

**About this File**

This Help file contains context-sensitive help topics that are used by Sonic Foundry Sound Forge.

Revised 2/14/2001

**Help**

Opens a context-sensitive Help topic.

## FILE MENU

**New**

Opens a new, blank data window.

**Open**

Opens an existing file.

**Close**

Closes the current data window and prompts you to save any changes.

**Open Workspace**

Opens all of the files in the workspace and restores their positions on the screen.

**Save Workspace As**

Saves the names of all open files along with their position, size, and views.



**Save**

Saves any changes to the current file.

**Save As**

Opens the Save As dialog. Use this command to rename an existing file or to save a project under a different format.

**Save All**

Saves all open files. You will be prompted for each unsaved file.

**Properties**

Opens the Properties dialog. This dialog stores information about the current file.

**Send**

Send the current sound file via electronic mail.

**Exit**

Closes Sound Forge. If you currently have unsaved files open, you will be prompted to save your changes first.

**Recent Files**

Lists the most recently opened projects. Click on the name of the project you want to open.

**EDIT MENU**



**Paste to New**

Creates a new data window using the contents of the clipboard.

**Undo**

Reverses the last action performed.

**Redo**

Reverses an Undo operation.

**Repeat**

Repeats the last operation performed.

**Cut**

Removes the selected sound data and copies it to the clipboard.

**Copy**

Copies the selected sound data to the clipboard.

**Copy Object Link**

Copy an object link to the sound file onto the clipboard. You can then Paste (or Paste Special) the link into another application (such as Microsoft Word or WordPad) that supports Object Linking and Embedding (OLE). This feature is useful for embedding sound files in documents.

**Paste**

Inserts a copy of the clipboard contents at the current insertion point. If there is a selection made, the **Paste** command deletes the selected data before inserting.



**Crossfade**

Mixes a copy of the clipboard contents at the current insertion point and allows you to apply a linear fade between the source and destination data.

**Mix**

Pastes a copy of the clipboard contents at the current cursor position and allows you to specify a level for the source and destination data.

**Overwrite**

Replaces a selection with the contents of the clipboard.

**Replicate**

Copies multiple copies of the clipboard contents to the current data window.

**Note:** The **Replicate** command will paste as many copies of the clipboard as will fit to a selected area. If no selection is currently made in the data window, the function will have no effect.

**Trim/Crop**

Removes all data from the sound file except the selected data.

**Delete (Clear)**

Removes selected sound data without copying it onto the clipboard.

**Select All**

Selects all data in the current window.

**Preview Cut/Cursor**

Plays the data before and after the current selection. This command lets you preview the result of a **Cut** or **Clear** operation without altering the file.



**Pre-Roll to Cursor**

Plays the data before the cursor position for the default pre-roll length.

## **Edit**

Selects the **Edit** tool. Use the **Edit** tool to select data.

## **Magnify**

Selects the **Magnify** tool. Use the **Magnify** tool to zoom in to a particular region without losing your selection.

## **Pencil**

Selects the **Pencil** tool. Use the **Pencil** tool to edit the waveform by drawing on it.

**Go To**

Displays the Go To dialog. Use the Go To dialog to move the cursor to a specific location in a sound file.

**Snap Edge to Time**

Forces the active edge of a selection to a whole time division as designated by the marks on the Time Ruler above the data window.

The active edge of a selection is defined by the blinking cursor.

**Snap to Time**

Forces both edges of a selection to a whole time division as designated by the marks on the Time Ruler above the data window.

**Snap to Zero**

Forces both edges of a selection to the next zero-crossing of the waveform.

**Note:** The Editing tab in the Preferences dialog allows you to choose whether this is a negative, positive or any zero-crossing.



**Snap Edge to Zero**

Forces the active edge of a selection to the next zero-crossing of the waveform.

The active edge of a selection is defined by the blinking cursor.

**Set**

Displays the Set Selection dialog, which allows you to select data by specifying starting and ending points or choosing a selection from a list of regions.

**Undo All**

Reverses all operations performed on a file. Unless the **Disable Undo/Redo** command was used after you opened the file, **Undo All** will return your file to its original state when opened.

**Disable Undo/Redo**

Prevents Sound Forge from creating temporary files used for undoing operations.

**VIEW MENU**

**Maximize Width**

Stretches the active data window to the full width of the Sound Forge window.

**Full Screen**

Maximizes the Sound Forge workspace in your display. To return to the regular window display, choose the **Full Screen** command again.

**Toolbars**

Displays the Toolbars tab in the Preferences dialog to specify which toolbars you want to display.



**Contents**

Displays the Clipboard Contents dialog.

**Play**

Plays the contents of the clipboard.

**Out Full**

Zooms out vertically to allow viewing of the entire amplitude range. This command also centers the centerline.

**Window**

Zooms in or out vertically to the maximum zoom ratio that allows you to view the entire waveform.

**Selection**

Maximizes a selected area vertically and horizontally.

**In Full**

Maximizes the horizontal magnification to one sample per pixel on the screen.

**Normal**

Zooms out to the default zoom ratio.

To change the default for the Normal zoom ratio, go to the Display tab in the Preferences dialog.

**Out Full**

Zooms out to the lowest magnification so that the entire sound file will fit on the screen.



**Selection**

Maximizes the selected area in the data window.

**Focus to Data Window**

Returns the screen focus to the sound file's data window. This performs the same function as left-clicking anywhere on the data window.

**Regions List**

Opens or closes the Regions List window. The Regions List contains all of the regions and markers that exist in the active data window.

**Playlist/Cutlist**

Opens or closes the Playlist/Cutlist window. This window is used to arrange regions for playback.

**Keyboard**

Opens or closes the MIDI Keyboard window. The Keyboard allows you to send MIDI note on and MIDI note off commands to your sound card or sampler.

**Mixer**

Opens or closes the Mixer window. The Mixer controls volume and record levels of sound cards that support this feature.

**Time Display**

Opens or closes the Time Display window. The Time Display window displays the current cursor or play position.

**Video Preview**

Opens or closes the Video Preview window. This window shows the video frame at the current cursor or play position.



**Play Meters**

Opens or closes the Play Meters window. The Play Meters display peak levels during playback.

**Undo/Redo History**

Opens or closes the Undo/Redo History window. This window allows you to see all of your edit operations. The most recently performed operations are displayed at the top of each list.

**Loop Tuner**

Opens or closes the Loop Tuner window. You can use the Loop Tuner to adjust the starting and ending points of a loop to create smooth transitions.

## SPECIAL MENU

**Record**

Opens the Record dialog. Use the Record dialog to record data into an existing data window or to a new data window.

**Note:** If the current window is opened in direct mode, the Record command will record to a new window by default.

**Play All**

Plays the entire sound file from beginning to end, regardless of cursor position, selection, or playlist.

**Play**

Plays back the file in current playback mode (Normal, Looped, or Sample mode).

**Pause**

Pauses playback and leaves the cursor at its current position.



**Stop**

Stops playback and returns the cursor to its position prior to playback.

**Go to Start**

Moves the cursor to the beginning of the current file.

**Rewind**

Moves the cursor backward through the current file.

**Forward**

Moves the cursor forward through the current file.

**Go to End**

Moves the cursor to the end of the current file.

**Play Normal Mode**

Sets playback to Normal mode. When you click the **Play** button while in Normal mode, playback will adhere to the following rules:

- If there is no selection, playback occurs from the cursor to end of file.
- If there is a selection, playback occurs from the beginning of the selection to the end of the selection.

### **Play Looped Mode**

Sets playback to Looped mode. When you click the **Play** button while in Looped mode, playback will adhere to the following rules:

- If there is no selection, the entire sound file is played in an endless loop.
- If there is a selection, the selection is played in an endless loop

### **Play as Sample/Cutlist Mode**

Sets playback to Sample or Cutlist mode. When you click the **Play** button while in Sample or Cutlist mode, playback will adhere to the following rules:

- If the file contains loops, the loops will repeat as many times as specified on the Edit Sample dialog. Use this to listen to a sound file as it would sound when played by a sampler.
- If cutlist regions have been defined, the file will be played once and cutlist regions will be skipped. Use this to preview the effects of your cutlist.
- If the file does not contain any loops and no cutlist has been defined, the file will be played once from beginning to end.



**Add**

Displays the Add Marker/Region dialog.

**Delete**

Deletes the selected region in the Regions List.

**Edit**

Display the Edit Marker/Region dialog so you can edit the selected region in the Regions List.

**Replicate**

Creates an exact copy of an existing marker or region in a file.

**Split**

Divides an existing region at the current cursor position, producing two separate regions.

**Update**

Updates a marker or region to correspond with the cursor.

**Clear**

Removes all markers and regions from the current file. This command will also clear any Playlist or Cutlist you have defined for the file.

### **Markers to Regions**

Converts all existing markers to regions using the data between each consecutive marker as the region boundary.



**Open**

Imports another regions/playlist file into the current sound file.

**Save As**

Saves a file's regions and playlist to an external file.

**Copy onto Clipboard**

Copies the text of the Regions List onto the clipboard for use with a text editor.

## **Add**

Adds the selected region to the Playlist/Cutlist.

**Note:** The **Add** command is not available unless the Playlist/Cutlist is visible. Press Alt+1 to display the list.

**Delete**

Removes the selected region from the Playlist/Cutlist.

**Edit**

Displays the Edit Playlist dialog. You can use the Edit Playlist dialog to specify the number of times a playlist region will be played, set up MIDI triggers, and establish pre-roll.

**Replicate**

Creates an exact copy of the selected Playlist/Cutlist region.

**Clear**

Removes all regions from the Playlist/Cutlist.

**Note:** This command will not remove regions defined in the file.



**Stop Point**

Defines the selected region as a stop point. When the Playlist is invoked, it will continue to play through the regions until it encounters a stop point.

**Pre-Roll Playback**

Begins playback a specified amount of time prior to the selected region. You can specify the pre-roll time on the Edit Playlist dialog or on the Playlist tab in the Preferences dialog.

**Open**

Imports an existing regions/playlist file into the current sound file.

**Save As**

Saves a file's regions and playlist to an external file.

**Copy onto Clipboard**

Copies the text of the Playlist/Cutlist onto the clipboard for use with a text editor.

**Convert to New**

Creates a new sound file that contains the regions arranged sequentially as specified in the Playlist.

### **Treat as Cutlist**

Choose this command to use the Playlist/Cutlist in Cutlist mode. Regions in the Cutlist will be skipped during playback when you click the **Play as Cutlist** button.

**Delete Cut Regions**

Removes Cutlist regions from a file.

**Note:** This command is not available unless **Treat as Cutlist** is selected.



**Save As**

Saves a file's markers, commands, and summary information to an external file.

**Import**

Imports markers, commands, and summary information from an external Windows Media Script file.

**Add Command**

Opens the Add/Marker Region dialog, where you can insert streaming media commands in your file.

**Halve Selection**

Reduces the current selection by half. For example, if you have four measures selected and choose **Halve Selection**, only measures one and two will be selected.

**Double Selection**

Doubles the current selection. For example, if you have four measures selected and choose **Double Selection**, the next four measures will be selected.

**Shift Selection Left**

Moves the current selection left by the length of the selection.

**Shift Selection Right**

Moves the current selection right by the length of the selection.

### **Rotate Audio**

The function of this command depends on the current selection:

- If there is no selection, the first quarter of the file will be moved to the end.
- If a selection is made at the very beginning of the file, that audio will be cut and pasted at the end of the file. If a selection is made at the very end of the file, that audio will be cut and pasted at the beginning of the file.

**Note:** If the selection does not touch the very end or very beginning of the file, the command will not work.



**Edit ACID Properties**

Displays the Edit ACID Properties dialog. You can use this dialog to change ACID-specific information in a wave file.

**Edit Sample**

Displays the Edit Sample dialog, where you can create or edit samples and loops.

### **Edit Frame Rate**

Displays the Edit Frame Rate dialog, where you can change the frames per second value used for status information when using the **Absolute Frames** or **Time & Frames** format.

**Edit Tempo**

Displays the Edit Tempo dialog, where you can calculate the musical tempo (in beats per minute) of the current selection.

**Center Cursor**

Redraws the data window so the current cursor position is in the center of the data window.

**Drop Marker**

Places a marker at the current cursor position.

**Create Region**

Creates a region using the currently selected data.

**Create Sample Loop**

Displays the Edit Sample dialog, where you can create or edit samples and loops.



**Mark In**

Sets the beginning of a selection at the current cursor position. The data between this point and the Mark Out position will be selected.

**Mark Out**

Sets the end of a selection at the current cursor position. The data between this point and the Mark In position will be selected.

**Toggle Selection**

Switches between the last selection and the last cursor position.

**Clear Undo/Redo History**

Erases the temporary undo files for the active file.

**Clear All Undo/Redo Histories**

Erases the temporary undo files for all open files.

**Rebuild Peak Data**

Recalculates the peak data file for the active data window.

## OPTIONS MENU

**Samples**

Displays the time ruler in samples.



**Time**

Displays the time ruler in hours:minutes:seconds.milliseconds.

**Seconds**

Displays the time ruler in seconds.

**Time & Frames**

Displays the time ruler in hours:minutes:seconds.frames with a frame rate of 15 frames per second.

**Absolute Frames**

Displays the time ruler in total frames from the beginning of the project with a frame rate of 15 frames per second.

**Measures & Beats**

Displays the time ruler in measures:beats.quarter-beats.

**SMPTE Non-Drop**

Displays the time ruler in hours:minutes:seconds.frames with a frame rate of 30 frames per second.

**SMPTE Drop**

Displays the time ruler in hours:minutes:seconds.frames with a frame rate of 30 frames per second with dropped frames.

**SMPTE EBU**

Displays the time ruler in hours:minutes:seconds.frames with a frame rate of 25 frames per second for the European Broadcasting Union.



**SMPTE Film Sync**

Displays the time ruler in hours:minutes:seconds.frames with a frame rate of 24 frames per second.

**Marker Names**

Displays marker names on the waveform display.

**Marker Lines**

Displays dashed lines on the waveform display to help you locate the exact position of a marker.

**Region Names**

Displays marker names on the waveform display.

**Region Lines**

Displays dashed lines on the waveform display to help you locate the beginning and end of a region

**Loop Names**

Displays loop names on the waveform display.

**Loop Lines**

Displays dashed lines on the waveform display to help you locate the beginning and end of a loop.

**Reset Clip**

Resets the **Clip** indication at the top of the meters.



**-12 to 0 dB**

Sets the range of the meters for -12 dB to 0 dB.

**-24 to 0 dB**

Sets the range of the meters for -24 dB to 0 dB.

**-42 to 0 dB**

Sets the range of the meters for -42 dB to 0 dB.

**-60 to 0 dB**

Sets the range of the meters for -60 dB to 0 dB.

**-78 to 0 dB**

Sets the range of the meters for -78 dB to 0 dB.

**-90 to 0 dB**

Sets the range of the meters for -90 dB to 0 dB.

**-120 to 0 dB**

Sets the range of the meters for -120 dB to 0 dB.

**-138 to 0 dB**

Sets the range of the meters for -138 dB to 0 dB.



**Show Labels**

Toggles the meter level labels on and off.

**Hold Peaks**

When this command is selected, the highest peak levels are represented by a thin line on the meter.

**Hold Valleys**

When this command is selected, the lowest peak levels are represented by a thin line on the meter.

**Always on Top**

When this command is selected, the play meters will always be displayed above any other windows.

**Position**

Displays the current cursor position in the time display window. The format of the display will depend on the **Status Format** setting.

**Sync/Trigger Status**

Displays the Sync/Trigger Status in the Time Display window.

**Playlist Position**

Displays the position of the cursor from the beginning of the playlist in the Time Display window. The format of the display will depend on the **Status Format** setting.

**Passive Update**

Reduces the overhead (processor time) needed to update the Time Display window. The smallest increments may not be exact, but the major time increments will be accurate.



**Copy Current Frame**

Copies the frame displayed in the Video Preview window to the clipboard.

**White Background**

Changes the background color of the Video Preview window and Video Strip to white.

**Black Background**

Changes the background color of the Video Preview window and Video Strip to black.

**Default Background**

Changes the background color of the Video Preview window and Video Strip to gray.

**Animate Video Strip**

Animates the Video Strip during playback. This feature is frame accurate, meaning that when you move the cursor, the correct frame corresponding to the cursor position will be displayed instead of the static overview frame.

**Number Frames**

Displays frame numbers in the bottom left-hand corner of the frames in the Video Strip.

**Stretch to Window**

Resizes each frame to fit exactly into the Video Preview window. This mode is generally the slowest because resizing a frame by non-integral fractions requires many calculations.

**Integral Stretch**

Resizes each frame to fit the Video Preview window, but frames are stretched only by integral amounts. This is usually the fastest mode.



**Preserve Aspect**

Resizes each frame to fit the Video Preview window while maintaining the original aspect ratio (horizontal vs. vertical size) of the video.

**External Monitor**

Sends video preview to an external video monitor. Your video card must support this feature in order to use it.

**Passive Update**

Reduces the overhead needed to update the Video Display window. The Video Display is updated when the processor is idle.

**Scroll Playback**

Enables automatic data window scrolling during playback. When the cursor moves off of the current window, it will quickly scroll to show another full window of data.

**Scroll Smoothly**

When this option is selected, the cursor will slowly move back to the center of the display, and the wave data will scroll past it. This allows you to see in front of the sound data that is being played.

**Drag and Drop Snapping**

When this option is selected, you can snap to major time ticks on the Time Ruler, markers and regions, video frames, or cursor positions when dragging data to another window.

**Lock Loop/Region Length**

Forces the length of a region to remain constant when changing the start or end time of a region or loop.

**Paste Events**

Transfers events such as regions and markers from the source to the destination sound files when pasting, mixing, or crossfading.



**Selection Grid Lines**

Displays grid lines that divide the selection into four equal parts. These lines make creating loops from existing material easier.

**Auto Snap to Time**

Forces the ends of selections to the nearest whole time division.

**Auto Snap to Zero**

Forces the ends of selections to the nearest zero-crossing.

**MIDI Input Sync/Trigger**

Enables triggering from MIDI commands received through the MIDI input port.

When this option is selected, dialogs that specify MIDI triggers will also accept input from the MIDI input port, allowing easy entry of MIDI note and controller values. When this option is not selected, the MIDI triggers, Regions List triggers, and Playlist triggers specified will be ignored.

### **MIDI Output Sync**

Enables Sound Forge to send MIDI time code through the MIDI Output port.

