#### Introduction To MultiView

Multiview was written to view up to four different AVI files without the need to run multiple instances of Microsoft's Media Player. You can also use MultiView to listen to WAVE and MIDI files!

Although MultiView has been designed to be easy to use, the following Help topics are available:

System Requirements

Defining MultiView As Your Default Windows' AVI Movie Viewer

Defining MultiView As Your Default Windows WAVE Audio Player

The MultiView Main Window

The MultiView Menu

The MultiView Control Box

Opening an AVI File

Playing an AVI File

Setting The AVI File Playback Speed

Looping an AVI Movie

Capturing Video

Selecting the Active Window

Using the Zoom Command

Playing a movie in Full Screen mode

Copying A Frame To The Windows' Clipboard

Using the Volume control

Using the Restart Command

Playing a Movie Backwards

Changing the Background Color

The MultiView AudioView Screen

The MultiView AudioView Menu

Opening a WAVE or MIDI File

Playing a WAVE or MIDI File

Editing WAVE and MIDI Files

Looping a WAVE or MIDI File

Changing the MultiView AudioView Light Scheme

**Using the Volume Control** 

**Shortcut Keys** 

Custom AVI Files

About the Author

## **System Requirments**

MultiView requires that the following software is installed on your PC:

Microsoft Visual Basic Runtime Module v3.0 (VBRUN300.DLL)

Microsoft Video For Windows Runtime

AVI files (necessary to have something to view!)

The hardware requirements are the same as for Video For Windows.

In order to hear sound from AVI files, or to use MultiView AudioView, you must have sound hardware installed, or you can use a Windows PC Speaker driver.

If you do not have sound drivers loaded, MultiView AudioView will be disabled.

MultiView is optimized for use with  $160 \times 120$  movies. It will decrease the size of any movies that are larger than that.

## The MultiView AudioView Screen

The MultiView AudioView screen is comprised of a menu, a title panel that will display the current file name, a slider to control the current position of the sound file, an elasped time display, volume control buttons, and an optional row of "lights".

#### The MultiView Main Window

The MultiView Main Windows is composed of four viewing windows.

These windows are referred to in the Windows menu selection as Upper Left, Upper Right, Lower Left, and Lower Right. On the <u>Control Box</u> these are referred to as 1,2,3, and 4. The <u>currently active window</u> is indicated by a darker shadow. If the <u>Control Box</u> is visible you can also determine the active window by checking which of the numbers on the <u>Control Box</u> is darker than the rest. The <u>Window menu</u> item will also show the <u>active window</u> by having a check mark next to the name of the window.

**Note**: If you exit MultiView while in the <u>Single View</u> mode, MultiView will automatically start in <u>SingleView</u> mode. The same applies to <u>Zoom</u> mode.

An optional  $\underline{\text{Control Box}}$  is available by selecting  $\underline{\text{Preferences}}$  from the  $\underline{\text{menu}}$ , then clicking on  $\underline{\text{Control Box}}$ .

## The MultiView AudioView Menu

The MultiView AudioView menu has five options. Choose the Menu item for more info.

## <u>File</u>

Open

Close

Exit

## <u>Edit</u>

Edit Current File Select Sound Editor

# <u>**Action**</u> Play

Stop

Position To Start

Position To End

### **Preferences**

Loop

Lights

MultiView

Volume

#### <u>Help</u>

Help

About

## The MultiView AudioView Light Scheme

Just for the heck of it, MultiView AudioView can show a row of "lights" to enhance your sound file listening pleasure.

From the <u>Preferences Menu</u>, choose Lights, then choose one of the schemes, or choose Off to disable the lights altogether.

### The MultiView Menu

The MultiView menu has six options. Choose the Menu item for more info.

## <u>File</u>

Open

Close

Capture - available if MultiView Capture is installed

Exit

#### <u>Edit</u>

Copy

Edit Current File

Select AVI Editor

#### **Action**

Play

Stop

Position To Start

Position To End

Restart

Reverse

Advance Frame

Back One Frame

Go To Frame

#### **Preferences**

Background Color

Control Box

Full Screen

Hide Menu

Loop

AudioView

Single View

Set Speed

Volume

Zoom

### **Window**

**Upper Right** 

Upper Left

Lower Left

Lower Right

#### <u>Help</u>

Help

About

## **Opening A WAVE or MIDI File**

There are many ways of selecting a sound file to be opened for use in MultiView.

The most obvious way is by selecting File from the MultiView menu bar, then choosing the Open... option. The Open File dialogue is then displayed. When the file is selected the sound file is opened.

