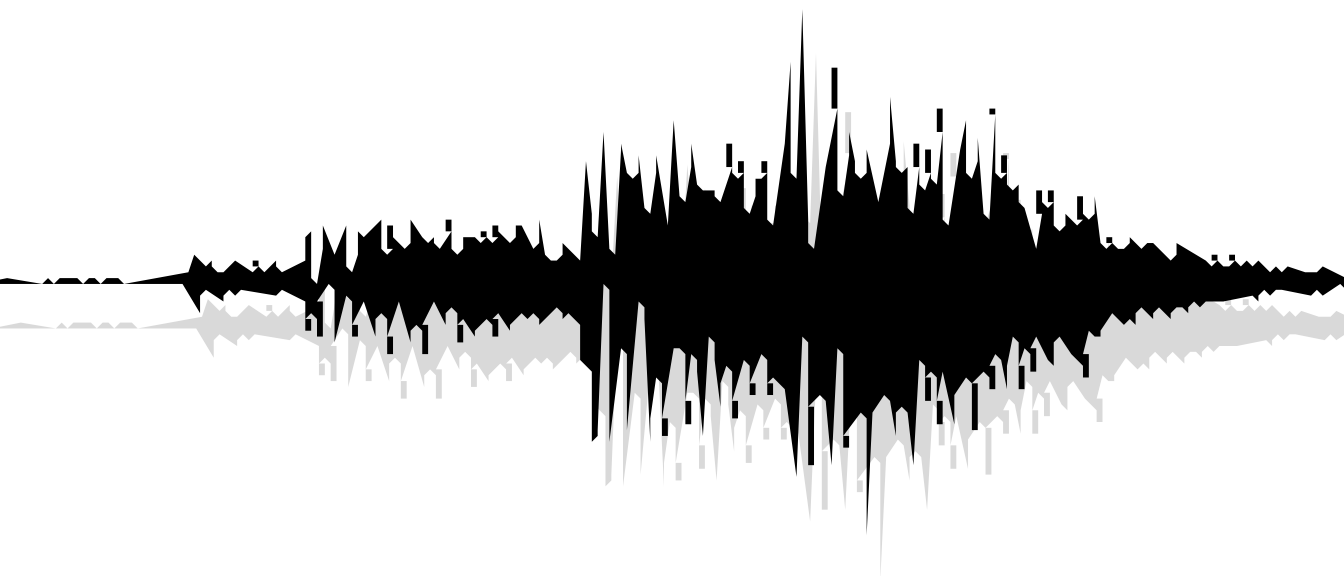


Chapter 3

Peak Basics



Chapter 3:

Peak Basics

Introduction

This chapter explains several key Peak concepts and functions, including how to open, close, and save audio documents.

A Brief Explanation of Digital Audio

If you are new to digital hard-disk-based recording, you may wish to acquaint yourself with a few of the principles behind digital audio before you dive into using Peak software. This section explains a few key concepts that will give you a good general understanding of how Peak does what it does.

What we hear as sound is actually a pattern of pressure waves that move through the air. The frequency of these waves determines the pitch of the sound — how low or high it sounds. Sound frequency is measured in cycles per second, or Hertz (Hz). The range of human hearing is generally considered to be from about 20 at the low end to 20,000 Hertz (20 kilohertz, or 20kHz) at the high end. In practice, however, most adults hear only as high as 12kHz to 18kHz, especially those of us who may have spent more time than we should have with headphones or at loud rock concerts.

Sampling and Sample Rate

Your Peak software-equipped Macintosh computer stores audio digitally. This means that analog electrical signals from microphones or other sources are converted into numbers by a circuit called an analog-to-digital converter and stored on hard disk. The

analog-to-digital (A/D) converter uses a technique called digital sampling to convert analog electrical signals into numbers.

Digital sampling is the sonic equivalent of taking a snapshot. By taking thousands of little digital samples per second and storing them to a hard drive, an A/D converter can capture an accurate sample-by-sample representation of a sound, much like a movie is a frame-by-frame representation of a moving image. The number of samples taken of the audio in a second is called the sample rate.

The sample rate determines the recording's upper frequency response. A higher sample rate delivers higher frequency response. As a rule of thumb, a digital recording's upper frequency response is roughly half of its sample rate. The audio on compact discs, for example, is recorded at 44,100 samples each second, or 44.1kHz. This sample rate is the standard for professional-quality digital audio, and provides an upper-end frequency response of approximately 22.550Hz, somewhat higher than most people's hearing range.

Bit Resolution

Another factor that affects the quality of the audio is the resolution of each sample. The greater the resolution, the better the quality. To use an analogy from the film world, just as image resolution and quality increase with film size (8 millimeter film is much lower in image quality than 70 millimeter film) greater bit resolution (8-bit, 16-bit, and 24-bit) results in better fidelity digital audio. Audio CDs have a resolution of 16-bits.

In practice, the bit resolution determines the recording's dynamic range — that is, how many

distinct steps you have to describe a sound's level, from quiet to loud. For instance, an 8-bit recording has 256 (2^8) levels available, which is the equivalent of 48 decibels (dB) of dynamic range. On the other hand, a 16-bit recording has 65,536 (2^{16}) levels available, equivalent to 96dB dynamic range. (The rule of thumb for dynamic range is to take the bit rate and multiply it by 6.)

About Disk-Based Recording and Editing

If you are new to hard-disk-based recording, you will be pleased at the amount of power and control that Peak software provides for recording and editing digital audio. You will encounter several new concepts and techniques for using a disk-based system such as Peak. Perhaps the most important among these is the concept of nondestructive manipulation of audio.