**Note:** You can specify a MIDI output port on the MIDI/Sync tab in the Preferences dialog.

**Pre-Queue for SMPTE/MTC**

Makes Sound Forge open the wave device and pre-load data from the next region to be played in the Playlist. Pre-queuing helps ensure that audio will begin playing the moment the designated SMPTE time is detected by Sound Forge when synchronizing to MIDI time code (MTC).

**MIDI Triggers**

Displays the MIDI Triggers dialog. Use this dialog to control Sound Forge functions using MIDI commands from external devices such as a MIDI keyboard or sequencer.

**Preferences**

Displays the Preferences dialog.



## WINDOW MENU

**New Window**

Creates a new data window that will be given a generic name. This command uses the sound parameters that were set when the **New** command in the File menu was last used.

**Cascade**

Arranges all open data windows so they overlap with the title bar of each window remaining visible.

**Tile Horizontally**

Arranges all open data windows top to bottom with no overlapping.

**Note:** This command affects only non-minimized windows.

**Tile Vertically**

Arranges all open data windows left to right with no overlapping.

**Note:** This command affects only non-minimized windows.

**Arrange Icons**

Arranges minimized data windows.

**Minimize All**

Minimizes all open data windows.

**Restore All**

Restores all minimized windows to their previous window size and position.



**Close All**

Closes all open windows.

**Switch Window**

Switches to another data window.

## HELP MENU

**Sonic Foundry Sound Forge Help**

Opens the online help.

**Keyboard Shortcuts**

Opens the Keyboard Shortcuts topic in the online help.

**Tip of the Day**

Displays the Tip of the Day window. This window displays helpful tips to help you use Sound Forge.

**Note:** The Tip of the Day message appears every time you start Sound Forge. You may turn this option off on the General Preferences tab.

**Register Sound Forge/Update User Information**

Starts the Sound Forge registration wizard, where you can register Sound Forge or update update your user information after you've registered.

**Sound Forge Home Page**

Starts your Web browser and opens the Sound Forge home page. Here you will find specific information about Sound Forge.



**Frequently Asked Questions**

Starts your Web browser and opens the FAQ page. Here you will find answers to most common questions regarding Sonic Foundry's products.

**Sonic Foundry Home Page**

Starts your Web browser and opens the Sonic Foundry home page. All the latest news about Sonic Foundry can be found here.

**Online Support**

Starts your Web browser and opens the Online Support page. This page is devoted to bringing you useful information for troubleshooting any problems you might be experiencing with Sound Forge.

**Product News**

Starts your Web browser and opens the News page. Here you will find announcements about new and existing products.

**Send Feedback**

Starts your Web browser and opens the Technical Support Request form found on our Web site. Our Technical Support Department will respond to you within 36 business hours.

**About Sound Forge**

Displays information about Sound Forge, such as the software license owner, copyright and system information, program version and serial number, and the cool Sound Forge logo.

**Latest Sound Forge Updates**

This command starts your Web browser and opens the Updates page, where you can download updates for your Sonic Foundry projects.

## PROCESS, EFFECTS, AND TOOLS MENUS



**Volume**

Opens the Volume dialog, where you can change the volume of a selection.

**Note:** If no data is selected, the volume of the entire file will be modified.

**Insert Silence**

Opens the Insert Silence dialog, where you can insert a section of silence in a sound file.

**DC Offset**

Opens the DC Offset dialog, where you can change the baseline of a sound file to compensate for electrical mismatches between your sound card and input device.

**Invert/Flip**

Reverses the polarity of the sound data. Although inverting data does not make an audible difference in a single file, it can be useful for matching a sample transition when executing certain pastes, mixes, or loops.

**Note:** If no data is selected, the entire file will be inverted.

**Mute**

Sets the volume of a selection to -Inf dB (silence).

**Note:** If no data is selected, the entire file will be muted.

**Reverse**

Reverses the current selection.

**Note:** If no data is selected, the entire file will be reversed.

**Fade In**

Applies a linear fade from -Inf. to 0 dB.

**Note:** If no data is selected, the fade is applied to the entire file.

**Fade Out**

Applies a linear fade from 0 dB to -Inf.

**Note:** If no data is selected, the fade is applied to the entire file.



**Crossfade Loop**

Opens the Crossfade Loop dialog to help you to create loops in material that otherwise might not loop well. Mixing sound occurring before the loop start point into the end of the loop can make the transition from the end to the beginning of the loop much smoother.

**Channel Converter**

Opens the Channel Converter dialog, where you can convert between mono and stereo formats.

**Bit-Depth Conversion**

Opens the Bit-Depth Conversion dialog, where you can to change the bit depth of a sound file.

**Graphic Fade**

Opens the Graphic Fade dialog, where you can use an envelope to vary the volume of a selection over time.

**Statistics**

Opens the Statistics dialog, which displays information about the selected sound file region.

**Find**

Opens the Find dialog, which you can use to search for clicks and pops, volume levels, or silent breaks in a sound signal.

**Auto Region**

Opens the Auto Region dialog, where you can automatically create regions in a sound file for the Regions List and Playlist.

**Auto Trim/Crop**

Displays the Auto Trim/Crop dialog, where you can remove unnecessary silence in a sound file and automatically fade in and out the end-points of a phrase.



**Envelope**

Opens the Envelope dialog, where you can apply an envelope to vary the amplitude of a waveform over time. Unlike the Graphic Fade command, which simply fades a waveform by a specific amount over time, the gain at each point is dynamically calculated to achieve the exact specified envelope.

**Resample**

Opens the Resample dialog, where you can change the sample rate of an existing sound file.

**Pitch Bend**

Opens the Pitch Bend dialog, where you can draw an envelope that increases or decreases the pitch of a sound file over time.

**Simple Synthesis**

Opens the Simple Synthesis dialog, where you can generate a simple waveform of a given shape, pitch, and length.

**FM Synthesis**

Opens the FM Synthesis dialog, where you can create complex sounds from simple waveforms using frequency modulation (FM).

**DTMF/MF Tones**

You can use DTMF/MF Tones dialog to generate the standard dial tones used by telephone companies.

**Normalize**

Displays the Normalize dialog, which allows you to raise the volume of a selection so that the highest level sample reaches a user-defined level. Use normalization to ensure you are using all of the dynamic range available to you without clipping.

**Normalize Using**

Select a radio button to specify how you want to normalize your file.



**Peak Level**

When you normalize to a peak value, you can specify the level to which the maximum detected sample value will be set. Sound Forge applies a constant gain to the selection to bring the peak to this level.

**Average RMS Power (Loudness)**

When you normalize using average RMS power, Sound Forge will normalize the sound file using the detected average RMS value of the sound file to a value you specify. This is helpful for matching the apparent loudness of different recordings.

### **Normalize To**

When the **Peak Level** radio button is selected, drag the fader to specify the level to which the highest peak should be set.

When the **Average RMS Power** radio button is selected, Drag the fader to specify the new average RMS power for the selection.

**Scan Levels**

Displays the Peak and RMS levels for the selection.

### **Ignore Below**

Drag the fader to determine the level of material you want to include in the RMS calculation. Any sound material below the threshold will be ignored in the calculation. This is useful to eliminate any silent sections from the RMS calculation. You should set this parameter a few dB above what you consider to be silence.

If you set this value to minus infinity, all sound data will be used. If the value is set too high (above -10 dB), there is a good chance that the RMS value is always below the threshold. In this case, no normalization will occur. Therefore, it is good to test the threshold by using the **Scan Levels** button.

**Attack Time**

Specify how quickly the scan should respond to transient peaks in the sound file. A slower attack time will tend to ignore fast-peaking material.

**Release Time**

Specify how quickly the scan should stop using transient peak material after it has begun to drop in level. A slower release time will increase the amount of material included in the RMS calculation.

**Use Equal Loudness Contour**

Select this check box if you want the RMS calculation to compensate for high- and low-frequency audio. Very low and high frequencies are less audible than mid-range frequencies.



**Scan Levels**

Click to scan the current selection and display the peak and RMS levels.

**Scan Levels**

Displays the Peak and RMS levels for the selection.

### **If Clipping Occurs**

Choose a setting from the drop-down list to specify how Sound Forge should react to clipping:

**Apply dynamic compression:** Any peaks that would clip are limited to below 0 dB using nonzero attack and release times to minimize distortion. In other words, a time-varying gain is used to ensure that no hard clipping occurs.

This option is useful for getting very loud, yet clear sound during the mastering process.

**Normalize peak value to 0 dB:** The selection's peak amplitude level is normalized to 0 dB. This applies the maximum possible constant gain that doesn't clip to the selection. Less gain is applied than would be necessary to achieve the Normalize to RMS level.

**Ignore (saturate):** Sound data is allowed to clip. Use this option only if the clipping samples are very short and infrequent.

**Stop processing:** Any sound data that would clip causes the Normalize function to stop processing and display a notification.

**Use Current Scan Level**

Select this check box to normalize to the level displayed in the **Peak** or **RMS** fields without rescanning.

## **Process Mode**

Choose a setting from the drop-down list to specify how you want to perform panning:

**Pan (preserve stereo separation):** allows you to perform right- and left-channel panning effects without mixing the channels together. This is used to simulate left/right positioning of stereo recordings.

**Pan (mix channels before panning):** allows you to perform right- and left-channel panning effects by first mixing the two channels and then changing the volume between channels.

**Stereo expand:** allows you to contract or expand the stereo image of a stereo recording, from dead center (mono), to completely panned wide (no center channel). For realistic effects, you should not venture too far from Normal, but do experiment.

**Mix Mid-Side (MS) recording to left and right channels:** allows you to convert a mid-side recorded track to a left/right track and set the width of the stereo image.

### **Output Gain**

Drag the fader if you want to apply a gain after processing.

## **Envelope**

Adjust the envelope to achieve the desired sound:

- Drag the small boxes (envelope points) up or down.
- To create a new drag point, left-click on any point of the fade envelope.
- To delete an envelope point, click it with the right mouse button, or double-click it with the left mouse button.
- To move all envelope points, press Ctrl+A and drag when the envelope has focus.

### Show Wave

When your selection is small, the waveform is automatically displayed in the envelope graph. Perform the following steps if the waveform is not displayed.

1. Select the **Show wave** check box.
2. If you're working with a stereo file, choose a setting from the drop-down list to specify which channels are displayed.



**Reset Envelope**

Click to reset the envelope to the center of the graph.

## SPECTRUM ANALYSIS

**Spectrum Analysis**

Starts the Spectrum Analysis tool, which you can use to examine the fundamental frequency and overtones present in a recording.

**Settings**

Opens the Spectrum Settings dialog, where you can configure the sonogram display.

**Auto Update**

Updates the Spectrum Graph with any change in the cursor position or selection of the current file. A check mark is displayed next to the command when it is selected.

**Monitor Playback**

Enables monitoring of a playback device. A check mark is displayed next to the command when it is selected.

The Spectrum Graph will update in real time as the current file plays. The response of the graph will depend on the current FFT size and the speed of your computer.

**Monitor Input**

Enables monitoring of input to your selected sound card. A check mark is displayed next to the command when it is selected.

The Spectrum Graph will update in real time to any input to your selected sound card. This feature makes it possible to perform real-time analysis of room acoustics or other live sources.

**Show Position**

Displays amplitude and frequency information in a tool tip next to the cursor.



**Show Notes**

Displays the nearest musical note equivalent of the cursor position in a tool tip next to the cursor.

**Print Display**

Sends the contents of the Spectrum Analysis window to your printer.

**Close**

Closes the Spectrum Analysis window.

**Zoom to Range**

Sets the amplitude and frequency range to the Display Range maximum and minimum values specified in the Spectrum Settings dialog.

**Zoom Out Full**

Allows you to view the entire frequency and amplitude range (0 Hz to Nyquist frequency). This option is handy if you're lost somewhere in the graph.

**Normalize DB**

Sets the Spectrum Graph amplitude range equal to the maximum and minimum values in the spectrum graph.

**Logarithmic**

This command displays the Spectrum Graph (x-axis) logarithmically. In logarithmic mode, more area of the graph is devoted to lower frequencies.

**Note:** This mode is not available in the Sonogram display.

**Grab/Pan**

Allows you to navigate the Spectrum Graph by dragging the mouse vertically or horizontally or using cursor keys. This option is only available when you are zoomed in on a selection.



**Sync Graphs**

Synchronizes both displays in a stereo file to allow you to view the same region of the FFT in both channels.

**Normal Display**

Displays the Spectrum Graph (amplitude on y axis ,frequency on x axis). If multiple slices are selected, a time axis is also displayed.

**Sonogram (Color)**

Displays a color Sonogram Graph (frequency on y axis, time on x axis, amplitude represented by color) of the selected region.

**Sonogram (B&W)**

Displays a black and white Sonogram Graph (frequency on y axis, time on x axis, amplitude represented by darkness) of the selected region.

**Line Graph**

When this option is selected, a single, unfilled line is used to draw the Spectrum Graph.

**Bar Graph**

When this option is selected, a series of bars corresponding to the FFT bins is used to draw the Spectrum Graph.

### **Filled Graph**

When this option is selected, the Spectrum Graph is displayed as a filled graph.

**Note:** Some video drivers have problems displaying in this mode. If you encounter problems such as incorrect shading or very slow drawing, use the **Line Graph** or **Bar Graph** options or change video drivers.

**Update**

Causes the Spectrum Analysis Plug-In to re-analyze the current selection and update the frequency or Sonogram Graph.



**Contents**

Opens the Spectrum Analysis topic in the Sound Forge online help.

**About**

Displays information about the Spectrum Analysis plug-in.

## BATCH CONVERTER

**Batch Converter**

Starts the Batch Converter. You can use the Batch Converter to modify and manipulate multiple files without enduring the monotony of processing each file individually. Any combination of processes, effects, tools or DirectX plug-ins can be added to the Batch Script and run on multiple files.

**Extract Regions**

Opens the Extract Regions dialog, which you can use to create individual files from regions in the Regions List of a sound file.

**Run Batch Script**

Opens the Run Batch Script dialog, where you can apply batch processing to opened sound files in Sound Forge. Scripts that are created with the Batch Converter are selected and applied to the current selection.

**Add**

Opens the File Add dialog for selecting the files to process. Files can also be added to the batch list by dragging files from the Windows Explorer and dropping them onto the Batch Converter window.

The File Add dialog allows one or more files to be added to the batch list. Select the files to add and click the Add button. The selected files will then be appended to the batch list as source files.

**Open Source**

Opens the selected source (unconverted) file in Sound Forge.



**Open Destination**

Opens the selected destination (converted) file in Sound Forge.

**Note:** The **Open Destination** command is available only if a successful conversion has completed and the **Status** of the file is **Done**.

**List Errors**

Displays a list of errors that were encountered during conversion of the selected file. If no errors occurred, this command is not available. Use this command to determine why the file was not converted.

**Properties**

Displays information about the selected file.

**Batch Script: Add**

Imports a batch script that was packaged by using the **Save Batch Script** command. It will install the selected file into the Batch Converter along with any new plug-in presets that may be required by the new script.

**Batch Script: Save As**

Allows a selected script to be packaged for transferring to different computers. The function creates a selected file with all the information necessary to install the selected script for use on another computer including user created presets for any plug-in. The file can then be passed to another user and installed using the **Add Batch Script** command.

**Close**

Closes the Batch Converter window.

**Invert Selection**

Inverts the current selection: all files that are selected (highlighted) will be unselected; all files that are not selected will be selected.

**Select Done**

This command selects all files that have a status of **Done**. Files are labeled **Done** after they have been successfully converted.



**Select All**

Selects all files in the list.

**Remove Selected (Delete)**

Removes all files that are selected (highlighted) from the list.

**Remove Done**

Removes all files that have a status of **Done** from the list. Files are labeled **Done** after they have been successfully converted.

**Remove All**

Removes all files from the list.

**Reset Selected**

Resets the Status of all selected files. After resetting a file's status, another conversion can be run on the file.

**Reset All**

Resets the status of all files in the list.

**Conversion Settings**

This command opens the Conversion Settings dialog. This dialog is used to specify the destination file format and audio processing functions that will be applied to the selected files.

### Source Raw Attributes

Displays the Source Raw Attributes. Use this dialog to specify the format for all raw source files in the list. Using Raw file types may be necessary to open sound files that are not stored in one of the standard file formats supported by the Batch Converter.

**Note:** All raw files in a single batch list must have the same attributes. If multiple raw formats need to be converted, they must be converted as separate batches.



**Destination Folder**

Displays the Destination Folder dialog, where you can specify settings for saving files created during batch processing.

**Show Full Path**

Toggles between displaying the full path to every file in the list and displaying just the file name. This option can be useful if you are converting files from multiple directories.

**Suppress Initialization Dialogs**

Select this command if you want to suppress any dialogs that would normally be displayed when certain processes are run during the batch. The default values for the dialogs will be used.

**Stop on Errors**

Select this command if you want the Batch Converter to stop processing and display a dialog if errors occur during processing. When the command is not selected, errors are logged and processing continues without stopping. All destination file name conflicts will be resolved by renaming the destination file to a unique name. The Batch Converter will always choose the safest resolution possible when running unattended.

**Log Errors to File**

When this command is selected, all errors will be logged to a text file in the location specified by the **Error Log Destination** option.

**Reset Error Log**

Erases the contents of the current error log file.

**Error Log Destination**

Opens the Destination Folder dialog, where you can specify a destination folder for converted files and modify converted file names.

**Replace Existing Files**

When this command is selected, converted files will overwrite files in the destination directory that have the same name. When this option not selected, a number will be appended to the file to make the name unique.



**Delete Source After Conversion**

Select this command to delete source files immediately after a successful conversion.

This option is used to save disk space during processing and is very safe if you are certain that you will be satisfied with the converted files. If any errors are encountered during the conversion, the source file will not be deleted.

**Rename with Long File Names**

Select this command if you want to allow file names to exceed the 8-character limit of non-32-bit operating systems when the **Replace Existing Files** command is not selected.

With this command enabled, the new a unique number will be appended to the end of the file name if the converted file has the same name as a file in the destination directory. When this option is turned off, then new file names will truncate the original file name to 6 characters and append a unique two-character number to maintain compatibility with the 8.3 naming convention.

### **Use Direct Mode When Possible**

When this command is selected, all source files will be opened in Direct mode when possible. Direct mode saves time and disk space by not creating a copy of the source file prior to conversion. This option can only be used in the following cases:

- The source and destination directories are the same, and the format of the file is not being changed
- The source and destination directories are different, and **Use plug-ins** is unchecked in the Conversion Settings dialog.

