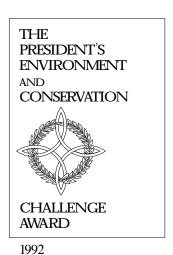
NETBuilder II Dual Power Supply System Installation Guide

A member of the NETBuilder II® Family



For 3Com User Group Information 1-800-NET-3Com or your local 3Com office

Manual Part No. 09-0488-000 Published December1993. Printed in the U.S.A. 3Com Corporation 5400 Bayfront Plaza Santa Clara California 95052-8145

© 3Com Corporation, 1993. All rights reserved. No part of this manual may be reproduced in any form or by any means or used to make any derivative work (such as translation, transformation, or adaptation) without permission from 3Com Corporation.

3Com Corporation reserves the right to revise this publication and to make changes in content from time to time without obligation on the part of 3Com Corporation to provide notification of such revision or change.

3Com Corporation provides this guide without warranty of any kind, either implied or expressed, including, but not limited to, the implied warranties of merchantability and fitness for a particular purpose. 3Com may make improvements or changes in the product(s) and/or the program(s) described in this manual at any time.

Use, duplication, or disclosure by the government shall be expressly subject to restrictions as set forth in subparagraph (c) (1) (ii) for restricted Rights in Technical Data and Computer Software clause at 252.227-7013 of the DOD FAR Supp.

Portions of this manual are reproduced in whole or in part with permission from (as appropriate).

3Com, NETBuilder, and NETBuilder II are registered trademarks of 3Com Corporation. 3ComFacts, Ask 3Com, CardBoard, and CardFacts are service marks of 3Com Corporation.

MasterCard is a registered trademark of MasterCard International. VISA is a registered trademark of VISA International Service Associates

CompuServe is a service mark of CompuServe, Inc.

Manual written by Judith Elleby. Edited by Chris Dresden and Pat Vaughn. Technical illustration by Paul Naas. Production by Ramona Boersma.



WARNING: 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, VDE Specification 0871, and CISPR22 (EN55022) Specification. These limits are designed to provide reasonable protection against harmful interference in a commercial 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. 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 the user's own expense.

Changes or modifications not expressly approved by 3Com could void the user's authority to operate this equipment.

LIMITED WARRANTY

HARDWARE: 3Com warrants its hardware products to be free from defects in workmanship and materials, under normal use and service, for the following lengths of time from the date of purchase from 3Com or its Authorized Reseller:

Bridge, gateway, and other internetworking products One year Server products One year Station products One year Network adapters Lifetime HubAdapter products Three years LinkBuilder(TM) 10BT and 10BTi hubs Three years Other transmission products One year Spare parts and spares kits 90 days Instrumentation 90 days

If a product does not operate as warranted during the applicable the warranty period, 3Com shall, at its expense, correct any such defect by repairing the defective product or part or, at its option, by delivering to Customer an equivalent product or part to replace the defective item. All products that are replaced will become the property of 3Com. Replacement products may be new or reconditioned. Any replaced or repaired product or part has a ninety (90) day warranty or the remainder of the initial warranty period, whichever is longer.

3Com shall not be responsible for any software, firmware, information, or memory data of Customer contained in, stored on, or integrated with any products returned to 3Com pursuant to any warranty.

SOFTWARE: 3Com warrants that the software programs licensed from it will perform in substantial conformance to the program specifications therefor for a period of ninety (90) days from the date of purchase from 3Com or its Authorized Reseller. 3Com warrants the magnetic media containing software against failure during the warranty period. No updates are provided. 3Com's sole obligation hereunder shall be (at 3Com's discretion) to refund the purchase price paid by Customer for any defective software products, or to replace any defective media with software which substantially conforms to 3Com's applicable published specifications. Customer assumes responsibility for the selection of the appropriate applications program and associated reference materials. 3Com makes no warranty that its software products will work in combination with any hardware or applications software products provided by third parties, that the operation of the software products will be uninterrupted or error free, or that all defects in the software products will be corrected. For any third party products listed in the 3Com software product documentation or specifications as being compatible, 3Com will make reasonable efforts to provide compatibility, except where the non-compatibility is caused by a "bug" or defect in the third party's product.

STANDARD WARRANTY SERVICE: Standard warranty service for hardware products may be obtained by delivering the defective product, accompanied by a copy of the dated proof of purchase, to 3Com's Corporate Service Center or to an Authorized 3Com Service Center during the applicable warranty period. Standard warranty service for software products may be obtained by telephoning 3Com's Corporate Service Center or an Authorized 3Com Service Center, within the warranty period. Products returned to 3Com's Corporate Service Center must be pre-authorized by 3Com with a Return Material Authorization (RMA) number marked on the outside of the package, and sent prepaid, insured, and packaged appropriately for safe shipment. The repaired or replaced item will be shipped to Customer, at 3Com's expense, not later than thirty (30) days after receipt by 3Com.

