GLYPH

Ultra Wide
Hard Drive
Quickstart Manual

About This Manual

This is not a technical manual. Technical manuals usually include information about the drive mechanism (like drive specs, wiring schematics, pin outs ... stuff like that). Since opening your Glyph enclosure voids your warranty, our documentation covers the setup & use of the product, not the drive inside it.

If you have questions or comments of a technical nature, we urge you to check out our web site for technical resources at www.glyphtech.com, or contact the Glyph Technical Support Department at (607)275-0154.

The importance of the addendum.

Now, here's one of the most important parts. As technology changes, so do our products. So, in an effort to make sure you have all of the most up-to-date information and methodologies regarding your drive, we occasionally include addendum sheets in your packing materials. Please read this document for specific information about compatibilities and formatting issues which may apply to your situation.

Unpacking, Inspection & General Info

Your Glyph drive and accessories are packaged in a sturdy shipping container. Please inspect the container for evidence of shipping damage and mishandling. If such evidence is found, file a report with the carrier or your Glyph dealer immediately and do not attempt to unpack and operate the Glyph drive until the carrier or dealer confirms the damage. Glyph products are factory sealed and you should not accept a box which has been previously opened.

Open the box. Get all excited. Now, proceed with unpacking the Glyph drive and verify that all of the following items are present:

1. The Glyph drive itself
   Tabletop -or- Rack Mounted
2. One (1) Glyph brand SCSI Cable
3. One (1) Terminator
4. One (1) Power Cable
5. Rack Screws (rack mounted drives only)
6. Warranty Card

If any of the items are missing, contact the party from whom the drive has been purchased to arrange for replacement.
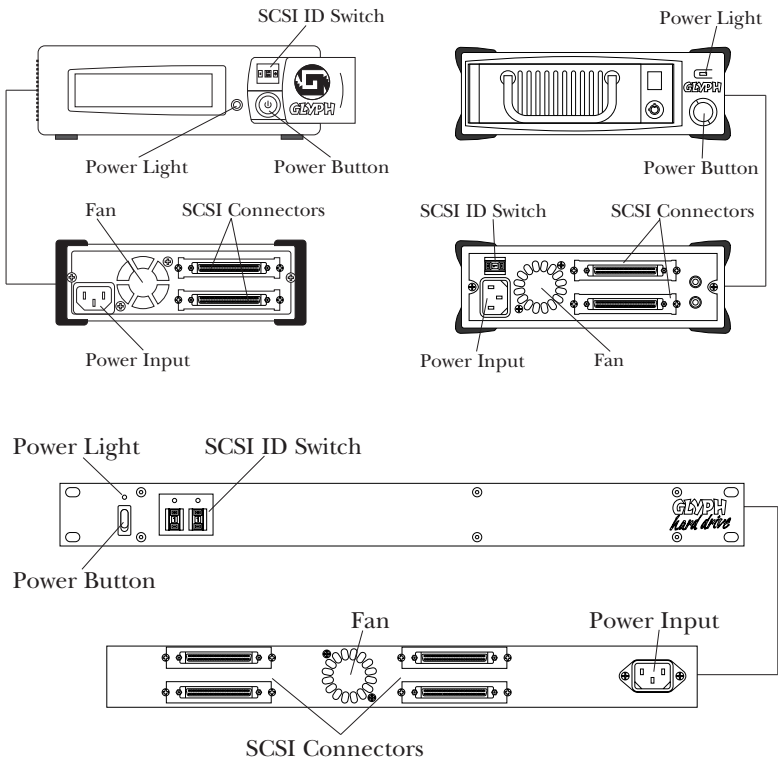
• It is a good idea to keep the shipping container and packing materials for storing or shipping the Glyph Tape Drive at some future date.

