Internal ZipDrive Kit for the EPS/ASR

Introduction

-Imagine having a hard drive in your keyboard. What convenience! The Internal ZipDrive Kit gives you that capability, including the external SCSI port for other devices to hook up with.

-The ZipDrive is perfect for installation into Ensoniq samplers. **Four big reasons:** the ZipDrive is powered by 5v, the same as the floppy, it comes in a handy 3.5 form factor, the EPS/ASR is not dependant on the floppy drive for basic operation, and the ZipDrive spins up FAST - fast enough to be accessible in the short time that the EPS/ASR gives it as it boots up.

-There are two things you will miss from your floppy: you can't format a SCSI Drive from the ASR anymore, and how will you get any of your sounds on your ZipDrive? The answer to those questions can be: use another SCSI-equipped Ensoniq to make the ZipDisks, and just read them on your Ensoniq, and/or use a PC/Mac program, like our Tools product, to make your ZipDisk from your computer.

Installation

Step One

Opening up your ASR

Your ASR keyboard has many screws! Unscrewing them is the hardest part of the install. Remove ALL the screws underneath the keyboard, and all the screws in back, where the audio jacks are. Some of the screws are different, so pay special attention on which screw went where. Next remove the side panel of the keyboard where the floppy is. And finally, unscrew the 4 screws that hold the floppy in place.

Step Two

Removing the Floppy

Take out the floppy controller connecter and the power connector. Pull out the floppy. **THIS CAN BE DIFFICULT** - it is jammed in hard; there is very little tolerance. You might find it easier to pull it in backwards, as the panels block the floppy by several mm's. Be careful - but don't hesitate to force the drive.

Step Three

Installing the SCSI ZipDrive

(You will need a 100mb ZipDrive Internal SCSI Drive.) This is pretty much the same thing, only backwards. Be careful of the aluminum tape on the ZipDrive - this can unravel as you slide it in from behind. After you've got it in place, use the same screws that held in the floppy to hold secure the ZipDrive. Plug in the floppy power connector.

Step Four

Placing the Custom Cable

On one of the Cable Adaptors, there are 2 "screw jacks" where the 25-pin jack comes in contact. Unscrew these - you will need them for later. Disconnect the short SCSI cable that connects the SCSI Interface board to the external jack. Place the identical 25-pin end, facing out, of the Custom Cable. Install the middle 50-pin connector, the one that is BETWEEN the cable adaptors, into the ZipDrive itself. In the small place behind the ZipDrive, tuck the cable adaptor portions nicely and securely.

Step Five

Installing the Rear Plate

Ensoniq did some funny glue jobs on the rear plate adaptor. Do what you can to remove the old 25-pin jack, leaving just an open hole. Next, place the other end of the Custom Cable into the hole, using the "screw jacks" that you removed from the cable adaptors.

Step Five

Testing the Connections

Before you put everything back together, test the SCSI connections. First, put a EPS/ASR formatted ZipDisk THAT HAS the OS on it into the ZipDrive. (If you do not have this type of ZipDisk, you need to make one somehow, using another ASR or a computer.) Turn on the EPS/ASR - it should boot up from the ZipDrive. If it doesn't, make sure all your connections are firmly placed - try disconnecting and reconnecting them as well. Keep trying - if you run into problems, give us a call. At first, don't try any other SCSI Devices in the chain. Once you have the ZipDrive running, try your other devices. Use the SCSI Troubleshooting guide at the right if you have any other problems.

Step Six

Cleaning Up

Screw everything back in, being careful that you put all the proper screws in their proper places. And you're off!

SCSI Drive Troubleshooting Tips

1) Turn EVERYTHING off.
2) Make sure your drive is plugged into the EPS/ASR, and the cable is screwed in and tight.
3) Turn on the drive.
4) If it does not have a cart in it, put it in now.
5) Wait for the disk to spin up, and click in to READY state.
6) Turn on the EPS/ASR, with an OS floppy inserted.
7) As the prompt says SEARCHING FOR SCSI DEVICE, look at the drive, and watch it to blink. This is called the NEGOTIATION PHASE. The EPS/ASR looks for devices on the SCSI chain, and tries to get an acknowledgment from them. If it does (the blink), it adds that device to it's "list", and goes on.
8) If it did not blink, either
   -something is wrong with your drive
   -your drive is on SCSI #3 (that's a no-no, that's the Ensoniq's number)
   -your cable is bad
   -your Ensoniq's SCSI is bad
   -something ahead or behind the drive is suspect
   -(For ZipDrives) there is no ZipDisk in the ZipDrive.
   -your drive needs to be terminated, or there is another device ahead of it in the chain which is terminated.
9) If it did blink, wait for the system to boot up.
10) Go to COMMAND-SYSTEM/MIDI/CHANGE STORAGE DEVICE, and switch it to the desired SCSI number.
11) If successful, you should get DISK COMMAND COMPLETED.
12) If not:
   a) INVALID LOAD DEVICE: The EPS/ASR did not add this to it's "list" during the Negotiation Phase
   b) DISK NOT RESPONDING: Something jammed the drive, usually in the Negotiation phase, or in your accessing. This sometimes happens when you try to access the drive when it's busy
   c) NOT EPS DEV or NOT ASR DEV: The command was successful, but the cart/drive is not formatted for the EPS/ASR
   d) It freezes: somethings really wrong.
   e) BAD DEVICE ID: The command was successful, but the cart/drive is not formatted for anything at all.
   f) DISK NOT READY: There is no cart/CD in your drive.