If either one of these conditions is not met, a copy of the file will be created for processing.

**Refresh List**

Updates the batch list to make sure all of the files still exist

**Run Current Script**

Starts the batch conversion process using the current script in the Conversion Settings window.

**Run Multiple Scripts**

Opens the Run Multiple Scripts dialog, where you can select multiple scripts and start conversion.

**Automatic Batching**

Opens the Automatic Batching dialog, which you can use to monitor a directory in the background and automatically process any new files that are added.

**Convert Selected Only**

Converts only the files that are selected in the batch conversion list.



**Sonic Foundry Batch Converter Help**

Opens the Batch Converter topic in the Sound Forge online help.

**About**

Displays information about the Batch Converter plug-in.

**Folder to Monitor and Automatically Batch**

Specify the folder you want the Batch Converter to monitor in the background and automatically process any new files that are added.

**Automatic Archive Folder**

Select this check box and specify folder if you want the Batch Converter to save copies of the unprocessed files for safekeeping.

**Status**

Displays the status of the automatic batching process.

**Started**

Displays the date and time the automatic batching process was started.

**Files Processed**

Displays the number of files that have been processed since the automatic batching process was started.

### **Start/Stop**

Click the **Start** button on the Automatic Batching dialog to start monitoring the specified directory. Any files that exist in the folder will be batched as well.

This button will change to **Stop** when the automatic batching process is running. Clicking **Stop** will cancel the monitoring process.



**Scripts**

Opens the Run Multiple Scripts dialog, where you can choose which scripts will be used by the Batch Converter.

**Available Scripts**

Select the check box for each script you want to include in automatic batch conversion.

**Run Scripts**

Starts the batch conversion process using the selected scripts.

**Destination**

Select a script and click to choose a destination for each script.

**Destination Folder**

Specify a folder for storing files created by the selected batch script, or click the **Browse** button to specify a new folder.

#### **Append Source Folder Structure to Destination Path**

Select this check box to add the full directory structure of the source file to the selected destination folder.

For example, if you want to convert **c:\Program Files\Sound Forge\tutmusic.wav** and have specified **c:\batchone** in the **Destination folder** box, the converted file will be saved as **c:\batchone\Program Files\Sound Forge\tutmusic.wav**.

**Add to Source Base Name**

Select this check box to append a constant name to the regular name of the destination files.

For example, if you want to convert **tutmusic.wav** and have specified **batch** in the **Add to source base name** box, the converted file will be saved as **tutmusicbatch.wav**.

**Batch Script to Save in the New Package**

From the drop-down list, choose the script that you want to save as a preset package.

Saving a script as a preset package creates a file with all the information necessary to install the selected script for use on another computer including user-created presets for any plug-in. The file can then be passed to another user and installed using **Add Batch Script**.



**Save Summary Information in the Batch Script**

Select this check box if you want to save summary information with the preset package (\*.sfz) file.

**Title**

The title of the batch script.

**Author**

The name of the author of the batch script.

**Copyright**

The copyright date of the batch script.

**Comments**

Enter any comments you want to associate with the batch script.

**Batch Script**

Displays the list of functions that will be applied, in their perspective order.

**Save the Result to a New Media File Using the Specified Format**

Select this check box to save the converted data in the format you have chosen in a new file.

This box must be selected if you want the file format conversion step in the selected batch script to be run. If you do not select this check box, every part of the batch script except the format conversion will be run.

**Save Current Selection Only**

Select this check box to save only the current selection to a new file. In this way, files can be cropped without having to create a separate file of the selection first.



**Automatically Undo Changes to Source**

Select this check box to force the Run Batch Scripts function to undo the changes to the source after saving the new file.

**File Save Type**

Displays the format that will be used to save converted files.

**One Undo**

Select this check box to create a single undo for the changes made by the batch script.

**Errors**

Displays a list of the errors encountered during batch conversion.

**Regions to Extract**

Select the regions you want to extract to new files.

**Destination Folder**

Specify a folder for storing files created from extracted regions, or click the **Browse** button to specify a new folder.

**File Name Prefix**

Enter a prefix to add to the file name of extracted regions. If the check box is not selected, then this prefix is truncated to the first 5 characters.

#### **Use Long File Names for Destination File Names**

When this check box is selected, file names can be up to 128 characters long and may contain spaces. The files names will consist of the value in the **File name prefix** box and the region name. For example, if your prefix is set to **This is my file\_** and there is a region named Region 004, the name used for extracting will be **This is my file\_Region 004.wav**.

When this check box is cleared, file names will conform to the 8.3 naming convention. These names consist of the first 5 characters from the **File name prefix** and a unique three-digit number starting with the number specified in the Start file counter index box. For example, if you have 4 regions selected for extraction, and your prefix is set to **PREFIX**, the names used will be **PREFI000.wav**, **PREFI001.wav**, **PREFI002.wav**, and **PREFI003.wav**.



**Start File Counter Index**

Specify the number that you want to use to start automatic numbering of files when the **Use Long File Names for destination file names** check box is cleared.

### **Play/Stop**

Click the **Play** button to play the selected region. This button will change to **Stop** during playback.

**Select All**

Click to select all regions.

**Remove Summary Information**

Select this check box to remove summary information during batch processing.

**Remove Region and Playlists**

Select this check box to remove regions list and playlist information during batch processing.

**Remove Sampler Information**

Select this check box to remove sampler information during batch processing.

**Remove Unknown Information**

Select this check box to remove information that Sound Forge does not recognize during processing.

### Information Fields

Select the check box for each item you want to add or replace during processing.

To edit the contents of an information field, select the field name and edit the information in the **Contents of selected field** box.



**Contents of Selected Field**

Displays the contents of the selected Summary Information field.

**Description**

Provides a description of the selected Summary Information field.

**Active File**

Select a file from the drop-down list to create a preview clip. You can listen to this file by clicking the **Play** button.

**Note:** Only the first 50 files from the batch list are available in the **Active file** list.

**Play**

Click to preview the selected file.

**Build Preview**

Click to build and play a preview clip from the active file using the current conversion settings.

**Comment**

Enter comments about the conversion results and/or the parameters used.

**Preview Start**

Specify a starting point to determine the region in the active file that will be used to create a preview clip.

**Preview Length**

Specify a length to determine the region in the active file that will be used to create a preview clip.



**Play Source**

Click to play the unaltered portion of the active file for comparing a preview with the original material.

**Clear All**

Click to clear all of the preview buffers and release any disk space used to store the preview information.

**Back**

Click to switch the active window (keyboard focus) back to the Conversion Settings dialog.

**File Format**

Select the **File Format** check box and choose a file format from the drop-down list if you want to convert your files to a different format during processing.

**Note:** When the you choose **Raw**, **RealAudio**, **RealMedia**, **MPEG Audio**, **Windows Media Format**, or **Video for Windows**, you can click the More button for advanced file-format options.

**Attributes**

Choose an option from the drop-down list (if available) to determine the parameters of the selected **Data format**.

**Data Format**

Choose a format for the selected file format.

**Add or Remove Summary and Extra Information**

When this box is checked, changes specified on the Summary and Extra Information dialog are applied to the destination sound file. If this check box is cleared, all Summary and Extra information in the source sound file is preserved in the destination files if possible. Some file formats do not let you store additional information in the file. In such cases, this field is ignored.

**Note:** Removing Summary and Extra information from sound files can save disk space and ensure compatibility with software that mishandles extra data.

**Preview**

Click to open the Preview Conversion dialog. This dialog provides a quick method of testing different processing options on small regions of sound: you can keep the dialog open while you change parameters in the Conversion Settings dialog.



**More**

Click to display the Summary and Extra Information dialog, where you can specify which summary and extra information should be preserved or removed during processing.

**Use Plug-Ins**

Select this check box to apply plug-ins during processing.

**Class**

Choose a type of plug-in from the drop-down list.

**Function**

Choose a processing function from the drop-down list.

### **Preset**

Choose a processing preset from the drop-down list, or click the **Settings** button to enter new parameters.

**Settings**

Click to specify new parameters for the selected processing function.

**Add**

Click to add the selected preset to your batch script.

**Delete**

Click to remove the selected preset from your batch script.



**Move Up**

Click to move the selected entry up one level in the script.

**Move Down**

Click to move the selected entry down one level in the script.

**Batch Script**

Lists all of the functions that will be applied to your files during batch processing.

### Frames Per Second

Choose a new frame rate from the drop-down list, or choose **Keep original frame rate** to use the file's original rate.

### Re-Size Video Frames To

Choose a new frame size from the drop-down list, or choose **Keep original frame rate** to use the file's original size.

**New Width**

Specify a new frame width. This box is active only when **Custom frame size** is selected in the **Re-size video frames to** drop-down list.

**New Height**

Specify a new frame height. This box is active only when **Custom frame size** is selected in the **Re-size video frames to** drop-down list.

## **Compression**

Click to display the Compression Options dialog.



## PRESET MANAGER

**Preset Manager**

Opens the Preset Manager dialog, where you can store, back up and transfer user-defined presets from all of the effects, processes, tools and plug-ins that are installed in Sound Forge.

## SAMPLER

**Sampler**

Opens the Sampler dialog, where you can send data to and receive data from a sampler.

**Selection Start**

Moves the cursor to the start of the current selection.

**Selection End**

Moves the cursor to the end of the current selection.

## Pop-Up Menus

**Go To**

Moves the cursor to the selected marker position.



**Delete**

Removes the selected marker.

**Edit**

Displays the Marker/Region dialog for the selected marker.

**Update**

Moves the selected marker (or region) to the current cursor position (or selection).

**Select**

Selects the area between the region end points.

**Split**

Splits the region using the current cursor position as the split point.

**Select**

Selects the area between the loop end points.

**Delete**

Removes the selected loop region.

**Edit**

Displays the Edit Sample dialog for the selected loop region.



**Update**

Moves the loop tags so the loop region matches the current selection.

**Status**

Toggles the display of the transport controls and status information at the bottom of a data window.

## **Ruler**

Turns off the time ruler and tool selector at the top of a data window.

**Note:** If you turn off the time ruler, the Display Properties shortcut menu is unavailable. To turn the time ruler on again, choose **Properties** from the File menu. Choose the Display tab and select the **Time Ruler** check box.

**Zoom**

Toggle the display of the time zoom ratio and controls at the bottom-right corner of a data window.

**Overview**

Toggles the display of the overview window directly underneath the title bar. The overview represents the length of the entire sound file, as if you were zoomed out all the way. From the overview, you can determine what section of the entire sound file is being displayed, the selection made, and the cursor location.

**Video**

Toggles the display of the video strip above the title bar. The video strip is displayed only for .avi files.

### **Vertical Ruler**

Turns off the level ruler and tool selector at the left edge of a Sound Forge window.

**Note:** If you turn off the level ruler, the display properties shortcut menu is unavailable. To turn the level ruler on again, choose **Properties** from the File menu. Choose the Display tab and select the **Level Ruler** check box.

**Vertical Zoom**

Toggle the display of the level zoom controls at the bottom-right corner of a data window.



**Scroll**

Toggles the display of the scrollbar below the waveform display. Turning off the scrollbar also removes time and level zoom controls.

### **Data Only**

Displays only the waveform.

**Note:** To turn off **Data Window Only** display, choose **Properties** from the File menu. Choose the Display tab and clear the **Data Window Only** check box.

**Copy**

Copies the picture to the clipboard.

**Paste**

Pastes an icon, bitmap, or cursor from the clipboard.

**Clear**

Deletes the picture.

**Sample Value**

Displays the sample value of the right- and left-channel levels at the cursor.

**Integer**

Displays the right- and left-channel levels at the cursor position as an integer.

**Percent**

Displays the right- and left-channel levels at the cursor position as a percentage. The range is from -100 to 100 percent.



**dB**

Displays the right- and left-channel levels at the cursor position in decibels. A value of 0 dB corresponds to maximum absolute amplitude, and negative infinity (-Inf.) corresponds to complete silence. In 16-bit audio, -90.3 dB is the lowest possible dB value (sample value of 1).

**Peak**

Displays the peak sample value in the vicinity of the cursor as a dB value.

**Note:** Sound Forge scans 50 milliseconds by default. To change the scan time, choose **Preferences** from the Options menu. Next, choose the Status tab and edit the value in the **Peak level scan time** box.

### **RMS Power**

Displays the Root Mean Square (RMS) of the sample values in the vicinity of the cursor as a dB value. RMS is a more accurate measurement of loudness than the peak value.

#### **Notes:**

- Sound Forge scans 50 milliseconds by default. To change the scan time, choose **Preferences** from the Options menu. Next, choose the Status tab and edit the value in the **RMS level scan time** box.
- The maximum value of 0 dB is only achieved by a square wave (or DC offset) of maximum amplitude. A maximum amplitude sine wave reaches only -3 dB. Values below -96 dB can be achieved by combination of silence and very low levels, and only complete silence will register negative infinity.

**Label in Percent**

Changes the scale of the level ruler to display -100% to 100%.

**Label in dB**

Changes the scale of the level ruler to display in decibels.

## Bit Depth

Choose a bit depth from the shortcut menu to set the bit depth for the active file.

**Note:** Sound Forge does not perform any dithering when you set the sample size from the status bar. The new sample size is used for playback only until you save your file. If you need to dither your file, use the Bit-Depth Conversion command.

**Sample Rate**

Choose a new playback rate from the shortcut menu. If the file is does not match the specified sample rate, the audio will sound faster or slower than normal.

**Sample Rate**

Opens the Format tab in the Properties dialog, where you can specify a custom sample rate.



**Mono**

Changes a stereo recording to mono. You will be prompted to keep one of the existing channels or mix the two channels.

**Stereo**

Changes a mono recording to stereo. You will be prompted to send the existing channel to one or both of the new stereo channels.

**MIDI Device**

From the drop-down list, choose the device to which you want to send MIDI signals.

**Send Program Changes**

Allows you to select instruments in the device from the keyboard. Program changes are sent only when a key on the MIDI Keyboard is clicked.

**Wave Device**

From the drop-down list, choose the device that you want to use for playing sound data.

**Auxiliary Device**

Choose a device from the drop-down list.

**New**

Records to a new data window.

**New**

Records to a new data window.



**Go To**

Moves the cursor to the position you specify.

**Selection**

Click to specify the interval where you want to punch in.

**Window**

Choose a window from the drop-down list to specify the window where you want to record.

**Review Pre/Post-Roll**

Select the check box and use the edit boxes to specify the amount of time that will be played prior to and after regions when reviewing a take.

**Calibrate**

Calculate the DC offset while monitoring incoming sound data. The numbers below the button show the value, in sample amplitude, of the adjustment. If you change sound cards or are recording from different digital sources or at different sample rates, it is suggested that you re-calibrate the DC Offset before recording.

**Aggressive Update**

When this command is checked, Sound Forge will give more priority to the updating of the meters. This results in more accurate metering, but increases the overhead on the computer's CPU.

**Ignore**

Gaps during the recording process will be ignored.

**Mark**

Sound Forge will insert markers to identify gaps during the recording process.



**Stop**

Gaps encountered during the recording process will cause recording to stop.

**Blinking Status**

Enables the blinking record status underneath the record meters.

**Automatic Labeling**

Opens the Automatic Labeling dialog. From here you can set up user options for how to name new record windows and takes.

**About Sound Forge**

Displays information about Sound Forge, such as the software license owner, copyright and system information, program version and serial number, and the cool Sound Forge logo.

**Copy**

Copies the selected video frame to the Windows clipboard as a bitmap.

**Go To**

Moves the cursor to the selected frame.

### **Effect Properties**

Click to display more information about the current plug-in.

**Processing Bit Depth**

Choose a bit depth from the shortcut menu. The plug-in will use this bit depth for processing.



**Reset All**

Returns all controls on the dialog to their default settings.

**Save Current**

Saves the current dialog settings as an untitled preset.

**Configuration**

Displays the Real-Time Preview Configuration dialog, where you can set parameters for previewing DirectX plug-ins.

### **Pre-Roll**

When this command is enabled, sound data preceding the current selection is played before the processed data during previews.

**Note:** To change the amount of pre-roll, choose Preferences from the Options menu and choose the Previews tab. Select the **Pre-roll** check box and enter a new value in the edit box.

### **Post-Roll**

When this command is enabled, sound data following the current selection is played after the processed data during previews.

**Note:** To change the amount of post-roll, choose **Preferences** from the Options menu and choose the Previews tab. Select the **Post-roll** check box and enter a new value in the edit box.

**Left**

Changes the selection to the left channel only.

**Right**

Changes the selection to the right channel only.

**Both**

Selects both channels in a stereo file.



**Select Current**

Changes the selection that will be effected to the current selection in the file.

**Select All Data**

Selects all data in the active data window.

**Edit**

Allows you to edit the selected item.

**Expand Structure**

Click to expand a category and display additional information.

**Contract Structure**

Click to contract a category and hide additional information.

**DirectX Plug-In**

Opens a DirectX plug-in.

**Show a Tip of the Day on startup**

When this check box is selected, a Tip of the Day is displayed every time you run Sound Forge.

**Show logo splash-screen on startup**

When this check box is selected, a Sound Forge splash screen will be displayed briefly upon startup.



**Show beat marks in data selections**

Select this check box to display grid lines that divide the selection into four equal parts. These lines make creating loops from existing material easier.

**Always ask for Region and Loop names**

Select this check box if you want to display the Edit Region or Edit Loop dialog when you create regions or loop points. When this option is turned off, a default name based on location will be used.

**Open default Workspace on startup**

If this check box is selected, Sound Forge will automatically open any files that were open when you last exited the program.

**Open drag-and-drop sound files in Direct mode**

If this check box is selected, any files opened by dragging them onto the Sound Forge desktop (from outside of the program) will be opened in direct mode.

**Open command-line sound files in Direct mode**

If this check box is selected, any files specified in a DOS-prompt command will be opened in direct mode. For example, if Sound Forge is launched by another application (such as a multi-track editor), Sound Forge will edit the original file directly.

**Do not prompt for re-open after Save**

Select this check box if you do not want Sound Forge to prompt you to re-open a sound file after saving to a different format.

**Default to slow scroll when drag selecting**

In some very fast computers, automatic scrolling while selecting is too fast to use accurately. When this option is turned on, drag-selecting will cause a slow scroll.

If you click the right mouse button while selecting, you can toggle slow scroll on or off.

**Warn when Mix or Crossfade rates mismatch**

Select this check box if you want Sound Forge to warn you before mixing or crossfading data that has different sample rates. Mixing or crossfading data of different sample rates may produce unintended results.