Nonlinear Versus Linear Recording

Nondestructive audio manipulation is possible thanks to the nature of Peak's recording medium: a hard disk instead of a roll of analog tape. Unlike analog tape, which is a linear recording medium, hard disks provide a nonlinear, or random-access medium. This is because audio is stored on hard disk as digital information which the hard disk can access immediately or randomly (hence the term "random-access"), simply by moving its read/write head to the appropriate location and reading the appropriate data. This allows you to perform such miraculous feats as cutting and pasting "pieces of sound" and rearranging material long after it has been recorded.

Nondestructive Editing

Perhaps most impressive is the fact that with disk-based audio production you need not actually modify the original source material in any way to accomplish these feats. In most cases, by cutting and pasting you are in reality only asking the hard disk to access portions of the audio file in a slightly different order.

Since Peak doesn't normally cut up, move around, or delete the actual recording on the hard drive, it's said to be a nondestructive editing system.

Other manipulations, such as playing audio material backwards, can be accomplished by reading the data in reverse order. The power and flexibility of disk-based audio production software such as Peak far surpasses the capabilities of traditional analog audio production tools.

Hard Disk Storage Requirements

The actual recording of audio to hard disk requires a significant amount of storage. This is directly affected by the sample rate and bit resolution at which you record: the higher the fidelity, the greater the requirements for storage. As a guideline, 16-bit, 44.1kHz audio requires roughly 5 megabytes of storage per minute of mono recording. Stereo 16-bit, 44.1kHz audio requires roughly 10 megabytes per minute. Stereo 24-bit, 44.1kHz audio requires roughly 15 megabytes per minute.

Hard Disk Maintenance

Because audio recording and playback is a hard disk-intensive task, it is important that your hard drive be in good operating condition. In the computer world, this means keeping it from becoming fragmented by using hard drive maintenance software. Fragmentation occurs as your hard drive begins to run out of contiguous (uninterrupted) space where it can write files. If the data that makes up a file is stored at a single location on your drive, it is much easier and faster for your drive to find the data and read it. However, as contiguous space runs out, the drive may not be able to write the entire file in one location and instead must fragment the file by writing pieces of it at various locations in whatever smaller open areas it can find. This requires that the drive search near and far to read the pieces of the file. Too much fragmentation can lead to errors in recording and playback as the hard drive struggles to keep up with the demands of your audio application.

In general, you should keep your hard disk below 10% fragmentation. Most hard drive maintenance software packages let you monitor the degree of fragmentation on your drive and defragment it by rewriting files into contiguous blocks of data. In addition to defragmenting your drive regularly, you should also back up your files and reformat your drive on a regular basis to keep your system in top operating condition. By doing this, you will ensure maximum performance from your Macintosh and Peak software and keep your studio running smoothly.

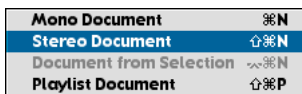
Now that you understand some of the basic principles behind digital audio and disk-based recording, take a few moments to learn some of the basic operations of Peak. These are covered in the sections that follow.

Creating a New Peak Document

Peak will allow you to create an empty audio file of zero duration by choosing a new mono or stereo document. However, you would typically record audio into Peak to create a new audio file or open an existing audio file into Peak for editing. Peak allows you to have multiple audio documents open at the same time.

To create a new audio document:

1. Choose New (⌘-N) from the File menu or Toolbar. This command provides a hierarchical menu which allows you to choose either a mono or stereo format for the new document.



Creating a new Peak document

2. When a new empty window appears, you are ready to begin your project.

Opening Existing Audio Documents

Peak allows you to open audio files created in a variety of common audio formats including AIFF, Sound Designer II, QuickTime, Red Book, WAVE, .au, .snd, System 7 Sounds, and even MP3 (if you are running QuickTime 4.x or later).

Opening WAVE files

The Macintosh recognizes files using a “type” and “creator.” WAVE files are recognized by some audio applications with a type “.WAV,” while others recognize only “WAVE” as the type.

Peak, along with Apple’s QuickTime software and most other Multimedia applications, recognize WAVE files of the type “WAVE,” but not of type “.WAV.” You can use ResEdit or other third-party applications to ensure your WAVE files have the correct type prior to attempting to opening them with Peak.

Opening Compressed Audio Documents

AIFF/AIFC and QuickTime files with compression such as MACE 3:1, MACE 6:1, IMA 4:1, QDesign, or μ law are compatible with Peak. If Sound Manager version 3.3 or later is installed, Peak can open these files for editing.

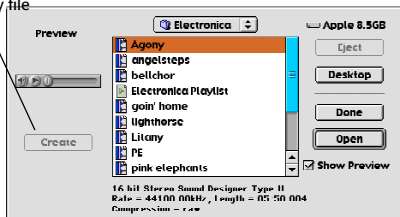
To open an audio file:

1. Choose Open (⌘-O) from the File menu.
2. In the dialog that appears, locate the file that you wish to open. From this dialog, you can open AIFF, Sound Designer II, QuickTime, RedBook, WAVE, .au, .snd, System 7 Sound, and MP3 formatted audio files. This dialog also allows you to audition files by selecting the file in the list and then clicking the Play button.
3. When you find the file you wish to open, click the Open button and Peak will open the audio file into a new audio window, displaying an overview of the entire sound. You can open multiple files

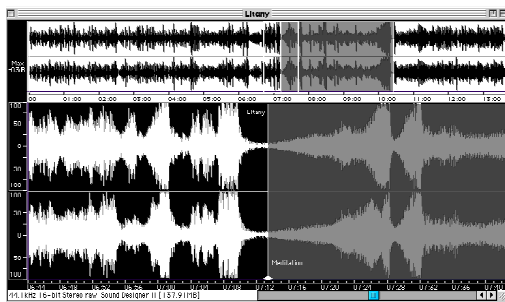
before proceeding to step 4.

