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For the... TS SERIES ASR EPS 16 PLUS EPS

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1-320-235-9798
"The Human Company"

EPSm™ Disk Utility for Mac OS

ASR EPS 16 PLUS TS SERIES EPS

MacOS Disk Utility Software for the Ensoniq EPS, EPS 16-Plus, TS Series & ASR series Instruments - by Terje

RUBBER CHICKEN SOFTWARE CO.

Thank You's and Legal Notices

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Legal Notices

Final Notes

A couple of things to keep in mind. Please report any alleged bugs that you might come in contact with. Also, if you have any ideas about how to make **EPSm** better or easier to use let me know. Here are a few numbers to keep in mind.

Ensoniq Corp.
155 Great Valley Parkway
Malvern, PA 19355
Customer Service (610)-647-3930
http://www.ensoniq.com
Customer Service e-mail: music-support@ensoniq.com

EPS/ASR/TS Internet users Group
epsasrts@soundcentral.com
Send subscribe requests to epsasrts-request@soundcentral.com
Essential for in-depth Ensoniq probing

Transoniq Hacker
1402 SW Upland Dr.
Portland, OR 97221
(503)227-6848
E-mail: interface@transoniq.com

Sound Management BBS
(708)-949-6434
Music, MIDI, Sampling, or anything in that vein? Sound Management is the board to check out! They have tons of samples and online help from different manufacturers.

Update Policy

Updates to this program are free for the lifetime of the program. You will receive free updates by the following:

1) Major upgrades are sent via postal mail. These are released every 6 months or so. **YOU ARE RESPONSIBLE FOR KEEPING YOUR ADDRESS ACCURATE WITH US - WE ARE NOT RESPONSIBLE FOR NON-FORWARDED MAIL!**

2) We make minor updates via the Internet. If you have a qualified e-mail address, please make sure we have you on our list to send these updates.

3) At anytime, you may download the latest revised support and help files from our web site (with the exception of the .EXE file): They are self-extracting .EXE files ready to install into your computer.

Table of Contents

Introduction

EPSm is a Macintosh program. It is utility for the Ensoniq family of samplers (EPS, EPS 16-Plus and ASR-10) and also sample players (TS-10/TS-12). The emphazis is on managing floppy disk images and hard disks for the Ensoniq samplers.

Features-summary.

Transfers floppy images between Mac hard disks to EPS formatted floppies by the MacÕs Super Drive.
Extracts from and puts individual files into images.
Imports Sound Designer (type 1 and 2) sample files, Yamaha TX16W sample files, AIFF files and exports samples in an instrument in 3 formats.
Imports Standard Midi Sequence Files.
Converts 16+ /ASR Sequences and Songs to those for the EPS Classic or exports sequences and song as Midi.
Prepares a database for your EPS/ASR floppies.
Formats ASR-10 floppies.
Ensoniq-SCSI disk management including basic read, write, delete, create directories, move files, back-up, restore, listing, editing and imports.
SCSI formatting.
Divides large files up into segments.
Editing of multi-file index.
Manipulating and viewing image contents (in various formats).
View and Edit Disk ID's.
View and edit image comments, including cut and paste from word processors.
Edit file names.
Bank editing.

See the Table of Contents to look-up a particular section, or a topic. The name derived from fabulous co**m**bined disk shredder and synth explosive for **EPS**"- EPSm for short.

Troubleshooting/Support

At Rubber Chicken we pride ourselves for the personal support we can give, because we believe the only important problem to you is your own problem! (Makes sense, doesn't it?)

But before you call/write in for support, **we do ask you of some requirements.**

a) Please describe the problem specifically (what screens come up, what do they say VERBATIM, any repeatable steps we can describe so we can duplicate the error here). If you say "it doesn't work", we're sorry, that just isn't enough for us to go on. IT IS VITAL THAT WE CAN REPLICATE THE ERROR. We need to know what is the difference in your computer that is causing the conflict.

b) It is VERY HELPFUL, in case of errors in reading parameters, to send us the File Image file that your are reading. Zip the file up using WinZip or related program (it will compress to a very small size) and attach it in an e-mmail message to us. These are very helpful in determining what the problem is.

d) Tell us which revision of the program you are using, what platform (Win95 or Win 3.x).

e) If the program "crashes", please be specific - does the computer freeze, or do you get an error dialog? What does the dialog say?

Contact information

Rubber Chicken Software Co.
714 5th Street SE
Willmar, MN 56201 USA
Toll Free Order Line: 1-800-8-PRO-EPS (800-877-6377)
Tech Line, Fax, and Int'l: 1-320-235-9798
E-mail: chickenEPS@willmar.com
Web Page: http://www.soundcentral.com/~chickeneps

matic defaults to Text". Then select the card "Misc" In that dialog check the box reading "[x] Use Type I to transfer binary". Then select the card "Upload" In that dialog select "Default non text format = Raw Data". Then choose from the main menu Customize/Suffix Mapping… In that dialog choose

Mime Type	Application	Creator	FileType (Not in Tbl.)	Action	Extentions
application/x-gnu zipped	MacGzip	Gzip	Gzip		.gz
application/x-K2000	K-Snatcher	krz2	k r z /	Unknown	.krz`
application/x-gkh	EPSm	EPSm	GKHO	Unknown	.gkh
application/x-Giebler Single	EPSm	EPSm	EPSD	Unknown	.EFE, .EFA,.ins
audio/aiff	SoundApp	SCPL	AIFF	Unknown	.aif, .aiff
audio/x-wav	SoundApp	SCPL	WAVE	Unknown	.wav
application/z-zip	ZipIt				

make new entrier as needed, dbl. clk to edit/change

You may choose to select other options than those above of coarse. Note that the "EPSD" filetype is an instrument, while .EFE or .EFA can be anything. EPSm will however make the right kind of file once it reads the file, and since most files you download will be instruments, the above suggestion is not a bad choice. If you don't have ZipIt, you may for example use UnZip, or StuffIt expander with Enhancers. You would also like to have some entry for Midi files.

EPSm - a first look/test drive.

First of all, you should **first**:
Don't run EPSm. Restart your Mac. Then please take an EPS/ASR/TS formatted floppy and put it in the Macs Superdrive. If your Mac crashes, that is not unusual, otherwise you may work on your computer for a day, but don't ever run EPSm that day., and your Mac suddenly crashes. You should reboot you Mac before doing anything serious or before running EPSm in this testdrive section.

Different Macs behave differently. Inserting an Ensoniq floppy will generally be harmful to your Mac. It is normal that your Mac freezes when you insert the floppy. When that does not happen it is normal that your Mac will crash first later on. This behaviour reflects errors in your Mac. EPSm will fix those. You produce no harm to your Mac by inserting Ensoniq floppies while EPSm is running.

You should do the following second:
To run EPSm you need to be running System 7 or higher. Probably you will have no problems with conflicting INITs (except DOSMounter).

•Locate the file "short .sit "in the EPSm folder. Uncompress this with "Stuffit Lite" or "Stuffit Expander" from Aladdin Software (Both these software packages are available at better mac ftp archives , www archives and BBS services or from Aladdin)

•Launch EPSm. Choose from the menu: **Image/Open...** Then select the file "short" you just decompressed. You will then see a listing of the content of the file. "short" is an image of an EPS floppy and you see which files were on the original floppy. There is only one instrument file in the image.

•Lets say you want to play the instrument on your EPS/ASR. You need to format a floppy on your EPS. If you have an ASR, use a DD floppy (Double Density) for now and choose ENSONIQ format when asked by your sampler.. If you have a TS, format a DD floppy on your TS..... We are back in EPSm and have opened "short ". You choose the menu Floppy/write Image to EPS floppy... Then you will see a dialog encouraging you to put in the EPS floppy in the SuperDrive. Do that. (Note: Anything on the floppy will be overwritten!) The image is written and the floppy pops out. Then you put it in your EPS /ASR /TS floppy drive and load the instrument there as usual. Check that the instrument loads and plays.

The third step is optional and leave you with options:

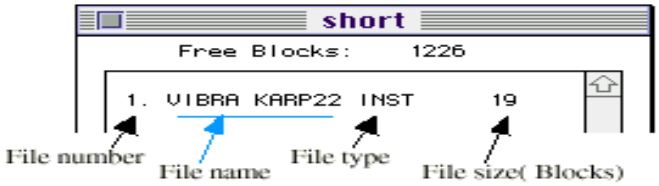
If you have an FTP net connection, you may want to take advantage of sample downloading from some of the ftp sites. You may try that, but the details about how you connect and download will vary from person to person. The FTP sites also come and go. At the time of this writing a working URL is "ftp://ftp.sparta.lu.se:/pub/music/eps" . Download the file "short.gkh.gz" from the ftp site first and make sure you can get your procedures for this file to work before you do any more downloading. Please follow the example instructions in section **SOME EXAMPLES: F** on how to proceed in more details. That section can be found later in this document.

If this does not apply and you want to find out something about EPSm without reading more of the documentation, you can explore on your own or look up the section SOME EXAMPLES.

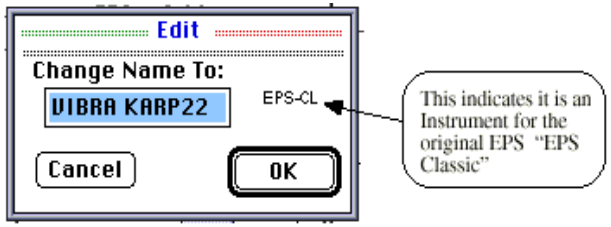
Some may also find it advantageous to jump to the section called "Operating Instructions" which describes briefly the different menu commands to give you an idea of what can be done in EPSm.

Fourth point of test-drive/tutorial

Get back to the EPSm program. Assume you have the image "short" still open. The window shows the content of the image like the following figure. "INST" means it is an Instrument.



•Double click on the entry.or, alternatively click on the entry and select the menu EPSfile/Edit… This causes a dialog to pop up....



You can type in a new name for the instrument. You will notice that the characters you type are automatically converted to uppercase and the length limits itself to 12 characters which is the max an ASR/EPS name can have. Let's say you change the name to "RATTLE NOISE". Press OK, to make the change permanent.

APPENDIX E

Setting up Netscape for EPSm

You know EPSm is not for Net -sample use as such. Still. many of the users do have net access. So I will give some hopefully helpful tips on how to set up Netscape wich has become a popular World Wide Web browser. It is possible to use Netscape for downloading samples instead of a dedicated FTP program, besides, several Net reachable samples are available only on WWW.

You may find it advantogous to set up your Netscape software. There is a lot of setup you probably already have done. You will find it convenient to define helper programs which automatically will decompress or decode files such as will have endings .gz, .sit, .hqx, .zip, .efe. It may vary how you want your netscape set up and there are many different ways. The following is only a suggestion.

I assume you have Netscape v 2.01. It may be convenient to obtain the following software for helpers MacGzip, StuffitExpander with Enhancer , MacApp. You can get these programs from popular Mac archives

Launch Netscape and choose from the menu Options/General Preferences../Helpers…

What you should do is now to define a series of file extentions/endings and tell Netscape which action to take when you download a file in Netscape. You will see a list of file extentions in the window. If ".gz" is not already defined, then take the following steps. Press [New..] . That brings up a dialog to fill in. Mime type and Sub type. Fill in with "application" and "x-gnu zipped" respectively. Yoy will see your new entry is in the list. Fill in extentions="gz" and on the line showing "application" press the [Browse..] button. Then locate the MacGzip application. and press (open). Then the line has been filled in with the "filetype" as Gzip. That's fine. If you want that MacGzip is going to be launched automatically and decompress a file, you should check the box (o)Launch Apllication. Your new Entry in the list will then look like.

Similar to the above you may then fill in a few more items.

Now select the card "General". Uncheck the box :use internet config". Then select the card "Download" .In that dialog uncheck the box reading [ ] "Auto-

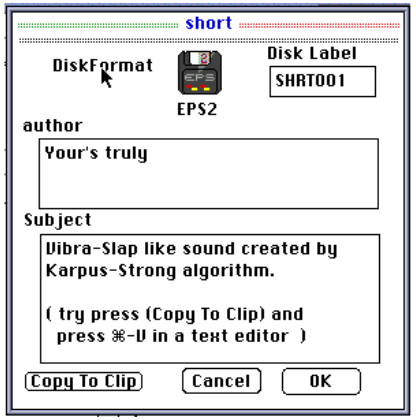
recommended that you download one particular file and get that to work before you do any more downloading.

Launch Fetch and choose from the menu ...File/Open Connection...Then fill in the fields in the dialog as follows, or what is most appropriate.

Host	ftp.sparta.lu.se
User ID	ftp
Password	your@email.address
Directoty	pub/music/eps

You will be connected to the FTP site and the display will show you which files are in that directory. Please find the file "short.gkh.gz" and select it. You may set the radio button labelled "(o) automatic" since you have setup Fetch to transfer .gz files as binary. You then select "Get File" or you simply double click on short.gkh.gz. It will then be downloaded- and it will be decompressed automatically.

•Choose the menu **Image/Info** to get the following display..



You may use the “author” and “subject” boxes for anything you like. You also notice a box for the Disk Label. EPS classic disks do not have a disk label, but do not mind them beeing there. Try writing a new disk label. Notice how the program limits the label to a total of 7 characters where the 3 last ones are digits. If you later choose the OK button, your changes will be written to the image. Try pressing the “Copy To Clip” Button, then press OK and then switch to a word-processor or SimpleText (You can not switch to another application from a dialog with a border looking like the one shown above). If you then press command-V or choose Edit/Paste in the editor, the following text will be pasted into the word processor:

———————————————
Info for Image : short 3/16/1996
Image-type : EPS2
———————————————
Label : SHRT001 FreeBlocks : 1226
Author : Your’s truly
Subject : Vibra-Slap like sound created by Karpus-Strong algorithm.

(try press (Copy To Clip) and press cmnd-V in a text editor)
———————————————-
 # Name type size
———————————————
1. VIBRA KARP22 INST 19
==========

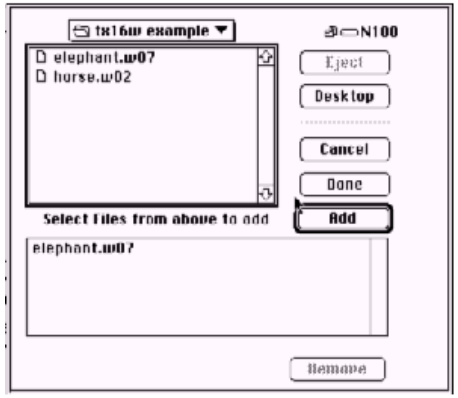
Now, switch back to EPSm. Click on the instrument to select it. It will then be hi-lited. We will save this instrument separately to the Mac hard disk. We do this by selecting the menu **EPSfile/SaveAs**. You will then save that instrument to your hard disk just as with any other Mac applications.
Lets see if we can also get a file from the Mac hard disk and put it into the

image. Select the menu **EPSfile/fetch(open)**... If you now select the file you just saved, you will see that it appears in the file list of the image. You will have two files with the same name. There is nothing wrong with that, but try to delete one of the files by selecting one file by clicking and then use the **EPSfile/Clear** menu.

Lets just clean up a little. You don't need the "short:" file any more so you can delete it. To do that you first close the window in EPSm and then place the file in the trash in the Finder.

Fifth point of test-drive/tutorial

Get back to the EPSm program. We will here transfer Yamaha TX16W files to your EPS /ASR sampler. We start by making a new image to work on which we do by the menu **Image/New** . For now just fill in a name for the image e.g. "transport ", and accept EPS2 as the default image type/format. You will then be presented with the file list of an empty image. You have 1245 Blocks to use. To make EPS instruments out of the Yamaha samples we do the following. We select the menu EPSfile/Import TX16W…. You are presented with a file-list. which after you have navigated to the "EPSm folder/tx16w examples"-folder will look like:



You select files from the top box and press "Add" to make the file appear in the lower box. Those files that appear in the lower part are the files you will import. So get all the files you want to appear in the lower box. In the present example you should make elephant.w07 and horse.w02 both appear in the lower box. When that is done, just press "Done". After a while you will see new file names appearing in the file list of the image. You can edit the file names if you wish by the **EPSfile/Edit**... menu.

You can transfer the converted samples to an EPS if you choose **Floppy/ write image to floppy**. You are then asked to put in an Ensoniq formatted DD floppy in the SuperDrive. Do that. You can then take the floppy to your sampler and load the instruments.

APPENDIX D

Suggestions for setting up the FTP utility Fetch

You know EPSm is not for net -sample use as such. Still. many of the users do have net access and many users are or have been or will become eps-maling list subscribers. So I will give some hopefully helpful tip on how to set up Fetch which is a popular FTP utility for the Mac. Here is described one procedure you can follow if you have a Mac with an Ethernet card connected to the InterNet..

