7 Disk/Global

The Disk/Global Controls

The Disk/Global area of the ASR-X Pro front panel contains two groups of controls that share the common goal of performing operations that affect the entire ASR-X Pro.

The Disk-related buttons—Load and Save—are used for:

- loading files from disk into RAM or FLASH.
- saving files from RAM to disk.

Operation of the Disk controls is described later in this chapter in "The Disk Buttons."

The System/MIDI button provides access to tools for:

- customizing the system-wide behavior of the ASR-X Pro to suit the way you create music.
- setting up the overall MIDI functionality of the ASR-X Pro.
- getting the most out of the ASR-X Pro RAM.
- performing various disk-file management functions.

The System/MIDI tools are described later in this chapter in "The System/MIDI Button."

Storage Options

The ASR-X Pro allows the loading and saving of data using:

- a built-in floppy disk drive
- a SCSI interface for connection to external SCSI devices

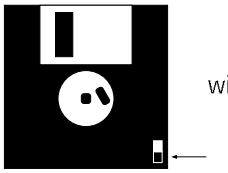
Floppy disk and SCSI storage both have their own advantages and disadvantages:

- Floppy disk storage offers the ease and cost-effectiveness of a built-in drive. In addition, you can automatically load a system set-up file or update to your operating system from floppy at boot-up. On the other hand, saving and loading data can be slow, especially with large files.
- SCSI hard and removable drives are fast and can greatly enhance the ASR-X Pro experience. SCSI CD-ROM drives allow you to load sounds from ENSONIQ, Akai and Roland CD-ROMs—you can also load .wav and AIF files from ISO-9660-format CD-ROMs. On the other hand, SCSI devices must be purchased separately. In addition, SCSI devices can be finicky, and may require troubleshooting.

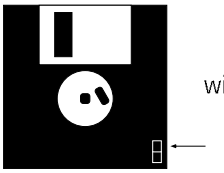
Introduction to Floppy Disk Storage

The Floppy Disk Drive

The ASR-X Pro contains a built-in floppy disk drive. The ASR-X Pro floppy drive can read or write to any 3.5-inch high-density or double-density floppy disk. Floppy disks can be write-protected so that the files they contain cannot be accidentally written over. If you plan to save ASR-X Pro files to a floppy, make sure that it's write-protect feature is not engaged. You can tell if a disk is write-protected by flipping it over (so that it's label-side down) and examining the small window in its lower right-hand corner.

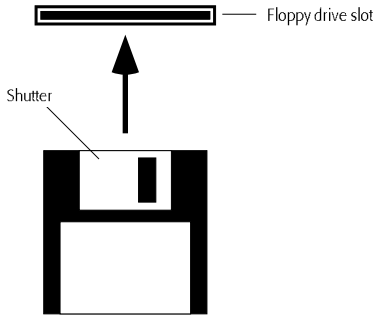


If the tab is in the down position, the write-protect window is open, and the disk is write-protected. It can only be read.

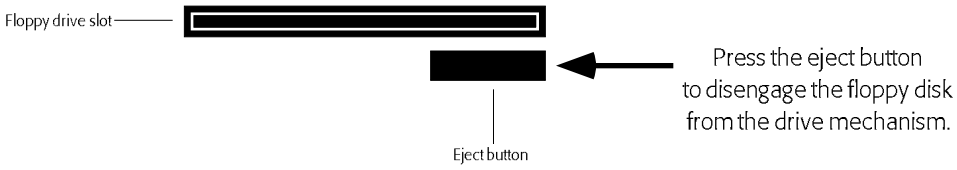


If the tab is in the up position, if the write-protect window is closed, and the disk is not write-protected. It can be both written to and read.

A disk is inserted into the drive—label-side up, with its shutter window to the right—by sliding the floppy into the drive's slot until the drive grabs the disk and seats it in the drive mechanism.



Disk are removed from the floppy drive by pressing on the button on the face of the drive—this causes the floppy to pop out far enough from the drive mechanism that it can be grasped and removed.



Warning: The floppy disk drive is a sensitive piece of equipment and, as such, should be approached with a measure of care. See "The Care and Feeding of the Floppy Disk Drive" at the front of this manual to learn the proper way to treat a floppy drive.

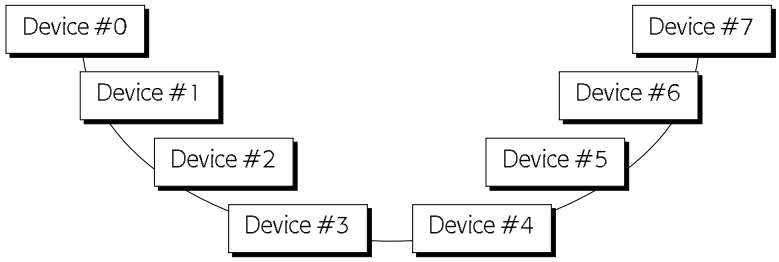
Introduction to SCSI Storage

What is SCSI?

SCSI is circuitry that allows for the high-speed transfer of data between computers and computer peripherals, including CD-ROM drives, scanners, storage devices and musical instruments such as the ASR-X Pro. The word "SCSI"—pronounced "scuzzy"—stands for "Small Computer Systems Interface."

In addition to internal circuitry, SCSI utilizes its own cables. These cables typically have 25- or 50-pin connectors on one or both ends. SCSI devices are equipped with SCSI jacks to which SCSI cables can be connected.

Up to eight SCSI devices can be interconnected—daisy-chaining one after another—in this manner at any given time. The data conduit created by the cabling that connects a SCSI system's devices is referred to as a "SCSI bus."



Most SCSI data is saved to a disk of some sort. Even removable SCSI cartridges contain a disk on which data is stored. Some SCSI devices—such as CD-ROM players—use disks whose contents can't be changed. These are referred to as "read-only" devices. Other SCSI devices—such as fixed and removable drives—contain *writable* disks to which you can save your data.

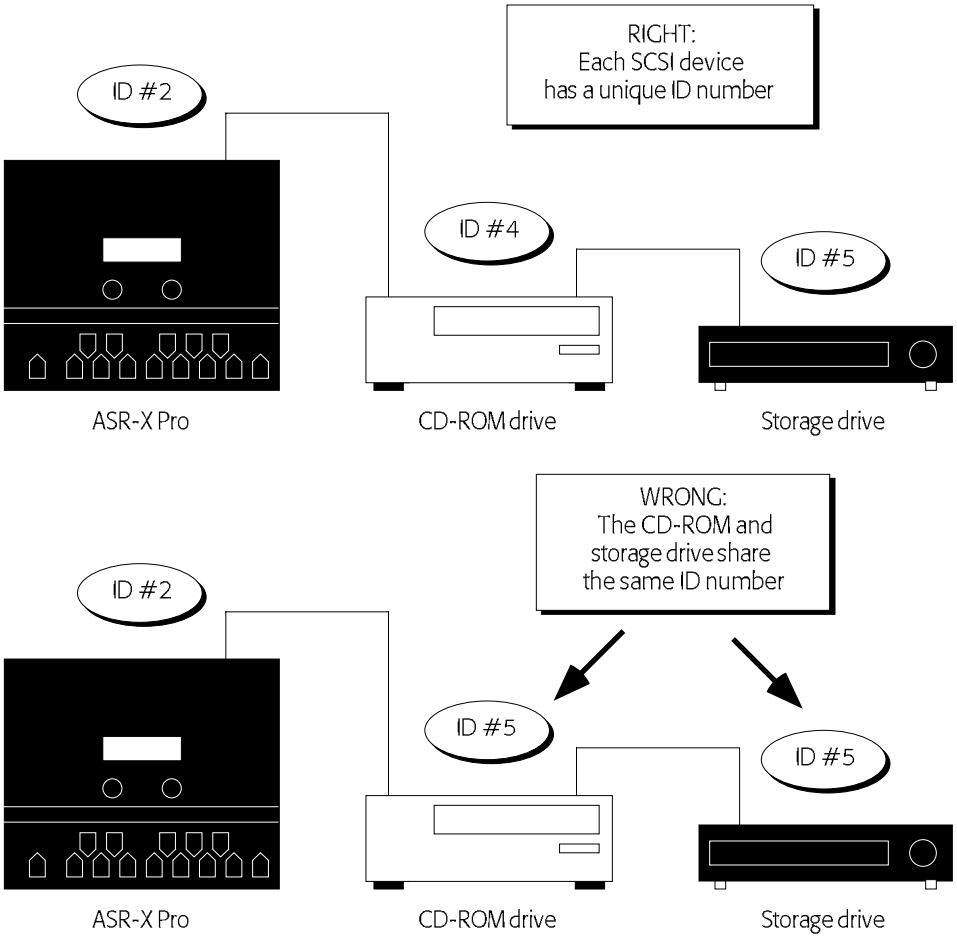
The ASR-X Pro is a SCSI II device—SCSI II is a faster, second-generation version of the original SCSI protocol. If your SCSI cables don't match the ASR-X Pro's SCSI interface's jack, you can purchase the necessary adapter at any computer supply outlet. SCSI II devices are compatible with SCSI and SCSI III devices. This manual refers to SCSI II as "SCSI" for simplicity's sake.