4. When you are finished opening audio documents, click the Done button.

click here
to play file



The Open dialog



An open Peak audio document

Recently Opened Documents

Peak automatically remembers up to the last eight audio documents that you have opened and keeps a list of these at the bottom of the File dialog. This allows you to easily select a document's name and reopen it without having to search on your hard drive. Peak can find and open a document even if you have changed its location on your hard drive. If you change the name of the file, the next time you open Peak, it will automatically update the name in its internal list.



recent documents

Recently opened documents in the File menu

Opening “Dual Mono” Files

Certain audio applications, such as BIAS Deck and Digidesign's Pro Tools do not directly support stereo interleaved files, and instead use “dual mono” files, which comprise the right and left channels of stereo material. Peak allows you to open such dual mono files, and in the process creates a new stereo audio document. Because Peak actually writes a new stereo audio file to disk, this conversion process requires hard disk space equivalent to the two original mono files.




Please note that the Import Dual Mono command requires that both files be mono files and have the same sample rate.

To open a dual mono file:

1. Choose Import Dual Mono from the File menu.


2. In the dialog that appears, locate the desired files.
3. Select either half of the dual mono file and click Open. Peak imports the first file and then prompts you for the second.
4. Select the second audio file and click Open. When Peak has finished creating the new stereo audio document you can begin editing.

 *For simpler importing of Dual Mono files, turn on the Auto Import Dual Mono feature in the Preference menu. With this feature activated, you can automatically import dual mono files by choosing Open from the File menu and selecting one of the dual mono file's channels. Peak will then create a new stereo document containing both channels. Please note that these dual mono files must have exactly the same file name with the suffix ".L" for the left channel and ".R" for the right channel.*

Peak also allows you to export your stereo audio documents in Dual Mono format, which means that it's easy to import dual mono tracks from Pro Tools into Peak, edit and process them within Peak, and then export them as Dual Mono files to be reincorporated into your Pro Tools sessions.

Dragging and Dropping Folders, Disks, and CD Audio Tracks

In addition to opening individual documents by dropping them onto the Peak application's icon, you can now drop entire folders or disks onto the Peak application's icon. The contents of the disk or folder(s) will be scanned entirely for audio document's that Peak can open, such as QuickTime, .WAV, AIFF, .au, Sound Designer II, Red Book, etc.

 *This feature is particularly useful when used with Peak's Batch File Processor, described later in this manual.*

Peak allows you to drag a CD audio track directly onto the Peak icon or open the track directly from the Open command under the File menu or Toolbar. When you import a CD track using one of these two methods, the entire track will be imported. If you do not want to import an entire audio track, you can still use the Import CD track command under the File menu (covered in Chapter 4).

Saving and Closing Documents

It is good practice to save regularly throughout a project to avoid losing valuable work in the event of a power failure or other unfortunate occurrence. The Save command saves the changes you have made to your audio document by writing it to your hard disk. The Save command cannot be undone. If you want to be able to continue to undo your edits, use the Save a Copy As... command under the file menu.

Peak allows you to save your audio documents in a variety of common audio file formats, each of which is described below. Be aware that different formats allow different information to be stored with the file. Peak preserves this information unless you save the file into a different file format. Saving a file in a format different from its original format may, however, cause some information stored in the file to be discarded.

Peak supports the following audio file formats:

- **AIFF:** This is Apple's Audio Interchange File Format. It is also Peak's default file format and is supported by many Macintosh software applications.
- **Sound Designer II:** This is Digidesign's audio file format for its digital audio products. Use this format if you wish to use an audio document in a Digidesign audio application.
- **.au:** This file format is commonly used on the World Wide Web and in Java audio applets. It is supported by many platforms and programs.

- **WAVE:** This is Microsoft's Windows Audio File Format. It is supported by many Windows software applications and some Macintosh applications. The WAVE format is best if you plan to use an audio document in an application that supports or requires WAVE format files.
- **QuickTime:** This is Apple's audio file format for QuickTime-based multimedia. It is supported by all Macintosh software applications that support QuickTime. The QuickTime format is best if you plan to use an audio document in multimedia applications that support QuickTime, such as Adobe Premiere or Macromedia Director™.
- **Raw:** This is the header-less raw file format that may be useful for some game platforms.
- **RealAudio:** This is the file format for RealNetworks™ RealAudio 5.0, 3.0 and 2.5 Encoders, used for preparing audio for streaming over the internet.
- **System 7 Sounds:** This is the Apple audio file format used for Macintosh Operating System Sounds.
- **JAM image files:** This is the JAM audio image file format. JAM audio image files may be created in Peak and used in Adaptec JAM for burning audio CDs.
- **Sonic AIFF:** The file format used by Sonic Solutions audio workstations.
- **.paf:** This is the file format used by Ensoniq's Paris audio system. Note this file format favors mono and dual mono files.
- **Shockwave:** This is the file format used for Macromedia's Shockwave, for preparing audio for streaming over the internet (the SWA Export Xtra must be in the Peak Plug-Ins folder for this option, see Appendix 3 for the URL).
- **MPEG-3 (MP3):** This saves your document in MPEG-3 format (the SWA Export Xtra must be in the Peak Plug-Ins folder for this option, see Appendix 3 for the URL).

