Introduction

EL-01-0988

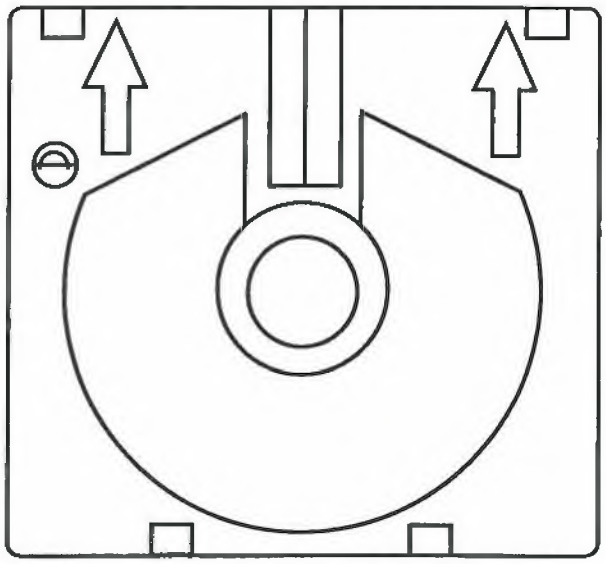
Effects Library organization

The Effects Library is a collection of sampled sound effects created for New England Digital by Sound Ideas. Each sampled sound is stored as a **sound file** on an optical disk. Some sounds are available in either mono or stereo and at sampling rates of either 50 kHz or 100 kHz.

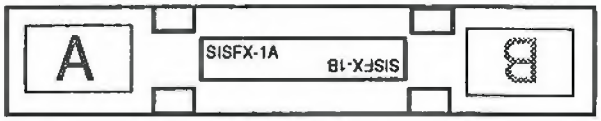
Library volumes

The Effects Library is contained on both sides of a single optical disk. Each side, called a **volume**, is treated as if it were a separate disk. The volume names are **SISFX-1A** and **SISFX-1B**. Approximately five percent of each volume is empty, so you can add new sound files or modified versions of existing sound files to your Effects Library. (See the section "Storing sound files and timbres.")

Effects Library optical disk



underneath view



side view

Effects Library organization (con't)

Sound file identification

Sampled sounds are stored as sound files on the Effects Library optical disk. Each sound file has a name, a caption and one or more category assignments.

A **sound file name** consists of eight characters that provide coded information about the sampled sound, as shown in the following table.

character positions	coded information
1-2	category
3-4-5	caption abbreviation
6-7-8	version number

For example, the sound file named LFCDS--3 can be decoded as follows.

characters	coded information
LF	LAUGHTER
CDS	Small Crowd, Indoor
--3	third version

The sound file named LFCDS--3 is cross-referenced to both the HUMAN SOUNDS and CROWD categories.

The three characters available for the version number provide room for up to 999 versions of one sound file. If you add your own sound files to the Effects Library disk, we strongly recommend that you begin with version number 500. This will insure that your filenames will not duplicate filenames that we add in the future.

Sound file identification (con't)

The **caption** provides descriptive information about the sound file. It includes "Mono" if the file is not stereo, and "100 kHz" if the sound was recorded at a sampling rate of 100 kHz. If no rate is included in the caption, the sound was recorded at a sampling rate of 50 kHz.

A **category** contains several related sound files. Each category has a unique two-letter code. For example, the category named LAUGHTER is identified by the code LF. See the section "Categories in the Effects Library" for a list of category codes.

A sound file may be cross-referenced to up to eight categories. Although a sound file may appear in more than one category, the file actually is stored only once on the optical disk.

Preparing to use the Effects Library

The power switch is located on the back panel of the optical drive unit. We recommend that you connect the unit to a circuit controlled by a master switch so that it is turned on with the rest of the system.

Software installation

Before using an optical disk, be sure it is included in the device configuration for your system. Answering yes to the optical disk question during a Winchester installation automatically sets this configuration for you.

If you are not installing new software when adding the optical disk drive, use the Configur utility to configure your system. The Configur utility is run from the Monitor. (See "Utility programs" in the *Reference guide* for more information about the Configur utility.)

1. Make sure that the top-level catalog of W0: is the current catalog.

2. At the Ready prompt of the Monitor, type **configur** and press Return.

   The Configur utility display appears on the screen.

3. Set the O0: option, listed under Storage Devices, to **12" Write-Once.**

4. Press Return, type **ok** and press Return again.

   Your system software is reconfigured to recognize the optical disk.