You may find it convenient to obtain the following software : for FTP- Fetch v.3.0 or later (available at Mac FTP sites and BBSs) [Another alternatives iare "XferIt", "AnArchie". "Mosaic", "Netscape"]. You need tools for decompressing files-MacGzip0.22 or later [Another alternative StuffitExpander with Enhancer] . IÕll tell how you operate these tools but first tell how to set them up...

Launch **Fetch** and choose from the menu ...Customize/Preferences…Then scroll select the card "General". Uncheck the box :use internet config". Then select the card "Download" .In that dialog uncheck the box reading [ ] "Automatic defalts to Text". Then select the card "Misc" In that dialog check the box reading "[x] Use Type I to transfer binary". Then select the card "Upload" In that dialog select "Defaault non text format = Raw Data".
Then choose from the main menu Customize/Suffix Mapping… In that dialog add the items:

Suffix	Transfer	Save As	Type	Creator	
.gz	binary	MacGzip archive	????	Gzip	MacGzip
.gkh	binary	GKH file	GKHO	EPSm	EPsm
.zip	binary	ZIP archive	pZIP	pZIP	UnZip (or StuffIt Expander +)
.mid	binary	Midi file	Midi	MIDI	Vision or yoyr Midi sequencer
.aif	binary	Audio Interchng	AIFF	????	Any, EPSm, Alchemy
.krz	binary	K200 archive	"krz "	krz2	krz2sd1

Make new entries as needed, dbl. clk to edit/change

Then launch MacGzip and choose from the menu ...File/Preferences…Then set the gzip suffix to **.gz** and compression level to 9 {not needed} I check "[x] Quit when done". Then check the menu items gzip/binary and gzip/uncompress

When you have set this up you can FTP download as described below. It is

APPENDIX C

Ensoniq Floppies and Macs

The Mac, as a computer family, can NOT read Ensoniq floppies. Here's why..

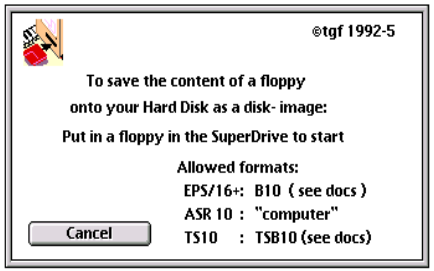
Much of what have been said about the subject have been said by people having IBM PC's. Much of what have been said is also wrong. Ensoniq floppies for the EPS, the 16+ and a couple other Ensoniq synths are formatted somewhat special. The low level format is called MFM. Basically the same system is used on IBM PC computers. However the Ensoniq floppies have 10 sectors in each track on each side of the floppy. Now the IBM variety, which a Mac with a SuperDrive also can use has 9 tracks. The Mac can read a number of disk formats. Mac DD disks can be formatted as double sided 800 K SCR or single sided 400 K. These formats use a varying number of sectors pr. track to keep the bit density more even. These formats use a completely different system for identifying tracks and sectors. A Mac with a SuperDrive can also access the 720 K MFM IBM type floppies. However the formats the Mac uses are hard-coded into the Mac ROM and programmers do not have any parameters or tables to vary. There are no hooks to the file access routines that can be used for the purpose of reading Ensoniq floppies by a Mac .

All Macs I have tried (prior to AV and PowerPC) crash if you insert an EPS floppy in the SuperDrive in 32 bit addressing mode. That is clearly a bug in the Mac. Some Macs have problems with their ROMS not being 32 bit clean(my claim) . These problems are separate from the inability to acess 10 tracks.

Some new Macs can be made to read Ensoniq floppies. They can not write this back to a floppy however. The Macs having this capability include Centris/Quadra 610, 650, Performa /LC 475, 550, 575, 630, and Performa 5200, 6200. Some other new Macs will tell the program they have the capability of reading Ensoniq floppies, but will fail to do it. Those that will fail are Quadra 950, Quadra 840A/V, 6100, 7100, 7200, 8100.

Sixth point of test-drive/tutorial

We will here introduce the novice to error messages and floppies. Launch the EPSm program if not already done. Select **Floppy/Read EPS/ASR/TS floppy**. The dialog may then look similar to this:



Please note from this that what is about to happen is that the content of a floppy will be saved in one single file (= “image” see following chapter). Further you can not put in just any floppy. For now try to put in a Mac floppy ; you will then get an error message. You can repeat and put in a regular Ensoniq formatted floppy. Then you also (for most Macs) get an error message.

If you have an EPS/16 you need to use a B10 floppy (read what it is in this documentation). If you have an ASR, you need to use the so called COMPUTER format when formatting floppies on the ASR. If you have a TS10, you need to use a TB10 or TB20 floppy.

However if your dialog looks different than the one shown above in that it shows “Ensoniq” as one of the allowed formats, then your Mac may read an Ensoniq floppy (at least it says so). It is still recommended that you for general work use either COMPUTER formatted floppies or B10 (or TB10. for TS10/12) and not Ensoniq format.

For many Macs the dialog will show “Ensoniq” as an allowed format, but will then display a message that it can not read this floppy after all. This is normal. See the section “In case of problems/New Macs and Ensoniq floppies”

From this complicated section you should have learned that normally a Mac can not read an Ensoniq floppy. That is not a matter of software; it is a hardware issue. That situation does not prevent communication between a Mac and an ASR/EPS/TS by floppies, but you need to take some precations , you may have to learn what to do. You may also need to learn some concepts. See for example “what is an image” , “ The B10 floppy” and the appendix C “ Macs and Ensoniq floppies” in addition to see the operating instructions and example section.

This concludes “test drive” section.

What is a Disk Image?

What do you think? Hard to define, but here it means a file containing all the data of a floppy disk. All the data of a floppy disk can be stored in an image on a hard disk, and the floppy can be restored from this image.

EPSm works (mostly) with images; floppy disk images. You do the various individual file manipulations on the image, not on any floppy itself. That's the basic mode of operation for EPSm. You may then regard the image also as your "workbench".

EPSm works with a few slightly different images that are representations of EPS/ASR floppies. My guess is that you may think this is a little overwhelming at first. I will try to present them below. Let me summarize first . There are several image types/formats. They are given short names like EPSi, EPS2, .gkh , ASRc and so on. For example is EPSi a raw image of an EPS floppy, .gkh is a raw image attached header and tail fields and ASRc is an ASR-10 "computer'-format image. The most widely used images will be EPS2, ASRc (and then .gkh for net transfers). Try to brows through the following. All the details are not necessary.

 This is the Icon for a direct image of the EPS floppy disk data. (stored in 800 K of the data fork. Any additional information is stored in the resource fork). We call this the **EPSi** format. It is easy to remember- E P S image. A Double-density (DD) floppy formatted on the ASR with default format is the same as an EPS floppy.

 This format is called **EPS2**. It is the same format in principle as the above, it is just an image of a little special floppy disk. You note a small difference in the icons. You see one sector of the disk is marked with "2". The size of the data fork of this image is 800 K. The number of blocks you can put data into is however reduced to 1260 compared to 1600 on a **EPSi** disk image. An **EPS2** disk image without any data on it will have 1245 free blocks since the EPS OS uses 15. So if you are not already totally confused yet, **EPS2** is a direct image of a B10 floppy (to follow). (EPS2 is what I use the most. Other formats are automatically and temporarily converted to this when you write them to a floppy.)

 Disks symbolized with this red icon is called a B10 image/file (**B10i**). This contain the same information , and is a representation of the same type of disk, as the **EPS2**. However the image size is reduced to 720 K by remov-

demo	43	-A TS10 demo
eu44	44	-A TS10 ?????
cnfg	45	-A TS10 program
smpb	46	-A TS10 sample banks
EDIT	47	-A TS10 Edit to a sample

.

In case you are writing software that manipulates the files EPSm generates, or read them, you may want to know the specifics, but only then. If you need it it is specified below.

The single files you save to a Mac disk from an image or an Ensoniq is an exact copy of the file as found on the Ensoniq device exept there is a 512 byte header attached. It is intended that some of these bytes identify the file format while others give specific info on the file. EPSm sets and assumes the following bytes. ofs 0 = $0D, ofs 1 = $0A, ofs $2F=$0D, ofs $30=$0A, ofs $31=$1A. If it is not an EU file, these bytes signals it is an EFE/EFA/EFT file. If the file contains the characters 'EFE1' at ofset $3E then the file is created by EPSm and an exact copy of the files directory entry is read from offset $42, otherwise the information on the file is taken from different offsets: at ofs $12 is the 12 character Ensoniq filename, at ofs $32 the filetype (byte), at ofs $34 the block file size (4 bytes, motorola long integer) , ofs $38 Pointer to 1st Block (2 bytes, but without significance) ofs $3A reserved (4 bytes used for multifile index and for filekind number). You should not use the 'EFE1' signature unless you copy the directory byte by byte.

APPENDIX B

Ensoniq File Types

In the file list window of EPSm you see different abreviations for file types such as “INST” which is easy to guess the correct meaning of. Not all are that easy. Here is a list of most abbreviations and their meaning.

ShortCut	Number	Meaning
OS	1	- An OS file for the EPS classic
OS16	27	-A 16+ Operating system file
OSa	32	-An ASR10 Operating system file
INST	3	-Instrument file
EFF	24	-Effects file in 16+ format
EFFa	33	-Effects file in ASR10 format
SONG	6	-A Song File in EPS classic format
SO16	26	-A Song file in EPS 16+ format
SNGa	29	-A Song in ASR10 format
SEQ	5	- A sequence file in EPS classic format
SQ16	25	- A Sequence file in 16+ format
SEQa	28	- A Sequence in ASR10 format
BANK	4	- A Bank file in EPS classic format
LK16	23	- A Bank in 16+ format (Link)
BNKa	30	- A Bank in ASR10 format
SYSX	7	- A Sysex recorder file
PPTR	8	- A Parent Ptr, used in subdirectories
MACR	9	- A Macro file
MACa	34	- An ASR10 macro file, (also a TS file type)
SUB	2	-A Sub directory

TS10/12 filetypes - These have been given the following names in the EPSm list

pg1	34	-A TS 1 program file Note MACa conflict!
pg6	35	-A TS10 6 Programs file
pg60	36	-A TS10 60 programs
p120	37	-A TS10 120 programs
ps1	38	-A TS10 single preset
ps60	39	-A TS10 60 presets
SetUp	40	-A TS10 User setup
seq1	41	-A TS10 a equence
so30	42	-A TS10 30 sequences

ing every tenth block from the image. So it is an image as viewed by the Mac. B10i was intended for easy archive purposes. It was recommended for such since it is very robust and easy to implement and is not likely to change, so it will likely be possible to support this for a long time. You may not use this if you are new to EPSm and you only use a Mac.

This cheerful guy is the icon for an image in **.gkh**format. This format has been used extensively by the EPS mailing list for exchanging samples. It was the official format of the EPS-mailing-list. You should use only this format for uploads to their ftp site. As there are very many pitfalls involved in uploads, the capability of uploading this format is only granted after you obtain the mailing lists equivalent of the black belt. of a high degree (EPSm :-). The **gkh** format consists of a header giving details on its contents followed by all the data on an EPS floppy disk and then normally followed by readable comments about the author of the samples and comments on the samples themselves. **EPSm** will read this format and you can operate on individual files. You should however regard this format as reserved for uploads and not for general use. You may not be allowed to edit the comment fields on images written by other applications in this format You may often not notice, but EPSm uses specific code for each (image)format. The **gkh** format is connected to the 800 kB DD EPS/ASR floppy disk only. No other sizes!!

This is an image of a DD floppy formatted by an ASR-10 sampler (**ASRc**). The size is 720 K. The image name may make sense as ASR-10 small size computer format. The ASR can format a floppy in so called ENSONIQ format or COMPUTER format. The **ASRc** uses the latter. The ENSONIQ format is 800 kB and identical to an EPS floppy, while the COMPUTER format can not be read by an EPS or EPS16+. So the EPS can not use floppies made from **ASRc.**

This is an image of a HD floppy formatted by an ASR-10 sampler (**ASRC**). The size is 1440 K. (ASR-10 capital size Computer format) This image is not recommended to be used as a “workbench” . The smaller sizes; ASRc and EPS2, are recommended instead.

EPSm will also work with archives of types .EDE, .EDT and .EDA. These are formats used by Giebler Enterprises in the PC world only. .EDE is used for EPS floppies and .EDA is used for 1.6 MB ASR-10 floppies. .EDT is for TS-10/12 data floppies. These archives contain only the blocks which are not empty in the original floppy. Currently EPSm will expand these archives into images. The .EDE archive thus becomes an **EPSi** image while we can call the 1.6 MB image for a **[EDA]** image. Regard .EDT files just as an experiment.

EPSm will open a .EDT image and you can see the individual files and save them, however files written into an image with EPSm could be wrong.

 This is an expanded .EDA Giebler file **[EDA].** It is then an image of a HD floppy formatted by an ASR-10 sampler in ENSONIQ format. The size is 1600 K. You will probably not use this for other than to view the content or save the single files within the image. You can not write this image to a floppy by the Mac. (.EDA is of course incompatible with the Mac to begin with).

 and  These are included for TS10/12 support and for current version it is partly an experiment. It is an image of a TS10/12 special data disk -a so called TSB10 and TSB20 disk. The images are called **tsd2** and **TSD2** for DD and HD floppies respectively. You can not format floppies with TSB10 format on the TS10, however you can make copies from a master floppy. You can make a master floppy by an IBM-PC program. Only this type of TS10 data floppies can be read by the Mac.

 The expanded versions of Giebler ".EDT" archives are called TSDI and tsdi for underlaying representation being based upon HD and DD floppies respectively. You should have little use for this.

Read this: The distinction between different images is not important when you work with the image itself (for example change the name of an instrument). However, when you write an image to a floppy then the floppy has to be compatible with the image. So you have to know which kind of image you are currently working on. The following table should summarize some of the characteristics of the images. It tells which floppy type (DD is Double side Double Density) you have to use for writing each format type and wether you can use the sampler or EPSm to format the floppy. The cells showing "ENSONIQ" or "COMPUTER"refers to the ASR-10 formatting option used.

Image / floppy							
Floppy type	DD	DD	DD	DD	DD	HD	HD
Format by	EPS/ASR	EPS/ASR	EPS/ASR	EPS/ASR	ASR/EPSm	ASR/EPSm	ASR
	ENSONIQ	ENSONIQ	ENSONIQ	ENSONIQ	COMPUTER	COMPUTER	ENSONIQ
Image Size	800 K+	800 K	800 K	720 K	720 K	1440 K	1600 K
Capacity	1600 blks	1600 blks	1260 blks	1260 blks	1440 blks	2880 blks	3200 blks
EPSm->disk	Yes*	Yes*	Yes	Yes	Yes	Yes	NO

* sometimes two Ensoniq formatted floppies.

Short image summary:

If you have an EPS (Classic or 16+) you will probably use **EPS2** for general work, while **gkh** only for net up/downloads.

APPENDIX A
Creators and File Types

Given here in case you want to force files from external sources to be compatible, Also a suggestion if you plan on any software yourself.

Application signatures

- EPSm - EPSm signature
- aDL - aDownLoader signature
- stEP -stEPS signature

Image - filetypes

- EPSi -file type for raw image of EPS floppy, extra info in resources
- EPS2 -raw image of floppy w/ empty zero sectors, otherwise as EPSi
- B10i - image of a B10 floppy as viewed by mac superdrive , 720 K
- GKH0- raw DD Ensoniq image w/ head & tail fields, same as .gkh
- ASRc -raw image of DD floppy formatted COMPUTER on ASR-10
- ASRC -same above but using a HD floppy.
- EDA -[EDA] expanded Giebler rep of an ASR-10 HD floppy
- TSD2 -an image of a TS10 HD floppy with empty zero sectors
- tsd2 -as TSD2 but DD floppy image.

Mac ftypes for EFE files created from different EPS filetypes
EPS filetypes are on the EPS floppy identified by 1 byte. Use the conversion:

Mac ftype= 'EPS'+chr(ord('A')+ord(ensoniq filetype)), which yields

- EPSA -blank, should never occur as a standalone file
- EPSB -EPS OS file-type
- EPSC - sub directory, should never occur as a standalone file
- EPSD -EPS instrument file-type
- EPSE -EPS Bank
- EPSF -EPS sequence file-type
- EPSG -EPS song file-type
- EPS[-16+ sequence file-type

I have only listed a few, see also Appendix B

There also exist another "system" of files and filetypes with Ensoniq files without headers. There the system is Mac ftype= 'EU'+StringOf(ord(ensoniq file-type))), which yields

- EU03 -EPS instrument file-type
- EU04 -EPS Bank

EPSm will also read this system.