To save a Peak document:

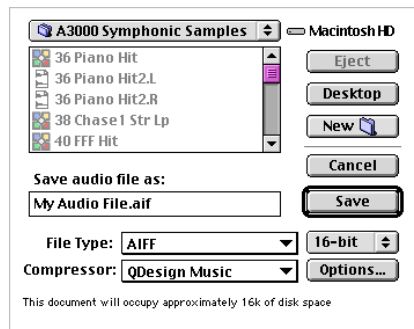
1. Choose Save from the File menu or press ⌘-S on your keyboard.
2. Select a file format from the pop-up File Type menu. AIFF is Peak's default audio file format.
3. Enter a name for the new audio document, select where you want to save the new file, and then click Save.

Using the Save As... and Save A Copy As... Commands

The Save As... command allows you to save a copy of the current document under a different name, or in a different location on your hard disk. Since the Save As command closes the current document and lets you keep working on the renamed copy, it is useful for saving successive stages of a project. This allows you to save each major step under a different name. Later you can retrace your steps should you want to go back to an earlier version. The Save A Copy As... command will save a copy of the file you are working on, but it will keep the copy you are working on open. This allows you to continue working on your audio and still be able to undo any edits you executed prior to using the Save A Copy As... command.

To save an audio document under another name:

1. Choose Save As... (Shift-⌘-S) or Save A Copy As... (Option-⌘-S) from the File menu. The Save dialog appears:





The Save dialog

2. Select the desired file format from the File Type pop-up menu. AIFF is Peak's default audio file format.
3. If you wish to save the audio document in a different bit depth resolution, click the bit depth pop-up. If not, leave this item unchecked. (*Peak does not use dithering when saving this way; you will want to use the Dither function under the DSP menu before saving for higher-fidelity conversion.*)
4. Enter a name for the new audio document, select where you want to save the new file, and click Save.

Saving Compressed Audio Documents

AIFF/AIFC and QuickTime files with compression such as MACE 3:1, MACE 6:1, IMA 4:1, QDesign, or μ Law are compatible with Peak. If Sound Manager version 3.3 or later is installed, Peak can open these files for editing and then save them with compression.

 *You may only Save with file compression using AIFF or QuickTime file formats.*

 *User Tip: Audio compression should be the last step in mastering your audio documents. Decompressing and re-compressing audio documents will degrade their sound quality each time they are re-compressed, so it is best not to save with compression until all editing and mastering has been completed.*


To save an audio document with compression:

1. Choose Save As... (Shift-⌘-S) from the File menu. The Save As... dialog appears.
2. Choose the audio compressor you wish to use from the Compressor pop-up menu. Some compressors work with 8-bit or 16-bit data only, so the compression options may be grayed out, depending on your setting in the bit depth pop-up. The types of audio compression that will be available to you if you have Sound Manager 3.3 or later include: MACE 3:1, MACE 6:1, QDesign

Music, Qualcomm PureVoice™, ALaw 2:1, 32-bit Floating Point, 64-bit Floating Point, IMA 4:1, 24-bit integer, 32-bit integer, 16-bit Little Endian, 16-bit Big Endian, and μ Law 2:1.

3. Type the name of the new audio document, select the folder you wish to save the audio document, and click Save.

Peak shows how much disk space the compressed audio document will occupy with the compression and bit depth settings.

 *If Sound Manager 3.3 or later is not installed, there will be no compression options in the Compressor pop-up menu.*

Closing Audio Documents

To close a file in Peak, choose Close from the File menu (⌘-W). If you have made any changes to your document since the last time you saved, Peak will ask you if you want to save them. If you do, choose Yes; if you don't, choose No. If you change your mind and wish to continue your session, choose Cancel.

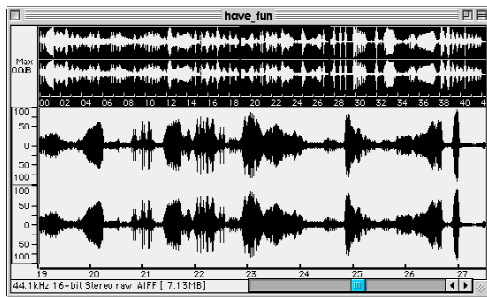
To close all files currently open in Peak, choose Close All from the File menu (⌘-Option-W).

Peak Windows and Palettes

By now you have noticed that when you open Peak, there are several windows and palettes that either appear by default or are available to you under Peak's Windows menu. Windows that appear in Peak by default are the Info Strip that appears along the bottom of your screen and an audio document window for each audio file you have open. Windows and palettes that you can turn on or off include the Toolbar, the Cursor Palette, the Contents Palette and the Movie Window. This section will cover the basic function of these Peak Windows and Palettes.

Peak Audio Document Window

Peak Audio Document windows contain a Waveform Display, an Audio File Info Bar (lower left corner) and a Max Level Indicator (upper left corner). The Waveform Display is a graphic representation of the audio file, the Audio File Info Bar shows the sample rate, bit resolution, file format and file size of the audio file, and the Max Level Indicator shows the highest amplitude level in the audio file. On top of the Audio Document window is the File Overview, if it is enabled under the Peak Preference menu. The Audio Window is described in more detail in Chapter 5.



The Audio Document window

The Info Strip

The Info Strip is anchored to the bottom of the screen. This strip contains three areas—the cursor location display, a time display showing elapsed time, and audio level meters with clip/peak indicators. The Info Strip is described in detail in Chapter 5.

