

PL-HD200

Operation Instructions

This hard disk unit is made by the Digital Electronics Company for use with its Panel Computer PL-X900Series devices. This 2.5 inch 2.1G hard disk is designed to be installed inside a Panel Computer.

(All product names that appear in this manual are the trademarks of their respective companies)



Warning - Safety Precautions

- Be sure not to jar or bump this unit when installing it in the Panel Computer. Also, be sure to check that the Panel Computer's power is disconnected before installing the hard disk in order to prevent electrical shock.
- Do not attempt to modify or open this unit, due to the danger of shock or fire.
- When installing this hard disk, be sure to read the following "3. Installation" section's information completely to insure that the unit is correctly installed.

To Prevent Accidents

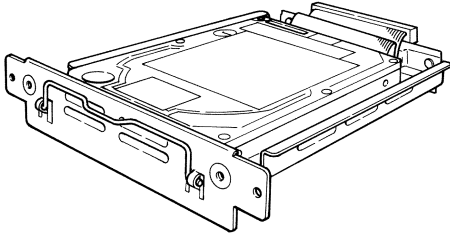
- Since the PL-HD200 is a precision instrument, be sure it is neither hit by nor pressed strongly against another object. After unpacking, be sure the unit is not dropped or jolted during installation. Also, a PL built in to a larger unit (i.e. operation panel) should be removed and packed separately prior to shipping.
- Be sure water, liquids or metal particles are not allowed to enter the unit. Any of these may cause either a breakdown or an electrical shock.
- Do not place or store this unit in a location where there is direct sunlight, excessive heat, dust or vibration.
- Do not store or operate this unit near chemicals, or where there are chemical fumes.
- Do not allow anyone other than Digital's own service staff to perform maintenance or adjustments to this unit.

Package Contents

Please check that the following items are all included in your package.

PL-HD200

(1)



**Operation Instructions (1)
(PL-HD200)**

Operation
Instructions

Digital has taken the utmost care to insure the quality of this product when it was shipped, however, should, for any reason, problems or damage have occurred during shipping, please contact your Digital representative immediately for service.

1 Hardware Specifications

Features

Memory Capacity	2.1G bytes
Sector Size	512 bytes/Sector
No. of Disks	1
No. of Logic Heads	2
No. of User Cylinders	9280
Ave. Seek Time	13msec
Electric Power	At Startup: 4.7W (TYP) Read/Write: 2.0/2.1 (TYP) During Wait: 0.3W(TYP)
Interface	ATA-4 (E-IDE)
Lifetime	5 years, or 20,000 operating hours, whichever comes first



- ***The PL-HD110 has a finite usage lifetime. Therefore, be sure to back up all HDD data regularly or prepare a backup HDD unit.***
- ***The HDD unit's lifetime depends on the type of usage and surrounding environment, which may either lengthen or shorten the figure given here. This figure is for reference purposes only.***

Environment

Operating Temperature	0 to 50deg. C
Storage Temperature	-10 to 60 deg. C
Ambient Humidity	30 to 85% (no condensation)
Noise Resistance (Depends on Noise Simulator)	Noise Voltage: 1500Vp-p Pulse Width: 50ns,500ns, 1us
Static Resistance	4kV
Vibration Resistance	0.5G (10 to 25Hz)
Shock Resistance	(shipped condition) 500G