Registration

EPSm is a commercial program. Thus you need to register your copy. Your registration number is included in this manual. The program will stop to function after 18 days of use if it has not been registered. If you yourself use EPSm on more than one Mac, you have to register the program on each Mac, but you only pay for one registration.

If you have an ASR10 you will probably use **ASRc f**or general use, while **gkh** only for net up/downloads.

Why this program?

This program does a lot of different things. Two persons could use this program for completely different purposes. I can tell you what I use it for. I use it a lot. For example for transferring samples I calculate on my Mac to my EPS. I did this by floppies. It is very much faster than MIDI, not faster than SCSI/ MIDI. Now I transfer samples sometimes by floppy and sometimes directly to an Ensoniq hard disk connected to my sampler and Mac by SCSI, all with EPSm. I have also sent out samples to an ftp site for fellow EPS'ers to download into their computer/sampler. I have used this program for preparing such disk images. I also find it practical for archive back-up. I transfer images or single files to back-up tape for my Mac. EPSm is also great for managing that EPS SCSI drive. I have connected the sampler, Mac, CD player, hard disks and Syquest on the same SCSI channel at all times.. Please note that this program is not intended as a vulgar “get free samples from the internet as fast as possible and with as little effort as possible”-utility.

System Requirements

The most important: requirements are:

Requires minimum System 7

Watch out for DOS-mounter look-alikes.

(this may not apply to future Macs and versions)

To the first time user: Please take note of the 1st paragraph of the introductory section called **“EPSm a first look/test drive”**

This program has been tested by me and runs on at least 20 different Mac models. Others have used it on additional models. Any reading and writing of floppies requires a SuperDrive. It requires system 7. All Macs with SuperDrives can read B10 floppies or ASR COMPUTER formats. Only some new Macs can read Ensoniq format floppies.

For some Macs and some DOS-mounter type programs you should turn the latter off. Some 68040 Macs may need to turn cache ON. You may want to turn your Midi in stream off. These things are likely to vary. (I run accessPC, SoftAT, AudioMedia, ftp daemon, e-mail and Midi at the same time as EPSm. without problems) EPSm has been tested mostly with 32 bit addressing off.

Disk access is slower in 32 bit addressing mode, otherwise there should be no reason for not using it.

Compatibility

There is currently no known compatibility problems with hardware and software on the Mac exept what is noted above. However since there are hundreds of INITs that can cause apparent problems for any program, there must be some.

EPSm is file-compatible with those used on other computer platforms. You should however be aware that most programs or system extentions that allow you to transfer files from other platforms may scramble your file unless you explicitely set them up correctly (usually by removing all filters or substitution options)

.EFE file format
The individual EPS files saved and opened by EPSm are compatible with the .EFE format used by Gary Giebler's utilities for IBM, or "Disk Wizard" for Atari or "EPSDisk" for IBM. However, I have not tested all these myself. There exist several utilities for the PC that generate faulty instrument files. EPSm will read those, but your sampler may crash either instantly or when you try to edit the indtrument.

Image file format
The following image types generated by EPSm can be read by Gieblers utilities: EPSi, EPS2, ASRc, ASRC, [EDA], tsd2, TSD2 and [EDT]. The following images can be read by EPSDisk if they are given the file name extention "*.IMG": EPS2, EPSi, ASRc, ASRC, [EDA]. The GKH image generated by EPSm can be read by a number of utilities including epswrite.exe and EPSDisk.exe. EPSm will read (.gkh) images created by epsread and by EPSDisk when they represent 800 KB DD floppies as they should.

Sample file format
EPSm uses standard files for a Mac, and most programs can use the files generated by EPSm and visa versa. There are however a few sound-ware houses that supply their sounds in an AIFF type of format which crash popular sample editors. A sample file must have been given a Mac type -for example 'AIFF' in order to be seen by the standard file-open-dialog. (The utility 'FileTyper' can do that)

menu "+special +" / Wipe Out Damaged
This will let you delete any entry in a directory without deleting the associated FAT markings. This command should normally never be used and only for damaged files. You do not make more space available by this command.

menu "+special +" / Set SCSI ID of Bank Entries
This will let you change the SCSI ID of the instruments or songs of all the Banks on the hard disk. The bank entries always ho;ds information on which SCSI ID the instruments are loaded from. If you decide to change your SCSI ID of the drive itself, then the references in the banks becomes invalid. You can by this change all of the references. You will only change the SCSI ID of those whose SCSI ID matches the ID you supply. In this way you will forexample change the bank references pointing originally to SCSI 2 but not change those pointing originally to SCSI 4. Those latter could be pointing to your CD ROM for example and you may not want to change those.

About the [Clear] command alias (⌘-B).command
This is just for ereasing the selected files. You will have a chance to change your mind in case this command is invoked by error. You can as usual select discontinous or continous ranges of files. This is not undoable!. If you select a menu which is not empty, then this command will nor erease the subdirectory. If however the command is invoked in expert mode (by holding the SHIFT Key), then the directories will be ersased. The while underlying tree will then be erased. Not undoable.

About the (⌘-C).command
Pressing this keyboard combination will cause the Midicomands nessecary to load the first currently selected file to be placed on the clopboard. The format is compatible with Vision, so you can switch to Vision and then paste the Midi commands right into the sequence. It requeres that Macro 11 brings you to the ROOT directory..

About the (Shift ⌘-C).command
Pressing this keyboard combination after selecteing a file in the SCSI browser causes The information on the file to be copied to the clipboard in a format that is compatible with the format the Cmd-L command saves in for datasbases. Thus you can paste in information for one single file, if your database allows.

About the menu-commands "+special+..
The items under these menu are truly special, and you will only use them if you are an expert.

menu "+special +" / "Try to Salvage Damaged " (File)
This will try to salvage a damaged file. First the selected file in the directory is analyzed in terms of its recoverability. If it is evaluated fair, you will be given the option to save the file to the Mac hard disk. Currently the file on the EPS hard disk is unchanged. You may try to use this feature when the ASR/EPS gives a message like file operation error or something similar, when the file at one time actually was OK.

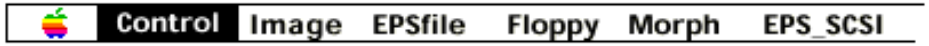
menu "+special +" / Set Num Entries in Sub
This will let you edit the number of entries in a subdirectory. You edit a number that is stored in the subdirectory entry in the file list. This parameter is not normally used, but if it is not zero, you can not delete the directory. Normally you should have no use for this function.

Operating Instructions (the menu).

Alternatives to this section are: 1) Figure it out yourself. 2) See the example tasks section; 3) see **good to know comments** 4) other specific sections.

To the first time user: See the section **"EPSm a first look/test drive"** first.

The following survey of the menus is meant to be helpful. The headings are organized such that the main menu comes first then the sub-menus within that menu.



Control

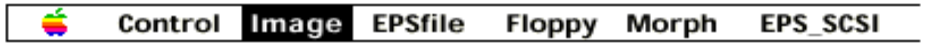
Quit: Simply quits the program. The changes you have made to an image are already stored.

Prefs: Sets some preferences. These have been set up with defaults . You should not have to invoke the submenus. They need further discussion in any case

MidiSeq Import... Brings up a dialog with parameters used when importing Midi sequences. See section "Some Examples... A)" for more details

Mod/Macro load... Setting parameters for the Macro and timedelay of the Midicommands that will load an instrument in a Mac sequencer. See section "Some Examples P. Load Instruments from Hard disk in a Vision Sequence" for more info.

SCSI bufsize-pref... You should not need to set these parameters,but you can. The buffer size used have some influence on the speed. The larger the buffer the faster the operations. However, some Macs have a flaw making them crash if your hard disk is too slow. For a Syquest 88 I use both buffers at 9216, while on one (faulty?) EZdrive, I set the read buffer at 4608.



ImageFile

New... Creates a new empty image. You can create the formats **EPSi**, **EPS2** and **ASRc**. **EPS2** should be used if you want to transfer it to your EPS and **EPSi** is for communication with other eps-non-mac users. **ASRc** is strictly for the ASR-10. By holding the [shift]-key while invoking the menu, you invoke it in 'expert' mode; You may then choose other, non-recommended image types

Open.. Opens an existing image. You can open the formats: **gkh**, **EPSi**, **EPS2, ASRc** , **ASRC, [EDA]** and .. You will only see the files in the standard-file list if they have extensions Õ.gkhÕ, or Ô.GKHÕ, or ÔEPSiÕ or if the file-type has been set to ÔGKH0Õ,ÕEPSiÕ, ÔEPS2Õ , 'ASRc' , 'ASRC', 'EDA ','tsd2','TSD2', 'TSDI' or 'tsdi' If there is already an open image then that image will be closed by the program. By holding the [shift]-key while invoking the menu, you can open in 'expert' mode. You are then tallowed to open any kind of file at your own risk.

Close.. Simply closes an image. Serves perhaps no real purpose other than; If you doubt the program updates the image, or to make sure the changes you have made are permanent, then close the image and then open it again.

Info... Brings up a modal dialog that let you view info on the disk. You can view the "author" and "subject" fields of the gkh image. You can copy the contents of this into a word processor by the usual : select text, press command-C, switch to a word processor and paste. For **EPSi**, **EPS2**, or **ASRc** you can edit these fields and they become permanent. Whereas for .**gkh** they can only be viewed for files created by some utilities. (These fields can be in front of or after the sample data in the image for gkh, and if it is in front the program has to create a new image and copy all 800+k if you add a letter to a field)

You can also edit the disk label. If the image has no label you will be asked explicitely if you want to create a new label. (The Classic do not use Labels, but it don't mind them. The 16+ uses Labels for banks)

If you press the [copytoclip] button then all the info fields and a listing of the Image content is copied to the clip and can be pasted into for axample a text document,

Check Does some rudimentary checking of the validity and consistency of the data in the current open image. If no errors found then nothing happens.

EPSfile: basic operation on individual EPS/ASR file entries in an open image.

Save As.. Select an entry and choose SaveAs. This saves that entry to a separate file on the Mac hard disk. The file format of the separate file is the socalled .EFE file. You can make multiple continuous and discontinues file selections in the file list in the image for efficient batch operations. Use shift- and command-clicking for range settings.

(= the displayed EPS directory).This restore option is a relative safe way to add a backed up partial tree.

So restoring by Mac folder is relative. It uses relative adresses from the Sub directory you are in when you start the restore. It is relatively safe to use, since it will never over write files. There is no guarantee that banks are still valid when you have restored. THe disk label is never changed.

About the (⌘-L) command
There is also a popup menu for this.. It lets you list the directories of your eps hard disk to a text file. I'm uncertain what would be a desirable/better format though. Suggestion?

About the (⌘-E) command.
There is also a popup menu for this. It lets you edit the name of files on your hard disk. Not all file types are currently editable. Subdirectories, Instruments, Banks and Sequences are. The operation is as with editing names for images.

About the (⌘-G) command.
Pressing this keyboard combination will cause the currently selected files in the image if there is one open, to be copied to the directory you are currently working on in the SCSI window.

About the menu-command "import / "AIFF, SDII,SFIL"..
This will open a file type of type AIFF (Audio Interchange File Format) and make an instrument that contain that sample. It will then put that instrument on your EPS hard disk. If you are in directory 38 from the ROOT level, the AIFF file will be converted to an audio track. Only mono files are used.

About the menu-command "exPort...
This is just like the exPort command for images: You can save the individual waves of an instrument as sample files of type AIFF (Audio Interchange File Format) or Sound Designer type 1 or Sound Designer II.. The command applies to the selected entry. If it is an ASR or 16+ sequence, the sequence will be saved as a type 1 Midi file. If it is an ASR or 16+ song, then the individual sequences will be saved as type 1 Midi files. For Audio tracks you can export them as AIFF sample files. 44.1 kHz sample rate is assumed for Audio tracks.

backup a complete hard disk, then reformat it and restore it. That would remove all fragmentation of the hard disk. The benefit would also be that you would have the backup itself in a form where each file was individually acessible and could be retrieved individually. For restoring the complete disk you would restore the backup to a blank formatted hard disk/cartridge.

Something about the rules, incase you want to use it your own way: If, during restoring, there are any files in the same file location on the disk, as originally (indicated by the log file), then the file on the disk will be deleted and the file from the backup media be added in that same file location. By file location is here meant the “key” of the file consisting of a series of entrynumbers for all the parent directories. The names of directories are insignificant. Files that already are on the EPS/ASR volume, but are in a file location that was empty when the bacup was done, will be left untouched. If the restore routine can not find a file on the mac hard disk which is written in the log file, you will have the option of looking for it by a standard file dialog, you could choose another file instead, you could skip that file or you cold cancel the complete restore operation. The starting point of the resulting structure of the the EPS/ASR volume is the ROOT. If the starting point at the backup no longer exist - because the backup started some directories deep and these directories were later deleted - If that is the case, then the restore operation will be terminated with the message that the start can not be found.

So the restore by log file always use absolute adresses on the disk. The restoring will always be exactly as deep from the ROOT as the file originally was. Banks will be valid after restoring if you back up to a cart with the same name/label as you originally had. (You will be prompted about changing the name of the current disk if different from that in the log file)

[Restore..] based upon a Mac folder.
This is currently the default. method A directory structure is made on the EPS/ASR that resembles that found on the Mac. Here it is only the files relative position that matters, and there is no overwriting of files. Duplicate names are allowed. You can see what the Mac hierarcical structure is when you display it in the Finder by choosing ‘view/by Name’. You can force a particular order of the files by preceeding the filenames with numbers such as for example ’02 SteinWayDirectory’, or ’03 Bass Guitar;. Only files that were saved by EPSm or stEPS are significant. The directory names that will be created on the EPS will be based upon those on the Mac. ’02 SteinWayDirectory’ would be translated to ‘STEINWAYDIRE’; that is if the folder name starts with a number, then the 3 first ascii’s are ignored and the rest of the name is capitalized and truncated to 12 characters as required by the EPS/ASR. Text files or other files than the EFE files saved by EPSm will be ignored. The starting point of the resulting EPS structure is taken from the current working directory

Fetch(open).. This lets you put individual files into the image. A StandardFile list will show files ending in .EFE (and .EFA) ,- for the purpose of opening files created with other programs as well as other computers. The files that are saved from EPSm program can of course also be opened. EPSm will also open EUxx files.

Clear: This clears the selected EPS files in the image. (Note the files may be renumbered! unlike EPS !!)

Import SFIL... etc. samplefiles. Given a sample or wave in any of the formats, the program let you import the sample as a plain vanilla instrument. The sample file formats are : SFIL -SoundDesigner type 1, TX16W - Yamaha 12 bit sampler files, SDII-Sound Designer type 2. , AIFF-Audio Interchange File Format. If you on a SCSI hard disk is in the Audiotracks directory, then the sample file will be made to an Audiotrack.

Import Midi file.. Given a standard midi file sequence of type 1. You can import it as an EPS classic sequence or (NEW) 16+ sequence. The 16+ and ASR will translate classic, but be aware that for all later versions and model than 16+ the O.S vers. 1.3 f there are many bugs in that translation

Import ASR/16+ seq.. This is a conversion from a 16+ sequence file to a sequence file for the EPS classic. When you have saved an individual sequence to hard-disk, you use this command to do the translation and place the result into the current working image. It will also open ASR-10 sequences and convert those to EPS Classic sequences. If you invoke the menu command in expert mode, then ASR sequences will be converted to 16+.