**Always open full-screen**

Enabling this option forces Sound Forge to always open in full-screen mode. If this option is disabled Sound Forge opens in the size and position it was in when it was last closed.

**Confirm on close**

Select this check box if you want Sound Forge to prompt you with a confirmation message box before exiting Sound Forge.

If you are a system administrator, you may want to enable this option for users who are new to Windows, and who may click the Close box by accident.

**Compatible draw mode (for broken video drivers)**

Because Sound Forge's drawing routines are highly optimized, they increase the chance of causing little-known video card problems to arise. Some video cards have bugs in their drivers that can make your system lock up when Sound Forge tries to draw a waveform.

Compatible draw mode uses a different method of drawing the waveform that, although not as smooth, puts less stress on the video card. With some video cards, this mode actually increases the draw speed. However, more flashing can occur.

This problem is known to happen with ATI's Mach64 card when using High Color (16-bit) in Windows 95.

**Compatible scroll mode (for other broken video drivers)**

When this check box is selected, Sound Forge will use a less optimized method of scrolling the Waveform Display. In some instances, this can reduce interference problems between your audio and video card during Smooth Scroll playback.

**Show a textured background on the Workspace**

When this check box is selected, a stucco texture will be used for Sound Forge's application background.

**Ignore fact chunk when opening compressed .wav files**

When this check box is selected, Sound Forge will ignore fact chunks in compressed .wav files. Compressed .wav files use fact chunks to specify how many actual samples are represented in the file. If a compressed file is improperly authored, this may cause some of the compressed data to not be loaded. If you suspect that not all sound data is being loaded from a compressed file, try checking this option and reopening the file.

**Show all ACM convert formats in Save As**

When this check box is selected, Sound Forge will enumerate all compression formats available for each ACM compressor. However, this enumeration process can be slow on slow machines. For simple ACM codecs (Microsoft ADPCM, IMA ADPCM, etc.), this option is unnecessary (they have only one compression type per input) and could be disabled to speed up the selection.

**Show ACM driver name in Save As**

When this check box is selected, Sound Forge will display the driver name next to each ACM codec. This is only necessary if you have more than one driver installed for a particular codec.



**Turn off Voxware key for ASF**

When this check box is selected, you will need a software key supplied by Voxware to save ASF files using a Voxware codec. This is only necessary if you have a later Voxware codec installed in your system than the one included with NetShow 2.0.

**Show free storage space on Status Bar**

When this check box is selected, the total amount of free disk space available on your specified temporary drive is displayed on the status bar.

**Show shuttle controls on Data Window transport**

When this check box is selected, **Rewind** and **Forward** buttons will appear on each data window's transport controls.

**Auto-power MIDI keyboard window**

Select this check box if you want Sound Forge to open up the MIDI device assigned to the MIDI Keyboard (if it is not already open) when you press a key on the MIDI Keyboard. You may want to disable this option if you are using the same MIDI output device for MIDI synchronization or for your sequencer. If this option is disabled you need to press the On button on the Keyboard prior to using it to send notes.

**Ignore device capabilities in Mixer window**

Normally, when Sound Forge loads audio devices found in the system, it checks to see if the drivers support volume control. Devices that report that they do not support volume control are grayed in the mixer devices list. However, some devices do not report their capabilities correctly.

If this option is enabled, Sound Forge will ignore the device capabilities and attempt to set the levels for any device you select in the Mixer window.

**Show OLE drag source on Data Window transport**

When this check box is selected, the OLE Drag Source control is displayed on the right side of the status bar in all data windows. This provides a convenient method of creating Sound Forge audio objects that can be embedded into other documents. If you do not use this feature and want to reclaim the space for the status bar, simply clear this check box.

**Offset video when saving using MPEG Layer 3**

Files saved with the MPEG Layer 3 codec have a slight amount of silence inserted at the beginning of the file.

Select this check box to insert video frames to compensate for this delay. This preserves audio and video synchronization.

**Offset markers/regions when saving using MPEG Layer 3**

Files saved with the MPEG Layer 3 codec have a slight amount of silence inserted at the beginning of the file.  
Select this check box to shift all markers and regions to compensate for this delay when saving.



**Enable forced write-through on Record (Windows 9x and Me only)**

This option forces recording directly to the hard drive, eliminating large amounts of data to be cached. It is recommended that this option remain enabled for optimum recording performance.

**Always Prompt to Save New Files with Scott Chunks**

Select this check box if you want Sound Forge to display the Scott Studios Information dialog when you save a new file or click the **Save As** button.

**Always Launch Send After Saving Scott Files**

Select this check box if you want Sound Forge to start the Scott Studios Send application after you save a file with Scott Studios information. Send allows you to send the newly created file to several different network locations.

**Strictly Conform to AVI2 Specification**

Select this check box to create files that conform strictly to the AVI2 specifications. If you have problems using your AVI files in other applications, clear this check box.

**Default to smaller 8-bit peak audio files**

Select this check box to use 8-bit peak audio files (\*.sfk). You may want to use this option to preserve disk space. When this check box is cleared, Sound Forge will use 16-bit peak files.

**Recently used file list**

Select the check box if you want to display a list of recently used files on the File menu. Use the edit box to specify the number of files you want to display.

If you do not want to display recently used files on the File menu, clear this check box.

### Normal zoom ratio

Click the down arrow and choose a zoom ratio from the drop-down list. This setting specifies the default zoom magnification when loading a new sound file or using the **Zoom Normal** command.

**Default sound file window height**

Click and drag the slider to specify the default data window height when you open a new file.



**Default video strip height**

Click and drag the slider to specify the default height of the video strip when you open an .avi file.

### **Color preference for**

Click the down arrow and choose a Sound Forge screen element from the drop-down list. You can modify the default color of the selected item by clicking the **Custom** radio button and adjusting the **Red**, **Green**, and **Blue** sliders.

**Default**

Click this radio button to return the color of the item selected in the **Color preference for** drop-down list to the default setting.

### **Custom**

Click this radio button to modify the color of the item selected in the **Color preference for** drop-down list.

Adjust the **Red**, **Green**, and **Blue** sliders to modify the display color.

## Color

This block represents the color that will be used to display the item selected in the **Color preference for** drop-down list. Click the **Custom** radio button and adjust the **Red**, **Green**, and **Blue** sliders to modify the display color.

## Red

Click and drag the slider to adjust the red component of the color displayed below the **Custom** radio button. This color will be used to display the item selected in the **Color preference for** drop-down list.

**Note:** Color sliders are not available unless the **Custom** radio button is selected.

### Green

Click and drag the slider to adjust the green component of the color displayed below the **Custom** radio button. This color will be used to display the item selected in the **Color preference for** drop-down list.

**Note:** Color sliders are not available unless the **Custom** radio button is selected.

## Blue

Click and drag the slider to adjust the blue component of the color displayed below the **Custom** radio button. This color will be used to display the item selected in the **Color preference for** drop-down list.

**Note:** Color sliders are not available unless the **Custom** radio button is selected.



**Disable triple-clicking to select all sound file data**

Select this check box if you don't want Sound Forge to select all sound data when you triple-click in a data window. You might want to select this option triple-clicks are falsely detected when you make a selection and then try to do a drag operation. Otherwise, decrease Windows' double-click threshold time.

**Snap to zero-crossing slope**

Use the drop-down list to specify how zero-crossings are detected when you choose **Snap to Zero**.

**Negative Slope:** Zero-crossings are detected only on a negative slope.

**Any Crossing:** Zero-crossings are detected on both positive and negative slopes.

**Positive Slope:** Zero-crossings are detected only on a positive slope.

It is usually best to use **Positive Slope** or **Negative Slope** so that noticeable pops and clicks are not generated by cutting data.

**Zero-cross scan time**

Determines the maximum time that Sound Forge will search for the next zero-crossing.

**Zero-cross level threshold**

Levels below this sample value will be considered a zero-crossing. This is useful if the file you are using has a DC offset, although a better idea would be to remove the DC offset.

**Disable auto-snapping below 1:4 zoom ratios**

Select this check box if you do not want selections to snap to time or zero-crossings when the data window zoom ratio is 1:1 or 1:2.

This is useful if you commonly zoom in full to adjust selection points manually yet still want to use auto-snapping when zoomed out.

**Limit number of undo buffers**

Select this check box and specify a number in the edit box to determine the maximum number of Undo operations that will be saved.

When the check box is cleared, Undo operations are not limited.

**Note:** Having many Undo operations available will increase use of hard-disk space.

**Limit number of redo buffers**

Select this check box and specify a number in the edit box to determine the maximum number of Redo operations that will be saved.

When the check box is cleared, Redo operations are not limited.

**Note:** Having many Redo operations available will increase use of hard-disk space.

**Default all new windows to undo disabled**

Select this check box to prevent Sound Forge from creating undo buffers for any operation that modifies a sound file.

When this check box is selected, you can enable Undo creation for each window by choosing **Disable Undo/Redo** from the Edit menu.



**Drag and drop auto rise delay**

Determines the time necessary before a window underneath the cursor becomes active during drag-and-drop operations.

**Warn if Save changes the sound data**

When you save a sound file to a different format, such when performing bit-depth conversions or compressing audio, you will not hear the conversion's effect on the sound until you re-open the file. If this option is enabled, you will receive a warning before saving.

**Automatically re-open if Save changes the sound data**

Select this check box if you want Sound Forge to re-open files when you save to a different format. Changes in bit size, channels, or compression format will result in re-opening, and will allow you to listen to any changes in sound quality.

**Sector align data for Digidesign's Session 8 WAV files**

Select this check box if you are using Sound Forge to modify files for use with Digidesign's Session 8.

When the check box is selected, Sound Forge will align the data portion of .wav files on a sector boundary as required by Session 8.

**Save VOC files using newest format (16-bit capable)**

Prior to Creative Labs' boards supporting the playback of 16-bit data, .voc files had no way of storing 16-bit audio data. With the addition of 16-bit playback sound boards to the Sound Blaster line of products, a newer version of the .voc file was created.

With this check box is cleared, Sound Forge will save all 8-bit files in the old format and all 16-bit files in the new format. With the check box is selected, all files will be saved in the new format. Enable this option only if you have software that requires the new format for 8-bit data.

**Open and Save with Sound Forge 3.0 compatible regions**

Sound Forge 3.0 had a minor bug when opening and saving regions in which the total length was off by one sample. Since we both opened and saved the files inconsistently with the published standard, it didn't affect anything. Sound Forge 4.0 and later corrected this problem, but in doing so files created with Sound Forge 3.0 will have their region length display 1 sample smaller than before.

If this bothers you, turn this option on when opening a file saved in Sound Forge 3.0, turn it off, and then save the file. The region lengths will display correctly in Sound Forge 5.0 (but will be incorrect in version 3.0).

**Use 32-bit (IEEE float) temp files**

Select this check box if you want to use 32-bit, IEEE floating-point temporary files for audio files that are not opened in Direct mode. When the check box is cleared (or when you open a file in Direct mode), the bit depth of the temporary file will match the source file.

**Enable 64-bit (float) internal processing**

Select this check box to enable 64-bit internal processing of sound files. When the check box is cleared, **64-bit (float)** is unavailable for bit-depth conversion.



**Default SDS channel when saving**

Specifies the channel used in SDS packets when saving audio as a MIDI SDS file.

**Default SDS patch when saving**

Specifies the patch used in SDS packets when saving audio as a MIDI SDS file.

**Default Dialogic VOX sample rate for open**

Specifies the default sample rate used when opening Dialogic .vox sound files in Sound Forge. This option is necessary because Dialogic .vox sound files do not contain this information. Typical settings for this option are 6,000 Hz and 8,000 Hz.

**Associate sound file extensions**

Click to open the Sound File Associations dialog. This dialog provides a method of associating audio files with Sound Forge. When a file is associated with Sound Forge, you can simply double-click on a sound file in the Windows Explorer and it will open for editing.

**Playback**

From the drop-down list, choose the device that you want to use for playing sound data.

Selecting a device such as the Wave Mapper or Microsoft Sound Mapper allows Windows to select an appropriate device to use for the current sound data.

**Try to Open 24 Bit**

Select this check box if you want Sound Forge to send 24-bit data to your sound card. If your sound card does not support 24-bit audio, clear the check box, and Sound Forge will convert the file to 16-bit format for playback.

**Interpolate play position for inaccurate devices**

Select this check box if you want Sound Forge to interpolate the position of the cursor during playback. If this option is not checked, Sound Forge relies on the sound card device driver to provide the correct position of the pointer during playback.

Many sound card drivers do not report their position accurately. When you play sounds back, the position of the cursor may seem to lag or precede the sound you are hearing. If your sound card driver does not have accurate position reporting, your Drop Marker and Mark In/Out positions will also be incorrect when placing markers during playback.

**Note:** Contact your sound card manufacturer for updated drivers.

**Play position bias**

Click and drag the slider handle to specify an offset value that Sound Forge will add to the position values returned by the sound card wave driver during playback.

Many sound card drivers do not report their position accurately. When you play sounds back, the position of the cursor may seem to lag or precede the sound you are hearing. If your sound card driver does not have accurate position reporting, your Drop Marker and Mark In/Out positions will also be incorrect when placing markers during playback.

When adjusting bias, start with smaller values and work toward larger values in increments of 4 (a value of 1 is equal to 512 bytes) until the play position pointer is accurate. Recommended settings are 4, 8, 16, and 32. These settings correspond to the typical bias values for these drivers of -2048, -4096, -8192 and -16384 (negative multiples of 2048) bytes.

**Note:** Most sound card drivers that report incorrect position give a value ahead of the actual sound.



**Record**

From the drop-down list, choose the device that you want to use for recording sound data.

Selecting a device such as the Wave Mapper or Microsoft Sound Mapper allows Windows to select an appropriate device to use for the current sound data.

**Interpolate record position for inaccurate devices**

Select this check box if you want Sound Forge to interpolate the position of the cursor during recording. If this option is not checked, Sound Forge relies on the sound card device driver to provide the correct position of the pointer during recording.

**Note:** Contact your sound card manufacturer for updated drivers.

**Record position bias**

Click and drag the slider handle to specify an offset value that Sound Forge will add to the position values returned by the sound card wave driver during recording.

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**Note:** Most sound card drivers that report incorrect position give a value ahead of the actual sound.

**Total buffer size**

Click and drag the slider handle to select the amount of RAM you would like to use for buffering sounds during playback and recording. Using a large value can optimize performance at high sample rates, but may also cause a slight delay before playback begins.

**Preload size**

Click and drag the slider handle to select the total amount of wave data that will be queued to the sound driver before playback starts.

### Video decompression mode

From the drop-down list, select the color resolution that will be used by Sound Forge when it decompresses video frames before displaying. Note that when a high bit depth is used, the performance demands on your system are increased. The available modes are:

<b>8 bits always</b>	Sound Forge will always decompress the video to 8 bits per pixel (256 color).
<b>Best for display</b>	Sound Forge will decompress the video to the best format that matches your system's color capabilities.
<b>Full decompress always</b>	Sound Forge will always decompress the video to its original bit depth when displaying. This is useful if you want to ensure that the video frames you see contain all the color information stored in the file. Also, if you want to paste frames to the clipboard, this setting ensures maximum resolution.

### Allow hardware scaling during decompression

Select this check box if you want to allow video frames to be scaled to a different size.

Use the **Only scale frames larger than** controls to specify the minimum size of frame that should be scaled, and the **Attempt to scale during decompression to** controls specify the new, scaled size.

### Width

Use the up and down arrows or enter a value in the edit box to specify the minimum width for video frames that can be scaled during decompression.

This control is available only when the **Allow hardware scaling during decompression** check box is selected.

### Height

Use the up and down arrows or enter a value in the edit box to specify the minimum height for video frames that can be scaled during decompression.

This control is available only when the **Allow hardware scaling during decompression** check box is selected.



**Width**

Use the up and down arrows or enter a value in the edit box to specify the width to which video frames will be scaled during decompression.

This control is available only when the **Allow hardware scaling during decompression** check box is selected.

### Height

Use the up and down arrows or enter a value in the edit box to specify the height to which video frames will be scaled during decompression.

This control is available only when the **Allow hardware scaling during decompression** check box is selected.

**Disable scan for External Monitor support**

Select this check box if you do not want Sound Forge to look for an external video monitor every time an .avi file is opened. If you do not have an external monitor, selecting this check box will cause .avi files to open more quickly.

### **External Monitor Sync Offset**

If your audio is not synchronized with your external monitor, you can configure an offset for your hardware.

Drag the slider to synchronize audio and video.

**Note:** This setting affects synchronization for previewing on an external monitor. Audio and video synchronization in your file is unaffected.

### **Play Looped adjust pre-roll**

Use the up and down arrows or enter a value in the edit box to specify the number of seconds that will be played before the loop end point when playing in Loop Preview mode. To play a loop in Loop Preview mode, hold the Ctrl key while clicking the **Play Looped** button. This is useful when loop-tuning a long loop.

**Pre-roll**

Use the up and down arrows or enter a value in the edit box to specify the amount of data played prior to the cursor position when you click and drag in the overview bar (above the waveform display). Playback stops when you release the mouse button.

**Loop Time**

Use the up and down arrows or enter a value in the edit box to specify the amount of time that will loop when you stop the cursor while clicking and dragging in the overview bar (above the waveform display). Playback stops when you release the mouse button.

### **Pre-roll**

Use the up and down arrows or enter a value in the edit box to specify the amount of data played prior to a cut region when you choose **Preview Cut/Cursor** from the Edit menu.



### **Post-roll**

Use the up and down arrows or enter a value in the edit box to specify the amount of data played after a cut region when you choose **Preview Cut/Cursor** from the Edit menu.

## Output

From the drop-down list, choose the MIDI output device you want to use for synchronization. This device is used to send SMPTE/MTC when **MIDI Output Sync** is enabled on the Options menu.

## Input

From the drop-down list, choose the MIDI input device you want to use for synchronization. This device is used to receive SMPTE/MTC when **MIDI Input Sync/Trigger** is enabled on the Options menu.

This device is the device through which Sound Forge will receive all MIDI triggering and synchronization input, including SMPTE/MTC, MIDI triggers, and Regions/Playlist triggers.

**Use 30 frames per second for SMPTE Non-Drop**

Select this check box if you want Sound Forge to use a frame rate of 30 frames per second for all SMPTE Non-Drop calculations.

When the check box is not selected, Sound Forge will use a frame rate of 29.97 frames per second.

**Bound record time on SMPTE record sync**

When this check box is selected, Sound Forge will not allow recording beyond the specified end time. This ensures that your record length is exact regardless of any inaccurate time code.