WARRANTIES EXCLUSIVE: If a 3Com product does not operate as warranted above, Customer's sole remedy shall be repair, replacement, or refund of the purchase price paid, at 3Com's option. THE FOREGOING WARRANTIES AND REMEDIES ARE EXCLUSIVE AND ARE IN LIEU OF ALL OTHER WARRANTIES, EXPRESS OR IMPLIED, EITHER IN FACT OR BY OPERATION OF LAW, STATUTORY OR OTHERWISE, INCLUDING WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE. 3COM NEITHER ASSUMES NOR AUTHORIZES ANY OTHER PERSON TO ASSUME FOR IT ANY OTHER LIABILITY IN CONNECTION WITH THE SALE, INSTALLATION, MAINTENANCE OR USE OF ITS PRODUCTS.

3COM SHALL NOT BE LIABLE UNDER THIS WARRANTY IF ITS TESTING AND EXAMINATION DISCLOSE THAT THE ALLEGED DEFECT IN THE PRODUCT DOES NOT EXIST OR WAS CAUSED BY CUSTOMER'S OR ANY THIRD PERSON'S MISUSE, NEGLECT, IMPROPER INSTALLATION OR TESTING, UNAUTHORIZED ATTEMPTS TO REPAIR, OR ANY OTHER CAUSE BEYOND THE RANGE OF THE INTENDED USE, OR BY ACCIDENT, FIRE, LIGHTNING, OR OTHER HAZARD.

Limitation of Liability. IN NO EVENT, WHETHER BASED IN CONTRACT OR TORT (INCLUDING NEGLIGENCE) SHALL 3COM BE LIABLE FOR INCIDENTAL, CONSEQUENTIAL, INDIRECT, SPECIAL, OR PUNITIVE DAMAGES OF ANY KIND, OR FOR LOSS OF REVENUE, LOSS OF BUSINESS, OR OTHER FINANCIAL LOSS ARISING OUT OF OR IN CONNECTION WITH THE SALE, INSTALLATION, MAINTENANCE, USE, PERFORMANCE, FAILURE, OR INTERRUPTION OF ITS PRODUCTS, even if 3com or its authorized reseller has been advised of the possibility of such damages.

Some states do not allow the exclusion of implied warranties or the limitation of incidental or consequential damages for consumer products, so the above limitations and exclusions may not apply to you. This warranty gives you specific legal rights which may vary from state to state.

3Com Corporation

5400 Bayfront Plaza Santa Clara, CA 95052-8145 (408) 764-5000

Before You Begin

This guide provides information to install and maintain the NETBuilder II® dual power supply (DPS) system. This system is available with an eight-slot chassis only. (The number of slots refers to the number of input/output (I/O) slots.)

This guide is written for network equipment installers or network managers responsible for installing and using network hardware and managing the attached networks. It assumes a working knowledge of network operations, but does not assume prior knowledge of 3Com® internetworking equipment.



NOTE: If the information in the release notes shipped with your NETBuilder II dual power supply differs from the information in this guide, follow the release notes.

If you are looking for:	Turn to:
Installation	Chapter 1
Maintenance	Chapter 2
Overview, Description of components, Specifications	Appendix A

A special format indicates notes, cautions, and warnings. These messages are defined as follows:

Special Messages



NOTE: Notes call attention to important features or instructions.



CAUTION: Cautions contain directions that you must follow to avoid immediate system damage or loss of data.



WARNING: Warnings contain directions that you must follow for your personal safety. Follow all instructions carefully.

Chapter 1 NETBuilder II Dual Power Supply System Installation

This chapter describes the tasks involved in installing the NETBuilder II dual power supply (DPS) system. In this manual, each power supply is referred to as a power supply module. When the two modules are installed in the DPS chassis, the unit is then referred to as the DPS system. The DPS system adapter is the unit that is installed into the NETBuilder II.

Table 1-1 summarizes these tasks in the order in which they should be performed. It also indicates where to find detailed instructions.

Table 1-1. Tasks for NETBuilder II DPS Installation

Task	Where to Find Information*
Preinstallation	"Preinstallation Checklist"
Installing the power supply module	"Installing the Power Supply Module"
Installing the DPS system adapter	"Installing the DPS System Adapter"
Mounting the NETBuilder II DPS system	"Mounting the NETBuilder II DPS System"
Attaching the DPS system cable between the DPS and the NETBuilder II, and attaching the power cable	"Attaching the Cables"

^{*} Unless you are referred to another manual, the information is in the specified section of this chapter.

Preinstallation Checklist

Read through the following checklist before proceeding to the installation instructions.

1. Inspect the DPS chassis, the power supply module, the DPS system adapter, and the DPS system adapter cable for shipping damage.

If you find any damage, contact the shipping company to file a report. If the unit must be returned to your network supplier, ship it in the original shipping carton. If the original carton was damaged in shipment, repack the unit in a carton that provides equivalent protection.



CAUTION: Ensure that the power supply module is 170w. The fan guard should be a circular, honeycombed vent on the face plate. In addition, the power supply module will not seat properly if it is not a 170w module. Contact your network supplier if the existing power supply in your NETBuilder II 8 slot is not 170W.

Installing the Power Supply Module

2. Verify that you have received all items on the packing lists included with the DPS system.

If you have not received all items on the packing list, contact your network supplier.

3. Verify that the power supply specifications listed in Appendix A correspond to your facility's available power source.

If the available power source does not correspond to the acceptable range, contact your network supplier for assistance.