Import ASR/16+ song.. This is similar to above (16+ seq..) but converts a song and places the result into the current working image. It will also open an ASR-10 song and convert that to Classic. This works for ASR songs without audio tracks. If you invoke the menu command in expert mode, then ASR sequences will be converted to 16+

split/divide files.. For the selected file in the image file list ,you can choose to divide a single file into two parts. See also **Large instruments and multi-disks.**

multifile index.. You can view and edit the multifile index of a file. You have to know what you are doing.See also **Large instruments and multi-disks.**

edit.. Dependent upon the file type (SEQ or INST or BANK) Will bring up a dialog giving additional information on the file. For Instruments, Sequences and Banks you can Edit the Name of the file. The dialog will also display the information on Banks and allow you to copy the info to the clipboard so that you can paste it into a word-processor. This is useful for recreating an ASR or 16+ Bank on a EPS classic, or an ASR bank on a 16+. See also “Large Disks and Banks”. The edit command will also be invoked by double-clicking on the entry in the list. {It could also display the complete structure of an instrument showing the layer and wavesamples in the future ? -a historical remark from feb93}

exPort…Can export wave samples in instruments, audiotracks or sequences and songs to non Ensoniq formats. It applies to the currently selected entry;. Choosing this menu option for instruments bring up a dialog showing a list of all the wavesamples in the instrument. It is shown which layer they belong to and the key assignment and whether the wave is a copy. You can press [copyToClip] which copies the table to Clip board and you can paste it into a document in your word processor. You can save any selection of the waves as separate files to disk. If you select more than one wave, you may x-check the “[x] Save all - Ask 1st “ option, then you will be asked for a filename only for the first file to be saved. This allows you to select the folder which all the rest will be saved in. The names of the other waves will be the same as the EPS name unless that name is already occupied, in which case a number is added to the name to make it unique. If all waves are named “UNNAMED WS”, then they will be automatically named “UNNAMED WS#x” where x is a number. You have the option of saving using different sample formats which can be selected from the popup menu; “SFIL” is the file-type of SoundDesigner type 1 files, “SDII” is Sound Designer II file and AIFF are Audio Interchange File Format. Many other applications can read these.

If you select an Audiotrack, then you can save that as a sample file. You should use AIFF.

If a sequence (marked SEQ, SQ16 or SEQa) is selected, then exPort will save the sequence as a Midi file of type 1. For songs (marked SONG, SO16,SNGa) it will save all the sequences of the song individually as Midi type 1 files. The word ‘-seq*’ will be appended to the name you choose for easy identification. (So you will not be prompted for the name of each sequence, only the location of the first) In addition the songTracks will be exported and a text file describing the structure of the song. The latter just prints the information in the song steps.

number in its directory..and so on. Inspection of the example should tell you how it is.

The example shown started at the top of the hierarchy- at the ROOT. It can start much further down if you prefer. In that case the key is the key relative to the starting key. To get the full key you add the starting key and the individual file key shown.

The **[BkUpTree]** button can perhaps be used by journalling or recording programs so you can press them and you can later play back for automatic back-up. But I have not tried any of those programs with EPSm

Now finally back to the other option of the waiting state. Change Back Up Folder. By pressing that button you can change the folder you want to backup onto. That way the backup will be spread out over different folders. These folders can be on different hard disks, or different cartridges or different networks. When you change bacup folder,I the Log file holding the position of all the files will be automatically moved to the Desktop and it is your reponsibility to save it to where you want it filed when the backup is finished. This log should not reside on removable media neither during backup nor during restoring, for backups spread over several cartridges, but it could very well reside on a cartridge for archival purposes, and then perhaps be moved to the desktop during restoring. .

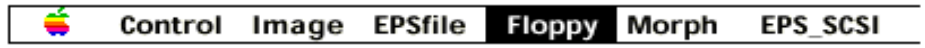
About the [Restore ..] command.
This is for restoring what you have backed up with the [backuptree] command. If you just want to load many files fast, you can also use the **[fetch..]** command. You can restore directory by directory that way. That may even be more convenient than using [ResorTree] if you decide you want to make changes to your hard disk and not restore everything as it was. The **[Restore..]** is for restoring all the files as they were. However the files will have no fragmentation when restored to a nonfragmented disk.

There are two different options for the RestorTree command. Briefly described they are 1) Restoring a hieracical file tree based upon the log file saved during a **[BackUpTree]** operation. 2) Making a tree structure on the EPS/ASR hard disk that resembles the folder-tree found on the Mac hard disk. These are separately described below.

[Restore..] based upon a backup log file.
The text file that was saved during backup is used to restore the EPS/ASR volume. (This text file could of coarse also have been generated by another piece of software) The previous secton on backing up a tree described the structure of the text file. Using a log file will try to preserve the hierarcical position the file had when it was backed up. The most obvious use could be to

```
1: 9
 11      INST    357     10 NOW QUEEN          -4       330     625152  1: 1:
1:10
 12      INST    302     11 TACK BELL  -4      330     625152  1: 1: 1:11
 13      INST    213     12 TOASTED    -4      330     625152  1: 1: 1:12
dir      SUB      8      04 FX   -4      329     617984  1: 1: 2
 14      INST    623     01 WINDOW SMASH   -4      331     2561024
 1: 1: 2: 1
 15      INST    153     02 TICKING      -4      331     2561024         1: 1:
2: 2
 16      INST    412     03 PLATE SMASH        -4      331     2561024
 1: 1: 2: 3
 17      INST    562     04 CANNON     -4      331     2561024         1: 1:
2: 4
 18      INST    664     05 FAST STOP -4       331     2561024         1: 1:
2: 5
 19      INST    910     06 NIGHT TRAIN        -4      331     2561024
 1: 1: 2: 6
 20      INST    228     07 HORSE SNORT        -4      331     2561024
 1: 1: 2: 7
 21      INST    516     08 HORSE WHINNE       -4      331     2561024
 1: 1: 2: 8
dir      SUB      0      05 MY SOUNDS          -4      328     613888  1: 2
dir      SUB      2      06 BANKS      -4      327     1536            2
dir      SUB      0      01 FACTORY BNKS       -4      333     614912  2: 1
dir      SUB      0      02 MY BANKS  -4       333     614912  2: 2
dir      SUB      2      07 SEQUENCES          -4      327      1536
 3
dir      SUB      1      01 FACTORY SEQS       -4      336     615936  3: 1
dir      SUB      5      01 BEATS      -4      337     622080  3: 1: 1
dir      SUB     22      01 ROCK       -4      338     4644864         3: 1:
1: 1
 22      SEQa     1      01 ROCK-1  4TH        -4      339     4645888
 3: 1: 1: 1: 1
 23      SEQa     1      02 ROCK-1  8TH        -4      339     4645888
 3: 1: 1: 1: 2
```

The entries are labelled in the heading.The “Name “ refers to Mac name . The Mac Name will be the two digit filenumber followed by the EPS name. Thus the alphabethical ordering in a Mac directory will be the same as it was in an EPS directory. The “vRefNum” and “ParID” are file references to the macfile. The fields “absLoc” is the absolute address of the EPS directory holding info on the file. While “key” is exactly that; it is a key identifying an EPS file uniquely on an EPS Hard Drive. The last digit is the entry number in the directory. The next-last number is the entry number of the parents entry



Floppy -for reading and writing floppies with the SuperDrive

Read EPS/ASR/TS floppy... You normally use a B10 floppy disk for this for EPS/16+data. For ASR data usually COMPUTER format floppy while for TS10/12 data you usualloy use a TSB10 floppy. You are asked to put in the floppy. All the contents on the floppy is saved in an image file. When a B10 floppy is inserted, your choices are **EPS2** or **B10i**. **B10i** is for archiving only (not for workbench) If you save it as an **EPS2** image file then that also becomes the active image in the image file list. The format will be **ASRc** if you have inserted an ASR DD COMPUTER format floppy and **ASRC** if you have inserted an ASR HD COMPUTER format floppy. If you insert a TSB10 the format will be **TSD2.** (Ensoniq formatted floppies can only be read on a few Mac models and their use are only justified for your old floppies. !!!!!)

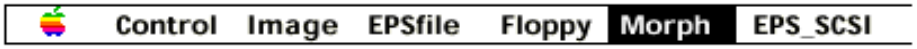
Write image to floppy... Takes the current image and writes that to a formatted floppy. Writes the current image if this is of type EPS2, GKH , EPSi ASRc, ASRC, TSD2 and tsd2 (EPS2 is faster and requires less memory than EPSi and GKH) The floppy type has to match the image type. See section “what is an image”.

get B10i, write to floppy... Let you open a **B10i** image from your archive and write the information to a regular EPS formatted floppy.

EPS disk cataloging.. This let you register all your floppies into a data base. You input Ensoniq formatted floppies in the SuperDrive. The information on the floppy is saved into a text which you later can import to your favourite data base program. I provide two different formats - see section on data-base formats. You should be able to import one of these to your database program. The menu option is also useful for seeing what is on some of those unlabelled floppies you have laying around. For the case of viewing only, you may want to uncheck the “save to txt file” option in the “change setup” DB prefs dialog (acessible from EPS disk cataloging..).

Format ASR-10 .. Let you format a DD (Double Density) or a HD (High Density) floppy to be used with an ASR-10. The format will be what the ASR calls COMPUTER format.

Format TS-10 (DD).. This is supposed to work on future versions of the TS-10 operating system if that will happen. Currently it can not be used and should be left unactivated.



Morph - for conversions of image types. (Transformation of images)

EPSi->GKH.. just translates an **EPSi** to a .gkh image, if the current image is of type EPSi. The original is not destroyed. Can be used for uploads to ftp site. Fill in any text in info fields before you convert.

GKH->EPSi.. does as it says. only active when the current working image is a gkh

EPS2->B10i.. does what it says.

B10i->EPS2.. does what it says . You never work on B10 images so you pick one dialog.

EPS2->GKH.. special for uploads from your EPS to ftp archive. Writes “floppy.gkh” and “floppy.txt” . floppy.txt is a text-file meant to accompany your upload. It lists the contents of the floppy.

ASRc->GKH.. as above but for the ASRc format

.EDE->EPSi.. For expanding Giebler .EDE PC archives. EPSm will open files with extention “.EDE” in PC Capitals and write an **EPSi** image. (This latter is saved as an expanded .EDE file. The EPSi file will be opened and become the current working image.

.EDA->[EDA].. For expanding Giebler .EDA PC archives. EPSm will open files with extention “.EDA” in PC Capitals and write an **[EDA]** image. It is the image of a 1600 blocks HD. You can not write this image to a floppy.

.EDT->TSDI/tsdi .. NB not Considered useful. For expanding Giebler .EDT PC archives. EPSm will open files with extention “.EDT” write an **TSDI or tsdi** image dependant on the size of the file. You can not write this image to a floppy.

sends out info, by apple events, about how many files it has written and the file reference to a file called EPSmBkUp_Log holding information on all the files. A tape back-up program can then back up all the files to tape and delete them when finished. -DONT DELETE DIRECTORIES-. This way, hard disk space is freed. The back-up program should send an AppleEvent command back to EPSm telling it to resume. If the software don’t have Apple events you can resume the operation manually. EPSm also checks the hard disk and will start filling it automatically as files are backed up to another place e.g. tape and deleted. So you could tell your back-up software to back-up a certain folder. Your back-up software can look at the folder and take files from there as it fills up, and EPSm will fill it up again when it empties. This should make for a system for automatic unattended back-up in the background even if you don’t have scripting capabilities to control EPSm and your back-up software by Apple events. You can of coarse also terminate the process by pressing [Cancel] in the dialog . Currently there is a timeout limit on 10 minutes.

If you plan on writing scripts for handling back-ups it may be advantageous to know the format of the file called “EPSBkUp_Log”. A partial example is shown below.

```
EPSm Tree BkUp 1993/ 8/ 2 23:43 of     CART003
EPS-start=      ROOT
Mac-start=      -4      327
#       Type    sz      name            vRefNum     ParID   absLoc  key
 1       OS     171     00 EPS-HACK OS      -4      327     1536     0
dir     SUB     2       01 SOUNDS     -4    327     1536     1
dir     SUB     2       02 FACTORY SNDS     -4      328     613888  1: 1
dir     SUB     12      03 BELLS N GNGS     -4      329     617984  1: 1:
1
 2      INST    139     01 CHE CYMBAL       -4      330     625152  1: 1:
1: 1
 3      INST    133     02 CUP GONG -4      330     625152  1: 1: 1: 2
 4      INST    266     03 FU YIN GONG      -4      330     625152  1: 1:
1: 3
 5      INST    497     04 FX GONG5  -4      330     625152  1: 1: 1: 4
 6      INST    244     05 OPERA GONG       -4      330     625152  1: 1:
1: 5
 7      INST    266     06 WIND GONG        -4      330     625152  1: 1:
1: 6
 8      INST    867     07 BOWED GONG       -4      330     625152  1: 1:
1: 7
 9      INST    185     08 CLEAR BELL       -4      330     625152  1: 1:
1: 8
 10     INST    310     09 SHADE BELL       -4      330     625152  1: 1:
```

entries or SUB (Sub directory) entries. When you have reached the directory where you want to move the files/subs you hit the button : **[ToHere]** (and it changes to [move] again). Remember that you can always see what is the current directory on the top of the file list.

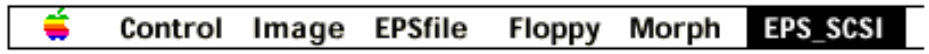
Whle you are in the “move - mode” you will also see a checkbox labelled “**[ ] updt banks**”. If you check this before pressing [ToHere] then the program will, after the move is completed, go throgh the complete hard disk looking for banks. If any of the files that got moved are referenced in a bank, then the bank reference in the bank will be changed to that of the files new location. There may be situations where you don’t want these updates to occurr.

About the [BkUpTree] command.
You can save individual files or ranges of files with the **[save..]** command. However [save..] do not save files beyond the current working directory. The **[BkUpTree]** on the other hand saves all files (from EPS-SCSI to a Mac-SCSI or a Network drive.) in the current working directory and below in the hierarchy. All filenames will be derived from those on the EPS hard disk and Mac folders are created automatically and files are put into them. The format used for both Save and BkUpTree is the .EFE format.

The BkUpTree may have different usage: Partial backup or a full backup of a hard disk. The backup itself can be used as an archive. The destination for the backup could either be a single folder on a disk holding all of the backuped files, or the backup could be spread out over several disks. You choose these options shortly after pressing the BkUpTree button.

If you for instance want to save all the sequences you have, you navigate to the SEQUENCES directory (or whatever) and press [BkUpTree] Then a dialog appears asking you in which mac folder you want to save the tree. (You can make a new folder, but the name must be unique. It is a good idea with some of these system-extensions that allow you to create new folders directly from the standard file dialog) Again, it is not which folder you may have selected in the list but which folder is the current working directory that matters. You hit [save] or [cancel].

If you have sufficient hard disk space on your Mac to hold all the files in the hierarchy , then the command will write all the files. It will not fill up the Mac hard disk more than to a certain limit. This limit you can set yourself. The program will ask you to enter that limit after you have selected the folder. When you have reached that limit during backup, the program goes into a waiting state. You have several options during the waiting state: cancel, change backupfolder or just wait for the backupfolder to be emptied. We discuss the last option first. When EPSm comes to the waiting state it first



EPS-SCSI - for manipulating files on an EPS/ASR formatted SCSI drive connected to your Mac

connect.. You connect to the currently selected SCSI drive, and a file window appears showing the EPS/ASR drive’s content. You can save files to and retrieve files from the SCSI drive by pressing dialog buttons or keyboard equivalents or popupmenus. These are descibed in a later special section on SCSI. You move down in the directory “tree” by double clicking on sub directories, “SUB” You move up in the folder hierarchy by double clicking on parent pointers “PPTR” There are 3 popupmenus at the top of the dlg for menu selections and navigation.

The following keyboard shortcuts buttons and menu choices apply.

⌘**-F=(**Fetch…**)**: Mac-file ->EPS-SCSI
⌘**-S=(**SaveÉ**)**: EPS-SCSI->Mac-file
⌘**-B= (**Clear): Clear the selected entry(ies). +Shift will also remove contents of subfolders
(Move) Move the selected entries from the directory where you select them to the directory where you press **(**ToHere**).** Pressing (Cancel), cancels .
(BkUpTree.) Save the complete hierarchy of files into folders on a Mac disk.
(Restore...) Restore what is backed up. or a Mac tree.See later section for details
(NewDir.) Make a new subdirectory
⌘**-G:** Get the selected files in an open image into current directory of SCSI drive.
⌘**-L:** List all the files at present and deeper levels in the directory hierarchy.; to text file
⌘**-E:** Edit file name, or contents of banks
⌘**-P:** exPort individual samples as AIFF/SDII/SFIL or sequences as Midi
⌘**-I:** Info on the SCSI drive such as capacity and Label which can be edited.
⌘**-C:** Copy - the hierarcical key of the selected instrument is copied as Midi and text
⌘**-W** Close the window and return to the normal working environment of EPSm
ESCAPE: Same as above
⌘**-Q:**Quit the program

menu Import SFIL/SDII/AIFF import samples to EPS instruments
menu Export ... samples in insts to AIFF/SFIL/SDII formats, or seqs to Midi
menu +special+ .. for experts or power users or in case of emergency
You can also navigate by the two popup menus at the top of the SCSI

dialog. The [goto] lets you save frequently used directories. While the central one take you to any in the current hierarcical tree.

