



## **Motion Works MediaShop : Interactive Video**

**Interactive Video** (Hot Spot Video) is a software tool that adds interactivity to Video for Windows movie files. This tool consists of two components:

- 1) a Visual Basic Custom Control, called the *Interactive Video Control* (IAVI.VBX).
- 2) a stand-alone interactive video editor called the *Interactive Video Tool* (IAVIEDIT.EXE) that is used to specify Hot Rectangles for each frame of the movie that the interactive object is visible.

To learn how to use help, press F1.

### **Contacting Motion Works**

### **Interactive Video Control**

### **Interactive Video Tool**

## **Contacting Motion Works**

If you have any questions, comments, or suggestions, Motion Works would like to hear from you. You can contact Motion Works at:

**Motion Works USA,  
524 Second Street, San Francisco,  
CA 94107,  
U. S. A.**

Tel: 1-800-800-8476, Direct (415)-541-9333,  
Fax: (415)-541-0555



## Interactive Video Control

Properties

Run-Time Properties

Events

---

### Description

The Interactive Video Control is a Custom Visual Basic Control that allows the user to define objects within an Audio Visual Interleaved or AVI movie and interact with those objects using Visual Basic.



### File Name

Iavi.vbx

### Object Type

Iavi

### Remarks

This control requires Interactivity Data File with extension .IVD. Also see the documentations on "Interactive Video Editor" for ways of creating interactivity data file.

---

**Distribution Note** When you create and distribute applications that use the Interactive Video Control, you should install the file Iavi.vbx in the customer's Microsoft Windows \SYSTEM subdirectory . The Visual Basic setup kit included with the Professional Edition provides tools to help you write setup programs that install your applications correctly.

---

## PROPERTIES

There are a number of properties used to communicate between Interactive Animation and Visual Basic. The following is a list of all available properties for this control. Asterisk(\*) denotes properties that apply to this control only or that require special consideration when used with it.

### Properties

<u>*About</u>	Name
BackColor	TabIndex
BorderStyle	TabStop
Caption	Tag
<u>*DataName</u>	Top
DragIcon	Visible
DragMode	Width
Enabled	Height
<u>*FileName</u>	
Index	
Left	

## RUN-TIME PROPERTIES

Run-time properties are hidden away from the general properties list but can be used inside the Visual Basic program. The following categories of run-time properties are designed to give user movie control.

### Run-time movie properties

<u>*AddObjectRect</u>	<u>*Displayed</u>	<u>*MovieBottom</u>
<u>*AddObject</u>	<u>*EditMode</u>	<u>*MovieLeft</u>
<u>*Changed</u>	<u>*FrameObjCount</u>	<u>*MovieRight</u>
<u>*Cued</u>	<u>*ListFrameObjBottom</u>	<u>*MovieTop</u>
<u>*CurFrame</u>	<u>*ListFrameObjID</u>	<u>*ObjectCount</u>
<u>*CurObjectBottom</u>	<u>*ListFrameObjLeft</u>	<u>*Pause</u>
<u>*CurObjectCursor</u>	<u>*ListFrameObjRight</u>	<u>*Play</u>
<u>*CurObjectID</u>	<u>*ListFrameObjTop</u>	<u>*RunCursor</u>
<u>*CurObjectLeft</u>	<u>*ListObjectCursor</u>	<u>*Save</u>
<u>*CurObjectName</u>	<u>*ListObjectID</u>	<u>*SoundEnabled</u>
<u>*CurObjectRight</u>	<u>*ListObjectName</u>	
<u>*CurObjectTop</u>	<u>*Loop</u>	
<u>*DefaultCursor</u>	<u>*MaxFrame</u>	

## EVENTS

The following is a list of all the available events for this control.  
Asterisk(\*) denotes events that apply to this control only or that require special consideration when used with it.

