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Multiquence™ is a fast, easy-to-use, multitrack multimedia processor.

To learn how to use help, press F1.

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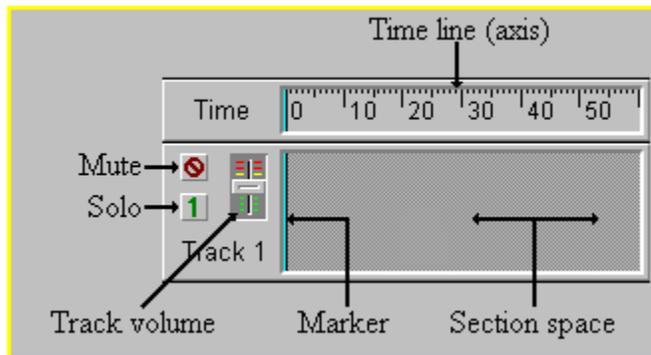
[Select a device for playback](#)

[Select a device for a recording section](#)

# Getting Started

## Step 1: The Interface

When you start Multiquence, a single blank track appears as shown in the diagram.



**Figure 1: Track Window**

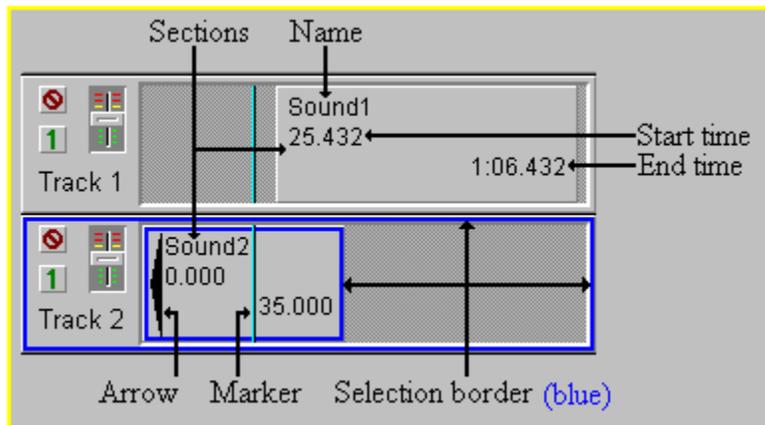
The Track volume slider controls the volume for the track. Moving the control up increase the volume. Both the Master volume and Track volume apply only to digital audio sections and do **not** affect the volume of MIDI or CD audio sections. You can use the Windows Volume Control accessory to change the volumes for those devices.

The Time line shows what region of the project is currently displayed in the window. Moving the mouse arrow within this area displays the exact time in the status bar. Clicking the left mouse button here will move the marker. A time context menu appears if you click the right mouse button here.

The Mute button disables a track so that it is not mixed or played. All the other tracks are played. You can use the mute button to temporarily remove a track from playback. The Solo button does the opposite. Only one track is played; no other tracks are mixed or played. This lets you hear a single track when working with many tracks.

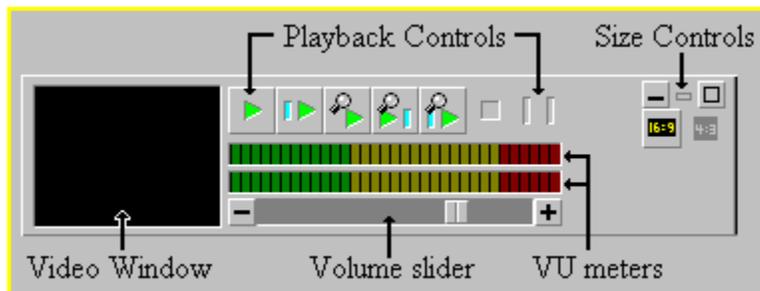
The marker is used for several editing commands and for starting playback at a specific time. It can be moved by clicking the left mouse button in the Time line or by clicking the right mouse button on a section and using the **Move marker here** command.

Section space is the area where sections are placed on a track (as shown below). Each section has a name (usually a filename), a start time and an end time. The *selected* track and section have a blue border. All new sections are added to the selected track and any editing is performed on the selected section. You can use the left mouse button to select a different track or section.



**Figure 2: Sections**

If a section extends outside the view, a black arrow appears on the end of the section, as shown.



**Figure 3: Master Control**

The Master Control window contains all the playback controls and the video window. The top right corner has several size buttons for changing the size of the Master Control window and the video aspect ratio. The ratios are 4 to 3 for standard television and 16 to 9 for high definition television.

The volume slider controls the final mixing and playback volume level for all of the tracks. If you received any "clipping" warnings the volume needs to be decreased.

Just above the master volume slider are left and right VU meters (with left on the top) that indicate the output volume level of all the tracks combined. If the maximum level is exceeded, meaning that clipping is required, the right-most red light will remain lit.

## Step 2: Setup

The first thing you should do is to set all the folders using the Options | Folder command. These folders are used whenever you add a file to a track. Set the "Audio" folder to the place where you keep all your **.wav** files. Set the "Project" folder to the place where you want to save your Multiquence projects.

If you have an audio editor, such as GoldWave, you can specify its full filename in the "Digital audio editor" box. Multiquence will run the editor when you use the Edit | Open editor command.

Check that an appropriate sound card has been selected for output under Options | Playback. The "Microsoft Sound Mapper" is selected by default, which is fine if you only have one sound card. If you have more than one card, you may want to select a specific driver. If you are using an older SoundBlaster card, make sure the **Reserve 16-bit recording** option is enabled.

## Step 3: Adding a File

There are several ways to add a file to a track:

- Choose an **Add** command from the **Track** menu.
- Choose the plus button in the tool bar.
- Click the right mouse button on the track and select the **Add section** command from the track context menu.
- Drag-and-drop a file (or set of files) from Windows Explorer.

Files are added in the selected track at the marker's position. If there is no room for the files, they are added to the end of the selected track.

If you are adding a variety of small and large sections, you may need to zoom in or out to get a better view. See [View Menu Commands](#) for details.

To see the contents of a file, such as the waveform for an audio section or images for a video section, you may need to zoom in. Try the **View | 10 seconds** command. Displaying of contents depends on the [contents threshold](#) setting. Waveforms are **not** displayed for compressed audio files such as MP3 or WMA.

## Step 4: Selecting and Moving sections

To select a single section, simply click the left mouse button on the section. To select a group of sections, you can do one of the following:

- Click-and-drag using the right mouse button to select all the sections within a rectangular area.
- Hold down the **Ctrl** key and click the left mouse button on each section you want to select (or unselect).
- Use the [Edit | Group list](#) command to select a previously assigned [group](#).