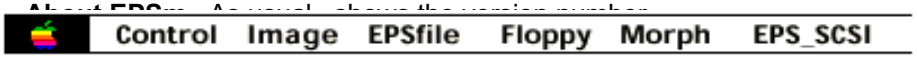
Set SCSI ID.. You select the ID (SCSI number) of the SCSI device you want to access.

Reset To be used in between changing cartridges.

Eject For ejecting EPS CD-ROMs as these can not be ejected by the drive front button

Format Device: High level formatting of EPS/ASR hard disks and cartridges. Previously Mac formatted or Ensoniq formatted media can be used.

Apple menu -Two menu items are placed here by EPSm



dialog is optional. If you have already registered, you can get the registration dialogue only by first pressing the Shift key and holding it while selecting the menu.

Keyboard Shortcuts

Many of the menu choices in EPSm can be activated by a keyboard command. The commands were covered in the previous section, and you can also see what the keyboard equivalents are by simply selecting the menus. In addition to these there are some keyboard shortcuts you can not find out what are from the menu. These are found in two “areas”. 1) when working with an image, 2) when working with a SCSI drive.In the latter case you can find what they are from selecting the “Shortcuts” option in the pull down menu in the SCSI window. The shortcuts in the image window are similar to these and applies to navigation. Here is the list for the image window.

[enter] has the same effect as double clicking when a file entry is hilited

[page-up] if you are in a subdirectory it will take you to the level above; if you work on a TS-10 floppy, this takes you to the root level. You may alternatively use the left-arrow. Pressing these keys is the only way to get to the ROOT short of closing and opening again.

[down-arrow] you move the hiliting in the file list one entry down. If no hiliting exist you move it in from the top-root level.

[up-arrow] you move the hilting up in the file list

[left-arrow] This will also take you to the root level.

The B10 floppy

between several sub directories. You can save the current path as a macro in this menu. The item with the snake biting its tail will hold the path of the subdirectory you last jumped from. It makes switching back to the previous location convenient and also switching between two directories convenient.

.

About the connect... menu command.

EPSm will try to connect to which SCSI drive number you set as the current. If there is no SCSI device connected with that number or the SCSI device with that number is not an EPS formatted drive, then EPSm will scan all the SCSI channels to see if there is any EPS drives. If it finds one it will make a connection and open a file list with the drives’ directory. You can see from the window title which SCSI ID you are connected to. (In case you have several EPS drives)

About the Eject menu command.

This is useful if you have an Apple CD ROM player connected. The eject button on the drive is inactive and if you want to change CD ROM you can normally only change it by choosing to eject by running the program CD-remote or similar, or - you can simply use this command in EPSm. The current drive with the current SCSI ID will be ejected if it has been set. Otherwise the first EPS drive will be ejected. If you happen to have a hard-disk cartridge that can be programmatically ejected, this will be ejected as long as it is an EPS formatted drive.

About the [move] command:

You may have some hard disks or cartridges where your instruments really are in the “wrong” subdirectories. Maybe because it is difficult on the EPS to tell what is the “current working subdirectory”. The move command changes the location of a file within the directory hierarchy. To accomplish this, the procedure only changes the directories, but do not move the actual files on the hard disk. This means that when you use the move command, you do not run the risk that your hard disk becomes fragmented.

The move command is only hilited when you have selected a file in the file list. You can also select a subdirectory and move it. You can also move multiple files by shift clicking and/or make discontinues file ranges by option clicking. You can move any combinations of regular files and subdirectories in one operation. All your selections will be moved to the same destination.

When you hit **[move]** , you will see that the button changes to **[ToHere]** and a **[Cancel]** button appears while others disappear. If you want to complete the move you navigate (by double clicking on PPTR (Parent Pointer)

Cartridge or CD-ROM connected to the SCSI bus of the Mac.

Please note that when operating with SCSI, the otherwise clean, concept of the program (in my view) is broken. The idea of the program is otherwise always that you transfer files into or out of the image. The image is always the playground for your operation. It is the workbench. Now it is not anymore. Now it is more that the SCSI-hard disk becomes the playground upon which you do things. However the operation is different. So the commands you have at hand are different . Some areas have fewer commands, han when working with images, while some SCSI specific are added

You should notice the SCSI-file list is a Modal Dialog (You have no menubar and cannot switch applications before you close the SCSI window) All commands are available via buttons and popupmenus in the dialog. Their active state changes dependant upon your actions. These buttons are similar to the menu commands available for images though. There are also a few additional keyboard shortcuts some of which are similar to those that exist for images. Since the last directory you worked on in the SCSI window is remembered , it should be easy to go in and out of SCSI mode. (press cmnd-W to close, press cmnd-H to reconnect) You can switch (temporary) to an open image by clicking on the image window . The purpose should only be to select files you want to transfer to the SCSI device. You then switch back to the SCSI window by clicking on the SCSI window.

Keyboard shortcuts and navigation.
You change directory by double clicking on an entry with filtype SUB (=subdirectory). You can do the same by hitting [enter] when a hilited entry is present. (it takes the first one if more than one) You can “go” up in the file hierarchy by double clicking the entry with file-type PPTR (=parent pointer). Again you can do this by hitting [enter] when the parent pointer entry is hilited/selected, or you can do the same by hitting the [page up] (=ASCII 11) on your keyboard.

You can pull out a hilite stripe out of nowhere by pressing [down-arrow]. You can move this hilite stripe up and down by the up and down arrows. You can pull it out of the listing all together by pulling it out at the bottom of the list by the [down arrow].

You can also navigate by two of the popupmenus at the top of the dialog. The one in center shows the current path. Pressing it with the mouse cursor pops up a menu showing all its “parent directories”. You can move to any of these by selecting one of them in a normal way.

The popUpMenu labelled “goto” can also be used for navigation if you for some reason (such as cleaning up a messy hard disk) need to switch fast

The B10 floppy is for writing EPS files with an EPS when these files are to be read with a Mac's SuperDrive, and really only for that. The ASR user do not need a B10 floppy.

The B10 floppy is a special floppy . In the electronic EPSm shipment package there is included a program for the IBM-PC which will allow you to make a master B10 floppy. I describe the procedure you have to follow to make your own. You will need to transfer the program MakeB10.exe to an IBM computer. “, “AccessPC”, “DosMounter “ or “Apple fileconverter” are a few programs that allow you to transfer the program to an MS-DOS floppy. Or you can transfer it over network. You also need to make a blank formatted DD EPS floppy which will become your B10 master floppy.

Put the program on the PC hard disk and start it by typing its name (MakeB10) at the DOS prompt. On the PC, I assume there is a 3.5 inch drive in position A:. Put an EPS formatted floppy into the drive. Then just press M) for M)ake It!. You will be prompted for the drive letter of your EPS floppy. Enter A: (or a). Then the program will start and the process should take less than half a minute.

When makeB10.exe is finished, push the write protect tab on this floppy and label it clearly. You can make as many copies of this “master” as you wish with the [command][system]<COPY/BACKUP/RESTORE>[enter*yes] command of the EPS. You only need one or two working copies of this disk and they will last a long time. You don’t need many since you can just delete the content when you have transferred the files you want to your Mac. That is, if you use the B10 as a transfer media and not a storage media..

Was that unclear? Here is a summary: You need to make a few working copies from the master B10 floppy. You need the B10 for transferring files from your EPS/EPS16+ to the Mac by floppies. You don’t need it for Mac-to-EPS. If you cannot make a B10, then you can request one from Rubber Chicken Chicken Software.

Of coarse, you can use B10 floppies exclusively, so instead of formatting new floppies you may choose to copy the floppy. I don’t use it this way. I use it for transfer, not for storage. The B10 floppy has less storage capacity than a normal EPS floppy.

The TSB10 floppy

The TSB10 floppy is for writing TS10 data files with a TS10/12 when these files are meant to be read with a MacÕs SuperDrive, and really only for that. TSB10 floppy is DD (Double Density) while TSB20 is HD.

The TSB10 floppy is a special floppy and similar to the B10 floppy described in the last section. In the electronic EPSm shipment package there is included a program for the IBM-PC which will allow you to make a master TSB10 floppy. The procedure to make your own is very similar to that for B10 and will thus not be repeated here

Put the program (MakeTSB10.EXE in the TS10 folder in the EPSm folder) on the PC hard disk and start it by typing its name at the DOS prompt. I assume there is a 3.5 inch drive in position A: on the PC. Put a TS10 formatted DD floppy into the drive. Then just press M) for M)ake It!. You will be prompted for the drive letter of your TS10 floppy. Enter “A: “(or “a:”). Then the program will start and the process should take less than half a minute.

You can make as many copies of this as you want with the COPY FLOPPY COMAND of the TS10. You only need one or two working copies of this disk and they will last a long time. You don’t need many since you can just delete the content when you have transferred the files you want to your Mac. That is, if you use the TSB10 as a transfer media .

There is also a program to make a similar floppy but from HD floppies. Those floppies are called TSB20 and the program MkTSB20.exe.

Large instruments and multi disk files

Some instruments use multiple disks. Since the largest EPS file you can write

the directory. The supplied Claris Works database let you sort the data base by diskrefnum and by category. So here is that structure:

DiskReferenceNum, tab, FloppyName,tab,DiskLBL, tab, Disk Comments, tab, FileName, tab, FileKind, tab, FileBlockSize,tab, MutiFileIndex, tab, tab, tab, return
DiskReferenceNum, tab, FloppyName,tab,DiskLBL, tab, Disk Comments, tab, FileName, tab, FileKind, tab, FileBlockSize,tab,MutiFileIndex,tab, tab, tab, return
DiskReferenceNum, tab, FloppyName,tab,DiskLBL, tab, Disk Comments, tab, FileName, tab, FileKind, tab, FileBlockSize, tab,MutiFileIndex,tab, tab, tab, return

You see that this is less space efficient than format 1.

Floppy Data Base; using Clarisworks with EPSm generated databases

How you get new records into the database is the same for the two formats, you just have to open the database for the right format type to begin with. You find the two templates for setting up databases and macros for sorting them in the electronic package for EPSm. EPSm will generate a text file for you. This you import to Claris Work’s word-processor. You then Select All(⌘-**A**) and Copy (⌘-**C**). You then switch to the Database and pick the layout called “importfromEPSm” which you also select by (⌘-**1**). You then just paste the text in (⌘-**V**) Now there will appear new records in your database.

For format 1 there are two layouts worked out (well you may want to add more entries-up to 39, I got bored when I came to 15) The “importfromEPSm” layout functions as a general purpose layout. In addition there is a “Floppy Label Format”. (⌘-**2**). You may have to adjust this to make it to work with your labels.

After you have copied records into the database of format 2 there are many ways you may find useful for sorting or searching the data. Two additional layouts and associated macros are supplied. You have to load the macros into ClarisWorks. If you want to list all samples and sounds on a floppy together then you use the macro. (⌘-[opt]-**2**) . The same data base can also be sorted by category. (⌘-[opt]-**3**) . You can fill in the category field with instrument type such as PERC, DRUMS, BASS.

Floppy Data Base; Using FileMaker Pro with EPSm generated databases

There are ready made templates for format 1 and 2. They should have written instructions in them.

EPSm-SCSI descriptions

This describes the operation of EPSm with an Ensoniq formatted Hard disk,

all your EPS floppies". What is done is that EPSm will write the floppy info like directory to a text file. You insert a floppy one at a time and the floppy info is added to the text file. You then import the text file to your favourite Data Base Program. In the EPSm package is included databases for ClarisWorks version 1 and 2 and for FileMaker Pro. Here is described the format(s) of the text files so that you can set up your own database easily. If you have none of these packages, then a look at the screenshots of the datbases will give you an idea.

Data Base Format

Here is presented the format of the text file that EPSm makes for your floppies. The electronic package of EPSm also includes DataBases for Claris Works, which I don't like myself - but it is what I have, and it is bundled with every new Mac. You can import the text files into these databases by importing the text file to ClarisWorks, Select All and Copy in the word-processor. Then you switch over to the database. Be sure to have the format you want selected, You then select the Layout for import from EPSm by pressing command-1, and then you choose Paste and all the new records should appear in your database.

Format 1.

Writes out all the information in the directory. A directory can contain 39 entries. If there are less than this, then empty fields are skipped. The last record is followed by carriage return and every field in the record is tab delimitated. All fields are represented by ASCII Now here is the structure:
DiskReferenceNum, tab, FloppyName,tab, FreeBlocks, tab, DiskLabel, tab, Disk Comments,tab,
FileName, tab, FileKind, tab, FileBlockSize,tab, MutiFileIndex, tab, tab, tab,
FileName, tab, FileKind, tab, FileBlockSize,tab, MutiFileIndex, tab, tab, tab,
FileName, tab, FileKind, tab, FileBlockSize,tab, MutiFileIndex, tab, tab, tab,
.....
return

You see the last lines contain no information in between the 3 last tabs. These fields you can fill out in your database program with for example Category and Comments. The supplied Claris Work database is like that.. Clarisworks terminates a record by a carriage return.

Format 2.

Writes the same fields but allows you to search for a sound by category. (It is idiotic that you have to do it this way in Clariswork, but that's how it is it seems to me). All fields are again delimitated by tabs and the record is ended by carriage return. But for this format there is a new record for every new entry in

on a floppy with the SuperDrive is 1245 blocks you should limit the file size to that. If everyone did so, there would be less problems. Sometime you may get hold of an image yourself which has larger file size and you want to put it into your EPS with EPSm. We will take a few examples and tell what you do about them.(This will change your files so make back-up, if you feel uncertain)

Assume you have a disk image holding an instrument that is, say, 1520 blocks. You will have to divide it up and make a multifile instrument. In this case you will spread the instrument over two floppies. In EPSm you do the following to accomplish that: Select the Instrument and choose EPSfile/Split file... (or press (⌘-/), (=command slash)) A dialog will give you an option for how to split it. Just press [OK]. to accept the default. You will then see you have a new entry with the same name as your selected instrument. To the right of the instrument size is displayed the numbers #1 and #2. These are the multifile indexes. To transfer this instrumet to floppy you will simply activate Floppy/Write Image.. and put in a floppy. EPSm writes the first part of the instrument onto this floppy and then asks you to put in another EPS/ASR formatted floppy. If you do that you will have the second part of the instrument on your second floppy.

Another example. Assume you have two disk images, together holding one instrument. On DISK001 with the image "biggy1" is the file BIG INST that occupies 1585 blocks and on DISK002 with the image "biggy2" you have BIG INST that occupies 200 blocks. You open biggy1, select BIG INST and press (⌘-/), (=command slash) and [OK]. You have now divided the 1st part of the instrument in two. You then open biggy 2, select BIG INST, press command-M to change its multifile index. In the present case. enter 3 for the multifile index, and press [OK]. You can transfer this to a floppy by choosing (⌘-**D**). Label the floppy biggy_C. Open biggy1 again and transfer this to floppies by choosing (⌘-**D**). Two floppies will be needed. Call the floppies biggy_A and biggy_B.

Loading floppies with multifile indexes is slightly different for the EPS classic on one hand and the the EPS16+ or ASR on the other.. In either case you start with putting the floppy biggy_A into the EPS. Press [load] and the display shows "BIG INST .1 ". The number 1 signifies it is a multi file instrument file. Load the instrument into any slot. On the classic you then proceed with floppy biggy_B and load it into the same ins/track. On the 16+ you are prompted to put the floppy in.

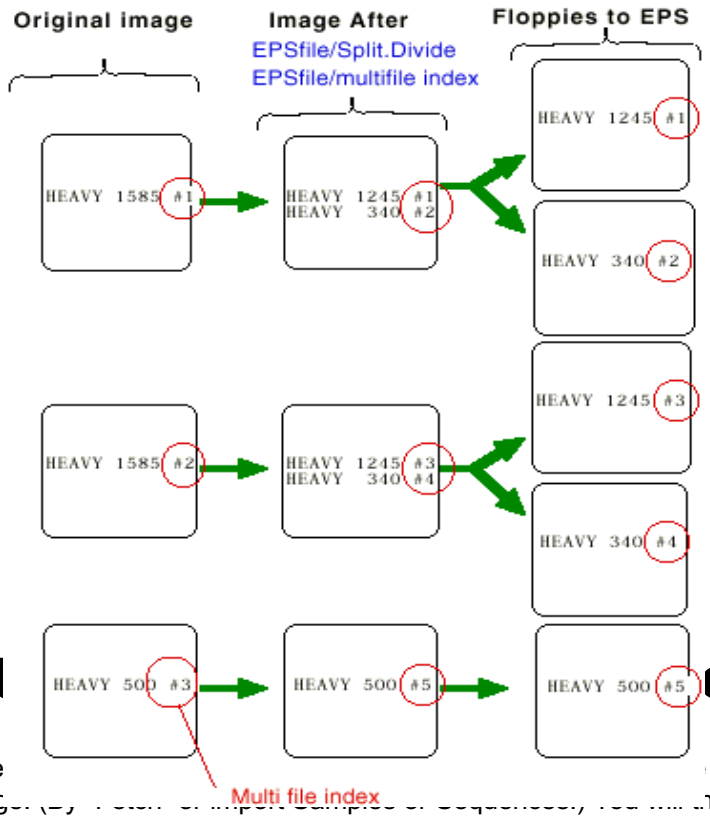
If you have a very big instrument spanning 3 or 4 full 1585 block disks then you need twice as many(-1) floppies to do it with the SuperDrive. Apparently you can not put several multi files from the same instrument on the same floppy even if space permitted.