### Events

\*Frame

\*Load

\*Unload

\*ObjMouseDownUp

\*ObjMouseDown

\*ObjMouseUp

\*ObjMouseMove

\*Play

## About Property

---

<b>Description</b>	Displays an About box for the control which contains the name of the control, version number and the author.
<b>Visual Basic</b>	Not Applicable
<b>Remarks</b>	This property can only be used during development time and is activated by double clicking on the About property field which displays "Click here..."
<b>Data Type</b>	Not Applicable

---

## FileName Property

---

<b>Description</b>	Provides the path and name of the digital movie file (with .AVI extension) loaded currently. To invoke the "Open AVI file" dialog, simply double click the left mouse button on this property.
<b>Visual Basic</b>	[form.]IAVI.FileName[=filename\$]
<b>Remarks</b>	<p>The path of the .IVD file will also automatically appear under the "DataName" property once the .AVI movie is loaded. If the IVD file does not exist, then there is no interactivity defined for that digital movie.</p> <p>Setting this property will close the current digital movie and load the specified interactivity data file (IVD). Use "Interactive Video Editor" to define an interactivity file.</p>
<b>Data Type</b>	<b>String</b>

---

## **DataName Property**

---

<b>Description</b>	Indicates the path and name of the interactivity data file (with extension .IVD). To invoke the "Open IVD file" dialog, simply double click the left mouse button on this property.
<b>Visual Basic</b>	[form.]IAVI.DataName[=filename\$]
<b>Remarks</b>	Setting this property will load the interactivity file for use with the current digital movie (see FileName property). If no objects or HotSpots (i.e. interactivities) are defined in an IVD file, this .IVD file will be destroyed upon termination of the program. Use "Interactive Video Editor" to define an interactivity file.
<b>Data Type</b>	<b>String</b>

---

## **CurFrame** Property

---

<b>Description</b>	Indicates the current frame of the digital movie being displayed.
<b>Visual Basic</b>	[form.]IAVI.CurFrame[=setting]
<b>Remarks</b>	Setting this property will seek the digital movie to the specified frame. Also see the Event "Frame" of this IAVI control.
<b>Data Type</b>	<b>Integer (LONG)</b>

---

## **Play Property**

---

**Description** Indicates if the digital movie is playing.

**Visual Basic** [form.]IAVI.Play[=setting]

**Remarks** Setting this property will either start and stop the movie.

<b><u>Setting</u></b>	<b>Description</b>
TRUE	Play
FALSE	(Default) Stop.

**Data Type** Integer (Boolean)

---

## Pause Property

---

**Description** Indicates if the digital movie is currently paused.

**Visual Basic** [form.]IAVI.Pause[=setting]

**Remarks** Setting this property will either pause and unpause the movie.

**Setting**

TRUE  
FALSE

**Description**

(Default) Indication to pause the movie.  
Indication to unpause the movie.

**Data Type** Integer (Boolean)

---

## Displayed Property

---

<b>Description</b>	Indicates if the digital movie is currently displayed.
<b>Visual Basic</b>	[form.]IAVI.Displayed[=setting]
<b>Remarks</b>	Setting this property will hide and show the movie.
<b>Data Type</b>	<b>Integer (Boolean)</b>

---

## **Cued Property**

---

<b>Description</b>	Indicates the condition of the cue for a digital movie.
<b>Visual Basic</b>	[form.]IAVI.Cued[=setting]
<b>Remarks</b>	This is a read-only property. Setting this property to TRUE will cue the selected digital movie for play-back.
<b>Data Type</b>	<b>Integer (Boolean)</b>

---

## **SoundEnabled Property**

---

<b>Description</b>	Indicates if the digital movie will play any sound associated with the movie.
<b>Visual Basic</b>	[form.]IAVI.SoundEnabled[=setting]
<b>Remarks</b>	Setting this property will either enable or disable sound in the movie.
<b>Data Type</b>	<b>Integer (Boolean)</b>