**Use internal timer for SMPTE generation**

Select this check box if Sound Forge should use the internal timer for SMPTE generation rather than position values reported by the sound card driver. Since many sound cards do not report their position accurately, it is usually better to use the internal timer for SMPTE generation.

**Internal timer resolution**

Choose a value from the drop-down list to specify the timer accuracy used for generating SMPTE when the **Use Internal Timer for SMPTE generation** check box is selected. Low values produce more accurate the SMPTE generation, but may also decrease system performance.

**Use free-wheel for SMPTE loss**

Select this check box if you want Sound Forge stop playback if the incoming MIDI time code signal stops being received. If this check box is not selected, Sound Forge will continue to play after time code stops unless the user stops playback manually.

**Free-wheel Time**

When the time code stops, Sound Forge will continue to play for this amount of time before stopping. During this time, if time code is found again, playback will continue.

**Free-wheel Slack**

This parameter controls how fast Sound Forge should expect time code updates before going into Free-wheel mode. If you have a fast machine, this value can be set to a lower value if you want Sound Forge to stop playback immediately when time code is interrupted.

### **Enable SMPTE playback offset**

Select the **Enable SMPTE playback offset** check box to specify an offset that will be added to the time displayed in Sound Forge's play counter. For example, if you want Sound Forge to generate MIDI time code starting at 01:00:00:00, instead of inserting 1 hour of silence at the beginning of your sound file, you can specify that amount in this field.

When using Record Sync, you'll often want to set this value to the Enable MTC/SMPTE Input Synchronization Start time. Sound Forge's ruler and play counter will not display this offset.



### **Temporary storage folder**

Specify a folder for storing temporary files, or click the **Browse** button to specify a new folder.

Sound Forge stores its temporary data in this folder. Using temporary file space allows you to edit very large files and keeps Sound Forge from using large portions of RAM on your computer. Your temporary directory must have enough space to accommodate the total size of all files you plan to edit along with space for any clipboard data and undo buffers.

If you change the temporary storage folder, you will have to restart Sound Forge for the change to take effect.

**Peak ratio default for new sound files**

Choose a ratio from the drop-down list to specify the zoom ratio above which Sound Forge will use a peak file instead of scanning all of the data to draw the waveform.

Lower values allow for faster scrolling at those ratios, but increase the peak file's size. For example, setting this value to 1:128 instead of 1:256 will make the peak file two times larger, but will make scrolling at 1:128 faster and scrolling at 1:65536 or higher ratios slower.

To calculate the size of the resulting peak files, divide the size of the file by the peak ratio. For example, a 100 MB sound file will need a 0.39 MB (100/256) peak file when using 1:256.

**Wait cursor zoom ratio threshold**

Choose a value from the drop-down list to specify the zoom level above which an hourglass cursor will be displayed between data window repaints. If the cursor seems to flicker on and off when redrawing wave data, you may want to increase this value. This value is ignored during playback.

**Show the position of the playback cursor**

When this check box is selected, the **Position** box in the status bar will show the cursor position during playback. Disable this option if you have a very slow computer or video card.

**Show the record counter while recording**

Select this check box if you want the record time displayed in the Record dialog while recording. Disable this option if you have a very slow computer or video card.

**Regions List display format**

Choose a setting from the drop-down list to specify how regions are displayed within the Regions List:

**Start and End**                Regions are displayed with the start and end time of each region.

**Start and Length**        Regions are displayed with the start time and length of each region.

**Playlist display format**

Choose a setting from the drop-down list to specify how regions are displayed within the Playlist/Cutlist:

**Start and End**                Regions are displayed with the start and end time of each region.

**Start and Length**        Regions are displayed with the start time and length of each region.

**Sort the Regions List alphabetically**

Select this check box if you want to sort the Regions List alphabetically. When this check box is cleared, regions are displayed in the order they were added.

**Playlist pre-roll**

Enter a value in the edit box or use the up and down arrows to specify the amount of pre-roll that will be used when playing entries in the Playlist. This allows you to easily hear the transition from one region to another without having to play all the way through the first region.

**Limit previews**

Select this check box and specify the length of audio that will be used when generating a preview. Low values decrease the amount of time needed to generate a preview when tuning effects or processing values.



**Pre-roll**

Select this check box and specify how many seconds of unprocessed audio will be played before the processed selection. Use this to listen to the transition from unprocessed to processed data.

**Post-roll**

Select this check box and specify how many seconds of unprocessed audio will be played after the processed selection. Use this to listen to the transition from processed to unprocessed data.

**Fade out last 10 milliseconds**

Select this check box to fade out the last 10 milliseconds of a preview effect so that large pops are not heard at the end of a preview buffer. With this check box cleared, a preview could end with a large data value, which can cause an audible pop.

**Loop preview continuously**

Select this check box to loop preview buffers infinitely rather than playing a single time. This can be useful when listening to the difference between the original sound and the sound after an effect or process has been applied.

### **Reactive Previewing**

Select this check box to automatically recalculate and play back of the preview buffer if the parameters of an effect change. This allows for immediate feedback of the effects of a change.

This option is very useful when using a fast computer, limiting preview times, and not using processor-intensive effects.

**Note:** You can temporarily suspend Reactive Previewing by holding down the Shift key while making parameter changes.

**Default all Previews to the Current Settings**

Select this check box to use the current settings for all previews.

### Default SMPTE format

Choose a format from the drop-down list to specify the SMPTE type used when selecting a SMPTE format option from the Status Bar shortcut menu.

- |                         |  |
|-------------------------|--|
| <b>Non-Drop 30 FPS</b>  | Calculates status values using 30 frames per second SMPTE code.  |
| <b>Drop 29.97 FPS</b>   | Calculates status values using 29.97 frames per second SMPTE code. This is accomplished by dropping two frames every minute except for minutes 00, 10, 20, 30, 40, and 50. |
| <b>EBU 25 FPS</b>       | Calculates status values using 25 frames per second SMPTE code. This format is the European Broadcast Union time code.   |
| <b>Film Sync 24 FPS</b> | Calculates status values using 24 frame per second SMPTE code. This format is for standard 24 fps film media.  |

### Default time format

Choose a format from the drop-down list to specify the time format (**Time** or **Seconds**) used when selecting the Time option from the Status Bar shortcut menu.

**Default frames per second**

Specify the default frame rate used to calculate frame values.

Frame values are useful when trying to synchronize sound with animation. Most animation players specify a playback frame rate at which video frames are shown to the user. If you are using an animation that has a frame rate of 15.0 frames per second, you would set the frame rate to 15.0. When status values are shown by Sound Forge, they will be shown in values of frames. This allows you to find the frame to which a given point in the sound file corresponds.



**Default beats per measure**

Specify the number of beats in each measure for displaying in measures and beats. For example, 2/4 time would have two beats per measure.

**Default beats per minute**

Specifies the number of beats per minute, i.e. the tempo of a song for displaying lengths.

**RMS level scan time**

Specify the amount of sound data surrounding the cursor used to calculate the RMS level in the Levels toolbar.

**Peak level scan time**

Specify the amount of sound data surrounding the cursor used when searching for a peak level to display in the Levels toolbar.

**Display format for SMPTE code**

Choose a setting from the drop-down list to specify how SMPTE values will be formatted for display.

## Toolbars

Use to select which toolbars are displayed on the main screen. A check before the toolbar means that the toolbar is turned on. The following toolbars are available:

<b>Standard</b>	Contains standard file and edit operations.
<b>Transport</b>	Contains record and play operations.
<b>Navigation</b>	Contains operations for navigating within the data window. Some of the operations included are zooming, marking, moving the cursor, and moving to relevant points.
<b>Views</b>	Contains operations for storing and retrieving data window views.
<b>Status/Selection</b>	Contains operations to set the display Status Format as well as the Snap To operations.
<b>Regions/Playlist</b>	Contains the Regions/Playlist buttons as well as synchronization commands and synchronization status boxes.
<b>Process</b>	Contains all processing operations.
<b>Effects</b>	Contains all effects operations.
<b>Tools</b>	Contains all tool operations.
<b>Levels</b>	Displays the left and right channel levels at the cursor in a variety of different formats.
<b>ACID Loop Creation Tools</b>	Contains tools for editing looping audio.

## Show ToolTips

Select this check box if you want to display pop-up descriptions when the mouse is held over certain items.

**Write Drive**

Select the CD recorder that you want to use when you choose **Create CD** from the Tools menu.

**Write Speed**

Choose a setting from the drop-down list to specify the speed at which you want to write sound data to CDs. Decrease the setting if you experience buffer underruns.



**One-Shot**

Select this radio button if you want ACID to treat your file as a one-shot.

### Loop

Select this radio button and specify a **Number of beats** and **Root note for transposing** if you want ACID to treat your file as a loop.

**Disk-Based**

Select this radio button and specify a **Tempo** if you want ACID to treat your file as a loop.

**Number of beats**

Specify the length of the file. Selecting a value that does not match the actual file will cause ACID to play the loop at a different speed than normal. For example, specifying a length of 8 beats for a 4-beat loop will cause the loop to play at half speed at any given tempo.

**Root note for transposing**

Select a note from the drop-down list to set the base note for loops and disk-based tracks that you want to conform to the ACID project key. If you do not want a track transposed to the project key (a track that contains a drum sample, for example), choose **Don't transpose**.

### **Tempo**

Select the **Tempo** check box and specify a tempo in beats per minute for ACID to stretch the track. If you do not want ACID to stretch the file at all, clear the **Tempo** check box. If you specify a tempo that is not the actual tempo of the file, the track will play at a different rate.

### **Play/Stop**

Click **Play** to start previewing the current selection. During playback, the button is displayed as a **Stop** button. Click to stop playback.

**Play looped**

Select this check box to play back the current selection in an endless loop.



**Set frame rate to**

Choose a preset from the drop-down list or choose **Custom** and enter a custom frame rate in the **Frames per second** box.

**Frames per second**

Enter a value in the edit box or use the up and down arrows to specify a new frame rate.

**Start**

Specify the beginning point of the selection. Sound Forge automatically fills in this value based on your selection or cursor position.

**End**

Specify the ending point of the selection. Sound Forge automatically fills in this value based on your selection or cursor position.

**Length**

Specify the length of the selection. Sound Forge automatically fills in this value based on your selection or cursor position.

**Input format**

Choose an input format from the drop-down list. This format is used to display the values in the **Start**, **End**, and **Length** boxes.

### **Selection Length in Beats**

This control specifies the number of beats in the current selection. Changing this value will automatically change the **Tempo in Beats per minute** control.

### **Tempo in Beats per minute**

This control specifies the tempo of specified selection. Changing this value will automatically change the **Selection length in beats** control.



**Number of Beats in a Measure**

Specify the number of beats in a measure when selecting a measure.

### **Play/Stop**

Click **Play** to start previewing the current selection. During playback, the button is displayed as a **Stop** button. Click to stop playback.

**Play looped**

Select this check box to play back the current selection in an endless loop.

**Overview**

Select this check box to display the overview control below the title bar.

**Time Ruler**

Select this check box to display the time ruler above the waveform display.

**Level Ruler**

Select this check box to display the level ruler on the left side of the data window.

**Time Zoom controls**

Select this check box to display the Time Zoom controls in the lower left-hand corner of a data window.

**Level Zoom controls**

Select this check box to display the Level Zoom controls in the lower right-hand corner of a data window.



**Scrollbar**

Select this check box to display the horizontal scroll bar.

**Note:** Clearing this check box also removes the Time Zoom and Level Zoom controls.

**Transport and Status bar**

Select this check box to display the transport and status bars at the bottom of a data window.

**Video Strip**

Select this check box to enable the video strip at the top of a data window.

**Note:** The video strip is displayed only for .avi files.

**Data Window only**

Select this check box if you want to display a data window with no controls or additional display items.

**Save as the default for all new windows**

Select this check box to set the current settings as the default display for all sound files.

**Sample rate**

Choose a sample rate from the drop-down list or enter a value in the edit box.

**Note:** This setting will not resample the sound file. If the playback rate is different from the originally recorded rate, the pitch will vary unless resampling is done.

**Bit Depth**

Click a radio button to specify the number of bits that should be used to store each sample.

**Channels**

Click a radio button to specify the number of channels for the current sound file.



### **Mono**

Click this radio button to specify a single channel for the current sound file. If the file is stereo, you will be prompted to mix the right, left, or both channels into the resulting mono file.

**Stereo**

Click this radio button to specify two channels for the current sound file. If the file is mono, you will be prompted to mix the file to the right, left, or both channels of the resulting stereo file.

**Source**

Displays the sample rate, bit-depth, and number of channels in the source file.

**Temporary**

Displays the sample rate, bit-depth, and number of channels in the temporary file.

**Process/DSP**

Displays the sample rate, bit-depth, and number of channels used when processing your file.

**Playback**

Displays the sample rate, bit-depth, and number of channels that will be used for playback.

**Cursor position**

Displays the cursor position in the sound file using the current units.

**Sample value**

Displays the sample value at the current cursor position in the sound file:

- In 32-bit audio, these values range from -2147483648 to 2147483647.
- In 24-bit audio, they range from -8388608 to 8388607.
- In 16-bit audio, they range from -32768 to 32767.
- In 8-bit audio, they range from -128 to 127.



**Peak data ratio**

Displays the ratio at which the peak data is stored. This means that when zoomed out beyond 1:512, the peak file, instead of the entire file is scanned when drawing the waveform.

**Sound data size**

Displays the amount of storage space being used by the sound data.

**Video source format**

Displays the frame size (height, width, bits per pixel) and compression algorithm of the original .avi file.

**Video decomp. format**

Displays the intermediate frame size (height, width, bits per pixel) and compression algorithm used by Sound Forge before displaying the video frames. The video decompression mode can be changed from the Performance tab in the Preferences dialog.

**Undo buffers**

Displays the number of undo buffers that exist for the sound file and the amount of hard-drive space they consume.

**Redo buffers**

Displays the number of redo buffers that exist for the sound file and the amount of hard-drive space they consume.

### **General properties**

The General tab contains technical information regarding the current sound file, including size, location, file type and attributes of the file. This information is for display only.

**Note:** Microsoft .wav files are composed of sections called RIFF chunks. These chunks contain the sound data plus other embedded information. If there are any non-standard chunks found in the current file, the junk, padding, and additional chunks will be checked. These chunks might be used by other sound utilities or contain extraneous information that can cause glitching in some programs.

**Title**

Enter the title of the project.



**Subject**

Enter name of the artist who performed in the project.

**Engineer**

Enter the name of the person who engineered the project.

**Copyright**

Enter copyright information about the project.

**Comments**

Enter any comments you want to associate with the project.

**Extended**

Click to display the Extended Summary dialog.

**Load**

Load sets the current file's summary information to the default settings. The default values can be set in the Extended Summary dialog.

**Picture**

Click to display the Open Picture dialog, where you can select an icon, bitmap or cursor to be attached to the current file.

### Video stream

Lists video streams associated with the current file.

The black diamond to the left of the streams indicate the active streams. You can view and edit additional information (stream name, language, and priority of the active audio stream) by clicking on the + sign to expand the list. Right-clicking on a field in the right-hand column allows you to edit it.



**Attach**

If your sound file does not currently contain any video, you can attach a video from an .avi file by clicking the **Attach** button. If your file already has a video stream, click the **Detach** button to remove the stream.

**Expand**

Click to display more information about a stream.

**Collapse**

Click to hide additional stream information

**Video stream information**

Displays information about the video and/or audio streams present in the .avi file, such as name, compression format, frame rate, and language.

## Recent

The **Recent** list is a quick way to navigate the Open File dialog. Folders that you frequently use will be available to choose from the list. All of the files in that folder will appear in the space above.

**Open as read-only**

Select this check box if you want to open a sound file but do not want to alter the data in the file. This feature is useful if you only need to play the file or copy sections from the file. You can still change the Regions List, Playlist, and Summary information for the file, but these changes must be saved to a new file.

**Operate directly on the sound file**

Select this check box if you want to open a sound file but do not want to create a temporary file. This greatly speeds the opening process but doesn't give you the security of a backup file. In most cases this is not a problem since all changes can be undone (if you have enough disk space). However, if Sound Forge terminated improperly, the file would remain in its edited state.

**Auto play**

Select this check box if you want Sound Forge to automatically begin playback when a file is selected in the Open dialog.



**Merge L/R to stereo**

Select this check box to merge two mono files to left and right channels of a stereo file when opening.

**Play/Stop**

Click to audition the sound file without opening it in Sound Forge. Click again to stop playback. If playing a file from a slow network or CD-ROM, some skipping might occur.

**Note:** This feature is only available for .wav files.

**Name**

Lists the name of the file.

**File type**

Displays the file type of the selected file.

**Format**

Displays the format of the selected file.

**Unity note**

Displays the key of the selected file.

**SMPTE offset**

Displays the SMPTE offset for the selected file if an offset has been defined.

**Comments**

Displays any comments that have been entered in the selected file's summary information.



**Length**

Displays the length of the selected file in hh:mm:ss.s and samples.

**Attributes**

Displays the sample rate, bit depth and number of channels for the selected file.

## **Loops**

Displays information about loops that have been defined in the selected file.

**Rgns/Playlist**

Displays whether a Regions List or Playlist has been defined for the selected file.

**More**

Click to display the General tab of the Properties dialog.

## Recent

The **Recent** list is a quick way to navigate the Save As dialog. Folders that you frequently use will be available to choose from the list. All of the files in that folder will appear in the space above.

**Format**

Choose a sample format from the drop-down list.

Sound files are most often saved in the PCM format. However, other formats are often used for compression purposes. If you have the Microsoft Audio Compression Manager (ACM) installed, you can save files in a variety of compressed formats including the Microsoft ADPCM format.

**Attributes**

Choose a set of file attributes from the drop-down list to specify the sample rate, sample size, and whether the file is stereo/mono.

**Note:** When you convert from mono to stereo, the data will be stored in both channels. When converting from stereo to mono, the data from both channels will be mixed to a single channel.



## **Rgns/Playlist**

Choose a command from the drop-down list to specify how Region and Playlist information in your file will be saved:

- **Do Not Save Regions or Playlist:** saves your file and ignores any defined playlist or region information.
- **Save Regions and Playlist in .wav/.avi files:** embeds the data in the sound file.
- **Save Regions and Playlist as .sfl file:** saves the data in an external Sound Forge playlist file.
- **Save Regions only as Session 8 .rpm files:** saves the data in an external playlist file for Digidesign's Session 8.
- **Save as Windows Media Script .txt files:** saves the data in an external text file that conforms to the script table format for Windows Media Format files.