4. Verify that for startup you have the minimum configuration recommended in the specifications in Appendix A.

Installing the Power Supply Module

Complete the following procedures to install the power supply module:

- Remove the power supply module from the NETBuilder II chassis
- Transfer that power supply module to the DPS chassis
- Install the DPS system adapter in the NETBuilder II chassis

Refer to the steps listed in Figure 1-1 for more detail.



CAUTION: Ensure that both power supply modules are 170w. (The fan guard should be a circular, honeycombed vent on the face plate.) Contact your network supplier if the existing power supply in your NETBuilder II 8 slot is not 170W.



NOTE: Since the power supply module can be removed from the rear of the system, it is not necessary to remove the system from the rack if it is so mounted.

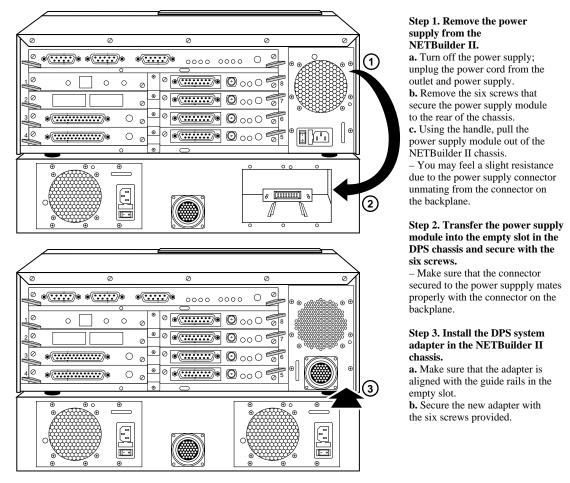


Figure 1-1. Installing the Dual Power Supply Module

Mounting the NETBuilder II Dual Power Supply System

Mount the NETBuilder II DPS system on a tabletop or in a 19-inch, two-or four-pole rack. You can mount the DPS system above or below the 8-slot NETBuilder II system. The following sections provide instructions on mounting the system using both methods.

Mounting the DPS System on a Tabletop

To mount your DPS on a tabletop, complete the instructions in Figure 1-2.

Mounting the NETBuilder II Dual Power Supply System

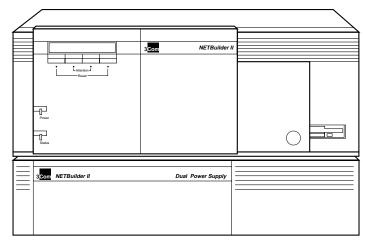


Figure 1-2. Mounting the DPS System on a Tabletop

Step 1. Place the system on a firm, flat surface.

 Do not mount the system at an angle greaterthan 15 degrees in any direction.

Step 2. Make sure that the air intake and fan exhaust vents (on the right side of the cover and the rear of the chassis) are not blocked. Leave at least 5 inches (12.7cm) of free space for air intake and fan exhaust.

Step 3. Make sure that the rear of the system is not up against a wall or some other obstruction. Leave approximately 9 inches (22.9 cm) of free space at the rear of the system for cable clearance.

Mounting the DPS System in a Rack

A rack mount kit comes with your DPS system. The kit provides two brackets and six flat-head screws that enable you to mount the DPS system in a 19-inch, two- or four-pole rack.

Verify that you have received all parts for the rack mounting kit listed above. If a part is missing, contact your network supplier.

You will need a Phillips screwdriver to mount the DPS system in your rack. You probably will need two people to perform step 3 in the following procedure; one person to hold the DPS system and the other to attach it to the rack.

One person should hold the DPS system between the poles of the rack, while the other attaches the unit to the poles. Attach the unit to the rack with the #10-32 pan-head screws with integral lock washers (two on each side) and the #10-32 spring-clip captive nuts (refer to Figure 1-3).



CAUTION: Using fewer than the six screws (three on each side) to secure the rack mount brackets to the sides of the system may result in the system falling and sustaining damage. The warranty does not cover such an event.

To mount the DPS system in a rack, complete the instructions in Figure 1-3.

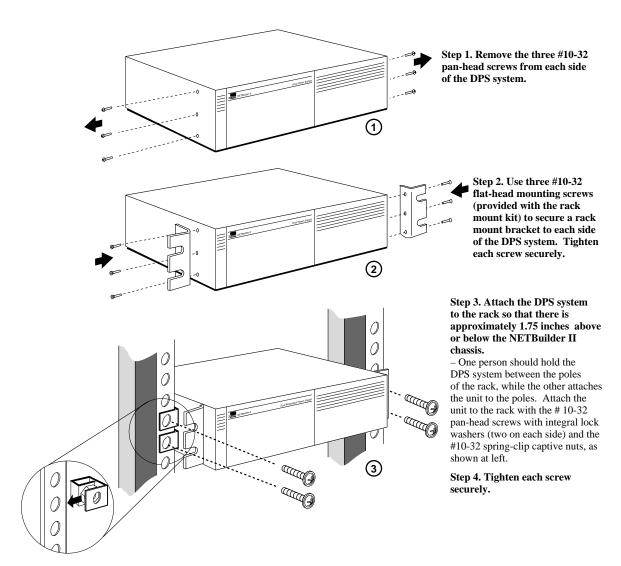


Figure 1-3. Mounting the DPS System in a Rack

Installing the Cables

The DPS system comes with two cables: a 37-pin DC DPS system cable and a power cord for the power supply module. The 37-pin cable that connects your DPS system to the NETBuilder II is supplied by 3Com. To install the DPS system cable, complete the instructions in Figure 1-4.

