

# HEWLETT-PACKARD



**Getting Started with  
Your HP 9127A Disc Drive**

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# Getting Started with Your HP 9127A Disc Drive



**June 1, 1986**

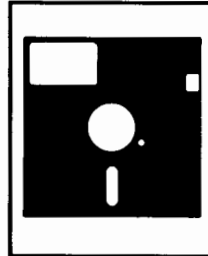
**Manual Part No.  
09127-90000**



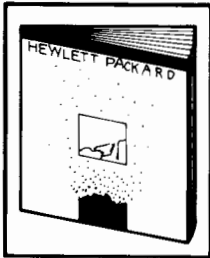
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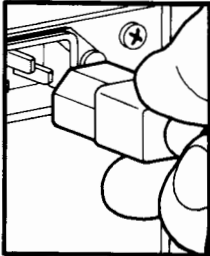
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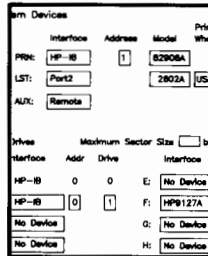
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**[www.hpmuseum.net](http://www.hpmuseum.net)**

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## Limited Warranty

### One-year Limited Hardware Warranty

Hewlett-Packard warrants this peripheral/accessory against defects in materials and workmanship for a period of one year from receipt by the end user, except when used as part of an HP system. If HP receives notice of such defects during the warranty period, HP will either, at its option, repair or replace products which prove to be defective.

Should HP be unable to repair or replace the product within a reasonable amount of time, Customer's alternate exclusive remedy shall be a refund of the purchase price upon return of the product.

If this product was purchased as part of an HP system in a coordinated shipment, it is warranted against defects in material and workmanship during the same period as the HP system.

### Exclusions

The above warranty shall not apply to defects resulting from improper or inadequate maintenance by Customer; customer-supplied software or interfacing; unauthorized modification or misuse; operation outside of the environmental specifications for the product; or improper site preparation and maintenance.

The selection and use of media, supplies, and

consumables is the customer's responsibility. Hewlett-Packard reserves the right to exclude from the warranty or service agreement any repairs for damage to HP products which HP reasonably determines or believes were caused by use of non-HP media or cleaning supplies. Hewlett-Packard will, upon request, repair such damage on a time and material basis.

### Obtaining Warranty Service

To obtain warranty service, products must be returned to a service facility designated by HP. HP may repair on-site at the option of the customer. Customer is responsible for travel charges when on-site repair is requested.

Warranty service for products purchased as part of a system will be subject to service in accordance with the system support services.

Customer shall prepay shipping charges for products returned to HP for warranty service and HP shall pay for return of the products to customer. However, Customer shall pay all shipping charges, duties, and taxes for products returned to HP from another country.

### Warranty Limitations

HP makes no other warranty, either expressed or implied, with respect to this product. HP specifically disclaims the implied warranties of merchantability and fitness

for a particular purpose. Some states or provinces do not allow limitations on the duration of an implied warranty, so the above limitation or exclusion may not apply to you. However, any implied warranty of merchantability or fitness is limited to the one-year duration of this written warranty.

This warranty gives you specific legal rights, and you may also have other rights which vary from state to state, or province to province.

#### **Exclusive Remedies**

The remedies provided herein are customer's sole and exclusive remedies. In no event shall HP be liable for any direct, indirect, special, incidental, or consequential damages, whether based on contract, tort, or any other legal theory. Some states or provinces do not allow the exclusion or limitation of incidental or consequential damages, so the above limitation or exclusion may not apply to you.

HP offers complete service and maintenance worldwide. Maintenance agreements are available for HP peripheral products. Advantages of these agreements to the customer include a fixed annual cost, individualized cost-effective contracts, and a choice of response time. Current rates can be determined by contacting your local HP Sales Office.

### **Federal Communications Commission Radio Frequency Interference Statement – USA Only**

This equipment generates and uses radio frequency energy and may, if not installed and used properly, that is, in strict accordance with the manufacturer's instructions, cause interference to radio and television reception.

It has been type tested and found to comply with the limits for a Class B computing device in accordance with the specifications in Subpart J of Part 15 of FCC rules, which are designed to provide reasonable protection against such interference in a residential installation. Shielded data cables were used during the type test; therefore, properly shielded and terminated data cables should be used to reduce potential interference. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

- reorient the receiving antenna
- relocate the computer with respect to the receiver
- move the computer away from the receiver
- plug the computer into a different outlet so that computer and receiver are on different branch circuits.

If necessary, the user should consult the dealer or an experienced radio/television technician for additional suggestions.

**Herstellerbescheinigung**

Hiermit wird bescheinigt, daß das Gerät/System HP 9127A in Übereinstimmung mit den Bestimmungen von Postverfügung 1046/84 funkentstört ist.

Der Deutschen Bundespost wurde das Inverkehrbringen dieses Gerätes/Systems angezeigt und die Berechtigung zur Überprüfung der Serie auf Einhaltung der Bestimmungen eingeräumt.

**Zusatzinformation für Meß- und Testgeräte**

Werden Meß- und Testgeräte mit ungeschirmten Kabeln und/oder in offenen Meßaufbauten verwendet, so ist vom Betreiber sicherzustellen, daß die Funk-Entstörbestimmungen unter Betriebsbedingungen an seiner Grundstücksgrenze eingehalten werden.

**Manufacturer's Declaration (English translation)**

This is to certify that the HP 9127A is in accordance with the Radio Interference Requirements of Directive FTZ 1046/1984. The German Bundespost was notified that this equipment was put into circulation; the right to check the series for compliance with the requirements was granted.

**Additional Information for Test and Measurement Equipment**

If test and measurement equipment is operated with unshielded cables and/or used for measurements on open setups, the user has to assure that, under operating conditions, the Radio Interference Limits are still met at the border of his premises.



## **Part 1: Essentials**

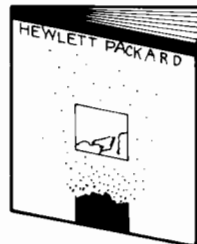
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**Principes Essentiels  
Wesentliche Grundlagen  
Elementos Esenciales  
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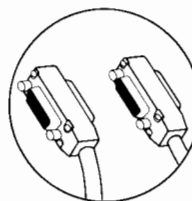
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CAUTION

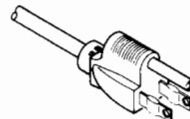
## 4 HP-IB

HP-IB  
HP-IB  
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## 7 POWER

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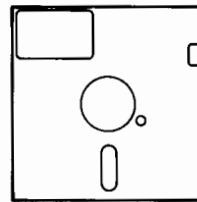
8 ADDRESS  
Adresse  
Adresse  
Dirección  
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Adres  
Osote  
Adresse  
Adress



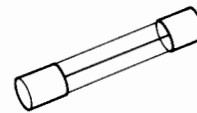
10 SELFTEST  
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Att använda skivlinnen

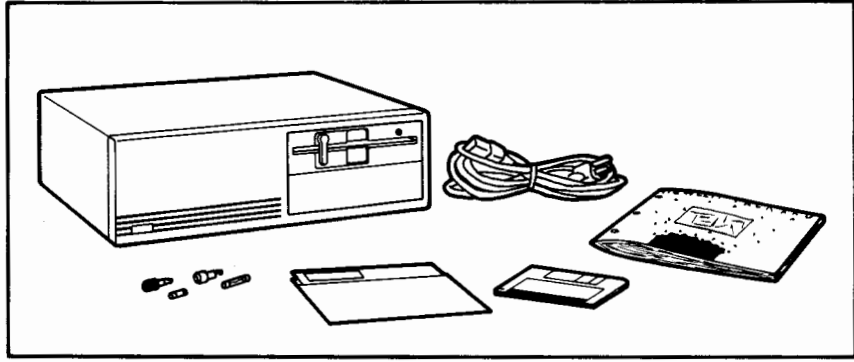
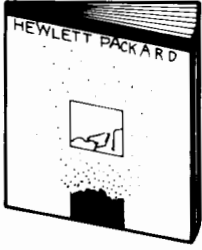


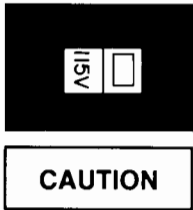
16 FUSE  
Fusible  
Sicherung  
Fusible  
Fusible  
Sikring  
Zekering  
Sulake  
Sikring  
Säkring



**WARNING**







Make sure the voltage switch is set correctly for your local power. Always turn off the disc drive before changing the voltage setting.

Assurez-vous que le sélecteur de tension est mis sur la position qui correspond à votre courant. Arrêtez toujours l'unité de disques avant de changer la position du sélecteur.

Prüfen Sie nach, ob die Einstellung des Spannungsschalters der Netzspannung entspricht. Schalten Sie das Gerät jedesmal aus, bevor Sie die Spannungseinstellung verändern.

Asegúrese de que el selector de voltaje está debidamente ajustado, de acuerdo con la red local. Apague siempre la unidad de disco antes de cambiar el ajuste de voltaje.

Assicuratevi che il selettore di tensione sia posizionato correttamente per la vostra corrente locale. Disinserite sempre l'unità disco prima di cambiare il posizionamento della tensione.

Sørg for at spændingsknappen er korrekt indstillet til Deres strømstyrke. Sluk altid for disc-aktivatoren før De ændrer strømstyrke.

Verzekert U zich ervan dat de voltageschakelaar juist is afgesteld voor Uw plaatselijke stroom. Zet de disk drive altijd af alvorens de voltageschakelaar af te stellen.

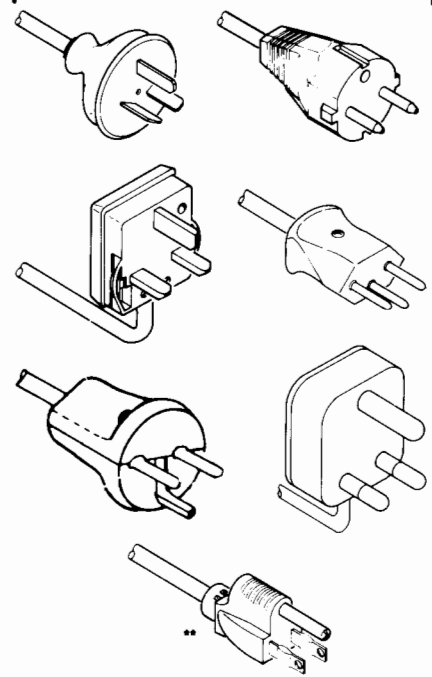
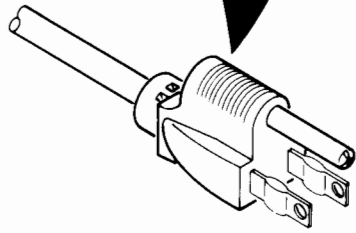
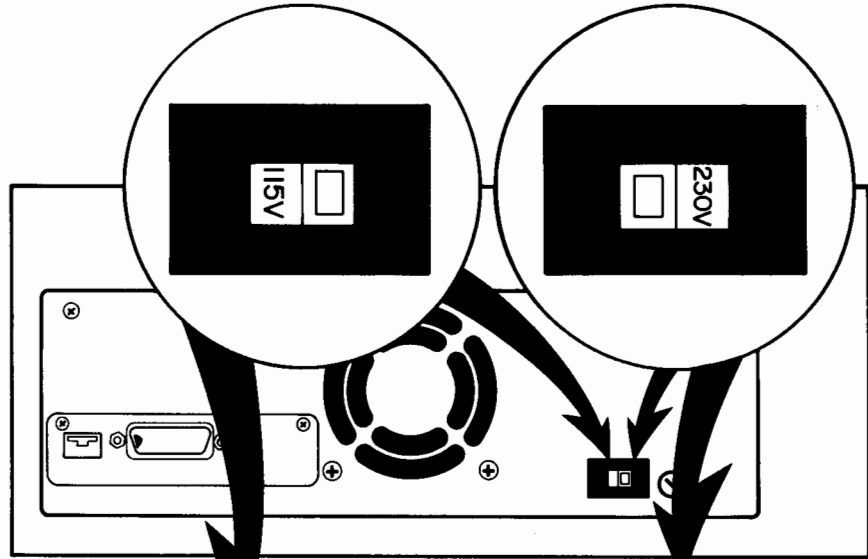
Varmista, että jännitekytkin on asetettu paikallisen tehon mukaan. Kytke aina levyasema pois päältä ennenkuin vaihdat jänniteasetusta.

Bekreft at spenningsbryteren er innstilt på den rette nettspenningen. Skru alltid av disc-driven før De forandrer spenningsbryteren.