• Save the serial number/part number document for your records. this is very important should you ever need tech support or service.
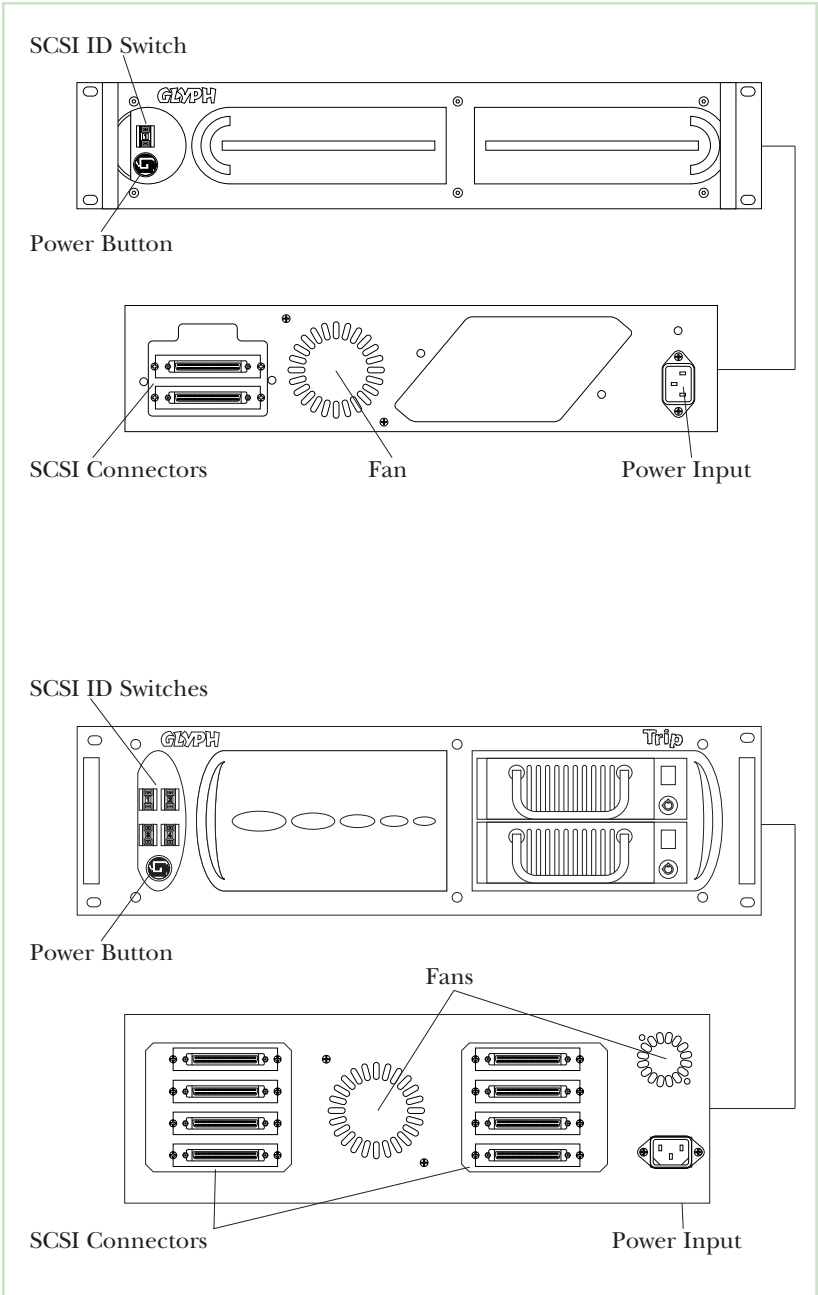
Parts Identification

Take a moment to study the diagrams below & on the following pages. You will be connecting cables and setting switches on the drive shortly, so it will be helpful to know the layout of the physical connections.

Glyph drives come in tabletop & rack mounted configurations... yours looks like one of the following 5 enclosures.

SCSI ID Switch

Power Light   Power Button

Fan   SCSI Connectors

Power Input

Power Light

Power Button

SCSI ID Switch   SCSI Connectors

Power Input   Fan

Power Light   SCSI ID Switch

Power Button

Fan   Power Input

SCSI Connectors

SCSI ID Switch

Power Button

SCSI Connectors   Fan   Power Input

SCSI ID Switches

Power Button

Fans

SCSI Connectors   Power Input

Configuring your Glyph Ultra Wide Drive for Install

Your Glyph ultra wide drive will interface with your SCSI card through the SCSI cable which is supplied with your drive, or with a cable specified by your ultra wide SCSI card manufacturer. The drivers to use the Glyph drive with a Macintosh are included with your ultra wide interface card package. Follow the instructions in the card's manual for proper installation. The drivers are specific to the Ultra Wide interface card that you have inside your computer. If you have an incompatible card, Glyph can provide currently compatible cards for most applications.

Connectivity

Ultra Wide SCSI is an interface specification that facilitates high speed data transfer between devices. The specification for Ultra Wide SCSI allows the connection of up to sixteen (16) peripheral devices to one Ultra Wide interface card. However, a more realistic, "Real World" application would be to daisy chain up to eight (8) devices together with up to 1.5 collective meters of cable (don't forget to factor in six inches of internal cabling per drive).

Connecting the Glyph Ultra Wide Hard Disk

To connect your Glyph drive, locate the following items from inside your new hard drive's package:

Rack Mount Drive -or- Tabletop Drive

- The Glyph drive itself
- Power cable
- SCSI interface cable(s)
- Active Terminator

Installing Glyph Hard Drive Hardware

Step 1 - Install your Ultra Wide card

Carefully ... follow the installation instructions in the manual which came with your ultra wide interface card. The card must be installed correctly in order for your computer to communicate with your Glyph Hard Drive.

If you are having difficulty with any aspect of the installation of your card, please contact the manufacturer of the card for technical assistance.

Step 2 - Position the Drive

If you are using the Glyph ultra wide rack mount drive, mount the drive (using the four supplied screws) into your rack, or find a level, solid surface on which to place the unit.

If you are using the Tabletop Glyph Drive, find a level, solid surface on which to place the unit.