Let's take one more example which is complicated. Hopefully the illustrations help..

Assume you have 3 gkh files/images called heavy1.gkh, heavy2.gkh and heavy3.gkh constituting one single large instrument "HEAVY". You would open these images and split the files, and you also need to edit the multifile index. Here I try to show the process schematically.

There are 3 original images. each with a single file entry. These have their multifile index set to 1, 2 and 3, signified by HEAVY-seg1. .. If the instrument in the original images filled 1585 blocks of the the two first disk images, then you split the entries and you need two floppies for each image to transfer to your EPS.

You have to edit the multifile indexes as shown below.



Puti es

Sometime space of an imag hen be

120 clock pulses). The best value is dependent on the speed of your drive. You also can customize the program number to use to invoke the macro to take you to root directory . The default is 111 which corresponds to macro number 11.

Note, Vision may grunt 'some instruments not defined' and you will have to define it, just as you will when importing a standard Midi file.

Q. Download *.EDT files. For TS10/12 only

EDT is an image-like file /archives of TS10/12 data floppies. They were introduced by Giebler for the IBM-PC. A Mac can not directly read and write TS10/12 floppies so something special has to be done. Most EDT files are zip compressed. What you do to them should be fairly simple.

1. **Download the "TSfile.zip" from the ftp site or bbs with your favourite netsurfing tool. Transfer as binary, not as ascii.**
2. **The *.zip extention signals the file is compressed with a ZIP program and need to be unzipped. You can unzip it with StuffIt Expander with Enhancer from Alladin Software. If the file in the archive ended with .EDT, then it should already be unzipped.**
3. **Drop the file TSfile.EDT onto the application "TSDrop" which is in the EPSm distribution. This leave you with a file "TSfile" which is an expansion of the EDT file.**
4. **Launch EPSm. Image/Open the file "TSfile"**
5. **Select Image/Write Image to EPS floppy, and put in a TS formatted HD floppy**

TSDrop will always expand (an reallocate) an EDT file to a HD image.

R. Load TS10/12 files into the Mac

A Mac can not directly read/write TS10/12 floppies so something special has to be done. A few Macs will actually read TS floppies, see **Appendix C** or the section **In Case of Problems/New Macs and Ensoniq**. If yours won't, then save your data on TSB10 (or TSB20 HD) floppies. These floppies can be read by the Mac and you can save an image of your floppy on the Mac, or you can mail the image to a friend. The image can be read by Giebler EDM and EDE for the PC.

Floppy Data Base

EPSm can help in preparing a DataBase for your floppies. makes for your floppies. - see the section called "SOME EXAMPLES: F Make a database of

Assume you have setup ASR/EPS in multimode and base channel is 1. Then instrument /track3 will respond to Midi commands on Midi channel 3. Assume the vision track is a single channel and records and transmits on Midi channel 3. .

You can load an instrument into the ASR by a series of Midi program changes. This requires that there already is an instrument in that Track/ Instrument posistion.

Further in order to load a sound you need to know which directory you are in. It is thus easiest to take all starts from the ROOT level.

Thus there are a few handy prepaations you should consider.

1. **Make a (possibly new Macro file) by going to the root directory. Save that position as Macro number 11.**
2. **Make 8 Midi instruments, save everything as a bank and save the bank as the first file in a new directory. Then save that location as Macro 12.**
3. **Save the Macrofile, after filling in some other of your favourites. Now everytime you boot yor ASR/EPS you should load that Macro file.**
4. **For preparing your ASR, you invoke Macro 12 and press enter to load all the Midi instruments. Your ASR is ready for sequencer communication work.**

Now we can enter the piano patch.

1. **Navigate in EPSm to the piano you want. Select it, press cmd-C. (Copy)**
2. **Press ESC and switch to Vision**
3. **Place the cursor in the track and press cmd-V.(paste) That will paste in program changes which will load the piano into track 3 when the sequence start.**

For the next instrument you switch to EPSm, press cmd-H (hard disk) and r e p e a t
The patch change commands need to be separated in time, so the channels should load instruments sequentially, not in paralell. The time needed depends on size and on your drive.

There are a few options you can setup if you want to. These are acessed from the menu **"Control:Prefs:Midi|Macroload-prefs"** The delay time between each program change command is stored as number of clock pulses (default

told by the program that there is not enough free space in the image, and you have the option to rename the file (= that is the same as just doing a file conversion and not puttting the result into an image) or to split the file up into a multidisk file. The first part will be placed in the current image, and the second will be left on the hard disk with a name of your choice. A file's second part can be split many times, but only into two parts each time and only the second can be split further. You also have the option of cancelling the fetch or import.

Large disks and banks

Banks written to floppies with EPSm works as normal as long as all the content of an image fits on one floppy. If that is not the case, you may experience problems unless you pay some attention. Let me try to explain why this is so. A bank contain information on which files should be loaded into the sampler. The bank store a reference to a file. The reference is always by number, not by name. For an EPS classic floppies the reference to the files is only by the file number in the directory, while for the 16+ it is by reference to the Disk Label as well . That is one reason you should be careful with editing disk-labels. The file reference also tells if the file is located on a floppy or any of 7 possible SCSI adresses for hard disks. The bank on a classic contains information on the file numbers to be loaded for instruments and the file number of the song. It also halds info on the volume and panning of each Track/instrument. Finally it holds information on Presets. The 16+ holds in addition information on the current Effect and the routing of instruments to the effect busses

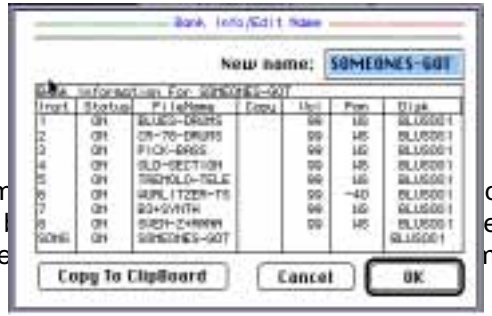
If you write an image that will be spread out over two floppies, then you should try to do the following:..

For Classic Banks: Double-click on the bank entry in the EPSfile list in EPSm. This brings up a dialog - we call it the bank statement. If you are by your EPS you may as well bring this screen up when you want to load instruments to your EPS. If not, you can copy the statement to the clipboard and paste it into a word-processor (9 pt Monaco gives best readability) and print it out and take it with you to your EPS. The dialog or the "bank statement" shows which instrument files should be loaded into which Track. Load according to that from the two disks. If the statement says that the file is a 'copy' then only load the one that is not a copy and then do the copy (by reference) on the EPS. Load also the correct song. Set the volume and the panning according to the bank statement. (by [edit][track] [Instruments*Tracks]<MIX=99 PAN=WAVESAMPLE>. Note that the bank-statement only shows the order of the Panning, 0=Wavesample, 1=Left, etc... When that is done, save all the instruments and the song to a newly formatted floppy. Then choose [Command][Instrument]<SAVE BANK> [Enter*Yes]. Currently there are no easy way to recreate presets.

For 16+ Banks: The 16+ is supposed to make the loading for songs with instruments very easy. Load all the instruments and the Song(s) (and effect(s)). Then you can load the bank(s). If the instruments are not on their right track, the 16+ is supposed to just change the track. It will not reload an instrument if one is already loaded. Loading the bank should set all the routing and mixing information only since the instruments are loaded. The no-reload-unless-nessecary feature is in contrast to the EPS classic. (I think the 16+ is not as "ideal" as I have been led to believe it is but ...)

Be also careful about saving a bank as an individual EFE file and Fetching it into another image. The results may be highly unpredictable.

The "bank-statement" produced by EPSm is not always complete. The purpose is to display the the most important information. Here it is reproduced:



In the above exam called BLUS001. All the files in the l e is located on another floppy, the ne column.

File references on a hard disk

Most people do not use subdirectories on floppies. However they do when using hard disks. We described what a file reference was and what a "key" to a file was previously, but will try to repeat. The file references consists of the following info:

a) Storage Device Type (Floppy, SCSI 0, SCSI 1...,..SCSI 7, FlashBank)
b) Disk LABEL
c) File KEY

where

File KEY = subdir : subdir : subdir :É: file number

separate directories. If you you have a bank in the image, the bank will always point to the files found in the image. So you will need to edit the bank after it has been transferred. Here is one convenient way to accomplish the task..

1. **Open the image in EPSm and select all the files.**
2. **Choose SCSI/Connect and make a new directory for example called the same as the image.**
3. **With the SCSI window as the front window, press Command-G. This causes all files to be transferred from the image to the SCSI device.| You will notice that the ordering of the files will be the same as in the image. This is important since the bank only contain references to file numbers, not to actual file names.**
4. **Select command-I to get info on the SCSI device. Notice the Device Label , for example "CART001"**
5. **Doubleclick the first file in the directory and notice the Key besides the filename. Assume for example it says "Key=" 10::2:1.**
6. **Double click the bank in the SCSI window. The"Bank statement" dialog then appears. Double click the first instrument of the bank. The Bank Editor dialog then appears. Change the file reference of all the files in one step by the following method:**
   - **i) Check the box labelled "doAll". Change the 'Device' by scrolling until it matches the SCSI ID of your Drive.**
   - **ii)Change the 'File #' by entering all of the File Key exept the last number. If the File # was 3, you should enter 10:2:3, if it was 1 you should enter 10:2:1 - assuming the example from 5 b above.**
   - **iii)Change the 'DevLBL' to the label of your current drive as noted in 4)**
   - **iv) Press OK. The bank can now be loaded from the ASR 10.**

   7. Optional. If you rather want your files organized, you can move your files around to other directories. If you check the [x]"updt Banks" -box, then your bank will be valid after the move.

P. Load Instruments from Hard disk in a Vision Sequence

If you use Opcode's sequencer Vision, you may find it advantagous to use the scsi window as a convenient browser and then copy/paste the Midi commands nessecary to load the instruments directly into Vision.

You may for example want to start a sequence with one or a few bars just for loading of the instruments needed into the sampler. Here is what you do to load for.example a special piano into the EPS/ASR instrument connected to track 3 of Vision.

gram and need to be unzipped. You can unzip it with StuffIt Expander with Enhancer from Alladin Software.

3. **Launch EPSm. Choose the menu Morph/.EDA->[EDA]**
4. **Select the instruments you want by clicking on them, then choose menu EPSfile/SaveAs.. This saves the files to you Mac hard disk**
5. **Select Image/New..ASRc..To make a new empty image. Note If You have an EPS/16+ Chose EPS2 instead of ASRc image**
6. **Select EPSfile/Fetch..and choose the files you did save.**
7. **Select Floppy/format ASR-10 and put in a DD floppy. Note If you have an EPS/16+ then format a DD floppy on your EPS.**
8. **Select Image/Write Image to floppy and put in floppy you formatted.**

.EDA and .EDE files are normally not fully expanded to an image. You can do that from the menu Morph/.EDE'->EPSi. and Morph/.EDA'->[EDA]. respectively. You can only expand the files if their extention is in PC Capitals. The expanded archive will automatically be opened.

If you don't have a SCSI connected Ensoniq formatted hard disk, then for expanded.EDE files, you can transfer the content directly to Ensoniq formatted DD floppies by "Floppy/Write Image to floppy.." and then put in an Ensoniq formatted DD floppy. (if a single instrument is larger than 1245 blocks, it need to be split up first).

Here is a complete step by step procedure for downloading *.EDE files to Ensoniq floppies.

1. **Download the "mumbojumbofile.zip" from the ftp site or bbs with your favourite netsurfing tool. Transfer as binary, not as ascii.**
2. **The *.zip extention signals the file is compressed with a ZIP program and need to be unzipped. You can unzip it with StuffIt Expander with Enhancer from Alladin Software.**
3. **Launch EPSm. Choose the menu Morph/.EDE->EPSi**
4. **Select Image/Write Image to EPS floppy, and put in an Ensoniq formatted DD floppy. You may need two floppies (or the same twice). Note that if an instrument is larger than 1245 blocks it should be split. (When you've become an expert, you can open the .EDE file by holding down the shift key)**

O. Transfer files from image with bank to SCSI hard disk.

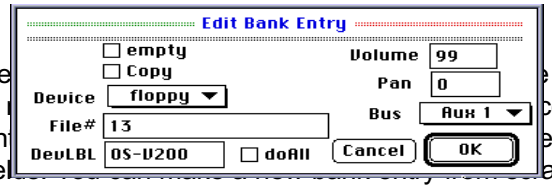
Transferring files from an image to a SCSI drive can be convenient with EPSm. You can transfer all files in the image to the same directory or to

Here subdir is a number. It is the subdirectory number. That is the number displayed in the filelist of EPSm as well as EPS/ASR. On a Mac one could specify a file by SOUNDS:MYSOUNDS:PIANOS:STEINWAY. Whereas on the ASR/EPS the same key could be specified by 3:1:2:4 when the numbers represents the subdirectories or folders. If you want to load an instrument by sending Midi commands to the ASR/EPS, then you send a string of program change commands where the program numbers correspond to the subdirectory numbers.

When a file in a bank is located in a subdirectory the instrument or song file will be indicated in the bank statement with something like "# 2:3:5" . Which is a key to the actual file. In this example you navigate to the file from the ROOT directory by entering the subdirectory which has entry No 2 in the file list. In that subdirectory you select the subdirectory that has entry No 3. Finally the target file is located at entry No 5 in that subdirectory.

The bank editor

If you double-click on an entry (a track or a song) then the bank editor dialog pops up. It is mostly self-explanatory, but I'll make a few comments. The editor basically looks like



First of all, whe… …e will be written to the image. So … …cel' to exit the bank statement… …ecked, one can not edit any fiel… …atch by unchecking that one. When the 'copy' box is checked it means the instrument in the track is a copy of another instrument. So you can then not edit the Disklabel and Device has no independent meaning and can not be changed. The device is a popup menu where you can select floppy or which SCSI ID the hard disk with the instrument has. The device is part of the reference which tells the EPS which instrument to load. The file reference , labelled "File#", which are in the dialog are digits separated (for subdirectories) by colons":". This file reference is a key to the file as described above in the previous paragraph. So the File# reference is organized the same way as how you would select the file by a series of Midi program change commands, (The complete reference to a file as found in the bank file consist of Device ID, File # and Disk Label). The Volume and Pan entries are just edit text fields. For

many instruments the panning shows “WS”, you can set that value/state by entering 0, zero. The bus setting is shown by a PopUpControl.

The “doAll” check-box need special mention. This is for setting all file references in the bank statement to the same except the last filenumber in the reference. Lets give an example; You have a bank where all instruments resides on a floppy with no subdirectories. The bank statement then shows instrument names, but the file key as seen in the Bank editor is a single number. Let us assume the label is “DISK001”. You want to move all the instrument files + the song over to a hard disk -”SQST004" and into a directory with key 10:4. Then you double-click any instrument in the bank statement to open the bank editor. The instrument you opened had say filenumber 2. You would then edit the file to 10:4:2 and the disk-label to SQST004 and the device to SCSI5. Now if you have checked “doAll” you will copy part of the reference to all other instruments when you press (OK). {If you press (Cancel), nothing happens.} You will see that the DiskLBL SQST004 appears on all tracks, and the “File” fields all look like 10:4:n where n represents the last digit of the File # file key. That digit is the same number as the filenumber in the floppy image. So if you move all files over to the hard disk in the same order as they appear on the floppy, the bank will be intact.

"Good to know" comments

working doc=final doc
When you work on an image in EPSm, you donÕt work on a copy of an image. The changes that you make will be permanent.. The disk image is updated

see it appears in the file list. You can add as many files as there is room for in the image. When done select Floppy/Write Image to floppy...