1-6

Installing the Cables

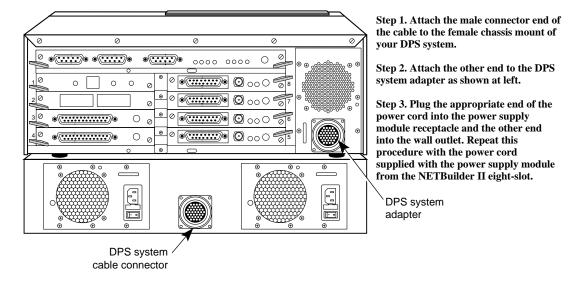


Figure 1-4. Connecting the DPS System to the NETBuilder II

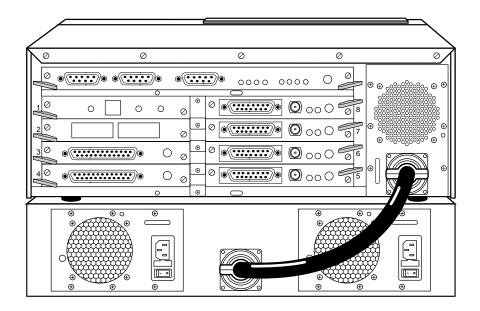


Figure 1-5. NETBuilder II Connected to the DPS



CAUTION: Before turning on the NETBuilder II base system for the first time, make sure that a blanking plate or an I/O module resides in each I/O slot and that the cover is properly secured in place. Turning on the system without a blanking plate or an I/O module in each I/O slot or without a cover in place can cause the system to overheat. The warranty does not cover such events.

You have now completed the installation of your NETBuilder II DPS system and are ready to start it up.

Chapter 2 NETBuilder II DPS System Maintenance

This chapter provides information on maintaining the NETBuilder II DPS system basic hardware.

Preventive Maintenance

3Com recommends the following procedures for preventive maintenance:

- Observe the environmental requirements listed in Appendix A of this manual. Temperatures outside the recommended range can impair reliability.
- Keep the area around the DPS system and the NETBuilder II base system clean. Avoid accumulated dust, especially around the air intake vents.



NOTE: Both power supplies in the DPS system must have 170w usage. (The fan guard should be a circular, honeycombed vent on the face plate.) Contact you network supplier if the existing power supply in you NETBuilder II is not 170w.

Replacing a Power Supply Module

You can replace the power supply modules one at a time and still remain operational. Replace a power supply module in the DPS chassis by using the instructions in Chapter 1.



CAUTION: When replacing a power supply module, the other module can continue running, but the switch on the failed module and its replacement module must be turned off while removing and seating it in the DPS chassis. Once properly seated, it can be turned on.



WARNING: Do not open the power supply module. It contains hazardous voltages. There are no user-serviceable parts inside.

VORSICHT: Öffnen sie niemals das Netzteil. Hochspannung! Es sind keine zu wartenden Teile enthalten..

AVERTISSEMENT: Ne pas ouvrir ce bloc d'alimentation. Tensions dangereuses à l'intérieur. Ne contient aucune pièce que l'utilisateur puisse rèparer.

PELIGRO: No abra fuente de alimentación. Contiene alta tensión. No hay partes para reemplazar adentro.

Should any component in either power supply module fail other than a fuse, you will need to replace that entire power supply module, (but not the chassis).

Replacing a Fuse

Replacing a Fuse

The following section explains how to replace a fuse located in your DPS system. The NETBuilder II eight-slot system can remain operational while a fuse is being replaced.

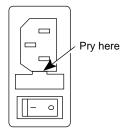
A fuse is located in the AC power switch/fuseholder/receptacle assembly of each power supply module mounted in a removable cartridge on the rear of the DPS chassis.



WARNING: If your system persistently blows fuses, there might be a problem with either your power supply or your facility's supply voltage. Contact your network supplier for assistance.

For continued protection against fire hazard, replace the fuse only with a fuse of the same type and rating. Using an incorrect fuse can subject your system to overcurrent conditions, resulting in damage or unsafe operating conditions.

Complete the instructions in Figure 2-1 to replace the fuse. You will need a small, flathead screwdriver.

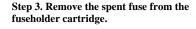


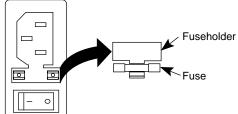
Step 1. Turn off the power supply module; unplug the power cord from the outlet and from the power supply receptacle.

- The other power supply module can remain running; you don't have to turn it off

Step 2. Remove the fuseholder cartridge from the power switch/fuseholder/ receptacle assembly.

 Insert the small, flathead screwdriver into the slot as shown at left. Remove the fuseholder cartridge.





Step 4. Replace the old fuse with a new fuse.-Use a 6-amp, 250 v, fast-blow fuse, 5mm by

–Use a 6-amp, 250 v, fast-blow fuse, 5mm by 20mm in size.

Step 5. Reinstall the fuseholder cartridge into the power switch/fuseholder/receptacle assembly.

