

Chapter 13

Disk Mode

Disk mode lets you load, save, back up, and copy files of objects between the K2600 and the outside world, through the K2600's floppy drive or SCSI ports. The floppy drive accepts MS-DOS[®] format double-sided double-density (DSDD—720K) and high-density (HD—1.4 M) floppy disks. To save data from the K2600 to a floppy disk, the disk must be formatted (initialized) by the K2600 or by a computer running MS-DOS-compatible formatting software.

Most SCSI (Small Computer System Interface) devices will operate with the K2600 via its 25-pin SCSI ports. The most common use for these ports is to connect one or more hard disks (or removable drives like Zip or Syquest) for storing samples and other objects. You can also connect a CD-ROM drive for reading files to the K2600. The K2600 will treat a CD-ROM drive like any other SCSI device (except that you can't save files to it). The K2600 can read writable CDs (CD-Rs), although it can't write to them.

The K2600 can address up to 2 gigabytes of file space on any one hard disk, so you can connect a maximum of 14 G of storage—up to seven hard disks. The K2600 can use all of the space on disks of 2 G and smaller. On larger disks, formatting with the K2600 creates a 2 G partition on the disk; the K2600 can read only that partition. If you format a hard disk on a computer, make the first partition just under 2 G. You can create other partitions, of any size, but the K2600 can read only the first partition.

Disk mode in the K2600 allows flexibility to organize disk files and their contents. Many powerful operations are included that can save a lot of time by allowing you to easily specify exactly what you want to load or save. Examples of this range from organizing related files into directories, to loading macros (lists of files or selected objects) from multiple SCSI disks, to setting up programs to automatically link with samples off of a CD-ROM.

Here's a summary of Disk-mode functionality:

- One floppy drive, two SCSI ports
- MS-DOS file system compatibility
- Sample transfer using standard audio file formats AIFF and WAV (including support for looped and tuned WAV files)
- Support for Roland,[™] Akai,[™] and Ensoniq[™] sample files
- SMDI sample transfers
- Support for song files (sequences) in MIDI Type 0 and Type 1 format
- Support for ISO 9660-format CDs: reading, copying, and backing up
- Support for writable CDs (CD-Rs):

Disk Mode Page

To enter Disk mode, press the **Disk** button, and the Disk-mode page will appear:

```

DiskMode   Samples:131072K Memory:480K

CurrentDisk:Floppy   Startup:Off
                   Library:Off
                   Verify :Off

<more  Load  Save  Macro  Delete  more>

```

As usual, the current mode is displayed on the top line. At the middle of this line, the amount of available sample RAM is shown (if you have added optional sample RAM; if you haven't, this part of the top line will be blank). To the right of the top line you see the amount of memory available for storing all other RAM objects. Straight from the box, this number should be around 500 K. If you have added the optional P/RAM extension kit, the number will be about 1.5 M. The P/RAM kit enables you to store hundreds of additional programs, songs, and any other objects. If you do a lot of programming or sequencing, the P/RAM option is a good idea.

In the center of the page is a line indicating the currently selected disk. Select different disks using any data-entry method. You can select a floppy disk, or SCSI IDs 0–7. (If you connect an Apple Macintosh® personal computer, don't select SCSI ID 7, since that's the SCSI ID of the Mac, which can't be changed. All SCSI devices connected in a network must have different SCSI IDs in order for the network to function.) When you want to communicate with any of the SCSI storage devices in your network, set the Current disk parameter to the value that matches the SCSI ID of the device you want to address. That is, the K2600 will interact with the SCSI storage device whose SCSI ID matches the value of the Current Disk parameter. If you choose a value of **Floppy**, the K2600 will communicate with its floppy disk drive.

The manual for your SCSI disk should tell you its SCSI ID. Most newer SCSI disks show their SCSI IDs on their rear panels, and many have adjustable SCSI IDs.

The currently selected device will be read from or written to when you load, save, rename, or delete files. Use the soft buttons to start any of these operations. Refer to *Disk Mode Soft Buttons* on page 13-6 for complete information.

Formatting a Floppy Disk

Floppy disks must be formatted (initialized) to the Kurzweil format before they can be used with the K2600. The K2600 uses the MS-DOS format, so floppies formatted on DOS computers (or any computer that can format disks in DOS format) should work with the K2600. To format a disk on the K2600, insert a floppy disk in the K2600's floppy drive, or in the floppy drive of any computer with MS-DOS formatting capability. Make sure the disk is unlocked (the sliding switch on the back of the disk is set so you can't see through the hole on that side of the disk).

Press the **Disk** button to enter Disk mode. Make sure the Current disk parameter says **Floppy**, so you don't accidentally format any SCSI devices you might have connected! Press the soft button labeled **Format**. The K2600 will ask you if you want to format, and a pair of **Yes/No** soft buttons will appear. Press the **Yes** soft button, and three soft buttons will appear, letting you choose between formatting the floppy as a 720K (double-density) or 1.4M (high-density) disk. Press the appropriate soft button, or press the **Cancel** soft button.

If the floppy you inserted is double-density and you press the **1.4M** soft button, the format procedure will fail. This is also true if the disk is high-density and you press the **720K** soft button. If the floppy is single-sided (SSDD), you can press the **720K** soft button, and the floppy will be formatted as a double-sided disk. (The only difference between single- and double-sided floppies is that both sides of a double-sided floppy have been tested by the manufacturer.)

Once you select between the 720K or 1.4M format, the K2600 will remind you that formatting will erase the floppy, and will give you two more chances to cancel the formatting procedure—we want to make sure you don't accidentally erase any disks. Press the **Yes** soft button to continue formatting. When formatting begins, the display will tell you that the disk is being formatted. You'll hear the disk drive turning, and the disk drive LED will light.

Formatting a 1.4M floppy disk takes just under three minutes, including the automatic verification. When formatting is finished, the K2600 asks you if you want to format another disk.

Connecting a SCSI Device

It's easy to connect SCSI devices to the K2600's SCSI ports. Using a SCSI device will give you off-line storage, and can speed up your loading and saving operations considerably.

You'll need a SCSI cable with a 25-pin SCSI connector on the end to be connected to the K2600. If your SCSI device does not have a 25-pin connector at one end, you can find SCSI cables like these at any personal computer store. Connect the 25-pin end of the cable to either of the K2600's SCSI ports, and the other end to your SCSI device. Two SCSI ports are provided to enable you to chain SCSI devices together. Before you start connecting cables, however, please read the next section carefully. We've also included important information about SCSI in Chapter 6 of the *Musician's Reference*.

SCSI Termination

Simply put, SCSI termination prevents the electrical signals used by SCSI devices from being reflected from unconnected SCSI ports, and possibly disrupting the data stream. The rule for SCSI termination is that the two SCSI devices on the ends of a chain of SCSI devices must be terminated, and all devices in between, however many, must be unterminated. Newer SCSI devices usually make it easy to enable or disable their termination settings. Older SCSI devices may require an external terminator to be installed. These are available at all personal computer stores. Make sure you get the right size for your device (25-pin or 50-pin).

It's impossible to describe all the possible configurations of SCSI devices, so we'll provide you with a few general guidelines that will cover the requirements for most SCSI systems. If you're chaining large numbers of SCSI devices together, you may have to do a little juggling, but chances are you'll already have some experience with SCSI termination.

First of all, it's *very* important that you terminate your SCSI system properly. Improper termination can result in lost data, can interfere with the operation of your SCSI devices, and over the long term, can damage them.

If your SCSI system includes a personal computer, you'll need to be sure that it is internally terminated. If you're not sure whether it's internally terminated, you should call your local computer dealer for confirmation.

If your SCSI system includes only the K2600 and an internally terminated computer, you're probably all set. First, check the SCSI Termination switch on the K2600's back panel (next to the SCSI ports), and make sure that it's set to Auto. Then connect the computer's SCSI port to either of the K2600's SCSI ports, and you're ready to roll. With the K2600's termination enabled, you've satisfied the requirement of terminating both ends of the chain.

If you have an internally terminated computer, a K2600 and an external hard disk with *two* SCSI ports, setting up is also painless. Connect the computer's SCSI port to one of the hard disk's SCSI ports, and the K2600's SCSI port to the hard disk's other SCSI port. Make sure the hard disk is not terminated, since it's in the middle of the chain. In this configuration (with a terminated computer at one end and the K2600 at the other), you can chain up to six hard disks between them. Make sure they're all unterminated, and don't forget to set each disk's SCSI ID to a different value.

Disabling the K2600's SCSI Termination

If you have a computer, a K2600 and an external hard disk with only *one* SCSI port, there's only one way to set them up: put the K2600 in the middle (with one SCSI port connected to the computer, and the other to the hard disk). In this case, you can either change the setting of the SCSI Termination switch to Disable (which means that termination is always off), or you can leave it set to Auto, which means that if you put the K2600 in a configuration that requires it to be terminated, it will enable its internal termination automatically (and disable it when appropriate, as well).

If you install an internal hard disk in your K2600, we recommend that you leave the K2600's SCSI Termination switch set to Auto. If your K2600 is going to be at the end of a SCSI chain (which is what we recommend), then the internal hard disk must be terminated. If the K2600 is going to be in the middle of a chain, the internal hard disk must be unterminated (we don't recommend this).

If you're planning to buy an external SCSI hard disk to use with your K2600, it's a good idea to buy one with two SCSI ports. Most new hard disks have two ports, and can be terminated or unterminated relatively easily. This gives you added flexibility, since you can install it at the end of a chain, leaving its termination in place, or in the middle of a chain, using both its SCSI ports, and removing its termination.

When your SCSI device is connected, you can select it with the Current disk parameter on the Disk-mode page. Use any data-entry method to select the SCSI ID that matches the SCSI ID of your SCSI device. If you're using the alphanumeric buttonpad to select the device, enter **9** to select the floppy. Newer SCSI devices usually have an external switch for setting their IDs. Older units may not have these; check your device's owner's manual for its SCSI ID.

Using your K2600 in a SCSI System

SCSI IDs

All devices in a chain of SCSI devices must have different SCSI IDs, including the K2600. The K2600's SCSI ID is set at 6 by default, and can be changed on the RECEIVE page in MIDI mode. If your SCSI system includes an Apple® Macintosh®, be sure not to use SCSI ID 7 for any of your other devices, since the Mac's SCSI ID is 7, and can't be changed.

Once you've made sure that all connected devices are set to different SCSI IDs, you should be able to select the devices, format them, and start loading and saving files.

Formatting a SCSI Device

The procedure for formatting hard disks is essentially the same as with floppy disks, once the SCSI device is selected with the CurrentDisk parameter. The K2600 will recognize the disk as a SCSI disk, and will warn you that formatting will erase the contents of the disk. Compared with personal computers, the K2600's formatting time for SCSI disks is surprisingly short.

Directories

A directory is a file on the disk that lets you group other files together as you might separate documents using folders in a file cabinet. You can create directories on K2600 Format SCSI and floppy disks. You can even create directories within directories; these are called subdirectories.

Directories are very useful for organizing your sample, song, and program files. The K2600 provides many operations for setting up and managing the directories on your disks and the files within them.

Path

The Path field shows the current directory on the current disk if it is a K2600 format disk. This field is displayed upon returning to the Disk-mode page after you have pressed one of the disk function soft buttons and viewed the file contents of a specific disk. It stays visible on the Disk-mode page until you power down or do a soft reset.

The K2600 always starts at the root (top-level) directory when you power it up, or when you change the value of the CurrentDisk parameter. When you use the disk functions to view other directories, the Path field updates the current directory value to track your movements.

The root directory is displayed as a backslash:

```
Path = \
```

If you press the **Load** button and load a file from a subdirectory called SOUNDS, the Path field will appear as

```
Path = \SOUNDS\
```

The backslash character is a directory separator, as in the following Path:

```
Path = \NEWTUNE\SAMPLES\DOGS\
```

This represents the directory DOGS, which is a subdirectory of the SAMPLES directory, which is a subdirectory of the NEWTUNE directory in the root directory. If the path is too long to fit on the top line of the display, it gets abbreviated. The maximum length of a path in the K2600 is 64 characters (including the backslash characters).

Startup

The Startup parameter determines what disk will be used for loading the power-up macro file **BOOT.MAC** (see *Creating a Startup File* on page 13-69). If this is set to **None**, then the K2600 will power-up in a normal fashion. If this is set to a SCSI device or **Floppy**, when the K2600 is next powered on it will look for the **BOOT.MAC** file in the root directory of the specified disk, and load each of the entries in the macro specified within.

This feature provides a very flexible way to automatically configure your K2600's memory contents whenever you turn the power on.

Library

This feature works in conjunction with the macro feature to provide a way to distribute macro files that load data from removable media without having to know in advance the SCSI ID of the removable-media drive. A macro file stores its references to disks by DISK ID (SCSI ID or Floppy), or by either a "Library" or "Unspecified" designation (see *Macros* on page 13-43). Typically, you would set the Library parameter to be the same as the SCSI ID of your CD-ROM drive, if you were loading macro files from a Floppy disk or another SCSI disk that referenced CD-ROM files containing samples or keymaps.

Verify

Set Verify to **On** when you want the K2600 to verify saves, copies, and backups (the K2600 can't verify loads). The operations take longer, but it provides insurance against corrupted files.

Disk Drive Information

Below the device type and disk capacity you'll see specific information about the current disk's manufacturer, model number and internal mechanism (this is true for SCSI disks only; no information appears about floppy disks). The K2600 requests this information from a SCSI disk when you select that disk with the Current Disk parameter. This information may be needed when determining if a given disk is compatible for SCSI operation with the K2600.

Macro On Indicator

When (Macro on) is visible, the K2600 records all file-loading operations in its macro table. See *Macros* on page 13-43.

Disk Mode Soft Buttons

Here is a brief description of each of Disk mode's soft button:

- | | |
|---------------|--|
| Load | Load selected file(s) or object(s) from the current disk into K2600 memory. |
| Save | Save banks of objects, selected objects, or a macro as a K2600 file on the current disk. |
| Macro | Display the macro function page, where you can create and edit macros. |
| Delete | Delete files from the current disk if it is a K2600 disk. See <i>Deleting Files and Directories</i> on page 13-66. |
| Rename | Change the filename of a file on a K2600 disk. See <i>Renaming Files</i> on page 13-65. |
| Move | Change the location of a file from one directory to another (on the same disk). |
| Util | Check the free space, find files, and view directory organization and sizes on the current disk. |
| NewDir | Create a new directory on K2600 disks. |
| Backup | Hierarchical file backup between disks. |
| Copy | Single or multiple file copy between disks. |
| Sleep | Send SCSI sleep command to the current disk. See the discussion below. |
| Format | Format the current disk as a K2600 disk. |

The Sleep Soft Button

Many SCSI devices will “sleep” when they’ve been idle for a few minutes. In other words, the disk will stop spinning, in order to save power and reduce wear. The K2600 lets you tell your SCSI devices to sleep. Just press the **Sleep** soft button, and if your devices have this feature, they will sleep. This is particularly useful in a quiet studio situation.

Any Disk-mode operation will “wake” the device again. The K2600 will ask you to wait while the device’s disk starts spinning. As soon as the disk is spinning at full speed, the K2600 will execute the operation you selected. Some SCSI devices automatically sleep when they power up. (A device of this type usually provides a way to override this feature; check its manual.) Any Disk-mode operation will wake a disk in this case, as well.

File List Dialog

The file list dialog appears when you select a disk function (such as Load or Rename) to operate on one or more files on a disk. Here is a typical file list dialog, for the Load function:

```

Dir:\                               Sel:0/3                               Index: 1

File to load: BASSOON .K26 3458K
              MAY25 (dir)
              PERC .K26 101K
Total: 3557K
Select Root Parent Open OK Cancel

```

When you enter this dialog, the K2600 displays the contents of the current directory, in an alphabetized scrolling list. If the current directory cannot be located (for example, if you’ve changed floppies or removable hard disks), the K2600 displays the current disk’s root directory. The root directory will also be selected if the disk was just chosen by the CurrentDisk parameter on the Disk-mode page (remember that the current directory is always set to the top level when the CurrentDisk parameter is changed, or if the K2600 has just been powered on).

The display for all disks (including floppy) shows the 3-character extension of all files in the directory (except directories themselves). Extensions are created when the file is saved by the K2600. You cannot modify the extensions on the K2600. This is because the K2600 uses the extensions to tell it what kind of data the files contain.

Directories created by the K2600 have up to 8-character names, with no extension. A directory can have an extension if it is created on an external computer (more on this later).

Here is a list of extensions used by or accepted by the K2600:

- .AIF** Audio Interchange File Format (AIFF)
- .KOS** Kurzweil K2500 or K2600 operating system file
- .KRZ** Kurzweil K2000 format file
- .K25** Kurzweil K2500 format file containing objects and/or sample data
- .K26** Kurzweil K2600 format file containing objects and/or sample data
- .MAC** Kurzweil K2500 or K2600 disk macro file
- .MID** MIDI Type 0 or Type 1 sequence file
- .WAV** Microsoft RIFF WAVE format



Note: In most cases, when we refer to .K26 files, we're including the older-format .K25 and .KRZ files as well, since the K2600 can read these file formats.

When loading files, the K2600 will try to find out the type of file if the extension is not the same as is suggested above (with one exception: **.MAC** files). The K2600 can create files with almost all of the above extensions; the exceptions are the older-format **.KRZ**, **.K25**, and **.KOS** files.

The top line of the file list contains several items of information pertaining to the currently displayed directory contents. A typical information line looks like this:

```
Dir: ..\HATS\ Sel:0/54 Index: 24
```

In the center of this line is an indicator of the number of files in the currently displayed directory. This number is grouped together with the number of selected files, for example:

```
Sel:0/54
```

This example indicates that you have selected none of the 54 files in the current directory. File selection is possible in several of the disk functions (more on this below). The total number of files also includes any subdirectories of the current directory, but not the files within the subdirectories.

On the left end of the top line of the file list page is the current directory, sometimes in an abbreviated form. If you are in the root directory, the display will read:

```
Dir: \ Sel:0/54 Index: 24
```

If you are in the directory `\MONDAY`, the display will read:

```
Dir: \MONDAY\ Sel:0/54 Index: 24
```


If you are in a directory that is more than one level down from the root directory, such as \FX2\GLASS\BREAKING, the display will read:

```
Dir: \.. \BREAKING\ Sel: 0/54 Index: 24
```

The “..\” indicator tells you that you are more than one level down from the root directory.