The last ten AVI, WAVE and MIDI files that have been opened within MultiView will also appear on the File Menu. Click once on a file name and that file will open, if it still exists. If you choose to open an AVI file then the MultiView video viewer will then be enabled.

Close the file by selecting Close from the File menu.

### **Opening an AVI file**

There are many ways of selecting an AVI file to be opened for use in MultiView.

The most obvious way is by selecting File from the <u>MultiView menu bar</u>, then choosing the Open... option. The <u>Open File dialogue</u> is then displayed. When the file is selected the AVI file is opened into the <u>currently selected window</u>. This method is also used if you have the <u>Control Box</u> displayed, and the Open button is clicked.

You may also bring up the <u>Open AVI File dialogue</u> by double clicking the window you would like to open the file into.

The last ten AVI files that have been opened within MultiView will also appear on the <u>File Menu</u>. Click once on a file name and that file will open, if it still exists. If you choose to open a WAVE or MIDI file then MultiView AudioView will then be enabled.

Close the file by setting it's window to <u>active</u>, then either select Close from the <u>File menu</u>, or click on Close from the <u>Control Bar</u>.

## **Playing A Sound File**

You can start playing an open sound file by either selecting the <u>Action Menu</u>, then clicking on Play, or simply click on the arrow to the left of the slider control. Stop the file from playing by choosing Stop on the <u>Action Menu</u>, or click on the square next to the slider control.

## **Playing An AVI File**

Once an AVI file has been <u>opened</u> into a MultiView window, you may choose to play this movie.

Choose Action from the <u>MultiView menu</u> and then select Play. This will start the movie playing in the <u>active window</u>. The frame number will be displayed on the title bar.

You may also play an open movie by clicking on the play button located directly under the viewing window.

If the <u>Control Box</u> is visible, click on the Play button to start playing the movie in the <u>active</u> window.

Choosing Stop from either the Action menu or the Control Box, or by pressing the square Stop icon under the <u>active movie window</u>, will cancel the playing of the movie.

Unless you have selected otherwise, the playback speed will be the same as the speed at which the AVI was made. You may check this by looking at the <u>Set Speed</u> menu item under the <u>Preferences Menu</u>.

#### The MultiView Control Box



The MultiView Control Box is visible if you have selected Control Box from the <u>Preferences menu</u>. Depending on the setting of the Hide Menu option from the Preferences Menu, the MultiView Menu may disappear when the Control Box is visible.

The Control Box gives you easy access to many menu items. As with the menu, the Action buttons (i.e. Play, Stop) pertain to the currently <u>active window</u>. The four buttons that represent the windows will indicate the active window if the number is bolder than the rest

The red bar in the middle of the Control Box is a <u>volume</u> control. Clicking from left to right raises the volume..

Toclose the MultiView Control Box you can double click on the Window Control Box (the square on the upper left hand corner of the title bar), or select Close from the Windows Control Box Menu. If you have not chosen to activate the <u>Hide Menu</u> option you also have the option to click on the Control Box option on the <u>Preferences menu</u>.

The MultiView Control Box may also be minimized, giving you easy access for making the Control Box visible again by double clicking on the Control Box icon.

## Restart

The Restart command, available from the <u>Action menu</u> and from the <u>Control Box</u>, will reset the current position of the <u>active movie</u> to the beginning and then start playing. This is the equivalent of using the <u>Start</u> command, then using the <u>Play</u> command.

## **Position To Start**

The Position To Start option on the <u>Action menu</u>, and the Start button on the <u>Control Box</u> positions the <u>active movie</u> to the beginning in the stopped position. You can also use the <u>scroll bar</u> under the window to position the movie.

## **Position To End**

Selecting the Position To End option from the <u>Action menu</u>, or clicking on the End button from the <u>Control Box</u> will position the active movie to the last frame in the movie. This comes in handy if you want to view the movie in <u>reverse</u>. You can also use the <u>scroll bar</u> under the window to position the movie.

## Reverse

Selecting Reverse from either the  $\underline{\text{Action menu}}$  or from the  $\underline{\text{Control Box}}$  will start playing the  $\underline{\text{active movie}}$  backwards.

## Zoom

The Zoom option from the  $\underline{\text{Preferences}}$  menu, or the Zoom On/Off button on the  $\underline{\text{Control Box}}$  will double the size of the  $\underline{\text{active window}}$ .

This makes the <u>active window</u> the only visible window, however you can still change windows and view these in the Zoomed view.

### The Window Menu

The Window menu give you a selection of the four <u>Main MultiView Windows</u>. The <u>active window</u> will have a check next to it. If an AVI file is open in a window, the file name will be ther in place of the positional name (Upper Left, Upper Right, etc.).