The Peak Cursor Palette

Peak has a floating Cursor palette that contains several useful functions. On the right side of the palette are four different icons representing different cursor modes. The default cursor is a standard Arrow Cursor. You can also use the cursor palette to select a Hand Cursor for moving a waveform within its window, a Pencil Tool for drawing directly on the waveform at the sample level, and a Magnifying Glass Tool for zooming the waveform view in and out. On the left side of the Cursor Palette there are two buttons that control Blend Enable/Disable and Loop During

Playback. To access any of these cursors or functions, just click on the corresponding icon in the Cursor Palette. To change the cursor tool, click on a new icon. The Blending and Loop Playback functions are discussed in more detail in Chapter 5.



The Peak Cursor Palette

Arrow Cursor Tool

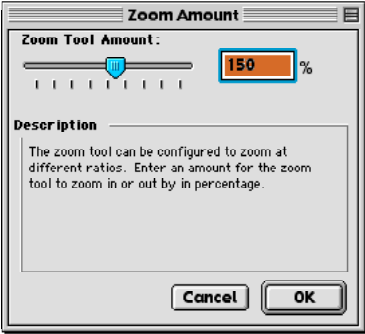
The Cursor Tool is the default tool. It is the standard “arrow” tool that lets you click and select on-screen items.

Hand Tool

The Hand Tool lets you grab and move a waveform around in its window.

Magnifying Glass (“Zoom Tool”)

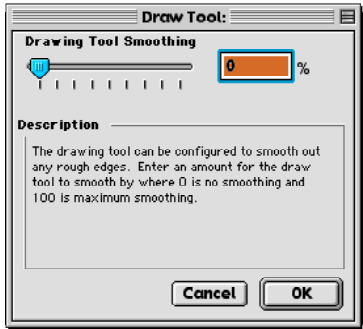
To use the Magnifying Glass tool, simply click on the tool in the Cursor Palette, then move the cursor over the waveform. A “plus” (+) sign will appear inside the Magnifying Glass. Click on the waveform to zoom in; each click of the mouse will zoom in farther. To zoom out, option-click on the waveform. A “minus” (-) sign will appear in the Magnifying Glass, and you can click on the waveform to zoom out. Double-clicking on the Magnifying Glass will open the Zoom Amount dialog where you can specify the Zoom Amount.



The Zoom Amount dialog

Pencil Tool

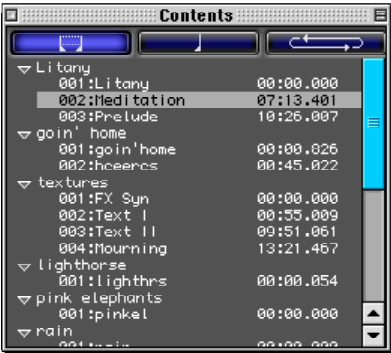
The Pencil Tool lets you draw directly on the waveform at the sample level. This is very useful for drawing out clicks in the waveform. Double-click on the Pencil Tool icon in the Cursor Palette for the Drawing Tool Smoothing Settings.



The Draw Tool dialog

The Contents Palette

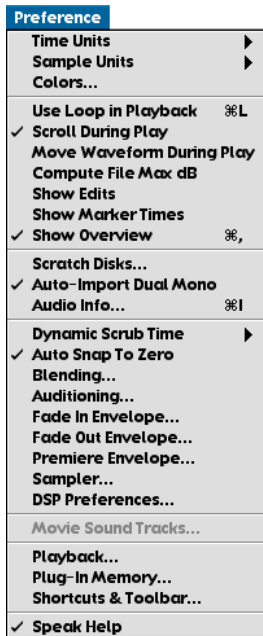
Peak has a floating Contents Palette that will display all Regions, Markers, and Loops contained in any open audio documents. There are three tabs at the top of the palette that allow you to select which items to view—from left to right: the Region Tab, the Marker Tab and the Loop Tab. Option-double-clicking on any item in the Contents window will bring up the Edit Region or Edit Marker dialog.



The Peak Contents Palette

Setting Preferences

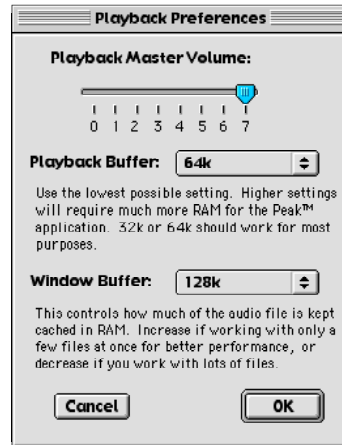
You can customize a number of Peak's parameters so you can work with the program in a way that best suits you. Most of these parameters are found in the Preference menu. These include the controls for playing back audio documents, the selection of the icons in the Toolbar, and the colors that you want for the audio document window. Once you have set these preferences as you like, they will stay that way until you decide to change them again. This section explains how to set several of these parameters. For any menu items not covered here, please refer to Chapter 11: Peak Menus. There you will find explanations of each command in the Preference menu and other Peak menus. Items from the Preference menu are also covered throughout this manual where their discussion is relevant.



The Preference menu

Setting Peak's Playback Parameters

Peak's Playback Preferences dialog allows you to control the master output volume, Spacebar operation, hard disk playback buffer size, and window buffer size.