---

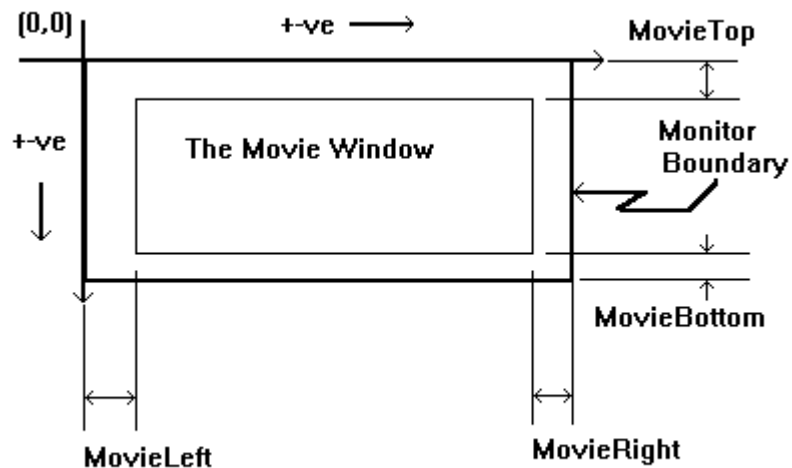
## MovieLeft Property

---

**Description** Specifies the left offset coordinate of the movie window (in pixels).

**Visual Basic** [form.]IAVI.MovieLeft[=setting]

**Remarks** Note that the "origin" of the monitor is located at the top left corner. Any length to the right of or underneath the corner is considered positive. Also see properties MovieTop, MovieRight and MovieBottom. The following sketch indicates the different offset assigned to each of these properties.



**Data Type** Integer

---

## **MovieTop** Property

---

<b>Description</b>	Specifies the top offset coordinate of the movie window (in pixels).
<b>Visual Basic</b>	[form.]IAVI.MovieTop[=setting]
<b>Remarks</b>	See also MovieLeft property for the co-ordinates' convention of the monitor.
<b>Data Type</b>	<b>Integer</b>

---

## **MovieRight** Property

---

<b>Description</b>	Specifies the right offset coordinate of the movie window (in pixels).
<b>Visual Basic</b>	[form.]IAVI.MovieTop[=setting]
<b>Remarks</b>	See also MovieLeft property for the co-ordinates' convention of the monitor.
<b>Data Type</b>	<b>Integer</b>

---

## **MovieBottom Property**

---

<b>Description</b>	Specifies the bottom offset coordinate of the movie window (in pixels).
<b>Visual Basic</b>	[form.]IAVI.MovieBottom[=setting]
<b>Remarks</b>	See also MovieLeft property for the co-ordinates' convention of the monitor.
<b>Data Type</b>	<b>Integer</b>

---

## **MaxFrame** Property

---

<b>Description</b>	Indicates the number of frames in the digital movie.
<b>Visual Basic</b>	[form.]IAVI.MaxFrame
<b>Remarks</b>	Since the internal program counter starts counting Frame number one at '0', the final number of frames stores in the program counter is MaxFrame - 1 not MaxFrame.
<b>Data Type</b>	<b>Integer (LONG)</b>

---

## EditMode Property

---

<b>Description</b>	Indicates if the IAVI control is in edit mode where the interactivity data can be edited.
--------------------	---

<b>Visual Basic</b>	[form.]IAVI.EditMode
---------------------	----------------------

<b>Remarks</b>	<table><tr><td><b><u>Setting</u></b></td><td><b>Description</b></td></tr><tr><td>TRUE</td><td>(Default) Activate EditMode.</td></tr><tr><td>FALSE</td><td>Deactivate EditMode</td></tr></table>	<b><u>Setting</u></b>	<b>Description</b>	TRUE	(Default) Activate EditMode.	FALSE	Deactivate EditMode
<b><u>Setting</u></b>	<b>Description</b>						
TRUE	(Default) Activate EditMode.						
FALSE	Deactivate EditMode						

<b>Data Type</b>	<b>Integer(Boolean)</b>
------------------	-------------------------

---

## **ObjectCount** Property

---

<b>Description</b>	Indicates the number of objects defined for this digital movie.
<b>Visual Basic</b>	[form.]IAVI.ObjectCount
<b>Remarks</b>	Since the first object is counted as '0' in the program counter, the last object is actually ObjectCount - 1 not ObjectCount. See also ListObjectID, ListObjectName and ListObjectCursor.
<b>Data Type</b>	<b>Integer</b>

---

## Changed and Save Properties

---

The following two properties are used for file management.

<u>Property Name</u>	Type	Description
<b>Changed</b>	integer (Boolean)	Indicates if there are any changes in the data maintained by the IAVI control. This property can only be changed from FALSE to TRUE under Visual Basic control. Setting the Save property (below) to TRUE will clear this property to FALSE.
<b>Save</b>	integer (Boolean)	This is a set-only property. Setting this property to TRUE will save the current interactivity data to the file. Saving the file will clear the Changed property to FALSE.

