



Digital 2100 Server

H7893 Power Supply Installation and Configuration

EK-H7893-IN. A01

April 1994

This document includes all information that is required to install and configure the H7893 power supply in the Digital 2100 Server Model 500MP system..

April 1994

Digital Equipment Corporation makes no representations that the use of its products in the manner described in this publication will not infringe on existing or future patent rights, nor do the descriptions contained in this publication imply the granting of licenses to make, use, or sell equipment or software in accordance with the description.

Copyright © Digital Equipment Corporation, 1994. All Rights Reserved.

The following are trademarks of Digital Equipment Corporation: Digital and the DIGITAL logo.

All other trademarks and registered trademarks are the property of their respective holders.

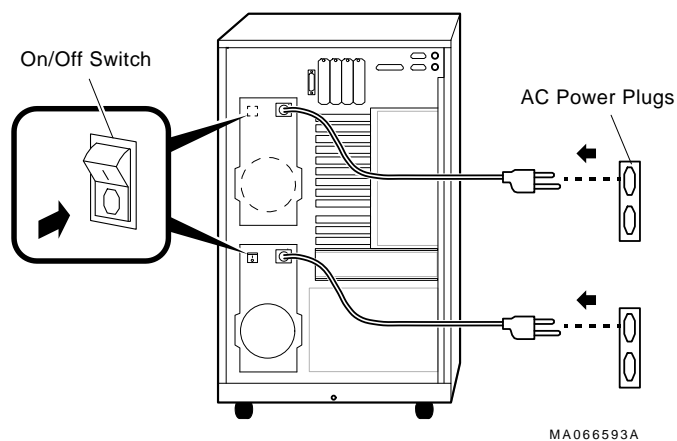
FCC Notice: The equipment described in this manual generates, uses, and may emit radio frequency energy. The equipment has been type tested and found to comply with the limits for a Class A computing device pursuant to Subpart J of Part 15 of FCC Rules, which are designed to provide reasonable protection against such radio frequency interference when operated in a commercial environment. Operation of this equipment in a residential area may cause interference, in which case the user at his own expense may be required to take measures to correct the interference

S2489

Model 500MP Power Supply Installation and Configuration

The following steps describe how to install and configure an H7893 power supply.

Step 1: Perform a Power Shutdown



Caution: Before opening or removing system panels:

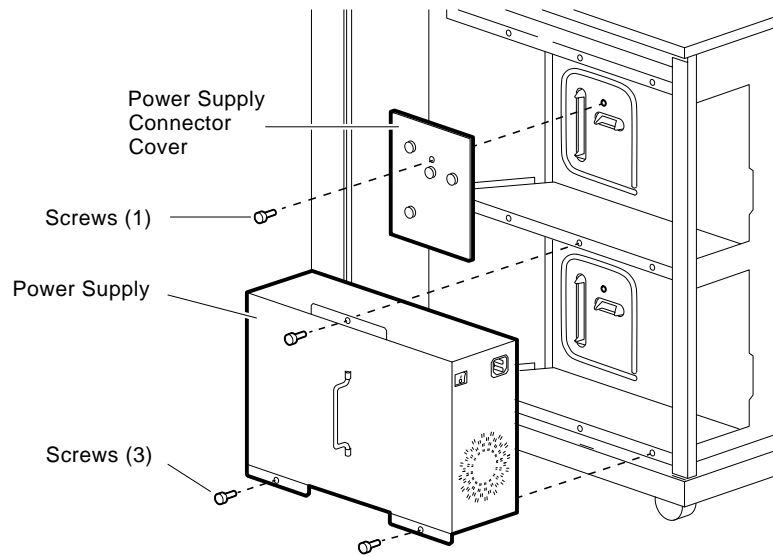
1. Perform orderly shutdown of the operating system.
2. Shut off the DC power switch on the operator control panel.
3. Shut off AC power by setting the AC On/Off switch on each power supply to Off.

Note: The power supply on your system may not have an AC On/Off switch.

4. Unplug the AC power cord for each power supply.

H7893 Power Supply

Step 2: Installing the Power Supply and Removing the Cover



MA067793



Hazardous voltages contained within. Do not open or attempt to service this unit. Return to factory.