Peak Playback Preferences dialog

Playback Master Volume

Peak provides a master volume control for audio playback. In the Playback Preferences dialog, set Peak's output volume to the level that you desire by adjusting the slider or entering a number value from 0 (silent) to 7 (loudest). If you are controlling your playback volume with the volume control of your playback system, you'll probably want to leave the output level set to 7.

Playback Buffer

Peak allows you to control the amount of RAM the program uses when playing back audio documents. In general, *lower is better*. A playback buffer of 32k is a good place to start. If you are experiencing clicks in your playback, working with fragmented files, using processor-intensive real-time DSP, or are using a slow hard drive, you may need a larger playback buffer setting.

Window Buffer

Peak also allows you to control the amount of RAM the program uses to cache audio data and the size of each processing chunk. Use larger values if you are working with a few large files, and smaller values if you are working with many smaller files.

Dynamic Scrub Time

Peak provides a unique audio auditioning technique called dynamic scrubbing. This feature is very useful for precisely pinpointing and selecting a desired location in an audio document. Dynamic scrubbing allows you to drag the mouse forward or backward over a waveform while Peak plays a short loop (between 10 and 600 milliseconds) at the scrub location. When you have found the location you are looking for, let go of the mouse and the insertion point will be exactly where you want it to be. Peak allows you to choose the length of this playback loop with the Dynamic Scrub Time command in the Preference menu. You can also select Tape-Style Scrubbing in this dialog. For a full description of scrubbing audio in Peak, please see Chapter 5.

To select a loop duration for dynamic scrubbing:

1. Choose Dynamic Scrub Time from the Preference menu, and choose a duration from the hierarchical submenu. Typically, a value of between 40 to 80 milliseconds works well.
2. You can also select Tape-Style Scrubbing by selecting it in this submenu. To deselect Tape-Style Scrubbing, just click any duration value in the submenu.



Dynamic Scrubbing is not available when using DAE.



Tape-Style Scrubbing requires Sound Manager 3.3 or later and is not available when using ASIO.

Scroll During Playback

With the Scroll During Playback command enabled, Peak will “scroll” through the audio document as playback progresses. This allows you to visually follow the progress of audio playback. A check next to this menu item indicates that it is enabled.

To enable Scroll During Playback:

1. Select Scroll During Play from the Preference

menu. A check next to this item indicates it is enabled.

2. To disable Scroll During Playback, simply re-select Scroll During Play from the Preference menu. The absence of a check next to this item indicates it is disabled.

Move Waveform During Playback

With the Move Waveform During Play command enabled, Peak will move the waveform under the cursor as playback progresses, so that the playbar is always in the middle of the waveform display. A check next to this menu item indicates that it is enabled.

To enable Move Waveform During Playback:

1. Select Move Waveform During Play from the Preference menu. A check next to this item indicates it is enabled.
2. To disable Move Waveform During Playback, simply re-select Move Waveform During Play from the Preference menu. The absence of a check next to this item indicates it is disabled.

Show Marker Time

With the Show Marker Time command enabled, all Peak markers will show a time value as well as the marker name.

To enable Show Marker Time:

1. Select Show Marker Time from the Preference menu. A check next to this item indicates it is enabled.
2. To disable Show Marker Time, simply re-select Show Marker Time from the Preference menu. The absence of a check next to this item indicates it is disabled.

Auditioning

Peak’s Auditioning command allows you to audition a selection along with a specific amount of audio

preceding or following it. The Auditioning dialog allows you to select a desired amount of pre-roll or postroll when you play the selection. To play a selection with the selected amount of pre- and postroll, press Control-Space bar.

To configure Auditioning:

- Select Auditioning from the Preference menu. Enter the desired amount of Pre-roll and Postroll into the dialog boxes. Click OK to exit the dialog.



The Auditioning dialog

Blending

Blending is an automatic crossfade function with a user-editable envelope. Peak can apply blending to areas of an audio document when they are modified by cutting, deleting, or other editing processes in order to smooth abrupt transitions between waveform amplitudes. It can be very useful for creating a smooth transition between edits that would otherwise sound too abrupt. If you have cut, pasted, or inserted audio into a document, you may wish to enable blending to smooth things out a bit. It can be toggled on or off by choosing the Blending command from the Preference menu, or by clicking the Blend enable/disable button on the Cursor Palette, or via the caps lock key on your keyboard.

To configure blending:

1. Select Blending from the Preference menu. Enter the Duration over which you wish Blending to occur into the dialog box.

2. To edit the Blending Envelope, click on the Edit Blending Envelope button. Click OK to exit the dialog.

For detailed instructions on how to use blending or how to edit the blending crossfade envelope, see Chapter 5: Editing.

Auto-Import Dual Mono

Certain audio applications, such as BIAS Deck and Digidesign's Pro Tools, do not directly support interleaved stereo files, and instead use "dual mono" files—a pair of files, one for the left channel and one for the right channel. These files will probably have been exported with the suffix ".L" for the left channel, and the suffix ".R" for the right channel. Auto-Import Dual Mono, when selected, will allow you to select just one channel of the dual mono file in the Open dialog. Peak will automatically "grab" the other half of the file, and convert both files into a single stereo Peak document.



Please note that the Import Dual Mono command requires that both files be mono files, have the same sample rate and bit depth, and must have the exact same name followed by the suffixes ".L" and ".R".

To enable Auto-Import Dual Mono:

1. Select Auto-Import Dual Mono from the Preference menu. A check next to this item indicates it is enabled.
2. To disable Auto-Import Dual Mono, simply re-select Auto-Import Dual Mono from the Preference menu. The absence of a check next to this item indicates it is disabled.

