



3 Modules



Drivers & Other Considerations

If your dealer hasn't done so, you must set up both HDD, Zip and LS-120 drives before they can be used for the first time. Please refer to the side-bar tips for instructions on how to do this. The setup information in this chapter is for *Windows 9x* and *Windows NT 4.0* (workstation). Setup information for other operating systems may be found on the Drivers/Utilities CD-ROM, in the relevant "Readme" files.

This chapter is about how to use and install these "data" modules:

HDD Bay
HDD

Drive Bay
FDD
Zip/LS-120



Power Bay
(see *Chapter 5: Power*)

If you're not sure where these modules are located, refer to *Chapter 1: Introduction*.

Each of these modules interacts with the system differently and so requires different setups.

INDICATORS

Whenever a data module is in use, the corresponding indicator lights up:

-  accessing the main HDD.
-  accessing the FDD.

DRIVE MODULES

FIG. 3 - 1

1. CD-ROM (see Chapter 2: System)
2. HDD
3. FDD module
4. Zip module
5. Zip disk

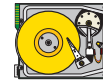


DRIVE INDICATOR LEDs

FIG. 3 - 2

6. HDD
7. Floppy bay





SWAPPING MODULES

“*Hot Swappable*” modules can be removed, reinstalled or replaced with other modules *without* turning off the system.

“*Hot Removable*” modules may be removed *but not reinstalled* while the system is turned on.

“*Cold Swappable*” modules can be removed or replaced *only* when the system is turned off.

In any case, please keep the following rules in mind:

- Before using a module, make sure it is secured in its bay. If a module isn't connected properly, it could fail and/or damage data.
- Though it may be convenient, **hot swapping** is **not** recommended. If possible, turn the system off before making any swaps. Hot-swapping a module risks accidentally “crashing” the machine (and losing unsaved data), or damaging a module if it's in use.
- If you must swap devices, be sure to save your data first and carefully review the section on the module(s) in this chapter.

WHAT'S SWAPPABLE?

Drive bay: The FDD, Zip* and LS-120* are **hot removable** (but not recommended). A battery is **hot swappable** with another battery.

*refer to the Zip/LS-120 section on page 3-11.

Parallel Port: FDD+cable is **hot swappable** with a parallel device.

Power bay: A battery is **hot swappable** with another battery (while the system is powered by an AC adapter).

HDD bay: The main HDD is **cold swappable** with another HDD.

HDD

The main HDD is in a removable plastic cartridge.

REMOVING THE HDD MODULE

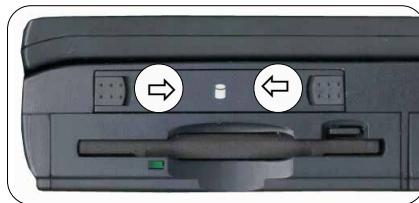
If for some reason you must remove the HDD cartridge:

1. Make sure the computer is turned off and slide the HDD latches towards each other. The HDD bay handle will pop out.
2. Gently grasp the HDD cartridge handle and *pull* it out.

REMOVING THE HDD

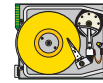
FIG. 3 – 3

1. slide the HDD latches towards each other
2. pull the cartridge out



INSTALLING THE HDD CARTRIDGE

To install the (new or upgraded) HDD cartridge, carefully slide it back into the HDD bay. Push the HDD cartridge handle in and slide the latches away from each other into their locked position.



Replacing a HDD

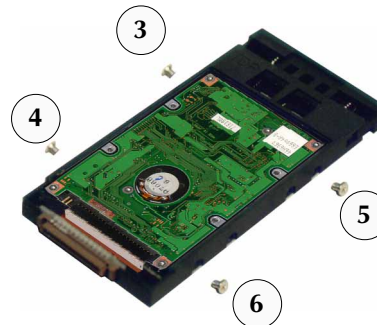
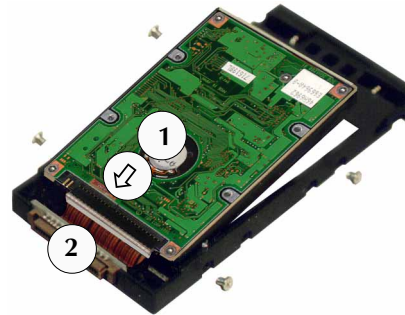
You can replace your HDD with another 2.5", 12mm high IDE hard disk drive.

To assemble the cartridge,

1. Make sure the HDD's jumper pins are set to "master" or "device 0". Most drives don't require any settings, but check your HDD's documentation to be sure.
2. Holding the HDD (1) at an angle (electronic side up), plug its pins into the connector (2). Make sure all the pins are inserted fully.
3. Cover the HDD's electronic component side with the mylar shield.
4. Insert the HDD and shield combination into the frame (electronic side up). As you do so, carefully fit the edges of the shield around the screw holes of the frame.
5. Secure the HDD, shield and frame with the four mounting screws (3)-(6).

