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**iPDS™ -130**  
**OPTIONAL FLEXIBLE DISK DRIVE**  
**INSTALLATION INSTRUCTIONS**

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# CONTENTS

<b>iPDS™-130 INSTALLATION INSTRUCTIONS</b>		<b>Page</b>
Introduction .....		1
Reference Documents .....		1
Unpacking Instructions .....		2
Product Description .....		2
Environmental and Power Specifications .....		3
Installation Instructions .....		3
System Checkout .....		5



# FIGURES

<b>Figure</b>	<b>Title</b>	<b>Page</b>
1	iPDS™ System with Three iPDS™-130 Drives .....	1
2	iPDS™-130 Drive .....	2
3	Power Cable .....	4
4	Power Switching Card .....	5
5	Rear Panel of the iPDS™-130 Drive .....	6



# iPDS™-130 INSTALLATION INSTRUCTIONS

## INTRODUCTION

This manual contains the iPDS™-130 Optional Flexible Disk Drive (iPDS-130 drive) installation instructions.

The base iPDS system has one internal, double-sided, 96 tracks per inch, 5¼" flexible disk drive for mass storage. For many applications, additional mass storage is a desirable feature. One choice is to add mass storage through the iPDS-130 drive. One to three iPDS-130 drives can be added to the base iPDS system. Each additional iPDS-130 drive has a 640K-byte capacity (formatted) for a maximum disk storage of 2.56M-bytes. The first iPDS-130 drive attaches to the rear of the main enclosure with a 30" cable. Each additional iPDS-130 drive is connected to the rear of the previous iPDS-130 drive. Figure 1 shows an iPDS system with three iPDS-130 drives attached.

## Reference Documents

Refer to the following manuals for additional information on the iPDS-130 drive:

- *iPDS™ User's Guide*, order number 162606
- *iPDS™ Field Service Manual*, order number 143861

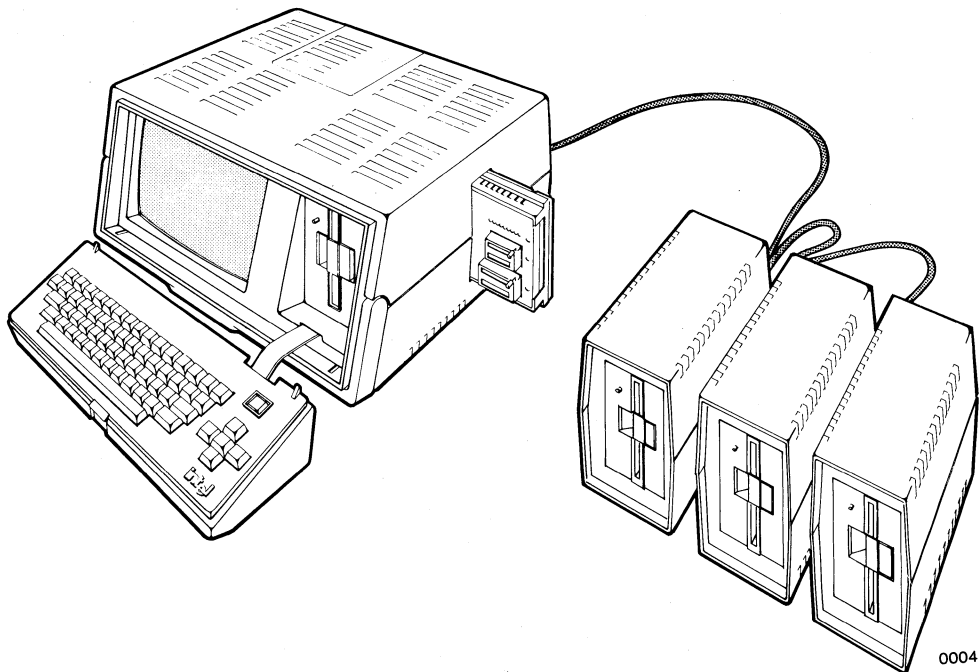


Figure 1 iPDS™ System with Three iPDS™-130 Drives

Copies of the technical manuals are shipped with the product they support. Additional copies of any of these manuals may be ordered from the Literature Department, Intel Corporation, 3065 Bowers Avenue, Santa Clara, California 95051.