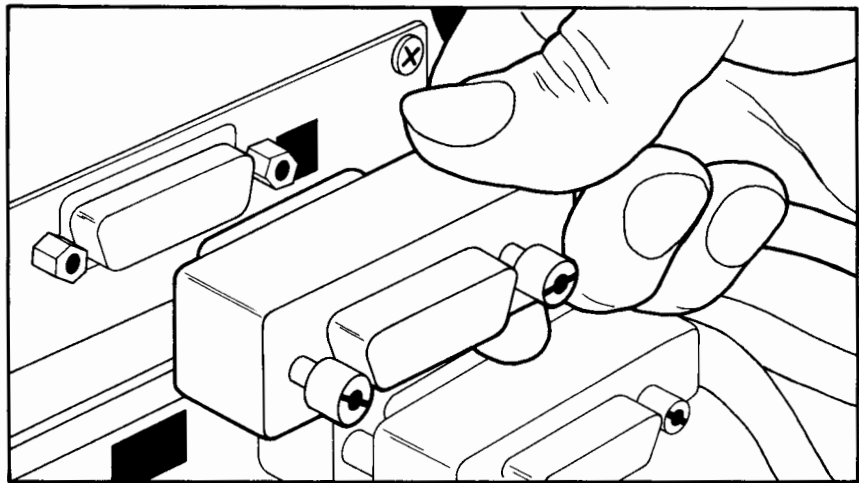
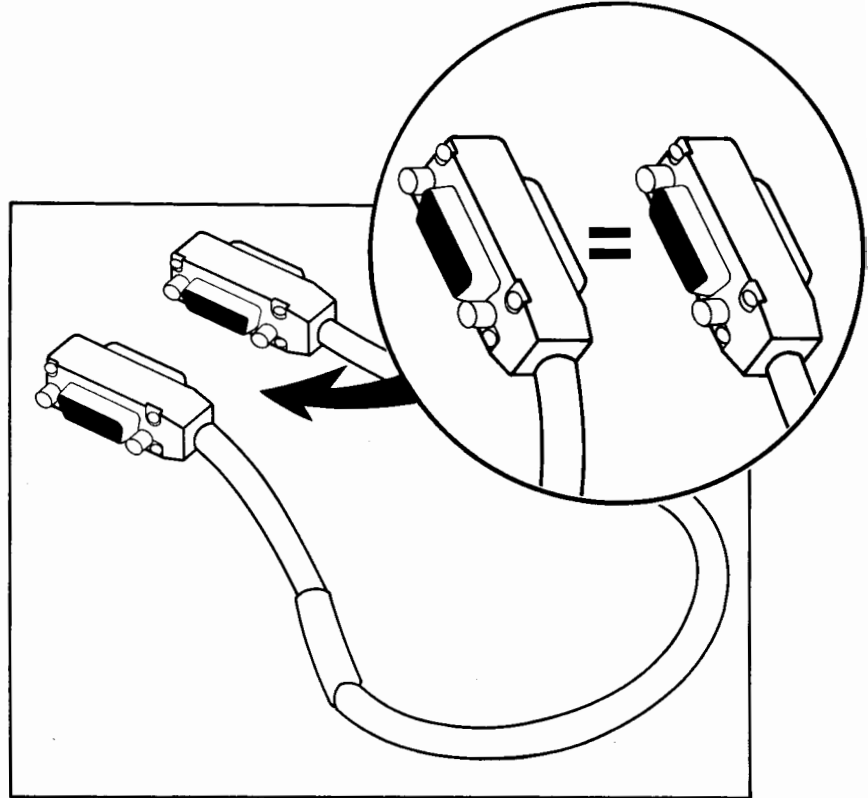
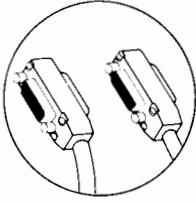
Försäkra dig om att spänningsomkopplaren har korrekt inställning enligt tillgänglig effekt. Slå alltid ifrån drivenheten för skivminne innan du ändrar spänningsinställningen.



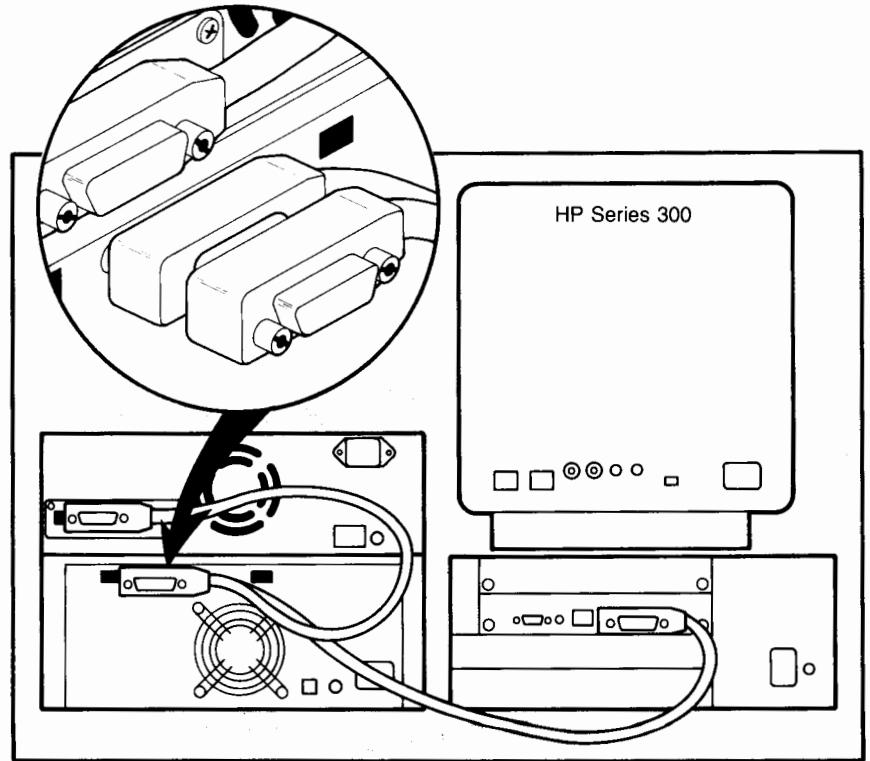
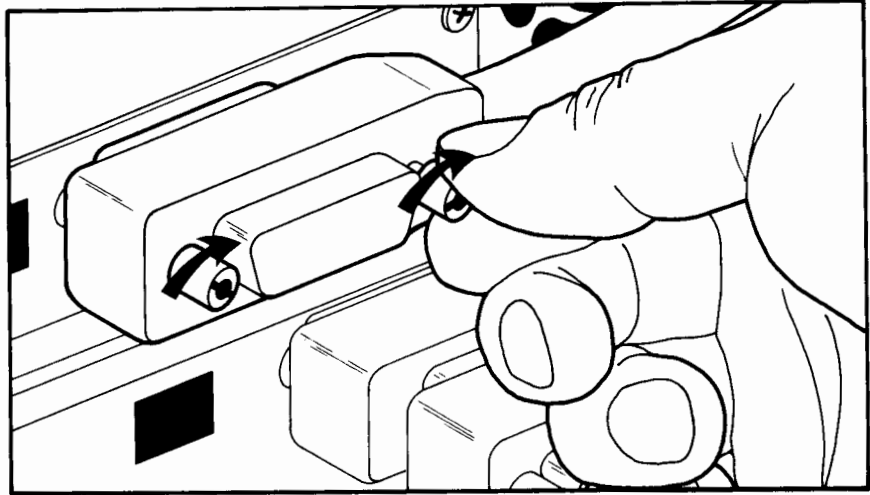
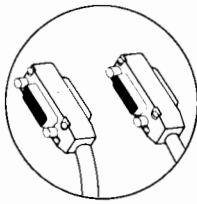
**CAUTION**



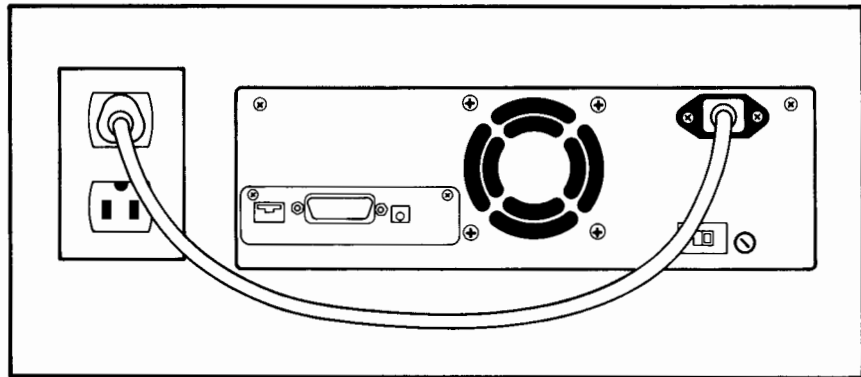
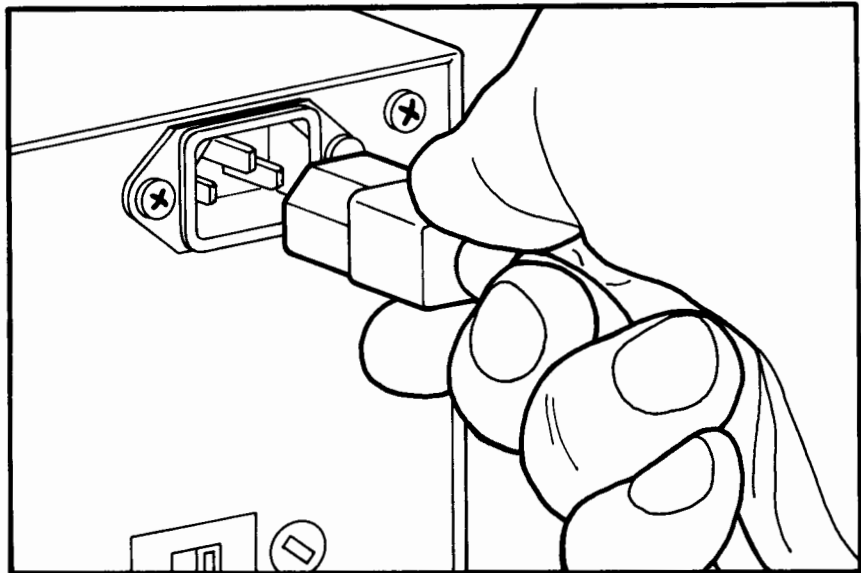
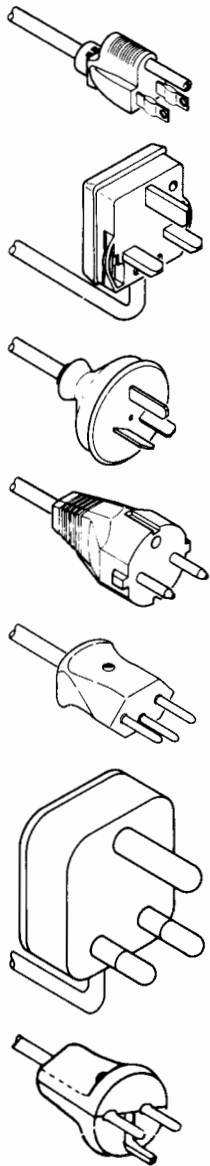
\*\* Peru - 230V













Hewlett-Packard sets the address wheel on the back of your disc drive at 4. As long as your HP 9127A is the only peripheral device on your system that is set at an address of 4, you do not need to change this setting.

Hewlett-Packard installe sur l'adresse 4 le rotatif situé à l'arrière de l'unité de disques. Vous n'avez pas besoin de changer cette position, tant que votre HP 9127S est le seul périphérique qui porte cette adresse dans votre système.

Hewlett-Packard stellt den Adressendreheschalter, der sich auf der Rückseite des Plattengeräts befindet, auf 4 ein. Sie können die Einstellung beibehalten, falls dem Gerät HP 9127A als einzigem Peripheriegerät die Adresse 4 zugewiesen wurde.

Hewlett-Packard ajusta a 4 la rueda de dirección que se halla en la parte posterior de la unidad de disco. En tanto que el HP 9127A sea el único dispositivo periférico de su sistema ajustado a la dirección 4, usted no tiene necesidad de cambiar este ajuste.

La Hewlett-Packard posiziona la ruota degli indirizzi sul retro della vostra unità disco a 4. Fino a quando la vostra unità HP 9127A è l'unico dispositivo periferico nel vostro sistema posizionato ad un indirizzo di 4 non è necessario cambiare questo posizionamento.

Hewlett-Packard har indstillet programkodehjulet på bagsiden af Deres disc-aktivator på 4. Så længe HP 9127A er det eneste ekstraudstyr på Deres system med programkode på 4, behøver De ikke at ændre denne indstilling.

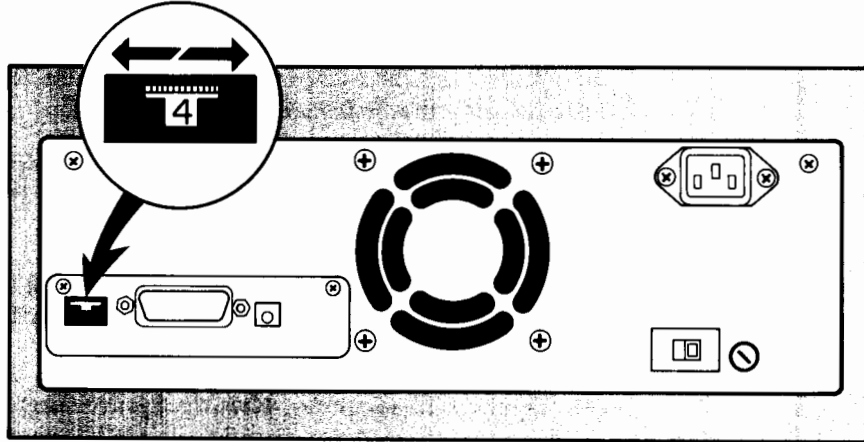
Hewlett-Packard heeft het adreswiel op de achterkant van Uw disk drive op 4 afgesteld. Zo lang Uw HP 9127A het enige perifere toestel is op Uw systeem dat op 4 is afgesteld, hoeft U deze afstelling niet te wijzigen.

Hewlett-Packard asettaa levyaseman takana olevan osoitepyörän asentoon 4. Niin kauan kuin HP 9127A on ainoa systeemiä ohjeileva, joka on asetettu asentoon 4, ei sinun tarvitse muuttaa tätä asetusta.