Note: If you're inexperienced with SCSI systems, read "About Termination" and "About SCSI Device IDs" below. All users should read "Preparing for SCSI" in this chapter before proceeding.

About SCSI Device IDs

Each SCSI device in a SCSI system—including the ASR-X Pro—must be assigned a number from 0 to 7, with the number representing one of the eight possible positions in a SCSI chain. These numbers, called "SCSI device IDs," allow you to identify—and target—the desired device when saving or loading data.

It's very important that no two devices are set to the same ID number—if this occurs, the SCSI bus won't be able to distinguish between the devices. This can cause your entire SCSI system to misbehave.



Some common SCSI devices are pre-configured to use certain SCSI ID numbers. If you'll be connecting your ASR-X Pro to any of these devices, be sure to avoid using these already-taken SCSI device IDs:

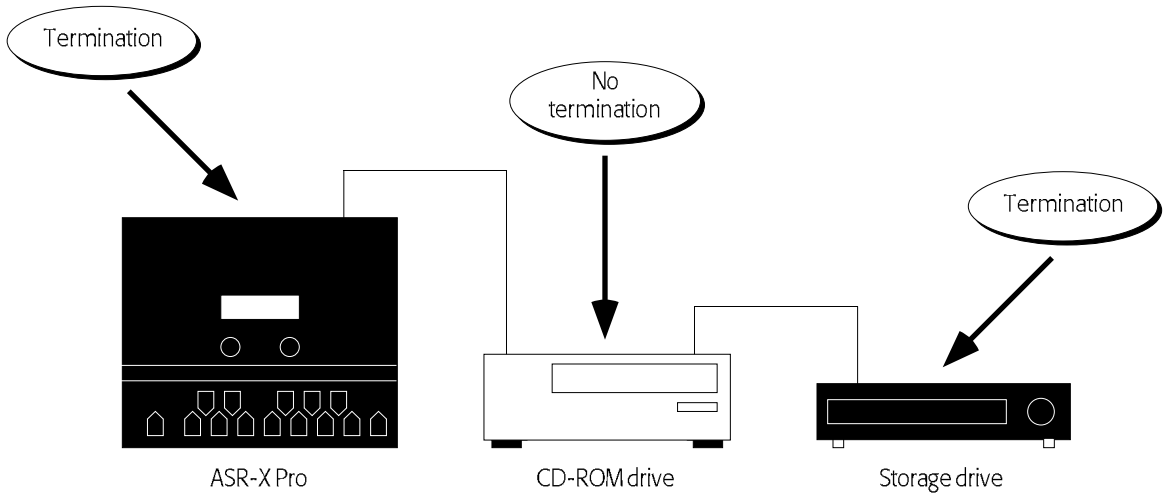
Device	Uses ID	Comment
Macintosh internal hard drives	0	unchangeable
ASR-10/88, TS-10/12, EPS16 PLUS	3	unchangeable
Macintosh internal CD-ROM drives	3	can be reset internally
ENSONIQ CD-ROM drives	4	can be reset via hardware switch
Iomega Zip drives	5 or 6	unchangeable
PC and Macintosh CPUs	7	unchangeable

Tip: If you're connecting your ASR-X Pro to an ASR-10/88 or TS-10 and a CD-ROM drive, it's a good idea to set the CD-ROM drive to ID #4, allowing the ASR-10/88 take advantage of ENSONIQ's DirectMacro™ feature, and to set the ASR-X Pro to some other unused ID number.

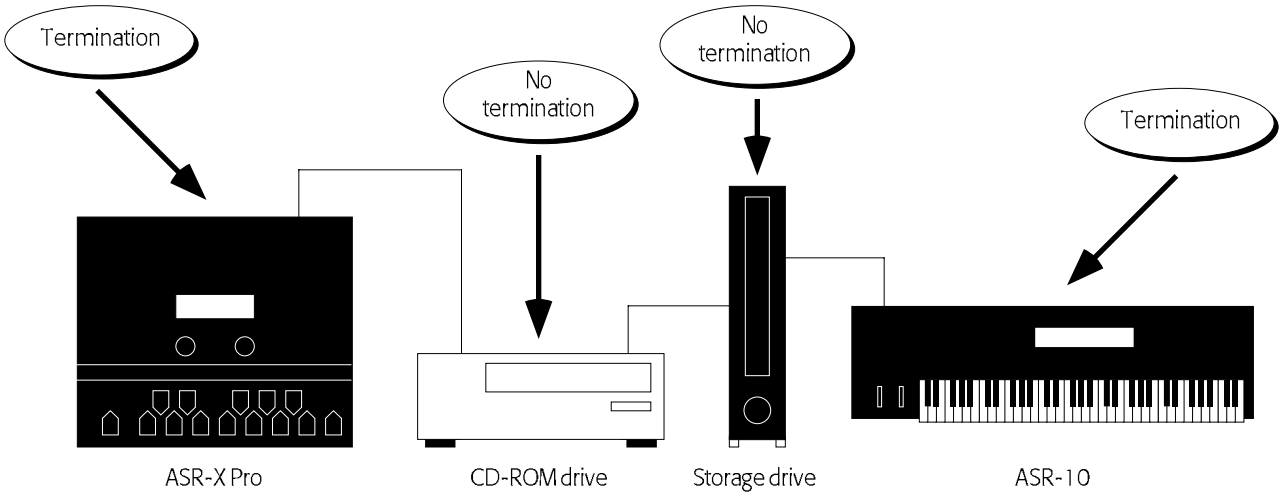
The ASR-X Pro's SCSI Device ID parameter can be set to any number, as described later in this chapter.

About Termination

The SCSI bus in any SCSI system is a circuit through which power flows from the first device in the chain to the last. Such a circuit requires a resistor at each of its ends. These resistors, which supply *termination* to the bus, prevent electricity from colliding with either end of the circuit and bouncing back, causing all sorts of problems. Extra termination supplied by devices other than the first and last in the chain is also problematic, since it impedes the easy flow of power up and down the bus. Therefore, the rule is: A SCSI bus requires termination on either end and nowhere else.



or…



Termination can be applied to the first and last device in a SCSI system through the use of:

- jumper connectors installed inside a SCSI device,
- a terminator plug externally installed in a device's spare SCSI jack
- software-switchable termination, as found in the ASR-X Pro.

The ASR-X Pro can supply termination or not, as your setup requires. This is controlled by the SCSI Termination parameter described later in this chapter.

Folders/Directories

Fixed and removable SCSI disks, CD-ROMs and floppies provide open expanses of memory to which data can be stored, and from which it's retrieved. In an effort to aid the organization of all that data, it can be useful to create smaller sub-divisions of memory into which related chunks of data can be stored and from which they can be easily accessed. These sub-divisions are commonly called "directories" or—as in the ASR-X Pro—"folders." Many CD-ROMs organize their files into such folders. Each folder can contain other folders and on and on and on. The ASR-X Pro provides a simple method for digging down through the folders on your SCSI disks to get to the locations and files you seek—see "SCSI Folder Navigation" later in this chapter. See "Creating a New Folder on a SCSI Device Using the ASR-X Pro" and "Creating a New Folder on a SCSI Device Using a Computer" later in this chapter to learn to create your own folders.

Invisible Folders

When the ASR-X Pro saves files to a SCSI disk, it creates a set of folders into which files are automatically saved. These folders are not visible when loading, saving, erasing or renaming disk files on the ASR-X Pro since they're used by the ASR-X Pro's internal automatic filing system. The folders can be seen when an ASR-X Pro disk is viewed on a computer. The names of the invisible folders are:

BANKS SEQUENCE SESSION SOUNDS WAVES

In addition, whenever the ASR-X Pro saves a file to a folder where the default folders don't already exist, it will create a new set of invisible folders into which files can be saved.

Preparing for SCSI

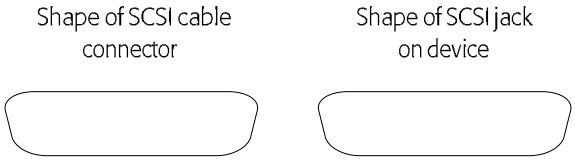
Since the ASR-X Pro provides convenient software-switchable SCSI device ID and termination settings, the following sequence of events must take place in order when setting up the ASR-X Pro for SCSI.