To move a section, click and hold the left mouse button on a section, then drag-and-drop the section to a new time or to a different track. If more than one section is selected, all selected sections are moved as a single group. This preserves the relative spacing between all selected units.

To move a section to an exact time, right click on a section and choose the [Move section](#) command. The [Edit | Move](#) command does the same thing for the currently selected section. Note that when moving a group of sections, the time is always relative to the left-most section (the one that is played first).

## Step 5: Playing a Project

The [Playback](#) menu and the **Master Control** window contain a number of commands for playing your [project](#). If you need to start playback from a specific time, click the left mouse button on the time (in the Time line area) and then choose the **Playback | From marker** command. Although you cannot pause playback, you can use the **Playback | Move marker** command, then stop playback and later continue playback from the marker.

## Step 6: Recording

To record in Multiquence, you must have either a [full duplex](#) 16-bit stereo sound card or more than one sound card installed in your system.

The **View | Window | Recorder** command displays the [Recorder](#) window where you can record new audio files.

If you need to synchronize recording with existing audio, such as recording vocals to background music, use the [Track | Create recording section](#) command to specify the filename, length, and number of channels for the new recording. The recording section must be in a different track so that it overlaps the

background music. When you play the project, the background music is played and audio is recorded in the recording section. To play the project after recording, use section options (described next) to set the recording section to **Play** mode.

## Step 7: Setting Section Options

Different types of sections support different options. An audio section has options for looping and input/output channel control. A video section has options for window position and size.

There are several ways to view these options:

- Double click the left mouse button on the section.
- Click the right mouse button on the section and select the **Section options** command from the section context menu.
- Make sure the sections is selected, then choose **Section** from the **Options** menu.

## Step 8: Editing Sections

As mentioned above, you can drag-and-drop sections to any position or track using the left mouse button. If you are dragging a single section and there is not enough room for the section at the drop position, all of the sections following the drop position will be shifted to the right to make room. A special mouse cursor appears if shifting is required. When dragging a group, it can be dropped only if there is room for all sections.

Before using Edit Menu Commands, make sure the correct section is selected and has a blue border. Most editing commands apply only to the selected section. For the example given in **Figure 2** (above), editing modifies only the **sound2.wav** section. If you wanted to edit **sound1.wav** instead, you would select that section with the mouse and move the marker to a point inside the section.

You can copy, trim, and split most sections using Edit Menu Commands. In general, recording sections cannot be edited. Note that only one section may be selected for some of the commands.

The copy and paste commands can be used to copy groups of sections from one project to another.

If a section has to be played in several places on several different tracks, you can make copies of the section and drag-and-drop them to a new position or track.

If you want to remove part of a section, you can move the marker to the point where it should be trimmed, then use the appropriate trim command.

If you need to insert a section in the middle of another section or you want to move part of a section to another track, you can move the marker to the dividing point and split it.

For audio sections, you can apply a variety of effects, such as flange, parametric EQ, dynamic volumes, and speed (see Crossfade for an example). Video sections support fades and transform plug-ins.

Multiquence does not modify the original file (except when recording). All editing and effects are performed realtime (on-the-fly) during playback. To modify a digital audio file, use Edit | Open editor.

## Step 9: Saving a Project

The File | Save command saves the names and positions of all the files used in a project. Note that if you change any of the files, it may alter the way the project plays the next time you open it. Warning messages will be displayed if there are any problems.

The File | Save as wave command mixes all the digital audio sections and tracks into a single wave file.

This file can then be played by other applications or burned onto a CD. The playback rate of the wave file depends on the high/medium/low setting in Options | Playback. For CD quality, make sure you have the **High (44100 Hz)** option selected. Note that only digital audio sections are mixed to the file. MIDI, CD audio and video sections are **not** mixed.

If your system is not fast enough to play all the tracks, you can use the **Save as wave** command to combine several tracks into one. By muting all the tracks you do not want to save, you can combine the remaining tracks into a wave file. This file can then be added to the project to replace those tracks.

The File | Save as video command mixes all the video and audio tracks into a single AVI file.

A full duplex sound card is one that can record and play at the same time. When you play a project, Multiquence uses the card for stereo, 16-bit digital audio playback. If you have a recording section in the project, the same card is used for recording as well. If your card is not full duplex, an error message is displayed.

# Projects, Tracks, Groups and Sections

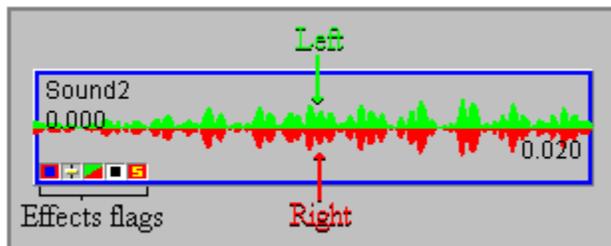
## Sections

A section is the most basic unit within Multiquence. It can be a digital audio file, a MIDI file, a video clip, or a section of audio from a CD. Each kind of section has its own colour.



### Section Colours

The contents of a digital audio file can be seen graphically when zoomed in. For a stereo sound, Multiquence uses a unique graph where the left channel is shown in green on the top and the right channel is shown in red on the bottom. Any effects enabled for the section, such as pan or flange, are indicated by **effects flags**. The flags, in the order shown below, are flange, equalizer, pan, volume, and speed.



### Digital Audio Section

## Groups

When more than one section is selected, it is referred to as a group. Some commands affect all sections in the group, such as Move and Copy. The Edit | Group List command allows you to create named groups, which can be used to quickly select a specific group of sections.

## Tracks

A track contains a sequence of sections that are played one after the other. All tracks are played concurrently, or in other words, they all play at the same time. This lets you play several digital audio files at once, provided you put each file on a different track. For example, you can put music in one track and vocals in another and play it to see how they sound together. For fun, you could put a video clip of the President on one track and an audio clip of Daffy Duck on another.

## Projects

A project contains a combination of tracks and sections to create such things as music, audio CDs, radio programs and multimedia presentations. They can store all the sounds necessary to play a short 30 second radio commercial or a long two hour movie sound track. Up to 5 hours worth of material can be added.

It is important to remember that a project uses all the files you've added to it. If you delete or modify any

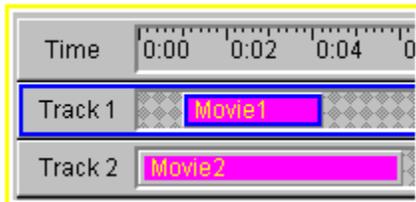
of those files, it may adversely affect your project the next time you open or play it.

