# Editing Audio with Peak

Peak software provides you with a uniquely powerful interactive, non-destructive environment for editing and manipulating audio. In this environment, not only are virtually all editing actions completely "undo-able", but they can be performed interactively while audio playback is engaged.

### Interactive Editing

Interactive editing means that you can cut, paste, loop, and process audio with Plug-Ins even while playing back the very audio that you are editing. You can for example, start playback, cut a selection of audio and paste or insert it later in the document, and when Peak reaches the location of the inserted audio, it will play it as if it were there all along. This revolutionary capability makes Peak a supremely fast and flexible audio production tool that makes conventional recording and editing methods such as analog tape and a razor blade seem archaic by comparison.

### Non-Destructive Editing

Peak's non-destructive editing capabilities mean that the edits you perform to an audio document do not perma-nently change the original source recording until you finally save the document. Thus, you can cut, copy, paste, fade in and out of, and otherwise completely change a recording, and still be able to return back to square one—the original untouched state of the recording—up until the time that you save the document to disk. At that time, all edits are permanently written into the document.

#### Unlimited Undo

As an editing session progresses, Peak maintains an internal list of the edits that you perform. Changes that you make to an audio document are never permanently applied to the file until you ultimately save it. This is what gives Peak its unprecedented unlimited undo capability. Through the use of the Macintosh's standard Undo command, you can undo your actions sequentially, or by using the powerful Edits command, using a "playlist-style" editing event list. This is a very exciting technology which allows you to maintain complete creative freedom of choice—right up until the last moment before you save your project to disk. By making good use of these non-destructive, interactive editing capabilities, you will be able to perform feats of audio production that until recently were virtually impossible with traditional tools.

### Waveform Drawing modes

Peak has four different modes to choose from for represent-ing audio waveform information. This allows you to select the mode that is most suited to the nature of editing that you wish to perform. Each line or dot in the audio document's window may correspond to more than one sample. This group of more than one sample representing a single line or dot on the audio document display is called a samples-pixel-set. The drawing mode affects the way the samples-pixel-set are displayed. These modes are as follows:

- Average. Shows the average sample value in the samples-pixel-set. Note that the average does not show polarity (whether or not the phase of the sample is positive or negative).

  Average drawing mode tends to show greater detail in an audio document.
- Min/Max. Shows the maximum or minimum sample value (whichever is larger, regardless of polarity) in the samples-pixel-set. Note that min/max does not show polarity (whether or not the phase of the sample is positive or negative). Min/Max tends to reveal more general characteristics such as the overall amplitude envelope of an audio document.
- Signed Average. Shows the average sample value in the samples-pixel-set, as well as the polarity of the sample.

• Signed Min/Max. Shows the maximum or minimum sample value in the samples-pixel-set, as well as the polarity of the sample.

# **Selections**

A selection is just what it sounds like: a portion of audio that you have selected with the mouse. You must select audio in order to perform an editing action on it. To make good selections for editing, the best rule of thumb is to begin a selection just before a peak in the waveform and end it just after a peak in the waveform. In other words, try to make selections start and end in areas of low amplitude ("valleys" in the waveform).

It is also important, when possible, to begin and end a selection at a point where the waveform meets the zero crossing line (the center line through the waveform). This helps you avoid creating pops and clicks if you later cut or paste the audio because the point at which the waveform meets the zero crossing is a point of low amplitude in the sound wave. Pops and click generally only occur if you make a careless selection and begin or end on a portion of the soundwave where the amplitude is high (where the waveform is high above the center point). The Zoom In function helps you make very precise selections by letting you zoom in to a higher magnification and select exactly the portion of the waveform you desire.

#### Markers

A marker can be placed in a document to identify a point of importance. A marker appears as a line with a solid triangular base. Peak allows you to place markers into a document in order to mark a given location or region in a document for later selection, navigation, or editing. Markers can be moved, named and renamed, "anchored" to a particular location on a waveform, and given other attributes. The use of markers is covered in greater detail in the "Essential Editing Functions" section of Online Help.

#### Loops

A loop refers to a region of audio that is bounded on either side by loop markers. The prtion of audio that falls between the loop markers "beg loop" and "end loop" is the portion of audio that is looped. Loops are used to sustain or repeat a section of audio. They can be used for material that you intend to transfer to a sampler, or simply for playback within Peak itself. Peak allows you to create one loop per audio file.

#### Regions

A region refers to a section of audio that is bounded by markers. In the illustration above, the area that falls between any two adjcent markers is a region.

### Blending Enable/Disable button

This button, located in the lower left of the audio document window, allows you to toggle Peak's blending function on or off. Peak applies blending to areas of an audio document that have been modified by cutting, pasting or other editing processes to smooth abrupt transitions between waveform amplitudes. Blending is very useful for creating a smooth transition between edits that might otherwise sound too abrupt or cause a pop or click.

## Cursor Location Display

This field displays information about the current position of the cursor. If audio is selected, it also displays information about the duration of the selection. The alphanumeric shorthand given here is as follows:

[L] = the cursor is currently positioned over the left channel of the audio

[R] = the cursor is currently positioned over the right channel of the audio

t= the current cursor position in time

<u>y= the current cursor position along the vertical scale (amplitude) or start point of a selection</u>

X= the current cursor position in samples

<u>dtr= distance in current units to the nearest reference marker</u>

<u>sel</u> = the duration of the current selection

+ or - indicates positive or negative phase

The time format displayed in this field depends on which time format (samples or seconds) you have chosen with the Units command in the Preferences menu.