**Save summary information in file**

Select this check box if you want to preserve summary information (specified on the Summary tab of the Properties dialog) in the saved file.

**Note:** This option is available only for .wav, .avi, .asf, .wma, or .rm files.

**Save sampler information in file**

Select this check box if you want to save sampler information (such as note assignment and loops) in the .wav file.

**Summary**

Click to display the Properties dialog.

**Sample rate**

Choose a sample rate from the drop-down list or enter a number in the edit box. This setting specifies the sample rate that will be used by Sound Forge when playing the file.

### **8-bit PCM**

Click to store each sample in an 8-bit uncompressed format.

**16-bit PCM**

Click to store each sample in a 16-bit uncompressed format.

**24-bit PCM**

Click to store each sample in a 24-bit uncompressed format.



### **32-bit PCM**

Click to store each sample in a 24-bit uncompressed format.

**32-bit IEEE Float**

Uses a 32-bit, floating-point value to represent each sample.

**64-bit IEEE Float**

This is the highest-quality sound file supported, using a 64-bit value to represent each sample. Using 64-bit samples will slow playback and processing functions.

**G.711 u-Law**

Click to store each sample in a compressed format commonly used for telecommunications in the United States.

**G.711 a-Law**

Click to store each sample in a compressed format commonly used for telecommunications in the Europe.

**Header**

Specifies the number of bytes stored in the file before the sound data.

**Trailer**

Specifies the number of bytes stored in the file after the sound data.

**Unsigned**

Click this radio button to save each sample value in an unsigned binary format.



**Signed**

Click this radio button to save each sample value in a signed binary format. Sound files on the PC are most often saved using this format.

**Sign Bit**

Click this radio button to save each sample value in a sign bit binary format.

**Mono**

Click to save a single monaural channel in the file.

**Stereo**

Click to save two channels in the file.

**Little endian**

Click to specify the order in which the high and low bytes of a 16-bit sample are stored. Little endian is used by Intel microprocessors.

**Big endian**

Click to specify the order in which the high and low bytes of a 16-bit sample are stored. Big endian is used by Motorola microprocessors.

**Sample rate**

Choose a sample rate from the drop-down list, or type a custom value in the edit box.

**Bit-Depth**

Choose a setting from the drop-down list to specify the bit-depth of the new window.



**Mono**

Click this radio button to specify a single monaural channel in the window.

**Stereo**

Click this radio button to specify a single monaural channel in the window.

**Maximum editing time**

Displays the maximum time currently available on the hard drive for editing a file of the specified type. Note that Sound Forge files are edited in 16-bit format and are only converted to 8-bit or compressed audio when closing the file.

**Record destination window**

From the drop-down list, choose the window to which you want to record new audio.

**Note:** Read-only files are not displayed in the list.

**Copy partials**

Click to fill the selected region completely, using a partial copy of the clipboard if needed.

**Whole copies**

Click to use only whole copies of the clipboard contents to fill the selected region. The selected region will not be completely filled if its length is not an exact multiple of the clipboard length.

**New left channel**

**From left:** Click and drag the fader to determine the amount of the original left channel that will be mixed to the new left channel.

**From right:** Click and drag the fader to determine the amount of the original right channel that will be mixed onto the new left channel.

**Invert Left Channel Mix:** Select this check box to reverse the polarity of the new left channel mix.

**New right channel**

**From left:** Click and drag the fader to determine the amount of the original left channel that will be mixed to the new right channel.

**From right:** Click and drag the fader to determine the amount of the original right channel that will be mixed onto the new right channel.

**Invert Right Channel Mix:** Select this check box to reverse the polarity of the new right channel mix.



**Convert to specified output channels only**

Select this check box if you want to disable the faders and invert checkboxes. When converting from mono to stereo, each new stereo channel will be an exact copy of the original mono channel. When converting from stereo to mono, the new mono channel will consist of each of the original stereo channels mixed at 50% volume.

**File types to associate**

Select the check box for each sound file you want to associate with Sound Forge.

The **File association details** box displays information about the selected file type, as well as the current association.

**Select all**

Click to select all check boxes in the **File types to associate** box.

**Select none**

Click to clear all selected check boxes in the **File types to associate** box.

**Extension**

Displays the extension for the selected file type and the icon used to represent files of this type.

**Content type**

Displays a description of the selected file type.

**Opens with**

Displays the path to the application used to open the selected application and the icon used to represent this application.

### **Files that can be recovered**

This list contains the names of any files that can be recovered after Sound Forge terminates improperly. Files that were opened in non-direct edit mode can be recovered in their edited state when you crashed.

- Click the **Recover** button to rename the \*.tmp files as \*.wav files.
- Click the **Delete** button to delete the temporary files.
- Click the **Ignore** button to leave the temporary files on your hard drive.



### Delete

Click to delete the temporary files selected in the **Files that can be recovered** list.

**Recover**

Click to rename the \*.tmp files as \*.wav files.

**Ignore**

Click to leave the temporary files on your hard drive.

**Name**

Enter a name to identify the marker or region.

### Marker

Click this radio button to create a marker.

## Region

Click this radio button to create a region.

**Type**

Select a radio button to specify whether you want to add a marker or a region.

**Trigger type**

Select a trigger type from the drop-down list if you want to trigger a region or marker using MIDI commands.



**Channel**

Specify the MIDI input channel for triggering.

**Note/Controller**

Specify the MIDI note or controller that will trigger the selected event.

When the **Note** radio button is selected, this value can be entered as a MIDI note value such as C4 or as a MIDI note number such as 60. When the **Controller** radio button is selected, enter a controller value from 0 to 127.

**Start**

Specify the beginning point of the marker or region. Sound Forge automatically fills in this value based on your selection or cursor position.

**Start** is the only available setting when the **Marker** radio button is selected.

NO IDH DEFINED

**End**

Specify the ending point of the region. Sound Forge automatically fills in this value based on your selection or cursor position.

**Length**

Specify the length point of the region. Sound Forge automatically fills in this value based on your selection or cursor position.

### Input format

Choose an input format from the drop-down list. This format is used to display the values in the **Start**, **End**, and **Length** boxes.

NO IDH DEFINED

**Name**

Displays the name of the selected region. To edit this value, use the Edit Marker/Region dialog.

**Play count**

Enter a value in the edit box or use the up and down arrows to specify the number of times the playlist region will repeat before playing the next region.

Setting this value to 0 will cause the region to be skipped during playback.



**Start**

Displays the beginning point of the selected region. To edit this value, use the Edit Marker/Region dialog.

**End**

Displays the ending point of the selected region. To edit this value, use the Edit Marker/Region dialog.

**Length**

Displays the length of the selected region. To edit this value, use the Edit Marker/Region dialog.

### Trigger

Select a trigger method from the drop-down list to determine the method by which the playlist region will be invoked.

**Channel:** If the playlist region will be triggered by a MIDI note, this will be the receive channel for that region.

**Note:** If the playlist region will be triggered by a MIDI note, this is the MIDI note number that will trigger this playlist region. This value can be entered as a MIDI note value (such as C4) or as a MIDI note number (such as 60).

If you have the MIDI Input Sync/Trigger mode enabled while using this dialog, you can auto-fill the Channel and Note values by pressing a key on your MIDI keyboard.

**SMPTE time:** If the playlist region will be triggered from a SMPTE time cue, this is the point in SMPTE time that will trigger the region.

**Pre-roll playback**

Select this check box and specify a value to set the amount of pre-roll that will be heard from the end of the previous region when starting the playlist sequence from the current region.

**Stop point**

Select this check box to stop playback with the selected region.

When the Playlist is invoked, it will continue to play through the regions until it encounters a stop point. The Playlist will continue to play only after it is invoked again. This is useful when triggering playback from incoming MIDI or time code and you only want certain sections of the playlist to be played at a time.

**One shot**

Click to make the sound file play normally with no loops.

**Sustaining**

Click to make the file repeat the Sustaining Loop region the specified number of times.



**Sustaining with Release**

Click to make the sound file repeat the Sustaining Loop region, play the region between the Sustaining and Release loops, and then repeat the Release Loop region.

**Sample Type**

Select a radio button to specify how the sample will be played back.

### Loop to Edit

When the **Sustaining with release** radio button is selected, select a radio button to specify which loop you want to edit.

### **Sustaining**

If you choose the **Sustaining with Release** radio button, click this radio button to edit the sustaining loop.

## **Release**

If you choose the **Sustaining with Release** radio button, click this radio button to edit the release loop.

**Infinite loop**

Select this radio button to play back the selected loop infinitely. Transitions between loops and normal data can be easier to hear when Infinite loop is selected.

**Loop count**

Select this radio button and specify the number of times that the Sustaining or Release Loop will be repeated before continuing playback. This information may or may not affect how your sampler plays the data.

**MIDI unity note of sample**

The MIDI unity note of sample is the MIDI note that will cause a sampler to play the sound file at the pitch (sample rate) it was originally recorded.



**Fine tune**

Some samplers will use this setting to adjust the pitch (sample rate) of the sound file.

Sound Forge does not fine tune the sound file when this option is utilized. This option is an informational setting that will be transmitted to a sampler via a sample-transfer procedure. A sampler such as the K2000 can use this information for its playback of the sample. The K2000 should accurately display this information on Master/Sample/Misc. page as Pitch Adjust.

**SMPTE format**

Some sampler editors can store a SMPTE offset value in the sample. Sound Forge ignores this offset value. If you want to add SMPTE offset information to your sample, choose a SMPTE format from the SMPTE format drop-down list and type a value in the SMPTE offset box.

**SMPTE offset**

Some sampler editors can store a SMPTE offset value in the sample. Sound Forge ignores this offset value. If you want to add SMPTE offset information to your sample, choose a SMPTE format from the SMPTE format drop-down list and type a value in the SMPTE offset box.

**Selection**

Click to display the Set Selection dialog.

**Format**

Displays the format of the selected file.

**Attributes**

Displays the sample rate, bit depth, and number of channels in the selected file.

**Length**

Displays the total length (in HH:MM:SS.sss) of the selected file.

**Samples**

Displays the total number of samples in the selected file.



**Total bytes**

Displays the file size in bytes.

## SFKERNEL ITEMS

**Recent**

Choose a folder from the drop-down list to quickly select a folder that you have used recently.

**OK**

Click to close the dialog box and save any changes you have made.

**Cancel**

Click to close the dialog box and discard any changes you have made.

**Free disk space**

Displays the amount of space available on the selected disk or hard drive.

**Folder**

Choose a folder from the drop-down list.

**Advanced**

Click to edit additional settings.



**Default Settings**

Click to use the standard settings.

**Custom**

Click to enter new custom settings.

**Generate Redirector Files**

Select this check box if you want to create a redirector file when encoding a Windows Media Format file.  
ASF redirector files use the .asx extension; WMA redirector files use the .wax extension.

**Server Path**

Specify the path where the redirector file will be stored on the Web server. This is the directory path where you will transfer the files with an FTP program.

**Use Alternate Destination Folder for ASX files**

Select this check box and specify a folder if you want to output redirector files to a different folder than the encoded Windows Media Format file.

**Play Start Position**

Specify the time in the streaming media file you want playback to begin.

**Play Length**

Specify the duration you want playback of the streaming media to continue.

**Title**

Specify the title of the file. This title can be displayed by some media players.



**Author**

Specify the author of the file. The author name can be displayed by some media players.

**Recording Attributes**

Displays the sample rate, bit depth, and number of channels that will be used in the recording.

**Remote**

Click to enter Remote Recording mode. This mode will hide the main Sound Forge window and show only the Record Remote dialog. This allows you to easily record while using other components of your system such as a CD player, mixer, or sequencer.

**Go To**

Click to display the Go To dialog. Use the Go To dialog to position the cursor within the current sound file.

## **Selection**

Click to display the Set Selection dialog. Use the Set Selection dialog to select a range of data within the current sound file. This command is available only when **Punch-In** is selected in the Mode drop-down list.

## **Window**

Click to display the Record Window dialog. Use the Record Window dialog to select the window to which you want to record new audio. The available windows will be displayed in the **Record destination window** drop-down list.

**Sync**

Click to display the Record Synchronization dialog. Use this dialog to set options for synchronizing Sound Forge with external devices or software.

**DC Adjust**

Select this check box before recording to enable automatic compensation for any DC offset produced by your audio hardware during the record process.

**Calibrate**

When you click this button, Sound Forge will calculate the DC offset while monitoring incoming sound data. The numbers below the button show the value, in sample amplitude, of the adjustment. If you change sound cards or are recording from different digital sources or at different sample rates, it is suggested that you re-calibrate the DC Offset before recording.



## Mode

Choose a recording mode from the drop-down list:

- **Automatic retake (automatically rewind):** In this mode, recording begins at the position specified in the Start box and replaces any sound data that already exists after that position. When recording is stopped, the next record start position is automatically rewound to the original starting position, allowing you to immediately replace the last take if necessary.
- **Multiple takes creating regions:** This mode will record successive takes of data and define them as regions. A new region will be defined every time you click the Stop button.
- **Multiple takes no regions:** This mode will record successive takes of data but will not create a region for each take.
- **Create a new window for each take:** In this mode, a new window is created every time you click **Record** and then **Stop**.
- **Punch-in (record a specific length):** This mode is used to record over an existing region of sound using the Start, End, and Length boxes to specify when recording will begin and end. This allows you to rerecord a portion of a previous take without recording a whole new file.

**Start**

Specify when recording should start. Sound Forge automatically fills in this value based on your selection or cursor position.

**End**

Specify when recording should end. Sound Forge automatically fills in this value based on your selection or cursor position.

**Note:** This control is used only when **Punch-in** is selected in the **Mode** drop-down list.

**Length**

Specify the length of the selection you want to record. Sound Forge automatically fills in this value based on your selection or cursor position.

**Note:** This control is used only when **Punch-in** is selected in the **Mode** drop-down list.

**Reset**

Click to reset the clip indicators on the record meters.

### Input Format

Choose an input format from the drop-down list. This format is used to display the values in the **Start**, **End**, **Length**, and **Time Recorded** boxes.

**Monitor**

Select this check box to enable the meters and monitor the level of the input signal.

**Prepare**

Click to prepare your system for recording. This means that the record device is opened and all preparation that can be done prior to recording is completed. This allows the system to begin recording as quickly as possible after the **Record** button is clicked.

**Note:** You do not need to use the **Prepare** button unless you want to begin recording immediately after clicking the **Record** button.



## Record

Click to start recording. During recording, the button changes to a **Stop** button; click again to stop recording.

**Play/Stop**

Click to hear the section of data over which you are going to record. After recording, you can click to hear the data you have just recorded. During playback, the button changes to a Stop button; click again to stop playback.

**Drop Marker**

Click to place a marker at the current cursor position. Markers allow for easy location of mistakes or points of interest.

**Go to Beginning**

Click to return the cursor to the beginning of the current sound file.

**Rewind**

Click to move the cursor to the beginning of the previously recorded take.

**Forward**

Click to move the cursor to the beginning of the next take.

**Go to End**

Click to move the cursor to the end of the current sound file.

**Status**

Displays the current recording status.



**Time Recorded**

Displays the total time recorded for the current sound file. The display is in the units selected in the **Input Format** drop-down list.

**Time Left on Drive**

Displays the total time available on the drive for recording. The display is in the units selected in the **Input Format** drop-down list.

**Review Pre/Post-Roll**

Select the check box and use the edit boxes to specify the amount of time that will be played prior to and after regions when reviewing a take.

**Note:** Pre- and post-roll settings affect playback only. This data is not played prior to recording.

### **New Window Prefix**

Specify the prefix you want to assign to new windows created when you click the **New** button or choose **Create a new window** for each take from the **Mode** drop-down list on the Record dialog.

New window names begin with this prefix and are automatically numbered.

**Custom Counter Start Value**

Select this check box and specify the number you want to use to start automatic numbering of new windows created by recording.

**Insert Leading Zeros in Field Width of**

Select this check box and specify a field width if you want to use leading zeros in window names.

For example, if you specify a field width of 3, windows numbered 1 to 99 would be named [Prefix]001 to [Prefix]099.

**New Take (Region) Prefix**

Specify the prefix you want to assign to new regions created when you choose **Multiple takes creating Regions** from the **Mode** drop-down list on the Record dialog.

New region names begin with this prefix and are automatically numbered.

**Custom Counter Start Value**

Select this check box and specify the number you want to use to start automatic numbering of new regions created by recording.



**Insert Leading Zeros in Field Width of**

Select this check box and specify a field width if you want to use leading zeros in region names.

For example, if you specify a field width of 3, regions numbered 1 to 99 would be named [Prefix]001 to [Prefix]099.

**Enable MTC/SMPTE Output Synchronization**

Select this check box to allow Sound Forge to generate MTC/SMPTE synchronization while recording.

**Start**

Select this check box and enter a value in the edit box to specify an exact time when Sound Forge will start recording.

**Pre-Roll**

Select this check box and enter a value in the edit box to begin SMPTE output at a specified time before recording.

**Enable MTC/SMPTE Input Synchronization**

Select this check box to trigger recording in Sound Forge from incoming MTC/SMPTE synchronization.

**Start**

Select this check box and enter a value in the edit box to specify an exact time when Sound Forge will start recording.

**End**

Select this checkbox and enter a value in the edit box to specify an exact time when Sound Forge will stop recording.

**Back**

Click to switch the focus back to the main Record dialog.



**Save Audio to a New Stream**

Select this check box to add a new audio stream that contains the audio currently open in Sound Forge.

**Create an OpenDML (AVI Version 2.0) Compatible File**

Select this check box if you want to save your file as an OpenDML file. OpenDML files allow you to create files that are limited in size only by the format of your hard disk: 2GB using FAT32 or 4GB using NTFS.

### Re-Size Video Frames To

Choose a preset from the drop-down list to adjust the size of the video, or choose **Custom** to specify a custom frame size in the **New width** and **New height** boxes.

**New Width**

Specify the width of the video frames if **Custom** is selected in the **Re-size video frames to** drop-down list.

**New Height**

Specify the height of the video frames if **Custom** is selected in the **Re-size video frames to** drop-down list.

**Source**

Indicates the source of the data that will be crossfaded.

**Destination**

Indicates the file to which the data will be crossfaded.

**Start Level**

Click and drag to adjust the level of the source material at the beginning of the crossfade.



**Start**

When performing drag-and-drop crossfading, this displays the start of your source data.

**End**

When performing drag-and-drop crossfading, this displays the end of your source data. When crossfading from the clipboard, the length of the data on the clipboard is displayed.