You can also select the window to become active my choosing it's number from the <u>Control</u> <u>Box</u>, or by clicking once in the window.

#### **Preferences Menu**

The Preferences Menu allows you to select these three options:

#### Background Color

Changes MultiView from metallic to black, and vice versa.

#### **Control Box**

When selected the <u>Control Box</u> will be visible. Select again to hide the <u>Control Box</u>. When enabled this option will be checked.

#### Full Screen

Full-screen mode enables playback on a black background. If the image is zoomed, it can take up the full screen size.

#### Hide Menu

Determines whether the MultiView Menu is hidden when the Control Box is visible.

#### Loop

This option causes a movie to run in a continuous loop

#### AudioView

Changes the interface over to the MultiView AudioView sound file player.

#### Single View

Changes MultiView from a four-window viewer to a single window viewer.

### Set Speed

Adjusts the playback rate.

#### **Volume**

Selecting this will drop down a list of numbers from 0 to 9. Selecting 9 will give you full volume. Zero will disable the volume.

#### **Zoom**

When the option is checked, the Zoom feature is enabled. Selecting this again will turn off the Zoom feature.

### **Volume**

The Volume option can be selected by clicking on the <u>Preferences Menu</u>, or

#### For MultiView only:

by clicking on the red bar on the Control Box.

#### For MultiView AudioView only:

by clicking on the numbered buttons on the bottom of the MultiView AudioView screen.

The volume may be lowered and raised by selecting a number from 0 to 9, where 9 is the loudest.

Note: This volume control does not control the master control for your sound card. When viewing AVI files or playing WAVE files the volume control controls the WAVE portion of your sound card. For MIDI files, it controls only the MIDI portion of your sound card.

You must preset the master volume on your sound card prior to using MultiView.

## **Action Menu**

If a sound file is currently open, the Action Menu will be enabled. Otherwise this menu item is greyed out.

These commands are available when the Action menu is enabled:

#### Play

Start playing the sound file.

#### Stop

Halt playing the sound file.

### **Position To Start**

Position the sound file to the beginning.

#### **Position To End**

Position the sound file to the end.

#### **Action Menu**

If the <u>active window</u> contains an open AVI file, the Action Menu will be enabled. Otherwise this menu item is greyed out.

These commands are available when the Action menu is enabled:

#### <u>Play</u>

Start playing the movie in the active window.

#### Stop

Halt the movie in the active window.

#### Position To Start

Position the active window's movie to frame 0.

#### Position To End

Position the <u>active window's</u> movie to the last frame.

## <u>Restart</u>

Play the movie in the active window from the beginning.

#### Reverse

Play the movie in the active window backwards.

#### Advance One Frame

Step ahead one frame

## Back One Frame

Step back one frame

#### Go To Frame

Allows setting the position of the movie by entering a frame number

## File Menu

The File Menu gives you these options:

Open an AVI file into the active window.

 $\frac{\text{Close}}{\text{Close the AVI file in the }} \underline{\text{active window}}.$ 

#### **Capture**

Visible if the MultiView Capture program is installed.

 $\frac{\underline{\text{Exit}}}{\text{End the MultiView program}}.$ 

The last ten AVI files that have been used by MultiView will also appear on the File Menu. Click on any file name to open that file. If the file no longer exists, you will be notified of this.

## **Exit**

The Exit command, selected either from the  $\underline{\text{File menu}}$  or, for MultiView only, from the  $\underline{\text{Control Box}}$ , ends the MultiView program.

## **Active Window**

The Active Window can be determined by the checked item on the Window menu list, by a darker shading around the window, or, if the Control Box is visible, a darkened number on the Window selection buttons. Select the window to become active by using the Window menu, clicking once on the window, or clicking on a number on the Control Box.

## **Open File Dialogue**

The Open File Dialogue allows you to select an AVI, WAVE, or MIDI file to open in the <u>active</u> <u>window</u>, or in the case of sound files, in MultiView AudioView.

Highlight the file name and click OK, or double click the file name, to open the file.

## **About**

MultiView was orignally written by Robert Reinstein in 1994.

Robert is a Microsoft Windows Certified Professional.

The future development of MultiView depends on your vote!

See the About option on the Help menu for more details.

## **Help Menu**

The Help menu gives you these choices:

Help - view this Help file

<u>About</u> - information about MultiView and it's author

VBRUN300.DLL is the runtime DLL for Microsoft's Visual Basic version 3.0.

This program was written using the Visual Basic Professional Edition.

Microsoft Video For Windows Runtime is available from most commercial bulletin board systems, such as CompuServe, and on Microsoft's own BBS.