## Unpacking Instructions

Remove the contents of the shipping container and compare them with the list of kit contents in the Dear Customer letter. If the contents of the shipping carton are damaged, keep the carton and packing material for the carrier agent's inspection. The carrier is responsible for any damage that happens in transit. For repairs to a product damaged in shipment, contact the Intel Product Service Center at one of the following numbers:



Western Region call: (602) 869-4951

Midwest Region call: (602) 869-4392

Eastern Region call: (602) 869-4045

International call: (602) 869-4391

The Product Service Center will provide you with a return authorization number and any further instructions. A purchase order will be required to complete the repair. A copy of the purchase order should be submitted to the carrier with your claim.

It is suggested that salvageable shipping cartons and packing material be saved for future use in the event the product must be shipped.

## PRODUCT DESCRIPTION

Each iPDS-130 drive is essentially a stand-alone unit that has its own power supply. The unit consists of the drive, an internal linear power supply, iPDS-130 signal cable, the rear panel, and a two section plastic case. Figure 2 shows the iPDS-130 drive and indicates features of the front panel.

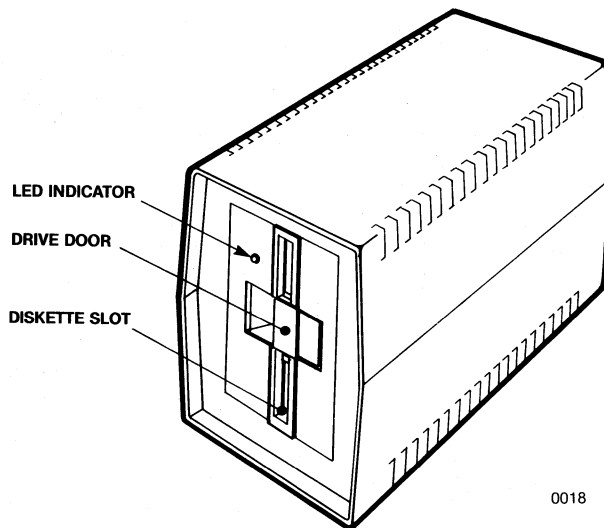


Figure 2 iPDS™-130 Drive

The supplied signal cable connects to the iPDS system or any previous iPDS-130 drive. Internal logic in the drive configures each unit with the next sequential drive number, and properly terminates the final drive in the daisy chain. Operation is the same as the internal disk drive on the iPDS system.

Line power (100 VAC, 120 VAC, 220 VAC or 240 VAC) is supplied through a line filter, line fuse, and ON/OFF switch to the internal linear power supply where +5 VDC and +12 VDC are developed.

## Environmental and Power Specifications

The following specifications summarize the environment, physical and electrical characteristics of the iPDS-130 drive.

### Environmental

Temperature	
Operating	10° C to 35° C
Non-Operating	-40° C to 70° C
Humidity	
Operating	20% to 80% non-condensing Maximum wet bulb of 29.6° C
Non-Operating	5% to 95% non-condensing
Cooling	Up to 30 watts are dissipated by fan cooling.

### Physical

Width	6.0"
Height	7.3"
Depth	13.8"
Weight	11.0 lbs.

### Electrical

Input Power	90 VAC to 132 VAC, 47 Hz to 63 Hz or 198 VAC to 264 VAC, 47 Hz to 63 Hz
Drive Power	12 VDC $\pm$ 1%
Logic Power	5 VDC $\pm$ 1%

## INSTALLATION INSTRUCTIONS

### WARNING

The disk drive must have 2.00 inches of clearance from the base iPDS system to avoid EMI interference.