Choosing Colors for the Audio Document Window

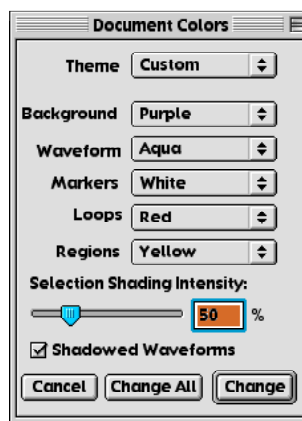
Peak allows you to customize the colors used to display the elements in audio documents. You can use this dialog to set the background color, waveform color, and colors for markers and loops. You can

select either a preset color combination, or individual colors for each element in the audio document window, as well as picking your own custom colors from a color palette. You can also choose to have the waveform display shading for a 3-D look, as well as select the amount of shading. Changes made using the Colors dialog affect both the current audio document's colors, and any subsequent new audio document's colors.

To customize the colors and shading of the waveform display:

1. Choose Colors from the Preference menu.
2. To select a preset color combination, click the Theme pop-up menu and choose the preset that you desire.
3. Alternatively, to select individual colors for each element in the audio document window, choose Custom from the Theme pop-up menu and then select the desired colors from the Background, Waveform, Markers, Loops, and Regions pop-up menus.
4. If you wish, you can use this dialog to further customize any element in the audio document window. Pick an element to customize, choose Custom from the Theme pop-up menu, and select User Color. A standard Macintosh color palette will appear. Use this wheel to select any color you wish. Click OK to return to the Colors dialog.
5. You can also customize the degree of shading, or darkness, of audio selections in the waveform display. Use the Selection Shading slider or enter a percentage in the number box to choose the degree of shading you wish to see in selected portions of audio.
6. Another way to enhance the look of audio waveforms in Peak is by giving them a 3-D look. Use the Shadowed Waveform checkbox to turn the waveform shadow on or off.
7. To close this dialog, click Change (to change one color) or Change All (to change the colors for all open audio documents). The audio document

window is now set to the colors and look you've selected.



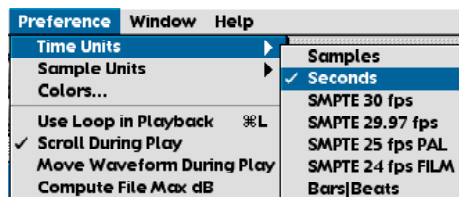
The Colors dialog

Choosing a Time Format

The Units command allows you to choose a time format for the audio timeline in Peak's audio document window. You can choose samples, seconds, SMPTE frames, and Bars | Beats. The format you choose will depend on the nature of the project that you are working on.

To choose Peak's time format:

1. Choose Units from the Preference menu.
2. From the submenu, choose the time format that you desire: samples, seconds, SMPTE frames, or Bars | Beats. The timeline in Peak's audio document window and Info Bar switches to the format that you choose.



Choosing a time format with the Units command

Audio File Meter, Tempo, and Timestamp Settings

If your audio document is using bars and beats as its units, you will want to tell Peak what the tempo of the audio document is. Use the Audio Info command from the Preference menu, or click on the gray Audio Info Area on the lower left of any audio waveform display, to set the tempo of the audio document. You can also enter the meter of an audio document using the Audio Info dialog. The numerator represents the number of beats per measure, and the denominator represents the value of a beat, where 4=quarter note, 8=eight note, 16=sixteenth note, etc.

You may also enter a timestamp for the audio document in seconds. If the audio document has a timestamp, then the displayed time in an audio document will be offset from this time rather than starting at zero. For example, if the timestamp for an audio document is four seconds, then the first sample in the audio document will appear in the audio document with a time of 4 seconds instead of zero seconds.

Choosing a Scratch Disk

Because audio data can be very large, Peak utilizes a portion of your hard disk's free space to hold audio data that has been cut or copied, as well as for temporary or scratch files for undo purposes. If your hard disk is short on space, you may not be able to cut, copy, or modify large selections. If you have more than one hard drive attached to your Macintosh, the Scratch Disks command in the Preference menu allows you to choose the hard drives (or "scratch disks") that you wish to use for these temporary files. Peak allows you to select which disk you want to have as your default, or "Primary" disk for this purpose—usually you would select the disk that has the most free space. If you are connected to a file server, you can utilize available storage on the server by clicking the Allow Servers checkbox. Any available servers will then appear in the Scratch Disks pop-up menu. This feature is recommended only if you have access to a high speed Ethernet, Media Net, or other fast server.

To choose a scratch disk for temporary files:

1. Choose Scratch Disks... from the Preference menu. The Scratch Disks dialog appears.



The Scratch Disks dialog

2. The Scratch Disks dialog will show all hard drives currently connected to your Mac. Choose the hard drive(s) that you wish Peak to use when it creates temporary files by clicking the checkboxes next to the drives in the list. To choose the Primary Disk, or the default disk for temporary files, click on the Primary button next to that disk. If you are connected to a file server and would like to use storage available there as well, enable the Allow Servers checkbox.
3. Click OK to close this dialog. Peak will use the disk you have selected as your Primary scratch disk, and, if it becomes full, will then use the other disks you've chosen.