The File Index

On the right side of the top line is the Index field. This tells the position of the highlighted file relative from the beginning of the file list. The first entry in a file list is index 1.

```
Dir: \ Sel: 0/23 Index: 3
AXM .K26* 122K
CHIME .K26 47K
File to load: DOORS .K26* 3456K
JUNE27 (dir)
LONGSMPS (dir)
Total: 21034K
FLUTE .K26 .5K
Select Root Parent Open OK Cancel
```

Typing a number on the alphanumeric buttonpad will automatically scroll the display to the corresponding entry in the file list. Typing an out-of-range value such as 999 is a quick shortcut to get to the end of the file list.

In addition to remembering the current directory on the most recently used disk, the K2600 also remembers the index within the file list for the current directory. For example, if you were to hit **Cancel** on the above page, go to Setup mode to check the current setup, then return to Disk mode to load a file, the file index would still show 3 **DOORS.K26** after you pressed **Load**. This index is remembered until a new disk is selected by changing the value of the Current Disk parameter on the Disk-mode page.

There are exceptions to this however. For example, when a file is written to the disk using the Save function, the index will subsequently be set to the file that was just saved. The index can also be explicitly set using the List and Find utilities (see *Disk Utilities* on page 13-60).

If there are no files in the current directory, then the index is 0, and no value appears for the File to load parameter:

```
Dir: \ Sel: 0/0 Index: 0

File to load:

Total: 0K
Select Root Parent Open OK Cancel
```

The maximum number of files that can be accessed within a single directory is 360. If you have more files than this amount in a single directory, then you will not be able to view the entries past index 360.

While in this dialog, pressing the **Chan/Bank** buttons will scroll the file list either forward or backward by “pages” of 5 entries. It is often easier to scroll the list this way when looking to see if a particular file is present in a directory.

Soft Buttons in the File List Dialog

Use the **Select** soft button for multiple file selection in the Load, Delete, and Move functions. In the display below, there are two files selected (**DOORS.K26** and **FLUTE.K26**), as indicated by the asterisk (*) following their filenames. If you pressed **OK** in the following display:

```

Dir: \                               Sel: 12/23   Index:    3
AXM                                  .K26      122K
CHIME                               .K26      42K
File to load: DOORS.K26*            3458K
JUNE27                              (dir)
LONGSMPS                            (dir)
Total: 21034K                       FLUTE.K26* .5K
Select  Root  Parent  Open  OK  Cancel

```

the files **DOORS.K26** and **FLUTE.K26** would be loaded.

The **Select** button will toggle the selection, meaning that if you press **Select** on a given file, the asterisk will go on if it is currently off, and vice-versa. Selecting can be done for files only, not for directories. You can select as many files as you wish using the **Select** button. There is also a way to select all files at once, or clear all file selections at once, using a double-press of the cursor buttons:

- **Left/Right** cursor double-press: Select All Files
- **Up/Down** cursor double-press: Clear All Selections

Pressing either the **Left** or **Right** cursor individually performs a separate function for finding directories, described below.

You can select multiple files only within a single directory. Changing directories clears any selections.

Once you have selected one or more files, press **OK** to perform the disk function (in this example, Load) on all files marked with an asterisk, regardless of whether they're visible in the display. If there are no files marked with an asterisk, the function operates only on the highlighted file.

The **Root** soft button returns you to the top-level directory. If the display is already at the root directory (as indicated by the Dir field on the top line of the display) the only effect of pressing Root will be to reset the file index to 1 if there are files in the directory.

The **Parent** soft button moves you up one level in the directory hierarchy. If the display is already at the root directory, this button has no effect.

The **Open** soft button performs a different operation depending on the disk function and the type of the currently highlighted file or directory (or selected files). In all disk functions, pressing **Open** on a directory—indicated by **(dir)** after the filename—will open that directory and display its file list.

When you first open a directory for viewing, the index is 1 (the first file in the list). The K2600 remembers the index of the previous directory you were in before you pressed **Open**, so if you

return to that directory by pressing **Parent**, the index changes accordingly. This index is remembered for one level down, and therefore is useful when stepping through a list of subdirectories from a single directory level.

In the Load function, pressing **Open** for a standard **.K26** file will start the Load Object feature. This allows selected individual objects from the file to be loaded into the K2600. If **Open** is pressed on a macro file (**.MAC** extension), then individual file entries within a macro file can be selected for loading.

For all other functions, if **Open** is pressed when a **.K26** or a **.MAC** file is highlighted, the object file or the macro file will be opened for viewing. For example, pressing Open on a **.K26** file while in the Delete function will display the objects within the file in a scrollable list, however no delete action will be possible on the individual objects.

Pressing the **OK** soft button will cause the K2600 to proceed with the selected function. After pressing **OK**, there may be further dialogs such as bank specification (for the Load function), confirmation (for Delete), or name entry (for Rename). One exception to this is in the Load function; when a directory is highlighted, pressing **OK** is the same as pressing **Open** (it displays the contents of the highlighted directory).

The **Cancel** soft button exits the file list dialog, completing the disk function with or without any operation taking place. The K2600 returns to the Disk-mode page. Pressing the **Exit** button will do the same thing as **Cancel**.

Total

The total size of all the files in the directory is indicated at the bottom left of the file display above the soft buttons. This total represents only the disk space used by the files in the directory being viewed. The K2600 includes a free space utility that indicates how much space is being used on the current disk. Also, there is a List utility that can be used to calculate the size of all files within a selected directory subtree. These functions are described in the section called *Disk Utilities* on page 13-60.

Quick Scrolling to Subdirectories

It is sometimes difficult to locate a subdirectory entry in the file list for the current directory, if there are many files in the current directory. To make this easier, individually pressing either the **Left** or **Right** cursor buttons will set the file index to the previous or next directory (respectively) in the current directory list. The index will wrap around the beginning or end of the list, so that repeated presses of either cursor button will cycle through all of the subdirectories. If you have many subdirectories, you can scroll through them all very quickly using this method.

For example, given the following file list display:

```

CYMBALS          (dir)
DQGS             .K26      122K
DQORS            .K26*    3456K
E4PRG            .K26      10K
LONGSMPS        (dir)
LUTE             .K26*     .5K

```

Pressing the **Right** cursor takes you two entries further to the next directory:

```
DOORS      .K26*   3456K
E4PROG     .K26     10K
LONGSMPS   (dir)
LOTE       .K26*    .5K
MOON       .K26*   3456K
TRIANGLE   .K26     10K
```

or, pressing the **Left** cursor takes you two entries back to the previous directory.

```
ALTO       (dir)
BOOBAMS    .K26*    .5K
CYMBALS    (dir)
DUGS       .K26     122K
DOORS      .K26*   3456K
E4PROG     .K26     10K
```

Creating Directories

As stated above, you can create directories for organizing your K2600 files, whether you are using SCSI or floppy disks. You can create directories on any disk formatted by a K2600, K2500, or K2000.

Directories appear in the normal file list with the indicator (**dir**) to the right of the directory name.

There are two ways to create new directories.

- Press the **NewDir** button while on the Disk-mode page
- Press the **NewDir** button during the Save dialog.

Creating a Directory From the Disk Mode Page

When you press **NewDir**, the K2600 prompts you for the directory name:

```
<>KbdNaming:Off
```

```
Directory name: THINGS_
```

```
Delete Insert >>End Choose OK Cancel
```

Pressing **>>End** will take the cursor to the last character in the name. The **Choose** button allows you to grab a filename from the current disk (see the discussion of file-name grabbing, in *More Features of the Save Dialog* on page 13-28). Otherwise, the name will default to either **NEWFILE** after a powerup, or the name will be that of the most recent file saved or loaded. Once you choose a name to start with (or the default), you can edit the name using the **Left** and **Right**

cursor buttons, the **Delete** and **Insert** soft buttons, and the **>>End** soft button. You can also use keyboard naming, as described on page 5-5.

After you have chosen the directory name and pressed **OK**, you have the choice of where (in what directory) to put the new directory you are creating.

```
Use current directory for THINGS?
(Path = \)
```

Change **OK** **Cancel**

Pressing **OK** will select the default path, which is the current directory. Pressing **Change** will allow you to view the disk, traversing its directories, until you find the one in which you want to create the new directory. In this case, pressing **OK** creates a directory called **THINGS** in the root directory.

```
Created directory /THINGS
```

The display shows that the K2600 has created the directory, then the Disk-mode page reappears.

Creating a Directory in the Save Dialog

As a convenience when saving files to a directory, you can press **Save** from the Disk-mode page and then press **NewDir** in the Save dialog. You'll get the same prompts as when you create a directory from the Disk-mode page. When you press **OK**, the display shows that the K2600 has created the directory, then the Save dialog reappears.

When you create a directory from within the Save dialog, the K2600 resets the current directory to the directory you just created.

The Directory Selection Dialog

When making a new directory, as well as in many of the disk functions, you will be presented with the opportunity to change the current directory, or the default directory for a disk operation. A good example is the "Use current directory?" prompt that you see when you create a directory. If you press **Change**, you will see a slightly modified file list dialog, through which you can select any directory on the disk. The display looks like this:

```

Dir:\                               Sel: 04/23   Index: 7
                                MELLOTRN .K26   122K
                                N123AB  .K26    47K
Select directory: OCEANS .K26   3456K
                                STRINGS  (dir)
                                T1        (dir)
Total: 21034K  UNDULATE .K26   .5K
Root Parent Open Current Exit

```

Disk Mode

Disk Mode Functions

When you enter this dialog, you will be in whatever directory was displayed as the default. From here you can go into other directories by using the soft buttons **Root**, **Parent**, and **Open**. Notice that there is no **Select** button. This is because the purpose of this dialog is to choose a single directory as opposed to selecting multiple files. However, the **Root**, **Parent**, and **Open** buttons function exactly as described above (for the file list dialog). The **Sel** field (on the top line) shows you how many files/directories you have selected out of the total number of files/directories in the current directory.

If you've highlighted a directory, there is one additional soft button displayed, **SetDir**. Notice the **Current** button moves over one button to the left:

```
Dir:\                               Sel:0/23   Index: 8
NI23AB .K26   42K
OCEANS .K26   3456K
Select directory:STRINGS (dir)
T1 (dir)
UNDULATE .K26 .5K
ZORK .K26 .5K
Total:21034K
Root Parent Open Current SetDir Exit
```

You can use either of two soft buttons to select a directory in this dialog.

- Current** This selects the directory you are currently in (whose file list you are viewing), as specified in the **Dir** parameter on the top line of the display. For example, if you wished to select the directory **STRINGS** using that directory, you would first press **Open** to display the contents of that directory, and then press **Current**. If you instead wanted to choose the root directory, you would simply press **Current**, since that is the directory you are viewing (notice the **Dir: ** at the top).
- SetDir** This selects the directory you are scrolled to, such as **STRINGS** in the display above. This method is often quicker and more convenient than pressing **Open** followed by **Current**, which does the same thing. The **SetDir** soft button is present in the display only when the scrollbar highlights a directory entry.

Disk Mode Functions

Now that you are familiar with the basics of creating directories and moving around in the K2600 file system, it is time to discuss some of the features provided in the disk functions themselves.

Loading Files

The **Load** button instructs the K2600 to copy a file from the current disk to the K2600's RAM. Press the **Load** button, and a list of files stored in the currently selected device will appear. Scroll through the list of files with the Alpha Wheel or **Plus/Minus** buttons, then press **OK**—or press **Cancel** to return to the Disk-mode page.

When you press **OK**, the Bank dialog will appear (as described in *Load Function Dialog* on page 13-19) and you'll be asked to select the memory bank to load the file into. Scroll through the list of banks with the Alpha Wheel or **Plus/Minus** buttons until the desired memory bank is highlighted, then press **OK**. Or press **Cancel** to back up a page and select another file to load. Once you have selected a bank to which to load, you will be asked to choose a method for

loading. The method you choose determines how the objects in the file will be ordered when loaded into the bank.

Loading Individual Objects

Since files can contain over 3000 objects, it is often useful to load only a subset of the information contained in a K2600 file. Sometimes, this capability is necessary even to be able to load certain files, if the size of the file's samples or data is greater than the K2600's internal RAM size.

You can select individual objects or groups of objects (samples, programs, keymaps, effects, songs) for loading from within a single K2600 file.

The Load Object feature is accessible from within the Load File dialog. To activate it, scroll the file list until you have highlighted the file that you wish to load objects from:

```

Dir:\                               Sel:00/6                               Index: 3
      BASSDRMS .K26                       426K
      HIHATS   .K26                       788K
File to load: SAXES .K26                   2510K
      TUMS     .K26                       301K
      TUMS1   .K26                       1400K
      XCVMB   .K26                       1012K
Total: 5037K
Select  Root  Parent  Open  OK  Cancel
  
```

Press **Open** to begin the Load Object dialog. (Note: The file must be in **.KRZ**, **.K25**, or **.K26** format in order to load individual objects from it.) The K2600 then scans the file contents in order to present a list of all of the objects in the file. Sometimes this procedure can take a few moments, depending on how many objects are in the file. During this time, you will see the following display:

```
Reading file SAXES.K26  [...]
```

```
Select  Next  Type  Multi  OK  Cancel
```

The soft buttons in the above display do not become active until the process of scanning is finished. When this happens, the K2600 will display a list of the file's objects, in the exact order that they are stored in the file:

```

Func:LOAD                               Sel:00/5                               Index: 1
Sample 200 Tenor Sax1                    G 2S 250K
Sample 201 Tenor Sax2                    C 3S 179K
Sample 203 Tenor Sax3                    F#3S 198K
Keymap 200 Tenor Sax                     176
Select  Next  Type  Multi  OK  Cancel
  
```

Disk Mode

Disk Mode Functions

The objects in the list are usually grouped by type (sample, program, keymap, etc.). The list can be scrolled using the Alpha wheel or the **Up** or **Down** cursors. The **Chan/Bank** buttons on the front panel can be used for fast scrolling. The list will jump by five entries at a time, moving the entry on the bottom line to the top line.



Note: When scrolling through large numbers of objects (more than 100), the K2600 may sometimes pause for a few seconds if it needs to get more information from the disk file. When this happens, some gyrating dots will briefly appear in place of the Index value on the top line of the display.

Each line in the scrollable list represents one object, and displays the object's type, ID, name, and size. Samples have additional information: the sample's root key and a stereo sample indicator:

Object Type	ID	Name	Sample Info	Size
SamPle	203	Tenor Sax3	F#3S	198K

The ID numbers are the same numbers that were used to reference the objects when the file was last saved by the K2600. These numbers will usually be different after the objects are loaded, depending upon the bank (for example, 200...299) and mode that is specified for loading. There is more information on these modes in the section called *Load Function Dialog* on page 13-19.

The Size field is interpreted differently for samples and nonsamples. For nonsamples (songs, programs, etc.), it shows the number of bytes used by the object in the file, and hence the amount of program memory that the object will occupy in the K2600. For samples, the size field shows the size of the all sample data associated with the object, and is displayed in kilobytes (K).

For samples, the letter S after the root key indicates a stereo sample.

Due to display space constraints, if the sample's root key happens to be in the lowest MIDI octave range (that is, C -1 through B -1), it will be displayed in a truncated form. For example, if a sample's root key was set to G[#]-1, the display would read:

SamPle	293	Tenor Sax	G#-	198K
--------	-----	-----------	-----	------

The status line at the top of the display specifies the function being performed, the number of selected objects in the list followed by the total number of objects in the file, and the current list index:

```
Func:LUHU Sel:0/5 Index: 1
```

As with the file list, entering in a number from the alphanumeric buttonpad will jump to the indexed entry, and typing in a large number like 9999 will go to the end of the list.

The soft buttons on this page are used for multiple selection of the objects in the list as well as for moving around the list when there are many items selected or listed. This same dialog is also used for many other functions in the K2600, namely for saving selected objects to disk and for several object utility functions that are described later.

Here is a brief description of each button's function, followed by a detailed explanation of its operation.

- Select** Select or deselect an object.
- Next** Jump to the next selected object.
- Type** Jump to the next object of a different type.
- Multi** Go to the Multiple Object Selector page.
- OK** Tell K2600 to proceed to load the selected objects.
- Cancel** Exit back to the File List Dialog.

Press the **Select** button to choose the highlighted object for loading. An asterisk (*) is placed in between the object name and the object ID for any items that are selected. Deselect a selected object by pressing **Select** again. The asterisk will disappear. The easiest way to choose objects for loading is to scroll the list and individually press **Select** on each object you want to load.

If you only want to select one object for loading, you need not select it with the **Select** button. Instead, pressing **OK** implicitly selects the highlighted object if there are no other objects selected. If there are objects selected, however, then the highlighted object will not be loaded unless it is selected.

This page shows three samples selected for loading (IDs 201, 203, and 304):

Func:	LUHM	Self:	3/26	Index:	4
Sample	201*	Machine	Snare	C 4S	100k
Sample	203*	Big	Bass Loop	C 4S	218k
Sample	304*	Distorted	Riff	C 4S	401k
Sample	305	EPiano1		D 2	24k
Sample	306	EPiano2		D 3	25k
Sample	313	EPiano3		D 4	15k
Select	Next	Type	Multi	OK	Cancel

The **Next** button will cause the index into the list to jump to the next selected object, forward in the list. When the end of the list is reached, the search will wrap around from the beginning. If you have more than one object selected, then if you repeatedly press Next you can easily cycle through all selected items. If there are no items selected, then this button doesn't do anything.

The **Type** button jumps to the next object of a different type from the one that is currently highlighted. This is a convenient way to find a particular type of object in the list. If you want to skip over the samples and the keymaps in an object list and jump right to the programs, press **Type** about two or three times, stopping when you notice that a program is highlighted.

Press the **Multi** button to enter the Multiple Object Selector (described on page 13-36). This powerful utility can be used to control the selection or deselection of many objects, cross-referenced by object types and ranges of ID numbers.

When you are all done selecting objects to load, press **OK**. As stated above, if only one object is to be loaded, it is implicitly selected if it is the currently highlighted object and there are no other selected objects in the list.