Step 6. Verify that the power switch is in the off position (the 0 side of the switch should be depressed). Plug the appropriate end of the power cord into the power supply receptacle and the other end into the outlet. Turn on the power supply module.

Figure 2-1. Removing and Replacing the Fuseholder Cartridge



CAUTION: Before turning on the NETBuilder II base system for the first time, make sure that a blanking plate or an I/O module resides in each I/O slot and that the cover is properly secured in place. Turning on the system without a blanking plate or an I/O module in each I/O slot or without a cover in place can cause the system to overheat. The warranty does not cover such events.

Appendix A NETBuilder II DPS System Overview

This appendix provides an overview of the NETBuilder II DPS system. It summarizes the system's features, describes its basic hardware and accessories, and provides specifications.

Feature Summary

Table A-1 summarizes the NETBuilder II dual power supply features.

Table A-1. NETBuilder II DPS System Features

Features	Summary
Eight-slot support	Supports the eight-slot NETBuilder II only.
Load balancing	Demand balanced between power supply modules.
Separate fuses and AC power cords	Each power supply has its own fuse assembly; each has its own power cord.
" Modified hot- swappable"	One power supply can be replaced while the other remains running. (The switch must be turned off before unplugging or pulling the unit out.)
Autoranging power supply	Automatically adjusts the internal supply voltage to the NETBuilder II base system. No operator intervention is necessary to switch between 115- and 230-VAC operation.
Rack or tabletop mounting	Can be mounted on a tabletop or in a 19-inch, two- or four-pole rack.

You can monitor the power and operational status using the back panel LEDs of the DPS system.

Description

The following section describes the basic hardware and accessories of the NETBuilder II dual power supply. The basic hardware consists of the following:

- DPS chassis (includes three #10-32 pan-head screws on each side)
- 37 pin DC DPS system cable
- DPS system adapter (includes 6 screws)
- Power cord (one for each power supply)

The accessories consist of the following:

■ Rack mount kit (includes six #10-32 flat-head screws; three for each side)

Figures A-1 and A-2 show the front and rear views of the DPS system with the NETBuilder II system. Note that Figure A-2 does not include the DPS system cable.

Dual Power Supply System

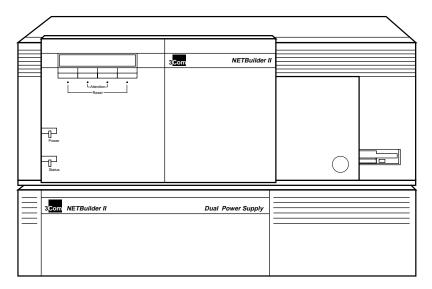


Figure A-1. Front View of the DPS System with the NETBuilder II System

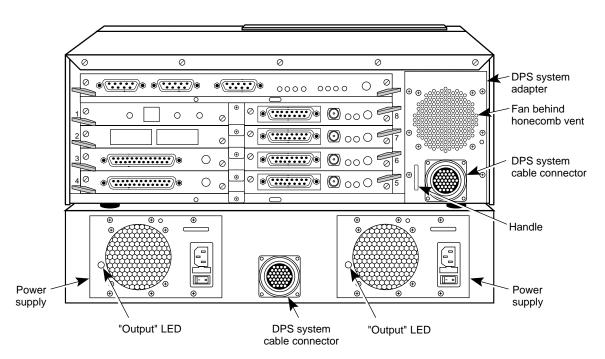


Figure A-2. Rear View of the DPS System with the NETBuilder II System

Dual Power Supply System

When installed, the DPS System consists of two power supply modules (including two fans, and two switch/fuseholder/receptacle assemblies).

The power supplies are autoranging, which means internally adjusting (autoranging) the supply voltage to the NETBuilder II eight-slot chassis automatically. No operator intervention is required for switching between 115- and 230-VAC operation.

A circular opening in each power supply enclosure reveals the fan inside. The fan opening serves as an air exhaust vent.

The switch/fuseholder/receptacle assemblies (one for each power supply) are accessible from the rear of the chassis, as shown in Figure A-3.

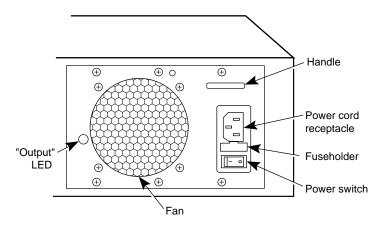


Figure A-3. Switch/Fuseholder/Receptacle Assembly

The AC power switches are marked according to international I/0 convention: when the I side is depressed, the switch is on; when the 0 side is depressed, the switch is off.

The fuseholder cartridges provide access for fuse replacement. One fuse is mounted in each removable cartridge. Refer to Chapter 2 of this manual for information on replacing the fuses.

The power supply modules are easy to remove and replace. Each module has a handle that helps in removing it from the chassis. Refer to Chapter 1 of this manual for details on removing and replacing the power supply modules.

The power supply output LED is lighted continuously when all outputs of that power supply module are operating. It shuts off when the output deviates or becomes irregular. In this event, the load is transferred to the other operating power supply module. To correct the situation, you may need to replace the module; contact your network supplier.