# Video Editing Basics

## Video Layers

Multiquence supports an unlimited number of video layers. Each track can be considered a single video layer. These layers are drawn in the order the tracks appear on screen. Video in Track 1 is drawn first, then video in Track 2 is drawn next, on top of Track 1, then video in Track 3 is drawn on top of that, and so on. This means that the last track is always drawn on top of all other tracks.

It is important to remember this layering order when adding new video sections to a project. For example, say you wanted Movie1 to appear as a picture-in-picture in Movie2. You would first use the video section options to change the size of Movie1. If you add the sections in the track order shown below, Movie1 will not be seen.



### Wrong Layer Order

Video in Track 1 is drawn first, then video in Track 2 is drawn on top of it. In this case, Movie2 will completely cover Movie1.

To correct the problem, simply drag-and-drop Track 1 below Track 2.



### Correct Layer Order

Video in Track 2 is drawn first, then the video in Track 1 is drawn on top of it. Since Movie1 was resized to be a smaller picture-in-picture, it will cover only a small part of Movie2.

Layering must be considered when using transform plug-ins and fading. In most cases, the section being faded or transformed should be placed in the last track.

## Transforms

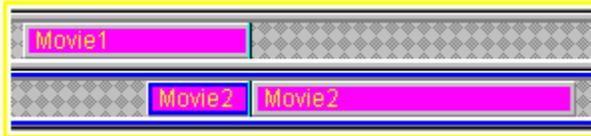
The [Effect | Video plug-ins](#) command displays a list of all video transform plug-ins installed in your system. Transforms can either modify the video in some way, such as making it appear blurred, or perform a transition from one video to another, such as a [wipe](#) or [crossfade](#).

Transforms that perform a transition usually allow you to specify start and finish values. These values determine the progress of the transition. A value of 0 indicates no progress and a value of 1 indicates full progress. As the video plays, Multiquence counts the progress from the start value to the finish value.

If a wipe transform is being used on Movie1, for example, and the start value is 0.5 and the finish value is 1, Movie1 will initially appear as half wiped and then continue to become fully wiped out. Progress can

move backwards as well. If start is 1 and finish is 0, then Movie1 will start completely wiped out, then gradually wipe in. To really understand how all this works, you will need to experiment with the wipe transform. If a picture is worth a thousand words, then experience is worth a million.

In most cases, you will want the transform to complete long before the end of the section. To do that, you need to split the section, then apply the transform to the beginning section.



### Transition Wipe In

For a wipe transform, enable the wipe effect on the left section of Movie2 shown above, and set start to 1 and finish to 0. When the project is played, Movie1 starts playing, then Movie2 is wiped in and continues to play.



### Transition Wipe Out

A similar effect is achieved by splitting the end of Movie1 and applying the transform to the end (right) section. Note the layer change. In this case, set start to 0 and finish to 1. When the project is played, Movie1 starts playing, then Movie1 is wiped out and Movie2 is wiped in.

### See Also

[Crossfade Video](#)

[Using Plug-ins](#)

A wipe transform wipes out the top video layer to reveal the lower layers. It is like wiping a rag across a steamed up window.

## Developer

GoldWave Incorporated is a Canadian corporation founded in 2001 by Chris Craig after 7 years of independent software development. The company's goal is to provide high quality, inexpensive, and easy to use digital audio and video tools.

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Multiquence: <http://www.goldwave.com/multiquence/>  
Contact: <http://www.goldwave.com/multiquence/contact.html>

## File Menu Commands

### **New**

Creates a new project with a single blank track. If another project was opened, you are asked to save any changes.

### **Open**

Opens an existing project. After the file is opened, all the sections in the project are checked to determine if they have been modified. If any changes are found, warning messages will be displayed. Note that if a file cannot be found, the folders specified in [Options | Folder](#) are searched.

### **Save**

Saves the project to the disk. The names and positions of all of the files used in the project are saved. Note that any changes made to those files may change the project the next time it is opened.

### **Save as**

Saves the project to the disk under a different name.

### **Save as wave**

Combines and mixes all digital audio portions of a project into a single wave file. Only digital audio sections are mixed. MIDI and CD audio sections are **not** included.

The sampling rate of the file is determined by the [Options | Playback](#) setting. For best quality, make sure to use the **High (44100 Hz)** setting.

### **Save as video**

Combines and mixes all digital video and audio portions of a project into a single AVI file. See **Save as wave** above for details. Note that not all video codecs work and some use a fixed size for the image.

### **Exit**

Exits Multiquence.

## Edit Menu Commands

Before using some of these edit commands, make sure the correct section is selected. Some commands require that only one section is selected. See [Getting Started](#).

### Undo

Reverses the last modification.

### Open editor

Runs the audio editing application specified in [Options | Folder](#).

### Cut

Copies the selected sections to the clipboard and removes them.

### Copy

Makes a copy of the selected sections on the clipboard.

### Paste at marker

Pastes the sections in the clipboard into the selected track at the marker's position. If there is no room for the sections, they are pasted at the end of the track. All relative track and section spacing is preserved.

### Mute

Disables the selected sections so that they will not be mixed or played. Use this command to see how the project sounds without the selected sections.

### [Move](#)

Moves selected sections to an exact time.

### Split

Divides the selected section at the marker's position. Use this command to insert a section in the middle of the selected section or to move part of a section to another track.

### Trim beginning

Removes the beginning of the selected section up to the marker's position. Use this command to keep the last 20 seconds of a 30 second file, for example.

### Trim end

Removes the end of the selected section at the marker's position. The part of the section extending from the marker's position to the end of the section is trimmed. Use this command to keep the first 20 seconds of a 30 second file, for example.

### Delete

Removes all selected sections from the project.

### [Group list](#)

Manages, creates, deletes, or selects groups.

### Set marker

Moves the marker to an exact time.

### Find section

Searches all tracks to find a selection of a given name.

### Find next

Searches all tracks to find the next section with the given name.

**See Also**

[Getting Started](#)

[Section Options](#)

## Effect Menu Commands

### Flange

Adds a flange effect to the selected audio section. Flange effects cannot be added to CD, MIDI, or video sections.

### Equalizer

Applies a parametric equalizer to the selected audio section. Equalizers cannot be applied to CD, MIDI, or video sections.

### Speed

Sets the playback speed of the selected audio section. Changing the speed also changes the pitch of the sound. Speed cannot be applied to CD, MIDI, video, or recording sections.

### Autofade

Automatically creates fade envelopes for all sections in the selected track based on the positions of the selected sections. To use this command, select the sections that should remain loud, then select a track that contains background audio. Note that none of the loud sections can be in the track you select.

### **Fade graph**

Shows or hides dynamic fades for all audio and video sections. By clicking the left mouse button inside a section, you can add or move points to change the fade envelope. Dragging a point outside the section will remove it. See [Crossfade Audio](#) and [Crossfade Video](#) for examples.