1. Prior to being connected to other SCSI device, the ASR-X Pro must be powered on and its SCSI ID and SCSI Termination system preferences set to their desired values. These parameters are described in "Setting and Saving SCSI System Prefs" later in this chapter.
3. The SCSI ID and Termination parameter setting must be saved to a floppy disk as part of a SYSTEMSETUP file. This procedure is described in "The Save Button" later in this chapter.
4. The ASR-X Pro must be powered off, and then connected to any relevant SCSI devices. See "Attaching SCSI Cables," later in this chapter. Some common SCSI configurations are shown in "Introduction to SCSI" above.
5. Your ASR-X Pro —with the floppy containing the SYSTEMSETUP file already in the floppy drive—must be powered up for use. See "Powering Up SCSI Devices" later in this chapter.

Attaching SCSI Cables

Warning: To avoid damaging your equipment, SCSI cables should be connected and disconnected only when the power is turned off to all devices on the SCSI bus.

The connectors at the end of SCSI cables are shaped in such a way that they can only be plugged into SCSI jacks in the proper direction.



Powering Up SCSI Devices

The order in which SCSI devices should be turned on varies from setup to setup. A general rule of thumb is to power up your terminated devices first—the devices on either end of your SCSI daisy-chain—and then power up the devices in-between. If the devices in your SCSI system fail to start up properly, or if some devices are not being recognized by other devices, experiment with different power-up sequences.

Troubleshooting Your SCSI System

If your SCSI devices are not working properly, start by ensuring that the following items have been properly set up, since these are the most common causes of SCSI trouble:

- Make sure that you have termination at either end of your SCSI daisy-chain, and *only* at its ends.
- Make sure that no devices are sharing a SCSI device ID number.
- Try turning on your devices in different orders.
- Make sure all of your devices are turned on.

The ASR-X Pro provides a Reset SCSI Bus command that can help straighten out a SCSI bus that's gotten confused for some reason. Its use is described later in this chapter.

If problems persist, try unconnecting your cables and re-connecting them; occasionally, cables that appear to be seated correctly are not. It's also possible that one or more of your SCSI cables have become unreliable. It's a good idea to have some spare SCSI cables around for troubleshooting purposes.

If you need further assistance, contact ENSONIQ customer Service at (610) 647-3930 Monday through Friday 9:30 a.m. to 12:15 p.m. and 1:15 p.m. to 6:30 p.m. Eastern Time.

SMDI Transfers

SMDI is a protocol that allows the transfer of sounds and samples from one SMDI-compliant program or product to another via SCSI. The ASR-X Pro can passively receive and transmit sounds via SMDI—there are no actions to be performed on the ASR-X Pro itself when performing a SMDI transfer. Once a sound has been sent to the ASR-X Pro, it can be saved to disk as a standard sound. To avoid competition for its resources, avoid performing SMDI transfers during sampling or sequencing on the ASR-X Pro.

The Disk Buttons

Everything you do on the ASR-X Pro can be stored to disk and loaded back into the ASR-X Pro whenever you wish. ASR-X Pro floppy and SCSI disks use a standard DOS format, so ASR-X Pro sequence and wave files can be loaded into a Macintosh or PC-compatible computer for further work. Most disk operations are performed after pressing the Disk/Global Save or Load buttons. The System/MIDI button provides access to a collection of disk utilities—see "Access disk utils?" later in this chapter.

Note: Before you can save ASR-X Pro files to disk, the disks must be properly formatted. This can be accomplished on a computer or on the ASR-X Pro. To learn how to format a disk on the ASR-X Pro, see "Access disk utils?" later in this chapter.

Storage Device Selection and Navigation

Since the ASR-X Pro can be connected to a large array of SCSI devices—as well as its floppy drive—a system is provided that allows you to select the desired device for any disk-related activity.

1. A load device can be selected from which data can be loaded.
2. A save device can be selected to which ASR-X Pro data can be saved.
3. A device can be selected as the subject of disk utility operations described later in this chapter.

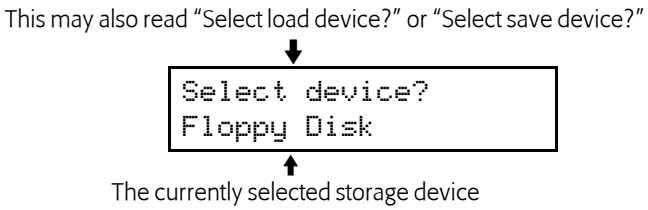
Until power-down, the ASR-X Pro retains the device that's been selected for each of these roles. This spares you from having to re-select devices when you want to load a file from one device and save it to another—the ASR-X Pro remembers the last load device, save device, and so on.

The device-selection process is essentially the same for each activity. When you press the Disk/Global Load or Save buttons, or answer the System/MIDI "Access disk utils?" question by pressing the Yes button, the "Select Device?" display appears. (If it doesn't, you can turn the Parameter knob all the way

counter-clockwise to access the display.) The procedures for selecting a device and navigating through the directories/folders of a SCSI device are described below.

Select Device?

When the Load or Save buttons are pressed—or the disk utilities are accessed—the "Select Device?" display appears after power-up with the floppy disk selected for use, and looking something like this:



The device shown on the bottom line of the display is the device selected for the current task. To select the floppy drive, turn the Parameter knob to select "Floppy Disk" is it's not already displayed.

To choose a connected SCSI device for use, turn the Value knob clockwise one tick to the right of "Floppy Disk." The first time that this occurs after power-up, the ASR-X Pro will scan the SCSI bus to learn what devices are connected. The display will show the ASR-X Pro checking each of the seven SCSI IDs to see if they represent connected devices (the ASR-X Pro is already using one of the eight possible SCSI IDs).

When the ASR-X Pro has finished, the SCSI device with the lowest ID number will be selected.

You can turn the Value knob counterclockwise to select any of the other connected SCSI devices.

Note: If a connected SCSI device is shown as *NOT READY*, most likely the device is a CD-ROM player or removable drive and its CD-ROM or cartridge is not currently installed.

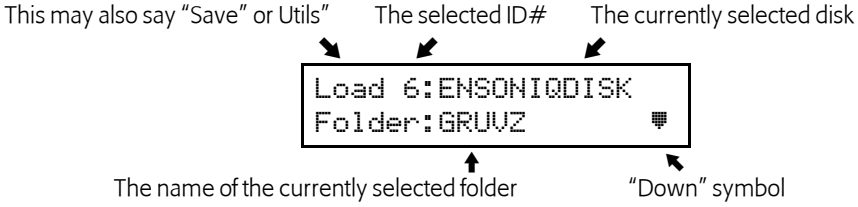
Once you've selected a device, turn the Parameter knob clockwise by one tick—the ASR-X Pro will read the contents of the disk in the selected device. To jump directly to the files on the disk, hit Enter instead.

Scan SCSI Devices?

If you change something in your SCSI system—if you've switched CD-ROMs or removable cartridges, for example—you'll need to re-scan the SCSI bus so that the ASR-X Pro can see the changes. To do so, turn the Value knob all the way clockwise until you see "Scan SCSI devices?" and press the Yes button.

SCSI Folder Navigation

When you've chosen a SCSI device, turn the Parameter knob one tick to the right to view the outer-most folders on the selected device's disk. The display will look something like this:



The upper left-hand area of the display shows the type of operation being performed and the ID number of the selected device.

Turn the Value knob to view the names of the other folders available in this location on the selected disk. The down symbol in the lower right-hand corner of the display indicates that the currently displayed folder can be opened by pressing the Enter button. To close the folder you're in, and to move back upward in the folder hierarchy, press the Exit button.

Turn the Parameter knob clockwise at any time to show the files types available in the selected location. Turn the Value knob to choose individual files of the selected type.

Tip: Turn the Parameter knob fully counter-clockwise to return to the "Select device?" display.

When you've navigated to the folder or file you seek, standard ASR-X Pro loading, saving, erasing and renaming procedures can be used. These procedures are detailed later in this chapter.

Creating a New Folder on a SCSI Device Using the ASR-X Pro

When saving disk files or using the disk utilities, you can create new folders. To do this:

1. While viewing the currently selected SCSI device's name on the "Select Device? display, turn the Parameter knob so that "Folder" appears in the lower left portion of the display.
2. Turn the Value knob all the way clockwise so that the display shows "Create new?"
3. Press the Yes button.
4. Spell out the new folder's name by using the Parameter knob or left/right arrow buttons to select each character position in turn, and the Value knob to dial in the desired character for each position.

Note: When creating your own folders on an ASR-X Pro disk, do not use the names reserved for the invisible default folders (described in "Invisible Folders" earlier in this chapter).