Dual Power Supply System

Cables

The international CEE-22 AC power receptacles are approved for 6-amp operation. Each DPS system cable connector has three prongs with a chassis ground on the middle prong. The interconnecting cable that connects the DPS system and the NETBuilder II base system is a custom cable, which is provided. None other will work. Figure A-4 shows the 37-pin DPS system cable that connects the DPS system with the NETBuilder II, 8-slot system.

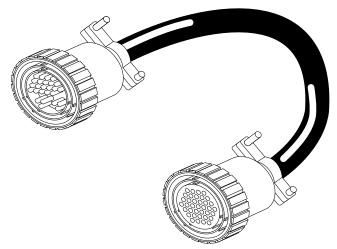


Figure A-4. 37-Pin DPS System Cable

In addition, each power supply module is shipped with a power cord; if the power cord does not match your requirements, contact your network supplier for assistance.

Rack Mount Kit

A rack mount kit comes with the NETBuilder II DPS system. The contents of this kit enable you to mount your system in your 19-inch, two- or four-pole rack.

The kit consists of two brackets and six #10-32 flat-head screws. The brackets should be secured to the sides of the system. The system in turn should be secured via the brackets in the desired position in the rack. For information on how to install the NETBuilder II DPS system in your rack, refer to Chapter 1 of this manual.

DPS System Adapter

Figure A-5 shows the DPS system adapter, which contains a fan and the connector for the DPS system 37-pin cable.

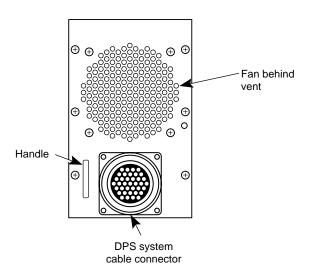


Figure A-5. DPS System Adapter

Specifications

Table A-2 lists the physical dimensions of the NETBuilder II DPS system.

Table A-2. Physical Dimensions of the NETBuilder II DPS System

Length (Depth)	Width	Height	Weight* DPS/adapter	Weight* DPS/no adapter
16.25 in	17.4 in	5.10 in	31.8 lbs	26.8 lbs
41.27 cm	44.2 cm	12.95cm	14.44kg	12.17kg

^{*} The weight includes the DPS chassis and two power supply modules

Tables A-3 and A-4 list the electrical and environmental requirements, respectively, for safe, reliable operation.

Table A-3. Electrical Requirements for the NETBuilder II DPS System

Parameter	Requirement	
Input voltage	115/230 VAC	47 to 63 Hz
Input voltage ranges	90 to 132 VAC or 180 to 264 VAC	Either range accepted without user switching
Maximum current consumption	3.25A @ 115 VAC 1.63A @ 230 VAC	Fuse: 6A, 250 V, fast blow, 5 mm x 20 mm
Power usage	374W	
Power dissipation	204W	
Heat Dissipation	696 BTU/hr (maximum)	

Specifications

Table A-4. Environmental Requirements for the NETBuilder II DPS System

Parameter	Requirement	
	Minimum	Maximum
Temperature:		
NBII Operating	41°F (5°C)	104°F (40°C)
NBII Nonoperating	-4F° (-20°C)	140°F (60°C)
DPS Operating	32°F (0°C)	122°F (50°C)
DPS Nonoperating	-40°F (-40°C)	167°F (75°C)
Altitude:		
Operating	Sea level	15,000 ft (4572 m)
Nonoperating	Sea level	40,000 ft at 32°F (12,191 m at 0°C)
Relative Humidity:		
Operating	20% noncondensing	80% noncondensing
Nonoperating	10% noncondensing	90% noncondensing

Minimum Configuration

For startup only, the CEC board and at least two other boards are required.

Appendix B Technical Support

3Com provides easy access to technical support information through a variety of services. This appendix describes these services.

Automated Fax Service

3Com's interactive fax service, 3ComFactsSM, provides technical information on 3Com products 24 hours a day, seven days a week. To access this service, dial 1-(408)-727-7021 from anywhere in the world using your touch tone telephone. In Europe, call (44) 442 278279.

Free local access is available within the following countries by using the numbers listed:

France 05 90 81 58
Germany 0130 81 80 63
Italy 1678 99085
Netherlands 06 0228049
Sweden 020 792954
U.K. 0800 626403

Within this service, you may choose to access CardFactsSM, containing adapter information, or NetFactsSM, containing network system product information.

- CardFacts provides adapter installation diagrams, configuration drawings, troubleshooting instruction, and technical articles. Document 9999 provides you with an index of adapter documents.
- NetFacts provides data sheets and technical articles on 3Com's hub, bridge, router, terminal server, and software products. Document 8888 provides you with an index of system product documents.

On-line Technical Services

You can access the following on-line services for software updates, drivers, technical tips, and product information.

3Com Product Information Service

Ask3ComSM is a CompuServeSM-based service containing patches and drivers, technical articles about all 3Com products and an interactive forum for technical questions. To use Ask3Com, you need a CompuServe account. Log in to CompuServe, type GO THREECOM and press [Enter] to see the Ask3Com main menu.