N. Download .EDA or .EDE files from an FTP site or BBS.

EDA and .EDE are image-like files/archives of ASR or EPS floppies respectively that were introduced by Giebler for the IBM-PC. (Ensoniq Disk EPS, Ensoniq Disk ASR). A Mac can not fully support these, but you can expand the archive by EPSm. The expanded archive then becomes equivalent to an image and you can then open that. For .EDA you expand to [EDA], for .EDE you expand to EPSi (=[EDE]). For the [EDA] you can transfer single files or all the files directly to your SCSI connected Ensoniq hard disk. If you don’t have a SCSI connected Ensoniq drive, then you can first transfer files to your Mac hard disk followed by creating a new image (EPS2 or ASRc) and EPSfile/Fetch the single files into the mage. (It is not practical to write an .EDA file to one or two HD floppies.)

Here is a complete step by step procedure for downloading *.EDA files to Ensoniq hard disk.

1. **Download the “mumbojumbofile.zip” from the ftp site or bbs with your favourite netsurfing tool. It need to be transferred as binary, not as ascii**
2. **The *.zip extention signals the file is compressed with a ZIP program and need to be unzipped. You can unzip it with StuffIt Expander with Enhancer from Alladin Software.**
3. **Launch EPSm. Choose the menu Morph/.EDA->[EDA]**
4. **Select the instruments you want by clicking on them, then choose menu SCSI/Connect..,**
5. **Navigate to the SCSI directory of your choice and press Command-G. The selected files will then be transferred to your hard disk. (When you have become an expert user you can open the .EDA file by holding down the shift key while activating Image/open or by holding shift while dragging the file on EPSm) If there is a bank (BANK, BNKa or LK16) in the EDA file then after 4 follow section O)**

Here is a complete step by step procedure for downloading *.EDA files to Ensoniq floppies

1. **Download the “mumbojumbofile.zip” from the ftp site or bbs with your favourite netsurfing tool. It need to be transferred as binary, not as ascii.**
2. **The *.zip extention signals the file is compressed with a ZIP pro-**

You will need SMAC4 available from Terje. To play the Roland samples on your EPS:

1. **Launch EPSm**
2. **Make a new empty image if you don't have one; Select Image/New; Select to make an EPS2 image is recommended, but you can make what you want. If you have an EPS/16+ don't select an ASRc image.**
3. **Select menu EPSfile/Fetch.. and select any of those files you conversed with SMAC.**
4. **You then choose EPSfloppy/Write image to floppy... and put in a formatted floppy as you are told to. If you made a a ASRc image you have to put in a DD "COMPUTER" format, otherwise you put in a DD floppy formatted by EPS or ASR (ENSONIQ) format**
5. **Take the floppy to your sampler, stuff it in the drive and load the instruments.**

M. Download AIFF samples from an FTP site.

This applied specifically to the ftp archive at oak.oakland.edu which did contain a large number of AIFF files. AIFF files are Audio Interchange Format Files. Many programs on the Mac dealing with sound use this file format. On the net these files often have the extension ".aif " and most are compressed with the unix compressor gzip. You need to have ftp software, MacGzip, FileTyper and EPSm for this. See also section EXAMPLES/F for procedures that are similar to these and use the ftp program XferIt as an example

1. **You log into the ftp site with your favourite ftp software, here assumed "Fetch".**
2. **Choose transfer as binary IMPORTANT**
3. **Navigate to /pub/eps/samples/aiff**
4. **Select "XXX.aif.gz" from the list and choose to "get" it**
5. **When the file is transferred, quit Fetch.**

6a. **Make sure MacGzip have been setup the following way; File/ Preferences..gzip suffix ".gz". gzip/binary IMPORTANT**

6b. **drag XXX.aif.gz on top of the application MacGzip. This creates "XXX.aif" and deletes "XXX.aif.gz"**
(*note that you can set up Fetch so that it will call MacGzip automatically)

7. **Drag "XXX.aif" onto the application FileTyper and IMPORTANT change the Type/Creator to "AIFF"/"EPSm". (The Creator can be anything really**
8 **Launch EPSm, create a new Image by Image/New.. Select EPSfile/ Import AIFF and select an AIFF file to place in the image. You will**

constantly, so it will always reflect the changes you make. If you have problems with this, I suggest you make a copy (in the Finder) of the image you intend to start to work on .

subdirectories

Most people do not use sub directories for EPS floppies. The program do not fully support sub directories for images because of the way I have chosen to treat file deletes. You can navigate through the directories, you can delete individual files as long as there are no subdirectories. You can add files. The SCSI management do of coarse fully support subdirectories.

the OS

The Ensoniq OS can reside on a floppy or a hard disk. It needs special mention. Generally you can not write the OS for the EPS/ or 16+ to a floppy with a Mac. You can however write the OS for the ASR to a floppy on a Mac.

The O.S. is not like all other files on a floppy. It is a little special. If you save the O.S. as an .EFE file and then move it back into another image, the results are unknown for different versions of the O.S. It is recommended that you don't move the system for the EPS around (Data has been transferred from the OS file to special areas of the disk and visa versa The minimum requirements for different versions are not known) You can not transfer the EPS nor the 16+ OS to B10 floppies. OS 1.3 for the 16+ and 2.49 for the EPS classic do not obey previous markings in the file allocation table (FAT), so the sampler will always write to zero sectors when writing the OS, (but for all other files, the FAT markings are obeyed.) The EPS does not use the FAT for reading the OS from floppy either. In plain text this means that generally you cannot get the O.S. from the EPS to your Mac computer nor the OS from a disk image to your EPS. Therefor EPSm will notify that you are not allowed to write OS to floppies. However this situation have changed sometime during development of ASR10 OS. So you can read and write ASR-10 OS at least for versions later than after 1.6. EPSm will let you write all ASR-10 OS on your own risk.

The O.S on an Ensoniq SCSI device is also special for the EPS and EP16+. The Sampler itself do not obey the FAT markings. This also means that transferring the OS to an Ensoniq SCSI device will overwrite whatever was there before. Those files would become corrupted. If you update the OS that can be done only as long as the new OS is of the same size or smaller than the existing OS. For the ASR-10, the OS can be updated on an existing SCSI device.

There are no known errors or inconsistencies in the way EPSm saves the OS from image or hard disk or transfers OS single files to a hard disk for versions": EPS 2.35, 2.49, EPS16+:1.1, 1.18, 1.3, ASR-10: 1.61, 2.0, 2.53, 3.0.

Others have not been tested.

temporary files
EPSm uses temporary files for some of its operations (such as imports). These files will have a name something like “$temp-12538.EFE” . You can EPSfile/Fetch this into another image, or you can delete it yourself from the Finder, after quitting EPSm if it by accident was left on your hard disk. They should be placed in the temporary folder in the system folder, the content of which should be emptied regularly by the system.

names of imported files
When importing a SoundDesigner 1 sample-file EPSm generates the name automatically. This is taken from the name which is a part of the header of the sample file. Some programs don’t use that name and the name comes up as UNTITLED. You can then edit it yourself.

SCSI connection to ASR/EPS - updates
When you work on an EPS-SCSI device with both EPSm and the EPS/ASR, then be aware that neither EPSm nor the sampler knows what changes the other might have done to the disk. They do not tell each other. If both work in the same directory, then the one that did not make the change should change directory to something else and then back to the working directory. Changing directory always make the last updates active.

CD-ROM's
When you work with an Ensoniq type CD-ROM and EPSm, the CD-ROM player need to be of SCSI-type. (Not the PC type). You need to have the required drivers in the extention folder of your Mac. I use the following.

Foreign File Access
High Sierra File Access
ISO 9660 File Access
Apple CD-ROM <<<The name may be different for other CD ROMS.
Audio CD Access

So you can safely include these. You don’t want too many “too smart” CD related extentions; so if you have problems, you may try removing those that are not on the list above. The following CD-ROM players work with EPSm; Apple: 40SC, CD150, CD300i, CD300e. Others works but have not been tested by me. EPSm can work with any number for the SCSI-ID of the CD-ROM , but if you want to use it on the ASR-10/16+ at the same time, the SCSI-ID should be set to 4 if you want to use the demos on the CD-ROM. Apples CD300i is internally set to SCSI-ID 3. The same ID is hardwired for the EPS/ASR. Thus you need to change the SCSI ID on the CD300i. To do that you need to open the Mac or pull the CD-ROM out. The ID is set by 3 jumper positions.

K. “Snatch” Kurzweil K2000 samples.

How you get the files in the first place can vary. Again you may obtain them from a friend. In ”net land” there are also ftp sites that have Kurzweil samples. Please locate that yourself. You can convert K2000 samples to Sound Designer type 1 samples or to EPS instruments with the program “K-Snatcher” available from Terje. You read what you need to know in the docs for that prog. You need to download the sample archive as binary. The sample archives have extension “.krz”. Archives with extension “.kr n” where n is a number are multifile/disk archives, you have to merge/slice those. After you have opened an archive with K-Snatcher and saved samples as Sound Designer files you may do the following to play those samples on your EPS/ASR/TS.

1. **Launch EPSm and create a new image with the menu Image/New. If you have an ASR10 or TS10/12 you may select to make an ASRc image. If you have an EPS/16+ I recommend you select an EPS2 image, which also works for ASR/TS**
2. **Select the menu EPSfile/Import SFIL.. Then select as many files as you think there will be room for in the image and choose “add” for each in the file menu and done when you are. This makes instruments which contain the samples, and they will be placed in the image**

2b. You may select to edit the names of the entries in the image (menu EPSfile/Edit)

3. **You then choose EPSfloppy/Write image to floppy... and put in a formatted floppy as you are told to. If you made a ASRc image you have to put in a DD “COMPUTER” format , otherwise you put in a DD floppy formatted by EPS or ASR (ENSONIQ) format**
4. **Take the floppy to your sampler, put it in the drive and load the instrument(s).**

Note, SoundDesigner type 1 files do not contain keyboard ranges while the .krz files do. With K-Snatcher you can also save the single files as EPS instruments. You can then fetch those into an image or onto your Ensoniq SCSI with EPSm. So it will be exactly like above but you EPSfile/Fetch a file instead of EPSfile/Import.

L. “Steal” Roland samples.

How you get the files in the first place can vary. Again you may obtain them from a friend. There exist a program written by t.g.finstad called SMAC that will read floppies from the 12 bit samplers (S330/S50/S550/W30). There is also an ftp site on the net that carry these samples. SMAC will extract the samples as EPS instruments contained in “.EFE” files.

I. View the content of your EPS floppies.

You can also use the (ð-**L**) option for just viewing the contents of your floppies without saving anything as a text-file... When the DB prefs dialog appear, uncheck the write to DB option, Then no text file will be saved. EPSm is in a special mode (as for K) and only waits for you to insert a floppy. You can switch to other applications but you cannot do anything else in EPSm than what is in the dialog with the flashing message.

J. Rob samples from Yamaha TX16W library.

How you get the files in the first place can vary. You can have a friend with these kind of samples. He may lend you some floppies. These can be read with any DOS reading utility for the Mac. Sample files end in ".Wnn" where nn is a number. There is a testfile for you to try in the electronic package of EPSm. Or if you are on the internet you can rob files from the tx16w mailing lists archive site. Just log in to rydnet-gw.lysator.liu.se: /pub/tx16w (these kind of ftp archives have a tendency to change address frequently) Then download and unzip the archive. That give you a several samplefiles.

1. **Launch EPSm.**
2. **Select Image/New....,EPS2, "tx16w_smpls".**
3. **Select EPSfile/Import TX16W... This brings up a dialog where you can see all files ending in ".Wnn". Select files from then upper file list and choose <Add> for one file after the other. If you change your mind about one sample then select <remove>.**
4. **When you have selected enough you press <done>. Now all the files you have selected will be converted to EPS format and placed in the image. If there is no more room for a file EPSm tells so. It will then leave an EFE file on your hard disk which you can later import to another image**
5. **Select Floppy/Write Image To EPS floppy... Put in an EPS formatted floppy as you are told to.**
6. **Take the floppy to your EPS and play...**

It may be advantageous to rename the instruments with EPSm, If your Mac is by your EPS then you can listen to the samples you load into your EPS, then you double-click the same in the EPSm file list and edit its name. When you are done you can write out the floppy once more, but now with perhaps more meaningful names. You have to edit these samples. You have to tune them and change key assignment..etc..

SCSI removable media

When working with removable media like Syquests, it is possible to use the same drive for Mac and EPS./ASR all connected to the same SCSI chain. You can just put in the appropriate cartridges when you need them. With the carts that comes with the Syquest, it is an advantage to not mount the Mac cartridge at startup. You can use the utility SCSIProbe-3.5sq to mount Mac cartridges after boot. It usually comes with the Syquest cartridges. You can have an EPS cartridge in the drive or no cartridge in the drive when booting up. When the ASR/EPS power is turned on, I usually have not encountered problems. I then have an ASR/EPS cart in the drive. After booting, you can change carts as you like. You can use the utility UnMountIt to unmount Mac cartridges. Some people prefer to use swittching boxes to switch a drive between the Mac and ASR/EPS.

Expert mode

There are instances where the program is restrictive in order to "protect" the user. This usually amounts to checking files and floppies and if they are outside what the program should handle the program bails out or you are not allowed to open a file. In some instances an "expert mode" may be invoked allowing you to bypass this checking, but then at your own risk. You invoke he expert mode of an operation by holding down the shift key while selecting the menu option. The operations affected by this will change much with the EPSm version. From version 121, it allows opening of any file as an image, or writing to any kind of floppy.

HD floppies/images

EPSm does not provide an option for creating HD images, because it is simply not a good idea to use them as a work bench. They take too much hard disk space, require much memory and it will overall take longer to work on it. If you think you must, you can of coarse use them. You can read ASR COMPUTER formatted HD floppies. If you read a blank one, you have created an empty image. You could duplicate this image from the Finder every time you wanted a new image. But, again, it is not recomended. This recommendation concerns HD floppies as a work bench, not HD floppies in general.

Ensoniq sequencers

The Ensoniq sequencers are extremely buggy. Lots of small things. The ASR converts EPS classic sequences incorrect. At least up to OS 3.53. The EPS16+ converts EPS classic sequences incorrect. The OS versions before 1.3 are better. In most of these cases the sequences will play back OK, but you may get in trouble if you edit them. Also on the ASR, there will be errors if you try to loop sequences. EPSm converts Midi sequences to EPS classic. It leaves it to the respective OS to convert to the other samplers' native for-

mats. Thus the sequences will have all the errors that the samplers put into the conversion.

In case of problems
All software has bugs. Much software have different versions. So does EPSm. A bug report from the user(s) is very , very much appreciated. And I generally will and can fix bugs. No bug is too small to be reported. Please email bug reports to support@chickensys.com. Sometimes new bugs or errors in the files can occur, so please ask. If something seems wrong, maybe it is, but easy to fix.

We have tested and run the EPSm program on 20 different Mac models. It has worked.

Bugs In Your Mac
I have always told users that their Macs have bugs. In addition to small ones there are serious bugs. It seems that no one takes that seriously or ignore the statement. I have to repeat it here. **Your** Mac has bugs. All Macs I have tried have serious bugs that occur with Ensoniq floppies. The result of this is similar on all models and systems but slight different in their details. You may convince yourself about this by inserting an EPS floppy into the drive after restarting without the EPSmINIT and without running EPSm .(EPSm will do things to fight the Mac bugs. This will also be effective after you quit EPSm. If you are using EPSmINIT then the bug fight is effective even before EPSm starts)

Make sure you use floppies of a reasonable quality.

Common problems:
Many people use EPSm for getting free samples from the internet. The disks they make with EPSm can crash their sampler when loading an instrument. This is not caused by EPSm. This is caused by either you downloading as ASCII from the ftp site, using ASCII transfer mode from your unix host or decompressing the image as ASCII. You can use the menu command Image/Check in EPSm after you open the image. It may tell you the image is not OK. You should read the section SOME EXAMPLES..F to see what you should have done, in that case Also many files on the internet will crash your sampler because the samples were “created” by a utility (mostly for a PC) that pretend to convert samples to Ensoniq format, but really makes crashing instruments.

EPS/ASR on Mac SCSI bus and removable drives:
This has nothing directly to do with EPSm, but you can use the same drive for both Mac and Ensoniq media. For one of the ways I have used it, the Mac does not have an INIT to mount at boot time. I mount the Mac cartridges

G. Upload samples to an ftp-site, upon request for pig sounds

Assume the ftp site is the eps -mailing list’s ftp site. Then this applies. Assume further you have saved your files as EFE files to your tape archive. You pick up your archive tape named “Fat Animal Sounds” You search the archive for Pigs and select to retrieve them. Now you have 112 samples of pigs. You select to leave the obscene sounds out and you are left with 4 pig grunts and cries.