REPLACING/UPGRADING THE CARTRIDGE

If you're too harried or a bit of a technophobe, contact your dealer to purchase or replace your current HDD with an upgrade.



Warning

Depending on the HDD, the cartridge jumper must be set to "master" or the system will not recognize it. Check your drive's documentation.

ASSEMBLING THE HDD
CARTRIDGE
FIG. 3 - 4

SETTING UP A NEW HDD FOR THE FIRST TIME

Before you can use a new HDD for the first time, two things are required:

- The computer detects the HDD.
(this is automatic at boot-up)
- Prepare the HDD to accept data.
(refer to your operating system manual)



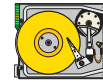
Formatting the HDD

A hard disk must be partitioned, and formatted before use. To partition the HDD, use the utility from your operating system (e.g. *MS-DOS's fdisk* command) to do this. To format, use the utility from your operating system (e.g. *MS-DOS's format* or *format/s* command). Consult your operating system's manual for more information on its partitioning and formatting utilities. If you plan to use the Save to Disk feature, refer to *Chapter 5: Power*.

After you replace or upgrade the HDD, turn the system on. The computer will automatically detect it.

528MB OR LARGER HDDs & LBA MODE

The computer automatically reads any HDD 528MB or larger as using LBA Mode. We do not recommend using an HDD larger than 528MB from an older system which does not use LBA mode. Doing so may result in problems reading some portions of the HDD.



DRIVE BAY MODULES

You can plug one of three modules into this bay: the FDD, a Zip drive, or a 2nd battery. Refer to page 3-3 for the rules on swapping. The battery module installation is covered in *Chapter 5: Power*.

REMOVING A MODULE

Even though the module may be hot swappable, we recommend making any changes with the system turned OFF.

To release a module:

1. Slide the locking latch on the bottom part of the module to the unlock position and hold it.
2. Grasp the edge of the module and pull it out of the Drive bay and release the latch.



MODULE REMOVAL

FIG. 3 – 5

1. slide locking latch
2. pull on module edge

SECURING A MODULE

To secure a module in the Drive bay:

1. Push the module in until its outer edge is flush with the side of the computer.
2. The locking latch will snap into place.



Warning

Do not remove the FDD module from the parallel port or Drive bay while it is active. Disconnecting during data access may damage the system, the FDD or result in data loss and/or corruption.

FDD (FLOPPY) MODULE

As mentioned on page 3 of this chapter, the FDD is **hot-removable**. It can work equally well in either the internal or external position.

STARTUP CONSIDERATIONS

The FDD does not have to be present when you boot-up. If it isn't in the Drive bay or attached to the parallel port, the POST (refer to *Chapter 4: Firmware*), will tell you. This does not affect performance: you can insert the FDD into the Drive bay or connect it to the parallel port at any time.

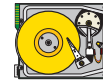
DRIVE BAY INSTALLATION

If the FDD is not already installed, make sure the bay is empty, then push the FDD module in until its outer edge is flush with the side of the computer. You should hear a "click" from the locking latch on the bottom panel when the module is in place.

PARALLEL CONNECTION

If the Drive bay is occupied (e.g. with a battery), you can connect it to the parallel port with a cable (not provided). To make the connection, attach the FDD to the cable **first** and then attach the other end of the cable to the parallel port.

If you need to use the parallel port for some other purpose (e.g. to print), you can disconnect the parallel adapter and plug in your parallel device without turning off the system.