Inserting the optical disk

The optical disk is contained in a protective cartridge. Do not attempt to open the cartridge. Follow these steps to insert a cartridge into the drive.

1. With the optical drive turned on and the Ready Indicator light (on the START/STOP button) off, open the door of the optical drive by pressing down on the door handle.

2. Insert the cartridge with the arrows pointing toward the drive.

   You can insert the cartridge with either side up. With the cartridge in the drive and the door open, the letter on the left of the cartridge indicates which volume of the disk (A or B) is being read.

3. Close the drive door.

4. Press the START/STOP button on the front panel of the optical drive.

   The Ready Indicator light on the button blinks for about two seconds. When the light stops blinking, the drive is ready.

   Note: If this is the first disk you insert after turning on the power, a series of diagnostic tests is run before the Ready Indicator light begins to blink.

Preparing to use the Effects Library (con't)

Removing the optical disk

1. Press the START/STOP button.

   The Ready Indicator light blinks. When the light stops blinking, the disk is ready to be removed.

2. Press down on the door handle to open the drive door, and pull the cartridge out of the drive.

Index files

A special subcatalog, called .INDEX and stored in the top-level of your Winchester disk, contains an index file for each optical volume used with your system. The index files list sound file names and lengths, all the categories to which each sound file is assigned and the first 62 characters of each sound file caption.

Before using the Effects Library for the first time, you need to create its two index files on your Winchester.

Preparing to use the Effects Library (con't)

Copying the index files

The first time you use the Effects Library disk, the index file associated with each volume must be copied to the .INDEX subcatalog on the Winchester disk.

1. Insert the optical disk into the optical drive and press the START/STOP button, as explained in "Inserting the optical disk."

   The following message appears on the screen.

   The index for this optical volume is not up-to-date.
   [UPDATE] [CANCEL]

2. Click [UPDATE].

   A message appears at the bottom of the screen to indicate that the index for one volume is being copied from the optical disk to the .INDEX subcatalog of your Winchester.

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Copying the index files (con't)

3. When the process is complete, remove the optical disk from the drive.

4. Turn the disk over and reinsert it into the drive.

   The same message appears on the screen.

   > The index for this optical volume is not up-to-date.
   > [UPDATE] [CANCEL]

5. Click [UPDATE].

   A message appears at the bottom of the screen to indicate that the index for the other volume is being copied from the optical disk to the .INDEX subcatalog of your Winchester.

Note: If there is not enough room on the Winchester for the index files, an error message appears. You can use the Resize utility to increase the size of the .INDEX subcatalog. (See the section "Resize" in the *Reference Guide* for details.)

Preparing to use the Effects Library (con't)

Loading the volume

Each time you insert a disk into the optical drive, the Winchester index file for the current volume must be loaded into computer memory. This is called "loading the volume." A volume can be loaded automatically or manually.

- After you insert the desired optical disk, select either the Sound File Directory or the Optical Disk Display from the Main Menu.

  The current volume is loaded automatically. The screen shows a list of all sound files stored on the volume.

Loading the volume (con't)

If the Sound File Directory is already shown on the screen when you insert the optical disk, follow these instructions to load the volume manually.

1. Click or type the number preceding the optical disk in the list of devices.

   A message appears near the center of the screen.

   > The current optical volume does not match your current index. [LOAD] [CANCEL]

2. Click [LOAD].

   The current volume is loaded, and its sound files are listed at the bottom of the screen.

If the Optical Disk Display is already shown on the screen when you insert the optical disk, you manually load the volume in the following way.

- Click the Load Volume command box near the lower left corner of the Optical Disk Display.

  The current volume is loaded and its sound files are listed in the optical disk window at the lower left of the display.

Recalling sound files from the Effects Library

You can recall a sound file using either the Optical Disk Display or the Sound File Directory. When a sound file is recalled, it is loaded into **polyphonic sampling memory** (poly memory).

Using the Sound File Directory to recall sound files

1. Select the Sound File Directory from the Main Menu.

   A list of devices and display formats appears at the top of the screen.

2. Select the optical disk by typing or clicking the number preceding it.

   The list of sound files contained on the current volume appears at the bottom of the screen.

3. Select a display format from the SORT and SHOW options. You can select one or more SHOW options.

   You can sort the sound file list alphabetically by category, filename or both. You can show names only, names with captions or names with lengths and captions. Lengths can be shown in seconds, sectors and/or megabytes. Audition allows you to hear the sound file as it is loaded into poly memory.

