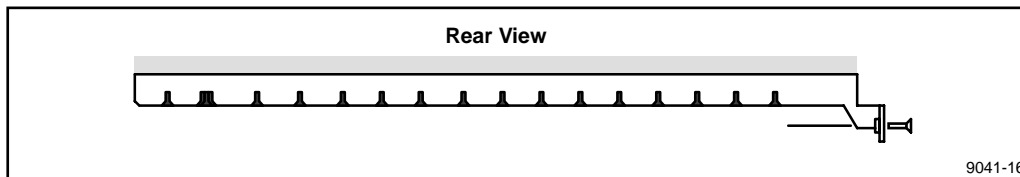


Figure 2. Retainer For Tall Circuit Cards

4. Remove the retainer for the short circuit cards. Remove the attaching screw located in the middle of the retainer. Lift the retainer straight out.

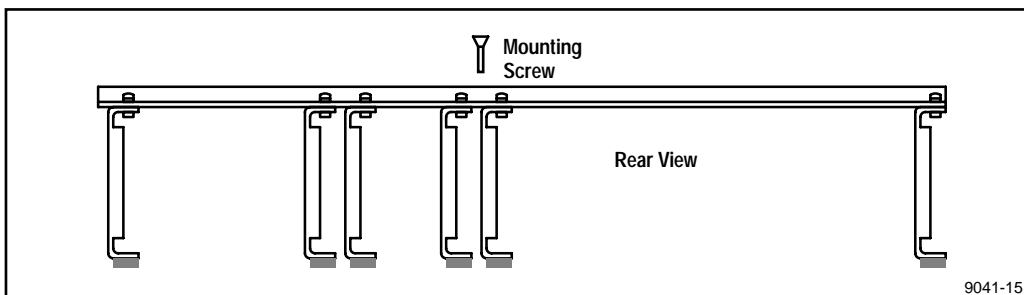
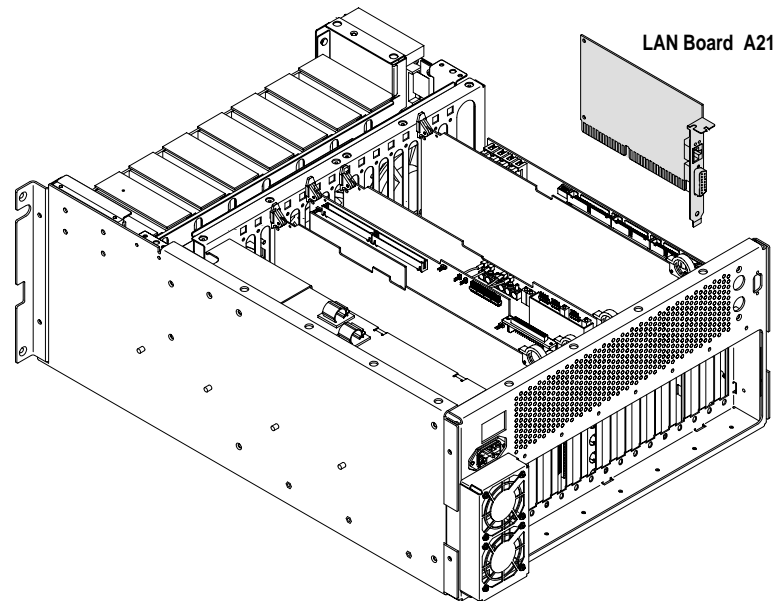


Figure 3. Retainer for Short Circuit Cards

CAUTION. Do not exert any force on the rear panel-connectors when removing or installing circuit cards in the card slots. Except for the LAN card, two screws hold each circuit card in the card slot, one accessible from the top of the card and the other accessible from the rear of the card. Both screws must be removed before the card can be removed from the product.

5. Slide the LAN card down into slot J3. Some resistance will be exerted by the contact pressure of the connectors. Take care not to exert extreme force to seat the circuit card.