Cancel returns to the file list dialog, highlighting the file you just opened. You can load the entire file after pressing **Cancel** by pressing **OK** when you return to the file list.

Shortcuts when Loading Objects

Select All/Deselect All

Selecting or deselecting all of the objects at once can be done with the same double-presses as described for the file list dialog, namely:

- **Left/Right** cursor double-press: Select All Objects
- **Up/Down** cursor double-press: Clear All Selections

If you want to load most but not all of the items from a file (for example, if there happens to be a Master table in the file that you don't want to load), it may be fastest to first select all objects using the **Left/Right** double-press, and then manually deselect any unwanted items.

Viewing the Name Table

The name table is an object that appears in files that were created using the **Names** button in the "Save dependent objects?" dialog (see *The Name Table* on page 13-31). This object contains a list of dependent objects needed by the other objects in the file at the time the file was saved. There is more information about this later on, however it is worth mentioning here that a highlighted name table object's contents can be viewed by pressing either one of the **Left** or **Right** cursor buttons.

Loading Dependent Objects

When you press **OK** after selecting one or more objects, the K2600 will ask the following question:

Load dependent objects?

Yes **No**

This dialog appears because one or more of the selected objects might have dependents associated with them in the file. (Remember, dependents are those objects needed by other objects; samples are dependents of keymaps, effects and keymaps are dependents of programs, and so on.) When this dialog appears, it does not necessarily mean that there really are dependents of the selected objects. The K2600 will not know whether there are dependent objects in the file until it begins to read in the selected objects, and determines what their dependents are.

Answering **Yes** to the question tells the K2600 to also load the dependents. You may wish to answer **No** if, for example, you are simply loading a program or a keymap as a template for use with other objects. You can also manually select only some of an object's dependents, and then answer **No** to "Load dependent objects?" to prevent other unwanted dependents from being loaded.

To summarize, it is not necessary to select any of the dependents of an object if you plan on loading all of the dependents. As an example, for a file containing dozens of programs, keymaps, and samples, you may choose to highlight a certain program and press **OK**, and

answer **Yes** to the “Load dependent objects?” question. The K2600 will do the rest, by only loading the samples and keymaps that are needed by the selected program.

Similarly, if you selected certain *keymaps* from a file, and then answered **Yes** to “Load dependent objects,” the K2600 would figure out exactly what samples need to be loaded as dependents of the selected keymaps.

Auditioning Samples from a Disk File

Often when working with files that contain samples it is helpful to be able to hear what the samples sound like before loading all or part of the file. It is possible to audition samples in the file, from within the Load Object dialog.

To audition a sample, first scroll to the sample that you wish to hear. Then, press either the **Left** or **Right** cursor. The K2600 will load the sample (or 1 second of it if it's longer than a second). The audition starts from the very beginning of the sample data (note that if the first second of data is silence then you won't hear very much when the sample is auditioned). If the loop points fall within the first second of the stored sample data, they will be loaded as well. The K2600 display will blink after the completion of loading the sample audition data. When the sample segment has been loaded, it can then be played back at its root key as well as transposed up and down the keyboard.

Once a sample has been auditioned, it remains active across the keyboard until another sample is auditioned. The audition function ends when either **OK** or **Cancel** are pressed.

There must be sufficient sample RAM in the K2600 to load one second of the sound for auditioning. This amount varies according to the sample rate of the sample, but for most samples this will be less than 100K bytes. If the auditioned sample does not play, check that there is enough free sample memory in the K2600. It is also possible to see the following error if the K2600 object RAM is full or very near full:

`Not enough memory to audition`

Loading Objects from Floppy Disk Files

Individual objects can be loaded from K2600 floppy disk files, with the caveat that some samples in a multiple-floppy disk file cannot be auditioned because they reside on more than one disk. These samples will still appear in the object list, but their size will be in parentheses meaning they cannot be loaded (either explicitly or as dependent objects) and cannot be auditioned.

Load Function Dialog

Bank Status Indicator

After you have chosen what you wish to load, you are presented with a dialog allowing you to determine what bank will be used to load the file's data. The bank-status indicator (an asterisk) indicates whether a bank contains objects.

If an asterisk is present after the bank number (for example, 400...499*), it means that there are objects in the bank, whether they are RAM or ROM objects. ROM objects are in the Zeros, 100s, and 700s bank, unless you have an optional ROM block installed. In that case ROM objects are also stored in the 800s, and /or 900s bank. If there is no asterisk on the line for a bank, it means the bank is empty.

In the following dialog, there are user objects in the 200s and 400s bank, and possibly also in other banks that become visible when the selection is scrolled.

```
Load this file as: 200...299*
                  300...399
                  400...499*
                  500...599
                  OK  Cancel
```

This indicator makes it easier to find an empty bank to use for loading, if needed.

Loading Methods

Once you have pressed **OK** to decide on what bank to use, you will see this dialog if the bank is empty:

```
Load this file as: 200...299*
                  300...399
                  400...499*
                  500...599
                  600...699
                  Append Fill  Cancel
```

You will see the following dialog if the bank contains any objects (in RAM or ROM):

```
Load this file as: 200...299*
                  300...399
                  400...499*
                  500...599
                  600...699
                  700...799
OVFill Overwrt Merge Append Fill  Cancel
```

The soft buttons control the mode for loading and renumbering of objects from the file. Here's how they work:

- OvFill** First deletes all RAM objects in the selected bank, and then loads objects using consecutive numbering.
- Overwrt** First deletes all RAM objects in the selected bank, and then loads objects using the object ID numbers stored in the file.
- Merge** Preserve the object ID numbers stored in the file for the objects to be loaded, overwrite objects already in memory if necessary.
- Append** Try to use the object ID numbers stored in the file for the objects to be loaded. If an ID number is already in use, increment the ID number until a free slot is found.
- Fill** Ignore the object ID numbers stored in the file. Try to use consecutive numbering from the beginning of the selected bank. If an ID number is already in use, increment the ID number until a free slot is found.
- Cancel** Cancel the mode selection, and go back to choosing a bank. Scrolling to a different bank value will have the same effect as Cancel.

Typically, you will just want to use the **Fill** method. **Append**, **Merge**, and **Overwrt** try to preserve the numbers stored with the objects in the file, but this should only really be necessary if you depend on program numbers or effect numbers to be at a certain MIDI program change number. **OvFill** is like **Fill** except the selected bank (or Everything) is cleared out before loading.

Overwrt and **OvFill** operate in different ways after a selected bank has been filled up for a given object type (for example, after you have loaded more than 100 programs into a bank). **Overwrt** will continue to preserve the objectIDs stored in the file, and will individually overwrite objects in the bank following the just filled bank. **OvFill** does not overwrite past the end of the selected bank; it instead skips over object IDs that are in use, loading only into unused IDs. Because of this difference, it can sometimes be faster to load a file using **OvFill** rather than **Overwrt**. However, this applies only if the objects to be loaded would extend past the end of a selected bank.

Note that when loading into a specific bank (as opposed to loading as "Everything"), the object IDs in the file are used as follows: The "bank" digit is ignored, and the remainder of the number is used when the K2600 rebanks the object ID into the bank that you specify. For example, if you save Program 453 into a file, and load it back into the 300s bank, the K2600 will use the number 53 when deciding upon a new object ID. If the 300s bank was previously empty, and the load mode is **Append**, then the program will end up with ID 353.

For loading as "Everything," the ID number for an object stored in a file is taken literally, and not rebanked (except if **Fill** or **OvFill** mode is chosen, in which case the K2600 will use ID numbers starting from 200).

The following example shows how each different loading methods affect how four programs load into a bank that already contains programs.

Disk Mode

Load Function Dialog

Example: Starting with the following objects already stored in the K2600 internal RAM:

Program ID	Program Name
200	Acoustic Piano 2
204	Bright Piano
205	Tin Ear Piano
210	Chorused Piano
211	Electric Piano 2

Suppose you were to load a file containing the following objects into the 200s bank:

Program ID	Program Name
405	Blues Organ
406	Gospel Organ
409	Cheezoid Organ
410	Internal Organ

The following table shows the IDs that each program end up with when you load the organs (with IDs in the 400s) into the 200s bank, which contains the pianos. Note that in Merge mode, Organs 405 and 410 replace Pianos 205 and 210.

Original Program ID	Program Name	Program IDs After Loading				
		OvFill	Overwrt	Merge	Append	Fill
200	Acoustic Piano 2	Deleted	Deleted	200	200	200
204	Bright Piano	Deleted	Deleted	204	204	204
205	Tin Ear Piano	Deleted	Deleted	Deleted	205	205
210	Chorused Piano	Deleted	Deleted	Deleted	210	210
211	Electric Piano 2	Deleted	Deleted	211	211	211
405	Blues Organ	200	205	205	206	201
406	Gospel Organ	201	206	206	207	202
409	Cheezoid Organ	202	209	209	209	203
410	Internal Organ	203	210	210	212	206

Selecting Multiple Files to Load

As stated previously, you can select multiple files for loading into the K2600 from within a single directory, in one operation. This is done from the file list dialog with the **Select** button.

After you have selected one or more files in this way, you will still choose a bank and mode to be used for the load process, just as with loading a single file. However, the dialog prompt will say Load selected as:

```
Load selected as: 200...299*
                  300...399
                  400...499*
                  500...599
                  OK  Cancel
```

If you selected any macro files (.MAC extension) from the directory, then once you have select the mode for loading, you will see the question:

```
Load macros as specified?
```

```
Yes  No
```

The answer to this question instructs the K2600 that any macro files will have their macro entries loaded according to the bank and mode:

- Yes** specified in the macro entry.
- No** currently specified for this multiple file load. In other words, whatever you select for Bank and Mode will override the instructions for each entry in the macro.

At this point the files will begin to load. When all the files have been successfully loaded or the load process has been aborted, the K2600 returns to the Disk-mode page.

If there are any errors encountered during a multiple file load, such as running out of object RAM, you will be asked once if you wish to abort the load. In some cases, you may wish to continue loading. If you continue (and don't abort), the only way to abort will be to use a special procedure described in the next paragraph.

Aborting a Multiple File Load

There is a way to abort the process of loading multiple files. Aborting can only be done "in between" files that are being loaded, and not during the load of any one file (short of powering off or soft-resetting the machine by pressing +/-, 0, and **Clear** simultaneously, but this is not recommended!).

Aborting a multiple file load is done by pressing and holding down either of the Plus (+) or the Minus (-) buttons that are located just below the Alpha wheel. This should be done at least one-half second before you anticipate the current file to finish loading, or else the K2600 will not sense that you wish to abort the load.

You will see the following question after the current file being loaded is completed:

Abort the load?

Yes No

It may be a good idea to practice using this method of aborting a multiple file load, so that when the time comes that you accidentally select 100 files, you will remember how to abort the process. This same method (of holding the **Plus** or **Minus** buttons down) is also used to abort the Backup feature and the macro file load feature.

If you run out of object or sample RAM, you will have one opportunity to abort the load as explained above. However, if you continue from that point you may end up seeing the same error message "Memory is full" for each file that you had selected. This can be a rather tedious process, however it is still possible to abort out of this by holding down the **Plus** or **Minus** button simultaneously while pressing **Yes** when you see the following question:

Abort this partial load?

Yes No

More Load Function Enhancements

There are more features having to do with the Load function that are described later on in this guide, such as loading macro files and loading AIFF files.

Saving Files

The **Save** button starts the process of saving from the K2600 to the currently selected device. When you press the **Save** soft button on the Disk-mode page you will see the bank dialog:

```
Save selection: 200...299
                300...399
                400...499
                500...599
Export Macro Object NewDir OK Cancel
```


The **Macro** soft button will be present only if macro recording is turned on. (See page 13-43 for more information on macros.)

You can save an entire bank of objects, or by pressing the **Object** soft button, select individual objects to be saved. If you choose to save using the bank method, all RAM objects within that bank will be saved. (You cannot save ROM objects. If you wish to save a ROM object, such as a program, you must first save it internally as a RAM program.) If any objects within the selected bank have dependent RAM objects that exist in a different bank, you will be asked if you want to save dependent objects. See page 13-29 for more on saving dependent objects.

Use one of the data-entry methods to select a bank to be saved. If you press the **Cancel** soft button, you'll return to the Disk-mode page. After you've selected the bank, press **OK**. The following page will appear:

```

<>KbdNaming:Off

Save as:          NEWFILE

Delete Insert >>End Choose OK Cancel

```

You can now name the file according to the naming procedures outlined in Chapter 5. You can enter up to eight characters. When you've entered a name, press **OK** to save the file as shown in the display, or press **Cancel** to return to the file dialog. When the file is saved, the K2600 adds an extension (**.K26**) to the filename. This enables the K2600 to recognize it as a Kurzweil file when it examines the disk's directory.

Saving Master and Everything Files

Among your choices in the Bank dialog are Master files and Everything files. Master files consist primarily of the items on the Master-mode page and the three MIDI-mode pages. They also include information like marked pages, view settings, and MIDI channel and program assignment. In fact, saving Master files (or dumping them via SysEx) is a good way to configure your K2600 (or another K2600) to your performance or sequencing needs. For example, you might save different Master files with every sequence you create using an external sequencer. Then, when you load the Master file, you would have all the correct programs assigned to the appropriate MIDI channels.

Everything files consist of the Master file parameters and every other RAM object. Saving an Everything file will literally save everything in RAM, including samples, into a single file. These can be quite large, so if you don't have a hard disk, be sure to have a few preformatted floppy disks handy.

Split Files

When you're saving memory banks, it's not uncommon to create files larger than 720K or even 1.4M—especially when you're saving RAM samples. If you're saving to floppy disks, the K2600 will create split files stored on multiple disks. A little advance preparation is necessary for this.

If the K2600 fills a floppy disk before it finishes saving a file, it will prompt you to insert a second disk in the floppy drive. This disk must be preformatted; the K2600 will not format disks in the middle of a save operation. When the second disk is inserted, the K2600 will continue to save. This process will be repeated until the entire file is saved. The K2600 marks these disks internally with a number that indicates the sequence in which they were saved.

When you're loading these split files, they must be inserted in the same sequence as they were saved. When the K2600 has loaded the contents of the first disk, it will prompt you to insert the second disk, and so on. Make sure to label your disks as soon as you save to them, so you'll keep them in the correct order.

Soft Buttons in the Save Selection Dialog

The meaning of the soft buttons in the "Save selection" dialog is as follows:

- Export** Save a sample or a song in an exported file format (that is, AIFF, WAVE, MIDI Type 0 or Type 1). This feature is described in *Importing and Exporting Data Using Standard File Formats* on page 13-71
- Macro** Save entries from the current macro table as a macro file (.MAC). This soft button is displayed only if macro file recording is on.
- Object** Save selected objects from the K2600's RAM.
- NewDir** Create a new directory on the current disk, and return to this dialog afterwards. This is described previously in *Creating Directories* on page 13-12.
- OK** Save all the objects from the highlighted bank (for example, 200...299), and optionally also save dependent objects.
- Cancel** Exit from the Save function.

Export (page 13-71), **Macro** (page 13-43), and **NewDir** (page 13-12) are all explained elsewhere in this guide. This section will describe the process of saving K2600 objects into K2600 format disk files.

Saving Individual Objects

You can select any group of objects in the K2600's RAM for saving into a single file. To save individual objects, from the above dialog, press **Object**. The K2600 will display a scrollable list of all the objects in RAM, very similar to the display for the Load Object feature (described previously):

```
Func:SAVE Sel:0/8 Index: 1

Sample 500 Lo Vocal A 3S 250K
Sample 501 Hi Vocal G 4S 179K
Keymap 500 VocalsMap 176
Program 500 Dry Vocals 270
Select Next Type Multi OK Cancel
```

The procedures for saving objects are essentially the same as the procedures described on page 13-15 for loading objects.

Shortcuts when Saving Objects

Select All/Deselect All

Selecting or deselecting all of the objects at once can be done with the following double-presses (two front-panel buttons simultaneously pressed):

- **Left/Right** cursor double-press: Select All Objects
- **Up/Down** cursor double-press: Clear All Selections

If you want to save most but not all of the items from a file (for example, if there are some songs in RAM that you don't want to be saved in the file), it may be fastest to first select all objects using the **Left/Right** double-press, and then manually deselect any unwanted items.

Viewing Selected Objects

When there are lots of objects selected, but they are scattered in the objects list, it can be helpful to be able to view a list of only the currently selected objects. Do this by double-pressing the **Chan/Bank** buttons.

- Double-press of **Chan/Bank** buttons: View Selected Objects

For example, if there were 10 objects selected, and you pressed both **Chan/Bank** buttons simultaneously, the K2600 would show a list similar to this:

```
View Selected Objects 10/134
Program 300 Biggest Kit          7124
Program 301 RePercussions       7124
Song    300 Drum Groove 7      12092
Song    301 Drum Groove 8      24700
Song    421 Nasty Funk         3122
Song    500 Beethoven          1024
      OK
```

The top line shows 10 objects selected out of the 134 that are currently in RAM. If the number of selected objects is larger than the 6 objects that fit on one page (as in this example), the list can be scrolled to view all of the information.

Note that this feature is not available in the Load Object dialog.

More Features of the Save Dialog

The Choose File Name Function

When entering in a filename for saving, there is a **Choose** soft button. When **Choose** is pressed from the file naming dialog, the K2600 will access the current disk directory and display the following:

```

Dir: \          Sel: 0/10      Index: 1

Choose file name: BOTTLE.K26   48K
                   CHAU       .K26  1207K
                   REGGAE     (dir)
Total: 664K      STICK       .K26  550K
  Root  Parent      OK  Cancel
  
```

The function of this dialog is to grab the text of any filename on the current disk, and either use it as a starting point in the file naming dialog, or else use the chosen filename exactly. This helps when replacing files on the disk (where the name must exactly match the file being replaced), or adding files to the disk that have similar names or appended revision numbers. You can save time by not having to enter the entire filename on the K2600's alphanumeric buttonpad.

The **Open** soft button is visible in the "Choose file name" dialog only when a subdirectory is highlighted.

Traversing directories from the Choose function does not change the current default directory.