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Using the Sound File Directory to recall sound files (con't)

4. Locate the desired sound file by moving the scroll box or pressing the arrow keys until the sound file appears, or by using the Search button (see "Using the Search button" later in this section).

   If you drag the scroll box, the sound file names appear in the center of the screen.

5. Click the sound file name to select it.

   A message appears at the bottom of the screen while the sound file is loaded into poly memory.

   Installing Sound File <sound file name>

   If you selected Audition, the sound file plays as it is loaded.

Recalling sound files from the Effects Library (con't)

Using the Optical Disk Display to recall sound files

1. Select the Optical Disk Display from the Main Menu.

   Sound files stored on the current volume are listed in the optical disk window at the lower left of the display. Sound files stored on any other selected device are listed in the sound file window at the lower right of the display.

2. Change the Display Format switches, if desired. You can display the sound file list in the optical disk window alphabetically by category, filename or both. You can show names only, names with captions or names with lengths and captions. Lengths can be shown in seconds, sectors and/or megabytes.

3. Set the Function switch to choose whether to simply select the sound file **(None)**, to select it and recall it to poly memory **(Recall)** or to select it, recall it to poly memory and listen to it **(Recall & Audition)**.

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Using the Optical Disk Display to recall sound files (con't)

4. Locate the desired sound file by moving the scroll box or pressing the arrow keys until the sound file appears, or by using the Search button (see "The Search function" on the following page).

   If you drag the scroll box, the sound file names appear in the center of the screen.

5. Click the sound file name to highlight it.

   The sound file name, caption and any categories to which the sound file is assigned appear in the information panel at the top of the screen.

   If you selected Recall, the sound file is loaded into poly memory. If you selected Recall & Audition, the sound file also plays as it is loaded into poly memory.

Recalling sound files from the Effects Library (con't)

The Search function

Both the Optical Disk Display and the Sound File Directory contain Search buttons. Each Search button is labeled with a question mark and is located just above the scroll bar.

You can use a Search button to automatically locate a sound file on the currently loaded volume.

1. Click the Search button.

   A message appears across the middle of the screen.

   Enter search ID: [SEARCH] [CANCEL]

2. Type any portion of the sound file name, caption or other information that you want to locate.

   You can type any character string, including letters, numbers, spaces and punctuation marks. The character string can be all or part of a word.

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The Search function (con't)

3. Click [SEARCH].

   In a few moments, the screen cursor moves to the first occurrence of the character string you entered. You can select that sound file or continue the search.

4. To continue a search in the Sound File Directory, press / (the slash key next to the Shift key). To continue a search in the Optical Disk Display, click the Search button again and then click [SEARCH].

   The cursor moves to the next occurrence of the character string you entered.

Note: You can abort a search by clicking the large trackball button.

Sound file applications

Once a sound file is recalled to poly memory, you can play it from the Synclavier keyboard, modify it, use it with other sound files to create an effects patch list and/or record it as part of a sequence.

You can hear the original sound by pressing A3 on the keyboard, and you can hear pitch-shifted versions of the sound by pressing other keys.

Modifying sound files

A sound file can be modified in a variety of ways. Modifications include cutting, pasting, filling, crossfading, looping, normalizing, inverting and reversing. You also can mix two sound files, create a stereo file from two mono files or create a mono file from a stereo file.

You modify a sound file using the Sound File Editor, accessed from the Main Menu.

1. Recall the sound file you want to modify.

   A copy of the sound file is loaded into poly memory.

2. Select the Modify menu from the Sound File Editor.

   The Modify commands appear at the bottom of the screen.

3. Select the desired command and, if necessary, enter the appropriate information. See "Modifying sound files" in the *Sampling and sound editing* manual for detailed instructions.

   The sound file in poly memory is modified and given a name in the format NEWF[four-digit number]. The original sound file on the optical disk is unchanged.

4. Save the sound file on the optical disk or the Winchester. (See the section "Storing sound files, timbres and sequences" later in this manual).

Sound files as Synclavier timbres

You can combine up to four layers of sampled sounds. Each layer, called a partial timbre, can be modified individually by changing the volume envelope or by adding vibrato, portamento, stereo or real-time effects. You can save the modified sound as a timbre in the Timbre Directory or by recording the sound on a sequence track and saving the sequence.