5. When you've finished, press the Yes button to complete the creation of your new folder.

Note: If you create a new folder inside an invisible folder, the folder you've created will be conveniently accessible at the outermost level of the disk's folder hierarchy.

Creating a New Folder on a SCSI Device Using a Computer

You can use a computer to create folders on an ASR-X Pro disk. When doing so, there are a couple of things to bear in mind to help ensure that the disk will be easy to use with the ASR-X Pro:

- Avoid using the names assigned to the invisible folders so as not to conflict with the ASR-X Pro's automatic filing system.
- It's best not to create a folder within any of the invisible default folders (these folders can be seen on a computer), since the ASR-X Pro will make such a folder visible to provide you access to any folders within it—this may create unnecessary confusion when viewing the disk's contents.

The Save Button

To save an ASR-X Pro file to disk, you:

1. press the Disk/Global Save button.
2. navigate to the desired floppy or SCSI disk and folder.
3. select the type of file to be saved.
4. name the file.
6. press the Yes button to finish saving the file.

Note: If the file or files you're saving require more space than is available on a single disk, the ASR-X Pro will ask if you're ready to proceed, and ask you to supply additional disks as needed.

File Types that can be Saved

When you press the Disk/Global Save button, the ASR-X Pro reads the directory of the disk in the drive, and presents you with a list of the types of files that can be saved to disk.

To choose a type of file to save, turn the Parameter knob to choose:

- ALL-SESSION—The ALL-SESSION file saves everything currently in RAM as files with a common name. An ALL-SESSION file saves:
  - an ALL-SOUNDS file (see below).
  - all of the waves currently in RAM as separate 1-AIF WAVE files.
  - an ALL-SEQS file (see below).
  - a SYSTEMSETUP file (see below).

Tip: Double-click the Save button to get to the ALL-SESSION saving display at any time.

- ALL-SEQS—An ALL-SEQS file saves all of the sequences currently in RAM as a single disk file.
- 1-SEQUENCE—A 1-SEQUENCE file saves the selected sequence to disk as a Standard MIDI File (SMF). Each track contains SysEx data that allows the track's parameter settings to be reloaded from disk or transmitted to the ASR-X Pro via MIDI from an external sequencer.
- ALL-SOUNDS —An ALL-SOUNDS file saves all of the sounds currently in RAM. The ALL-SOUNDS file type also saves any waves currently in memory as 1-AIF WAVE files.
- 1-SOUND—The 1-SOUND file type saves the currently selected sound to disk. If the sound is playing a wave currently in RAM, the wave is saved to disk as well, as an 1-AIF WAVE file.

Tip: When you save a kit as a 1-SOUND file, all of the sounds and waves it uses are saved as well.

- SYSTEMSETUP—A SYSTEMSETUP file saves the current System/MIDI, Resampling Setup and sequencer Click settings, as well as your current USER quantization templates.
- ESSENTIALS—An ESSENTIALS file saves your current Essentials buttons assignments.

Tip: You can save special ALL-SESSION and SYSTEMSETUP files that will load automatically when stored on a floppy inserted in the ASR-X Pro's drive at power-up. To do this, name the desired SYSTEMSETUP file "SYSSETUP" and/or the desired ALL-SESSION file "AUTOLOAD."

Each file type has its own 3-character DOS extension. As in any DOS-based system, the ASR-X Pro identifies disk files by this extension. Each file is automatically saved into the appropriate folder.

Folder/Directory Name	What's Stored There	File Extensions
SESSION	ALL-SESSION files	.ssx
	SYSTEMSETUP files	.spb
BANKS	ALL-SOUNDS files	.sbx
SEQUENCE	sequence banks files associated with ALL-SESSION files	.mfb
	1-SEQUENCE files	.mid
SOUNDS	1-SOUND files	.sou
WAVES	1-AIF WAVE files	.aif
	alias files that prevent duplicate saving of 1-AIF WAVE files	.als
(current folder)	ESSENTIALS	.fav

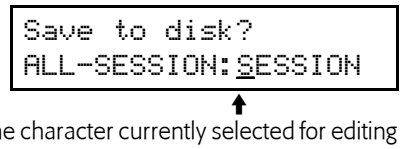
Note: Though it's desirable that files be stored in these folders/directories, the ASR-X Pro can "see" and load files from anywhere on a disk.

Saving the Contents of the Scratch Pad to Disk

After you've pressed the Save button and the ASR-X Pro has read your disk's directory, you can save the contents of the Scratch Pad to disk by pressing the Scratch Pad—the ASR-X Pro will create a sound that plays the wave(s) in the Scratch Pad and that you can save to disk.

Naming Disk Files

Each file you save to disk should be given a unique name. The ASR-X Pro will not allow two files with the same name on a single disk—if you save a file that has the same name as a file on the disk, the older file will be replaced by the new one. This allows you to easily update files by resaving them to disk without re-naming them—it also means that you can unintentionally erase a file you meant to keep.



The character currently selected for editing is underlined

To name a disk file you're saving, press the left and right Select Track buttons to select each of its eight character locations. Turn the Value knob to choose the desired character for each location. If you're naming an ALL-SESSION file, each of its component files will share the name you designate.

When you've finished naming your file, press the Yes button to save the file to disk.

Note: When you name a disk file, you're not changing the name of the item it contains.

The Load Button

To load a file from disk into the ASR-X Pro, you:

1. press the Disk/Global Load button.
2. navigate to the desired floppy or SCSI disk and folder.
3. select the type of file to be loaded.
4. select the specific file to be loaded.
5. if you're loading a 1-SOUND file, select the RAM location into which you want to load the sound.
6. press the Yes button to load the file.

Note: If files you're loading are on multiple disks, begin loading the files from the first of these disks—the ASR-X Pro will ask for each disk as it needs it.

File Types that can be Loaded

When you press the Disk/Global Load button, the ASR-X Pro reads the directory of the disk in the drive, and presents you with a list of the types of files that can be loaded from disk.

The type of file to be loaded

To choose a type of file to load, turn the Parameter knob to choose:

- ALL-SESSION—The ALL-SESSION file type restores all of the items that were in RAM when the file was saved. It loads:
  - an ALL-SOUNDS bank.
  - the 1-AIF WAVE files played by sounds in the ALL-SOUNDS bank.
  - an ALL-SEQS file.
  - a SYSTEMSETUP file.
- ALL-SEQS—An ALL-SEQS file loads the sequences that were in RAM when the file was saved.
- 1-SEQUENCE—The 1-SEQUENCE file loads a Standard MIDI File (SMF) created on the ASR-X Pro or any SMF-compliant sequencer.
- ALL-SOUNDS —An ALL-SOUNDS file restores all of the sounds that were in RAM when the file was saved, as well as any 1-AIF WAVE files required to produce the sounds.
- 1-SOUND—The 1-SOUND file type loads a single sound, as well as any 1-AIF WAVE files required to produce the sound.
- 1-WAV WAVE—A 1-WAV WAVE file loads a .wav-format wave file created on an external device. 1-WAV WAVE files are loaded directly into the Scratch Pad, from where they can be sent to pads and incorporated into ASR-X Pro sounds.

Note: The ASR-X Pro converts .wav files to AIF format as it loads them into the ASR-X Pro.

- 1-AIF WAVE— A 1-AIF WAVE file loads an AIF-format wave file created on the ASR-X Pro or an external device. 1-AIF WAVE files are loaded directly into the Scratch Pad, from where they can be sent to pads and incorporated into ASR-X Pro sounds.
- SYSTEMSETUP—The SYSTEMSETUP loads the System/MIDI, Resampling Setup and sequencer Click parameter settings, and USERS quantization templates in place when the file was saved.
- ASR-SND—An ASR-SND file loads a sound saved to a single high-density (HD) or double-density (DD) floppy, or SCSI drive, from an ENSONIQ ASR-10, ASR-88, EPS 16 PLUS or EPS. The ASR-X Pro can also load such sounds stored on disk in Giebler Enterprises' popular .efe and .efa format (to contact Giebler Enterprises, visit their Web site at *http://www.giebler.com*).
- AKAISND—An AKAISND file imports a sound from an AKAI S-1000 SCSI disk.
- SND—A SND file imports a sound from a Roland S-770 SCSI disk.

A Note About Imported Sounds

The ASR-X Pro, ASR-10/88, EPS 16 PLUS, EPS, AKAI S-1000 samplers and Roland S-770 samplers each have their own distinctive voice architecture, with their own set of parameters. You may experience some changes in such sounds when they're played on your ASR-X Pro —a direct translation of every parameter in an imported sound to the ASR-X Pro's architecture is not always possible.