FDD STATUS INDICATOR

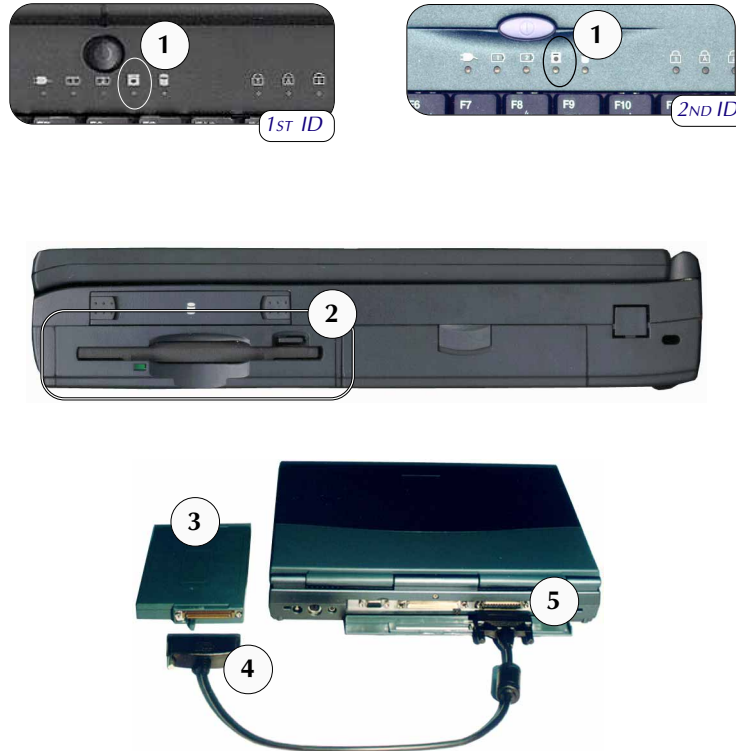
FIG. 3 – 6

1. LED lights for FDD access from either position

DRIVE BAY WITH FDD

FIG. 3 – 7

2. Floppy disk eject button



Warning

The FDD/parallel adapter cable can only be used with the FDD module. It cannot be used with any other module.

If it's connected to the parallel port, the cable must also be connected to the FDD module or the system may halt.

FDD P ARALLEL CONNECTION

FIG. 3 – 8


3. FDD module
4. FDD to Parallel adapter
5. Parallel port

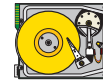
INSERTING/REMOVING FLOPPY DISKS

Gently insert a 3.5-inch disk (with its label side up) into the Floppy drive until the disk is properly seated. Press the button on the right of the Floppy drive to eject the disk.

FDD Care

Following are a few tips on the proper handling of floppies:

- Store disks away from magnetic fields and extreme temperatures. These conditions can damage your data. It's also a good idea to make backup copies of software and data.
- If a disk label is already on the disk, use a soft-tipped pen to write on the label. This prevents damage to the disk. Don't use a pencil - its carbon particles can rub off inside the drive.
- Do not remove any disk from the drive when the  LED is flashing (in-use).
- Do not try to clean, bend, or throw disks.
- Do not touch or scratch any exposed portion of the disk medium. Don't pull open the protective door either - this lets dust get inside.



THE ZIP/LS-120 MODULE (OPTION)

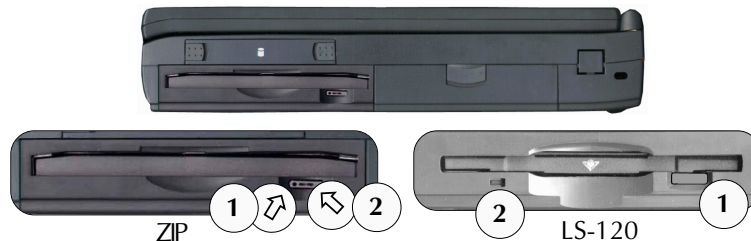
As mentioned on page 3 of this chapter, the Zip or LS-120 is **hot-removable**. However, there are some limitations (see “Operation”, pages 3-13~14).

STARTUP CONSIDERATIONS

When you install the Zip or LS-120 drive, make sure the bay is empty, then push the module in until its outer edge is flush with the side of the computer. You should hear a “click” from the locking latch on the bottom panel when the module is in place.

The Zip or LS-120 module must be installed *before* you boot-up. If it isn't in the Drive bay when the system boots, the system won't recognize it and won't allocate system resources.

Note: The Zip drive is not a “boot” device whereas the LS-120 drive can become bootable only if you activate its booting function in the BIOS Setup.



Warning

Do not remove the Zip/LS-120 module from the Drive bay while it is active. Disconnecting during data access may crash and/or damage the system, the Zip/LS-120 or result in data loss and/or corruption.

DRIVE BAY WITH ZIP

FIG. 3 – 9

1. emergency eject
2. accessing LED (green)

Note: Swappable with LS-120



Limitation & Recommendation

WITH EXTERNAL FDD

Do not choose to boot the system from Zip or LS-120 drive in the BIOS setup if you are using *Windows 95*. Doing so will make your external FDD become undetectable.

WITHOUT EXTERNAL FDD

Do not choose to boot the system from "Legacy Floppy Devices" in the BIOS setup. Instead, configure your system to boot from the Zip or LS-120 drive to prevent possible future problems in drivers/utilities installation.

BUSMASTER DRIVER FOR WINDOWS 95

Do not install the BusMaster driver in your *Windows 95* if your notebook computer doesn't have an external FDD present. Even if it does, please be aware your *Windows 95* will still identify the external FDD as an "A:" drive regardless you have configured to boot the system from Zip or LS-120 in the BIOS setup.

DRIVERS & UTILITIES

The Zip or LS-120 module must be in the Drive bay before you can install their respective tool suite. Although *Windows 9x* and *Windows NT4.0* allocate the resource automatically, you still need the tools provided with the accompanying *Drivers/Utilities* CD-ROM for many of the necessary controls.