When you play the keyboard, you can solo a partial timbre to hear only its sound, or you can play the complete timbre to hear the combined sounds. For example, you can assign the sound of footsteps in water to specific notes in one partial timbre and the sound of footsteps on gravel to the same notes in another partial timbre. By playing those notes with both partial timbres selected, you can create the combined sound of footsteps on wet gravel.

When you recall a sound file to poly memory, it is automatically placed on the first partial of the current timbre. You also can place a sound file on another partial timbre.

- Press and hold the desired PARTIAL TIMBRE SELECT button while you click the sound file name in the Sound File Directory or Optical Disk Display.

  The selected sound file is placed on the specified partial timbre.

Modifying partial timbres

You modify partial timbres using either the Synclavier keyboard control panel or the Timbre Display. Before beginning any modifications, read "Keyboard patches" in the *Sampling and sound editing* manual. The following is a summary of the procedure. See the *FM Synthesis* manual for more detailed instructions.

1. Select the partial timbre to be modified.

2. Select the timbre parameter you want to modify by pressing the appropriate button on the keyboard control panel or by moving the cursor to the desired parameter on the Timbre Display.

3. Set the new value for the parameter by turning the control knob on the keyboard control panel or by typing a new value on the Timbre Display.

4. Save the timbre. (See the section "Storing sound files, timbres and sequences" later in this manual.)

Note: When you modify a partial timbre that contains a patch list, all the sound files in the patch are affected by the modifications.

Creating an effects patch list

For each partial timbre, you can create a patch list of sound effects to use together. For example, you can assign car door sounds to one area of the keyboard, tire sounds to another area and engine sounds to a third area.

This is a summary of the procedure for creating a patch list. For detailed instructions, see the section "Keyboard patches" in the *Sampling and sound editing* manual.

1. Select the Patch Display from the Main Menu.

2. Press the Spacebar repeatedly until the desired partial timbre is displayed.

3. Add the desired sound files to the patch list. You can either type the filenames or press Ctrl-C and then select the files from the Sound File Directory.

4. Assign each sound file to an area of the keyboard by typing key names in the columns labeled Start and End on the Patch Display. Only one sound file in a partial timbre may be assigned to a key.

5. If desired, adjust the volume and tuning of each sound file.

6. Type a key name in the column labeled Transpose to specify the key on which you want the original pitch to sound.

7. Repeat steps 2 through 6 to create patch lists on other partial timbres, if desired.

8. Save the timbre. (See the section "Storing sound files, timbres and sequences" later in this manual.)

Sound file applications (con't)

Recording a sequence of effects

You can record a sequence of sound effects synchronized to film or video by playing patch list notes synchronized to incoming SMPTE time code. The following is a summary of the procedure. Detailed instructions are in the *Sequence editing* manual.

1. Recall a patch list that has the sound effects required for the sequence assigned to different notes and/or partial timbres.

2. If necessary, press the ERASE button twice to erase the current sequence from memory.

3. Be sure that the SMPTE output of the film or video is connected to the SMPTE IN jack of the Synclavier.

4. Select the desired SMPTE mode and set an offset, if desired. (See the section "Synchronizing to film and video" in the *Studio operations* manual for more details about using SMPTE time code.)

5. Select the track on which you want to record, and press the RECORD button on the keyboard control panel.

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Recording a sequence of effects (con't)

6. Start the SMPTE code source.

7. Record the desired sound effects by playing the appropriate keys.

   The effects are recorded synchronized to SMPTE.

8. When the scene is finished, press STOP on the keyboard control panel.

9. Turn off the SMPTE source.

10. Save the sequence. (See the section "Storing sound files, timbres and sequences" later in this manual.)

Storing sound files, timbres and sequences

When you modify a sound file using the Sound File Editor, you can save the modified version as a new sound file on the Effects Library optical disk or on the Winchester. Approximately five percent of each optical disk volume is available for these additional files.

When you modify sound files as timbres or create effects patch lists, you can save them as timbres on the Winchester. When you record a sequence of sound effects, you can save it as a sequence on the Winchester.

Preparing to store sound files on the optical disk

The optical disk is a write-once-read-many (WORM) medium. Once stored on disk, a sound file cannot be overwritten. A file can be deleted, renamed or replaced, but the space where it originally was stored is not reusable. Each time you delete, rename or replace a sound file, you decrease by one the total number of files that can be stored on the optical disk and you decrease the number of sectors available for storage.