Most ASR-10/88, EPS 16 PLUS and EPS features have counterparts in the ASR-X Pro voice architecture that are translated when a sound is imported. A few features lack such a counterpart, however:

- A-B FADE IN-TO, C-D FADEOUT-TO, and FADECURVE parameters settings are not imported.
- ASR-10/88, EPS 16 PLUS and EPS pitch tables are not imported.
- Only the START, LPSTRT-X and TRANSWAV loop modulators are translated.
- All ASR-10 and ASR-88 sounds are set to the MediumReverb FX Bus when they're imported.
- The ASR-X Pro VelLevels Amount settings for Envelopes 1, 2 and 3 are derived by averaging the HARD VEL LEVELs 1 and 2 and the SOFT VEL LEVELS 1 and 2 for each envelope in the original ASR-10/88 sound.
- When a layer's LYR GLIDEMODE parameter is set to any value other than "OFF" in an ASR-10/88 sound, the layer's Glide Mode is set to "On" and its Voice Mode to "Mono" when it's imported.

Note: EPS sounds do not contain all of the above features.

The amount of time that it takes to import a sound depends on the number of wavesamples in the sound, since each wave's parameters must be translated to the ASR-X Pro architecture—the process can take several minutes to complete. Once imported, a sound becomes a ASR-X Pro standard sound: it can be played, converted to a RAM kit and edited using the PAD parameters, and saved to floppy or SCSI disk.

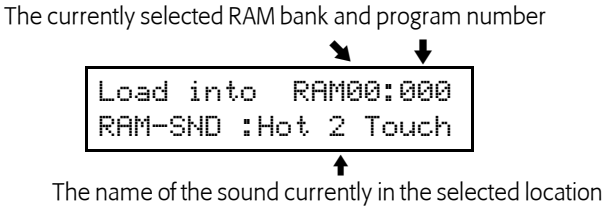
Selecting an Individual File to be Loaded

Once you've selected the type of file to be loaded, turn the Value knob to select a specific file. Once you've chosen the file you want to load, press the Yes button, and the ASR-X Pro will load the file.

Note: If a file you're loading was created on a computer and its name contains more than the eight characters supported by DOS, the file's name will be truncated according to the following rules: if the file was named on a Macintosh, an exclamation point will appear at the beginning of its name; if it was created on a PC-compatible, the last two characters will be an arrow and a digit.

Selecting a Location into which a Sound will be Loaded

When loading a 1-SOUND file, an additional display appears when you press the Yes button after selecting the file to be loaded.



When this display appears, you can turn the Value knob to select any location in either of the ASR-X Pro's two RAM sound banks—RAM 00 and RAM01. If you select a location that already contains a sound, the sound you're loading will replace the one currently in the location. Unused locations show **EMPTY.** When you've selected a location, press the Yes button to load the sound.

The System/MIDI Button

The System/MIDI button provides access to parameters and tools for setting up your overall ASR-X Pro environment and for memory and disk file management. These various items are grouped into several broader categories, each of which is accessed by pressing the System/MIDI button, turning the Parameter knob to view and then pressing the Yes button to respond to a displayed question. The questions are:

- Set system prefs?—Pressing the Yes button in response to this question reveals parameters that control the response of the pads, what occurs when you select new track sounds, SCSI ID and termination, the Patch Select buttons and foot switches, and the zero-cross loop-finding feature.
- Alter system pitch?—Pressing the Yes button in response to this question causes the ASR-X Pro to display parameters that determine its response to received MIDI pitch bend messages, that allow you to fine-tune the overall pitch of the ASR-X Pro, and set the ASR-X Pro's tuning table.
- Edit MIDI settings?—Press the Yes button in response to this question to display parameters that set the base MIDI channel for the ASR-X Pro, its response to and transmission of sequencer synchronization data, its response to several types of received MIDI messages, its System Exclusive ID number and allows you to define four special system-wide real-time MIDI controllers.

- Access disk utils?—Pressing the Yes button in response to this question causes the ASR-X Pro to display an assortment of utilities for formatting disks, copying and optimizing SCSI disks, resetting a SCSI bus, erasing disk files, renaming disk files, determining how files will be displayed, and also provides a read-out of the free space available on the currently select disk.
- Enter MemoryManager?—Press the Yes button in response to this to display informational displays showing how much free memory is currently available and the name of an installed expansion board, as well as a set of tools for onboard memory management that provide the ability to clear the onboard memory banks, erase or rename a sound and change a sound's SoundFinder category.
- Save these settings?—Pressing the Yes button saves your current System/MIDI, Resampling Setup and sequencer Click settings, as well as USER quantization templates, to FLASH memory.

Some of these parameters are accessed by responding "Yes" to questions posed on sub-displays under the top-level question. To exit from a sub-display or from the System/MIDI displays altogether, press the Exit button each time you want to move up a level back out to the ASR-X Pro front panel. The factory default value for each parameter is listed with its description in case you want to restore the default after using the "Save these settings?" command described later in this chapter.

Set system prefs?

Touch Curve

factory default value: Table-2

The ASR-X Pro pads are velocity-sensitive, responding with tremendous accuracy to how hard or soft you play. The Touch Curve parameter allows you to adjust the velocity response of the pads to match your playing style and technique. There are six available Touch Curve settings:

- Table-1—With this setting, the pads offer an easily controllable, compressed dynamic response. Table-1 is optimized for players with a light touch.
- Table-2—This setting is similar to Table-1, but designed for players who play hard.
- Table-3—With this setting, the pads offer a full dynamic range for musicians with a high degree of control over the force with which they play. Table-3 is optimized for players with a light touch.
- Table-4—This setting is similar to Table-3, but designed for players who play hard.
- Fixed 64—This setting causes the pads to always respond as if you've hit them precisely half as hard as they can be hit. This can be useful in simulating vintage synthesizers with no velocity control.
- Fixed127—This causes the pads to always respond as if you've hit them as absolutely hard as they can be hit. This is good for drum/percussion parts in which you don't want dynamic changes.

Patch Selects

factory default value: Live

The ASR-X Pro Patch Select buttons can be set to operate in one of two modes, each of which is invoked by one of two values for the Patch Selects parameter:

- Live—With this setting, the Patch Select buttons are momentary switches. This means that the sound changes caused by pressing either, or both, of the Patch Select buttons lasts for only as long as the button is physically held down.
- Held—With this setting, playing a note from the pads or via MIDI locks in the Patch Select button or buttons being held when the note is played. To release the button(s), tap either of the Patch Select button; subsequent notes will sound as they should when no Patch Select buttons are being pressed.

FtSw L and FtSw R ("Foot Switch Left, Right")

factory default values: FtSwl=Unused; FtSwR=Sustain

The ASR-X Pro can accommodate either a dual foot switch with two pedals—such as the ENSONIQ SW-10—or a single foot switch with one pedal—such as the ENSONIQ SW-2 or SW-6. The FtSw L and FtSw R parameters allow you to assign a broad range of functions to any pedals you're using. When a dual foot switch is connect, both the FtSw L and FtSw R parameters are active, controlling the behavior of the left and right pedals, respectively. When a single foot switch is connected, FtSw R controls its behavior.

Tip: To learn how to connect foot switches to the ASR-X Pro, see Chapter 1.

FtSw L and FtSw R can be set to any of the following values:

- Unused—pressing the pedal will have no effect.
- Sustain—holding the pedal will cause notes to continue sounding after the key is released.
- Sostenuto—any keys that are held down when you press the pedal will sustain until you release the pedal; keys pressed down after you press the pedal will not sustain.
- SysCTRL1—pressing the pedal down will send a value of 127 to any aspect of a sound or effect that's modulated by the controller designated as CTRL1; releasing the pedal will send a value of 0 to any aspect of a sound or effect that is modulated by the controller designated as CTRL1. (For details on setting the CTRL1 parameter and descriptions of CTRL1 settings, see "CTRL1, CTRL2, CTRL3 and CTRL4" later in this chapter.)
- SysCTRL2—This functions in the same manner as the SysCTRL1 value described above, except that it applies to CTRL2 instead of CTRL 1.
- SysCTRL3— This functions in the same manner as the SysCTRL1 value described above, except that it applies to CTRL3 instead of CTRL 1.
- SysCTRL4— This functions in the same manner as the SysCTRL1 value described above, except that it applies to CTRL4 instead of CTRL 1.
- Play/Stop—pressing the pedal will have the same effect as pressing the Stop button if a sequence is playing; it will have the same effect as pressing the Play button if a sequence isn't playing.
- PlayTop/Stop—pressing the pedal once will have the same effect as double-clicking the sequencer Play button; pressing it twice will stop the sequence if it's playing.
- RecPlay/Stop—pressing the pedal will start recording on the currently selected track. If the sequencer is already recording, pressing the pedal down will stop recording. This setting can be used for punching ins on a track.
- Record—pressing the pedal will have the same effect as pressing the sequencer Record button.
- Stop—pressing the pedal will have the same effect as pressing the sequencer Stop button.
- Rewind—pressing the pedal acts like pressing the sequencer Stop and Record buttons together.
- FastForward—pressing the pedal acts like pressing the sequencer Stop and Play buttons together.
- Mute—pressing the pedal will have the same effect as pressing the track Mute button.
- Step Advance—pressing the pedal will advance a track currently being step-recorded by one step.
- PrevEssntial—pressing the pedal will select the previous Essential sound. When the first Essential is selected, tapping the pedal once will select the last Essential sound.
- NextEssntial—pressing the pedal will select the next Essential sound. When the last Essential is selected, tapping the pedal once will select the first Essential sound.