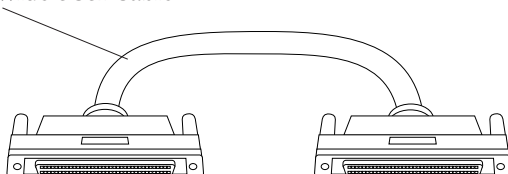### Step 3 - Connect Power Cable (Power Off)

Make sure that the power is off on all of your computer equipment and the Glyph drive. Connect the power cable to the back of the Glyph drive. Plug the three prong power plug into an appropriate power receptacle, preferably with surge and spike protection.

Step 4 - Connect SCSI Cable

The pins of the Ultra Wide SCSI cables are extremely easy to damage, so be very careful plugging and unplugging them. Carefully ... connect the SCSI cable to the Ultra Wide SCSI card which you have already installed. Then connect the remaining 68 pin end to the back of the Glyph drive in either the top or bottom 68 pin connector. These two connectors are functionally identical and the open connector can be used for adding more ultra wide devices or for termination (more on termination in this guide).

68 pin Ultra Wide SCSI Cable

Both ends have 68 pins

Glyph uses a 68 pin High Density connector for our LVD/ultra wide drives, so we've supplied a 68 to 68 pin Ultra Wide SCSI cable with each Glyph ultra wide drive. If you already have one or more ultra wide SCSI devices connected to your ultra wide SCSI card, you need to daisy chain your drives together. If your Ultra Wide SCSI card uses a connector other than 68 pin, call Glyph Technical Support.

Step 5 - SCSI Termination

Like we mentioned earlier, the ultra wide SCSI interface specification allows up to sixteen (16) peripheral devices connected to one ultra wide SCSI card. The ultra wide SCSI bus wants to know where the first and last devices connected are. This is accomplished by adding active termination to the peripheral devices. Active termination can be implemented in many different ways. Glyph has supplied a small rectangular 68 pin terminator that plugs into the remaining 68 pin connectors on the back of the drive (or where ever the end of the daisy chain).

When to Use Termination on your Computer

When deciding if you need to use the terminator for your Glyph drive, use the following as a guide:

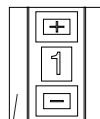| Situation	Terminator
The Hard Drive is the only SCSI device connected to the Computer.	ON
The Hard Drive is the last SCSI device in a chain of three or more devices.	ON*
The Hard Drive is NOT the last device in a chain of two or more devices.	OFF

* In this case, make sure that none of the "middle" devices are terminated. Only the first and last devices should be terminated.

Ultra wide SCSI devices are physically connected together by cables in a "daisy chain". When we refer to first or last devices, we refer to the physical location of the device in a daisy chain rather than the SCSI ID number of the device.

Step 6 - SCSI ID Selection Switch

The SCSI ID Selection Switch sets the drive's SCSI identification number. Each device connected to your ultra wide SCSI card must have a unique SCSI identification number. The sixteen (16) possible identification numbers are 0 through 15. When you select a number for the Glyph drive, be sure that no other ultra wide SCSI device, or your ultra wide SCSI card (which is usually set to 7), has the same number.

SCSI ID Switch

Setting the ID Switch

Based on the previous discussion, you are now ready to set the SCSI ID Selector Switch on your new Glyph drive. The Glyph tabletop's SCSI ID Switch is located over the power button, behind the sliding door on the front of the unit. The Glyph Hot Swap Tabletop's ID Switch is found on the back of the enclosure, above the power cable input. The Glyph rack mounted drive SCSI ID Switch(s) is(are) on the front panel of the unit.

If you found that your ultra wide SCSI card did have one or more ultra wide SCSI devices connected, make sure that you select a unique SCSI ID number for the Glyph drive that is not currently in use. Push the plus or minus button on the SCSI ID selector switch to increment or decrement the SCSI ID number. Once it is set, you will not have to change it again unless you add more devices to your ultra wide SCSI bus.

You must turn off the power to both the computer & Glyph drive when switching SCSI ID numbers and then restart in order for the drive to recognize the SCSI ID change.

Step 7 - Power Up the Glyph Hard Drive

Check that you have:
- A good location for the drive
- The drive off and the power cord plugged into the drive
- The SCSI cable connected to the ultra wide SCSI card and the Glyph Drive.
- Termination if necessary
- The SCSI ID# set correctly

Power up your Glyph drive. Rack mounted Glyph drives have power switches on the front panel. The Glyph tabletop's power switch is behind the sliding door on the front of the enclosure. The Glyph Hot Swap Tabletop's power button is found on the front of the enclosure. Make sure that the power light is on. Always turn on your drives first and let them spin up before switching on your computer.

Step 8 - Power Up Your Computer

Now that the drive is on, power up your computer. Your Glyph drive has been preformatted for Macintosh in our production facility, so in most cases you can plug & play immediately on a Mac, but if you have a stand-alone DAW or PC- compatible you must reformat the drive before using it. You are now ready to install any other drivers specific to your ultra wide interface card. Refer to the documentation for specific installation instructions regarding your particular ultra wide interface card.

Your Mission ... should you choose to accept it ...

Your Ultra Wide SCSI Glyph Hard Drive should now be ready for you to go forth and make the art you were destined to create. Again, the technical support staff is here to help you if you run into problems along the way.

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