Selecting the Directory to use for Saving a File

After you specify the filename when saving any file, select where to put it: by default it goes in the current directory, but you can specify any other directory on the current disk:

```

Use current directory for BOTTLE.K26?
(Path = \)
  
```

```

Change  OK  Cancel
  
```

Pressing **OK** will accept the default path (the current directory), which in this example is the root directory (represented by the backslash character). Pressing **Change** will allow you to view the disk, traversing its directories, until you find the one in which you want to save the file. If you choose a different directory from the default, it will become the new default directory. For more information on selecting a directory, see *The Directory Selection Dialog* on page 13-13.

Saving Any File sets the File Index

After saving a file, you can go to any disk function (such as Load), and the just saved file will be automatically highlighted. This makes it easy to find a file that you have just saved, in case you

want to delete it, add it to a macro, move it to a different directory, open it (if it is a **.K26** or a **.MAC** file), etc.

Auditioning Objects in RAM

When deciding which individual objects to save, it can be difficult to know if you are selecting the correct ones. This is especially true if many objects have similar or identical names, or if the names of the objects are not descriptive enough to know what they are. The K2600 has a feature that allows auditioning of samples, keymaps, programs, and songs right from the Save Object dialog (as well as all of the other object utility dialogs that are discussed later). To activate this feature, scroll to an object of an appropriate type to be auditioned, and press either the **Left** or **Right** cursor button. The display will blink, and the objects can now be heard as follows:

Samples play at their root key, as well as transposed across the keyboard. Stereo samples will play in stereo. Auditioning samples in this way is similar to listening to samples from the SampleMode page in Master mode. The samples are auditioned using a “hidden” program set up according to the parameters in Program **199 Default Program**. This default program can be customized if needed by editing and saving a new program 199.

If you audition any sample objects, the last one that you audition will become the “preview” sample the next time you go to the SampleMode page in Master mode. This can be a quick way to edit the sample without having to edit a program and a keymap.

Keymaps are reproduced accurately, and are played according to the parameters in Program **199 Default Program**. This default program in ROM is set up to have a 0% effects level (dry). Therefore, auditioning keymaps can be a very convenient way to hear them isolated from the effects.

Programs play exactly as they would if they were selected from the Program-mode page.

Songs start playing when either the **Left** or **Right** cursor button is pressed, and stop playing when either cursor is pressed while the song is playing. The most recent song that is auditioned from this page become the current song (as seen on the Song-mode page).

Setups play exactly as they would if they were selected from the Setup-mode page.

Once auditioned, the above object types remain active on the keyboard until another object is auditioned, or until **Cancel** is pressed. If a song is being auditioned, no other objects are auditioned until the song audition is stopped (by pressing one of the **Left** or **Right** cursor buttons).

Saving Dependent Objects

When you save a file, you may see a prompt as part of the Save dialog that asks you whether you want to save dependent objects. A dependent object is simply an object that’s associated with another object. The dependent object can be stored in a different memory bank—for example, a RAM sample with ID 301 that’s used in a program with ID 402, or in the same bank as the file being saved. Rather than forcing you to save dependent objects separately and to keep track of them yourself, the K2600 gives you the option of automatically saving the dependent objects as part of the file you save. When you load the file again, the dependent objects will be loaded along with the objects to which they’re attached.

There are a few things to keep in mind regarding dependent objects. First, it’s not uncommon for RAM samples to be dependent objects, and they can take up quite a bit of memory. If you save a RAM sample as a dependent object when you save a bank of programs to disk, you may create

files that won't fit onto a 720K or 1.4M floppy disk. Since the K2600 can't format floppy disks in the middle of a save operation, you should have spare formatted disks ready to go before you start saving. See the section called *Split Files* on page 13-25.

While the K2600 makes it easy for you to keep track of your dependent objects, you need to keep aware of what happens with dependent objects when saving to disk and reloading. Consider this example. Suppose you create 30 new programs, each of which uses a keymap containing four different RAM samples. If you save these programs to a disk file, and save dependent objects with them, you've created a file containing 30 programs and 120 dependent RAM samples. So far, so good. Suppose you then load that file into the 300s bank. The K2600 will load the 30 programs into the 300s bank just fine, but it will be able to load (at most) only the first 100 dependent objects to the 300s bank (each memory bank can hold a maximum of 100 objects of a given type). The remaining 20 dependent objects will be loaded into the 400s bank. If there are no objects of the same type in the 400s bank, there's no problem. But if there are objects of the same type in the 400s bank, some or all of them will be replaced by the newly loaded dependent objects.

The easiest way to prevent this is to make sure that you don't create more than 100 dependent objects attached to the other objects in a given memory bank. The easiest way to do *this* is to avoid creating dependent objects when possible, by saving objects with IDs in the same memory bank as the objects to which they're related. For example, if you create a program that uses RAM samples, and you save the program with ID 201, resaving the RAM samples used by that program with IDs in the 200s will prevent dependent objects from being created for that program. If you do this, you'll minimize the number of dependent objects you create, and you'll be unlikely to force dependent objects to be loaded into a higher-numbered memory bank when you load files.

Once you have selected objects for saving (either individually as just described or by bank selection), the K2600 will determine if any of the items chosen to save have any dependent objects in RAM that were not chosen. For example, if you select a program to be saved and nothing else (using the Save Object feature), the program may have dependent effects, keymaps, and samples that are in RAM. Dependent objects that are in ROM (for example, ROM samples or keymaps) do not get saved to disk.

You will see the following dialog displayed if there are any dependent objects in RAM of any objects that were selected for saving:

Save dependent objects?

Names Yes No

Choosing **Yes** will cause any dependent objects to be saved in the file together with the selected objects. Choosing **No** means that unselected dependents will not be saved. The **Names** button creates a new kind of object to be stored in the file, called the name table.

The Name Table

A file's name table is a list of any dependent objects that were not explicitly selected for saving in the file. Each entry in the name table contains the object type, object ID, and the name of a dependent object.

A file's name table is used by the K2600 at only one time: when the file is loaded. At that time, the K2600 will search for dependent objects that were not saved in the file originally. The search matches dependent objects by name with objects that are already in RAM, and links them to the "parent" object. The name-table data are then discarded when the file load is finished. This search feature is referred to as **Relink-by-Name**.

Relink-by-name can help you work efficiently with K2600 objects and disk files. Careful use of this feature can save you many megabytes of disk storage. It can also free up time for working on music and production instead of waiting for sample data to be resaved.

Relink-by-Name allows you to save objects and their dependent objects separately (in multiple files) and be able to link them up later on by loading the files in the correct order. This can be a very efficient way of working with the K2600's many levels of dependent objects. The most common way in which Relink-by-Name speeds up development of sounds is when making small adjustments to a program that has as its dependents a large amount of sample data. You can separate the program and sample data, so that after changing a program parameter, only a file containing the program and a name table need be resaved.

When loading a file that contains a name table, the following rules should be observed in order for correct relinking to occur.

1. *Use unique names for dependent objects at every level.* For example, if you were going to be relinking several samples from one file with a program and a keymap from another file, each sample should have a different name. Otherwise, the dependent objects (the samples) will not get relinked properly. This will create problems such as keymap ranges that don't play as they are supposed to.
2. *The dependents to be relinked must already be loaded.* Otherwise they will not be found and relinked when the file containing the parent objects is loaded. This constraint on the order of file loading can be made easier to work with by using the macro file feature (described later). You can construct a macro file to automatically load the dependents files and the parent files in the correct order, making sure that any files containing dependents are loaded first. An alternative to loading the files with a macro would be to save the dependent and parent files in the same disk directory with similar filenames such that they will appear consecutively in the alphabetized file list. Once you have done this, it is easy to select both files for loading in the correct order.

These rules may appear complicated at first, but they will seem natural once you have worked out a few examples with your own files.

The search algorithm used for relinking dependent objects to their parent objects during loading is as follows:

The search for a dependent object (whose name matches that of an entry in the name table) begins at the beginning of the bank that is specified for loading the parent file. All possible IDs are then consecutively searched. When the last ID of the 900s bank has been searched (typically 999), the search will wrap around to ID 1 up until the end of the bank just before the specified bank. The search stops once a dependent with a matching name has been found and relinked.

For example, if a file containing a one-layer program is loaded into the 400s bank, and the file includes a name table that lists the layer's keymap by name, then the K2600 will begin to look through all possible keymap IDs starting at 400, until ID 999. The search then continues from

ID 1, stopping at ID 399. If the search does not successfully find a match, the dependent will be unresolved, and in this example the program would show a value of "Object id not found" for its Keymap parameter, where the object id is the value that was stored in the file.

The search is done in this "circular" manner so as to allow you to direct which dependent objects get relinked. This may be necessary if you end up with multiple copies of dependent objects with the same name; you can differentiate between them by loading the parent file into a specific bank that is the same bank or "before" the bank containing the objects you wish to relink to. Note that this can only be taken so far, since it would be impossible for the K2600 to differentiate between objects with the same name within the *same* bank.

The relinking process happens in the background, without any notification or error messages if items cannot be relinked.

Working with Relink-by-Name

Here are a couple of more in-depth examples that can show how Relink-by-Name works in a practical situation.

Consider that your K2600's RAM contains the following one-layer program and also its dependent keymap and samples (the technique used in this example could well apply to any programs with any number of layers):

Program: Program 317 Steinwave Piano

Keymap: Keymap 300 Steinwave Piano

Samples: Sample 300 StwaveG1 Sample 310 StwaveC7

In this case you might wish to save the samples and the keymap in one file, and the program in another file. So, from the Save Object dialog you could first select all the samples from 300-310, and Keymap 300, for saving into a file, let's say **STWAVE1.K26**.

You would then return to the Save Object dialog and save just Program 317 in a separate file in the same directory, let's say **STWAVE2.K26**...only this time, you will be asked the "Save dependent objects" question pictured above. Answer this by pressing **Names**.

After saving, the file **STWAVE2.K26** will contain two objects in it, Program 317 and a name table. You can easily verify this by going to the Load function (or any other disk function) and pressing **Open** on the file just saved (which should come up already highlighted). The display of objects for the file will look like this:

```
Func:LOH0 Sel:0/2 Index: 1

Table 36 Names 334
Program 317 Steinwave Piano 274

Select Next Type Multi OK Cancel
```

The name table will always be the first object in the list. You can verify the exact contents of the name table by using the "View Name Table" shortcut (as described on page 13-18); make sure

the name table is highlighted, and press either the **Left** or **Right** cursor button (as if you were “auditioning” the name table). You would then see the following:

Name	Table	Contents
Keymap	300	Steinwave Piano
Sample	300	StwaveG1
Sample	301	StwaveD2
Sample	302	StwaveB2
Sample	303	StwaveE3
Sample	304	StwaveB3
Sample	305	StwaveG4

OK

The Name Table Contents list shows what would have been saved in the file had you answered **Yes** to “Save dependent objects?” instead of answering by pressing **Names**. More importantly, it allows you to see what objects need to be in the K2600’s RAM *before* loading this file.

The object IDs shown in the table are the same numbers that those dependent objects used at the time this file was saved. (The ID numbers are necessary in order for Relink-by-Name to function, since they are the “link” between the higher level objects and the names of the dependents.)

An important thing to notice about this particular name table is that the sample names are not needed by the K2600 for relinking purposes. In fact, the only information necessary for relinking the dependent objects of this file is the keymap object. The reason for this is that when this file containing the program is loaded, all of these dependent objects should already have been loaded, and the keymap should already be correctly linked to the samples. Although the samples’ names are redundant from the K2600’s point of view, they are included for free, so to speak, and you may find them very helpful if you ever need to know exactly what the dependents of this file were intended to be.

The Name Table Contents list is scrollable if there are more than seven objects in the name table.

Now that the two files **STWAVE1.K26** and **STWAVE2.K26** have been created using the name table, they can be reloaded and correctly relinked. The files can be loaded into any bank—they do not need to go back into the bank they were originally in—since the **STWAVE2.K26** file will search through all the banks to find the objects by name in order to relink them. In fact, if you were to immediately reload just the file containing the program (**STWAVE2.K26**), into any bank, you would find that it was automatically relinked to the correct keymap, since the keymaps and samples are currently in memory.

Furthermore, you could edit the program and create more variations of it that reference the **Steinwave Piano** keymap, add ROM layers, and /or effects if desired, and resave all of the programs (and any effects) to the same or a new file (remember to press **Names** when you are asked “Save dependent objects?”) You never have to resave the file **STWAVE1.K26** that contains the keymap and samples, if all you have done is edited the programs or added more of them. This can be a tremendous time-saver.

If the keymap and sample files are found on a CD-ROM disk, then using Relink-by-Name is not only a time-saver, but a disk-space saver as well. If you like the samples and keymaps from a CD-ROM file, there is no need to duplicate the sample data on your own writable hard disk. Instead, all you have to do is save a program file in the above manner, and then make sure the CD-ROM file is loaded first before you load the program file.

If you needed to add some sample data to the file (for example, you want to add a root to the keymap or process and reloop a sample from the CD-ROM), you can do this by explicitly

selecting the new sample data and the keymap for saving along with the program and the name table. Then, the new sample would not be listed in the name table (it would be in the same file as the name table), and the keymap would be relinked to all of the samples by name instead of the program being relinked to the keymap (as before). What you put in the different files is up to you, and there is no limit to where you can break up the objects in one file or another. The main thing to be aware of are the two rules for Relink-by-name mentioned above:

1. *Files containing dependent objects must be loaded first.*
2. *Always use unique names for like objects types.* (NOTE: In cases where duplicate names exist in different banks, load the file(s) containing dependent objects, then load the file that contains the name table into the same bank or to the one just before it. This will prevent relinking conflicts.

As you will see later, you can create a macro file that will automatically load both of the files in the correct order, no matter what disks they are on or what disk directories they are in. By using macro files in this way, you can avoid having to explicitly load multiple files and remember the correct order each time.

You can also use the Multiple Object Selector (see page 13-36) to help in the process of identifying dependent objects and parent objects that you want to place into separate files. For example, you could easily select all dependent keymaps and samples of any group of programs, to create a “dependents” file. Then, you could quickly select the programs and any other objects that you wanted to be relinked later on, and save them in another file.

Here is another practical example using songs (sequences). Suppose you have loaded several files into your K2600, such that you now have all your favorite instruments in RAM. Then, you make a bunch of songs using a combination of ROM programs and the RAM programs you loaded.

The dependent object structure of the songs would look something like this:

Songs	400 Wild Jam	401 Memphis Groove
Programs	600 Drawbarz 231 Funky GTR 50 Studio Kit 1 (from ROM)	245 FendJazzBass 400 ObieWarble Pad
Effects	ROM Effects	
Keymaps, Samples	Lots of 'em...	

In this case you might want to save all of the songs in one file, and be able to automatically relink the dependent programs used by the song tracks. All of the programs are presumably already saved in separate files. The only file that needs to be created is one that contains all of the song objects, plus a name table. Once again, this is done by selecting the songs from the Save Object dialog, and answering Names to “Save dependent objects?” The contents of this file can then be displayed by pressing Open (as was done for the previous example).

```
Func:LUAD Sel:0/2 Index: 1
Table 36 Names 700
Song 400 Wild Jam 12114
Song 400 Memphis Groove 34002
Select Next Type Multi OK Cancel
```

Also as shown in the previous example, you can display the contents of the name table:

```
Name Table Contents
Program 231 Funky GTR
Program 245 FendJazzBass
Program 400 Obie Warble Pad
Program 600 Drawbarz
Keymap 220 Funk Guitar
Keymap 229 Jazz Bass
OK
```

Notice that the ROM program **50 Studio Kit 1** will not be listed in the name table. Any dependent objects that are in ROM do not need to be relinked by name. ROM objects are always directly referenced by their object ID number, since they don't get saved in any files.

Once the song file has been saved, it can be loaded at any time and correctly relinked, as long as the other files containing the necessary programs have already been loaded.

For this type of situation, where you may be working on songs always using a consistent set of programs, it is beneficial to make a macro file that can be loaded in one step to direct all of the various program files to be loaded. After that, any time you load a song file containing a name table referencing these programs, the songs should get relinked to the correct programs.

If you happen to have multiple copies of the necessary programs already loaded into different banks, you can control which bank of programs will be linked to the songs by choosing a certain bank to load the song file into. The relinked programs will be the first set encountered according to the Relink-by-Name search algorithm defined above.

Not Loading the Name Table

There may be a time that you wish to load objects from a file containing a name table, but you don't want the K2600 to relink any dependent objects according to the name table. This can be accomplished by "Opening" the file from the Load function, and selecting any desired objects from within the file, *except* the name table. The selected objects will be loaded into the bank you specify, however the Relink-by-Name mechanism will not function.

Relink-by-Name Processing Time

Normally, the time taken to relink several dependent objects using the name search will be insignificant, relative to the time it takes to load the data from the file. However, if you are attempting to relink a very large amount of dependents by loading one file (say, 200 samples or so), there may be a noticeable wait while the K2600 searches its object database for the dependents. If this happens, it's best to be patient.

Storing Objects in the Memory Banks

There is a separate bank of Object IDs for each object type. That is, you can store 999 programs, 999 samples, 255 songs, and so on. There are two groups of object types, based upon the number of available Object IDs. Table 13-1 shows the number of IDs and ID ranges—in ROM and in RAM—for both groups of object types.

Object Type	Total Available Object IDs	ROM ID Ranges	RAM ID Ranges
Samples Keymaps Programs Setups	999	1–99 100–199	200–299
			300–399
			400–499
			500–599
			600–699
Quick Access Banks Songs Velocity Maps Pressure Maps Intonation Tables	255	1–75	700–799
			800–899
			900–999
			100–119
			200–219
			300–319
400–419			
500–519			
600–619			
700–719			
800–819			
900–919			

Table 13-1 Memory Banks: Object IDs Available for Different Object Types

The Multiple Object Selector Page

The Multiple Object Selector gives you several ways to select multiple objects for various operations—for example, to load all setups with IDs between 250 and 299, to save all programs in the 400s bank, including their dependent RAM keymaps (but not their dependent RAM samples), or to delete all samples whose name includes “Gazonk.”

The Multiple Object Selector is available in two places:

- In Disk mode, in the Load and Save dialogs
- In Master mode, on the Object Utility pages—Move, Copy, Name, Delete, and Dump (see page 11-13)

Each of these dialogs and utility pages has a **Multi** soft button. Pressing it takes you to the Multiple Object Selector.