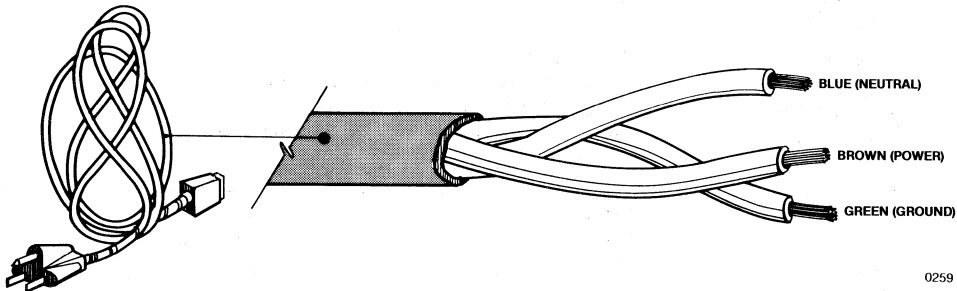
To install the external drives:

1. When installation is being performed in a region where the power outlets do not match the power plugs supplied with the iPDS system, cut off the power plug supplied with the system and install the appropriate power connector for this area.

**WARNING**

Changing the power cord involves hazardous voltage and current levels. To avoid the risk of electric shock and fire, the power cord should be changed only by qualified technical personnel.

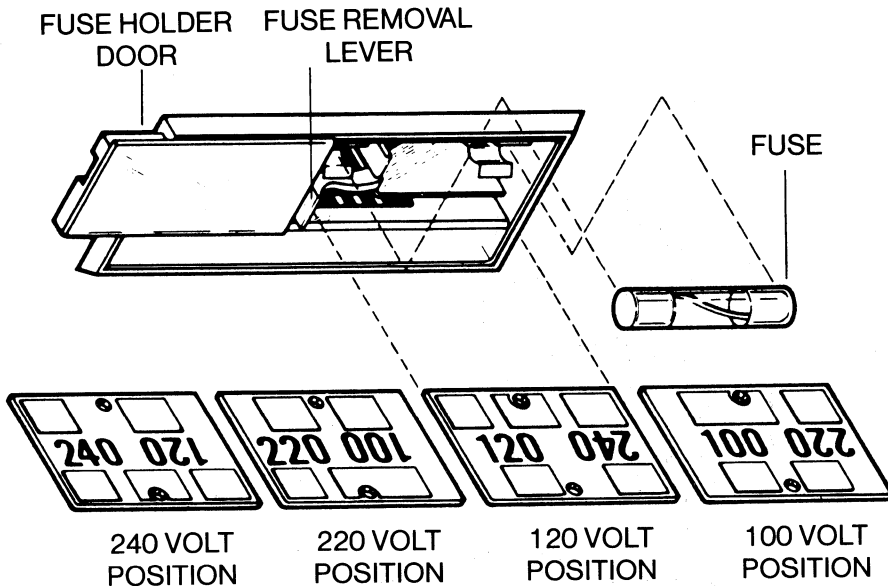
The power cable is a three-conductor cable. Figure 3 shows the cable configuration. The brown wire is the power line; the blue wire is neutral; and the green wire with the yellow stripe is the ground wire in conformance with the Color Coding Standard (CEE). Do not connect the system to the power outlet.



**Figure 3 Power Cable**

2. The iPDS-130 drive can be set to one of four different AC line voltages. Using Figures 4 and 5, slide the plastic shield up and remove the power switching card. Make sure the card is aligned for the correct AC line voltage, then plug the card back into the slot. The card must be inserted so the correct voltage can be read with the card in its slot.
3. The iPDS-130 drive is fuse protected for 1 amp over the full voltage range for 100 or 120 ac. It is fuse protected for .5 amp over the full voltage range for 220 or 240 VAC. If fuse replacement is necessary, unplug the power cord from the socket on the drive, slide the plastic shield up, rotate the fuse removal lever outward, and remove the blown fuse. Replace the blown fuse with a 1 amp, 250 VAC, slow-blow fuse of the same size.
4. Connect the iPDS-130 signal cable from the iPDS-130 drive being installed to the NEXT DRIVE connector on the previous drive (see Figure 5), or to the EXT DRIVE connector on the rear panel of the iPDS system if drive 1 is being installed. The supplied signal cable has one male and one female connector.





1405

**Figure 4 Power Switching Card**

5. Ensure that the main power switch is set to OFF. Connect the power cable to the power connector on the rear panel (see Figure 5). Then connect the power cable to the AC power outlet.
6. Remove the cardboard insert from the iPDS-130 drive by opening the drive door. Pull the drive door release out and to the right. The cardboard insert protects the drive while in transit. Save it for use whenever moving the system.
7. Turn the main power switch to ON to power on the iPDS-130 drive.