### **Pan graph**

Shows or hides dynamic panning for all audio sections. By clicking the left mouse button inside a section, you can add or move points to change the fade envelope. Dragging a point outside the section will remove it. The higher the point, the more left the balance will be. The lower the point, the more right it will be.

### **Reset fade**

Resets the fade envelope to a straight line for the selected sections.

### **Reset pan**

Resets the panning envelope to a straight line (center) for the selected audio sections.

### Audio plug-ins

Displays a list of plug-ins installed in the system. Audio plug-ins include effects such as reverb, noise gate, equalizers, and so on.

### Video plug-ins

Displays a list of video transform plug-ins installed in the system. Video plug-ins include transitions such as wipe, fade, and pixelate and effects such as blur, emboss, and engrave.

### **See Also**

[Getting Started](#)

[Section Options](#)

## Track Menu Commands

Track menu commands create new tracks, add files (sections) to the selected track, delete a track, or find a section. When possible, new sections are added at the marker's position, otherwise they are added to the end of the track.

### **New**

Creates a new blank track.

### **Move up and Move down**

Moves the selected track up or down in the list. This lets you arrange the order of tracks.

### **Add section**

Adds a file to the selected track. The file can be audio, MIDI, or video. All supported files types are listed.

### **Add audio section**

Adds an audio file. Only digital audio files are listed.

### **Add MIDI section**

Adds a MIDI file. Only MIDI files are listed.

### Add CD section

Adds a CD audio section. Before using this command, make sure an audio CD is inserted in your CD-ROM drive.

### **Add video section**

Adds a video section.

### **Add image section**

Adds a still image section.

### Add caption section

Adds a text caption section.

### Create recording section

Creates a file for recording and adds it to the selected track. When you play a project, the section record digital audio from your sound card. The recording section can be set to playback mode using section options.

### **Delete track**

Deletes the selected track and all sections.

## View Menu Commands

View commands act like a zoom lens allowing you to zoom in and out of the project. By using these commands, you can get a more detailed view of individual sections or of the overall project. To quickly zoom in and out, use the up and down arrow keys.

### **Beginning of section and End of section**

Moves the view to the beginning or end of the selected section. Use these commands to quickly see the previous or next section when zoomed in.

### **End of track**

Moves the view to the end of the selected track.

### **Marker**

Moves the view to the marker if you are zoomed in and the marker is outside the view.

### **Size**

Changes the vertical size of all tracks. When set to small, more tracks are shown, which is useful when moving a groups of sections. When set to large, it shows much more detail in the sections and allows fade and pan envelopes to be set more precisely.

### **Zoom in and Zoom out**

Zoom in expands the time line showing more detail. Zoom out compresses the time line showing less detail, but more of the overall project.

### **All**

Displays the entire project.

### **1 second**

Displays one second of the project. At this level, you can easily see small sections and perform accurate editing.

### **10 seconds**

Displays ten seconds of the project. This level is useful for setting volume levels or manipulating small sections.

### **1 minute**

Displays one minute of the project. This level give you a good overview of short projects.

### **5 minutes**

Displays five minute of the project. You can arrange large sections at this level.

### **1 hour**

Displays 1 hour of the project, which is useful for CD audio projects.

### **Window**

The **Window** menu holds commands to show or hide the **Messages** window, the **Project list** window, open a Recorder window or an XML window. The **Project list** window lists all tracks and sections in a project and allows sections names to be changed. The XML window shows a project listing in XML format that can be saved to a file.

### **Show contents**

Displays or hides waveform graphs for audio sections or images for video sections. Contents are displayed only if the amount of time shown in the view is less than or equal to the Contents threshold.

### Contents threshold

Sets the time threshold for displaying waveforms or images inside sections.

### **Snap to zero-crossing**

Snaps the marker to the closest zero-crossing. When moving the marker, the marker will be placed at a point where the audio level crosses zero amplitude. When trimming or splitting an audio section, it is best to enable this option to prevent a pop or click caused by sudden changes in amplitude. This feature ensures that amplitudes at the edit point will always be as close to zero as possible.

**Note:** The marker is adjusted only for the one selected audio section in the selected track. If you select a different audio section, click the left mouse button on the marker to find the new zero-crossing. This only works well for uncompressed audio, not MP3 or WMA files.

### **Grid/snap to grid**

Displays a grid and snaps the marker to the grid. When dragging a section, the starting point of the section is snapped to a grid line. The grid is visible only if the space between each line can be shown, otherwise you will need to zoom in to see the grid.

### Grid size

Sets the grid spacing.

# Playback Menu Commands

## **All**

Plays the entire project.

## **From marker to end**

Starts playback at the marker's position and plays to the end of the project.

## **View**

Plays the section of the project shown in the view.

## **From marker**

Plays the section of the project shown in the view starting at the marker's position.

## **To marker**

Plays the section of the project shown in the view and stops at the marker's position. The marker must be visible.

## **Stop**

Stops playback.

## **Move marker**

Moves the marker to the current playback position. Use this command when you need to mark a place to trim or split a section.

# Options Menu Commands

## **Section**

Presents a dialog where section options can be changed for the selected section. Different types of sections have different options. Select one of the following: Audio, CD audio, MIDI, Recording, Image, Caption, or Video.

## Track

Presents a dialog where the selected track name and settings can be changed.

## Folder

Presents a dialog where folders for various types of files can be specified.

## Playback

Presents a dialog where playback features can be configured.

## Tool bar

Presents a dialog where the tool bar can be configured.

# Keyboard Commands

## General

<b>Keystroke</b>	<b>Action</b>
F1	Starts help.
F3	Find next section.
Ctrl+G	Show or hide grid and enable or disable snap-to-grid.
Ctrl+O	Open project.
Ctrl+W	Show or hide waveforms or images.
Tab	Move to marker position.
Enter	Section options.
Up	Zoom in.
Down	Zoom out.
Ctrl+Up	Select track above the currently selected track.
Ctrl+Down	Select track below the currently selected track.
Alt+Up	Move selected track up.
Alt+Down	Move selected track down.
Ctrl+1,2,4,5,9	Set zoom level to 1 second, 10 seconds, 1 minute, 5 minutes, or 1 hour.
Left	Scroll view to the left.
Right	Scroll view to the right.
Page Up	Scroll view to the left one page.
Page Down	Scroll view to the right one page.
Home	Move view to the beginning of the section.
End	Move view to the end of the section.
Ctrl+End	Move view to the end of the track.
Ctrl+Right	Move the marker right.
Ctrl+Left	Move the marker left.