Using the Multiple Object Selector: An Overview

1. In Disk mode, press **Load** or **Save**, or in Master mode, press **Object**, then press **Move**, **Copy**, **Name**, **Delete**, or **Dump**. You’ll see a list of objects that you can scroll through with the Alpha Wheel. (If you’re in Disk mode and loading objects, you’ll need to navigate through the directories and open a file before you’ll see the list and the **Multi** button.) This list of objects—conveniently called the *object list*—is what the Multiple Object Selector searches through.

2. Instead of scrolling through the object list manually and pressing **Select** for each object you want to select, simply press **Multi**. The Multiple Object Selector appears.
3. Set the value of the Select parameter, which determines the operating mode for the Multiple Object Selector.
4. Set the values of any other parameters that are visible. Different parameters are visible depending on the value of the Select parameter. This step is called setting the *selection range*. The selection range determines which objects get selected when you execute the next step.
5. Press **Set**. In most modes, this selects every object in the selection range, and returns you to the page you were on before you pressed **Multi**. Notice the asterisks between the IDs and names of the selected objects.
6. Complete the operation you started in Step 1.

Operating Modes: The Select Parameter

The Multiple Object Selector has four operating modes, which determine how the Multiple Object Selector defines the selection range within the object list. Use the Select parameter to set the operating mode. There are four values:

Type/Range	Restricts the selection range to a particular object type (like programs or samples), and lets you specify a range of IDs (like 1–100).
Dependents	Restricts the selection range to objects that are dependents of whatever object(s) you specify.
Everything	No restrictions; the entire object list becomes the selection range.
Search String	(SearchStrg) Restricts the selection range to objects whose names contain a string of characters that you specify (for example, all objects whose names include "clav").

The first two operating modes in the Multiple Object Selector have other parameters associated with them. The following diagram shows what Type/Range mode looks like.

```

Multiple Object Selector
Select : TYPE/Range
Type   : Sample
Bank   : 200's
StartId: 200      EndId: 299

All  Type  Toggle  Clear  Set  Cancel

```

Use this mode for operations on a particular type of object (like loading all setups, or just Setups 250–299). The Type, Bank, StartId and EndId parameters let you specify which objects to work with. See *Type/Range Mode* on page 13-41 for more information.

Change the value of the Select parameter to **Dependents** if you want to select objects based on their dependencies (for example, when you want to save 20 programs and their dependent keymaps). A different set of parameters appears.

```
Multiple Object Selector
Select :Dependents
Of      :Current Item
Specify:All

Current = Program 205 Viola Section

All  Type Toggle Clear Set Cancel
```

You can't use this mode with the Load function, since the K2600 can't calculate dependencies on objects that aren't already in RAM. You can use this mode with all the other functions mentioned at the beginning of the Multiple Objects Selector section.

Use the Of parameter to specify whether you want to select dependents of the current object, or dependents of previously-selected objects. In the former case (with Of set to **Current Item**), pressing **Set** selects the dependents of the object showing in the Current field (Program 205 **Viola Section** in the display above—it's always the object that was highlighted on the previous page). In the latter case (with Of set to **Selected Objects**), pressing **Set** selects all the objects that you marked for selection on the previous page (all objects with asterisks between their IDs and names).

The Specify parameter determines what types of dependent objects get selected when you press **Set**. This is handy when you want to save one type of dependent object, but not another. See *Dependents Mode* on page 13-42 for more information.

If you set the Select parameter to a value of Everything or SearchStrg, all other parameters disappear. In Everything mode, the K2600 selects every item in the list on the previous page. When you press **Set**, you'll return to that page, and see every object selected.

In SearchStrg mode, the K2600 selects every object whose name contains a user-defined string of characters. In this case, when you press **Set**, the K2600 prompts you to enter a string of characters using the alphanumeric buttonpad. Enter the characters, and press **OK**. The K2600 returns you to the page you were on before you pressed **Multi**, selecting the objects whose names contain your string.

Multiple Object Selector Soft Buttons

The Multiple Object Selector has six soft buttons:

```
All  Type Toggle Clear Set Cancel
```

Cancel probably doesn't need explanation; it takes you back to the previous page without changing the current selection of objects. The other buttons fall into two groups.

All and Type

The first two are short-cut buttons—one for selecting all objects (just like Everything mode), and one for selecting or deselecting all objects of a particular type.

- All** Returns the Select parameter to **Type/Range**, if it was not already set that way. Sets Type to **All Types** and Bank to **All Banks**, and also sets StartId to **0** and EndId to **999**. This is equivalent to using Everything mode. The advantage to using the **All** button is that you can select all objects, but still be in Type/Range mode, where you can refine the selection range (for example, all objects in the 400s bank, or all programs).
- Type** Returns the Select parameter to **Type/Range**, if it was not already set that way. Sets the Bank parameter to **All Banks**, and also the StartId to **0** and the EndId to **999**. The Type parameter's value matches the type of the object currently indexed from the object list. For example, if you scrolled to a setup object then pressed **Multi**, pressing the **Type** soft button would set up the Type parameter to **Setup**. This is usually used to quickly select or deselect all objects of a particular type by scrolling to the first object of that type, and then pressing **Multi-> Type-> Set** or **Multi-> Type-> Clear**. If you don't want to include all banks in the selection range, it is easy to adjust the Bank or ID parameters to narrow the range.

Toggle, Clear, and Set

In most cases, these soft buttons select or deselect the objects in the selection range, then return you to the previous page (the page you were on when you pressed **Multi**). The exception is SearchStrg mode, in which case pressing any of these three buttons prompts you to specify the string that determines the selection range.

- Toggle** For each of the objects in the specified range, toggle the selection status of the object. If an object is not already selected, this selects it (an asterisk will appear between its ID and name when you return to the previous page). If an object is already selected, this deselects it (asterisk disappears).
- Clear** Deselects all objects in the selection range.
- Set** Selects all objects in the selection range.

Example: Toggle

Toggle is useful when you want to select all objects in the list *except* those that meet certain conditions. For example, you may want to free up some RAM by deleting all objects that are not being used by a song that you're working on.

1. Go to Master mode, and press the **Object** soft button, then the **Delete** soft button. You'll see a list of RAM objects.
2. Highlight the song whose dependent objects you want to keep, then press **Multi**. The Multiple Object Selector appears.
3. Set the value of the Select parameter to **Dependents**, the value of the Of parameter to **Current Item**, and the value of the Specify parameter to **All**. This specifies that you want to select all dependents of the highlighted song.
4. Press **Set**. This selects all of the song's dependent objects, and returns you to the DELETE page, showing the list of RAM objects. Note the asterisks between the IDs and names of the selected objects.
5. Press **Multi** again, and set the value of Select to **Everything** (or press **All**).
6. Press **Toggle**. This selects everything that wasn't selected, and deselects everything that was. The result is that everything *not* used by your song is selected.
7. Press **OK**. If the K2600 asks whether you're sure, press **Yes**.

Example: Clear

Suppose you're in Disk mode, and you want to save everything in RAM except programs.

1. Press the Save soft button to call up the **Save** dialog, then press the **Object** soft button.
2. Select the entire object list by pressing the **Left/Right** cursor buttons together.
3. Press **Multi**. Set the Select parameter to a value of **Type/Range**.
4. Set the value of Type to Program, and the value of Bank to All Banks.
5. Press **Clear**. The K2600 returns to the Save dialog. As you scroll through the object list, you'll notice that no programs are selected, and all objects that aren't programs *are* selected.

Example: Set

Suppose you wanted to save all keymaps and samples in the 300s bank to a single file.

1. In Disk mode, press Save, then press Object.
2. Set the Select parameter to **Type/Range**, the Type parameter to **Keymap**, and the Bank parameter to **300's**.
3. Press **Set**. This selects all the keymaps in the 300s bank.
4. Press **Multi** again, change the Type parameter to **Sample**, and press **Set** again. Now all keymaps *and* samples in the 300s bank are selected.
5. Press **OK** and continue with the Save operation.

Entering Selection Criteria in the Multiple Object Selector

This section describes the operation of the selection modes provided on the Multiple Object Selector page. These are accessed by scrolling the Select: parameter to different values, as pictured above.

Type/Range Mode

This mode lets you select objects based on their type, and on a particular range of object IDs.

Parameter	Possible Values	Function
Type	Sample, Keymap, Effect, Program, Setup, QABank, VelMap, PrsMap, IntTbl, Song, Table, All Types	Sets the desired object type. The value All Types will select all of the other possible types.
Bank	000s, 100s, 200s, 300s, 400s, 500s, 600s, 700s, 800s, 900s, All Banks	Sets the desired bank. Changing this parameter causes the StartId and the EndId to be set to the limits of the chosen bank (for example, a value of 300s sets the StartId to 300 and the EndId to 399). A value of All Banks sets the StartId to 0 and the EndId to 999. <i>The actual range used for selections when Toggle, Set, or Clear is pressed is taken from the setting of the StartId and EndId parameters.</i> For example, if you set the Bank to 200s and then change the StartID to 300 and the EndID to 399, the 300s bank will be selected, not the 200s. The Bank parameter is used as a quick way to set up the ID range for an entire bank, or all banks.
StartID	0–999	Sets the specific starting ID of the selection range.
EndId	0–999	Sets the specific ending ID of the selection range.

Table 13-2 Object Selection by Type / Range

It is possible to set the EndId before the StartId. If this is the case, the selection range is empty.

Dependents Mode

This mode is used to select a group of objects that are dependents of other objects. This is not available when loading objects in Disk mode.

Parameter	Possible Values	Function
Of	Current Item, Selected Items	If set to Current Item , selection range is confined to those objects in the object list that are dependents of the currently indexed item (Current =), including the currently indexed item itself. If set to Selected Items , then the selection range includes any objects in the object list that are dependents of any currently selected objects (those with asterisks between their IDs and names). The currently indexed item is ignored unless it is already explicitly selected.
Specify	All, All->Keymap, All->Program, Keymap->Sample, Samples Only	This parameter is used to limit which dependent objects are included in the selection range for the appropriate objects included via the Of parameter. The normal setting is All , which means all dependents are included. The other settings are useful primarily when separating objects into different files for reloading later using macros and Relink-by-Name. If set to All->Keymap , then the selection range includes all dependent objects down to the level of keymaps. That is, samples will be excluded from the selection range. If set to All->Program , then the selection range includes any dependent objects down to the level of programs and effects (keymaps and samples are excluded from the selection range). Keymap->Sample includes all keymaps and samples that are dependent objects, and nothing else. Samples Only includes all samples that are dependent objects, and nothing else.
Current	Type, ID, and name of the currently indexed object	Displays the object that will be used if Current Items is the value of the Of parameter.

Table 13-3 Object Selection by Dependents

Everything Mode

Everything includes all objects in the list. You may prefer to use the **All** button for this purpose.

Search String (SearchStrg) Mode

This selection mode will ask for a search string to be entered, as soon as you press either the **Toggle**, **Clear**, or **Set** button. The range for the selection/deselection will be any objects whose names contain the search string, ignoring upper/lower case. As soon as you press the OK button after entering a search string, the K2600 executes the toggle, clear, or set command that you specified at the beginning of the search operation. SearchStrg mode is not available when loading objects.

Working with the Multiple Object Selector

The Multiple Object Selector minimizes button presses and quickly allows you to select whatever group of items you want from the K2600's RAM. It's available for all of the related object management functions.

You may notice that the cursor positions and parameter settings are remembered whenever you exit the Multi Selector dialog, even if you exit the dialog and choose a different function. For

example, if you end up doing a lot of selecting of samples, or of dependents at various levels, the parameters will stay set up the way you left them as you move from function to function (for example, from Copy to Delete to Save, etc.).

“Select Dependents” mode is very useful not just for saving dependents, but also for splitting up groups of objects for placing in different files. By using the optional settings for the Specify parameter (**All-> Keymap, All-> Program, Samples Only** etc.), you can separate the group of objects that you want to save at any level of the object tree that is necessary.

Examples of possible operations using Multiple Object Selector:

- Select all the keymaps that are dependents of a block of programs.
- Select all the samples starting from ID 398.
- Select all the objects that have “piano” in their object name.
- Select the programs, setups, and effects that are dependents of song 200.
- Select all of the keymaps and samples that are dependents of songs 400-410.

Macros

The K2600 lets you create lists of disk files called macros. The files can be located on any disk, whether SCSI-based or in the internal Floppy drive. Files from SCSI disks in Roland and Akai format can also appear in macros. Ensoniq files are not currently supported by K2600 macros.

Macros are stored in a data object called a Macro table, and these can exist in two forms:

- A Macro table object in the K2600’s nonvolatile RAM. We call this the RAM Macro table.
- A disk file, containing one Macro table object. This disk file is called a macro file, and it has a **.MAC** extension (visible in the directory listing).

Macros are used primarily to load a K2600 with sound and sequence data from several files, or with selected objects within files. When a macro file is loaded, every selected object in every selected file in that macro file’s Macro table will be loaded, according to the order of the entries in the Macro table.

The Macro Page

There can be only one Macro table in the K2600’s memory at any time. This object is created for the first time by turning on Macro Record mode, from the MACRO page, which you reach by pressing the **Macro** soft button on the Disk-mode page, as shown below.

```

DiskMode: Samples: 12313K Memory: 132K
Path = \CYBER\

CurrentDisk: SCSI 2 Startup: Off
Library: Off

Direct Access, 84MB
Psyquest PS-427 XMC1.7
<more> Load Save Macro Delete >more>

```

The following page is what you will see if macro recording is Off:

```
Func:MACRO [ Off ] Index: 0
```

```
Select Modify Load Record On Exit
```

The top line displays the disk function, the current macro mode, and an index value into the Macro table.

```
Func:MACRO [ On ] Index: 0
```

Macro Modes

The K2600 has three macro modes: Record, Pause, and Off.

Off There is no Macro table in the K2600.

Record A Macro table exists, and the K2600 adds all file-loading operations to the Macro table.

Pause A Macro table exists, but the K2600 *does not* add file-loading operations to it.

Note that whenever macro mode is Off, there are two soft buttons labeled **Record** and **On**. Pressing **On** will enable Macro Record mode, and then will return to the Disk-mode page. As an alternative, pressing **Record** will also enable Macro Record mode, but the display will remain on the MACRO page. Once you press **Record**, the soft buttons and the top line of the display will change. The display will look like this:

```
Func:MACRO [Record] Index: 0
```

```
████████████████████████████████████████████████████████████████████████████████
```

```
Select Modify Load Pause Off Exit
```

The new macro mode is displayed ([**Record**]), and the soft button that used to say **Record** now says **Pause**. The soft button that used to say **On** now says **Off**. Pressing **Pause** will cause the macro mode to read [**Pause**] and the **Record** soft button will reappear. You can switch between Record and Pause by pressing this button repeatedly.

Whenever Macro Record mode is enabled, you will see the indicator (**Macro on**) near the top left of the display on the Disk-mode page:

```

DiskMode   Samples:100/24K   Memory: 4/2K
Path = \
(Macro on)
CurrentDisk:Floppy           Startup:Off
                             Library:Off
                             Verify :Off

<more   Load   Save   Macro   Delete   more>

```

The Macro Table

When Macro Record mode is enabled after being in the Macro Off state, a new object called a Macro table gets created in the K2600's memory. In the object list for the Save dialog, the Macro table would appear as:

```
Table   35 Macro           14
```

A Macro table can be deleted from memory only by pressing the **Off** soft button, or by performing a hard reset of the K2600. Pressing the **Off** button will display the following question:

```
Reset macro?
```

```
Yes   No
```

Pressing **Yes** will delete the Macro table from memory, and then will return to the Disk-mode page. The Macro mode is set to Off, and the (**Macro on**) indicator is no longer displayed on the Disk-mode page.

Pressing **No** will return to the MACRO page with no action taken. The "Reset macro?" question is displayed to allow you to change your mind about deleting the Macro table, in case you have accidentally pressed the **Off** button.

When the Macro table is first created it takes up a minimal size (14 bytes) in your nonvolatile RAM. With each new entry that is added, the Macro table will increase in size by approximately 40 to 100 bytes (or possibly more if the entry specifies an individual object list). In Macro Pause mode, the Macro table remains in memory but does not change size since file operations are not recorded. This is useful if you need to load files into the K2600 but you don't want them to be entered into the Macro table.

In Macro Record mode, the Macro table gets progressively larger with every file-loading operation. Consequently we recommend that you leave the Macro mode set to Off unless you are recording and saving macros. This will prevent the Macro table from taking up RAM.

On the other hand, if you have lots of RAM (here's another plug for the P/RAM option) you may wish to leave Macro Record mode enabled all the time. This can be useful for viewing a

history of files you have recently loaded. Both the Macro mode and the Macro table are remembered between power-cycles of the K2600 via the battery-backed memory.

A macro can hold as many entries as there is space for in your K2600's nonvolatile RAM.

How to Make a Macro File

This section will take you through creating, saving, and loading a macro file. A simple example will be used. Afterward, you will be able to apply the example and create your own macro files.

The first step in making a macro file is to turn on Macro Record mode (from the MACRO Page, press **On**, if you have not already done so).

Creating the Macro

Suppose you have the following four files on your disk (on SCSI ID 5, in the directory \ANALOG\) that contain analog-style synthesizer programs, and you would like to have one macro file that will load them all:

```
Dir:\ANALOG\      Sel:4/4      Index: 1

File to load:
MULTIUX .K26*      98K
NOISE   .K26*      36K
RESONANT .K26*     109K
SYNAPSE .K26*     421K
Total: 664K
Select  Root  Parent  Open  OK  Cancel
```

Using multiple selection, you can select all four files, as shown (you can also open each file and select one or more objects in that file; when you load the macro, only those objects get loaded). When you press **OK** you will see the usual Load dialog, but with the extra soft buttons **Macro** and **Insert**:

```
Load this file as: 200...299
                   300...399
                   400...499
                   500...599
Insert             Macro  OK  Cancel
```

The extra soft buttons are available only in Macro Record mode. First, select the bank that you want, as usual. Press **OK** means to load all of the selected files into the K2600, *and* add all of the files to the Macro table. If you're just creating a macro file, and don't need to load any files at the moment, press **Macro**, which adds the files to the Macro table, but doesn't load them into the K2600.