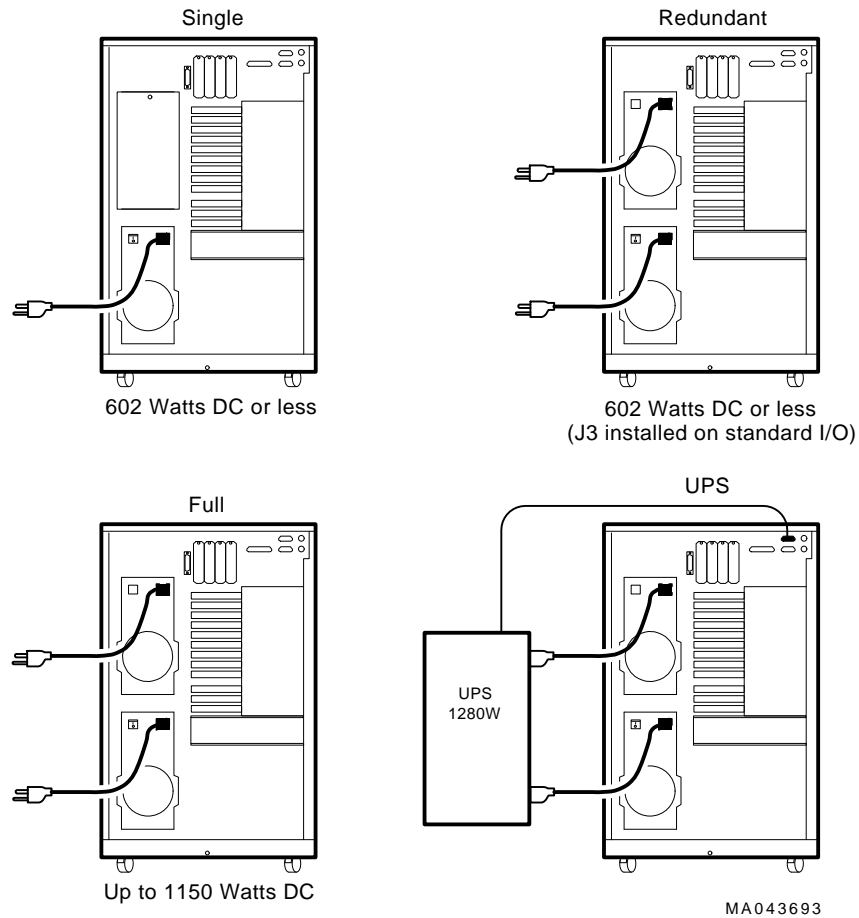


- Plug this unit into a properly grounded power receptacle.
- No voltage selection is required.
- If more than one unit is used, both must be unplugged to remove power from the system.

H7893 Power Supply

Step 3: Configuring the Power Supply

The following art shows four possible configurations.



The uninterruptible power supply (UPS) selected must have provisions for total leakage currents to exceed 3.5 ma. The UPS AC input should be fixed, or pluggable Type-B and should have a label for high-leakage current and earth connection.

H7893 Power Supply

Note

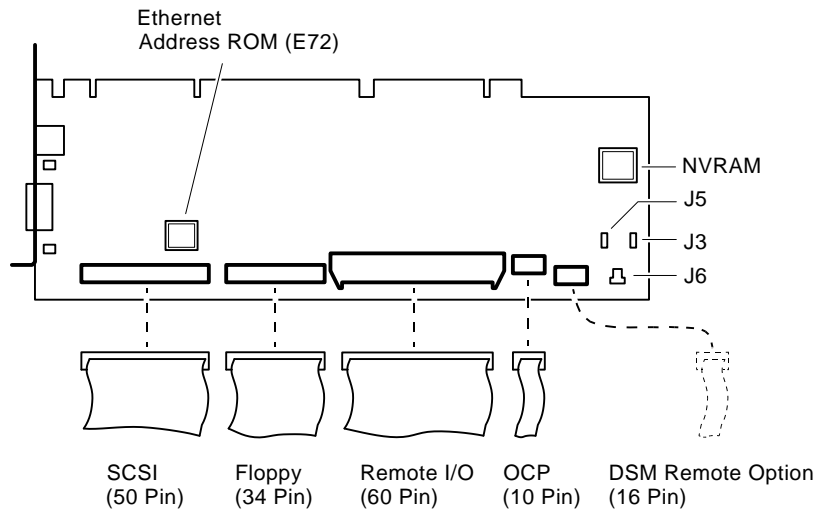
Both power cords can be plugged into a duplex receptacle.

Rating for Each Power Cord

Configuration	100 V – 120 V	220 V – 240 V
Single	8.5 A	4.0 A
Full	7.0 A	3.5 A
Redundant	4.25 A	2.0 A

H7893 Power Supply

Step 4: Setting the I/O Switches



MA060393

Reference the Digital 2100 Model 500MP service or owner's guides for I/O location.