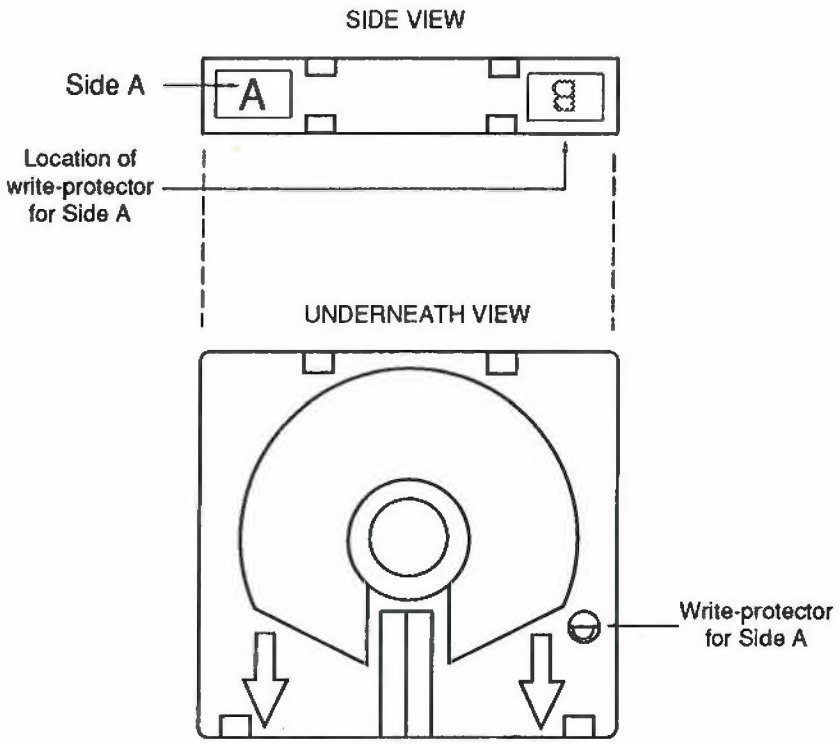
Before storing a sound file on an optical disk volume, you need to unlock the write-protector for that volume. Follow these instructions to unlock the write-protector for side A.

1. Remove the optical disk cartridge from the drive and hold it so that the letter "A" on the edge of the cartridge is right-side-up.

2. Use a coin or screwdriver to rotate the write-protector on the bottom of the cartridge so that the arrow points to WRITE.

3. Reinsert the cartridge into the drive.

Write-protector



Storing sound files, timbres and sequences (con't)

Naming a sound file

Before storing a modified or new sound file in the Effects Library, you need to assign a name to the sound file.

1. Select the Sound File Editor from the Main Menu.

2. From the Store/Recall menu, select the RENAME command and enter a valid filename.

   A valid filename has up to eight consecutive characters. Spaces and the following characters cannot be used.

   ? ! : ; , / \ < > + = % & * | @

   Each file must have a unique filename. You might find it helpful to use the filename structure and category codes that already exist in the Effects Library. We recommend that you begin with version number 500. This will insure that your filenames will not duplicate filenames that we add in the future.

Storing sound files in the Effects Library

You can change the caption, assign new categories and store the file on the Effects Library optical disk. (See the section "Storing sound files on optical disk" in the *Organizing and storing sounds* manual for detailed instructions.)

1. Select the Optical Disk Display from the Main Menu.

2. If desired, click the Caption field and type a new caption.

3. If desired, click empty Category fields and type new categories.

4. Review all the information in the Information panel carefully.

   Make sure the caption and all category assignments are correct and complete before you store the sound file. Although you can change filenames, captions and categories after the file is stored, the space used by the original file is not recovered and the number of files you can store on the disk is decreased.

5. Click the button labeled STORE.

   The sound file is stored on the optical disk, and the index file on the Winchester is updated.

Storing sound files, timbres and sequences (con't)

Saving sound files and timbres

The instructions on this page summarize how to store sound files and timbres in the current catalog of the Winchester. For more detailed information, see the *Sampling and sound editing* manual.

You can store sound files using the Sound File Editor.

1. Select the SAVE command from the Store/Recall menu.

2. Type the name of the sound file you want to store, and press Return.

   The current sound file is stored with the specified name in the current catalog.

You can store patch lists and timbres by using the TIMBRE/SEQUENCE STORAGE buttons on the keyboard control panel.