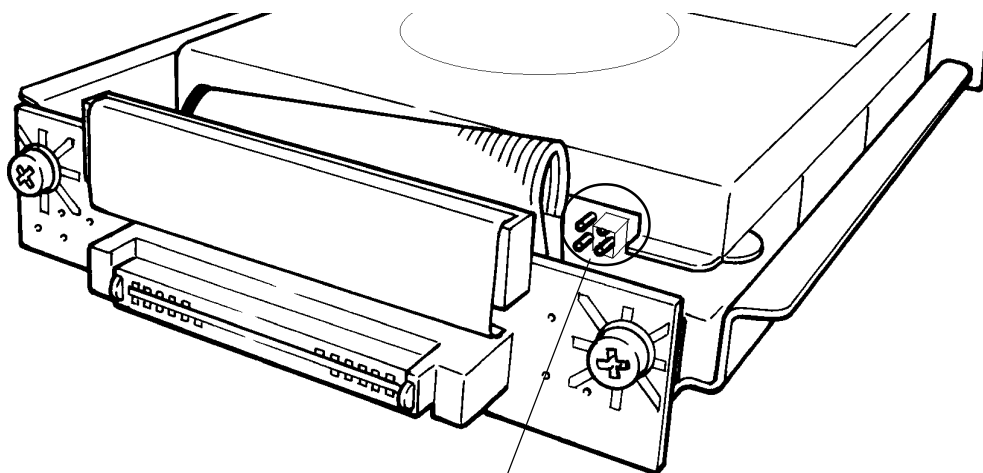


- ***The environment specifications given here are for a PL that is built into a metal panel.***
- ***The Digital Electronics Corporation does not guarantee the preservation of any data stored on the HDD if the HDD has an accident, malfunctions or is damaged in any way. Therefore, the regular backing up of important HDD data to either a floppy disk, or other type of suitable magnetic media is strongly recommended.***
- ***This HDD has a finite usage lifetime. The lifetime figure given in this document's Performance Specifications is for reference, and the regular exchanging of the current HDD unit for a new HDD unit is strongly advised.***

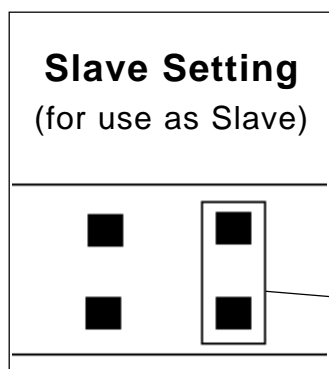
2 Hard Disk Unit Settings

The PL-HD200 is factory set for use as the PL's slave drive, however, if the user desires to change this setting so that the PL-HD200 can be used as the PL's Master drive, follow the procedures given below.

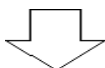
<PL-HD200 Front Face Connector>



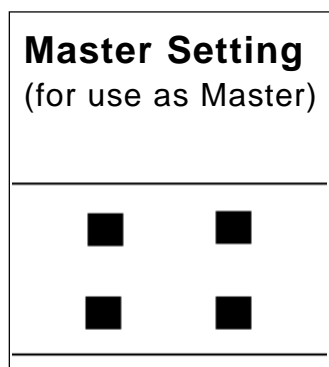
1)



Jumper Plug



2)



When using the PL-HD200 as a Master, be sure to remove the right side's jumper plug.



- **All of Digital's PL-X900 series units have a built-in hard disk unit. These units, when shipped, are all set as the PL's master, When an additional HDD unit is used(PL-HD200), be sure to set this unit's the jumper plug to slave.**
- **Except for the short plug shown here, do NOT use any other short plugs with the PL-HD200, since it can cause a malfunction or damage the unit.**

3

Installation

Use the following steps to install the PL-HD200 in the PL.



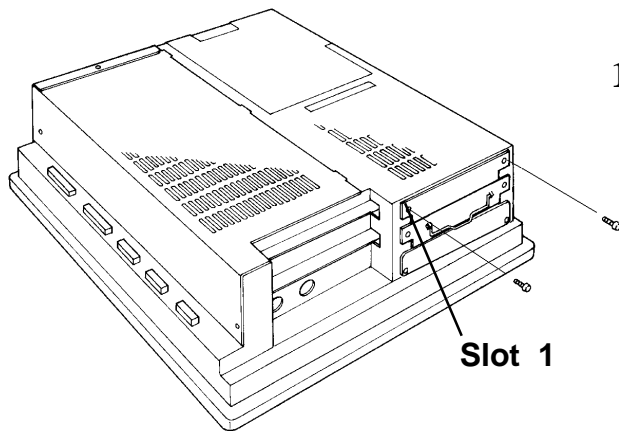
WARNING

WARNING: Shock Danger! Be sure to unplug the PL unit prior to installing the PL-HD200