I/O Jumper Configuration

Jumper J3 controls the following two modes:

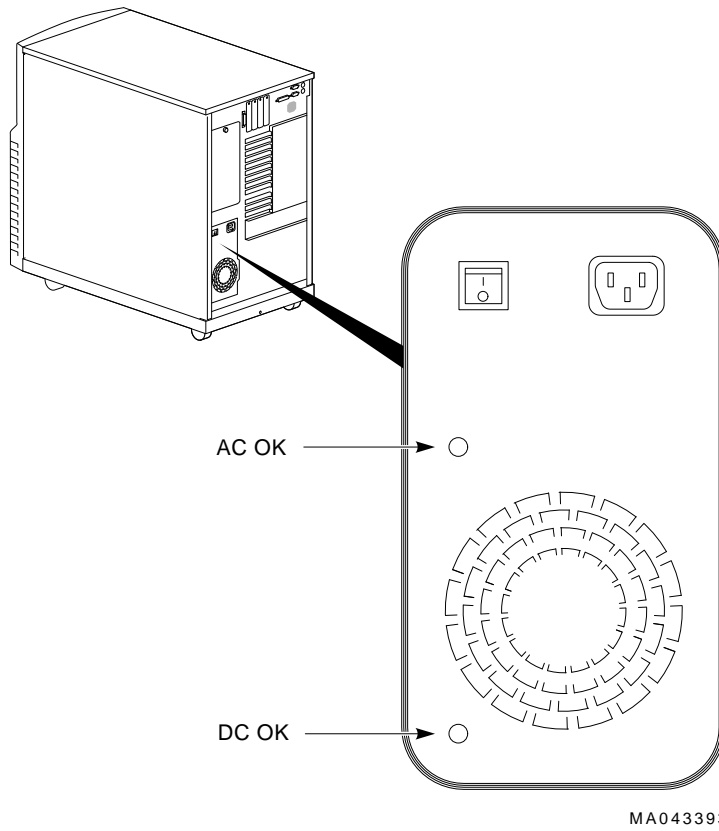
Jumper Status	Mode
Installed	Redundant
Not Installed	Parallel

Note

The H7893 power operating system controls the power-up sequence for disk spin-up.

H7893 Power Supply

Power Controller LEDs



Note

The power supply on your system may not have an AC On/Off switch.

H7893 Power Supply

LED Functions

LED	LED Status
AC OK (green)	
On	AC power is on and the fuse is functioning properly.
Off	Power supply is not plugged in or has failed.
DC OK (green)	
On	DC power is on and voltages are within correct operating levels.
Off	Power supply has failed or DC not enabled.

H7893 Power Supply

Power Supply Specifications

Input Voltage Characteristics

Parameter	Minimum	Requirements	
		Nominal	Maximum
Input voltage range			
Low range	90 Vrms	100 – 120 Vrms	128 Vrms
High range	180 Vrms	220 – 240 Vrms	256 Vrms
Overvoltage line surge			
Low range			150 Vrms
High range			300 Vrms
Input current			
Low range		8.5 Arms	
High range		4.0 Arms	
Inrush current			50 A Pk

H7893 Power Supply

Output Voltage Characteristics

Parameter	+3.3 Vdc Output	+5.1 Vdc Output	+12.1 Vdc Output	-12.0 Vdc Output
Voltage				
Minimum	3.25 Vdc	4.95 Vdc	11.6 Vdc	-12.6 Vdc
Nominal	3.35 Vdc	5.10 Vdc	12.1 Vdc	
Maximum	3.45 Vdc	5.25 Vdc	12.7 Vdc	-12.0 Vdc
				-11.4 Vdc
Current				
Minimum	3.0 A	5.0 A	0.0 A	0.0 A
Maximum	39.0 A*	62.0 A	12.5 A	1.0 A
Startup	39.0 A*	62.0 A	25.5 A	1.0 A
Power				
Maximum	130.7 W	310.0 W	145.2 W	12.0 W
Startup	130.7 W	310.0 W	308.6 W	12.0 W

Environmental Specifications

Parameter	Range
Operating temperature	10°C – 35° C
Operating humidity	10% – 90% noncondensing maximum wet bulb of 32° C

* For H7893-BA, 41.0 A.

H7893 Power Supply

Ordering Information

Power Supply

Power Supply	Order Number
H7893-AA	30-41274-01
H7893-BA	30-41274-02

Documentation

Document	Order Number
<i>Digital 2100 Server Model 500MP/500MP-R/600MP Series Service Guide</i>	EK-KN450-SV
<i>Digital 2100 Server Model 500MP Series Owner's Guide</i>	EK-KN450-OP