## Playback

<b>Keystroke</b>	<b>Action</b>
Space	Start/stop playback of view.
Shift+Space	Start/stop playback of view starting at marker.
Ctrl+A	Play the entire project.
Ctrl+E	Plays from the marker to the end of the project.
F5, F6, F7, F8, F9	Plays view, plays from marker, plays to marker, stops, and moves marker respectively.

## Editing

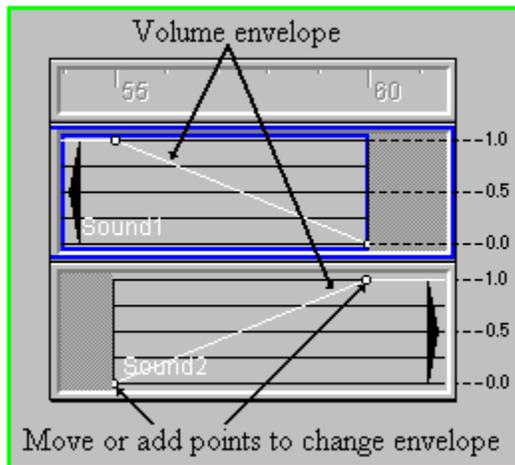
<b>Keystroke</b>	<b>Action</b>
Ctrl+B	Trim beginning.
Ctrl+C	Copy selected sections.
Ctrl+M	Mute selected sections.
Ctrl+T	Trim end.
Ctrl+V	Paste clipboard at marker.

Ctrl+W  
Ctrl+X  
Alt+Backspace or Ctrl+Z  
Shift+Ins  
Shift+Del  
Ins  
Del  
Ctrl+F  
Ctrl+P

Show or hide waveforms or images.  
Cut selected sections.  
Undo last operation.  
Create a new track.  
Delete the track.  
Add a new section.  
Delete the section.  
Show or hide fade graphs.  
Show or hide pan graphs.

## Crossfade Audio

Use the [Effect | Fades](#) command to crossfade between two sections, such as fading out one song while fading in another. The figure below illustrates an example.



### Crossfading

Crossfading is accomplished using the following procedure:

- 1) Add Sound 1 to Track 1.
- 2) Create a new track.
- 3) Add Sound 2 to Track 2.
- 4) Drag Sound 2 to a position so that it starts 5 seconds before the end of Sound 1.
- 5) Choose **Fade graph** from the **Effect** menu.
- 6) Shape the envelope so that the end of Sound 1 goes to 0.0 and the beginning of Sound 2 goes from 0.0 to 1.0, as illustrated.

Use the left mouse button to drag an existing point or add a new point. To remove a point, drag it outside the section box. Note that you cannot delete points at the very beginning or end of the section. To clear all the points, use the [Effect | Reset fade](#) command.

### See Also

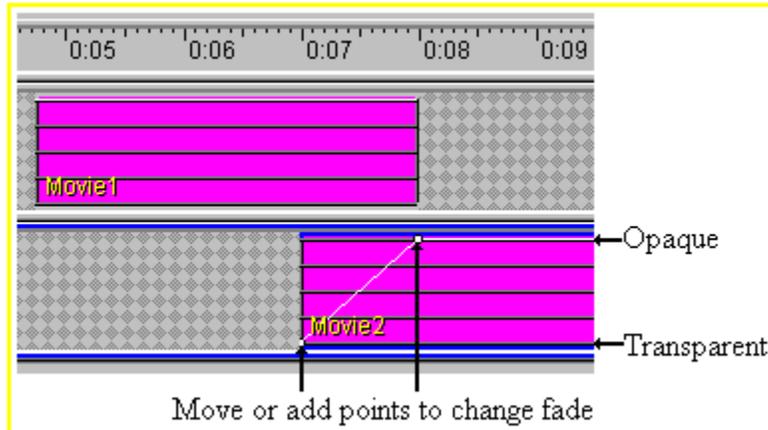
[Getting Started](#)

[Crossfade Video](#)

[Autofade](#)

## Crossfade Video

Use the [Effect | Fades](#) command to crossfade between two sections, such as fading out one video while fading in another. The figure below illustrates an example.



### Crossfading

Crossfading is accomplished using the following procedure:

- 1) Add Movie1 to Track 1.
- 2) Create a new track.
- 3) Add Movie2 to Track 2.
- 4) Drag Movie2 to a position so that it starts a few seconds before the end of Movie1.
- 5) Choose **Fade graph** from the **Effect** menu.
- 6) Shape the envelope so that the beginning of Movie2 goes from 0.0 to 1.0, as illustrated. Note that no fading is required on Movie1.

Use the left mouse button to drag an existing point or add a new point. To remove a point, drag it outside the section box. Note that you cannot delete points at the very beginning or end of the section. To clear all the points, use the [Effect | Reset fade](#) command.

The lower the point, the more transparent the video will be.

### See Also

[Getting Started](#)

[Crossfade Audio](#)

[Video Editing Basics](#)

## Using Plug-ins

To apply a plug-in to a section:

- 1) Select the section.
- 2) Choose the **Audio plug-in** or **Video plug-in** command from the **Effect** menu.
- 3) Check the checkbox next to the plug-in's name.
- 4) Choose the **Properties** button to adjust any other setting.
- 5) Choose **OK**.

To change a plug-in's setting for a section:

- 1) Select the section.
- 2) Choose the **Audio plug-in** or **Video plug-in** command from the **Effect** menu.
- 3) Select the plug-in you want to change.
- 4) Choose the **Properties** button and make the changes.
- 5) Choose **OK**.

To remove a plug-in from a section:

- 1) Select the section.
- 2) Choose the **Audio plug-in** or **Video plug-in** command from the **Effect** menu.
- 3) Uncheck the checkbox next to the plug-in's name.
- 4) Choose **OK**.

Some video plug-ins allow additional settings, such as start and finish values, and a mix option. The **Start** value specifies the initial progress of a transition or transform. In the case of a fade transform, it specifies how faded the video starts. The **Final** value specifies the final progress of the transform or transition, such as how much the video should be faded. See [Video Editing Basics](#) for additional information.

The **Mix with master** setting may be available if the plug-in accepts either 1 or 2 inputs. The master window contains all the video on the lower layers. The Pixelate transform, for example, accepts either 1 or 2 inputs. If you check the **Mix with master** setting, it uses 2 inputs: the video section where the effect is applied, and the master video window. This means that it will pixelate out the video section, and pixelate in the master window (lower video layers).

If you do not check the **Mix with master** option, only a single input is used, which is the video by itself. In this case, the video will pixelate until the end of the section.

Audio plug-ins can be applied to audio sections only (not MIDI or CD sections). Video plug-ins can be applied to video sections only.