Hewlett-Packard har innstilt adressehjulet på baksiden av disc-driven på 4. Så lenge Deres HP 9127A er det eneste tilleggsutstyret i Deres system som er blitt innstilt på adresse 4, behøver De ikke forandre på innstillingen.



Hewlett-Packards standardinställning för adresshjulet, som finns på baksidan av drivenheten för skivminne, är 4. Om din HP 9127A är den enda periferienhet i ditt system med läge 4, behöver du inte ändra denna inställning.





The selftest takes about 15 seconds. If the disc access light remains lit after 15 seconds, your disc drive has NOT passed the selftest.

Ce test automatique dure environ 15 secondes. Si le témoin d'accès au disque reste allumé au delà d'15 secondes, votre unité de disque N'A PAS REUSSI le test.

Die Durchführung des Selbsttests dauert ungefähr 15 Sekunden. Leuchtet die Zugriffsanzeige nach Ablauf 15 Sekunden weiterhin auf, hat die Diskette den Selbsttest nicht bestanden.

Si la luz de acceso al disco continúa encendida después de transcurrido 15 segundos, ello significa que su unidad NO HA PASADO la autoprueba.

La prova di autocontrollo dura circa 15 secondi. Se il segnale luminoso di accesso al disco rimane acceso dopo 15 secondi, la vostra unità disco NON ha superato la prova di autocontrollo.

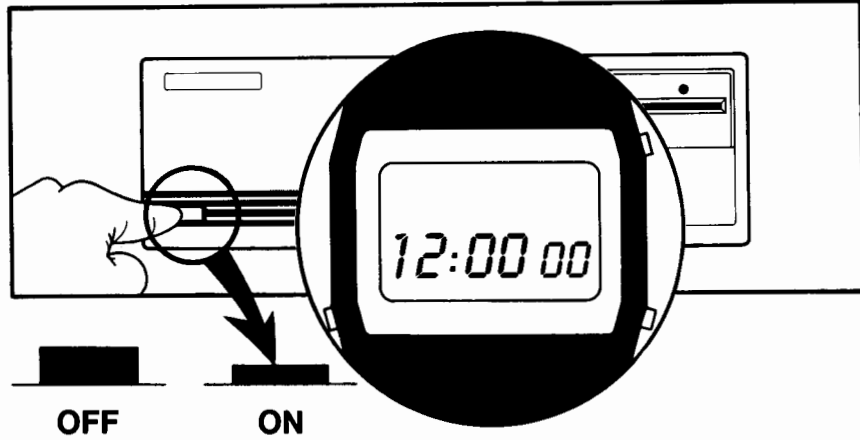
Testen tager ca. 15 sekunder. Hvis disckontrollampen forbliver tændt efter 15 sekunder, er Deres disc-aktivator IKKE operationel.

De zelftest duurt ongeveer 15 seconden. Indien het toevoerlicht van Uw disk langer dan 15 seconden aanblijft, is Uw disk drive er niet in geslaagd de zelftest uit te voeren.

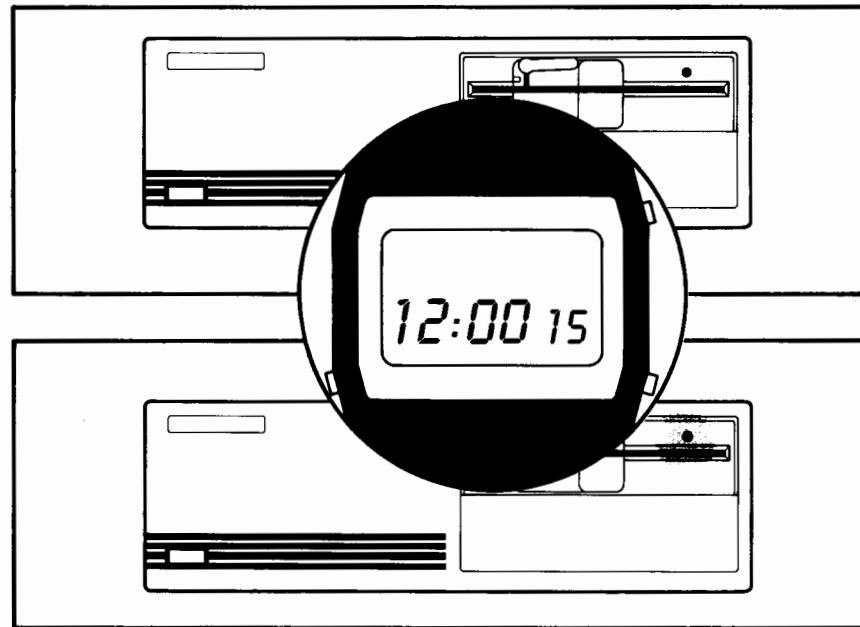
Tämä itsetarkastuskoe kestää 15 sek. Jos levyn merkkivalo palaa edelleen sek kuluttua, Ei levyasemasi läpäissyt koetta.

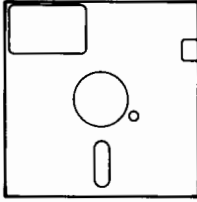
Kontrollprøven tar omtrent 15 sekunder. Hvis operasjonslyset til disketten fremdeles står på etter 15 sekunder, har Deres disc-drive ikke bestått kontrollprøven.

Självtestet tar ca 15 sekunder. Om indikatorlampan för skivminne lyser fortfarande efter 15 sekunder, har din drivenhet för skivminne INTE kunnat fullborda självtestet.



- Pass
- Passe
- Bestehen
- Paso
- Superato
- Operational
- Geslaagd
- Läpäise
- Bestätt
- Fullbordat
  
- Fail
- Echec
- Versagen
- Falla
- Bocciato
- Ikke operational
- Niet geslaagd
- Epäonnistui
- Ikke bestätt
- Misslyckat





Write protecting ensures that the disc drive cannot change or delete information on the disc. If you wish to write protect a disc, place a write-protect tab over the write-protect slot.

La protection de l'enregistrement garantit que l'unité de disque ne peut ni modifier ni effacer les données inscrites sur le disque. Si vous souhaitez protéger l'enregistrement d'un disque, placez un taquet de protection d'enregistrement sur la fente aménagée à cet effet.

Der Schreibschutz garantiert, daß die auf der Diskette gespeicherte Information weder verändert noch gelöscht werden kann. Um eine Platte vor dem Überschreiben zu schützen, kleben Sie einen Schreibschutzstreifen über den Schreibschutzspalt.

La protección contra escritura asegura el que la unidad de disco no pueda cambiar o suprimir información en el disco. Si usted desea esa protección en un disco, coloque una lengüeta de protección contra escritura sobre la ranura correspondiente.

La protezione contro la sovrascrittura assicura che l'unità disco non può cambiare o cancellare informazioni sul disco. Se volete proteggere un disco contro la sovrascrittura, mettete una linguetta di protezione contro la sovrascrittura nella scanalatura di protezione contro la sovrascrittura.

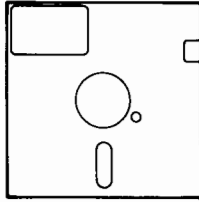
Programbeskyttelse sikrer at program-aktivatoren ikke kan ændre eller slette data på discen. Hvis De ønsker programbeskyttelse, anbring da en mærkeseddel over programbeskyttelsesrillen.

Schrift bescherming geeft U de verzekering dat de disk drive geen gegevens op de diskette kan veranderen of uitwissen. Indien U deze bescherming wilt toepassen op een diskette, dient U een schriftbeschermingsschuifje over de schriftbeschermingsgleuf te plaatsen.

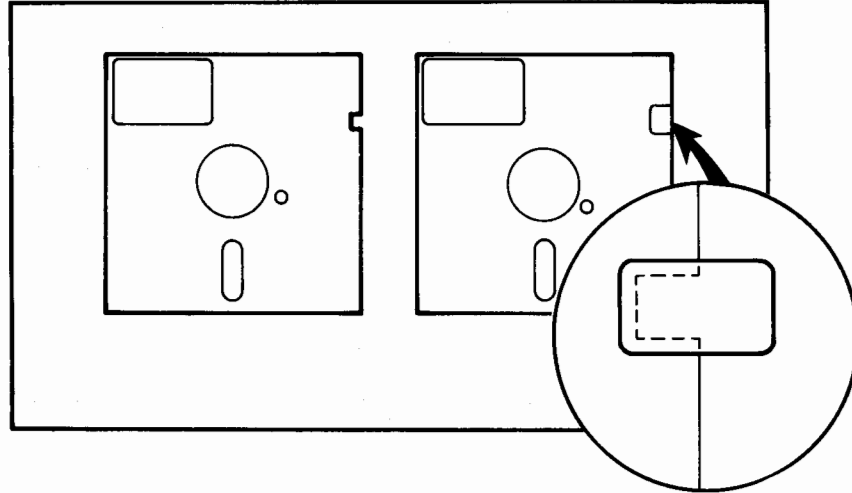
Kirjoitussuoja varmistaa, että levyasema ei voi vaihtaa eikä poistaa levyille talletettua tietoa. Jos haluat kirjoitussuojata määrätyn levyn, aseta kirjoitussuojakappale kirjoitussuojaraon päälle.

Skrivebeskyttelse forsikrer at disc-driven ikke kan forandres eller informasjonen på disketten utviskes. Hvis De ønsker å skrivebeskytte en diskett, plasser en skrivebeskyttelseslapp over åpningen til skrivebeskyttelsen.





“Skrivskyddad” säkerställer att drivenheten för skivminne kan varken ändra eller ta bort information på skivminnet. Om du önskar skrivskydda ett skivminne, placera en skrivskydda-flik över skrivskydda-spåret.



**NOT WRITE-PROTECTED**

**NON PROTÉGÉ**

**NICHT SCHREIBGESCHÜTZT**

**NO PROTEGIDO CONTRA ESCRITURA**

**NON PROTETTO CONTRO LA SOVRASCITTURA**

**IKKE SKRIVEBESKYTTET**

**NIET SCHRIFTBESCHERMD**

**EI KIRJOITUSSUOJATTU**

**IKKE SKRIVEBESKYTTET**

**ICKE SKRIVSKYDDAD**

**WRITE-PROTECTED**

**PROTÉGÉ**

**SCHREIBGESCHÜTZT**

**PROTEGIDO CONTRA ESCRITURA**

**PROTETTO CONTRO LA SOVRASCITTURA**

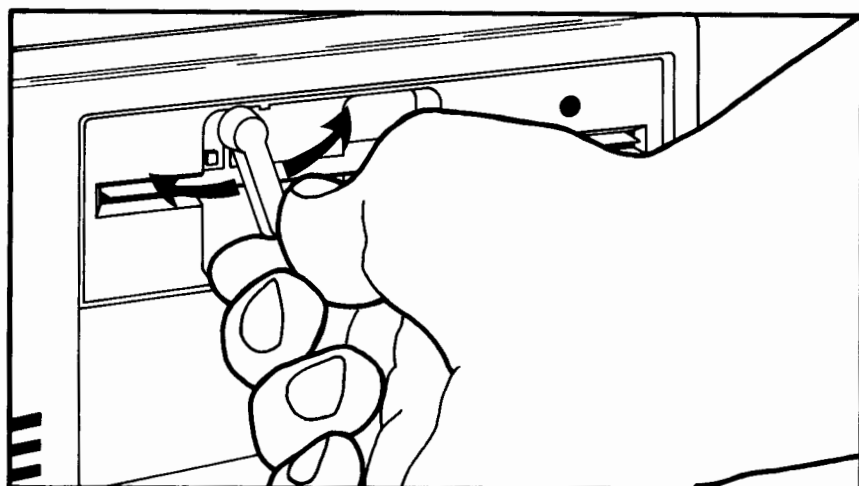
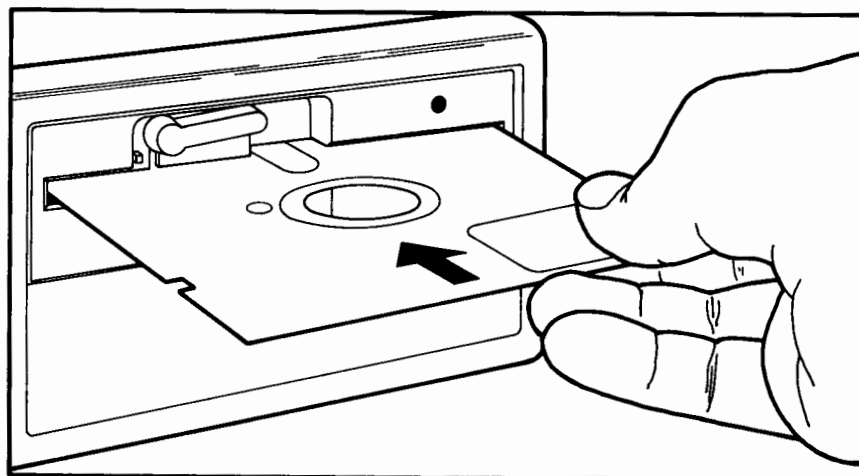
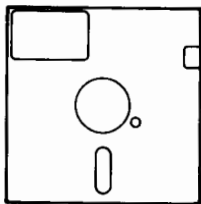
**SKRIVEBESKYTTET**

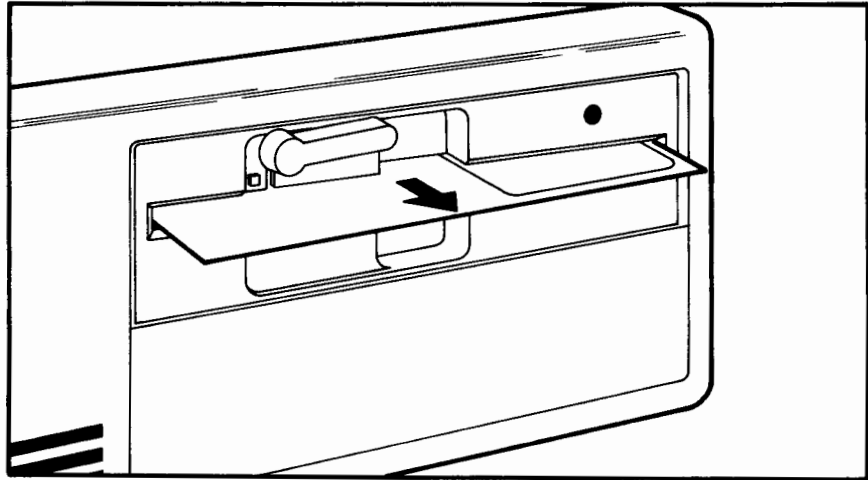
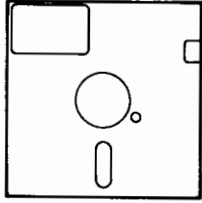
**SCHRIFTBESCHERMD**

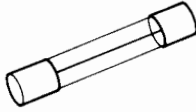
**KIRJOITUSSUOJATTU**

**SKRIVEBESKYTTET**

**SKRIVSKYDDAD**







**WARNING**

Because of a potential shock hazard, always unplug the power cord if you need to change a fuse. Put the fuse in the fuse-holder, and then put the fuse-holder back into the drive.