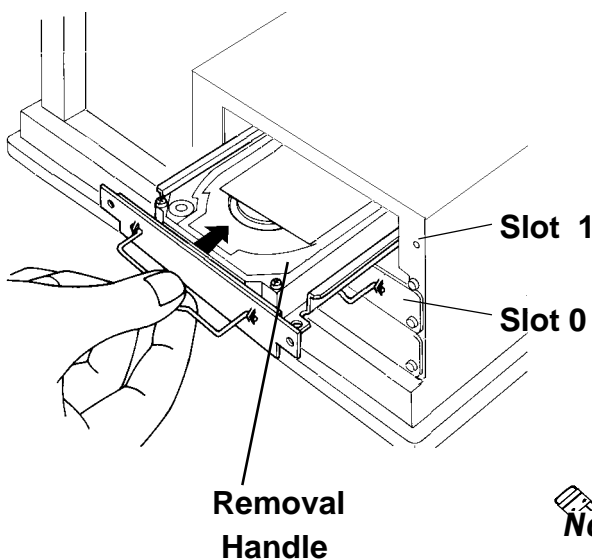
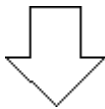


Important

Since the PL-HD200 is a precision instrument, be sure it is neither hit by nor pressed strongly against another object.



- 1) Remove the uppermost (slot 1) expansion slot cover's two (2) attachment screws.



- 2) Hold the PL-HD200's removal handle and slide the unit slowly into the expansion slot, so that the rear face connector is completely inserted into the slot's connector pins.

- 3) Reattach the two (2) expansion slot cover attachment screws.



Note: When installing an HDD unit in slot 0, use the abovementioned installation procedures.

4 Hardware Setup

- 1) Turn the PL unit's power ON.
- 2) When the "Press to enter SETUP" message appears, press your PC's DEL key.

The Setup utility will start and the following screen will appear.[STANDARD COMS SETUP]

```
ROM PCI/ISA BIOS(2A5LEU1C)
STANDARD CMOS SETUP
AWARD SOFTWARE, INC.

Date (mm:dd:yy): Wed,Jul 2 1998

Time (hh:mm:ss): 14 : 50 : 3

          CYLS.HEADS  PRECOMP  LANDZONE  SECTORS  MODE
Drive C:Auto( 0b)  0    0    0    0    0    AUTO
Drive D:Auto( 0b)  0    0    0    0    0    AUTO

Drive A:1.44M,3.5 in.

Video : EGA/VGA
VGA_Text Mode:Normal
Halt On : All, But Keyboard

Base Memory : 640K
Extended Memory:31744K
Other Memory : 384K

Total Memory :32768K

ESC : Quit          : Select Item  PU/PD/+/-:  Modify
F1  : Help          (Shift)F2 : Change Color
```

Operation Keys

Displays the keys used (enabled) during Setup, and their function(s)

Help Information Display Area

Provides detailed information about the currently highlighted (cursor position) item

System Settings Area

Displays the current System Settings for each Menu area (Main, Advanced, Power, etc.)

- 4) Confirm that both the C and D drives are set to [Auto]. This designates that when the PL is started up, the hard disk's parameters are automatically read out and used. If [Auto] is not selected, be sure to change this setting to [Auto]. The [Auto] setting is factory set and recommended for most users.
- 5) Press the [ESC] key to call up the [SAVE & EXIT SETUP] menu.

5 Software Setup

After completing the hardware setup, in order to record all data and application(s) use your OS (MS-DOS or Windows) to create partitions and initialize the hard disk. Please consult your OS's operation manuals for details.

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