### See Also

[Plug-in List](#)

[Crossfade Audio](#)

[Crossfade Video](#)

[Video Editing Basics](#)

## Timebox

A **timebox** lets you specify a time in a variety of ways. The general form is **HH:MM:SS.TTT**. Each letter represents a single number: H for hour, M for minute, S for second and T for thousandths of a second. For example, 2 hours, 35 minutes and 40 seconds is given as **2:35:40.000**. However, you can use whatever format is easier. You could have entered **155:40** in minutes and seconds or **9340** in seconds. You can even enter 1 minute as **1:** or enter **1::** for 1 hour.

## Group List

Groups organize a set of sections under a single name. A group may contain all the video sections, recording sections, or a set of sections that you often need to access, move, or copy.

To create a group:

- 1) Select one or more sections.
- 2) Choose **Group list** from the **Edit** menu.
- 3) Enter a name for the group in the top box.
- 4) Choose the **Create** button.

To reselect a group in Multiquence, either choose the group in the list and use the **Select** button or double-click on the group in the list.

To delete a group, select it from the list and use the **Delete** button.

# Equalizer

The **Equalizer** is a flexible tool for reducing or enhancing ranges of frequencies in a sound. If you wanted to boost base sounds, for example, you would increase the levels for bands 1 and 2.

## Equalizer levels

The levels (or gains) for 5 frequency bands can be adjusted using the scroll bars or by entering a value in the appropriate edit box. A gain of 12 dB is equivalent to an increase of 400%. A gain of -12 dB is equivalent to a reduction to 25%. A 0 gain disables the band.

## Center frequencies

The center frequency specifies what frequency the band should change. Any frequencies near the center are affected. A band with a center at 1000 Hz, for example, affects frequencies between 500 Hz and 1500 Hz.

## Setting

Check this box to enable the equalizer.

## Presets

Predefined parameters can be read from [presets](#).

# Flange

Flange uses variable delays and mixing to create some unusual audio effects, including echos and reverbs. Parameters can be entered by hand or read from [presets](#).

## Input

Specifies the volume of the unmodified sound to mix with the output. A value of 100 is full volume. The original sound is not mixed if the volume is 0.

## Flange

Specifies the volume of the flanged sound to mix with the output.

## Feedback

Specifies the volume of the feedback to mix with the output.

## Invert

The input, flange, or feedback can be inverted by checking the appropriate check box. Normally, mixing adds the sounds together. Checking **Invert** subtracts a sound instead.

## Depth

Specifies in milliseconds how much the delay should vary. A value of 40 will let the delay vary from 0 to 40 milliseconds.

## Frequency

Specifies how fast to vary the delay. A value of 2 will vary the delay over its depth twice a second. For a value of 0.2, the full delay depth is reached every 5 seconds.

## Fixed delay

The fixed delay is added to the depth to change the minimum delay. If the depth is 40 and the fixed delay is 10, the delay will vary from 10 to 50 milliseconds.

## Setting

Check this box to enable a flange effect.

## **Pan**

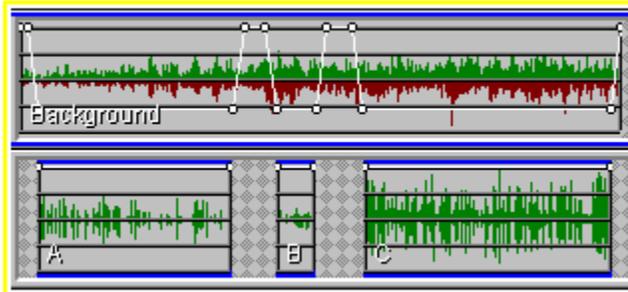
The **Pan graph** lets you control the left/right balance of the section. Higher points are left, lower points are right.

## Speed

The speed effect controls the playback speed and pitch of an audio section. Simply adjust the scroll bar to the left or right to change the speed. Note that changing the speed also changes the length and the pitch of the section.

## Autofade

Use **Autofade** to automatically fade audio sections in the selected track. This is useful if you have background music or sounds that must be faded when a voice section is played. You would select all the voice sections, select the track containing the background music (click on the track header), then use **Autofade** to automatically adjust the fade envelopes. Note that none of the voice section may be located in the selected track (a section cannot fade itself).



### Autofade

Sections A, B, and C are selected. The Background section is **not** selected, but the track where it resides is selected. The fade envelope is automatically reduced where sections A, B, and C overlap Background.

Several fade envelopes are provided in the [presets](#). You can create your own envelopes by dragging the four points to different locations.

If your background sounds are in more than one track, you can select each track and apply the **Autofade** effect.

### See Also

[Crossfade Audio](#)

## Plug-in List

The audio and video plug-in lists show all the DirectX plug-ins installed in your system. To apply a plug-in to a section, check the checkbox at the left of the plug-in name. Choose the **Properties** button to set any properties for the plug-in.

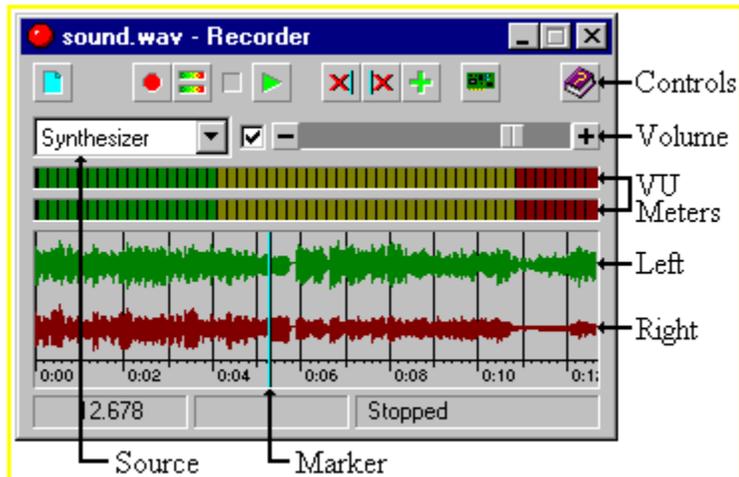
See [Using Plug-ins](#) for more information.

## Find Section

Use the **Find Section** dialog to search for a section. Enter the name of the section in the edit box, and choose **OK**. If a section is found, it is selected. Use **Edit | Find next** to search for the next section with that name.

## Recorder

The Recorder window lets you record new audio. Several Recorder windows can be active at one time so you can record several files at the same time provided you have multiple sound cards. For synchronized recording, see [Track | Create recording section](#).



### Recorder Window

Recording, playback, and editing controls are located along the top. Tooltips and the status bar describe the purpose of each button.

The source drop down list contains all the recording sources for a given sound card. To enable a source, check the checkbox next to the list. To select a different sound card, use the Device button.