Au moment de changer un fusible, débranchez toujours le cordon d'alimentation, pour ne pas risquer de recevoir une décharge électrique. Insérez le fusible dans le porte-fusible, puis remplacez l'ensemble dans l'unité de disques.

Da die Gefahr besteht, einen Stromschlag zu erhalten, ziehen Sie das Stromkabel aus der Steckdose, bevor Sie die Sicherung auswechseln. Setzen Sie die Sicherung zuerst in den Sicherungsschalter ein und dann in den Sicherungskasten.

Para evitar el peligro de electrocución, desenchufe siempre el cordón de alimentación antes de reemplazar un fusible. Coloque el fusible en el portafusible y luego coloque éste en la unidad de disco.

Per evitare il possibile rischio di una scossa elettrica staccate sempre il cavo di alimentazione se dovete cambiare un fusibile. Mettete il fusibile nel porta-fusibili e poi rimettete il porta-fusibili nell'unità disco.

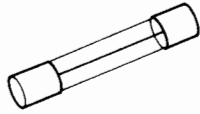
Træk – på grund af risiko for elektrisk stød – altid stikket ud, hvis det er nødvendigt at skifte sikring. Anbring sikringen i sikringsholderen og sæt derpå denne tilbage i disc-aktivatoren.

Om schokgevaar te voorkomen dient U altijd eerst de stekker uit het stopkontakt te verwijderen indien U een zekering moet vervangen. Plaats de zekering in de zekeringsdoos en plaats de zekering weer in de disk drive.

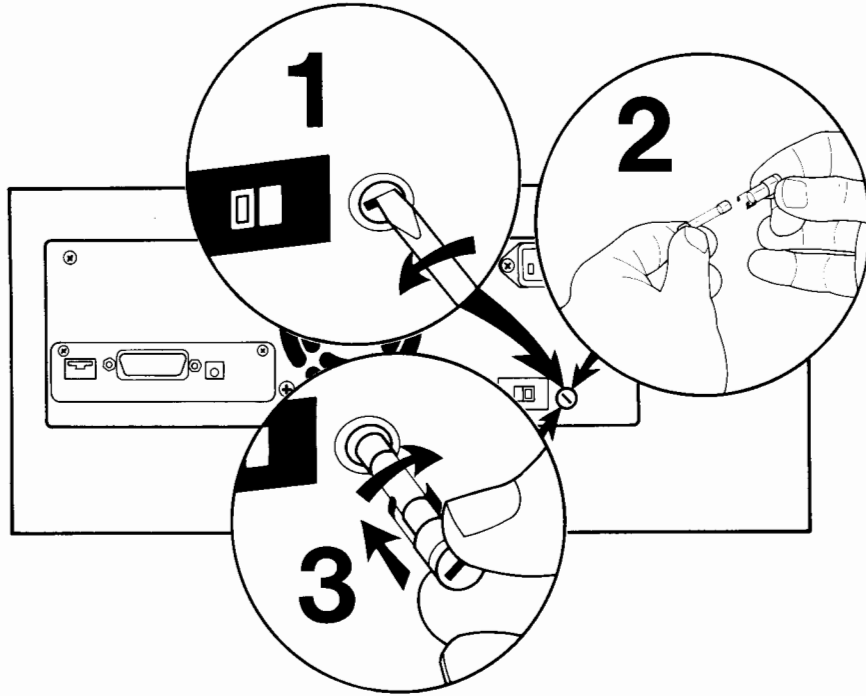
Mahdollisen sähköiskuvaaran takia on liitännäjohtin irroitettava aina ennen sulakkeen vaihtamista. Pane sulake sulakkeenpitimeen ja aseta sulakkeenpidin takaisin levyasemaan.

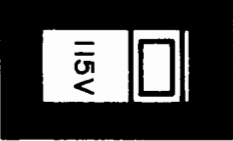
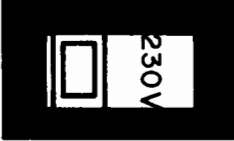


På grunn av eventuell fare for stød, trekk alltid ut den strømførende ledningen, hvis De må skifte sikring. Sett sikringen inn i sikringsbeholderen og sett så sikringsbeholderen tilbake i disc-driven.

På grund av ev. stötfara, försäkra dig om att nätsladden är frånkopplad, om du behöver byta en säkring. Sätt säkringen i säkringshållaren och sätt sedan säkringshållaren tillbaka i drivenheten för skivminne.



**WARNING**



	
 3.0 A 250 V~	 1.6 A 250 V~



## Part 2: Start-Up and Reference

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# 1

## Introduction

### About This Manual

If you've gotten this far, you've probably skipped all of those pictures or have gotten through them and are wondering what to do next--or aren't quite sure what you've just done.

**If you'd like a little more detail**, read on. Chapter 2 elaborates on the contents of Part I, the multi-language setup section. Chapter 3 describes flexible discs, and Chapter 4 outlines basic maintenance and troubleshooting procedures.

**If you've set up your system and are ready to start using it**, you can move to Chapter 3, which describes flexible discs. You'll find basic maintenance and troubleshooting information in Chapter 4.

Chapter 5 contains some BASIC and PASCAL operating information for Series 200/300 users as well as Touchscreen PC instructions. If you are using an HP Portable or Portable Plus computer, refer to the Portable manuals for setup and operating information. Series 300 users with a *DOS* Coprocessor System (HP P/N 98286S) should read the Coprocessor manual for operating instructions. If you are connecting the HP 9127A to another computer, refer to the system documentation.

Keep this start-up manual as a reference, inserting it into a three-hole book such as your system manual binder.

## About Your Disc Drive

A disc drive is a device that allows a computer to store data on a disc or to read data stored on a disc. A disc is similar to a phonograph record, but it stores data and programs instead of music. Data may be stored on only one side of a disc (single-sided) or on both sides of the disc (double-sided). A disc can be flexible or hard.

A flexible (or "removable") disc can be removed from the disc drive. The disc is called "flexible" because it is made from a flexible, synthetic material.

A hard (or "fixed") disc usually cannot be removed from the disc drive and is made from rigid aluminum. A small hard disc is often called a "Winchester" disc.

The HP 9127A is a 5 1/4-inch flexible disc drive. Because of the data handling techniques used by the drive, it is especially useful for exchanging data between different stand-alone computer systems.

Specifically, the HP 9127A permits data interchange between IBM personal computers and HP personal and technical computers that use 5 1/4-inch flexible discs. The HP Series 300 DOS Coprocessor provides IBM PC-DOS compatibility when used with the HP 9127A.

Let's set up your new disc drive.



# 2

## Setting Up

---

You'll go through these seven steps in this chapter:

- Step 1: Before You Begin
- Step 2: A Look at Your Disc Drive
- Step 3: Setting the Voltage Switch
- Step 4: Connecting the Interface Cable
- Step 5: Connecting the Power Cord
- Step 6: Setting the Address
- Step 7: Try It!

If you've already set up the drive and want to start using it, move now to Chapter 5. Come back to this chapter if you have questions.

Chapters 3 and 4 provide reference information.

---

## Step 1: Before You Begin

1. Check that the following items are packaged with your disc drive:
    - User's manual
    - Power cord
    - 3 1/2-inch HP 9127A FORMAT\_\_MASTER disc
    - Blank 5 1/4-inch disc
    - Two fuses (one for 115V operation and the other for 230V operation) and two fuse inserts.
- 

### CAUTION

Although rugged, the HP 9127A is a precision instrument and must be handled with care.

---

2. Inspect your disc drive for any physical damage that may have occurred during shipment.
  3. If you find any damage, notify your dealer or the nearest Hewlett-Packard Sales and Support Office and file a claim with the carrier.
  4. Remove the protective shipping disc by rotating the disc slot latch up and to the right. Pull the disc out.
- 

### CAUTION

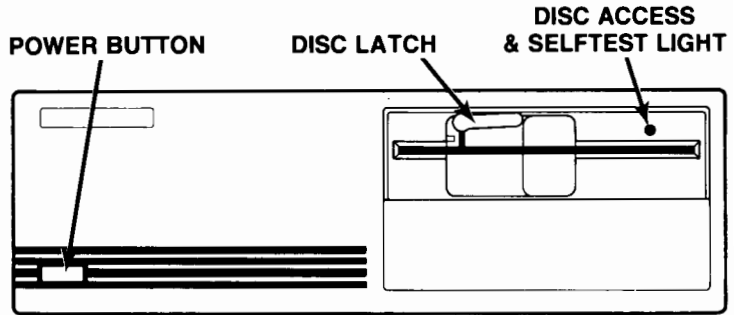
NEVER turn on the drive with the shipping disc inserted; doing so will damage the drive.

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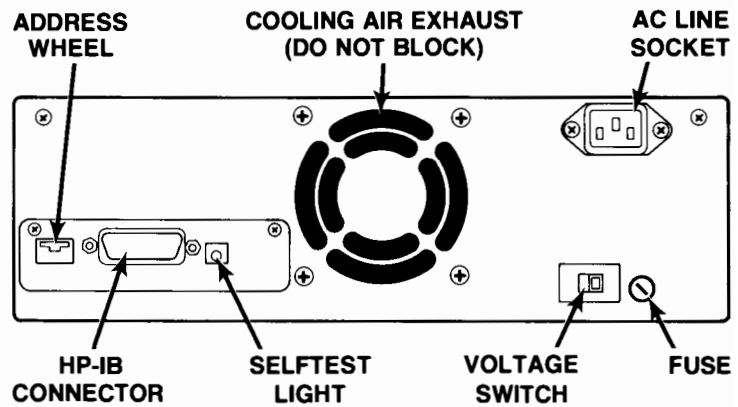
5. If you plan to move your disc drive in the future, save the shipping carton and the protective shipping disc. This shipping material is carefully designed to protect your drive from shock and vibration.

Before you move the drive, insert the shipping disc in the flexible disc drive. Seal the disc drive in a plastic bag and repack it in the shipping carton. If you'd like to order a new shipping disc, see Chapter 4 for information.

## Step 2: A Look at Your Disc Drive



HP 9127A Front Panel



HP 9127A Rear Panel

- Note the cooling air exhaust vent on the rear panel. When you position your drive, don't block this exhaust.

**NOTE** Operate your disc drive in a clean environment to prolong its life. HP is not responsible for damage caused by use in a dirty environment.

Before we begin, find the power button on the front panel of your disc drive. *PERFORM THE STEPS THAT FOLLOW WITH THE DRIVE OFF.* The drive is on when the power button is IN, and off when the button is OUT.

### Step 3: Setting the Voltage Switch

Voltages and Fuses

Voltage Switch Setting	Nominal Range	Countries	Fuse	Fuse Holder
			P/N	
115V~	100-120V~	U.S. Mexico Canada Japan Most South American Countries	3.0 AF 250V~  HP P/N 2110-0003	Gray
230V~	200-240V~	Most European Countries	1.6 AF 250V~  HP P/N 2110-0673	Black

1. Find the voltage switch on the rear panel of your disc drive.
2. Make sure the voltage switch is set correctly. See the table above to determine which setting is correct for your local power. (Ranges shown in the table are based on normal usage.)

---

**CAUTION**

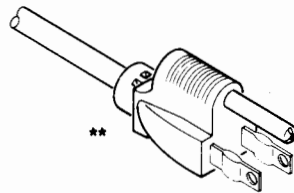
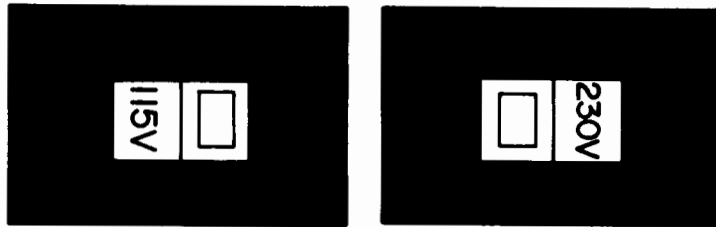
To avoid damaging the drive, make sure the drive is unplugged and turned off before changing the voltage setting.