Before inserting a disk, ensure power is ON to the iPDS system and the iPDS-130 drive. Also, before inserting a disk, and before taking a disk out, ensure that the LED indicator light is off (see Figure 2).

## SYSTEM CHECKOUT

Insert an iPDS system diskette that contains the iPDS confidence test in drive 0. Ensure that there is a formatted diskette in each iPDS-130 drive to be tested. Boot the iPDS system and when the machine prompt is returned, enter the following commands:

```
PCONF<cr>
then
INIT CONPDS<cr>
then
TEST<cr>
```

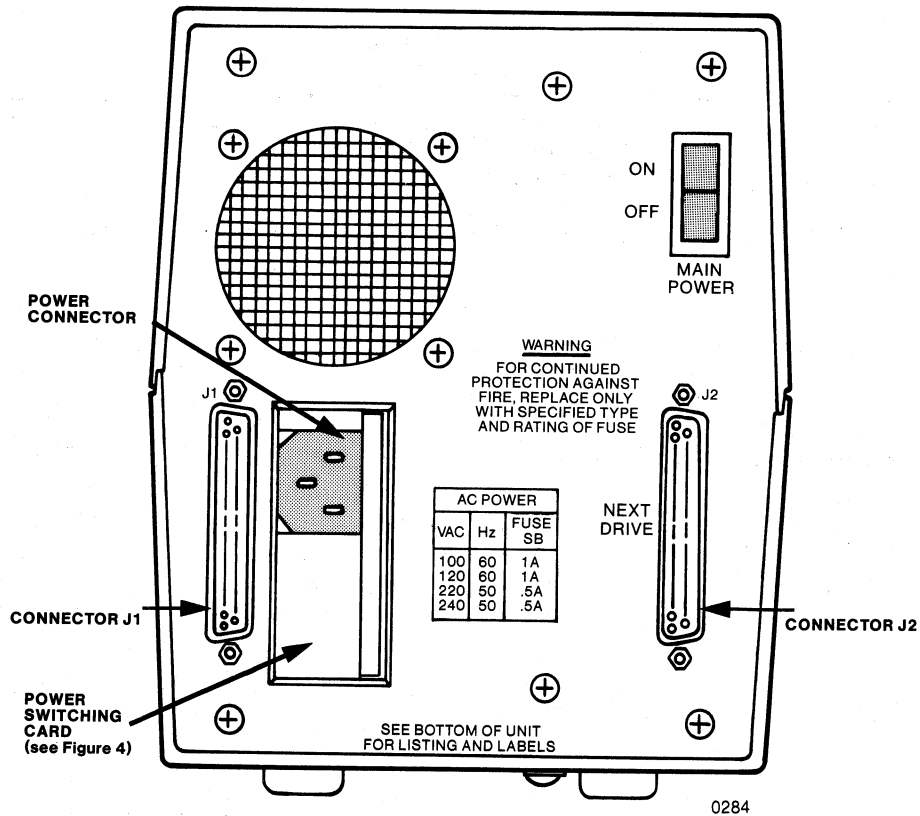


Figure 5 Rear Panel of the iPDS™-130 Drive

The iPDS system will run the confidence tests. If all tests pass, the installation is complete.

If any errors are detected, confidence tests 9, A and B may be run for more information (refer to the *iPDS™ User's Guide*, Appendix B or the *iPDS™ Field Service Manual*, Chapter 3). Contact the regional Product Service Center (see the Unpacking Instructions section in this manual for the correct phone number), if your iPDS-130 drive fails to pass the confidence test.



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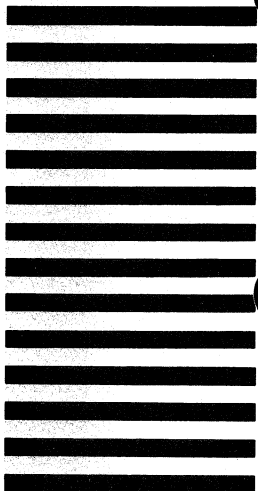
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