**End Level**

Click and drag to adjust the level of the source material at the end of the crossfade.

**Start Level**

Click and drag to adjust the level of the destination material at the beginning of the crossfade.

**Start**

Displays the point at which the crossfade will begin. If there is no selection in the destination window, the cursor position is displayed. If you are crossfading into a selection, the beginning of the selection is displayed.

**End**

Displays the point at which the crossfade will end. If there is no selection in the destination window, the Start position plus the length of the source data is displayed. If you are crossfading into a selection, the end of the selection is displayed.

**End Level**

Click and drag to adjust the level of the destination material at the end of the crossfade.

**Start Selection At**

When no selection is present, the linear fade starts at the cursor position. When there is a selection in the destination data window, you can perform the crossfade starting at the beginning or end of the selection.



**Start of Selection**

Click to start the crossfade at the beginning of the selection.

**End of Selection**

Click to start the crossfade at the end of the selection.

## **Tune**

When crossfading two sound files, phase cancellation of some frequencies often occurs. Very small delays can cause audible differences in tone quality. The **Tune** control allows you to minimize (or maximize, if you so desire) this effect.

**Crossfade Length**

Displays the length of the data that will be crossfaded.

**Source**

Indicates the source of the data that will be mixed.

**Volume**

Click and drag the slider to control the amount of gain applied to the source data before mixing with destination data.

**Start**

When performing drag-and-drop mixing, this displays the start of your source data.

**End**

When performing drag-and-drop mixing, this displays the end of your source data. When mixing from the clipboard, the length of the data on the clipboard is displayed.



**Invert Data**

Select this check box to invert the sound file at the baseline (reverse the polarity). Inverting data can help match transitions and compare the phase relationship of the two sound files.

**Destination**

Indicates the file to which the data will be mixed.

**Volume**

Click and drag the slider to control the amount of gain applied to the destination data before mixing with source data.

**Start**

Displays the point at which the mix will begin. If there is no selection in the destination window, the cursor position is displayed. If you are mixing into a selection, the beginning of the selection is displayed.

**End**

Displays the point at which the mix will end. If there is no selection in the destination window, the Start position plus the length of the source data is displayed. If you are mixing into a selection, the end of the selection is displayed.

**Start Mix At**

When no selection is present, the data is always mixed starting at the cursor position. When there is a selection in the destination data window, you can perform the mix starting at the beginning or end of the selection

**Start Selection**

Click to start the mix at the beginning of the selection.

**End Selection**

Click to start the mix at the end of the selection.



**Invert Data**

Select this check box to invert the sound file at the baseline (reverse the polarity). Inverting data can help match transitions and compare the phase relationship of the two sound files.

**Apply Destination Volume to Overlapping Data Only**

When this check box is selected, the Destination Volume gain is applied only where the destination and source data are mixed.  
When the check box is cleared, the Destination Volume gain is applied to the entire destination sound file.

**Pre/Post-Fade Destination Edges**

Select this check box to apply a fade to the destination data before and after the mixing region. The left edit box determines the fade time before the mix start, and the right edit box determines the fade-time after the mix end.

**Tune**

Use the up or down arrows or enter a value in the edit box to adjust the mix start position in the destination file. Use this to perform fine adjustments of the mix without having to leave the Mix dialog.

When mixing two sound files, phase cancellation of some frequencies often occurs. Very small delays can cause very audible differences in tone quality. The Tune control allows you to minimize (or maximize, if you so desire) this effect.

**Total Mix Length**

Displays the length of the data that will be mixed.

**Event**

Select a Sound Forge function that you want to trigger when the note or controller specified in the Trigger box is detected.

**None**

Click to assign no MIDI trigger to the selected event or to remove an existing trigger.

### Note

Click to trigger the selected event with a MIDI note.

Specify the MIDI channel to which the trigger is assigned in the **Channel** box, and specify the musical note that will trigger the event in the **Note** box.



**Controller**

Click to trigger the selected event using a MIDI controller.

Specify the MIDI channel to which the controller is assigned in the Channel box. Use the Controller box to specify which controller will trigger the event and specify a value in the Value box.

**Trigger**

Displays the trigger that is currently assigned to each event.

**Channel**

Displays the trigger that is currently assigned to each event.

**Value**

Specify the controller value that will trigger the selected event.

**Enable MIDI Input Sync/Trigger**

Select this check box to enter the values in the **Channel**, **Note**, **Controller**, and **Value** boxes automatically when you press a key or controller on your MIDI device.

**Automatically Detect and Remove**

Click this radio button to calculate the DC offset for each channel individually and automatically correct it.

### **Adjust DC Offset By**

Click this radio button and enter a value in the edit box to specify an offset value.

**Note:** From the Tools menu, choose **Statistics** to see an approximation of the DC offset of the waveform. For example, if the Average value (DC offset) is 100, then you should apply a -100 DC offset to cancel the existing offset.

**Compute DC Offset From First 5 Seconds Only**

Click this radio button to analyze only the first 5 seconds of a sound file when measuring the DC offset. The only time that 5 seconds is not sufficient is if a long fade-in or mute has been applied at the beginning of the file.



**Dial String**

Enter the phone number to be generated along with any necessary pause characters. Unknown characters will be ignored.

**Amplitude**

Click and drag the slider to set the peak level of the waveform.

## **DTMF**

Click to generate Dual Tone Multi-Frequency (DTMF) tones. DTMF signals are used by the standard push-button phones. They are generated using combinations of 679, 770, 852, 941, 1209, 1336, 1477, and 1633 Hz sine waves.

**MF**

Click to generate Multi-Frequency (MF or CCITT R1) tones. CCITT R1 signals are used internally by the telephone networks. They are generated by a combination of 700, 900, 1100, 1300, 1500, and 1700 Hz sine waves.

**Single Tone Length**

Specify the output length (in seconds) of individual tones.

**Break Length**

Specify length (in seconds) of the silence between tones.

**Pause Length**

Specify length (in seconds) of the silence that will be inserted when the Pause character is found.

**Fade the Edges of Each Tone**

Select this check box to fade each tone in and out to prevent glitching.



**Pause Character**

Specify the character that will cause a pause between successive tones in the dial string.

**Insert New Tone Sequence at**

Choose a position from the drop-down list to determine where the generated waveform will be placed within the existing sound file.

**New Sample Rate**

Specify the sample rate to which the sound file will be converted.

**Interpolation Accuracy**

Click and drag the slider to determine the complexity of the method used during the resampling process. The audible difference between the different values can be subtle without the use of test tones and is most apparent in high frequencies. In general, a setting of 1 is adequate for general-purpose audio. Settings of 2 and 3 are good for high-end audio. Setting this parameter to 4 results in slow processing, but produces near-perfect results for audiophiles and audio researchers.

**Apply Anti-Alias Filter During Resample**

Select this check box to apply an anti-aliasing low-pass filter to the sound file before resampling when changing to a lower sampling rate.

Since the maximum frequency that can be represented by a particular sample rate is one-half of the sampling rate (the Nyquist frequency), high frequencies in a sound file cannot be represented if the sound file is resampled to a lower sampling rate. Therefore, when changing to a lower sampling rate, if the sound file has strong high-frequency content, anti-aliasing should be used to prevent these high frequencies from becoming low-frequency distortion.

**Set the Sample Rate Only**

Select this check box to change the playback rate without resampling the data. This means that the original pitch of the file is not preserved.

**Insert**

Specify the length of silence that you want to add.

## At

Choose a setting from the **at** drop-down list to specify where the silence should be inserted.



**Total Samples to be Inserted**

Displays the number of samples of silence that will be inserted when you click the **OK** button.

**Maximum Length Allowed for Insert**

Displays the maximum length of silence you can insert.

### **Amplitude**

Click and drag the slider to determine the peak level of the waveform to be generated.

**Note:** When **Noise** is selected in the **Waveform shape** drop-down list, the amplitude is affected by the cutoff frequency selected.

**Waveform Shape**

Choose a shape from the drop-down list to specify the shape of a single period of the waveform.

**Length**

Specify the length (in seconds) of the generated waveform.

## Frequency

Enter a value in the edit box or use the up and down arrows to determine the frequency of the current operator's waveform.

### Notes:

- Aliasing can occur with many of these waveforms when using high frequencies because they are not band-limited.
- When you choose **Noise** from the **Waveform shape** drop-down list, **Frequency** determines the low-pass cut-off frequency. For full-bandwidth (white) noise, set **Frequency** to its highest possible setting.

**Insert New Waveform At**

Choose a position from the drop-down list to determine where the generated waveform will be placed within the existing sound file.

**Total Output Waveform Length**

Specify the length (in seconds) of the generated waveform.



**Current Operator: Operator 1**

Click to modify the first operator.

**Current Operator: Operator 2**

Click to modify the second operator.

**Current Operator: Operator 3**

Click to modify the third operator.

**Current Operator: Operator 4**

Click to modify the fourth operator.

**Cursor Position**

Displays the position of the cursor in the envelope graph.

### **Envelope Graph**

Displays an envelope you can use to change the amplitude of the current operator over time.

Click the left mouse button to define a point and drag to change its position. Click the right mouse button or double-click over an existing point to remove it. You can create up to 8 envelope points for each operator.

**Amplitude**

Click and drag the slider to determine the output gain that will be applied to the current operator after the amplitude envelope.

If the operator is a modulator, this control, along with the envelope, determines the amount of frequency modulation applied to the carrier. If the amplitude of a modulator is high, very harsh sounds can result.

**Operator Shape**

Choose a shape from the drop-down list to specify the shape of a single period of the current operator's waveform.



## Frequency

Enter a value in the edit box or use the up and down arrows to determine the frequency of the current operator's waveform.

### Notes:

- If **Frequency** is set to 0.00, a DC (zero-frequency) waveform is produced regardless of the waveform specified.
- When you choose **Noise** from the **Operator shape** drop-down list, **Frequency** determines the low-pass cut-off frequency. For full-bandwidth (white) noise, set **Frequency** to its highest possible setting.

**Feedback**

Click and drag the slider to determine the amount of the operator's output that is used to modulate itself. If the operator is also being modulated by another waveform, the feedback path and the modulator output are mixed together to modulate the carrier.

**Reset**

Click to reset the envelope graph.

**Insert Waveform At**

Choose a position from the drop-down list to determine where the generated waveform will be placed within the existing sound file.

### Configuration

Drag the slider to specify the arrangement and number of operators that will be used. A graphical representation of the operators is displayed above the slider:

- The outputs of operators joined horizontally are simply mixed together. The outputs of the bottom operators are mixed together to form the final output. Mixing different simple waveforms is called additive synthesis.
- Operators joined vertically are FM carrier-modulator pairs. The bottom operator is the carrier, and the top operator is the modulator.
- Operators that have no other operator directly above are simple waveform generators.
- When three or more operators are stacked, the top operator modulates the operator below it, which modulates the following operator, and so on.

## Operator Configuration

This image represents the arrangement and number of operators that will be used. Drag the **Configuration** slider to change the setting:

- The outputs of operators joined horizontally are simply mixed together. The outputs of the bottom operators are mixed together to form the final output. Mixing different simple waveforms is called additive synthesis.
- Operators joined vertically are FM carrier-modulator pairs. The bottom operator is the carrier, and the top operator is the modulator.
- Operators that have no other operator directly above are simple waveform generators.
- When three or more operators are stacked, the top operator modulates the operator below it, which modulates the following operator, and so on.

**FFT Size**

Choose a setting from the drop-down list to set the size in samples of the analysis window and number of discrete frequencies analyzed. Higher numbers produce increased frequency resolution at the expense of lower time resolution and longer computational time.

**FFT Overlap**

Specify the percentage of overlap between FFT analysis windows. Overlapping allows for more accurate analysis. Lower settings decrease the number of distinct analysis functions performed, which decreases processing time. High settings allow for more analysis, but can result in extremely slow processing.



**Smoothing Window**

Choose a setting from the drop-down list to determine the window function applied to the input data before analysis. The window function affects the sharpness of peaks in an FFT graph and the leakage into neighboring frequencies.

**Slices Displayed**

Specify the number of FFT slices displayed. Each slice represents FFT size samples in time.

**Forward**

When displaying multiple slices, click to layer slices in chronological order.

**Backward**

When displaying multiple slices, click to layer slices in reverse chronological order.

### **Set Sonogram Resolution**

Select this check box and specify the number of FFT samplings used in the Sonogram. When this check box is not selected, the number of samplings is determined by the length of the selection and the **FFT overlap** setting.

**Logarithmic Graphing**

Select this check box to display the x-axis in logarithmic mode rather than linear mode. In logarithmic mode, more area of the graph is devoted to lower frequencies.

**Freq. Min.**

Specify the lowest frequency displayed in graphs when **Zoom to Range** is selected on the Display menu.

**Max.**

Specify the highest frequency displayed in graphs when **Zoom to Range** is selected on the Display menu.



**Ceiling**

Specify the highest amplitude level displayed in graphs when **Zoom to Range** is selected on the Display menu.

**Floor**

Specify the lowest amplitude level displayed in graphs when **Zoom to Range** is selected on the Display menu.

**Hold Peaks During Monitoring**

Select this check box if you want to mark the highest value of each frequency bin.

**Maintain Last Monitored View**

Select this check box if you want to maintain the state of the Spectrum Graph when you stop playback. If this check box is not selected, the graph will revert to the cursor position.

**Attack Sensitivity**

Click and drag the slider to determine how sensitive the attack-detection algorithm is to fast increases in volume.

**Release Sensitivity**

Click and drag the slider to determine the minimum decrease in sound level that must occur before a region end is created.

**Minimum Level**

Click and drag the slider to determine the threshold sound level that must be found before a new region is created.

**Minimum Beat Duration**

Specify the minimum length that must elapse before a new region can be created.



**Use Release Point for End of Region**

When this check box is selected, a region will end when the sound level drops by a factor determined by the Release sensitivity. This is useful if you don't want the silence in between sounds or phrases to be included in the regions.

**Build Regions Using the Current Tempo**

When this check box is selected, regions are created according to the Beats per minute specified in the Edit Tempo dialog and the settings in the **Measures** and **Beats** boxes. Otherwise, regions are created by using an algorithm that finds sound level changes to determine where a sound attack or release occurs.

## Measures

The **Measures** and **Beats** settings determine the musical time interval between regions according to the specified number of beats in a measure. For example, if you want a region to be created at every beat, set **Beats** to 1 and **Measures** to 0. To create a region at every measure, set **Measures** to 1 and **Beats** to 0.

## **Beats**

The **Measures** and **Beats** settings determine the musical time interval between regions according to the specified number of beats in a measure. For example, if you want a region to be created at every beat, set **Beats** to 1 and **Measures** to 0. To create a region at every measure, set **Measures** to 1 and **Beats** to 0.

**Cursor Position**

The cursor position (in samples) from the start of the sound file.

**Sample Value at Cursor**

The number stored by a single sample. The maximum allowed sample value is often referred to as 100% or 0 dB.

**Minimum Sample Position**

The location where the minimum sample value occurs.

**Minimum Sample Value**

The minimum sample value in a file.



**Maximum Sample Position**

The location where the maximum sample value occurs.

**Maximum Sample Value**

The maximum sample value in a file.

**RMS Power**

The Root Mean Square of the sample values relative to the RMS value of a maximum-amplitude square wave (the loudest possible recording).

**Average Value (CD Offset)**

The sum of all sample values in the selected region divided by the number of samples. If this value is not zero, this usually indicates that there is a DC offset in the recording process.

**Zero Crossings**

The number of times per second that the waveform changes from a negative value to a positive value.

This value can be used as a rough estimate of the frequency of the sound data for very simple waveforms.

**Pitch and Position**

Displays the pitch at the cursor position in the envelope graph.

**Pitch**

Adjust the envelope to achieve the desired sound:

Click and drag the small boxes (drag points) up or down.

To create a new drag point, left-click on any point of the fade envelope.

To delete a drag point, single-click it with the right mouse button, or double-click it with the left mouse button.

To move all drag points, press Ctrl+A and drag when the envelope has focus (the cursor will be displayed as a hand).

**Range**

Drag the slider to determine the maximum and minimum pitch change in semitones (half-steps).



**Preserve Original Duration**

Select this check box if you do not want pitch bending to change the size of the sound file. This setting works best when performing small pitch corrections (up to +/- 2 semitones).

**Maximum Gain**

Select a radio button to adjust the range of the envelope graph.

**Show Wave**

Select this check box to display the waveform in the envelope graph.

When your selection is small, the waveform is automatically displayed.

**Reset**

Click to reset the envelope.

## Gain

Drag the **Gain** fader to adjust the volume of the selection.

**Output Channels**

Select a radio button to specify whether you want to create a mono or stereo file.

## **Mono**

Click to mix a stereo file to a mono file.

## **Stereo**

Click to mix a mono file to a stereo file.



**New Left Channel**

Adjust the controls to determine the level of the original file's right and left channels that will be used in the new left channel.

**New Right Channel**

Adjust the controls to determine the level of the original file's right and left channels that will be used in the new right channel.

**From Left**

Click and drag the fader to determine the amount of the original left channel that will be mixed to the new left channel.

**From Right**

Click and drag the fader to determine the amount of the original right channel that will be mixed onto the new left channel.

**From Left**

Click and drag the fader to determine the amount of the original left channel that will be mixed to the new right channel.

**From Right**

Click and drag the fader to determine the amount of the original right channel that will be mixed onto the new right channel.

**Invert Left-Channel Mix**

Select this check box to reverse the polarity of the new left-channel mix.

**Invert Right-Channel Mix**

Select this check box to reverse the polarity of the new right-channel mix.



**Convert to Specified Output Channels Only**

Select this check box if you want to disable the faders and Invert checkboxes. When converting from mono to stereo, each new stereo channel will be an exact copy of the original mono channel. When converting from stereo to mono, the new mono channel will consist of each of the original stereo channels mixed at 50% volume.

## Bit-Depth Conversion dialog

**Level and Position**

Displays the level at the cursor position in the envelope graph.

## **Envelope**

### **Adjust the envelope to achieve the desired sound:**

- Click and drag the small boxes (drag points) up or down.
- To create a new drag point, left-click on any point of the fade envelope.
- To delete a drag point, single-click it with the right mouse button, or double-click it with the left mouse button.
- To move all drag points, press Ctrl+A and drag when the envelope has focus (the cursor will be displayed as a hand).

**Smooth Gain to Minimize Distortion on Steep Slopes**

Select this check box to prevent the gain from changing too quickly, which might result in unwanted distortion. Also, when this option is on, the gain will always begin at 0%.