Operating the drive at an incorrect voltage setting may affect performance or damage the drive.

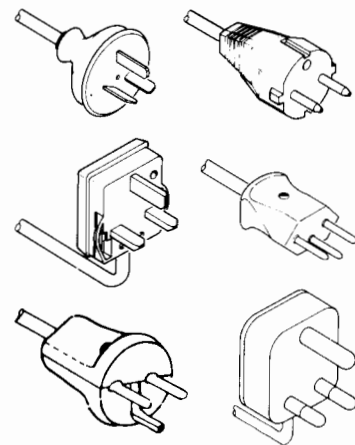
---

3. If necessary, use your fingernail or a screwdriver to slide the voltage switch sideways until the switch displays the proper setting.

The following figure illustrates the power cords used with each voltage setting.



\*\*Peru allows usage of this power cord at a voltage setting of 230V.

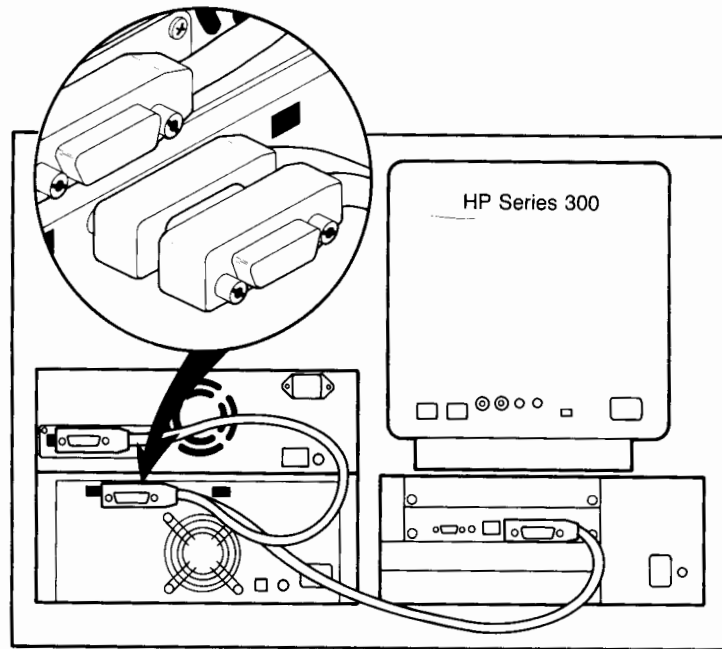


**Voltage Setting and Power Cords**

When you replace a fuse, select the one appropriate to your voltage setting.

A fuse was installed in your drive at the factory, and unless your voltage setting requires a different fuse, DO NOT replace it. If you do need to replace it, please follow the directions in Chapter 4.

#### Step 4: Connecting the Interface Cable



**Interface Cable**

1. Make sure your disc drive and computer are turned off.
2. Attach one end of the cable onto the HP-IB connector of your disc drive, and tighten the screws on the cable with your fingers.



- 
3. Attach the other end of the cable onto the HP-IB connector of your computer, and tighten the screws on the cable with your fingers.
- 

**NOTE** Look at the inset in the preceding figure.

The end of the interface cable allows you to connect, or “piggyback,” other cables. If you need to add another peripheral, you can plug another interface cable into the back of the cable you have just hooked up. We recommend, however, that no more than four piggyback connectors be stacked on one piece of equipment; the resulting weight could damage the connector mounting.

Refer to the Appendix for more details on interface restrictions.

---

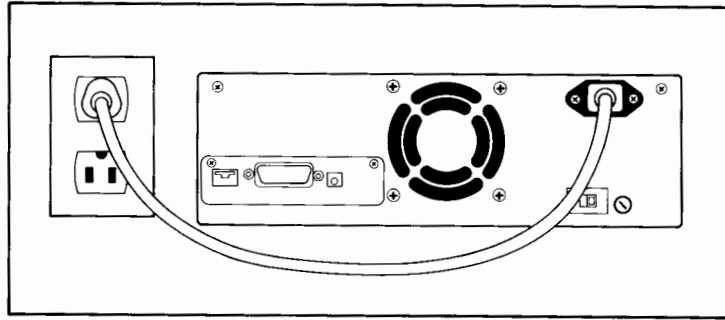
## Step 5: Connecting the Power Cord

1. Make sure your disc drive and computer are turned off.
  2. Connect the power cord to the socket labeled “AC LINE” on the rear panel of your disc drive.
- 

**WARNING** This product is equipped with a power cord and plug designed for your safety. Plug the power cord into a properly grounded receptacle to avoid possible electrical shock.

---

3. Plug the power cord into an electrical outlet.

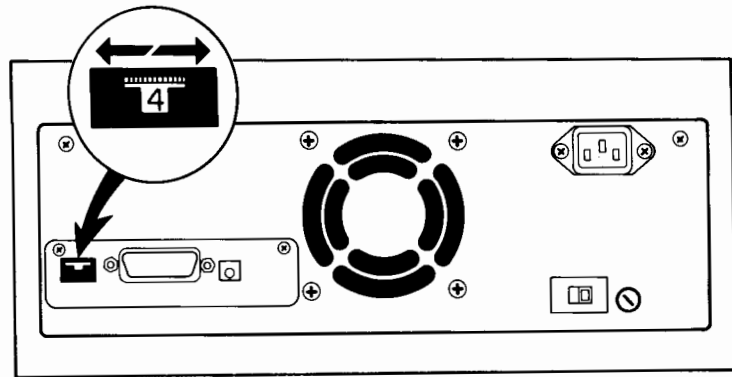


**Power Cord Connection**

## Step 6: Setting the Address

Each Hewlett-Packard peripheral connected to the same HP-IB on your personal computer must have a unique address, just as each house on a block must have a unique address. Your computer uses that address to communicate with the peripheral.

Hewlett-Packard sets your disc drive address to 4 at the factory. As long as the HP 9127A is the only peripheral on your system set to 4, you should not change the address. If another peripheral is set to 4, set the HP 9127A to an *unused* address between 0 and 7.



**The Address Wheel**

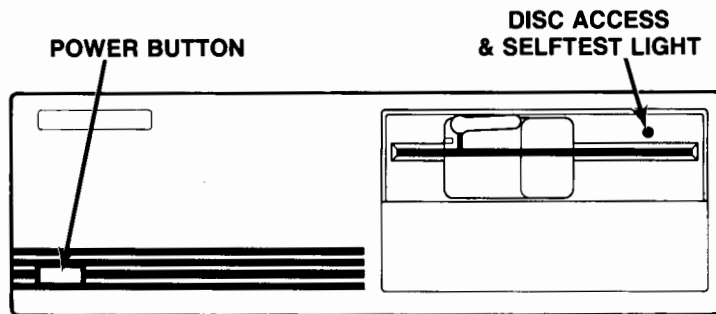
If you ever need to change the address:

1. Make sure your disc drive is turned off.
2. Turn the thumb wheel to the desired address.

**Whenever you change the address, you must turn the drive off and then on again for your system to know that a change has occurred.**

You'll turn the drive on and learn about the drive's selftest in the next step.

## Step 7: Try It!



Power Button and Disc Access Light

### CAUTION

The amber light on the front panel of your disc drive is both a selftest light and a disc access light.

Do not turn off your disc drive nor remove a flexible disc when this light is on. The light comes on when the disc drive is storing data to, and retrieving data from, the disc. It lights momentarily when the drive is turned on.

1. Make sure you have removed the protective shipping disc.
2. Locate the power button on the front panel of your disc drive. Push the button IN to turn on your disc drive.
3. When you turn on your disc drive, the disc drive performs a selftest which takes about 15 seconds. During this time, the amber light on the front panel on your disc drive is lit. (The red light on the rear panel is also a selftest indicator.)
4. After about 15 seconds, the amber light should go out, indicating that your disc drive has passed the selftest.
5. If the amber light remains on or flashes, turn off your disc drive. Turn your disc drive on again to repeat the selftest.
6. If the light flashes or is still lit after you repeat the selftest, contact your dealer or the nearest Hewlett-Packard Sales Office.

## Using Your Disc Drive

Read on to learn about flexible discs (Chapter 3). Basic maintenance and troubleshooting are described in Chapter 4.

For information on using your disc drive with your computer, move to Chapter 5.

# 3

## Using Flexible Discs

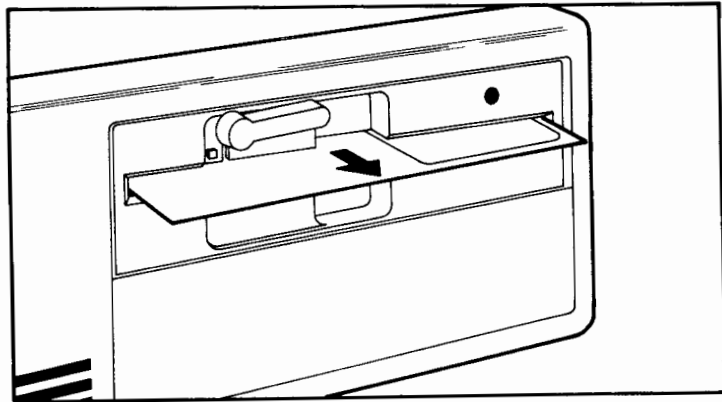
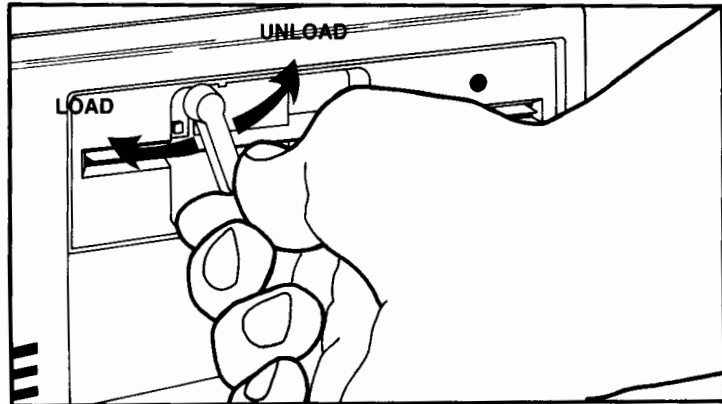
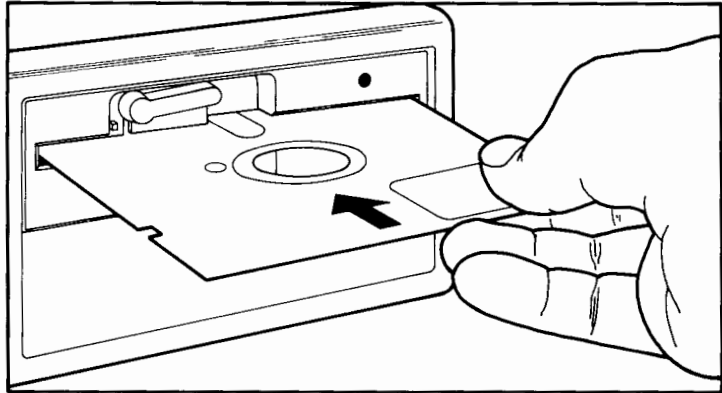
### Handling Discs

Because your discs contain valuable data and programs, you should treat them carefully.

Follow these guidelines to avoid data loss and to prolong the life of your flexible discs and your disc drive:

- Use discs in a clean environment to avoid dust or dirt particles scratching the discs.
- Avoid magnetic fields, such as appliances with motors, to prevent magnetically erasing the data on your discs.
- Insert discs into the drive until you hear a click, then close the latch. Inserting discs fully prevents damage to discs and to the drive.
- Don't bend or fold discs. Bending or folding may damage discs, causing loss of data.
- Label discs with a felt-tip pen. Do not use a pen that could scratch the surface and cause data loss.
- Return discs to their envelopes after use to protect them from dust, fingerprints, and scratches.
- Store discs in a cool, dry place to prevent moisture and heat damage.
- Don't touch the disc surface. Fingerprints contaminate discs, shortening disc life and causing data loss.
- Don't try to clean discs. The plastic jacket contains a mechanism for cleaning the surface. Other cleaning methods may damage discs.

## Loading and Unloading Discs



Loading and Unloading Discs

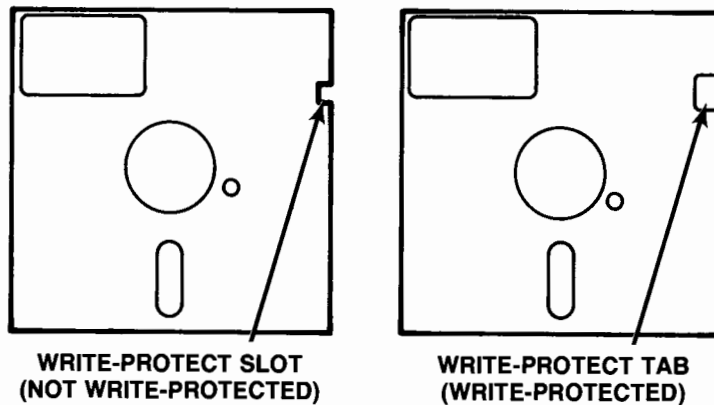
1. Rotate the disc latch up and to the right.
2. If you haven't already done so, remove the protective shipping disc.
3. Remove the flexible disc from its protective envelope. *Do not remove the disc from its sealed jacket.*
4. Hold the disc with the label on top.
5. Slide the flexible disc completely into the slot. You'll hear a click when the disc is fully inserted.
6. Rotate the latch down until it clicks into place.
7. Remove the disc by rotating the latch up and to the right. Pull the disc straight out of the slot.