When you add files to a Macro table, they get added at the *end* of the Macro table by default. **Insert** is for inserting file entries at any point in a Macro table. See *Macro Insert* on page 13-57 for more information.

Once you have pressed either **Macro** or **OK**, the loading-mode buttons appear (**OvFill**, **Overwrt**, **Merge**, **Append**, and **Fill**). Choose a mode based on what you want to happen *when you load the macro*, because the mode gets saved as part of the Macro table. You should do this because the bank you select for the Macro table may be empty now, but it might not be when you load the macro. You need to set the mode accordingly. If preserving the IDs of the loaded objects is important, you should use Merge or Overwrt. If IDs aren't as important as preserving the objects already in RAM, use Fill or Append.

For the sake of this example, let's choose the 200s bank and Fill mode. When you press **Fill**, the K2600 executes the **OK** or **Macro** command you entered earlier. If you had pressed **Macro**, the K2600 would add the selected objects to the Macro table. If you had pressed **OK**, the K2600 would add the selected objects to the Macro table, and load them into the selected bank as well.

You have now created a macro. If you go to the MACRO page (from the Disk-mode page, press **Macro**), you'll see the files listed in the K2600's current Macro table.

Saving the Macro File

At this point you have a Macro table with several entries in it, but you don't have a macro file until you save the current Macro table. From the Disk-mode page, press **Save**, then press **Macro**. You'll see the following dialog:

```
Func:SAVE MACRO Sel:0/4 Index: 1

5:\ANALOG\MULTIVOX.K26      200:F:
5:\ANALOG\NOISE.K26        200:F:
5:\ANALOG\RESONANT.K26     200:F:
5:\ANALOG\SYNAPSE.K26     200:F:
Select All OK Exit
```

This is called the Save Macro page. The soft buttons on this page control which Macro table entries (macro entries) will get saved to the Macro table in the macro file. You can select multiple entries using the cursor buttons and the **Select** soft button. Selected entries have an asterisk on the first character of the display line, such as this:

```
*5:\ANALOG\RESONANT.K26      200:F:
```

You can use the following double-presses to select and deselect all entries in the list:

- **Left/Right** cursor double-press: Select all macro entries
- **Up/Down** cursor double-press: Clear (deselect) all currently-selected macro entries

The top line indicates how many total macro entries are in the current Macro table, and how many are selected.

Pressing **OK** saves the selected macro entries to be saved in the file. If there are no entries selected when you press **OK**, the K2600 saves only the highlighted entry.

You might think that there isn't much use for a macro file with only one entry in it, however it can be a convenient link to an often-used file. For example, you could create a macro file called **\PERC.MAC** in the root directory on the disk where you store your programs. This macro file could load a single object, namely the file **\MYSOUNDS\PERC\TECHNO\PERC.K26**. When you wanted to load **PERC.K26**, you could simply load the macro **PERC.MAC**, instead of having

to open three directories to select the file for loading. This gives you quick access to the file while preserving the organization of your program files.

If you know that you want to save all of the entries into the macro file (as we do for this example,) just press **All**. The K2600 will go through the standard file saving dialog in which you choose a filename and select a directory to save the file in.

Let's save the file as `\ANALOG\SYNTH.MAC`. Macro files are automatically saved with the `.MAC` extension. While the file is being saved, you'll see something like this:

```
Writing file SYNTH.MAC...
```

```
Table      35 Macro                - 162 b
```

Loading the Macro File

So far, so good. We have created a macro in memory and saved it to the disk, in the same directory as the files that are listed in the macro.

This example loads files from within a single directory on a single disk, to keep things simple. But you can create macros that load files from any number of directories on any number of disks.

Now, let's go to the Load page and try to load the macro file, which will load all the files in the macro file's Macro table. When you return to the Load page, the file list highlights the macro file that was just saved (as it would after any type of file that you save):

```
Dir:\ANALOG\      Sel:0/5      Index: 5
                RESONANT .K26      109K
                SYNAPSE  .K26      421K
File to load:SYNTH .MAC      .5K
```

```
Total:664K
Select Root Parent Open OK Cancel
```

Press **OK** to load `SYNTH.MAC`. Now the display reads:

```
Load this macro as:specified
                200...299
                300...399
                400...499
Insert Macro OK Cancel
```


There are a couple of things to notice here. The first is a new choice in the bank list: **specified**. “Load this macro as specified” means load all the files in the macro following the exact instructions for the bank and load mode for each file. In our example, all the files were specified to be loaded into the 200s bank using Fill mode. If this is acceptable at the time you want to load the macro, you can just press **OK**. Otherwise, you can override the bank and mode settings for the entire macro by choosing a different bank and mode before pressing **OK** (this is called *rebanking* the macro).

The other thing noticeable about the above display is that the **Macro** and **Insert** buttons are still available, because the Macro mode is still Record. This means that when you load the macro, it gets added to the RAM Macro table. But it’s not the *filename* (**SYNTH.MAC**) that gets added, as is the case with **.K26** files. Instead, *every macro entry in the file’s Macro table* gets loaded into the RAM Macro table. This is a convenient way to edit a macro file or combine elements of several macro files into one macro. See *Editing Macros* on page 13-54.

In our example, since we’re in Macro Record mode, pressing **Macro** would add the macro file’s entries into the RAM Macro table. Pressing **OK** would add the macro file’s entries into the RAM Macro table, *and* would load the corresponding files into RAM. Since we added the files listed in the macro to the RAM Macro table when we recorded the macro, the RAM Macro table now includes a duplicate set of entries.

Whatever method of loading you choose (that is, specified in the macro or overriding the macro), the K2600 locates each file in the macro in the exact order in which the entries are listed. If the files are on different disks in your disk system, you can observe your various disks as they’re selected in turn and files are loaded from them.

If the K2600 cannot locate one of the files, you’ll see a “Not Found” error message. If a disk cannot be accessed (for example, if the SCSI ID stored with the macro entries in this example is no longer the current SCSI ID of the disk), you will see the message “Problem mounting disk,” to which you must press **OK**. If Confirm is set to **On** on the Master-mode page, loading will stop on the first error message, giving you a chance to cancel the operation or keep going. If you answer **Yes** at this point, the operation will continue, even if the K2600 encounters subsequent errors. If you run into a lot of errors due to loading an out-of-date macro file, the macro process can be discontinued using a special procedure described later in the section called *Aborting a Macro Load*. (page 13-59).

When the macro is done loading, you’ll see this display:

```
Macro SYNTH.MAC completed...
```

The K2600 returns to the Disk-mode page. You should now be able to go to the Save dialog, or Program mode, and verify that all of the objects from the files of the macro are now in the K2600’s memory.

Macro Entries

Each file-loading operation that is recorded into the Macro table is called a macro entry. Each macro entry stores information about how a disk file should be loaded. Each entry is displayed as a single item in a scrollable list on the MACRO page, with various fields indicating the parameters of the entry. The following diagram shows how the MACRO page might look once four files have been recorded into the RAM Macro table:

```

Func:MACRO [Record]                               Index: 1
3:\DRUMS\REALKITS.K26                             200:F:Obj
3:\BASSES\WALKING.K26                             200:F:
3:\KEYS\CHROMA12.K26                              200:F:
F:\SONG42.K26                                     200:F:
Select  Modify  Load  Pause  Off  Exit
    
```

Table 13-4 describes the information stored in a macro entry. The highlighted entry in the diagram above indicates a file on a disk with a SCSI ID of 3. This file is stored in a directory called **DRUMS**. The filename is **REALKITS.K26**. The K2600 will load it into the 200s bank, using Fill mode. “Obj” means that individual objects within the file are selected for loading, and *only* those objects will be loaded from this file.

Disk ID	Specifies the disk from which to load. There are ten possible values: The numbers 0-7 represent SCSI 0 through SCSI 7. The letter F represents the Floppy drive. The letter U means Unspecified disk ID (see page 13-51). The letter L means the Library disk (see page 13-52).
Directory path/ filename	This is the directory path and the filename of the file on the disk to be loaded by this macro entry. The display can show up to 28 characters of this name, although the RAM Macro table stores the entire path and filename.
Bank	The bank where you want to load the file. This will have a value from 0 through 900 (by 100s), or the letter E for Everything (all banks).
Mode	The mode specified for loading the file. The following one-letter codes are shown in the display: O means Overwrite mode (Overwrt) V means OverFill mode (OvFill) M means Merge mode A means Append mode F means Fill mode This field is to the right of the bank field, after a colon.
Object indicator	When this field is empty, the entire file gets loaded. If “Obj” appears in this field, the K2600 loads only those objects that were selected for loading during the recording of the macro. If the entry represents a file on a third-party SCSI-format disk such as Akai or Roland, this field indicates the manufacturer: Aka means Akai format Rol means Roland format Ensoniq format disks are not currently supported in macros.

Table 13-4 Information Stored in Macro Entries

Using the Bank and Mode Fields

The bank and mode fields in a macro entry are relevant only if a macro file is loaded as specified. This means that each file listed in the macro will be loaded exactly as the bank and mode fields of the macro entry dictate. You can override the macro entry's settings during the Load operation, and specify a different bank and mode for the entire macro (you can't specify overrides for individual entries).

Depending on your working style, you may not have much use for the settings of the bank and mode fields. If you're always loading things into different banks depending on the situation, you'll probably change the bank and mode each time you load anyway, so the bank and mode fields in the macro entries won't matter much to you.

The bank and mode fields are more important when you want to use macros to fill the K2600's memory banks a particular way, and you want to be able to do it automatically and consistently.

Viewing the Object List for a Macro Entry

If a macro entry contains an object list, it can be examined by scrolling the Macro table display until the item with the Obj indicator is highlighted, and then by pressing either the **Left** or **Right** cursor button on the front panel. You will see a display that looks like this:

```
Macro Object List (load dependents)
Program 210
Program 211
Program 212
Program 213
```

OK

The Macro Object list, a scrollable list, shows what objects are to be loaded from the file specified in the currently indexed macro entry. You will not see the names of the objects in this display, because they are not stored in the Macro table. The objects are referenced only by object type and object ID. The (load dependents) indicator in the top line means that the macro process should also load all dependents of the objects in this list.

If you need to know the names of objects in a macro entry object list, it is possible to begin a disk function (such as Load), find the file specified in the macro entry, press **Open** to display the file's objects, and look up what the objects are, using the information in this display.

Unspecified Disk ID

When you record a macro entry to the RAM Macro table during a load operation, that entry's disk ID matches the ID of the disk from which you loaded the file. So, for example, if your hard disk has a SCSI ID of 5, all the files you load from that disk will show 5 in the Disk ID field. This information gets saved when you save the RAM Macro table to a macro file. The next time you load that macro file, the K2600 looks for a disk with SCSI ID 5 and expects to load files from that disk.

That's good, because you probably don't change the SCSI ID on your hard disk very often. But what if you have a removable-media drive (like a Zip drive or Jaz drive) with SCSI ID 5, and you pack a disk full of programs and samples to give to another band member who has a removable-media drive with a different SCSI ID? Does one of you have to keep changing SCSI IDs to exchange files?

Fortunately, no, because the K2600 lets you create macro files with entries that don't specify a Disk ID. When the K2600 is loading a macro file, and encounters an entry with an unspecified Disk ID, it expects to find the files on the same disk as the macro file. So you can create a macro file by loading a bunch of files from your Zip drive, editing every entry so that it has an unspecified Disk ID, and saving the RAM Macro table. Then you can put the macro file and all the files in its Macro table on a Zip disk, and hand the disk to a friend. Your friend can then load the macro into her K2600, and it will load the files no matter where she has her Zip drive's SCSI ID set.

This feature is likely to be most useful for people who distribute K2600 sound files and macro files on removable media. By leaving the Disk ID unspecified, they can be sure that anyone can load the files without regard for SCSI ID.

Of course, there are other uses. If you use a single hard disk with your K2600, or if you regularly work with macro files that load files from the same disk, then if you set all the macro file's Disk IDs to unspecified you won't have to edit your macro files if you happen to change your disk's SCSI ID.

The Modify Macro page is where you can set unspecified Disk IDs (in Disk mode, press the **Macro** soft button, then the **Modify** soft button). See *Editing Macros* on page 13-54 for more information.

The Library Disk

If a macro entry is set to the library Disk ID, it means that the file to be loaded should be found on the disk at the SCSI ID set by the Library parameter on the Disk-mode page. This designation is similar in purpose to the unspecified Disk ID, because it is a way to avoid needing to hard-wire the SCSI ID in advance. The library disk ID is intended to be used in macro files that reside on removable media such as a floppy disk, whose macro entries are supposed to load particular files on a specific sample CD.

The main purpose of this feature is so that macro files can be distributed on floppy disks containing programs that link up with sample files from CD-ROMs. You don't want to have to copy a CD-ROM file to one of your hard disks in order to make new programs that use that CD-ROM file's sample and keymap data. If you set up your CD-ROM drive as the library disk, then create a macro file with entries that specify Library (L) for the Disk ID, the K2600 will be able to load files directly from the CD-ROM, then load the programs from the floppy disk, link the programs with the sample and keymaps using the Relink-by-Name feature.

Here's an example. In the following diagram, the Library parameter has been set to SCSI 3.

```

DiskMode   Samples:10022K   Memory: 42K
Path = \
(Macro on)
CurrentDisk:Floppy           Startup:Off
                             Library:SCSI 3

<more>  Load  Save  Macro  Delete  more>

```

We'll assume that SCSI 3 is your CD-ROM drive, and that you have a floppy disk that contains a macro file with the following entries:

```

L:\PIANO4MB.K26             200:F:Obj
F:\PNOPROGS.K26           200:F:

```

When you load this macro file, the K2600 first looks for the file `\PIANO4MB.K26` on your CD-ROM drive, because your CD-ROM's SCSI ID is 3 and you've set the Library parameter on the Disk-mode page to 3. As long as you have the right disk in the CD-ROM drive, the K2600 loads the file, and then loads `\PNOPROGS.K26` from the floppy disk.

If the K2600 executes the above macro, but the Library parameter has not been set (is set to **Off**) an error message

Library has not been set.

will be displayed when the macro process attempts to load `\PIANO4MB.K26`.

The K2600 remembers the setting of the Library parameter across power-cycles, via the battery backed memory. Set up the Library disk once, and it stays that way until you change it.

The Modify Macro page is where you can edit macro entries to use the Library disk (in Disk mode, press the **Macro** soft button, then the **Modify** soft button). See *Editing Macros* on page 13-54 for more information.

Although the Unspecified and Library Disk IDs are meant to be used with distributable media such as CD-ROMs and floppy disks, these features will work with any supported disks.

Loading Selected Entries from a Macro File

It is possible to examine the contents of a macro file from any disk function page—the same way you would open a `.K26` file to check out what objects are stored in it—by highlighting the `.MAC` file and pressing **Open**:

```

Dir: \ANALOG\          Sel: 10/5      Index: 5
      RESONANT .K26      109K
      SYNAPSE  .K26      421K
File to load: SYNTH    .MAC          .5K

Total: 664K
Select  Root  Parent  Open  OK  Cancel

```

The K2600 will need to read the macro file into a temporary area of internal memory, which means there needs to be enough free RAM to accommodate it. Press **Open** during the Load function to enter a dialog similar to the MACRO page and the Save Macro page. This is called LOAD MACRO page:

```

Func: LUHU MHUKU      Sel: 2/4      Index: 1

5:\ANALOG\MULTIVOX.K26  200:F:
*5:\ANALOG\NOISE.K26   200:F:
 5:\ANALOG\RESONANT.K26 200:F:
*5:\ANALOG\SYNAPSE.K26 200:F:
Select Check          All  OK  Exit

```

From the LOAD MACRO page, you can select one or more individual macro entries for loading, instead of having to load the entire macro. This is done using the **Select** soft button, identical to the method of saving macro entries. In fact, this dialog operates identically to the Save Macro dialog, with one exception, the **Check** soft button.

The **Check** button will cross-check all of the macro entries in this opened macro file against the current RAM Macro table, if there is one. Any entries in the opened macro file that are not in the RAM Macro table will be selected when you press the **Check** button. The selected macro entries can then be loaded by pressing **OK**. This can be helpful to avoid loading in duplicate files if you...

1. Use Macro Record to keep a running history of files that you have already loaded into the K2600.
2. Have a lot of macro files that load similar lists of files.

If the **Open** button is pressed from a disk function other than Load, you will see the VIEW MACRO page:

```
Func:VIEW MACRO Sel:0/4 Index: 1
5:\ANALOG\MULTIUX.K26 200:F:
5:\ANALOG\NOISE.K26 200:F:
5:\ANALOG\RESONANT.K26 200:F:
5:\ANALOG\SYNAPSE.K26 200:F:
Exit
```

The only function of this dialog is to view the Macro table entries stored in a macro file. This feature is useful when, for example, you are about to delete a macro file and want to know what information is contained in the file before you remove it from the disk.

Editing Macros

The RAM Macro table can be edited from the MACRO page. You can select one or more macro entries and execute any of the following operations on them:

1. Change the Disk ID.
2. Change the bank and mode settings.
3. Delete the selected macro entries.

To edit a macro file already saved on your disk, it is necessary to first load the macro file into the RAM Macro table:

Making sure that Macro Record mode is enabled, go to the Load function, highlight the macro file you wish to edit, and then either select certain entries from the macro file (by pressing **Open** to get to the LOAD MACRO page), or just press **OK** to load the entire macro file. When you see

the following display, press the **Macro** soft button, so that the K2600 will not load the files listed in the macro.

```

Load this macro as: Specified
                    200...299
                    300...399
                    400...499
Insert             Macro  OK  Cancel

```

If you want, you can rebank the macro by scrolling the bank list to something other than **specified**. Similarly, if you override the load mode, it also will be reflected in the RAM Macro table.

To edit entries from the Macro table, return to the MACRO page. For this example we will edit all the entries at once (like other similar dialogs, if you are concerned with only one list entry, it does not need to be explicitly selected with the **Select** soft button). You can use the following double-presses to select and deselect all entries in the list:

- **Left/Right** cursor double-press: Select all macro entries
- **Up/Down** cursor double-press: Clear all selections

With all the entries selected, our display looks like this:

```

Func:MACRO [Record]          Index: 1

*4:\NEWMIX\TRASH\12.K26      200:F:
*4:\POTS\TEAPOT.K26         300:F:
*4:\PANS\FRYING.K26         400:F:
*4:\KITCHEN\SINK.K26        500:F:Obj
Select Modify Load Pause   Off  Exit

```

The two remaining soft buttons are **Modify** and **Load**.