3Com Documentation on CD-ROM

Adapter-Specific Bulletin Board System (BBS)

This private BBS, called CardBoardSM, contains patches and drivers for 3Com adapter products, as well as technical articles. To access CardBoard, call the CardBoard telephone number nearest to your location:

France (33) (1) 69 86 69 54

Modem set up to 9600 baud, 8 data bits, no parity, 1 stop bit.

Germany (49) 89 62732-188 or (49) 89 62732-189

Modem set up to 9600 baud, 8 data bits, no parity, 1 stop bit.

Italy (39) (2) 27 30 06 80

Modem set up to 9600 baud, 8 data bits, no parity, 1 stop bit.

U.K. (44) (0) 442 278278

Modem set up to 9600 baud, 8 data bits, no parity, 1 stop bit.

U.S. (1) (408) 980-8204

Modem set up to 14400 baud, 8 data bits, no parity, 1 stop bit.

3Com Documentation on CD-ROM

An extensive library of 3Com product documentation is available in CD-ROM format through Support On-Site for NetworksTM subscription service. This multivendor CD-ROM service, offered by Computer Library, a division of Ziff Communication, contains technical information and documentation from major data networking hardware and software manufacturers. Standalone and concurrent user subscriptions are available. For more information, call Computer Library at (800) 827-7889, extension 515. Outside the U.S., call (212) 503-4400 or use fax number (212) 503-4487.

Warranty Information

3Com's warranty varies by product. For warranty information on your product, refer to your purchase agreement. If you are a non-contracted end customer, refer to the warranty card accompanying the product, or contact your authorized 3Com network supplier for assistance.

Additional Technical Support Services

Additional information about obtaining technical support follows, broken down into three sections:

- U.S. and Canada
- Europe and Africa
- Australia, New Zealand, Asia, Japan, Central America, and South America

Refer to the section that contains information relevant to your location.

U.S. and Canada

Authorized 3Com network suppliers are qualified to provide network planning, installation, hardware maintenance, application training, and support services. Many 3Com network suppliers are uniquely qualified to provide on-site services for products from multiple vendors. Contact your 3Com network supplier first for assistance. If you do not know who this is,

contact your nearest 3Com sales office. To find the 3Com sales office nearest you, call 1-800-NET3Com (638-3266).

Before Contacting Your Network Supplier

Before you talk to your network supplier, make sure that you have detailed information about the problem, including:

- A complete description that includes:
 - The sequence of events or actions that led to the problem
 - The nature, symptoms, and duration of the problem
 - The system components involved
 - Whether or not you can reproduce the problem
- A list of all the 3Com products you have, including:
 - Hardware models and serial numbers
 - Software part numbers and revision levels
- A list of all other products involved in the problem, including:
 - Hardware products (types and model numbers) such as personal computers, monitors, fixed disks, and modems
 - Software products, including operating systems and applications
- A list of all recent system configuration changes, including:
 - Hardware
 - Operating system and application software
 - Network and system administration procedures

Your network supplier will determine what action needs to be taken to resolve the problem.

Returning Products for Repair

If you need to have a product repaired, local 3Com authorized service partners are good sources for quality repairs and spare parts. However, a situation may arise in which you need to return a product directly to 3Com for service. Before doing this, you must obtain a Return Materials Authorization (RMA) number.

Obtaining an RMA Number. To obtain an RMA number, contact 3Com Customer Repair Services at 800-876-3Com. If you have a touch-tone phone, select hardware repair, option #2. If you do not have a touch-tone phone, remain on the line for assistance. You also can fax your repair request to 3Com at 408-764-7120. In order to obtain an RMA number, you must provide the following information:

- Name and phone number of technical contact at your company
- Company name
- Company shipping address
- Product name
- Model and serial numbers of the main unit
- Failed subassembly name and serial number, if applicable

Additional Technical Support Services

- Failure symptoms with diagnostic error messages, if applicable
- Proof of purchase for warranty repairs

If you send a product to 3Com for repair without an RMA number displayed clearly on the outside of the box, it will be returned to you unopened.

Paying for Repairs. You may pay for repairs by C.O.D., MasterCard®, or VISA®. Terms are available only if you have prearranged a special authorization with the 3Com credit department and you enclose a copy of the purchase order with the equipment.

3Com reserves the right to charge for "no problem found," regardless of the product warranty status.

Packing and Shipping Products to 3Com. To ensure the safe arrival and speedy repair of your equipment, follow these packing and shipping guidelines:

- Package carefully, using the original container if possible.
- Wrap controller boards and adapters in antistatic material.
- Do not include cables, software, or documentation.
- Include any problem diagnostic information.
- Include a packing list, purchase order, and other repair documentation.
- Print the RMA number clearly on the outside of the box. (If you send a product to 3Com for repair without an RMA number displayed clearly on the outside of the box, it will be returned to you unopened.)
- Prepay the shipping costs to 3Com.

Ship your products to:

3Com Corporation 5400 Bayfront Plaza RMA Receiving, Attention: RMA (your RMA number) Santa Clara, CA 95052-8145

3Com returns products by air freight, priority 2, and pays all return shipping costs.

Repair Timeframes. Repairs may take up to thirty (30) working days in-house. A 24-hour turnaround option, which includes priority 1 return air freight, is available for an additional expedite charge.