## Write Protecting Discs

Write protecting ensures that your disc drive cannot write over or delete information on the disc.

Write protect discs that contain valuable programs and data.

To write protect a disc, cover the write-protect notch with one of the write-protect ("Protect Data") tabs provided with the flexible discs. If you later wish to store data on the disc, remove the tab. See the following figure.



Write Protecting Discs

---

## Ordering Discs

To purchase a package of ten flexible discs, order HP part number 92190A from Hewlett-Packard Direct Marketing Division:

1320 Kifer Road  
Sunnyvale, California 94086.  
Telephone (800) 538-8787 toll free in the U.S.  
or (406) 738-4133 in California.

Chapter 4 and the Worldwide Sales Office Directory in the back of this manual provide more ordering information.

---

### CAUTION

Disc drive performance and reliability are dependent on the type of media used. Disc drive specifications can be assured only when using HP media. The use of improper media can result in premature disc failure or damage to your disc drive.

On some disc products, HP may qualify other non-HP media. When tested, this media met HP specifications. However, HP does not warrant or support this media and cannot control changes in its specifications or quality. The selection and use of such products are the customer's responsibilities. HP reserves the right to exclude from warranty and maintenance agreement coverage any repairs which HP reasonably determines or believes were caused by the use of media not provided by HP. HP will, upon request, provide such repairs on a time and material basis.

---



# 4

## Problem Solving, Repairs, and Supplies

---

### Caring for the Case

1. Before cleaning the case, disconnect the power cord and HP-IB cables. Make sure that a disc is not inserted in the drive.
  2. Dampen a clean, soft, lint-free cloth in a solution of clean water and mild soap.
- 

### CAUTION

Chemical spray-on cleaners used for appliances and other household and industrial applications may damage the case finish. Do not use cleaners that contain ammonia, benzenes, chlorides, or abrasives.

---

3. Wipe the soiled areas of the case, making sure that no cleaning solution gets inside the case. For cleaning more heavily soiled areas, use a solution of 80% clean water and 20% isopropyl alcohol.
4. Wipe the areas with cleaning solution with another clean, soft, lint-free cloth. Remove pen and pencil marks with a non-abrasive eraser.

### Warranty

A warranty summary for the U.S. is included in the front of this manual. If you have questions concerning the warranty, please contact your dealer or the nearest Hewlett-Packard Sales Office. In countries other than the U.S., contact your dealer or the nearest HP Sales Office to determine warranty terms.

## Maintenance

Your disc drive does not require regular maintenance. However, the performance and life of your disc drive depend on how carefully it is handled. Be sure to follow the environmental restrictions in the Appendix and the flexible disc care and handling guidelines in Chapter 3.

## Changing the Fuse

A new fuse was installed in your disc drive at the factory, and you normally do not need to replace it. Should you need to change the fuse, follow these guidelines and steps carefully.

### WARNING

To avoid a potential shock hazard, unplug the power cord if you change a fuse. Place the fuse into the fuse holder and then into the unit.

For continued protection against fire hazard, replace the fuse only with the same type and rating fuse.

**Voltages and Fuses**

Voltage Switch Setting	Nominal Range	Countries	Fuse	Fuse Holder
			P/N	
115V~	100-120V~	U.S. Mexico Canada Japan Most South American Countries	3.0 AF 250V~  HP P/N 2110-0003	Gray
230V~	200-240V~	Most European Countries	1.6 AF 250V~  HP P/N 2110-0673	Black

The ranges in the preceding table are based on normal usage.

1. Turn off and unplug your disc drive.
2. Verify that the voltage setting is correct for your local power. (See the preceding table.)
3. Use a screwdriver to turn the fuse holder in a counter-clockwise direction while pushing in gently.
4. When you have loosened the fuse holder, pull it out with your fingers.
5. Remove the old fuse.
6. Select the correct fuse for your local power and voltage setting.
7. Put the new fuse into the fuse holder, and then insert the fuse holder into the unit. Do not hold the metal portion of the fuse while inserting the fuse into the unit. Turn the fuse holder in a clockwise direction while pushing gently.

## What If Something Goes Wrong?

The error messages you see depend on your particular computer.

- **What if the selftest light remains on or flashes after the selftest?**

If your disc drive does not pass the selftest, take the following actions:

1. Turn off your disc drive. Then turn the drive back on and wait for the drive to repeat the selftest.
2. If the selftest fails again, turn the drive off and then on again with a different disc or with no disc inserted.
3. If the selftest fails again, check the temperature and humidity of the environment in which you use the drive. Make sure you are using your drive in an area within the environmental ranges specified in the Appendix.

Your disc drive may have experienced abrupt temperature or humidity changes. For example, an abrupt change in temperature occurs when you take your drive out of an air-conditioned office, take it to a warm car, and then set it up in another air-conditioned office. *If your drive has been moved from one type of environment to another, allow the drive to stabilize in the new area for two hours before turning it on.* If you turn the drive on without allowing it to stabilize, it may fail the selftest.

4. If your disc drive continues to fail the selftest, contact your dealer or the nearest HP Sales Office.

■ **What if I get an error message stating that the disc is write protected?**

1. You may be using a flexible disc that you have write protected. If you wish to write information on the disc, remove the write-protect tab on the disc (see Chapter 3). If you wish to keep the disc write protected, insert another disc.
2. If you still receive a write-protect error, try another flexible disc. If you receive a write-protect error on several discs in a row, your disc drive may not be operating properly. Contact your dealer or HP Sales Office.

■ **What if I get a message that says *Disc Not Present or No Discs Were Found*?**

1. Be sure your disc drive is turned on.
2. Make sure all cables are securely connected.
3. Check that you have a disc in the flexible disc drive and that the latch is down and has clicked into place.
4. Be sure that the flexible disc has been initialized (formatted).
5. Check that your disc drive is addressed correctly.

6. Check that your computer is configured properly. See your computer manual for details.
7. If all this fails, you may have a bad flexible disc. Try another flexible disc. If this fails, contact your dealer or HP Sales Office.

■ **What if I get a message that says *Disc Error Reading Drive \_\_\_\_?***

1. Your flexible disc is probably worn or damaged. Try using other discs to see if you get the same message.
2. If you receive the message on only one flexible disc, copy the disc immediately and discard it. (Please note that if the disc is worn or damaged, the copy may not work.)
3. If you receive the same message on several flexible discs, contact your dealer or HP Sales Office.

■ **What if I get a message that says *Disc drive is empty, off, or undefined?***

1. Be sure your disc drive is turned on.
2. Make sure all cables are securely connected.
3. Be sure that you have a disc in your flexible disc drive and that the latch is down and has clicked into place.
4. Check that your disc drive is addressed correctly.
5. Check that your computer is configured properly. See your computer manual for details.
6. If all this fails, you may have a bad flexible disc. Try another disc. If this also fails, contact your dealer or HP Sales Office.

*Your disc drive can be repaired only by a trained service person. If you suspect that your disc drive is malfunctioning, contact your dealer or HP Sales Office.*

## Ordering Supplies

DESCRIPTION	HP PART NUMBER
Flexible Discs (10 discs/box)	92190A
Fuse, 3.0 AF 250V (115V Setting)	2110-0003
Fuse, 1.6 AF 250V (230V Setting)	2110-0673
Power Cord*	See footnote
HP-IB Cable, 1-meter length	10833A
HP-IB Cable, 2-meter length	10833B
HP-IB Cable, 0.5-meter length	10833D
Protective Shipping Disc	09131-87900
HP 9127A User's Manual	09127-90000

*\*Power cords are dependent on your location. Please consult your dealer or HP Sales Office if you need to order a power cord.*

Order supplies for your disc drive by contacting your HP Sales Office. Worldwide sales offices are listed in the back of this manual. You may also contact the Hewlett-Packard Direct Marketing Division at the following address:

Direct Marketing Division  
1320 Kifer Road  
Sunnyvale, California 94086

Telephone (800) 538-8787 toll free in the U.S.  
(406) 738-4133 in California

# 5

## Operating Information

This chapter will help you get started using your HP 9127A with Series 200/300 computers and HP Touchscreen computers. If you are using the HP 9127A with another computer, please refer to the system manuals for operating instructions.

The information in this chapter is intended to be used with the instructions in your system manuals.

Touchscreen instructions follow Series 200/300 information.

### With Series 200/ 300 Computers

The HP 9127A provides data interchange in HP FORMAT between HP technical computers using 5 1/4-inch flexible discs.

Install an HP Series 300 *DOS* Coprocessor if you need IBM *PC-DOS* compatibility. Refer to your system manual, *Using Your DOS Coprocessor*, P/N 98531-90002, for installation and operating instructions.

The section that follows is divided into two sections, one for BASIC users and another for PASCAL users. The HP 9127A is supported on BASIC 3.0 or later versions with Series 200 computers and on BASIC 4.0 or later versions with Series 300 computers. The HP 9127A is supported on PASCAL 3.0 or later versions with Series 200 computers and on PASCAL 3.1 or later versions with Series 300 computers.

## If You Have the BASIC Operating System . . .

### Step 1: Before You Begin

1. The address switch on the HP 9127A is set to 4 at the factory. If another peripheral is set to that address, set the HP 9127A to an *unused* address between 0 and 7.
2. Determine the MSUS, or Mass Storage Unit Specifier, according to the HP 9127A instructions in the *Peripheral Installation Guide* accompanying your Series 200/300 computer. Your *BASIC User's Guide* also provides information. (The HP 9127A replaces the HP 9125S; if your *Installation Guide* describes the HP 9125S, use those instructions to determine the MSUS.)

### Step 2: Booting Your System

“Booting” loads the operating system and utilities. Boot your system using the following steps:

1. Turn on the HP 9127A, but make sure your computer is not turned on.
2. Insert the BASIC System Disc in the flexible disc drive.
3. Turn on your computer. If the HP 9127A is the only disc on your system, your computer automatically loads the BASIC operating system.\* When the prompt *BASIC Ready X.XX* appears on the screen, the operating system is loaded. Loading the operating system takes 4 to 5 minutes.
4. Remove the BASIC System Disc and insert the BASIC Driver Disc into the flexible disc drive.
5. Type **LOAD BIN “HPIB”** and press **Exec** (or **Return**).\*
6. When the prompt *BASIC HPIB X.XX* appears, type **LOAD BIN “CS80”** and press **Exec** (or **Return**).\*
7. The system is now ready to use with BASIC.

\* Refer to your *BASIC User's Guide* for detailed instructions.



The next steps describe **INITIALIZE** and other frequently used BASIC commands.

*All commands have the same format: the command, followed by the MSUS of the disc drive to which the command is directed, and any additional command – specific parameters.*

### Step 3: Initializing Flexible Discs

---

#### **CAUTION**

All discs must be initialized before they can be used. Initializing is the process of preparing a blank disc to receive information and ensuring that your disc will record that information reliably.

**Initializing erases any data already stored on the disc.**

---

The **INITIALIZE** command allows you to select a *formatting option* and an *interleave factor*.

You have several *formatting options* from which to choose. 0 or 1 (which are the same) are the default options. The following table illustrates your choices:

**Flexible Disc Formatting Options**

Format Option	Format Name	Bytes/Sector	Sectors/Track	Tracks/Surface	Surfaces/Disc	Capacity (Bytes)
0,1 (Default)	HP	256	16	33*	2	270,336
2	DOS 2.1	512	9	40	2	368,640
3	1 k	1024	5	37	2	378,880
4	DOS 1.0	512	8	40	1	163,840
5	DOS 2.0	512	9	40	1	184,320
6	DOS 1.1	512	8	40	2	327,680

\* +2 Spares/Surface

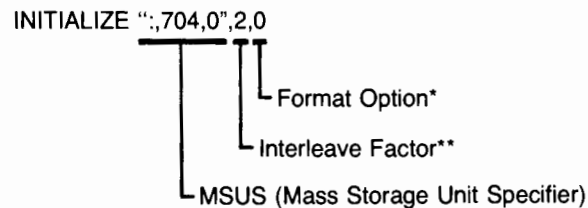
You must remember two important things when selecting a format option:

- A. Single-sided formatting is allowed on single- OR double-sided flexible discs in single- OR double-sided disc drives.
- B. Double-sided formatting is allowed ONLY on double-sided discs in a double-sided drive. (All HP 5 1/4-inch drives and flexible discs are double-sided.)

When you select a formatting option, you must also select an *interleave factor*.

Interleaving alternately numbers sectors on a disc. The factor you select may affect system performance, so we recommend a factor of 2. An interleave of 2 provides fast transfer rates and maximizes your system performance.

Initialize the flexible disc using a command similar to the following example. (Press **Enter** after typing in the command.)



*\*Optional. You may specify a format option; default is double-sided and 256 byte sectors. The preceding table and your system manual outlines formatting options if you have questions.*

*\*\*Optional. When you specify a format option, you must also specify an interleave factor. Default is an interleave factor of 2.*



#### Step 4: Other Mass Storage Commands

The following system commands are also described in your BASIC language documentation.

*All commands have the same format: the command, followed by the MSUS of the disc drive to which the command is directed, and any additional command – specific parameters.*

CAT	Lists or prints the directory of files on the disc.
COPY	Copies a volume or file.
CREATE	Creates a data file.
ENTER	Reads data from a data file.
GET	Reads an ASCII file into memory as a program.
INITIALIZE	Formats the disc: checks the disc for defects, establishes a volume label on the disc, and creates a directory.
LOAD	Reads a program file into memory.
MSI	Specifies the default storage device.
OUTPUT	Writes data to a data file.
PURGE	Deletes a file from the directory.
RE-STORE	Rewrites a program to the disc, and then purges the old version.
SAVE	Creates an ASCII file and writes BASIC program lines from memory into the file.
STORE	Writes a program to the disc.