## **Advance Frame**

When in the paused (Stop) position, this menu item, or Control Box button, will step the movie in the active window ahead one frame. You can also use the scroll bar under the window to step frames.

In the <u>Control Box</u> click on the >> button.

### **Back One Frame**

When in the paused (Stop) position, this menu item, or  $Control\ Box$  button, will step the movie in the <u>active window</u> back one frame. You can also use the <u>scroll bar</u> under the window to step frames.

In the <u>Control Box</u>, click on the << button.

## Loop

Enables movies or sound files to loop (restart after reaching the end).

Turning on this option will automatically restart a movie or sound file if the  $\underline{\text{Position To End}}$  command is used.

#### MultiView only:

This option is also available by clicking on  $\rightarrow$  in the <u>Control Box</u>. Turn off looping by clicking on  $\rightarrow$  in the <u>Control Box</u>.

## **Select Editor**

This menu option will display a dialogue box which lets you choose a file editor of choice to use with the <u>Edit Current File</u> option.

### **Edit Current File**

This option is enabled only if you have already chosen a file editor using the <u>Select Sound/AVI Editor</u> menu option. Clicking on this option closes MultiView, but starts the editor of choice with the file from the cureent file loaded and ready for editing.

### MultiView only:

This is also available by clicking on Edit button in the **Control Box**.

## Capture

This option will be enabled if you have a video capture board installed, and you have installed the MultiView Capture program into your MultiView directory.

The MultiView Capture program is a full featured video capture program that allows you to quickly review what you have captured, and also allows you to exit the program and either edit the captured video, or return to MultiView.

# **Full Screen**

This enables full-screen playback. In  $\underline{Zoom}$  mode, a 160x120 AVI file will fill the entire screen.

This option is also available in the **Control Box** by clicking on the monitor button.

# **Background Color**

This changes the MultiView window from the metallic color to a black background, and vice versa.

## **Scroll Bars**

The scroll bars located under each window that contains an open AVI file can be used to postion the movie. By clicking on either arrow you can step by one frame in either direction. Clicking between the button and the arrows step the movie by 10 frames. Clicking and dragging the button can take you anywhere within the movie (try it).

Note that the scroll bar is only active for frame positioning if the movie is in STOP mode. Otherwise the button will display the current position of the movie.

## **Shortcut Keys**

MultiView uses the following shortcut keys to allow you total control without a mouse!

Ctrl+O File Open

Ctrl+F12 File Close

Ctrl+X Exit MultiView

Ctrl+C Copy Frame

Ctrl+P Play

Ctrl+S Stop

Ctrl+T Position To Start

Ctrl+E Position To End

Ctrl+M Toggle between MultiView and MultiView AudioView

Ctrl+L Restart

Ctrl+R Reverse

Ctrl+A Advance One Frame

Ctrl+Q Back One Frame

Ctrl+G Go To Frame

Del Change Background Color

Ctrl+B Control Box Toggle

Ctrl+Y Full Screen

Ctrl+I Hide Menu Toggle

Ctrl+F8 Loop Toggle

Ctrl+V Single View Toggle
Ctrl+Z Zoom Toggle

Shift+Del Select Editor

Ctrl+F1 Upper Left Window

Ctrl+F2 Upper Right Window

Ctrl+F3 Lower Left Window

Ctrl+F4 Lower Right Window

Ctrl+H Help

#### **Custom AVI Files**

If you would like to transfer some of your favorite home movies to AVI format, I am offering a service to do just that. Send an NTSC VHS or NTSC 8mm videotape cued to the proper section, and I will transfer 15 seconds of video to an AVI file for the price of \$15 **(\$10 for registered users of MultiView)**. A diskette will be sent to you with the AVI file. For an additional \$2 I will return your videotape.

If you wish to order your custom AVI file, be sure to enclose a good description of the segment you would like transfered (for instance, "child squirts grown-up in the face with water gun"). Please cue the tape as accurately as possible.

The AVI file will be 160x120 at 15fps. This offer is good for the U.S. only.

Send orders to:

Robert Reinstein 20 Singingwood Drive Holbrook, New York 11741



After passing several examinations, a designation of Microsoft Certified Professional For Microsoft Windows Version 3.1 Administration.

# **Single View**

Enabling Single View allows you to use MultiView as a standard AVI viewer. This will display one AVI file in the center of the MultiView window.

You can still switch from file to file, as this option acts just like the  $\underline{Zoom}$  option, without enlarging the size of the AVI file display area.

If you exit MultiView while in Single View mode, the next time you start MultiView it will still be in Single View mode.