If your system doesn't configure to be booted from Zip or LS-120 drive, when the Zip installation is complete, normally it pushes the CD-ROM back one letter (i.e. if the CD-ROM is drive "D:", it will become drive "E:", and the Zip drive will be the new "D:"). To prevent confusion, follow the instructions in the sidebar on next page to fix the CD-ROM to one "letter". Whereas, the LS-120 doesn't have this problem. Once the installation is done, it will recognize the LS-120 as drive "B:" as long as your system doesn't have the BusMast driver installed.



Zip Tools Installation

WINDOWS 9x / WINDOWS NT 4.0

Make sure the Zip drive is installed before you turn on the computer.

When the operating system starts up, it automatically detects, and recognizes the Zip drive as a "Removable Disk" but it lacks many necessary utilities provided by Zip tools. To install,

1. Insert the *Drivers/Utilities* CD-ROM.
2. From the **Start** button (on the tool bar), select **Run...** Click on **Browse...** and navigate to: E:\drivers\options\zip\win\setup*
*This assumes your CD-ROM is drive "E:" and your operating system is English version.
3. Click **Open**, then on **OK**. Follow the program's dialog boxes to install the tools (default installation is recommended).
4. When the installation is complete, the computer will ask to reboot. Do so.
5. After the system restarts, *Iomega Tools* will be added to the **Programs** menu from **Start** button.

Note: Once the installation is complete, *Windows 9x* will identify your zip drive as a "Zip 100" disk. Although *Windows NT4.0* still recognizes it as a "Removable Disk", your zip drive is inaccessible if you still haven't installed the tools.



Fixing CD-ROM Letter (Zip Installation cont.)

WINDOWS 9x

To fix the CD-ROM's new letter assignment so that it stays the same even when the Zip isn't installed:

1. Open **Control Panel > System (Properties) > Device Manager** (tab) > **CDROM**.
2. Highlight the "CDROM" listed (e.g. TOSHIBA) and click on **Properties > Settings** (tab).
3. Change the "Start drive letter" to "E:" (if the Zip drive is "D:"). Click **OK**, shutdown the system and reboot.

WINDOWS NT4.0

To fix the CD-ROM's new letter assignment so that it stays the same even when the Zip isn't installed:

1. Open **Start** (menu) > **Programs > Administrative Tools (Common) > Disk Administrator**.
2. Click on the rectangular area next to CD-ROM0 then **Tools > Assign Drive Letter**.
3. Change the "Assign drive letter" to "E:" (if the Zip drive is "D:"). Click **OK**, shutdown the system and reboot.

OPERATION

The Zip or LS-120 becomes a hot removable device only if it is installed in the system *before* it boots. If it isn't in the Drive bay when the system boots, the system won't recognize it and won't allocate system resources.

WINDOWS 9x CONSIDERATIONS

Removal When the Zip or LS-120 is removed from the Drive bay, the system will freeze all operations and wait for the drive to be re-installed. Once the Zip or LS-120 drive is back in place, the system takes a little time to free the system resources again.

Tools Highlight the Zip or LS-120 drive and click on the right mouse button to access the various tools. While most functions are self-explanatory, we also recommend reviewing Zip or LS-120 Tool's on-line help.

WINDOWS NT 4.0 CONSIDERATIONS

Removal If you've removed the Zip or LS-120 from the Drive bay, **do not try to access it**. Doing so will alert *Windows NT 4.0* to a change in the system profile and you won't be able to reinstall the Zip or LS-120 drive without rebooting. As long as *Windows NT 4.0* doesn't have to look for the Zip or LS-120, it assumes it is present, and maintains the system resources.

Tools This version of *lomega Tools for Windows NT* is available through the **Program** list of the **Start** menu. *lomega Quick Tools for NT* has the most commonly used utilities. However, these tools are not usable if any directory on a Zip disk is open. We also recommend reviewing *lomega Tools for Windows NT's* on-line help.



LS-120 Tools Installation

WINDOWS 9x / WINDOWS NT 4.0

Make sure the LS-120 drive is installed before you turn on the computer.

When the operating system starts up, it automatically detects, and recognizes the LS-120 drive as a "3½ Floppy". However, it still lacks many necessary utilities provided by LS-120 tools. To install,

1. Insert the *Drivers/Utilities* CD-ROM.
2. From the **Start** button (on the tool bar), select **Run....** Click on **Browse...** and navigate to:
E:\drivers\options\LS-120\win95&98\setup*
or E:\drivers\options\LS-120\nt40\setup*
*This assumes your CD-ROM is drive "E:".
3. Click on **Open**, then on **OK**. Follow the program's dialog boxes to install the "SuperDisk Device Driver & Utility" or "SuperDisk Utility" (default installation is recommended).

4. When the installation is complete, the computer will ask to reboot. Do so.
5. After the system restarts, *Format Utility for SuperDisk* will be added to the **Programs** menu from **Start** button.