#### If You Have the PASCAL Operating System . . .

##### Step 1: Before You Begin

1. The address switch on the HP 9127A is set to 4 at the factory. If another peripheral is set to that address, set the HP 9127A to an *unused* address between 0 and 7.
2. Determine the Unit Number according to the HP 9127A instructions in the *Peripheral Installation Guide* accompanying your Series 200/300 computer. Your PASCAL *User's Guide* also provide information. (The

HP 9127A replaces the HP 9125S; if your *Installation Guide* describes the HP 9125S, use those instructions to determine the Unit Number.)

## Step 2: Initializing Flexible Discs

---

### CAUTION

All discs must be initialized before they can be used. Initializing is the process of preparing a blank disc to receive information and ensuring that your disc will record that information reliably.

**Initializing erases any data already stored on the disc.**

---

Use the following steps to initialize a disc:

1. Turn on the HP 9127A. Wait for completion of the selftest.
2. Turn on the rest of the computer system and wait for completion of selftests.
3. The computer now searches for an operating system. Insert the **Boot:** disc in the flexible disc drive.
4. The computer now loads the utilities. When the screen displays *New system date?* type the date and press **Enter**.
5. When the screen displays *New system clock time?*, type the time and press **Enter**.
6. The following command line appears on the top of the screen:

*Command: Compiler Editor Filer Initialize Librarian Run  
eExecute Version?*

When the command line appears, remove the current disc and insert the **Access:** disc.

7. Type **X** for eExecute.

- 
8. The screen displays:

*Execute what file?*

Type **ACCESS:MEDIAINIT** and press **Enter**.

9. Insert the flexible disc you wish to initialize in the HP 9127A.

10. The screen prompts:

*Volume ID?*

---

## **NOTE**

If the HP 9127A is your only flexible disc drive, the ID is unit **#3**. If you load the operating system from the HP 9127A, it is **#3**, no matter what devices are connected to your computer.

If you have an HP 9127A and another flexible disc drive and load the operating system from the other, the HP 9127A is unit **#7**.

---

11. Type **#3** (or **#7**; see preceding note) to initialize the flexible disc.

12. You'll see this line:

*Are you sure you want to proceed? Y/N*

Type **Y** if you wish to continue with the initialization procedure. Type **N** if you wish to stop the initialization procedure.

13. The screen displays:

*Formatting option? (defaults to 0).*

You have several choices, as described in the following table:

This section also provides information on other *MS-DOS* commands and utilities, removing and reinstalling the HP 9127A Driver, and troubleshooting procedures.

### Step 1: Setting Up

1. Connect your disc drive to your computer according to the instructions in Chapter 2 in this manual. Make sure the address is set to 4 or, if you have another peripheral set to that address, to an *unused* address between 0 and 7.
2. Turn on your primary disc drive (for example, your HP 9122D or 9133).
3. Turn on your Touchscreen and wait for it to boot (load the utilities) from your primary disc drive. If you need assistance, please consult the manual that you received with your primary disc drive or your Touchscreen manual.
4. When P.A.M. appears on your Touchscreen, turn on your HP 9127A. Wait for it to complete the selftest.
5. **If you have an HP 9122D**, insert the HP 9127A FORMAT\_MASTER disc (included with your HP 9127A) in the right flexible disc drive. Insert your Touchscreen SYSTEM WORK DISC in the left drive. Make sure this disc is NOT write protected. (For information on write protection, refer to the HP 9122D/S manual.)

**If you have an HP 9133, insert the HP 9127A**

FORMAT\_MASTER disc into the flexible disc drive. (If you have configured the flexible disc drive as any drive other than drive B, substitute the appropriate drive letter wherever we refer to drive B in the following instructions.)

### Step 2: Installing the HP 9127A Driver

Use the following steps to install the HP 9127A Driver:

- 
1. Make sure the P.A.M. menu is on your screen.
  2. Select **MSDOS COMMANDS** on the P.A.M. screen.
  3. Press **Start Applic.**
  4. A new screen appears with an *A>* as the last line on the screen. Type a **B:** after the *A>*, so that the screen displays:  
*A>B:*  
(Be sure to type the colon (: ) after the *B.*)
  5. Press **Return**. You should now see a *B>* on your screen.
  6. Type the word **DRIVER** after the *B>* so that this message appears:  
*B>DRIVER*
  7. Press **Return**.
- 

## NOTE

What if I get a message on the screen that says *Bad command or file name*?

You probably made a simple typing error. Another *B>* should appear beneath the error message on your screen. Type **DRIVER** again. If you still get an error message, make sure that you have inserted the HP 9127A **FORMAT\_MASTER** disc in your flexible disc drive B. Type **DRIVER** again.

---

8. For the next few seconds, you will see the following list of messages displayed on your screen:

*Echo Off*

*1 File(s) copied*

*1 File(s) copied*

*1 File(s) copied*

*1 File(s) copied*

Finally, this prompt appears: *Reboot system by hitting (Shift, CTRL, Reset) at the same time. B>* appears beneath this message.

9. Press the **Shift**, **CTRL** and **Reset** keys at the same time. Your Touchscreen reboots and displays P.A.M.
10. The HP 9127A Driver is now installed and will remain installed until you remove it.

### Step 3: Configuring

You now need to configure your system to let the Touchscreen know that you have added the HP 9127A to your system and installed the driver. Use the following steps:

1. Make sure the P.A.M. menu is on your screen.
2. Select **DEVICE CONFIG** on the P.A.M. screen.
3. Next, press **Start Applic (F1)**.
4. The following device configuration screen appears:

MS-DOS Device Configuration										Main	
<b>System Devices</b>											
	Interface	Address	Model	Print Wheel		Interface	Address				
PRN:	HP-IB	1	82906A		PLT:	Port2					
LST:	Port2		2802A	USASCII	COM1:	Remote					
AUX:	Remote				COM2:	Port2					
<b>Disc Drives</b>											
			Maximum Sector Size					RAM Disc Size			
	Interface	Addr	Drive		Interface	Addr	Drive	Interface	Addr	Drive	
A:	HP-IB	0	0	E:	No Device			I:	No Device		
B:	HP-IB	0	1	F:	HP9127A	4	0	J:	No Device		
C:	No Device			G:	No Device			K:	No Device		
D:	No Device			H:	No Device			L:	No Device		
<input type="button" value="Previous Choice"/> <input type="button" value="Next Choice"/> <input type="button" value="Save Config"/> <span style="margin-left: 20px;">3 1</span> <input type="button" value="Default Values"/> <input type="button" value="Active Values"/> <input type="button" value="Exit Config"/>											
Num Pad 10:59											



The information on your screen varies according to the peripherals you are using with your computer. You need only be concerned with **DRIVE F** now.

**DRIVE F** is your HP 9127A. You want your screen to match the highlighted portion of the preceding illustration exactly. If the information next to drive F on your screen is not the same as in the previous screen, change your screen as follows:

- A. Select, in turn, the *Interface*, *Addr*, and *Drive* blocks.
- B. Press **Next Choice (F3)** until each block contains the desired information.

---

**NOTE**

This configuration assumes that you have set the address wheel on the back of your HP 9127A to 4. If you have selected a different address, change the address block next to drive F to match the address you have selected.

---

5. Press **Save Config (F4)**.
6. Press **Exit Config (F8)**.

#### **Step 4: Installing the Format Utility**

The HP 9127A format utility upgrades the utility that you received with your Touchscreen so that you can format 5 1/4-inch discs in IBM *PC-DOS* format also. (Touchscreen II PC users with a format utility C.01.00 or later need not perform this step.) You must now use the HP 9127A format utility *instead* of the Touchscreen format utility; follow these steps:

1. Make sure the P.A.M. menu is on your screen.

2. **If you have an HP 9122D**, place your SYSTEM WORK DISC in the left drive. Make sure this disc is NOT write protected. Place your HP 9127A FORMAT\_\_MASTER in the right drive.  
**If you have an HP 9133**, place your HP 9127A FORMAT\_\_MASTER in the flexible disc drive.
3. Select **Install**.
4. Press **Start Applic (F1)**.
5. Press **Install Applics (F1)**.
6. This message appears:  
*Select the correct disc(s) below. Press Show Applics.*  
In the FROM column, highlight **B**. In the TO column, highlight **A**.
7. Press **Show Applics (F5)**, and note that **FORMAT** is the only application on your HP 9127A FORMAT\_\_MASTER disc.
8. Press **Start Install (F5)**.
9. You should now see this message:  
*Version \_\_.\_\_.\_\_ of FORMAT already exists on A./*  
Since you wish to overwrite the old format utility, press **Continue Install (F5)**.
10. After about one minute, you'll see this line:  
*Install Completed.*  
Press **Exit Select (F8)**.
11. Press **Main Menu (F8)**.
12. Press **Exit Install (F8)** to return to P.A.M.
13. Write protect your SYSTEM WORK DISC again.

#### **Step 5: Formatting Discs**

The HP 9127A format utility that you just installed now does everything that your old format utility did, as well as formatting 5 1/4-inch discs in IBM PC-DOS formats. The following list describes the formatting capabilities of this utility:

### 3 1/2-inch discs

Using a 3 1/2-inch Hewlett-Packard disc drive, you can format 3 1/2-inch discs in either single-sided or double-sided Hewlett-Packard format. Follow the instructions for formatting in your Touchscreen manuals.

### 5 1/4-inch discs

This utility allows your HP 9127A to format 5 1/4-inch discs in several IBM *PC-DOS* versions. (The HP 9127A defaults to **Hewlett-Packard Double-Sided Format** unless you select an IBM format. The directions below provide some information on selecting IBM formats.)

If you wish to format a disc in an IBM *PC-DOS* format so that the disc can be read by an IBM PC, use the following steps:

1. From P.A.M., select **FORMAT**.
2. Press **Start Applic (F1)**.
3. The screen displays:  
*Select and insert disc(s) and press Start Format or Start Clear.*  
At this time, insert the blank disc that you wish to format into the HP 9127A. Using the **Tab** key, move the arrow to **Drive F**.
4. Press the **Select** key on the keyboard to highlight this disc.
5. This message appears:  
*Type the disc label (11 characters or less) and press Return.*  
Press **Return**.

---

**NOTE** If you wish to label the disc, type the label and then press **Return**. Also, note that the Touchscreen, like the IBM PC, will not put a label on a disc formatted in IBM *PC DOS* 1.0 format.

---

6. Press **Format Options (F1)**.
  7. Select the desired *PC-DOS* format by pressing the function key that corresponds to the desired format. An asterisk will appear in that block. Do not press **Single Side-HP** since this format does not work with the HP 9127A.
- 

**NOTE** What if I am not sure which IBM format to select?  
If you are formatting a disc for an IBM user, you can ask the user which IBM format to use. Otherwise, remember that IBM *PC-DOS* 1.0 format works with any version of *PC-DOS*, but has a capacity of only 160 kbytes. IBM *PC-DOS* 2.0 format, with a capacity of 360 kbytes, works with *PC-DOS* 2.0 or later versions.

---

8. Press **Main Menu (F8)**.
9. Press **Start Format (F5)**.
10. The screen displays *Formatting Disc F*. When the computer finishes formatting you disc, the screen displays *Press Start Over or Exit Format*.
11. Format more flexible discs, or press **Exit Format (F8)**.



## Other Utilities and MS-DOS Commands

The HP 9127A works like other Hewlett-Packard disc drives. This means that you can use the COPY/BACKUP and INSTALL utilities with the HP 9127A just as you would use these utilities with any other Hewlett-Packard disc drive. You can also use all MS-DOS commands, such as the COPY command, with your HP 9127A. The manuals that you received with your Touchscreen contain instructions on the use of the INSTALL and COPY/BACKUP utilities, as well as MS-DOS commands.

## Removing and Reinstalling the HP 9127A Driver

Certain application programs require the maximum amount of system memory. As a result, these programs may not run unless you remove the HP 9127A Driver or purchase additional memory.

If you ever get an error message stating that you have insufficient memory, you need to remove the HP 9127A Driver by following these steps:

1. Make sure P.A.M. is on your screen.  
(If you are using an HP 9122D, insert the Touchscreen SYSTEM WORK DISC in the left flexible disc drive. Make sure this working copy is NOT write protected. HP 9133 users do not need to insert the HP 9127A FORMAT\_MASTER disc.)
2. Select **MS-DOS COMMANDS**.
3. Press **Start Applic (F1)**.
4. From the *A>* prompt, type **RMV9127A**, and press **Return**.
5. After a few seconds, you'll see this line:  
*Reboot system by hitting the (Shift, CTRL, Reset) keys at the same time.*

An A> appears beneath this message.

6. Press the **Shift**, **CTRL** and **Reset** keys simultaneously. Your Touchscreen now reboots and displays P.A.M.
7. Remove the SYSTEM WORK DISC and write protect the disc again.