**Show Wave**

Select this check box to display the waveform in the envelope graph.

When your selection is small, the waveform is automatically displayed.

**Reset Envelope**

Click to reset the envelope.

**Level and Position**

Displays the level at the cursor position in the envelope graph.



## **Envelope**

### **Adjust the envelope to achieve the desired sound:**

- Click and drag the small boxes (drag points) up or down.
- To create a new drag point, left-click on any point of the fade envelope.
- To delete a drag point, single-click it with the right mouse button, or double-click it with the left mouse button.
- To move all drag points, press Ctrl+A and drag when the envelope has focus (the cursor will be displayed as a hand).

**Dither and Noise-Shape**

Select this check box if you want to apply noise-shaping during processing to minimize quantization noise. This effect is most noticeable when the signal is at very low levels.

**Show Wave**

Select this check box to display the waveform in the envelope graph.

When your selection is small, the waveform is automatically displayed.

**Reset Envelope**

Click to reset the envelope.

**Find**

Choose a mode from the drop-down list to choose the type of data you want to find.

### **Threshold Slope/Level**

When **Glitch** is selected in the **Find** drop-down list, click and drag the slider to determine the minimum slope (steepness) of the glitch. A high setting will only detect glitches with a high slope, while a low setting will detect both low and high-sloped glitches.

When **Level equal to or above** is selected in the **Find** drop-down list, click and drag the slider to determine the sound level to search for.

When **End of silent region** is selected in the **Find** drop-down list, click and drag the slider to determine the sound level that will be treated as silence. The Silence search will move the cursor to the next position where the level goes below and then back above the silence threshold level.

### **Sensitivity**

When **Glitch** is selected in the **Find** drop-down list, click and drag the slider to determine how the algorithm looks for glitches.

**Not Defined**

IDH\_IDC\_PM\_MORE\_LIST\_PKG



**Open**

Click to import the presets from an existing preset package (\*.sfz) file into your installation of Sound Forge.

**Save As**

Click to save all of the presets in the Preset package contents box into a preset package file (\*.sfz). This file can then be transported to another installation of Sound Forge or backed up for future use.

## Settings

Select a preset and click the **Settings** button (or double click the preset). Sound Forge opens a temporary dialog for the selected function. You can use the temporary dialog to edit and create presets.

## **Presets**

The **Preset** box contains a tree view of all presets that exist in your Sound Forge installation. Presets are organized by menu and then by function. Click the + button to expand a list, or click the - button to collapse a list.

### **Preset Package Contents**

Lists the contents of the preset selected in the **Presets** box.

### **Add**

Select a preset in the **Presets** box and click the **Add** button to add the preset to the Preset package contents box. When you save the preset package, all of the settings will be saved in the preset package (\*.sfz) file.

### **Delete**

Select a preset in **the Preset package contents box** and click the **Delete** button to remove the preset from the package. When you save the preset package, the preset will be removed from the preset package (\*.sfz) file.

## Recent

The **Recent** list is a quick way to navigate the Open dialog. Folders that you frequently use will be available to choose from the list. All of the files in that folder will appear in the space above.



**Name**

The name of the file you want to open.

**Title**

Displays the title of the selected preset package.

**Author**

Displays the author of the selected preset package.

**Copyright**

Displays the copyright of the selected preset package.

**Comments**

Displays the comments associated with the selected preset package.

**More**

Not defined.

## Recent

The **Recent** list is a quick way to navigate the Save As dialog. Folders that you frequently use will be available to choose from the list. All of the files in that folder will appear in the space above.

**Title**

Specify a title for the preset package.



**Author**

Specify the name of the preset package's author.

**Copyright**

Enter copyright information for your preset package.

**Comments**

Enter any comments you want to associate with the selected preset package.

**Save Summary Information in the preset package**

Select this check box if you want to specify summary information in the preset package.

### Configuration

Choose a preset from the drop-down list.

**Logical Send/Receive Sample Number**

Specify the number your sampler uses as its location reference for samples sent or received.

**Actual Send/Receive Sample Number**

Displays the actual sample number that will be sent/received. This value is the number specified in the **Logical send/receive sample number** box plus the sample bias specified on the Sampler Configuration dialog.

**Sampler**

Displays the sampler you have specified in the **Sampler Model** box on the Sampler Configuration dialog.



**MIDI Unity Note**

Displays the **MIDI unity note of sample** setting specified on the Edit Sample dialog.

**Fine Tune (cents)**

Displays the **Fine tune** setting specified on the Edit Sample dialog.

**Configure**

Click to display the Sampler Configuration dialog.

**Get Sample**

Click to start receiving sample information from your sampler.

**Note:** When receiving a sample, the entire contents of the active data window are replaced with the new sample data (a warning will be displayed before any data is replaced).

**Send Sample**

Click to send the contents of the contents of the active data window to your sampler.

**Sampler Model**

Choose a sampler from the drop-down list.

## **MIDI**

Click to configure a standard MIDI device.

## SCSI

Click to configure a SCSI MIDI device.



**Sample Bias**

Specify a numbering offset that allows you to add or subtract a value to the **Logical send/receive sample number** to compensate for differing sampler storage schemes.

**Note:** It is often easiest to set the **Sample bias** so that a **Logical send/receive sample number** of zero corresponds to the first available sample storage number in your sampler.

**Sampler**

If your sampler uses SCSI/SMDI transfer, use the **Sampler** box to specify the ID of the SCSI controller to which the sampler is connected.

**Sampler**

Not Defined.

### **MIDI Input**

Choose a MIDI input port.

## **MIDI Output**

Choose a MIDI output port.

**MIDI Channel**

Specify the MIDI channel through which sample data will be sent when using SDS (Sample Dump Standard).

**Open Loop**

Select this check box if you want to send SDS sample data immediately upon clicking the **Send Sample** button. This is an unconditional transfer of sample data (no handshake).

**Send Request when Retrieving Samples**

Select this check box if you want the Sampler tool to send a request (handshake) to the sampler before beginning an SDS sample transfer.



**Wait for Request when Sending Samples**

Select this check box if you want the Sampler tool to wait for a request (handshake) from the sampler before beginning an SDS sample transfer.

### Go To

Choose a preset from the drop-down list, or choose **Custom** to specify a cursor position using the **Position** and **Input Format** controls.

**Start**

Type a value in the edit box or use the spin controls to specify a starting point for your selection.

**Input Format**

Choose a format from the drop-down list. This setting determines the input format used to specify the cursor position.

### **Selection**

Choose a selection type from the drop-down list. Choose **Custom** if you specify your selection using the **Start**, **End**, **Length**, and **Channels** controls.

**End**

Type a value in the edit box or use the spin controls to specify an ending point for your selection.

**Note:** Specifying a value in the **End** box will modify the value in the **Length** box.

**Length**

Type a value in the edit box or use the spin controls to specify the length of your selection.

**Note:** Specifying a value in the Length box will modify the value in the End box.

**Channel**

Choose **Left**, **Right**, or **Both** from the drop-down list to specify which channels will be selected.



**Snap Time**

Click to snap the current selection to the nearest division on the Time Ruler.

**Snap Zero**

Click to snap the current selection to the nearest zero crossing.

**Play Looped**

Select this check box to enable looped playback of the current selection.

### **Play**

Click to preview the selection. During playback, the button will change to a **Stop** button.

**New Preset Name**

Specify a name for the new preset.



**Plug-In Properties**

Displays information about the selected effect.

**Remove**

Click to install the selected effect.



**Buffers to Process per Second**

Specify how many playback buffers are processed per second. A larger number may increase real-time playback reliability.

**Total Playback Buffers**

Specify the number of playback buffers. A larger number may increase real-time playback reliability.

**Do Not Allow In-Place Buffer Size Increases**

Select this check box only if a plug-in fails to correctly handle buffer size information.

When this check box is selected, the available data size and the actual data buffer size are forced to be equal. Plug-ins based on Microsoft's original Gargle Filter example may require this option to be enabled.

**Use Plug-In's Requested Minimum Buffer Size**

Select this check box only if a DirectX plug-in fails to connect and process audio. Some plug-ins may only work with specific buffer sizes.

**Crossfade Edges**

Select this check box to crossfade the edges of the processed and unprocessed audio at the start and end of the current selection. Crossfading prevents glitching when applying an effect in the middle of a sound clip.

**Note:** Crossfading is not available in real-time preview.

### **If Plug-In Extends Length**

These options determine how Sound Forge handles the extra audio tail of plug-ins, such as reverb.

**Insert Tail**

Select this radio button to insert the audio tail. All audio to the right of the tail will be moved over to accommodate the extra audio.

**Mix Tail**

Select this radio button to mix the tail into the adjacent material. This is the most natural-sounding option.



**Ignore Tail**

Select this radio button to ignore the tail. The effect will end abruptly at the end of the selection.

**Reset**

Click to restore the default Real-Time Preview Configuration settings.

**Lead Time**

TBD

**No Markers**

TBD

**Commands Only**

TBD

**All Markers**

TBD

**Check ECC**

TBD

**Wavespan**

TBD



**Packet Size**

TBD

IDH\_IDC\_BTN\_COMPOP

TBD

**Single Meta**

TBD

**RealMedia Server Path**

Specify the path where the RealMedia file will be stored on the Web server. This is the directory path where you will transfer the file with an FTP program.

**Use Alternate Destination Folder for RAM Files**

Select this check box and specify the folder where you want to save RAM files.

## Video Stream

If you open an .avi file that contains multiple streams, the Video Stream dialog is displayed after you click the Open button. Use the Video Stream dialog to view information about each stream and to specify which streams you want to open:

- Drag the black diamond icon to choose the streams you want to open.
- Click on the **Expand** button + to display information about a stream.
- Right-click a field name and choose Edit from the shortcut menu to modify a setting.
- Click the **Contract** button - to hide stream information.

**Name**

Choose a mode from the drop-down list.

**Attack Threshold**

Drag the fader to set the threshold level used for the detection of the trim/crop start point. -Inf. is complete silence, 0 dB is a maximum amplitude level.



**Release Threshold**

Drag the fader to set the threshold level used for the detection of the trim/crop end point. -Inf. is complete silence, 0 dB is a maximum amplitude level.

**Fade-In**

Specify the length of fade-in applied to the sound file after the trim/crop start point is detected. This is useful for preventing glitches at beginning and ending points.

**Fade-Out**

Specify the length of the fade-out applied to the sound file after the detected trim/crop end point.

**Minimum Inter-Phrase Silence**

Specify the minimum amount of silence which must exist between phrases before a new region is created.

**Minimum Length Following Loop End**

When using the **Remove data beyond loop points** option, this number specifies the number of samples that must exist after the loop. This is used to ensure that a sampler can loop properly, since some samplers don't use the exact loop points supplied.

**Create Undo**

When check box is selected, an undo buffer will be created prior to processing the current sound file.

**Selection**

Displays the range of the current selection that the plug-in will act upon.

**Selection**

Click to open the Set Selection dialog. From here you can alter the selection that the plug-in will act upon without leaving the dialog.



**Preset**

This drop-down list contains the presets that have been stored for the plug-in.

**Save As**

Click to save the current plug-in settings as a new preset.

**Delete**

Click to remove the current preset from the list. Built-in presets cannot be deleted.

### **Preview**

Click to begin previewing the processed sound file. The type of preview depends on the **Real-Time** checkbox.

**Bypass**

Select this check box to hear the dry, unaffected audio during preview. This is a useful feature when doing A/B comparisons between the affected and unaffected signal.

**Real-Time**

When this check box is selected, Sound Forge will try to preview the plug-in in real time. If your computer can not keep up, you should clear the check box.

**CPU %**

Displays the current CPU usage of the plug-in. When this reading reaches close to 100% you can expect to hear gapping in the audio preview.

**Properties**

Click to display more information about the current plug-in.



**Bit Depth**

Displays the bit depth that the plug-in is using for input and output.

**Help**

Click to display the online help for the current operation.

**Copyright**

Enter copyright information associated with the active media file.

**Description**

Contains a brief text description of the active media file.

**Rating**

Assigns a rating to the active media file. Most Internet browsers can be rendered “content sensitive” to prevent distribution of inappropriate material to vulnerable Internet users. Select a rating by clicking the down arrow to the right of the box and clicking the appropriate rating (**None**, **G**, **PG**, or **R**).

**Use Markers in Source File**

Select this check box if you want to include any markers that are defined in the source file. If the checkbox is unchecked, the encoder will ignore the markers.

**Use Script Commands in Source File**

Select this check box if you want to include any script commands that are defined in the source file. If the checkbox is unchecked, the encoder will ignore the commands.

**Advanced**

Click to display the Target Bitrate Settings tab.



**Automatically Generate RAM File**

Select this check box to generate a redirector file during encoding.

**Copyright**

Enter copyright information associated with the active media file.

**Comments**

Enter any comments you want to associate with the active media file.

**Plug-Ins**

Lists the plug-ins that have been added to the chain, and the order in which they were added.

IDH\_SFQGRAPH\_BTN\_GRAPH

TBD

**Clear All**

Click to remove all plug-ins from the chain.

**Add**

Click to display a list of all available DirectX audio plug-ins.

**Delete**

Click to remove the selected plug-in from the chain.



**Move Up**

Click to move the selected plug-in up one level in the chain.

**Move Down**

Click to move the selected plug-in down one level in the chain.

**Properties**

Click to modify the selected plug-in's settings.

## Extract Audio from CD

**Refresh**

Click to update the track list for the selected CD drive.

**Play/Stop**

Click to play the selected track in the track list. Click again to stop playback.

**Speed**

If you experience problems extracting audio, choose a slower speed from the drop-down list. Decreasing the speed decreases the size of the memory buffer required.

**Play Status**

IDH\_IDC\_DAE\_TXT\_PLAYSTATUS



**Drive**

Choose the CD drive that contains the CD from which you want to extract audio.

**Read by Tracks**

Select this radio button and select each track you want to extract. Each track will be extracted to a new data window.

**Read Entire CD**

Select this radio button to extract the current CD to a single file.

**Read by Range**

Select this radio button and enter a starting time and ending time (or a beginning time and length). The time range will be extracted to a new data window.

### Track List

When the **Read by tracks** radio button is selected, select each track you want to extract.

**Selected Length**

Displays the length of all audio that you have selected for extraction.

**Start**

Enter the time from which you want to start extracting audio.

**End**

Enter the time at which you want to stop extracting audio.



### **Length**

Enter the length of the audio you want to extract. Sound Forge will start extracting audio at the **Start** time and continue until this amount of audio has been extracted.

If you enter values in the **Start** and **End** boxes, Sound Forge will calculate the **Length** value.

### Create Regions for Each Track

If you select the **Read entire CD** or **Read by range** radio buttons, select this check box to create regions to indicate the beginning and end of each track in the new data window.

#### Create Markers for Each Index Change

If you select the **Read entire CD** or **Read by range** radio buttons, select this check box to create markers to indicate index changes in the new data window.

## Tracks

Displays the tracks on the CD in the selected drive.

Select a track and click **OK** to extract audio.

You can choose another drive from the **Drive** drop-down list, select a track and click **Play** to preview tracks, or click CDDb to retrieve CD information from the Internet.

**Play**

Click to preview the selected track.

## Crossfade Loop Dialog

**Loop to Crossfade**

Click the appropriate radio button to select the sample loop that will be affected by the crossfade. Most samples only have one loop: the sustaining loop. If a sample contains two loops, the second loop is called the release loop.

**Sustaining**

Select this radio button to crossfade the sustaining loop. Most samples only have one loop: the sustaining loop. If a sample contains two loops, the second loop is called the release loop.



**Release**

Select this radio button to crossfade the release loop. If a sample contains two loops, the second loop is called the release loop.

**Loop**

Shows you where the crossfade will occur. The three areas (from left to right) represent the sound before, inside, and following the loop points, and are displayed with different sloped lines.

For example, when performing a Sustaining loop crossfade with no Post-Loop, you can see the loop data fade out as data from the Pre-Loop is mixed in to form a crossfade.

**Loop**

Select the check box and click and drag the slider to determine how much of the selected sample loop will be crossfaded. The end of the sample loop is crossfaded with the end of the region before the loop start to make the end of the loop blend smoothly with the beginning of the loop.

**Post-Loop**

Select the check box and drag the slider to determine how much of the region following the loop end is crossfaded. The region following the sample loop is blended with the beginning of the sample loop to make the transition from the end of the loop to the rest of the sample following the loop smoother.

**Preview Mode**

Choose a mode from the drop-down list to determine how the **Preview** button will work:

**Loop the Loop:** plays the loop area only.

**Play Loop through Post-Loop:** plays the loop once and then the Post-Loop.

**Play as One Shot:** plays from the beginning of the file and uses the loop settings to determine how many times to loop each loop.

## Convert Bit Depth

**Bit-Depth**

Choose a setting from the drop-down list to specify the number of bits that should be used to store each sample.

## Dither

Choose a setting from the drop-down list to specify the type of dither noise that you want to add to your signal.

Dithering adds random noise to the signal to mask quantization noise. This setting determines the range of possible dither values.

In general, Highpass Triangular with noise shaping produces the most favorable results.

Setting	Description
Rectangular	Eliminates distortion caused by conversion to a lower bit depth, but the noise level is dependent on the signal.
Triangular	Eliminates distortion caused by conversion to a lower bit depth and eliminates noise floor modulation by producing a slightly higher noise level.
Highpass Triangular	Eliminates distortion caused by conversion to a lower bit depth and eliminates noise floor modulation by producing a slightly higher noise level. Noise is shifted to higher frequencies than standard triangular dithering.
Gaussian	Does not perform as well as rectangular or triangular dithering, but may be suitable for some material.

## Noise Shaping

Choose a setting from the drop-down list to apply noise shaping to your signal. Noise shaping lowers the perceived noise floor of the signal by shifting most of the noise into the upper frequencies of human hearing.

Setting	Description
None	Does not apply noise shaping.
High-pass contour	Moves noise into high frequencies. <b>Note:</b> The frequencies to which the noise is shifted (shaped) are close to the Nyquist frequency, so you should not apply noise shaping to files with a sample rate below 44.1 kHz. For example, a 22 kHz signal has a Nyquist frequency of 11 kHz. If you move most of the noise into that range, you are putting it into a sensitive area of human hearing and will produce a worse-sounding signal.
Equal contour	Distributes noise equally into high and low frequencies.

## About

Displays information about the selected file format.



**Custom**

Click to create or edit a custom encoding template.

**Channels**

Select a radio button to specify the number of channels in the new window.