! *The hard drive with the original audio file must have the equivalent amount of free space (i.e., a 60MB file would require that there be an additional 60MB of free space on the hard drive on which the file resides).*

! *If you are using Peak with DAE and ProTools III or earlier hardware, you must be sure to configure the Scratch Disks dialog to utilize only those drives on your dedicated ProTools SCSI bus.*

Keyboard Shortcuts

Peak allows you to customize any Peak menu item with a keyboard shortcut. To change your keyboard shortcuts, go to the Preference menu and select the Shortcuts and Toolbar item. Keyboard shortcuts are stored in a Preference file in the System Folder's Preferences Folder, called "Peak 2.5 Shortcuts." Peak's default Keyboard Shortcuts are listed in Appendix 1 at the end of this manual.

To add a new Keyboard Shortcut

1. Choose Shortcuts & Toolbar under the Preference menu.
2. Scroll through the list of menu items, or, with the list box selected, simply type in the first few letters of the menu item you wish to assign. Then click on the name of the Peak menu item you wish to assign a new keyboard shortcut.
3. Use the Shortcut Key box to enter the letter you wish to use for a shortcut. You may select the Command, Option, Shift or Control keys as additional modifiers by clicking on the checkboxes in this dialog.
4. Close the Shortcuts & Toolbar dialog.

To remove a Keyboard Shortcut

1. Choose Keyboard Shortcuts under the Preference menu.
2. Scroll through the list of menu items, and click on the name of the Peak menu item for which you wish to remove a keyboard shortcut.
3. Click on the Clear button.
4. Close the Keyboard Shortcuts dialog.



User-defined Keyboard Shortcuts and Toolbox customization are not supported in Peak LE.

Making a Keyboard Shortcuts "Cue Card"

It's easy to make a "cue card" that you can keep on your desk with all the Peak shortcuts you've assigned.

Using the supplied FileMaker Pro template, you can import all of your shortcuts from a text file describing each keyboard shortcut generated from Peak.

To Create A Custom "Cue Card" of your Keyboard Shortcuts:

1. Choose Shortcuts under the Preference menu.
2. Click on the Save As Text... button.
3. Enter the name of the keyboard shortcuts text file you wish to save, and choose the disk and folder you wish to save into. Click Save.
4. Switch to the Finder and Launch FileMaker Pro.
5. Choose Open from the File menu in FileMaker Pro.
6. Open the supplied "Peak Shortcuts Template" FileMaker Pro template.
7. Choose Import Records... from the File menu in FileMaker Pro.
8. In the pop-up menu at the bottom of the Open... dialog in FileMaker Pro, choose Tab-Delimited.
9. Find the shortcuts text document you saved in step 3 and click Open.
10. FileMaker Pro will add the records to the database.
11. Use the Print option in FileMaker Pro's File menu to print out your keyboard shortcuts.

You can also sort the imported keyboard shortcut commands by description or shortcut. Consult your FileMaker Pro User's Guide for more information on importing records, sorting records, and printing.

The Toolbar



Peak 2.5 allows you to select almost any Peak command for the Toolbar. The Shortcuts & Toolbar

menu allows you to group together the functions you use most often, so that you can simply click a button instead of going to the menus. For example, if you frequently use Normalize and Pitch Change, you can choose to have the icons for these functions in the Toolbar, so that all you have to do to use one of them is to make an audio selection and click a button. The Toolbar is an easy way to make your work in Peak faster and more efficient, allowing you to customize the program to suit the way you work.

To add or subtract items from the Toolbar, use the Shortcuts & Toolbar item under the Preference menu. Toolbar selections are stored in a Preference file in the System Folder's Preference Folder, called "Peak 2.5 Shortcuts."



You can "grow" or "shrink" the Toolbar by clicking on the plus (+) and minus (-) signs in the vertical gray bar on the right of the Toolbar. You can also choose whether to have a vertical Toolbar at the left of your screen, or a horizontal Toolbar along the top of your screen—just click on the box at the upper right of the Toolbar, and it will snap to its new position.

To add a new icon to the Toolbar

1. Choose Shortcuts & Toolbar under the Preference menu.
2. Scroll through the list of menu items, and click on the name of the Peak menu item you wish to have appear in the Toolbar.
3. Click on the "Place In Toolbar" checkbox to select the icon to add to the Toolbar. If there is no icon, the menu item cannot be placed in the Toolbar.
4. Close the Keyboard Shortcuts dialog.

To remove an icon from the Toolbar

1. Choose Shortcuts & Toolbar under the Preference menu.
2. Scroll through the list of menu items, and click on

the name of the Peak menu item you wish to remove from the Toolbar.

3. Click on the checkbox to uncheck the item you wish to remove..
4. Close the Keyboard Shortcuts dialog.



Customizable Toolbar is not supported in Peak LE.

Quitting Peak

When you have finished a project or wish to end an editing session, the Quit command allows you to quit Peak and return to the Finder. If you haven't saved changes, Peak will warn you before allowing you to quit.

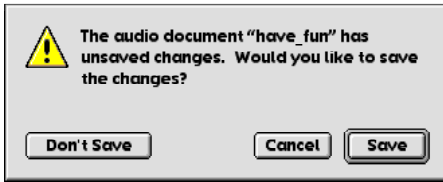
To quit Peak:

- Choose Quit from the File menu (⌘-Q).

If you have made any changes to your document since the last time you saved, Peak will ask you if you want to save them. If you do, choose Yes; if you don't, choose No. If you change your mind and wish to continue your session, choose Cancel.



If you wish to close all currently open windows without saving, hold down the Option key and click Don't Save.



The Save Changes Before Quitting dialog

Conclusion

You now know how to create, open, import audio files, export, close, and save Peak documents. You also know how to set the preferences for operating Peak. The next chapter explains how to use your Peak software to record audio to disk.