The volume slider controls the volume level of the shown source. You can adjust the volume of a different source by selecting it from the list. The Monitor button activates the VU meters so you can adjust the volume levels to avoid clipping. If clipping occurs, the right-most red light remains on. You can stop and restart monitoring to reset the light.

Before you begin recording, you must create a new file by clicking the New button. When you press the Record button, recording continues until: the stop button is pressed, there is no storage available, or an error occurs.

When recording stops, the waveform of the recording is shown. You can move the marker to trim the beginning or end of the file using the Trim buttons. You can also record over part of the file. Recording starts at the marker's position.

When recording and editing is complete, add the file to your Multiquence project using the Add button.

### See Also

[Track | Create recording section](#)

## Recorder Device

Use this dialog to set the recording and playback devices for the recorder window. If you have several recorder windows opened, you will need to select a different recording device for each window if you want all windows to be able to record at the same time.

## Contents Threshold

The Contents threshold specifies the maximum amount of time shown in the view for displaying the contents of a file. For audio and recording sections, the waveform is graphed. For video sections, images are shown.

A value of 20 means that the contents will not be displayed unless the view is zoomed in to 20 seconds or closer. A value of 1 means that you would need to use View | 1 second to see the contents. You can turn off contents at any time using **View | Show contents**.

Contents are display only if **View | Show contents** is checked and the range of time shown in the time axis is less than or equal to the threshold value.

## Grid Size

The grid size specifies the amount of time between each grid line. A value of 5 means a grid line is drawn every 5 seconds and the marker and section will be aligned to a 5 second interval.

Note that the **View | Grid/snap to grid** option must be enabled to see the grid lines.

## CD Options

Use the **CD Options** dialog to select a playback region and caption for a CD audio section.

The **Caption** is any text you would like to use to describe the section. It will be shown in the section.

### Region to play

If you have multiple CD-ROM drives, you can select the drive letter from the **Device** list. Make sure you select a drive before specifying a range in the **From** and **To** timeboxes.

## Create Recording

Use the **Create Recording** dialog to specify the filename, length, and number of channels for a recording. The length is specified in a timebox.

After the section has been added, you can use the Options | Section command to set more options, such as input device and input source.

Note that any existing file is erased. A recording section is not deleted from your hard drive if you remove from your project.

To adjust the recording volume levels, you can use the Monitor feature under the View | Window | Recorder command.

### **See Also**

Recorder Window

## Recording Options

Use the **Recording Options** dialog (**Options | Section**) to change the recording length, select a record device, select a record source, or enable/disable recording.

### Record device

If you have more than one input device installed, you can select a specific device to use for this recording section. By selecting a different device for each recording section, you can record several tracks at once.

### Record source

Most sound cards have several sources. Select an appropriate source for your recording (such as Line-in or Microphone).

To adjust the recording volume levels, you can use the Monitor feature under the View | Window | Recorder command.

### Length

If you need to change the length of the recording, specify a new time in the timebox.

If **Record** is selected, the section will be recorded when the project is played. If **Play** is selected, the section will be played when the project is played. Use this setting to test how a recording sounds when combined with all the other tracks.

### See Also

Recorder Window

## Move

Use the **Move** dialog to move a section or group of sections to an exact time. The time can be absolute, from the beginning of the project, or relative, from the nearest preceding section.

## Audio Options

Use the **Audio Options** dialog (**Options | Section**) to select the playback region, enable looping or configure playback channels.

### Region to play

Choose the **Entire sound** option if you want to play the entire file. Choose the **Part of sound** option if you want to play only part of the file and define the region in the **From** and **To** timebox. If the audio file contains any cue points, they are listed in the timebox.

If you want to loop the section, enter a non-zero value for **Loops**.

### Channel to play

If the audio file is stereo, you can choose **Left** or **Right** to use and play only one channel. Both channels are enabled if **Stereo** is selected.

### Output channel

This option specifies the output channel for the section. Choose **Left** to have all audio in the section played on the left channel. Choose **Right** for playback on the right channel. Choose **Stereo** to use both channels.

## MIDI Options

Use the **MIDI Options** dialog to select the playback region.

### Region to play

Choose the **Entire song** option if you want to play the entire file. Choose the **Part of song** option if you want to play only part of the file and define the region in the **From** and **To** timebox.

## Video Options

Use the **Video Options** dialog to select the playback region, configure the video position and size, or set transparency values.

### Region to play

Choose the **Entire clip** option if you want to play the entire file. Choose the **Part of clip** option if you want to play only part of the file and define the region in the **From** and **To** timebox.

### Video position and size

The **X** and **Y** values set the position. The **Width** and **Height** values set the size.

### Preview

The preview window represents a full screen video frame. The current position, size, and transparency settings are previewed. Transparent regions are shown in green. Use the scroll bar below the preview window to show different frames.

### Transparent colour range

Use these settings to define a range of colours to be transparent. This creates a blue or green screen special effect for compositing part of one video over another (to superimpose actors over computer generated backgrounds, for example). Note: Using some video transforms may disable the transparency effect.

You can specify the colour range manually or simply click the mouse on the preview window over the colours that need to be transparent. Make sure the **Transparent colour range** box is checked to see the effect. Hold the Ctrl key and click on the Preview window to reset the range to a single colour.

### See Also

[Crossfade video](#)

[Effect | Video plug-ins](#)

## Image Options

Use the **Image Options** dialog to set the display time and configure the image position and size.

### **Display time**

The display time is the length of time that the image will be shown on the video screen.

Refer to [Video Options](#) for an explanation of the other controls.

### **See Also**

[Crossfade video](#)

[Effect | Video plug-ins](#)

## Caption Options

Use the **Caption Options** dialog to edit the caption text, change the scrolling direction, set the display time, or configure the position and size.

### Caption text

You can edit the caption text in this window. Editing features are similar to the WordPad accessory. The font size, face, and justification can be changed. Before choosing a font size, it is important to choose and **Apply** the render width and height first.

### Preview

The preview window represents a full screen video frame. The current position and size settings are previewed. You can move the scroll bar to see how scrolling will behave (if enabled). Remember to **Apply** any changes to see updated preview.

### Caption position and size

The **X** and **Y** values set the position. The **Width** and **Height** values set the size.

### Display time

The display time specifies the length of time that the caption is shown on the video screen. It also controls how fast the text will scroll, if scrolling is enabled.

### Scrolling

This sets the scrolling direction for the text.

### Render width and height

These set the level of detail used to render the text. Use higher numbers for smoother text. For best quality, these should be set to the width and height of the final video. If you plan to create a standard MPEG-2 video, then values of 720 and 480 (or higher) should be used. The values must be set and applied before writing any caption text since the size of the text changes with these values.

All video effects can be applied to caption sections, such as fading and transitions.