1. **Launch EPSm**
2. **Choose: Image/New..¥EPS2**
3. **Choose: EPSfile/Fetch(open) and select pig1, pig2, pig3 and mongolian_pig**
4. **Fill in Info (Image/Info)**
5. **Choose Morph/EPS2->gkh , and follow procedure E 7. (It is of course possible to start with an EPSi image in pt 2 and use EPSi->gkh in pt. 5)**

H. Make a database of all your EPS floppies.

1. **Take your EPS/ASR floppies to your Mac. The first time you do it, 3 disks are enough.**
2. **Start EPSm and select Floppy/EPS Disk Cataloging.. or press (⌘-L)**

3a. Read the upcoming clue dialog, Press continue

3b. A DataBase preferences menu appears. Decide which format you want for your data-base : 1 or 2 (Try either, if not sure) and give a name to the textfile you want to save the records under. Hit OK

3b More clues appears, read them and press continue.

4. **Put in a floppy in the Superdrive, You will see the directory of the floppy.**
5. **Fill in the fields such as DiskRefNum and DiskName and if you like, fill in Comments. The information will be saved to file when you insert the next floppy, or when you close the window. If you don’t want a particular record/floppy in the text file you check “skip [x].” The diskrefnum is incremented automatically when you insert a floppy.**

You repeat step 4 and 5 for as many floppies you want.

You then import the textfile to your preferred database program. In the electronic package of EPSm is included templates for importing to Claris Works and FileMaker Pro. I believe many other database programs could be used. If you make a convenient template you are willing to share, send it to Terje. Please see a seperate section on the format of the textfiles generated by EPSm and how to use in Claris works.

F. Download samples (.gkh files) from an ftp-site

This applies for a site with GKH that are Gnu compressed *.gkh.gz. (btw, The specialized program aDownLoader also takes care of most of these situations) If you do this for the first time, you should prepare to download a file that is known to work. Often files can be corrupted. It is also best to choose a small file. If you connect to sparta , then a sutable file is “short.gkh.gz”.

Make sure you get this file to work before you do any more dowloading.

1. **You log into the ftp site with your favorite ftp software, here assumed XferIt.**
2. **Choose transfer as binary IMPORTANT**
3. **Navigate to find short.gkh.gz**
4. **Drag “short.gkh.gz” from the window to one of the folders on your desktop**
5. **When the file is transferred, quit XferIt.**

6a. Make sure MacGzip have been setup the following way; File/ Preferences..gzip suffix “.gz”. gzip/binary IMPORTANT

6b. Drag short.gkh.gz on top of the application MacGzip. This creates "short.gkh” which occupies 800 K on your hard disk, and deletes “short.gkh.gz”

7. **(optional) Drag “short.gkh” onto “FileTyper” and change the Type/ Creator to “GKH0”/”EPSm”**
8. **Launch EPSm, Choose Image/Open.. “short.gkh”**

9a. Choose Floppy/Write Image to EPS floppy..

10a. Put in an EPS formatted floppy in the drive as you are told to. (An EPS floppy is always a DD floppy and it is always formatted with the ENSONIQ format option . If you have a TS you can use a TS formatted DD) Take the floppy to your EPS and make sure the instrument loads and plays.

If the image contains files which together are more than 1245 blocks, you will need two EPS floppies. If individual files are larger than 1245 blocks you need to split them up -see previous section on large files. If the downloaded image has a bank that will end up on two different floppies then you may have problems loading the bank. You can always load the instruments and sequences separately, See previous note on large disks and Banks.

Note that some guys with PCs may upload files that can be floppy images of other than 800 K DD floppies. You should protest! .gkh files should only be of 800 K DD floppies. Accordingly, you can not open those files with EPSm. (You can drag them onto ASRDrop and pull out it’s content however)

manually with a little program called “scsi probe” which are on all the Syquest cartridges I have bought. When powering up the sampler I usually have an Ensoniq cart in the drive. I can remove it afterwards and switch to a Mac cart. When booting the Mac I either have no cart in the drive or an Ensoniq one. I use scsi-probe to mount new mac volumes, and I often use a utility called Unmount it to unmount them.

In another approach, I have reformatted the Syquest cartridges. I can then boot up the Mac with a Mac cartridge in the drive without using any INIT. I also then unmount with UnmountIt and mounts new Mac ones with SCSI probe. I have encountered Mac freeze ups if I power up the ASR with OS v 3 in the ASR drive and no mounted cart in the Syquest.

Crashes:
If you observe crashes when working with EPSm, you may do right in thinking they are associated with EPSm. Please tell about it. (see below for Power Center Power PC)

New Macs and Ensoniq floppies
The Mac can generally not read an Ensoniq formatted floppy. It can read B10 and COMPUTER format. However some new Mac models can read Ensoniq format. Unfortunately some new Macs tell they have that capability, but fail. These will show Ensoniq as an allowed format, for reading, but will then display a repeating error message when the floppy is read. Not all Macs have been tested. The Macs that can read Ensoniq floppies and work fine are: LC475, Performa /LC 550, 575 , 630, 5200, Centris/Quadra 610, PowerPC 6200. The following Macs tell they have the capability, but fail : PowerMac 6100, 7100, 7200, 7500, 8100(?) Please report any other.

PowerPCs and 3rd party Macs, Power Center
I have only had access to Apple Macs. There has been nothing special about the PowerPC Macs; EPSm has run just fine on them. However I have heard that the Power Center machines require more memory. If you have a 3rd party computer and have problems, like crashes, then select EPSm from the Finder and set the memory by cmd-I and filling in the dialog. 1.2 MB should be plenty (vers 157)

SOME EXAMPLES

of tasks you may want to do and how to do it

A. Preparing sequences on Mac for your EPS to play at your gig.

1. Make the sequence with your favourite Mac sequencer. Use only 8 tracks.
   Which midi channels you use are unimportant; the ordering of tracks is what matters.
   It determines on which EPS tracks the results will appear on.
2. Save your sequence as a midi file type 1, call it perhaps “mySEQ”
3. Launch EPSm,
4. Choose: Image/New.., ¥EPS2 , “Transfer image”
5. Choose: EPSfile/Import midifile..., (open), “mySEQ”
6. Choose: Floppy/ Write Image to EPS floppy..
7. Put in a formatted EPS floppy in the drive.
8. Take the floppy to your EPS, load the sequence and play it.

You may choose to save the sequence to a freshly formatted EPS floppy with other instruments you need for the sequence.

The next time you perform task A. you can replace point 3 and 4, by

3b Double click on “Transfer Image”
4b Select “mySEQ”, Choose: EPSfile/Clear to delete an old entry.

There are a few options for the conversion available.

You set these options by pressing the button (change setup) in the dialog appearing in 5.) above.

You may suppress the writing of poly aftertouch and mono pressure or program changes.

If you want your tracks on the EPS to appear in a different order than in the midi sequence you can do that. Say you have made a midi seq with only two tracks; bass and drums. You want these on EPS tracks 7 and 8. You can accomplish this without making dummy tracks if you set the setup dialog as follows (and check the box:” [x] use below track map “)

Midi Track 1 2 3 4 5 6 .....
EPS track 7 8 x x x x

If you have recorded your sequence with tempo changes and want your EPS to reflect these, then you can check the “[x] pseudo tempo changes” option in the setup dialog. This will be similar to recording the tracks with your EPS with the Mac sequencer playing it back. Note that the settings of the setup dialog can be made permanent only by pressing (make permanent). Pressing (OK) only changes them temporarily for the very next file you import. Pressing (make permanent) will create ‘EPSmPrefs” in the preferences folder inside the system folder.

compatible with PKZIP for the PC. Unzip the file on a Mac by
a) Stuffit Expander with Enhancers or
b) Unzip
Once unzipped the file format could be anything and you would have to look at the new extention to make a guess.

“.gz The file is GNU compressed. Uncompress the file on a Mac by
a) Stuffit Expander with Enhancers or
b) MacGzip
Once unzipped the file can be anything as with *.zip

***.Z** Unix compression is used. Uncompress the file on a Mac by
a) Stuffit Expander with Enhancers or
b) MacGzip
c) MacCompress - This needs to be set up, every time! Tricky!

***.gkh** A GKH image like file. Open by EPSm : Image/Open. Write content to floppies, Ensoniq SCSI or single instrument file on a Mac drive.

***.EDE** A Giebler mumbo file. Expand by EPSm by : Morph/.EDE->EPSi. (Or open it directly in expert mode) Write content to floppies, Ensoniq SCSI or single instrument file on a Mac drive

***.EDA** A Giebler mumbo jumbo file. Expand by EPSm by : Morph/ EDA>[EDA].(Or open it directly in expert mode) Write content to Ensoniq SCSI or single instrument file on a Mac drive

***.EFE** A Giebler single file. Open a new image in EPSm and EPSFile/Fetch the file into it. Then write the image to a floppy ,or Fetch the.EFE directly to an Ensoniq SCSI

***.EFA** A Giebler single file. As for .EFE files

***.AIF** An Audio Interchange File Format File. You need to give the file a type ‘AIFF’ by FileTyper. Then iimport it to an Open image or SCSI drive in EPSm.

***.WAV** A MicroSoft Windows sample file. Use SoundApp to convert to an AIFF file Then import it to an Open image or SCSI drive in EPSm.

***.mid** A Midi file, Change the filtype to ‘Midi’. Can then be import to many Midi applications and EPSm.

This descriptions with updates should also be in a document reachable on the WWW web at http://fysmac04.uio.no:/eps.html. There used to be one ftp site on the net with a lot of EPS samples. These were almost all kept in one single format so there were no confusions. Now there are many ftp sites and bulletin boards. They store EPS/ASR samples in a variety of formats. The files are then compressed and arcived in a variety of other formats.

It also used to be so that the files on ftp sites followed unix naming rules. The file extension told about the format of the file. Now, the IBM PC rules the ground. It has an 8+3 characters naming limit. Only 3 letters for one single extention. This limitation is sometimes carried over to the archives.

Whatever format is used, you should always download a file as binary

You should also know that most utilities for transferring files from a host to a Mac or for transferring unix files from floppies - they default to transfer as TEXT or ASCII. Tranferring files in this mode will corrupt the files.

In addition, be prepared to accept that some of the files might already be corrupt in the archive. In particular PC programs that claim to convert samples from other formats tend to make Ensoniq instrument files that will crash your sampler when editing the fle.

Below is a list of internet addresses from where EPS/ASR samples can be downloaded This list will also be more complete and up to date at <http://fysmac04.uio.no/eps.html>

file://ftp.sparta.lu.se:/pub/music/eps	**GKH format**	**Gnu & Zip Compress**
file://ftp.atnet.at/home/dietz	**EDE format**	
file://ftp.funet.fi/pub/sci/audio/instruments/eps	**GKH format**	**Zip compress**
http://www.soundcentral.com	**EFE format**	**Zip Compressed**

These sites are likely to operate a short time and then close down. Please show general net etiquette when connecting. Respect local working hours. Don't jam the net.

File Extensions

Below is a table showing file extentions, their most likely format and what you need to do to the file.

***.zip** The file is zipped. Probably, but not nessecarily by a utility that is

The EPS sequences can only represent Midi notes with number 21 to 108 (from A-1).

If the original sequence has notes outside this range, they will be shifted by octaves.

You can import to EPS Classic sequences or to 16+ sequences. You can set the destination by the setup dialog, either by pressing the (change setup) button in the MidiImport File Dialog or by setting the preferences by the Control/Prefs.. /MidiImport - menu.

B. Calculate single samples on Mac to be played by your EPS/ASR/TS

1. Make the samples you want with your favorite sample calculator/editor. (SoftSynth, Csound, Cmusic, Turbosynth, SMP, SoundDesignerII, SoundTools..)

2. Save the single-sample file as Sound Designer type 1 (="SFIL") or Sound Designer type 2 or AIFF. If you have none of these formats you probably have something that can be converted to these types. There is a shareware program called "SoundHack" that will do many type of conversions. The freeware program SoundApp also does many conversions. Suppose you save your sample as "mySMP.AIFF". If you use another format, then replace in the following as appropriate.

3. Launch EPSm,
4. Choose: Image/New.., **EPS2**, "Transfer image"
5. Choose:EPSfile/Import AIFF.. select "mySMP.AIFF" This will make and EPS instrument and put it in the image.
6. Choose: Floppy/ Write Image to floppy..
7. Put in a formatted EPS floppy in the drive.
8. Take the floppy to your EPS, load the instrument and play it.

If you have an ASR or TS, you may select **ASRc** for the image type in 4). In this case you may also format the floppy on the Mac: Choose Floppy/ format ASR10 and insert a DD floppy.
If you have an Ensoniq formatted SCSI hard disk, you can import the AIFF (or other format) directly to that hard drive when the SCSI device is connected to your Mac.

C. Find out what is the file structure of MACROs on EPS floppies

1. At your EPS, make a few intelligently crafted macros.
2. Put in a copy of your B10 floppy and save your macros to the disk

(at your EPS).
3. **Launch EPSm.**
4. **Choose Floppy/Read EPS floppy.., EPS2, "macros"**
5. **Select all the entries in the image by shift clicking.**
6. **Choose EPSfiles/SaveAs..**
7. **For each file you will be prompted for a name**
8. **Quit EPSm and use your favourite hex editor to look at (and modify) the files.**

The EFE format places a 512 byte header in front of the EPS file.

D. Send an EPS instrument by email to a mac friend that also has EPSm

This should only be used for short and emergency samples, otherwise it is too costly and surface mail is a better alternative I think.

1. **Assume you have made the instrument on your EPS.**
2. **Make a fresh copy of a B10 disk by pressing [com][system]<copy floppy> on your EPS.**
3. **Save the instrument on the new B10 copy. (use a new to save space on compression)**
4. **Launch EPSm**
5. **Choose Floppy/Read EPS floppy.. ¥B10i, save as "to my friend"**
6. **Quit EPSm, compress "to my friend". Stuffit Lite is recommended for compression.**
7. **Attach the document to an email letter.**

(User's of other computers than mac/ibm could also benefit from this B10 format since it is very easy to implement . However may not presently be implemented. Any platform that can read and write a raw image can write the EPS2 format to disk though)

As for many things with EPSm, there are several ways to accomplish the same.Two Mac owners could share work by any of the formats EPSm supports. The most convenient ones would be B10i, or EPS2, or ASRc or EFE.

E. Upload samples to an ftp-site (NEW)

This describe procedures used for the eps -mailing list's ftp site. This may not always be operational. Other ftp sites do follow the same rules, some don't. Here is described uploads in gkh format and compression with gnu zip; still, the details can vary vastly depending upon personal preferences/circumstances.

1. **You have made the instruments and songs on your EPS. (It is best , but not absolutely necessary , to keep any single instrument as well as the total instrument size less than 1245 blocks for sys 6 mac users and less than 1000 blocks for those with an unexpanded EPS)**
2. **Save, with EPS, the instruments to your working copy of the B10 floppy. I assume it is the complete content of this you want to upload.**
3. **Launch EPSm.**
4. **Choose: Floppy/Read EPS floppy.. ¥EPS2, name it "myupload"**
5. **Choose Image/info and fill in the author and subject field. Press OK**
6. **Select Morph/EPS2->gkh, accept default name "myupload.gkh" This creates a .gkh image and a ready template to mail to the mailinglist: "myupload.txt"**
7. **Quit EPSm and Launch MacGzip (or your favourite unix gnu compressor), Here is assumed MacGzip 0.2. Mark the options in the menu "gzip/binary " and "gzip/compress". Select File/Preferences and choose gzip suffix: ".gz"; Compression level: 9; then select File/Open ., and select "myupload.gkh". This creates the file "myupload.gkh.gz",**
8. **Launch your favourite word processor that also allow you to save the text unix style. Write a short note on the content of the upload. Save as "myupload.txt"**
9. **Launch Xferlt (or your favourite ftp application).**
10. **In Xferlt choose File/New Connection and fill in the fields and press OK**
11. **The directories at the ftp site will appear at your desktop. Navigate to ****incoming/ Take a note of the mailing address to which you are requested to notify about your upload.**
12. **Choose Transfer As/ Binary and drag "myupload.gkh.gz" over into the "pub2/eps/incoming" window.**
13. **Choose Transfer As/ Text and drag "myupload.txt" over into the "pub2/eps/incoming" window.**
14. **Launch your mailing program. And tell what you have uploaded to the ftp site administrator. (Use notes from pt. 11)**
15. **Send a note to the mailing list. You may just edit a little the note generated in Pt. 6.**

If you have an ASR rather than EPS you have another alternative to the above. In 2) you may save the instrument to a DD COMPUTER format floppy, so you get ASRc in 4) and use Morph ASRc->gkh in 6). As a courtesy you should still try to observe the sizes mentioned in 1)

F. Download samples from an ftp- or web- site (-general)