Warning: If you're using a single foot switch, FtSw L should always be set to "Unused."

AutoSelect FXBus

factory default value: On

The AutoSelect FXBus parameter allows you to program the ASR-X Pro to assign an appropriate effect to a sound when it's chosen for use by a track. Each sound in the ASR-X Pro has a parameter called the Alt Bus that assigns it to a non-insert effect routing. If AutoSelect FXBus is set to "On":

- when you select a sound that contains an insert effect for use by a track other than the Insert Control Track, the sound is routed to the FX bus designated by its Alt Bus value.
- when you select a sound that doesn't contain an insert effect for use by any track, the sound is routed to the FX bus designated by its Alt Bus value.

When the AutoSelect FXBus parameter is set to "Off," the track's FX Bus routing is unchanged when a new sound is selected for the track.

Tip: To learn about the Insert Control Track , see Chapter 4. To learn how to program the Alt Bus for sounds you've sampled, see Chapter 3.

Track ParamReset

factory default value: On

The Track ParamReset parameter determines whether or not certain track parameters will be reset to their default values when a new sound is selected for a track. This helps ensure that each sound will be heard as its programmers intended when it's selected for a track; on the other hand, if you've set a track's parameters just so, you may want them to remain in place when a new sound is selected. A list of the affected track parameters—and their default values—can be found in Chapter 9. When Track ParamReset is set to "On," these parameters will be reset whenever a new sound is selected for a track; when it's set to "Off," each track's parameters will be unaffected by the selection of a new sound for the track.

Auto-Zero Cross

factory default value: Off

The Auto-Zero Cross parameter enables or disables the ASR-X Pro's zero-crossing search feature. This feature automatically offers locations within waves that are most likely to produce trouble-free loops when the Loop Start and Loop End Pad parameters (see Chapter 3) are adjusted.

SCSI Device ID

factory default value: 2

Each device in a SCSI system must be assigned its own SCSI device ID number so that it can identified by the other devices in the system. The ASR-X Pro can be set to any of the eight possible SCSI device IDs, numbered as 0 through 7. Some ID numbers should be avoided in certain circumstances—see "About SCSI Device IDs" earlier in this chapter for more information. The default ASR-X Pro SCSI Device ID is 2.

SCSI Termination

factory default value: On

A SCSI system is an electrical circuit that requires resistors on either end that supply termination to the SCSI bus. The ASR-X Pro can be set to provide termination according to the setting of its SCSI Termination parameter. The parameter's default setting—for situations where the ASR-X Pro is at either end of your SCSI chain—is On. The parameter should be set to "Off" only when the ASR-X Pro is placed in the middle of a SCSI chain through the use of a SCSI splitter connector.

Note: You can save a SYSTEMSETUP file to floppy that restores your SCSI system prefs automatically on power-up. See "File Types that can be Saved" earlier in this chapter.

Alter system pitch?

The System Pitch Bend Setup

A Pitch Bend Wheel is a spring-loaded wheel typically located to the far left of a MIDI keyboard. It's most commonly used to bend the pitch of notes up or down by pushing the wheel forward (up) or pulling it back (down). Some manufacturers employ a left/right scheme.

ASR-X Pro sounds are programmed to respond to MIDI Pitch Bend messages in ways appropriate to the sound. The ASR-X Pro also offers a system pitch bend setup that can be accessed by setting any track's Pitch Bend Up and Pitch Bend Down parameters to the "Sys" setting (see Chapter 2). There are three parameters that determine the behavior of the system pitch bend setup.

The system Pitch Bend Up parameter can be set to:

- 1-12dn or 1-12up—the pitch of any sound on a track whose Pitch Bend Up parameter is set to "Sys" will be lowered or raised by the number of equal-temper semitones set here when a Pitch Bend value of 127 is received. The factory default setting is 2up.
- Off—the pitch of any sound on a track whose Pitch Bend Up parameter is set to "Sys" will ignore MIDI messages received from a Pitch Bend Wheel pushed forward.

The system Pitch Bend Down parameter can be set to:

- 1-12dn or 1-12up—the pitch of any sound on a track whose Pitch Bend Down parameter is set to "Sys" will be lowered or raised by the number of equal-temper semitones set here when a Pitch Bend value of 0 is received. The factory default setting is 2dn.

- Off—the pitch of any sound on a track whose Pitch Bend Down parameter is set to "Sys" will ignore MIDI messages received from a Pitch Bend Wheel pulled all the way back.

The PitchBendMode parameter unlocks a powerful feature that allows you to decide which notes will be affected by received Pitch Bend messages. It can be set to one of three values:

- Normal—received Pitch Bend messages will affect all notes currently sounding.
- Held—received Pitch Bend messages will affect only those notes sounding from keys which are being physically held down. Notes held with the sustain pedal or in their release stage will remain at their original pitch.
- Prog—the system Pitch Bend will respect the Normal/Held settings programmed into sounds using the system pitch bend set-up. This is the factory default setting.

Tip: This PitchBendMode feature can be used to create guitar-style pitch bends or to "paint" with pitch, leaving different notes sustaining at different pitches.

Fine Tuning

factory default value: 0cents

The Fine Tuning parameter allows you to raise or lower the overall pitch of sounds in cents—100ths of a semitone. This parameter can lower pitch by as much as -50 cents or raise it by up to +49 cents.

PitchTbl

factory default value: EqualTemper

The intervals (or relationships) between notes in a scale can be altered to create special pitch tables. The ASR-X Pro pitch tables have a tuning resolution of 256 cents per semitone. You can select from a large assortment of traditional, modern, ethnic, and exotic pitch tables in the ASR-X Pro. A detailed list of these pitch tables can be found in Chapter 9.

The ASR-X Pro also provides a RAM location for a custom pitch table, and supports the MIDI pitch table Bulk Tuning Dump and Single Note Tuning Change standards. If you've got the appropriate computer program, you can create your own pitch tables, and transmit them to the ASR-X Pro via SysEx. This feature is described in detail in Chapter 9.

The ASR-X Pro provides a system pitch table that can be accessed by setting a track's PtchTbl parameter to the "Sys" setting (see Chapter 2). The System/MIDI parameter allows you to select the tuning that will be used by the system pitch table. Any built-in pitch table or the RAM pitch table can be selected.

Edit MIDI settings?

Local-Off Operation of the ASR-X Pro

The Pads Play Local and Local Off Channel parameters allow you to disable the ASR-X Pro's response to its pads, Patch Select buttons and foot switch while using them to send data to an external MIDI sequencer—the external sequencer can then send the data back to the ASR-X Pro sounds via MIDI. Turning off the ASR-X Pro's response to the pads when working with an external sequencer ensures that what you hear is being correctly captured and played by the external sequencer; it also prevents the accidental simultaneous playing of ASR-X Pro sounds from two MIDI sources.

The Pads Play Local parameter enables or disables the ASR-X Pro's response to the pads, Patch Select buttons and foot switch. It can be set to:

- On—causing the pads, Patch Select buttons and foot switch to function normally in the playing, creation and editing of sounds. MIDI data can be sent on a track using a MIDI-OUT sound, according to the setting of the TrackMIDIOut parameter (see Chapter 2). This is the default setting.
- Off—the pads, Patch Select buttons and foot switch function only as MIDI controllers transmitting data on the MIDI channel determined by the Local Off Channel parameter.

The Local Off Channel parameter sets the MIDI channel on which the ASR-X Pro will transmit data from the pads, Patch Select buttons and foot switch when the Pads Play Local parameter is set to "Off." The factory default setting is 01.

ClockSource

factory default value: Internal

Various activities in the ASR-X Pro depend on a timing source, or clock. Obviously, the sequencer needs such a reference; in addition, synchronized LFOs and noise generators within sounds, and certain effects such as delays, also depend on a timing reference. The ASR-X Pro contains its own internal clock—it can also use timing information received from an external MIDI device that transmits MIDI clocks. The ClockSource parameter determines which timing reference will be used. The parameter can be set to:

- Internal—so that ASR-X Pro's internal clock is used. When this is the case, the sequencer tempo sets the timing of synchronized LFOs, noise generators and effects.
- MIDI—so that received MIDI clocks control the timing of the sequencer, LFOs, noise generators and effects. With this setting, the ASR-X Pro responds to Song Position Pointer messages.