### See Also

[Crossfade video](#)

[Effect | Video plug-ins](#)

## Track Options

Use the **Track Options** dialog to change the selected track's name, volume, mute, and solo settings. A muted track is excluded from playback and from the **Save as wave** and **Save as video** commands. A solo track is played (or saved) exclusively and all other tracks are excluded.

## Folder Options

Use the **Folder Options** dialog to choose folders for commonly used file types. To set a folder, choose the button to the right of the edit box.

### **Audio**

Specifies the folder where you keep your digital audio files (\*.wav, \*.aif, \*.voc, \*.au, etc.).

### **MIDI**

Specifies the folder where you keep your MIDI files (\*.mid, \*.rmi).

### **Video**

Specifies the folder where you keep your video files (\*.avi).

### **Image**

Specifies the folder where you keep your images (\*.gif, \*.jpg, \*.png, \*.bmp).

### **Project**

Specifies the folder to use when saving project files.

### **Digital audio editor**

Specifies the pathname of an audio editing application to use for the Edit | Open editor command.

## Playback Options

Use the **Playback Options** dialog to configure output quality, media prepare time, scrolling, and output device.

### Quality and preparation

Quality controls the sampling rate to use for playback and mixing. Using a lower sampling rate may increase the number of tracks that can be played on your system, but the audio quality decreases. If you receive a warning that your system is not fast enough, try using a lower sampling rate. Later, you can use the File | Save as wave command to create a high quality wave file without any gaps.

**Video frame rate** specifies the number of frames per second for realtime video playback. Note that if your system is not fast enough to play at the given frame rate, then frames will automatically be dropped. You can decrease this setting to reduce the amount of processing time spent on video. Note that frames are not dropped when using the **Save as video** command.

**Media prepare time** specifies how much time is needed to prepare a multimedia file for playback. This applies to CD audio, MIDI, recording, and video sections. It does not apply to digital audio. On slow systems, it may take a few seconds to prepare a file for playback. If you notice that synchronization is off at the beginning, try adjusting this time. Note that due to inconsistent standards and differences in hardware, synchronization cannot be maintained for a long period of time. Most sound cards do not play at the exact given sampling rate, which makes synchronization difficult.

### Options

The **Scroll view to follow playback** option scroll the view if the playback position moves outside the window. This can be useful when zoomed in and you need to see the sections as they are played.

The **Reserve 16-bit recording** option ensures that a 16-bit device will be used for recording. Some sound cards use 8-bit recording during 16-bit playback, causing noisy recordings.

The **Improve responsiveness** option greatly improves how quickly modifications can be heard during playback. Normally it takes about 800ms before mute, solo, or volume changes are heard. Enabling this option reduces that lag to under 200ms. The master VU meters also update quicker, giving more accurate realtime levels. This option uses more processing power, so avoid it if you use a slow system or notice breaks in playback.

### Audio playback device

If you have more than one audio playback device installed in your system, you can select a specific device from the list. This device will be used for all digital audio output generated by Multiquence.

## Tool Bar Options

Use the **Track Options** dialog to configure the Multiquence tool bar. Highlighted buttons are shown in the tool bar and grayed buttons are not. Click on a button to highlight or gray it.

## Presets

Presets store parameters and shapes in the **MQPreset.ini** file so they can be recalled again the next time the effect is used. Controls for presets consist of a drop down list box, a **[+]** button, and a **[-]** button.

### To add a new preset:

- 1) Enter in all the new parameters and/or draw the new shape.
- 2) Type in a new name for the preset in the drop down list. This name cannot be the same as one currently in the list.
- 3) Choose the **[+]** button.

### To delete a preset:

- 1) Select the preset from the drop down list.
- 2) Choose the **[-]** button.

### To change a preset:

- 1) Delete the preset, as above.
- 2) Add the preset, as above.

When you delete a preset, the current parameters and name remain on the screen so they can be changed.

# Multiquence Order Form

Please type in the following information:

Name (first & last): \_\_\_\_\_

[Company]: \_\_\_\_\_

Address: \_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

Country: \_\_\_\_\_

E-mail address: \_\_\_\_\_

[Telephone (with Area Code)]: \_\_\_\_\_

Multiquence version (see Help | About): v2.02

Multiquence license/password: (US\$45, Can\$65, UK£30)

Payment:

Check enclosed (payable to GoldWave Inc.)

Money order enclosed

Please mail this form to the address below. Thank you for registering!

GoldWave Inc.  
P.O. Box 51  
St. John's, NF  
CANADA A1C 5H5

[www.goldwave.com/multiquence/](http://www.goldwave.com/multiquence/)

## **Web Site Links**

Main page:

<http://www.goldwave.com/multiquence>

Ordering information:

<http://www.goldwave.com/multiquence/register.html>

## Registering

Multiquence is a shareware program. It is not free. To register and support further development, please fill in the [order form](#) or visit the [website](#). Registration details are given below.

### **Registration (US\$45, Can\$65, UK£30)**

You will receive a personalized license that removes all shareware messages/logos and unlocks the latest version of Multiquence. Please be sure to download the latest version from the Multiquence website.

### **Sending Payment**

Checks from banks in the **United States, Canada, the United Kingdom**, are welcome.

An **international postal money order** or **bank draft** in Canadian currency is required for other locations. Make sure that you send a copy of the order form separately if it cannot be included with the money order or bank draft.

[Register](#)

## Multiquence Shareware Version

This application is a demonstration shareware version of the Multiquence multitrack audio processor. Shareware allows you to try a program before you buy it. If you find Multiquence useful, you are required to [register](#) it. Please note that the demonstration version limits saved files to 45 seconds in length.

As shareware, you can give copies of Multiquence to anyone you think might find it useful. You can also upload it to websites and post it to appropriate forums or newsgroups. Before copying, uploading, or posting, please click [here](#).

Please read [Getting Started](#) for an introduction. Additional information is given in the [Contents](#).

The **readme.txt** file contains helpful information and important installation instructions. The **whatsnew.txt** file lists many of the changes made to this version. For recent information and software updates, please refer to the Multiquence [website](#).

### Toll Limit

The **toll** in the status bar gives you a rough idea of the benefit you have received from using Multiquence. This shareware version is limited to 100 commands (or a \$1.00 toll) each session. When the limit is reached, a toll message will appear occasionally. Exiting and restarting Multiquence gives you another 100 commands without messages. By [registering](#), you will receive a password that removes the toll limit, allows you to save files longer than 45 seconds, and create videos without the Multiquence logo.

Only the original Multiquence zip file may be copied, uploaded, or posted. This ensures that everyone will get a complete and working copy. Distributing modified or incomplete copies is a violation of the copyright.