Press the **Modify** soft button to change any items mentioned at the top of this section. You will see the following display:

```

Modify Macro Entries

Modify: Drive
Drive : SCSI 4

4 entries selected.

Delete  OK  Cancel

```

Use the Drive parameter to change the Disk ID for the selected macro entries. This is where you would set the entries' Disk IDs to be **Unspecified** or **Library**. If you increment the Modify parameter, the display switches to let you modify bank and mode information:

```
Modify Macro Entries
Modify:Bank/Mode
Bank :200's      Mode:Fill
4 entries selected.
Delete OK Cancel
```

The initial settings of the parameters on these pages are always taken from the lowest-indexed macro entry that is selected on the MACRO page. In addition, every time you return to the "Modify Macro Entries" page, both the Modify parameter and the highlighted value will be the same.

Pressing **OK** will set all of the selected macro entries to have Disk ID or bank and mode settings according to the parameters set up on this page. The display will return to the MACRO page with the same entries still selected. Any modifications to the parameters will be visibly apparent. Selecting multiple entries for editing allows you to change those entries in a uniform way. In our example above, you could change the macro so that all the files were loaded into a single bank, instead of the separate banks they had previously been loaded to.

Press **Delete** to remove the macro entries from the Macro table. You will see the display:

```
Delete macro entries?
Yes No
```

If you answer **Yes**, the display returns to the MACRO page and all of the previously selected entries will be gone from the list. If you answer **No**, the display will return to the Modify Macro Entries dialog.

Pressing **Cancel** in the Modify Macro Entries dialog will return to the MACRO page with everything that was selected still selected, but with no parameter changes made to any macro entries.

Here are the parameter values for Modify Macro Entries:

Parameter	Values
Modify	Drive, Bank/Mode
Drive	Floppy, SCSI 0–SCSI 7, Unspecified, Library
Bank	000s–900s, Everything
Mode	Append, Merge, Fill, Overwrite, OvFill

Once you have made the necessary changes to the RAM Macro table, you can go to the Save Macro page to write selected (or all) entries to a new disk file (or replace an original macro file that you loaded from a disk).

Macro Insert

You can insert new macro entries into the middle of the RAM Macro table if necessary. This is done by pressing the **Insert** soft button at the "Load this file as:" prompt, when loading a file (if Macro Record is enabled):

```

Load this file as: 200...299
                   300...399
                   400...499*
                   500...599*
Insert           Macro OK Cancel

```

When you press **Insert**, you will see a dialog displaying the current RAM Macro table:

```

Set Macro Insert Point      Index: 2
5:\ARCFEIL.K26             200:F:
5:\METALIC.K26             200:F:
5:\STEREO2X.K26           300:F:Obj
5:\STRINGS\DLBASS.K26     400:F:
5:\STRINGS\CELLOS.K26     400:F:
                           OK Cancel

```

Scroll the Macro table until the entry before which you want to insert is highlighted. In the above display, any new macro entries added by this load operation will be inserted in the Macro table just before the entry for **METALIC.K26**. That is, the new entry would have index 2, the index for **METALIC.K26** would shift from 2 to 3, and the indices for all the entries after **METALIC.K26** would increase by 1.

Press **OK** to enable the insert point. Press **Cancel** to disable the insert point.

The display will return to the Load dialog. If a macro insert point has been set, an indicator will appear at the top left of the display:

(Macro insert)

```

Load this file as: 200...299
                   300...399
                   400...499*
                   500...599*
Insert           Macro OK Cancel

```

The insert point can be disabled before loading, by pressing **Insert** again and pressing **Cancel** from within the Set Macro Insert Point dialog. The (Macro insert) indicator will disappear. Similarly, the insert point can be changed before loading by pressing **Insert** again (the display will highlight the current insert point,) scrolling to a different insert point, and pressing **OK**.

Executing the RAM Macro Table

You can load any group of files listed in the RAM Macro table. This is done using the **Load** soft button on the MACRO page:

```
Func:MACRO [Record] Index: 1
1:\STRINGS.K26 200:F:
*1:\PIANO.K26 300:F:
1:\DRUMS.K26 400:F:
*1:\NOISE.AIF 500:F:
Select Modifs Load Pause Off Exit
```

Pressing the **Load** button gives you the choice of loading either all of the files in the Macro table or loading only the files that are selected:

```
Load selected items or all items?
```

```
All Selected Cancel
```

If you don't have any items explicitly selected (with an asterisk), the message you see when you press **Load** is slightly different:

```
Load current item or all items?
```

The current item is the file that was highlighted on the MACRO page.

The files that have been selected for loading will be loaded in their respective order in the Macro table, using the bank and mode parameters that are specified in the list. In the example diagram above, if you were to load selected items, first `\PIANO.K26` would be loaded into the 300s bank, and then `\NOISE.AIF` would be loaded into the 500s bank.

Saving and Loading a Macro Table in a .K26 file

Macro table objects can be explicitly saved or loaded (without being "executed") using **Save Individual Object** and **Load Individual Object**. If for some reason you wanted to save a Macro table that you've been working on, and then be able to load it again later on to be worked on some more, you would use this method. The Macro table can be selected for saving and loading just like any other object. When you load a Macro table using **Load Individual Object**, it will overwrite any Macro table already in memory. Once it is loaded, you may have to go to the

MACRO page and enable Macro Record mode to continue to record further load operations into the macro.

The “Save Everything” feature of the Save dialog does not include the Macro table. This is done to prevent inadvertent distribution of what would most likely be a meaningless Macro table to other users.

Aborting a Macro Load

You can abort the process of loading a macro file. Aborting can only be done “in between” files that are being loaded, and not during the load of any one file (short of powering off or doing a soft reset—but we don’t recommend this).

Aborting a macro load is done by pressing and holding down either of the **Plus** or **Minus** buttons. This should be done at least one-half second before you anticipate the current file to finish loading, or else the K2600 will not sense that you wish to abort the load.

You will see the following question after the current file finishes loading:

Abort the macro?

Yes No

It may be a good idea to practice using this method of aborting a macro file load, so that when you accidentally load an out-of-date macro file with 25 entries all at the wrong SCSI ID, you’ll remember how to abort the process. This same method (of holding the **Plus** or **Minus** buttons down) is also used to abort the Backup feature and the multiple file load feature.

If you run out of object or sample RAM, you will have one opportunity to abort the macro as explained above. However, if you continue from that point you may end up seeing the same error message “Memory is full” for each file to be loaded. This can be a rather tedious process, however it is still possible to abort out of this by holding down the **Plus** or **Minus** button simultaneously while pressing **Yes** when you see the following question:

Abort this Partial load?

Yes No

If the macro that you abort was loaded by multiple selection together with other files, you will have to abort twice, once to get out of the current macro file load, and a second time to get out of the multiple file load process.

If you are aborting a macro because the Disk ID is incorrectly specified (as evidenced by lots of "Problem mounting disk" errors) you will need to hold down either the **Plus** or **Minus** button while pressing **OK** to satisfy the error prompt. The display may blink while holding down the **Plus** or **Minus** button, but as soon as you have pressed **OK** you will see the "Abort the macro?" question.

Remote Macro Load

You can remotely load a macro into the K2600 from a sequencer. This can be useful, for example, if the K2600 is inaccessible or inconveniently situated.

Once you've created the macro that you will be remotely loading from the sequencer, set the sequencer to record, then dump the macro object to the sequencer using the **Dump** soft button on the Master-mode Object page. Then, add the SysEx LOADMACRO (10h) command to the sequence, following the macro object. Although some sequencers allow you to record a SysEx command directly into a sequence, the K2600 provides a convenient shortcut, described in the next paragraph.

To add the LOADMACRO command to a sequence (after dumping the macro object to the sequencer), leave the macro object highlighted on the Master-mode Object page, then press the **Left** or **Right** cursor button. The K2600 will display: "Send SysEx Load Macro command?" Press the **Yes** soft button and the K2600 will add the LOADMACRO SysEx command to the sequence.



Note: You cannot remotely load a macro to the K2600 while the K2600 is on the Disk-mode page or in an edit mode.

Disk Utilities

The Disk Utility functions provide certain necessary information about disks and their files and directories. These functions are useful when you want to know how your disks are organized and how much disk space you have available. They also help you to locate files and directories.

To access the Disk Utilities page, press the **Util** button from the Disk-mode page. The Disk Utilities page looks like this:

```
Util: SCS1 2
```

```
Select utility function:
```

```
Info Find List Free Done
```

The functions on the Disk Utilities page are used for finding out information about the Current Disk. The Current Disk is always indicated on the top line of this page. If you want to use the utility functions for a different disk, you must first set it to be the Current Disk on the Disk-mode page.

Here is a brief description of each soft button:

- Info** Provides general information about the current disk, such as the Disk ID and formatting specifications.
- Find** Enables you to search for files that match a certain character string in their filenames.
- List** Lists an expanded directory tree from any level of the hierarchy, showing the current directory's contents, and the contents of all of the current directory's subdirectories. This function can be used to determine the total size of files within any tree of subdirectory. It is also helpful for finding files on the disk.
- Free** Calculates the available space on the disk.
- Done** Exits to the Disk-mode page.

Find Files

The Find files utility first prompts you to enter a character string to be searched for:

```
<>KbdNaming:Off
```

```
Search string: RAT_
```

```
Delete Insert >>End Choose OK Cancel
```

You can use the **Choose** button to grab the text of a filename from the current disk, as described previously.

If you press **OK**, the K2600 will begin to search the disk for any files or directories that contain the search string in their names. The search starts in the root directory and searches the entire disk. When a matching file or directory is found, you'll see one of the following:

```
Found file:
```

```
\BABYTOYS\RATTLE.K26
```

```
FindNext Go To Cancel
```

```
Found directory:
```

```
\CRATES
```

```
FindNext Go To Cancel
```

Disk Mode

Disk Utilities

If the search string is found anywhere within a filename it will be matched. The search algorithm independently checks both the filename and the extension. For example, if you wanted to find any macro file on the disk, you could enter in **MAC** for the search string. This would find any macro files as well as any files or directories that have **MAC** in their filename.

When a match is found, there are three choices displayed:

- FindNext** Continue searching the disk for another file or directory that matches the search string.
- Go To** Exit to the Disk-mode page, setting the current directory and file index of the K2600 to the location of the found file or directory.
- The next disk function you choose will display the current directory with the found file already highlighted. If a directory was found, then the first file in the directory list will be highlighted.
- Cancel** Exit to the Disk-mode page.

When the search has checked all of the items on the disk, you'll see this dialog:

```
Search completed.
```

```
OK
```

If no matching files were found, you will also see

```
(No files found)
```

The K2600 will remember the last search string that you entered. This makes it easy to repeat the same search. If you press **Util-> Find** again, the "Search string:" dialog will contain the previously used string.

List

The List utility allows you to view directories on a disk with the expanded contents of all subdirectories. Each line is indented according to its directory level, so that you can get sense of how your directory tree is organized.

```
Dir:\          [ 1968K]  Index:  1

ELEPHANT.K26   148K
BSOUNDS\
  TRUMPETS\
    JSBACH.K26  712K
Root  UP    Down    Go To  Exit
```

The Dir field shows the directory that is being listed. The size value displayed on the top line of the display represents the total size of the directory subtree that is currently being viewed. The **Root**, **Up**, and **Down** soft buttons navigate through the directory hierarchy:

- Root** Display the disk from the top level, meaning that all of the files on the disk will appear in the scrollable list.
- Down** Set the display to the level of the highlighted file or directory.
For example, scrolling to **TRUMPETS** in the above list, and pressing **Down**, would focus the list on the contents of the **TRUMPETS** directory, starting with **JSBACH.K26**.
- Up** Set the display up one directory level.
- Go To** Exit to the Disk-mode page, setting the current directory and file index to the location of the highlighted file or directory.
The next disk function you choose will display the current directory with the found file already highlighted. If a directory was found, then the first file in the directory list will be highlighted.
- Cancel** Exit to the Disk-mode page. The current directory is unchanged.

The files are listed in the order that they appear on the disk, unalphabetized. The traversal order of the directories is the same one that is also used for the Backup function.

Free

The Free utility calculates the amount of free space on the current disk and displays the result on the Disk Utilities page. This may take a small amount of time to calculate, depending on the disk.

```
Computing free space on SCSI 2
```

```
Please wait...
```

```
Disk Utility: SCSI 2 (100%)
Used:23% Free:94814K Total:124396K
```

```
Select utility function:
```

```
Info Find List Free Done
```

The parameters tell you the following:

- Used** The percentage of the disk that is taken up by the existing information stored on it.
- Free** The amount of disk space available for new files.
- Total** The size of the disk. This will be the size of the usable partition if MS-DOS format.

For SCSI disks, if the current disk was formatted on a PC or a Mac in MS-DOS format and contains at least one primary partition, you will see the **(DOS)** indicator on the top line. Using this format is described in *MS-DOS File System Compatibility* on page 13-71.

For floppy disks, the density (HD or DD) will be displayed. All K2600 floppy disks are MS-DOS format compatible.

Moving Files Between Directories

Files and directories can be moved from one directory to another on a given disk. You can either choose multiple files to move using the **Select** soft button, or just move the single highlighted file or directory (if no other files are selected). As you would probably expect, moving a directory also moves all the files within the directory. To use this function, press the **Move** soft button from the Disk-mode page. Then choose the file or files that you want to move:

```
Dir:\                               Sel:0/15   Index: 1

File to move: ATOMTOM .K26          98K
               BLOWFISH.K26         36K
               COLORS .K26          109K
Total: 6846K
DRUMHITS      (dir)
Select Root  Parent  Open  OK  Cancel
```

Press **OK** when you have made your selection. Press **Cancel** to return to the Disk-mode page.

The K2600 remembers the most recent destination directory that a file was moved to. If the current directory is different from the most recent destination directory, you will see the question:

```
Use default directory for ATOMTOM.K26?
(Path = \DRUMHITS\)

Change OK Cancel
```

Press **OK** to use the default.

Press **Change** if you want to select a different destination from the default shown. The K2600 will then display a directory selection dialog (see page 13-13), and you can select the move destination directory from there:

```
Dir:\                               Sel:0/15   Index: 4
               BLOWFISH.K26         36K
               COLORS .K26          109K
Select dest dir: DRUMHITS (dir)
               EARTHLNG.K26         144K
               HANDCLAP.K26         645K
Total: 6846K
INDUSTRY      (dir)
Root Parent  Open  Current SetDir Exit
```


The move operation begins when you press either **Current** or **SetDir**.

If the default destination directory is the same as the source directory, the K2600 will skip the Use default directory? question and instead go right to the Select dest dir dialog.

A good way to organize files into subdirectories is by using the Move command. First, create the subdirectories you need, using the **NewDir** function. Then, use multiple file selection to select the files to be grouped into a particular subdirectory. The files can be moved to their new location in one operation.

For each file that is moved, you will see a confirmation message:

```
\ATOMTOM.K26 moved to
\DRUMHITS\ATOMTOM.K26
```

Note the following:

- You can select multiple files for moving within a directory. However, you cannot move files from more than one directory at a time. If you select any files and then switch to another directory, the files you had chosen will be deselected.
- If you are moving a directory, you cannot move it in to a subdirectory of itself.
- If the source and destination directories are the same, the file will not be moved, and an error message such as the one below is displayed. This would happen if you pressed **Current** above.
- The same message will be displayed if there is a file in the destination directory with the same name as the file to be moved.

```
File \ATOMTOM.K26 not moved.
```

Renaming Files

Press the **Rename** soft button (from Disk mode) to rename files or directories without loading them. When you press **Rename**, the K2600 will prompt you to select the file to be changed, by showing you a list of the files found on the current disk.

When you've selected the file to be renamed, press **OK**, and the K2600 will ask you to enter the new filename. When you've done this, press **OK**, and the filename will be changed.

```
Dir:\                               Sel:0/1                               Index: 1
```

```
File to rename:FILE9876 .K26 2048K
```

```
Total:2048K
  Root  Parent  Open  OK  Cancel
```

This function can be used to change only the 8-character filename, not the extension. When you press **Rename**, the File List dialog is displayed and you can navigate through the directories to choose the file or directory you wish to rename. Unlike the other disk functions that use the File List dialog, you will not see the **Select** soft button. This is because you can rename only one file

at a time. Therefore you simply choose the file you want and press **OK**. The K2600 will then ask you to enter a new name, which you can do a number of ways: Alpha Wheel, **Up/Down** cursor buttons, alphanumeric buttonpad, or keyboard naming (see page 5-5 for a description of keyboard naming). Once you've done this, press **OK** again, and the filename will be changed.

Deleting Files and Directories

Press the **Delete** soft button (from Disk mode) to delete files and directories. The Delete function supports multiple selection of files for deletion. Select one or more files and/or directories to be deleted, and press **OK** (or **Cancel** to abort). Be careful! You don't get a second chance to change your mind once you've pressed **OK**. Once a file is deleted, it's gone. Remember the fundamental directive of computer users: Save early, save often; make backups.

```

Dir:\                               Sel:2/4                               Index: 2
                                     BLUES                               (dir)
File to delete: MOTOR                .K26*                               98K
                                     QUACKS                            .K26                               344K
                                     ZAPPER                            .K26*                               802K
Total: 1244K
Select  Root  Parent  Open  OK  Cancel

```

When you press Delete, the File List dialog appears, and you can navigate through the directories to choose the file or directory you want to delete.

Within the current directory, you can select multiple files for deletion. You can't, however, delete files from more than one directory at a time. If you move to a different directory in the middle of a deletion, any files you had selected up to that point get deselected.

You cannot delete directory if it has any files in it. To delete a directory, you must first delete its contents. Also, you can't use the **Select** soft button to select a directory for deletion. To delete a directory (once it's empty, of course), highlight the directory and press **OK**. If the Confirm parameter on the Master-mode page is set to **On**, the K2600 will ask you if you're sure. Press Yes and the K2600 begins deleting the selected objects. If one of the selected objects is a directory that contains files, the K2600 will tell you that it can't delete the directory.