Xmit MIDI Clocks

factory default value: Off

The ASR-X Pro can generate MIDI clocks to provide a timing reference for external MIDI devices, allowing them to be synchronized to its sequencer. The XMit MIDI Clocks parameter enables or disables transmission of MIDI clocks when the ASR-X Pro is running. The parameter also enables or disables transmission of MIDI Song Position Pointer messages from the ASR-X Pro sequencer.

Bank&ProgChgRecv

factory default value: On

Each track has parameters that allow you to enable or disable the track's response to Bank Select and Program Change messages. The Bank&ProgChgRecv parameter provides a master switch for this feature, simultaneously enabling or disabling all 16 tracks' response to Bank Select and Program Change messages. The parameter may be set to "Off" or "On."

ResetControlRecv

factory default value: On

The ResetControlRecv System parameter allows you to determine how the ASR-X Pro will respond to Reset All Controllers MIDI messages. When the parameter is set to "On," and the ASR-X Pro receives a Reset All Controllers message, it will return all of its real-time controllers and any parameters that respond to MIDI controllers to their default values, clearing up any hung values or unexpected settings. When ResetControlRecv is set to Off, the ASR-X Pro will not respond to Reset All Controllers messages. For more information on the ASR-X Pro's response to Reset All Controllers messages, see "Reset All Controllers (MIDI controller 121) Reception Behavior" in Chapter 9.

AllNotesOff Recv

factory default value: On

The ASR-X Pro can respond to All Notes Off (controller 123) and All Sounds Off (controller 120) MIDI control messages. When the ASR-X Pro receives either of these messages, any notes that are currently sounding are silenced. When the AllNotesOff Recv parameter is set to "On," the ASR-X Pro will respond to these messages—when it's set to "Off," it will ignore them.

SysEx Device ID

factory default value: 000

When sending System Exclusive messages to the ASR-X Pro in a MIDI system that contains more than one ASR-X Pro, it's vital to have a way of distinguishing one ASR-X Pro from another. To accomplish this, each ASR-X Pro should be set to its own SysEx ID number. The SyEx Device ID parameter may be set from 000 to 127.

CTRL1, CTRL2, CTRL3 and CTRL4

The ASR-X Pro responds to the following real-time MIDI controllers and messages:

- Data Entry Slider
- Pitch Bend Wheel
- Mod Wheel
- Foot Pedal
- Sustain/Sostenuto pedals
- MIDI Volume messages
- MIDI Pan messages
- MIDI Expression messages

In addition, you can define four additional real-time MIDI controllers: CTRL1, CTRL2, CTRL3 and CTRL4. These can be assigned to any MIDI controller number, and can used to modulate the ASR-X Pro

sounds or effects. (see Chapters 3 and 4, respectively, to learn about modulation). Each track offers parameters for enabling or disabling the track's response to any of the four CTRLs. See Chapter 2.

When the ASR-X Pro is shipped from the factory, the CTRLs are set to the following default values:

- CTRL1 is assigned to Breath Controller (MIDI controller #002).
- CTRL2 is assigned to FXControl1 (MIDI controller #012). This is the controller transmitted by the FX-SW modulator on ENSONIQ's TS-10 and TS-12.
- CTRL3 is assigned to PatchSelct (MIDI controller #070). The Patch Select buttons can be used for real-time modulation when you select CTRL3 as a sound or effect modulator.
- CTRL4 is assigned to Timbre (MIDI controller #071).

Tip: Some of the ENSONIQ-programmed sounds in the ASR-X Pro use CTRL3 as the mechanism by which they respond to the front-panel Patch Select buttons. If you'd like to use an external MIDI controller—such as a continuous controller—instead of the Patch Select buttons, you can change CTRL3 to any controller number that's convenient. Remember, however, that this will have the effect of disabling the Patch Select buttons on the ASR-X Pro for these sounds.

Access disks utils?

Format disk?

Before a disk can be used by the ASR-X Pro to store data, it must be in DOS format. You can use the ASR-X Pro to format any HD (high-density) floppy disk that's been properly inserted into its drive, or any writable SCSI disk. When you press the Yes button in response to "Format disk?" the ASR-X Pro presents a second display as a safety feature to make sure you're prepared to erase the selected disk. The formatting process can take anywhere from a few to 20 minutes (or longer with a very high-capacity SCSI disk). As formatting occurs, "Formatting disk. Please wait..." will be displayed. (When certain SCSI devices—such as Iomega's Zip and Jaz drives—are being formatted, a percentage display will appear, showing the progress of the formatting procedure.)

Warning: Make sure that any disk you format does not contain anything that you want to keep. All data on a disk will be lost when the disk is formatted.

You can format DD floppy disks on any device capable of DOS formatting using the DOS command "format (the letter designator of your floppy drive): /F:720".

Copy [disk name] disk?

"The "Copy [disk name] disk?" utility allows to you to copy a SCSI disk using one or more drives. You can copy all files between two DOS-formatted disks of different sizes, or perform a sector-by-sector copy between any two disks of the same size. Each method has its advantages and disadvantages.

When copying a DOS-formatted disk to another DOS-formatted disk of a different size, the ASR-X Pro copies the data from the source disk file-by-file. This has the advantage of allowing you to copy the data on your source disk to a destination disk that already contains files; this can be handy when compiling archive disks containing important files. It may be that you have files on your destination disk that have the same names as files on the source disk—the ASR-X Pro will offer you a choice of whether or not you want to replace such files with copied files, or leave them intact.

The only disadvantage to a file-by-file copy is that, since it uses DOS, only file names of up to eight characters are supported. If you've created long folder or file names on a computer, those names will be truncated during the copying procedure.

Tip: If the destination already contains files you want to discard, wipe the disk clean by formatting it prior to performing the disk copy.

When copying a disk of any format to another disk of the same size, the ASR-X Pro copies the source disk sector-by-sector. The resulting copy is an exact duplicate of the original source disk. This method has the advantage of supporting any disk format, and of preserving long file names. The disadvantage is that the copying procedure causes all files on the destination disk to be completely erased.

The formatting and relative sizes of the disk being copied and the disk to which the copy is being made determine the nature of the copy to be made. The ASR-X Pro refers to the disk being copied as the source (abbreviated as "src") and the disk on which the copy will be made as the destination ("dest").

Important: See "A Note About the SCSI Copy and Optimize Utilities" below before proceeding.

To copy a SCSI disk:

1. After accessing the disk utilities and selecting the SCSI device containing the disk you want to copy, turn the Parameter knob until "Copy [the name of the selected device] disk?" is displayed.
2. Press the Yes button—the ASR-X Pro will present a display that allows you to select the SCSI device that will contain the new copy of your disk.
3. Turn the Value knob to select the desired SCSI device.
   - If you want to copy a disk from one DOS-formatted SCSI device to another, select the SCSI device on which you want to make the copy.
   - If you want to make a copy of a removable disk using a single SCSI device by swapping disks during the copying procedure, select the same SCSI device you selected in Step 1.
4. Press the Yes button to make the disk copy. The ASR-X Pro will offer you a confirmation question verifying that you want to proceed with the copying procedure.
5. If you're copying a removable disk using a single SCSI device, the ASR-X Pro:
   - will tell you how many times you'll need to swap the source and destination disks to complete the copying procedure and ask if you want to proceed. The number of swaps depends on the size of the disk being copied and the amount of free RAM that you have in your ASR-X Pro.
   - will ask you to insert each disk as it's needed.

Optimize [disk name] disk?"

During normal usage, a SCSI disk's files become scattered across the disk's surface as files are written, edited and re-written to disk. When a disk becomes fragmented in this manner, loading its data takes more time. The "Optimize [disk name] disk?" utility de-fragments the selected SCSI disk to the degree possible given the available amount of free space remaining on the disk, thus optimizing its performance. To perform an optimization, read "A Note About the SCSI Copy and Optimize Utilities" below, and then press the Yes button when "Optimize [disk name] disk?" is visible. The process can take a while, depending on the size of your disk and the amount of RAM available in the ASR-X Pro.

A Note About the SCSI Copy and Optimize Utilities

The copy and optimize utilities are available only when there is at least one writeable SCSI device active on your SCSI bus, since the procedures require such a device. If your writeable device uses a removable disk, a disk must be present in the drive for the ASR-X Pro to recognize it as a write-capable device. Also, the ASR-X Pro uses available RAM as it shuffles disk data during these procedures—it's recommended that you clear your RAM of all waves and sounds before using the utilities. This will allow the ASR-X Pro to perform these operations more quickly, since it will be able to hold larger chunks of disk data in RAM.