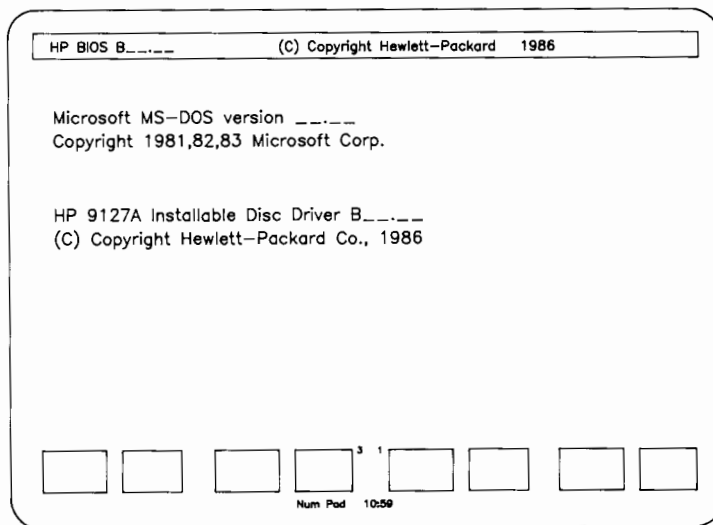
When you wish to use your HP 9127A again, repeat the directions in **Step 2: Installing the HP 9127A Driver** and **Step 3: Configuring**.

### What if Something Goes Wrong?

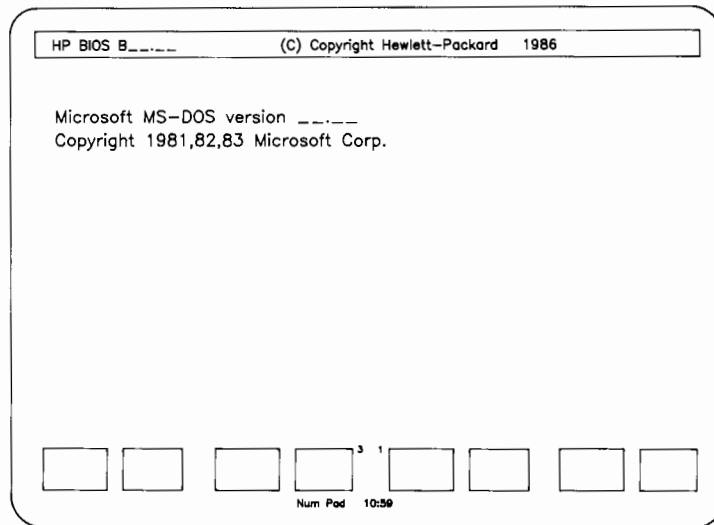
- **What if I am not sure whether or not the HP 9127A driver has been installed?**

If you aren't sure the HP 9127A Driver has been installed, press **Shift**, **CTRL** and **Reset** simultaneously. Watch your Touchscreen carefully.

If you have successfully installed the HP 9127A Driver, the following screen appears for a moment before P.A.M. appears:



If the HP 9127A has not been installed or has been removed, the following screen appears for a moment before P.A.M. appears:



Remember, one of the above screens appears only for a moment before P.A.M. appears. If you missed viewing one of the above screens, press **Shift, CTRL** and **Reset** again. Watch the screen carefully.

■ **What if I want to format in an IBM format, but the IBM formats do not appear on my screen?**

You are not using the format utility that comes on the HP 9127A **FORMAT\_\_MASTER** disc. Return to **Step 4: Installing the Format Utility**, and follow the directions in that section.

■ **Can I transfer data between ANY HP and IBM versions of an application program?**

In some cases, you may experience problems transferring data files between Hewlett-Packard and IBM versions of an application program because of various differences. However, most major software packages, such as Lotus 1-2-3, successfully exchange data files.

■ **When I type DRIVER, I see this message: *Duplicate File Name or File Not Found*. Why?**

Do not worry if you see this error message. The message means that the HP 9127A Driver has already been installed on your system, and you are trying to install this driver again. Your Touchscreen will successfully install the driver even though you see an error message.

## **With Other Computers**

Refer to your system manuals for operating information. Contact your dealer or HP Sales Office if you have questions about operating the HP 9127A with your computer.





## Appendix: Technical Reference

### HP-IB Interface Restrictions

- The total length of cable in one bus system must be *less than or equal to* two meters times the number of devices connected to your system (maximum cable length  $\leq$  two meters  $\times$  the number of devices). Your computer counts as one device, and the total length of cable must not exceed 20 meters.

Here's an example:

You have a total of three devices.  $2 \text{ meters} \times 3 \text{ devices} = 6 \text{ meters}$ . Your system can be connected together with cables that have a total length less than or equal to 6 meters.

- The individual lengths of cable may be arranged in any manner, as long as the total length does not exceed the maximum. If you are going to connect more than ten devices together, use cables shorter than two meters between the devices to keep the total cable length less than 20 meters.
- The maximum number of devices that you may connect together in one bus system is 15. Up to eight of these devices may be disc drives. There are no restrictions to the way cables may be connected together. We recommend, however, that no more than *four* piggyback connectors be stacked on one device since the resulting weight could damage the connector mounting.
- Use only properly shielded and terminated HP-IB cables to reduce potential interference to radio and television reception.

## Specifications

Listed below are the performance characteristics, environmental ranges, physical characteristics, and power requirements for the HP 9127A.

### Performance Characteristics

DISC FORMAT	Bytes/ Sector	Sectors/ Track	Tracks/ Surface	No. of Surfaces	Capacity (BYTES)
<b>With Series 200/300</b>					
HP FORMAT	256	16	33 (+ 2 spares)	2	270,336
IBM PC DOS 1.0*	512	8	40	1	163,840
IBM PC DOS 1.1	512	8	40	2	327,680
IBM PC DOS 2.0/2.1 3.0/3.1/3.2	512	9	40	1	184,320
IBM PC DOS 2.0/2.1 3.0/3.1/3.2	512	9	40	2	368,640
1 k FORMAT	1024	5	37	2	378,880
<b>With Touchscreen Series</b>					
HP FORMAT	256	16	33 (+ 2 spares)	2	270,336
IBM PC DOS 1.0*	512	8	40	1	163,840
IBM PC DOS 1.1	512	8	40	2	327,680
IBM PC DOS 2.0/2.1 3.0/3.1/3.2	512	9	40	1	184,320
IBM PC DOS 2.0/2.1 3.0/3.1/3.2	512	9	40	2	368,640

\* Discs formatted in IBM PC DOS 1.0 can be read and written to by IBM PC DOS 1.0, 1.1, 2.0, 2.1, 3.1, and 3.2 operating systems. Therefore, if you do not know which IBM operating system will be reading the disc, or if you want any IBM operating system to be able to read the disc, select IBM PC DOS 1.0 format.

### Functional Characteristics\*\*

Maximum Sustained Transfer Rate	11.0 k/s
Average Access Time	93 ms
Maximum Access Time	455 ms
Tracks/Inch	48

Rotational Speed 300 rpm  
Recording Format MFM/Double Density  
Interface HP-IB (Using SS/80 protocol)

\*\* Figures depend on your computer

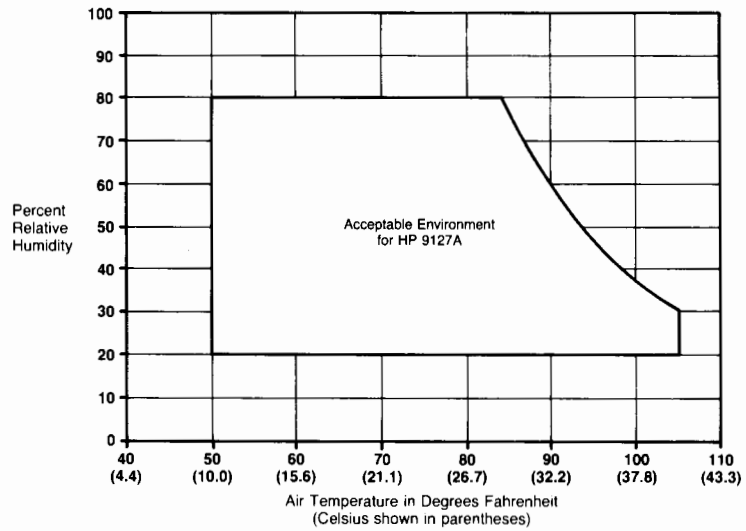
### Environmental Ranges

#### Temperature

Operating 10 to 40 degrees C  
(50 to 104 degrees F)  
Non-Operating -40 to 60 degrees C  
(-40 to 140 degrees F)

#### Humidity

Operating (non-condensing) 20% to 80%  
29 degrees C maximum  
wet-bulb temperature  
Non-Operating (non-condensing) 5% to 95%



<b>Altitude</b>	
Operating	0 to 4572m (0 to 15000 ft)
Non-Operating	-305 to 15240m (-1000 to 50000 ft)

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### Physical Characteristics

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#### Dimensions

Height	106 mm (4.2 in.)
Width	325 mm (12.8 in.)
Depth	287.5 mm (11.2 in.)

#### Weight

Net	6.8 kg (15 lbs)
Shipping	8.75 kg (19.25 lbs)

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### Power Requirements

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Nominal Voltage (select with panel switch)	100-120V~ (115V~ setting) 200-240V~ (230V~ setting)
Voltage Range	86-127V~ (115V~ setting) 195-253V~ (230V~ setting)
Nominal Frequency	50-60 Hz
Frequency Range	48-66 Hz
Power	100W

## Glossary

ADDRESS	A number that identifies the exact location to which your computer can send data or from which your computer receives data. Just as you have a unique home address, your disc drive, plotter and printer must each have a unique address.
BACKUP	A duplicate copy of a disc made in case the original disc is lost or damaged. Backup can be done on flexible discs or on HP's 1/4-inch tape products.
BOOTING	Puts your computer in a ready-to-run condition. The computer "pulls itself up by its bootstraps" and gets ready to operate. (Booting loads the operating system and utilities into your computer's memory.)
BUS	A bundle of wires over which computer devices can communicate. The bus is similar to a telephone line shared by several telephones with different numbers.
BYTE	A unit of measurement for memory storage. A byte is often used to represent one character, such as a single letter, number, or other symbol.
CABLE	Provides the connection between computers and peripherals (printers, plotters, and disc drives). The cable used with this drive is the HP-IB ( <b>H</b> ewlett- <b>P</b> ackard <b>I</b> nterface <b>B</b> us).
CRT	An acronym for cathode ray tube. The CRT is the video screen of the computer.
DIRECTORY	The table of contents for the files stored on a disc.
DISC	A circular plate of magnetically-coated material used to store computer information. The disc is similar to a phonograph record that stores programs and data instead of music.  A disc may be flexible or hard. The flexible disc may also be single-sided or double-sided.

DISC ACCESS LIGHT	A light that comes on whenever the computer is getting information from the disc drive or sending information to the disc drive.
DISC DRIVE	A device that allows a computer to read data that is stored on a disc or write data on a disc.
DRIVER	A set of instructions or program that allows the operating system to communicate with the peripheral.
FAULT LIGHT	The amber light on the front panel of the unit. This light goes on during selftest and stays on if there is a problem. It also remains on during flexible disc initialization (formatting). This is also called the <i>SELFTEST</i> light.
FIXED DISC	A disc that cannot be removed from your disc drive. Also called "hard" or "Winchester" disc.
FLEXIBLE DISC	A disc which can be removed from your disc drive. The disc is called flexible because it is made from a flexible piece of synthetic material.
FORMATTING	The process by which a disc is prepared to receive and store data. Also known as "initializing."  If you think of your disc as a filing cabinet, formatting is equivalent to getting an empty file cabinet and preparing the cabinet for use. First, you check the cabinet for any damage. Similarly, the disc drive checks the disc for any damaged areas in which data cannot be stored. Second, you place hanging folders and dividers in your file cabinet. Likewise, the disc drive sets up storage areas on the disc. Finally, you label your filing cabinet so that you know what is in each drawer. Similarly, the disc drive sets up a directory on your disc.
HARD DISC	Also called a "fixed" or "Winchester" disc. A hard disc is called hard because it is made from rigid aluminum.
HARDWARE	The physical parts of the computer system; the computer and the peripheral devices.
HEAD	The part of the disc drive that touches the surface of the disc. It reads data from your disc and writes data onto your disc.



HP-IB	Stands for <b>Hewlett-Packard Interface Bus</b> . The HP-IB is a bundle of wires that allows the computer and the peripherals to communicate.
INITIALIZING	The process by which a disc is prepared to receive and store data. Also known as "formatting."
INTERLEAVE	Interleaving alternately numbers sectors on a disc. The interleave factor affects performance.
KBYTES	A unit of measurement for memory storage, also called "k" or "kilobyte." One kbyte is technically equal to 1,024 bytes.
LOAD	To read programs from a disc or tape into a computer's memory.
MBYTE	A unit of measurement for memory storage, also called "Mb" or "megabyte." One megabyte is technically equal to one million bytes.
MFM	Modified frequency modulation (MFM); an encoding method used to store data on discs.
PERIPHERALS	Devices that are external to and controlled by the computer. Peripherals are so called because they are not part of the computer (e.g. tape drives, disc drives, printers and plotters).
PIGGYBACKING	Hooking one HP-IB cable into the back of another HP-IB cable. Piggybacking is one way to connect more peripheral devices to your computer system.
PROGRAM	A set of instructions or steps telling the computer how to handle a problem or task.
READ/WRITE HEAD	See <i>HEAD</i> .
SELFTEST	A series of internal routines the drive performs when you turn it on. These routines check that the drive is functioning correctly.
SOFTWARE	A computer program or set of programs.
UTILITY	A program that performs a task required by most users. For example, most users need to make copies of discs. The copy utility is a program that tells the computer how to copy discs.

WINCHESTER DISC

Another name for the fixed disc. The original model of the fixed disc had two discs that held 30 megabytes of data each. As the story goes, the inventors appropriately named this 30-30 disc after the famous western 30-30 rifle, the "Winchester."

WRITE PROTECT

A method of protecting disc information from being erased or overwritten.



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