Single View mode is also available by clicking on in the <u>Control Box</u>

Turn off Single View mode by clicking on in the <u>Control Box</u>.

# **Copying A Frame To The Windows' Clipboard**

When viewing an AVI movie, you may select the  $\underline{\text{Edit Menu}}$ , then choose Copy. The current frame will be copied to the clipboard. If you are using  $\underline{\text{Zoom}}$  view, then the zoomed image will appear on the clipboard.

You may also click on the Copy button in the Control Box to achieve the same results.

# **Setting The Frame Number**

Besides using the  $\underline{\text{scroll bar}}$ , and the  $\underline{\text{Position To End}}$  and  $\underline{\text{Position To Start}}$  commands, you may choose from the  $\underline{\text{Action menu}}$  the Go To Frame... option.

This will display an entry field for you to enter the frame number you would like to skip to.

You may also click on the GoTo button in the Control Box.

### **Edit Menu**

The MultiView Edit menu contains these options:

## MultiView only:

Copy

Copy the current frame to the Windows' Clipboard

### MultiView and MultiView AudioView:

**Edit Current File** 

Load the current file into a selected editor

Note: The current file is first closed, and then loaded into the editor

Select Sound/AVI Editor

Choose the program to be used with the Edit Current File selection

# Using MultiView As Your Default WAVE or MIDI Player

MultiView is capable of functioning as your default WAVE and MIDI sound file player.

There are two methods of enabling this.

For the first method you must edit your WIN.INI file. Look for the section [Extensions] and find the line that starts with WAV=. This will read something like:

WAV= mplayer.exe ^.wav

Change the line, or if you cannot find this line, add the line:

WAV=C:\MULTIVU\MULTIVU.EXE ^.WAV

For MIDI files. look for

MID=mplayer.exe ^.mid

and change the line to:

MID=C:\MULTIVU\MULTIVU.EXE ^.mid

Substitute your MultiView directory for C:\MULTIVU if you have it installed in a different path.

The second method requires that you open the Windows' File Manager. Click on the File menu, then choose Associate...

Next, in the Files With Extensions field, enter WAV or MID. Then, click on the Browse... button and navigate to the directory where your MultiView executable, MULTIVU.EXE is located. Double-click on MULTIVU.EXE, and then choose OK. The association is now complete. Repeat this for the other extension if you wish.

# Using MultiView As Your Default AVI Player

MultiView is capable of functioning as your default AVI movie file player.

There are two methods of enabling this.

For the first method you must edit your WIN.INI file. Look for the section [Extensions] and find the line that starts with AVI=. This will read something like:

#### AVI= mplayer.exe ^.avi

Change the line, or if you cannot find this line, add the line:

### AVI=C:\MULTIVU\MULTIVU.EXE ^.AVI

Substitute your MultiView directory for C:\MULTIVU if you have it installed in a different path.

The second method requires that you open the Windows' File Manager. Click on the File menu, then choose Associate...

Next, in the Files With Extensions field, enter AVI. Then, click on the Browse... button and navigate to the directory where your MultiView executable, MULTIVU.EXE is located. Double-click on MULTIVU.EXE, and then choose OK. The association is now complete.

# **Set Speed**

You can adjust the playback speed of AVI files using this option, found on the <u>Preferences Menu</u>.

You can also adjust the speed by using the Plus (+) and Minus (-) buttons on the <u>Control Box</u>.

The choices are:

1x - normal speed
2x - double speed
1/2x - half speed
1/4x - quarter speed
1/5x - one-fifth speed
1/10x - one-tenth speed

Changing the speed will affect all MultiView windows.

### **Hide Menu**

This option, available from the <u>Preferences Menu</u>, determines whether the <u>MultiView Menu</u> will be visible when the <u>MultiView Control Box</u> is visible.

If this option is checked, the <u>MultiView Menu</u> will disappear when the <u>Control Box</u> item from the <u>Preferences Menu</u> is selected. The <u>MultiView Menu</u> will re-appear when the <u>Control Box</u> is closed.

If this option is left unchecked then the  $\underline{\text{MultiView Menu}}$  will still be available when the  $\underline{\text{Control Box}}$  is visible.

# The MultiView AudioView Preferences Menu

Preferences Menu

The Preferences Menu allows you to select these three options:

#### Loop

This option causes a movie to run in a continuous loop

#### MultiView

Changes the interface over to the MultiView AVI file player.

#### <u>Lights</u>

This item provides you with a choice of light schemes, or the ability to disable the lights.

### <u>Volume</u>

Selecting this will drop down a list of numbers from 0 to 9. Selecting 9 will give you full volume. Zero will disable the volume.