Reset SCSI bus?

SCSI busses handle large chunks of data flowing in between complex computer-based devices. Sometimes the bus itself becomes confused as a result of minor malfunctions, power fluctuations, or unstable connections. Symptoms of a scrambled SCSI bus would include the inability to access a SCSI device, failed data-saving operations, failed loading operations, SCSI devices that appear to be "stuck" in some mode of operation, or failed attempts at ejecting removable cartridges. These symptoms don't

necessarily mean that there's anything wrong with your data—resetting the bus will often solve the problems you're experiencing. When you press the Yes button in response to "Reset SCSI bus?" a second display will be presented as a safety feature to make sure you want to do this.

Warning: Do not reset the SCSI bus when any of your SCSI devices are performing any reading or writing operations. Doing so could result in damage to your data and/or SCSI devices.

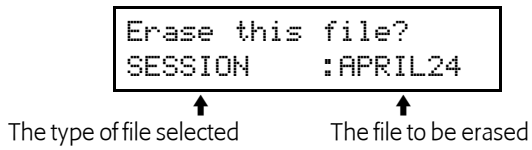
Some devices may need to rescan the SCSI bus after it's been reset by the ASR-X Pro.

Write-Protect

Some SCSI devices—such as Iomega's Zip and Jaz drives—support software write-protection, a software parameter that will prevent the accidental writing of data to the selected disk. If the currently selected SCSI device supports this feature, the Write Protect parameter will be available. Set the parameter to "Yes" to ensure that you won't over-write important data on the currently selected disk.

Erase disk files?

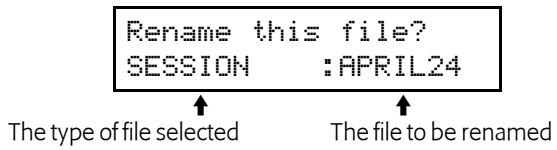
The "Erase disk files?" feature lets you permanently delete any file from the currently selected disk. When you answer the question by pressing the Yes button, the following display appears:



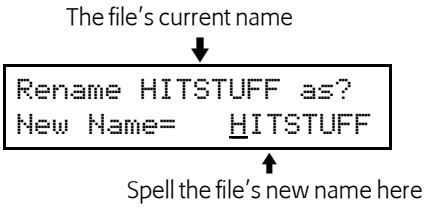
Turn the Parameter knob to select the type of file you want to erase, and then the Value knob to select a specific file. When you've selected the file you want to delete from the disk, press the Yes button. A display will appear asking you if you're sure—press the Yes button to erase the file.

Rename disk files?

The ASR-X Pro allows you to rename any files you've already saved to disk by pressing the Yes button in response to "Rename disk files?" When you've done this, the display will show:



Turn the Parameter knob to select the type of file you want to re-name, the Value knob to select a specific file, and press the Yes button. The ASR-X Pro will present the file-naming display:



Turn the Parameter knob to select each character location in turn—the selected character will be underlined—and then turn the Value knob to select the desired character for that location. When you've finished spelling out the new name for the file, press the Yes button to write the name to disk.

Note: It's recommended that you do not rename files saved as part of a SESSION—if you do so, the ASR-X Pro will not be able to locate renamed files when the SESSION file is reloaded.

Directory Sorted

The Directory Sorted parameter allows you to display files on the selected disk in alphabetical order. When the parameter is set to "Off," files are displayed in the order in which they were saved to disk.

Free

The Free display shows how much free space—in bytes—is available on the currently selected disk.

Enter MemoryManager?

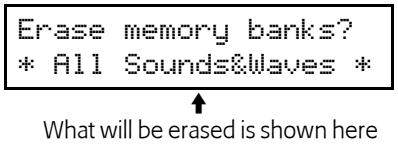
Show free memory?

The ASR-X Pro Memory Manager provides a handy way to keep track of how much RAM is available for sequences and waves. Pressing the Yes button in response to "Show free memory?" reveals two read-only sub-displays:

- Sound & Wave RAM—This shows the amount of free RAM currently available for sounds and waves. The amount displayed will depend on the amount of memory installed in your ASR-X Pro. A stock ASR-X Pro will show 37,778 bytes free when all of its memory is available.
- Sequencer RAM—This shows the amount of free memory currently available for sequencing.

Erase memory banks?

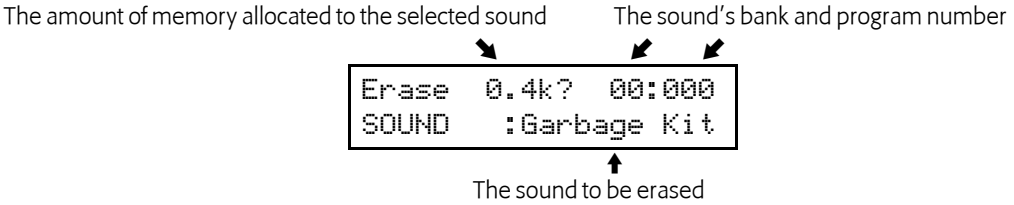
The ASR-X Pro Memory Manager allows you to easily clear the sound and wave RAM, or the sequencer RAM. Pressing the Yes button in response to "Erase memory banks?" reveals the following sub-display, from which you can turn the Value knob to select either "All Sounds&Waves" or "All Sequences":



When you've selected the type of RAM you'd like to erase, press the Yes button.

Erase sound?

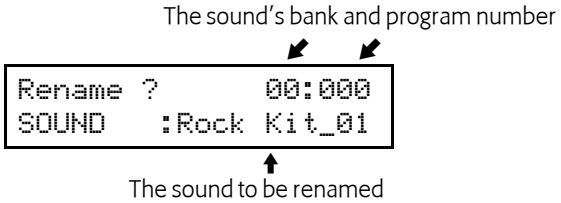
The ASR-X Pro allows you to erase any sound from RAM by pressing the Yes button in response to "Erase sound?" When you do so, the display will show:



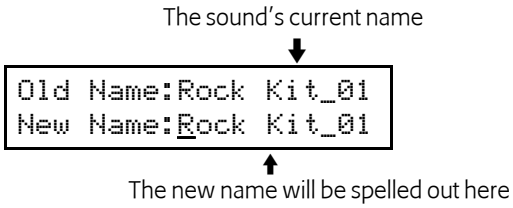
Turn the Value knob to select the sound you'd like to delete, and press the Yes button to erase it.

Rename sound?

To rename a sound in RAM, select "Rename sound?" and press the Yes button. The display will show:



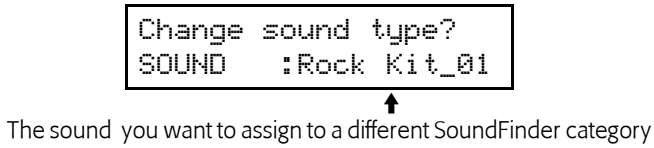
Turn the Value knob to select the sound you'd like to rename, and then press the Yes button to invoke the sound-renaming display:



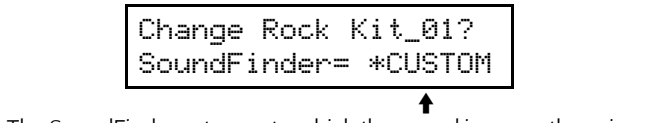
Turn the Parameter knob to select each character location in turn—the selected character will be underlined—and then turn the Value knob to select the desired character for that location. When you've finished spelling out the new name for the sound, press the Yes button to finish renaming it.

Change sound type?

The MemoryManager allows you to change the SoundFinder category to which a sound is assigned. Press the Yes button is response to "Change sound type?" and the following display appears:



Turn the value knob to select the sound whose category you'd like to change, and press the Yes button. The displays shows:



Turn the Parameter knob clockwise to reveal the FinderPref parameter, which allows you to assign the selected sound to the USER-SND and/or DEMO-SND SoundFinder types. Turn the Value knob to select:

- None—to assign the selected sound to neither the USER-SND or DEMO-SND category.
- DEMO-SND—to assign the selected sound to the DEMO-SND category.
- USER-SND—to assign the selected sound to the USER-SND category.
- USER+DEMO—to assign the selected sound to both USER-SND and DEMO-SND categories.

Turn the Value knob to select the desired SoundFinder designations, and press the Yes button to re-assign the sound to the new categories.

Exp Name

The EXP Name is a read-only display that shows the name of the ENSONIQ EXP Series Wave Expansion Board you've installed in your ASR-X Pro.

Save these settings?

Pressing the Yes button in response to "Save these settings?" stores the current System/MIDI, Resampling Setup and sequencer Click settings, as well as USER quantization templates, to FLASH memory, where they will remain in place permanently, or until you save new settings.