Additional 3Com Support Services

If you want to supplement your network supplier's service, 3Com offers a variety of technical support services including:

- Network Integration Service, a set of professional services that can assist you with large-scale, complex projects
- Annual on-site support contracts
- Annual hardware maintenance contracts
- Technical support service by telephone

- Factory repair service
- Spare parts
- Software update service

You can receive information about these programs and services from your authorized 3Com network supplier or directly from 3Com by calling 1-800-NET-3Com or the 3Com sales office nearest you.

Europe and Africa

Authorized 3Com network suppliers often are equipped to provide repair service. Contact your network supplier first for assistance. If your equipment needs repairs that are not available from your network supplier, or if you purchased your equipment directly from 3Com, you or your network supplier usually will send the equipment to the 3Com Europe repair center in England.

Equipment Warranties and Repair Services

3Com's warranty varies by product. For warranty information on your product, refer to your purchase agreement. If you are a non-contracted end customer, refer to the warranty card accompanying the product, or contact your authorized 3Com network supplier for assistance.

3Com Europe offers a 30-day exchange/repair service (in-house) for most products. A standard charge is made on all items returned for exchange or repair when the product's warranty has expired, whether or not the item is found to be faulty.

When you send items to 3Com Europe for repair, you are responsible for paying all shipping or freight charges. 3Com Europe pays all return freight charges.

3Com Europe may exchange your equipment for an identical part. If you require that your original equipment be repaired rather than exchanged, please note this on the documents you send with your equipment.

Returning Products for Repair

Before you return any product for repair, contact 3Com's European Repair Services by phone or fax with your purchase order or reference number, and include shipping and flight information with the shipping date.

Phone: (44) 44 2 278 125Fax: (44) 44 2 236 824

The account administrator for your country will assist you with your repair needs.

Preparing Your Equipment for Shipment

To ensure that your equipment arrives without damage and can be traced through the repair process, please prepare it in the following manner:

- Attach a reference number to equipment that is under warranty.
- Include a purchase order for the repair work if the equipment is not under warranty.

Additional Technical Support Services

- Make sure that the packing list you include with your equipment has the following information on it:
 - Reference number you assigned to the equipment (for equipment under warranty)
 - Model, item, or part number
 - Unit or board serial number (for warranty repairs only)
 - Proof of purchase (for end customer warranty repairs)
 - Fault diagnosis attached to each unit
- Pack equipment carefully.
- Enclose all network adapters and units that have exposed boards in Faraday cage-type shielding material to prevent electrostatic damage.

Send equipment to:

European Repair 3Com Europe Ltd. ISOLAN House Brindley Way London Road Hemel Hempstead Hertfordshire

HP39 XJ England

If you are sending equipment from outside England, please contact European Repair Services to determine your nearest logistics centre.

Australia, New Zealand, Asia, Japan, Central America, and South America

3Com's warranty varies by product. For warranty information on your product, refer to your purchase agreement. If you are a non-contracted end customer, refer to the warranty card accompanying the product, or contact your authorized 3Com network supplier for assistance.

Authorized 3Com network suppliers are qualified to provide network planning, installation, hardware maintenance, application training, and support services. Contact your 3Com network supplier first for assistance. If you do not know who this is, contact your nearest 3Com sales office.

For Australia and New Zealand:

3Com Intercontinental sales office (Sydney, Australia) 61 2 9593020

For Asia:

3Com Asia, Ltd.

Hong Kong office 852 8489200 Singapore office 65 3218929 Taiwan office 886 2 7754352

For Japan:

3Com KK (81) 3 3243-9234

For Central America and South America: Icon Support in the U.S. (fax) 408 7645742

Index

Numerics 3Com product support. See technical support A Ask3Com, B-1 B before you begin, xi Begin, xi bulletin boards, B-1	installing the power supply module , 1-2 M maintenance replacing a fuse , 2-2 replacing a power supply module , 2-1 minimum configuration , A-6 mounting the dps system in a rack , 1-4 on a tabletop , 1-3
cable DPS system, A-4 installing, 1-5 power cord, A-4 CardBoard bulletin board system, B-2 configuration (startup), A-6 D description of dual power supply, A-1 DPS installation, 1-1 DPS system adapter, A-4 cables, A-4 components, A-2 front view, A-1 rear view, A-1 dual power supply module installation, 1-2	Network Integration Service , B-4 network supplier , B-2 O overview AC power switches , A-3 cables , A-4 description of DPS system , A-1 DPS system components , A-2 features , A-1 minimum configuration , A-6 specifications , A-5 P power cord , A-4 preinstallation checklist , 1-1 preventive maintenance , 2-1 product support. See technical support
E equipment repair , B-2 F feature summary , A-1 I installation cables , 1-5 completed , 1-6 dps system , 1-1 power supply module , 1-2 rack mount , 1-4 tabletop , 1-3 installing the DPS , 1-1	rack mount , 1-4 rack mount kit , A-4 repair service , B-2 replacing a fuse , 2-2 replacing a power supply module , 2-1 RMA number , B-3 S special messages, 1- , xi support. See technical support T tabletop mount , 1-3 technical support

Africa, B-5
Asia, B-6
Australia, B-6
Canada, B-3
Europe, B-5
Japan, B-6
Latin America, B-6
New Zealand, B-6
South America, B-6
United States., B-3