1. Select Name Keyboard Timbre from the Main Menu, and type a name for the current patch list or timbre.

2. Press BANK and the appropriate numbered button on panel 4.

3. Press and hold WRITE while you press ENTRY and the appropriate numbered button on panel 4.

   The current patch list or timbre is stored with the specified name in the current catalog.

Storing sequences

This page summarizes how to store sequences in the current catalog of the Winchester. For more details, see the *Sequence editing* manual.

You can store a sequence in a numbered sequence file by using the TIMBRE/SEQUENCE STORAGE buttons on the keyboard control panel.

- Press and hold WRITE while you press SEQUENCE and the appropriate numbered button on panel 4.

  The sequence is saved in the corresponding numbered sequence file of the current catalog.

You can store a sequence in a named sequence file by using the Sequence Editor, accessed from the Main Menu.

1. Select the Sequence Files command.
2. Select the Save Sequence function from the dialog box.
3. Type the desired sequence name and click the button labeled SAVE SEQUENCE.

   The sequence is saved with the specified name in the current catalog.

Printing a list of sound files

You can produce a list of all the files and categories in the Effects Library using either the Sound File Directory or the Optical Disk Listing utility.

Printing the Sound File Directory

You can produce a hard copy of the entire sound file list contained on the currently loaded volume using the Sound File Directory. The hard copy contains only the columns you select to display in the sound file window on the terminal screen.

1. Be sure that your printer is connected and the power is on. The printer must be in "ready" or "on line" mode.

2. Insert the desired optical disk into its drive, and select the Sound File Directory from the Main Menu.

   A list of devices and display formats appears at the top of the screen.

3. Select the optical disk by clicking or typing the number preceding it.

   The list of sound files contained on the current volume appears at the bottom of the screen.

4. Select a display format from the SORT and SHOW options. You can select one or more SHOW options.

   You can sort the sound file list alphabetically by category, filename or both. You can show names only, names with captions or names with lengths and captions. Lengths can be shown in seconds, sectors and/or megabytes.

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Printing the Sound File Directory (con't)

5. Click the button labeled P near the top right of the sound file window, or type the letter **p.**

   This message appears in the dialog box.

   Click PRINT to initiate printout [PRINT] [CANCEL]
   Title:

6. If you want to specify a title for the printout, click the field labeled Title and type the desired text.

7. Be sure your printer is ready, and click [PRINT].

   The printer produces a list of all the sound files on the current volume, using the display format you selected. If you specified a title, it appears on the cover page.

Note: You can halt the printing procedure at any time by clicking the large trackball button.

Printing a list of sound files (con't)

The Optical Disk Listing utility

You can produce a list of sound files contained on any optical disk volume, whether or not it is loaded. The list can be sent to a printer or shown on the terminal screen.

You can list filenames only, or categories and filenames. In either case, the list can include the file length in seconds and in megabytes, the caption and a letter that indicates whether the file is a stereo or mono file.

The Optical Disk Listing utility is accessed from the Monitor.

1. Insert the 5.25" disk labeled System Utilities Disk into the floppy drive and turn the lever down.

2. At the Ready prompt of the Monitor, enter the command

   old f0:oplist;run

   A message appears at the top of the screen.

   Optical Disk Listing Utility version of 10 June 1988

   Enter name of index file or <RETURN> to quit:

3. Type the volume name (**sisfx-1a** or **sisfx-1b**) and press Return. The volume name does not have to correspond to the loaded volume.

   This message appears.

   Display File List [Y(es) or N(o)]?

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The Optical Disk Listing utility (con't)

4. Type the letter **y** if you want a list of filenames only. Otherwise type **n.**

   Another message appears.

   Display Category List [Y(es) or N(o)]?

5. Type the letter **y** if you want a list of categories and filenames. Otherwise type **n.**

   Another message appears.

   Display all file information [Y(es) or N(o)]?

6. Type the letter **y** if you want the list to indicate whether each file is a stereo or mono file, the file length in seconds, the file length in megabytes and the caption. Type **n** if you do not want to include this information on your list.

   The final message appears.

   Send output to printer [Y(es) or N(o)]?

7. If you want to print a hardcopy of the list, be sure your printer is ready, and type the letter **y.** If you want to display the list on the screen, type **n.**

   When the specified list is printed, the Ready prompt reappears.

Note: You can halt the procedure at any time by pressing ⌘-Spacebar. If you display the list on the screen, you can temporarily freeze the scrolling screen by pressing the F15 key. Press the F15 key again to continue the display.