9510-1

Figure 4. Inserting the LAN Card



Reassembly

1. Install any additional Options (PDR0FXX) at this time. Use the procedures provided with the PDR0FXX kit.
2. Install the Torx mounting screw in the top of the circuit card panel (bracket).
3. If it was necessary to change the location of any of the short circuit cards (to accommodate the selected location of the new circuit cards), rearrange the individual ECB hold-downs for the short circuit cards to coincide with the new locations. Install the retainer for the short circuit cards.
4. Install the retainer for the tall circuit cards.
5. Install the circuit card cover and disk drive cover. Install and tighten the attaching screws.
6. Install the Profile system in the instrument rack.
7. Install the appropriate cabling to the rear panel connectors of the Profile system.

Configuration

1. Power up the Profile system. Press **F1** or **ENTER** to accept the Services error message.
2. Open the PDR Debug Applications.
3. Double click on the **Load CMOS** icon in the PDR Debug Applications group. Note that the Processor is listed with the SMC LAN card.
4. Reboot the Profile and log in as administrator. Accept the Services error messages during startup.
5. Open the Control Panel, and double click on the **Network** icon.
6. In the list of Installed Adapter cards, highlight the **Intel Ether Express 16LAN Adapter** and click on the **Remove** button. Accept the error message that appears.
7. Click on the **Add Adapter** button, select **Other** (at the end of the list), and then click **Continue**.
8. When prompted for the directory, type **c:\profile\drivers\smc** and press **RETURN**.
9. Select **OK** at the **Select OEM Option** prompt.
10. When prompted, choose **10Mb/s** and select **OK**.
11. You will next return to the Network dialog box. Click **OK**.
12. You will next be prompted for TCP/IP configuration. Proceed to *Configuring the Ethernet card for TCP/IP*.



Configuring the Ethernet Card for TCP/IP

NOTE: *If you are connecting to an existing TCP/IP network, you must contact your network administrator before proceeding with TCP/IP configuration. Please review this procedure and the Configuring Fibre Channel for an Existing Net procedure with your network administrator before performing either procedure.*

The following steps assume that you are **NOT** connecting to an **existing** TCP/IP network.

1. Bring up the TCP/IP configuration dialog.
2. You will need to fill in two fields in the TCP/IP dialog, IP Network Address and Subnet Mask. For the IP Network Address, we recommend the following numbering convention. Note that each Profile **must** have a unique IP address.

For the first profile, use 128.181.1.1
For the second profile, use 128.181.1.2
For the third profile, use 128.181.1.3
etc. ...

3. For the Subnet mask, use the same value on all systems: 255.255.255.0 and then click **OK**. Choose **Restart Now** from the resulting dialog box.
4. Power off and then reboot the Profile.
5. Verify TCP/IP connectivity between Profiles by opening a command prompt window and typing **ping 128.181.1.n** where n is the number for this Profile.
6. Repeat step 5 for at least one other Profile in the network.
7. Restart the Profile system when prompted.

NOTE: For more information on Windows NT networking please refer to one or more of the following:

- Double click on “Windows NT Books” icon in the “Main” program group.
- Refer to Windows NT documentation shipped with the Profile system.
- Refer to a Windows NT manual.

NOTE: Use the procedure described in the following section to create an emergency repair disk after any software upgrade or any change of product configuration.



Creating an Emergency Repair Disk

NOTE: (1) The emergency repair disk is intended for trained service personnel to repair Windows NT if it is not operating properly. Repair data must be updated whenever the system configuration is changed. This includes software upgrades. Store the repair disk in a safe place for future use.

To make a new emergency repair disk, you need one 3.5" disk. Mark it clearly as the emergency repair disk for Profile system with serial number xxxxxxxx. (You don't need to format the disk.)

NOTE: The emergency repair disk is system specific. Make sure that the emergency repair disk is clearly marked with its Profile system's serial number.

1. From the File menu, choose the **Run** command.
2. Enter **rdisk** in the Run dialog box.
3. Select the **Update Repair Disk** button.
4. Insert the floppy disk in the **A** drive and select **OK**. The utility then formats the disk and loads all of the information from the registry.
5. When the operation is complete, select the **Exit** button to leave the Repair Disk Utility.
6. Remove the Emergency Repair Disk from the Profile, set **WRITE PROTECT** on the disk, and store in a convenient location.