When selecting files and directories for deletion, you can use the **Open** soft button to open directories and files. Opening a directory at this point is useful for selecting files within the directory. Opening a file is less useful, since you can't delete individual objects from files. You can view the file's contents, but you can't select any of them for deletion.

Backup and Copy Functions

File Backup

To access the Backup function from the Disk-mode page, first make sure that the current disk is set to be the disk that you want to back up. Next, press the **Backup** soft button:

```
Dir:\          Sel:0/15      Index: 1

Set backup dir:ANIMALS .K26      1097K
                   BREAKAGE      (dir)
                   LOWINST      (dir)
Total:9040K      PLANKTON      (dir)
Root Parent Open      Current Exit
```

Select a directory to be backed up (see *The Directory Selection Dialog* on page 13-13). Backup allows you to copy all of the files within a directory from one disk to another. All of the files within the directory that you choose (plus all of its subdirectories and the files within them) will be copied to the new disk. If you want to backup the entire disk, then make sure the current directory is the root directory (as in the picture), and press **Current**.

Next, you will see a dialog for choosing the destination disk:

```
Destination disk:SCSI 0
                   SCSI 1
                   SCSI 2
                   SCSI 3
                   OK Cancel
```

Select the disk you wish to transfer files to. It must be different from the current disk.

Next, you can select a directory on the destination disk that will receive the transferred files.

```
Use default directory on SCSI 0?
(Path = \)
```

```
Change OK Cancel
```

The default is always the root directory on the destination disk. Press **OK** to select the default. To select a different directory, press **Change**.

Next, select the Backup mode when you see the following question:

RePlace or increment mode?

Help RePlace Increm Cancel

Replace Any files to be transferred that already exist in the destination directory will be replaced (overwritten).

Increm Any files to be transferred that already exist in the destination directory will be skipped (not transferred).

Help Displays a reminder about the meaning of Replace and Increment modes.

After you select the Backup mode, you will see a confirmation dialog with all of your selections so far:

Press OK to start backup:SCSI 4->SCSI 0
Mode =RePlace
Source=\
Dest =\

SetFile OK Cancel

OK Begin the Backup function according to the parameters on this page.

Cancel Exit to Disk mode.

SetFile Set Backup starting file. This is mainly used when you are backing up files from a larger SCSI disk to several smaller removable media disks. Once one of the removable destination disks is full, note the last file that was successfully copied. Enter the Backup function again, setting up the source and destination path parameters exactly as before. But this time use the **SetFile** button to start from the file after the last file copied.

You will notice that the file list displayed when **SetFile** is pressed is not in alphabetical order, but in the actual order the files occur in the directory on the disk:

dir:\ Sel:0/15 Index: 1
Set start file:ZYXWUITS .K26 418K
PLANKTON (dir)
ANIMALS .K26 1097K
Total:9040K UEGGIES .K26 2801K
Root Parent Open OK Cancel

Find the last file copied from the previous partial backup. Set the list index to one entry past the location of this file. If this file is already the last entry in the file list, the “next” file to continue the multi-part backup would be the file or directory that comes after the file list entry for the currently viewed directory. To find this file or directory, you will need to look in the Parent directory.

A large SCSI hard disk backed up in this way can be restored by individually backing up the removable media onto the SCSI hard disk.

Backup and Copy will transfer files much faster if you have cleared your object RAM first using the Delete Everything command (save any objects in RAM to disk first).

When using the Backup function to transfer files from SCSI to floppy, directories are ignored (that is, not created on the floppy). This “flattens” out any directory structure so that multi-disk files can be created on the floppy disks.

File Copy

The Copy function lets you copy one or more files from one disk to a specified directory on the destination disk.

Copy is similar to Backup, with a few differences:

- You can't copy directories.
- The Replace or increment mode dialog does not appear. Instead, if you're copying a file that already exists in the destination directory, the K2600 asks “Replace existing *filename* on *destination disk*?”

```
Dir:\                               Sel:0/15   Index: 1

File to copy:ZYXWUUTS .K26         418K
              PLANKTON              (dir)
              ANIMALS .K26          1097K
Total:9040K   UEGGIES .K26         2801K
Select Root Parent Open OK Cancel
```

Creating a Startup File

You can create a macro file that will be automatically loaded when you power up your K2600. This file, called the startup file, or boot macro, can be on a floppy disk or on a disk at any SCSI ID. See the section on macros for background information.

The steps needed to create a Startup file are:

First, create a macro file called **BOOT.MAC** in the root directory of the disk that you will use as the Startup disk. Specify in the macro the exact ordering of files that you would like to have loaded into the K2600 when powered on. When you save the macro file, just name the file **BOOT**, and the K2600 will add the **.MAC** extension.

Second, set the Startup parameter on the Disk-mode page to be the Disk ID of the Startup disk. So, if your **BOOT.MAC** file was on a floppy disk, set the Startup parameter to **Floppy** and make sure that you have the correct floppy in the drive when you next turn the K2600 on.

When the K2600 is powered on, it will display the following message (after the introductory VAST logo):

```
About to load startup file...
```

```
Cancel
```

The K2600 looks for a file **BOOT.MAC** in the *root directory* on the disk specified by the Startup parameter. If the file is not found, or the disk cannot be accessed, you will get an error message. The Startup load can be bypassed in the first few seconds after the K2600 is turned on, by pressing the **Cancel** button.

If **BOOT.MAC** is found by the K2600, it will begin to load the macro file as if you had loaded it explicitly from the Load function in Disk mode. When the macro has completed, you will see the following:

```
Macro BOOT.MAC completed...
```

The K2600 will go directly to Program mode afterwards.

Deleting Banks in a Startup File

You may want the Startup file to clear out one or all banks in the K2600 before loading files. This could help overcome the problem of having “silent” copies of programs in your RAM that depend on samples that are no longer there (because they disappeared the last time the K2600’s power was turned off). The following trick will allow a macro entry to essentially function as a Delete Bank or Delete Everything command:

Create a file somewhere on (preferably) your Startup disk, by saving an empty bank from the K2600. Call the file **NULL.K26**. Now, insert this file at the beginning of a boot macro you are creating: load the file, specify the bank you want to delete in the Startup file (or specify **Everything** if you want to clear RAM completely), and specify **Overwrite** for the load mode. Make sure you press **Macro** and not **OK**, so that the overwrite doesn’t take place until you use the Startup file.

Here is what that macro entry for this file might look like on the **MACRO** page, if you were doing a “Delete Everything”

```
3: \NULL.K26                                E:0:
```

The **E:0:** stands for “Load to all banks, using Overwrite mode.”

MS-DOS File System Compatibility

The K2600 is compatible with fixed and removable disk drives that use the MS-DOS hard disk and floppy disk formats. If you want to use this feature, *you must first format the disk media on a computer* such as a PC compatible or a Mac running appropriate MS-DOS conversion software.

The MS-DOS hard disk format is structured so that the disk can be split up into multiple partitions. *The K2600 uses only the first partition that it finds on the disk.* Therefore, it is usually best to format the media with only one partition taking up all usable space on the disk. Working from the K2600 front panel with an MS-DOS formatted disk will appear the same as working with a disk that has been formatted with the K2600's own Format function (on the Disk-mode page). The Free utility (Disk mode->**Util**->**Free**) can be used to identify whether a disk is in DOS format or in standard K2600 format. If the **(DOS)** indicator is displayed, it means the K2600 has determined that the disk is a DOS-format hard disk with at least one primary DOS partition. Floppy disks do not display the DOS message.

Some advantages of working with an MS-DOS compatible disk format over the standard K2600 format are:

- Easier sharing of K2600 files with other users over computer communications lines
- Ability to use graphical file management interfaces for organizing files and directories
- Ability to back up K2600 data using a PC compatible or Mac with commercially available software
- Easier transfer of data using standard file formats such as AIFF, WAVE, and MIDI Type 0, for importing and exporting samples and sequences

Filename Compatibility

DOS format does not support space characters in filenames. The K2600, though, allows spaces to be used within filenames. If you plan to transfer files between the K2600 and a DOS compatible computer, it is recommended that you use only filenames without space characters in them. Otherwise, a computer may have trouble identifying the files.

Importing and Exporting Data Using Standard File Formats

The K2600 supports three common data interchange file formats, Apple Interchange File Format (AIFF), Microsoft RIFF WAVE, and MIDI Type 0 and Type 1. The first two are used to transfer sample data, and the latter is used for sequences.

The K2600 can recognize these file types automatically on loading, regardless of the file extension. You can load these files as you would any standard K2600 file, and also as part of a macro file load. The most recent sample file loaded will become the "preview" sample, which means you can quickly access it for playing or editing on the SampleMode page (press the **Master** mode button, then the **Sample** soft button). Similarly, the most recently-loaded MIDI Type 0 file will become the current song on the Song-mode page.

Disk Mode

Importing and Exporting Data Using Standard File Formats

You can save files in these formats on the Export page. This page is accessible from the Disk-mode page by pressing **Save-> Export**.

```
Save AIFF file                               Index: 1

Sample 200 NewSample                          C 4S 100K
Sample 201 Babaganoush                       C 4S 444K
Sample 202 YaYaYa                            C 4S 190K
Sample 203 GregorianChant                    C 4S 6515K
AIFF WAVE MIDI OK Cancel
```

The Export page allows you to save one sample or song object per file. Choose the format you wish to save in, and press the corresponding soft button. For AIFF and WAVE, only sample objects are listed. For MIDI Type 0 and Type 1, only song objects are listed. Scroll to the object that you wish to save, and press **OK**. The dialog will proceed the same as if you were saving a K2600 file. You will be prompted for a filename, and will have the option to select a different default directory to save the file in.

The K2600 will automatically place a standard extension on the file when it is created on the disk. These extensions are sometimes necessary when transferring files to external programs that can recognize the file format based on the extension. They also help you to recognize the format of each file when looking at a directory listing. You can use the Find Files utility (Disk mode-> **Util-> Find**) to search for files that match a certain extension. The standard extensions used on the files are:

.AIF AIFF
.WAV WAVE
.MID MIDI Type 0, Type 1

The first time you enter the Export page after powering on (or after a soft-reset), the format defaults to AIFF. After that, the K2600 remembers the most recent format that you used. For example if you save a MIDI Type 0 file, and then go back to the Song-mode page to record more sequences, the next time you return to the Export page, the file format will still be set to **MIDI**, and all of the song objects will be listed. You can audition the samples and songs the same way as you would on the Save Object or Object Utility pages (by pressing the **Left** or **Right** cursor buttons).

AIFF and AIFF-C Files

The K2600 can read 8 or 16 bit AIFF files, mono or stereo. The sample rate, sustain loop, loop mode, base note, sample name, and sample detuning are supported. AIFF-C files that do not use compression can also be read by the K2600. The K2600 will save 16-bit AIFF files, either mono or stereo.

WAVE Files

The K2600 can read 8 or 16 bit WAVE files, mono or stereo. It can also save 16-bit WAVE files, either mono or stereo.

Standard MIDI Files (MIDI Type 0 and Type 1 Files)

The K2600 reads and writes MIDI Type 0 (single-track) and Type 1 (multi-track) files. The K2600 supports all musical timestamp resolutions, and automatically scales imported information to the K2600's internal sequencer resolution of 768 ticks per beat, if necessary.

Tempo information is supported, defaulting to 120 beats per minute if no tempo is specified.

SysEx data are supported.

If there is a time-signature event in a file, the first one becomes the song's time signature. Otherwise, the time signature defaults to 4/4. Time signature changes are not supported.

Apart from SysEx, tempo and time-signature events, all other meta events are skipped to minimize RAM usage.

Importing Samples from Other Manufacturers

The K2600 will load samples from Akai, Roland, and Ensoniq EPS and EPS-16 Plus SCSI disks and floppies (including ASR-10 "Ensoniq" format), using the Load operation. (Roland samples can be loaded only via SCSI, while all other samples can be loaded from floppy or via SCSI.) The displays you see will vary depending on the samples you're loading, but several features are the same. We'll describe the similarities first, then elaborate on the differences.

If you're working with sample files in one of these formats, you may notice that once you select the disk that contains the samples (this is done with the Current Disk parameter on the Disk-mode page), the soft buttons change to accommodate the structure and content of the disk. The K2600 automatically recognizes the type of disk when you select it.

Press the **Load** soft button, and you'll see a page prompting you to select something to load (we'll call them objects, since different manufacturers give them different names). The top line of the display will tell you the number of objects available of the currently selected type, as well as the index number of the currently selected object. You can select any object in the list by typing its index number on the alphanumeric buttonpad and pressing **Enter**. The next step is to use the soft buttons to select the type of object to be loaded.

Once you've selected the type of object to load, press the **OK** soft button, and the bank dialog will appear, enabling you to select the bank into which the object(s) will be loaded. When you've selected a bank, press the **OK** soft button, and the loading process will begin. At the center of the display you'll see the object currently being loaded. The top line of the display will fill with asterisks to indicate the status of the current object. The bottom line will tell you the total number of kilobytes to be loaded.

The K2600 will create layers as necessary when you load objects. These layers have the same settings as Layer 1 of Program 199.

When the load is complete, the Disk-mode page will reappear. You can now proceed with another load, or go to any other mode. If you exit Disk mode, the K2600 will remember the file that you selected most recently. When you return to Disk mode, this file will be highlighted.

Once you've loaded a sample or program file, you can save it as a Kurzweil object. You'll find it can be loaded and backed up much faster as a Kurzweil object than in its original format.

Akai

The first page to appear is the page for loading files. The soft buttons name the operations: **HDrive**, **Volume**, and **File** on the left, and **OK** and **Cancel** on the right.

The hierarchy of objects is shown by the three soft buttons on the left. The display prompts you: "File to load:" The **HDrive** button selects the partition on the currently selected disk. The **Volume** button selects volumes within the currently selected partition. The **File** button selects an individual sample file from within a volume. The **OK** button, toward the right, executes the displayed function: partition selection, or loading a volume or file. The **Cancel** button returns you to the Disk-mode page.

When you press the **HDrive** button, the center of the display's top line shows the currently selected volume in the currently selected partition. The prompt at the center of the display will read: "HD Partition." The list of available partitions will appear following the prompt. They're usually named A through F. Use the cursor buttons or numeric entry to highlight a different partition. Pressing the **OK** soft button will select the highlighted partition.

Pressing the **Volume** button will change the prompt to "Volume to load:" The list of available volumes in the current partition will appear. The center of the top line will show the current partition. The Layer buttons will scroll through the list of available partitions. Use the cursor buttons or numeric entry to select a different volume. Pressing the **OK** button will load the entire highlighted volume, unless the volume is larger than your available sample RAM, in which case, the K2600 will load as many files as will fit.

The Bank dialog will appear, enabling you to select the bank that will receive the volume. Press **OK** again, and you'll be prompted to press either the **Progs** soft button, which will load program information in addition to the samples, or the **Samps** soft button, which will load only the sample information. Programs are identified by the extension **.p**, and are stored in program RAM. Samples have the extension **.s**, and are stored in sample RAM. You can press **Cancel** to return to the Disk-mode page without loading the volume.

If you load sample objects, you'll see the following prompt: Create preview program/keymap? If you answer **Yes**, the K2600 will load the samples into a program that it creates based on Layer 1 of Program 199. Loading program objects will load multi-layer samples and keymaps, and sometimes velocity switches. The K2600 will create layers as necessary when you load program objects. These layers have the same settings as Layer 1 of Program 199. In some cases, the K2600 will also create stereo keymaps to preserve the separation of stereo samples.

If you press the **File** button, the prompt will change to the Load dialog. You can view the list of files with the cursor buttons, or use numeric entry. The top line of the display will show the currently selected volume. Select different volumes with the Layer buttons. The size of the currently selected file, in kilobytes, is shown just above the soft buttons on the left. Press the **OK** button to load the highlighted file.

Press **OK**, and the Bank dialog will appear. Press **OK** again, and the file will be loaded into the highlighted bank.

Sometimes you may find an Akai floppy disk that your K2600 can't read. In this case, check the format of the disk. Akai allows you to format a double sided-double density (DD) disk for high density (HD). This is not standard in the computer industry, since DD disks are not verified for use as HD disks. If this is the case, you will need to load the disk into an Akai, then save it out to a properly formatted disk.

Roland

For Roland disks, the hierarchy is a bit different; the objects that can be loaded are called volumes, performances, patches, and samples. The page that was selected last time a SCSI load was executed will appear when you initiate the load operation. Following the prompt is the list of available objects, with the size of the object in kilobytes displayed as well. The top line of the display will show the number of available objects of the selected type.

Use the soft buttons to highlight the object to be loaded. The layer buttons will take you through the current object list in increments of 100. Press **OK** to execute the load. The Bank dialog will appear. Press **OK** again, and the object will be loaded. The display will update you on the progress of the load.

EPS

For EPS disks, the hierarchy consists of files and directories. Directories can be nested several layers deep. When you press the **Load** soft button, you'll be prompted to select a file or directory to load from the list of available files and directories. The currently highlighted object will be either a file or a directory. If it's a file, its name and size will be shown following the prompt. If it's a directory, its name appears, followed by **(dir)** to indicate its type. The Layer buttons will take you to the first and last files of the currently selected directory. Note that if you're loading from floppy disks, you won't see any of the displays or soft buttons relating to directories, since the directory architecture is not supported for floppies.

When a file is highlighted and you press **OK**, the Bank dialog appears; press **OK** again to load the file. When a directory is highlighted and you press **OK**, you enter that directory, and the list of files and subdirectories in that directory appears, each file followed by its size, and each subdirectory, if any, followed by **(dir)**. The top item in every list you select is always the parent directory of the files below it. Select the top item in a list to go up one directory level.

Pressing the **Exit** soft button will take you one level back up the hierarchy. Pressing it repeatedly will take you to the root directory—the directory at the top of the hierarchy. The quickest way to the root directory is to press the **Root** soft button. The top line of the display shows you the name of the currently selected directory (or subdirectory). Pressing the **All** soft button will load all files in the current directory (but not any subdirectories). The Bank dialog will appear, and when you press **OK**, you'll be prompted to press the **Progs** button to load program information in addition to the samples, or the **Samps** button to load only the samples.