---

## **ListObjectID, ListObjectName and ListObjectCursor Properties**

---

The following are array properties. Within Visual Basic, the array properties are accessed via the use of a subscript following the property name. For example, ListObjectName(5) would refer to the name of the 5th object name in the current movie. See also ObjectCount.

<b><u>Property Name</u></b>	<b>Type</b>	<b>Description</b>
<b>ListObjectID</b>	integer	This is an array property that contain all the object IDs of objects in the interactivity data.
<b>ListObjectName</b>	string	This is an array property that contain all the object names of objects in the interactivity data.
<b>ListObjectCursor</b>	integer	This is an array property that contain all the object cursor IDs of objects in the interactivity data.

Related Topic:

[Relationship between ListObject..., CurObject... and ListFrameObj... properties](#)

---

## **CurObjectID, CurObjectName, CurObjectCursor, CurObjectTop, CurObjectLeft, CurObjectRight, CurObjectBottom, DrawCurObjectRect, AddObject and AddObjectRect Properties**

---

The following properties allow users to access the current object information in the Interactivity Video file via the Interactive Video Control. Together with AddObject and AddObjectRect properties, the user can add or delete objects in the interactivity files.

<b>Property Name</b>	<b>Type</b>	<b>Description</b>
<b>CurObjectID</b>	integer	A property used for holding the ID of an object while information is being sent to or received from the IAVI control.
<b>CurObjectName</b>	string	A property used for holding the name of an object while information is being sent to or received from the IAVI control.
<b>CurObjectCursor</b>	integer	A property used for holding the cursor ID of an object while information is being sent to or received from the IAVI control.
<b>CurObjectLeft</b>	integer	A property used for holding the left rectangle coordinate of an object while information is being sent to or received from the IAVI control.
<b>CurObjectTop</b>	integer	A property used for holding the top rectangle coordinate of an object while information is being sent to or received from the IAVI control.
<b>CurObjectRight</b>	integer	A property used for holding the right rectangle coordinate of an object while information is being sent to or received from the IAVI control.
<b>CurObjectBottom</b>	integer	A property used for holding the bottom rectangle coordinate of an object while information is being sent to or received from the IAVI control.
<b>AddObject</b>	integer (Boolean)	This is a set-only property. Setting this property to TRUE will add the object specified by CurObjectID, CurObjectName, and CurObjectCursor to the object list of the movie's interactivity data. Setting this property to FALSE will delete the object with the ID specified by CurObjectID.
<b>AddObjectRect</b>	integer (Boolean)	This is a set-only property. Setting this property to TRUE will add the object rectangle to the current frame's interactivity data specified by CurObjectID, CurObjectLeft, CurObjectTop, CurObjectRight and CurObjectBottom. Setting this property to FALSE will delete the frame's object rectangle

specified with the ID specified by CurObjectID.

**DrawCurObjectRect**

integer  
(Boolean)

This is a set-only property. Setting this property to TRUE will draw the object rectangle to the current frame's interactivity data specified by CurObjectID, CurObjectLeft, CurObjectTop, CurObjectRight and CurObjectBottom. Setting this property to FALSE will not draw the frame's object rectangle specified with the ID specified by CurObjectID.

Related Topic:

[Relationship between ListObject..., CurObject... and ListFrameObj... properties](#)

---

## FrameObjCount Property

---

<b>Description</b>	Indictates the number of objects defined in the current frame of the movie.
<b>Visual Basic</b>	[form.]IAVI.FrameObjCount
<b>Remarks</b>	Since the internal program counter starts counting the first object at '0', the final number of objects stores in the program counter is FrameObjCount - 1 not FrameObjCount.
<b>Data Type</b>	<b>Integer (LONG)</b>

---

## **ListFrameObjID, ListFrameObjLeft, ListFrameObjTop, ListFrameObjRight and ListFrameObjBottom Properties**

---

The following properties allow users to manipulate the object information in a frame of the Interactivity file via the Interactive Video Control. The following are array properties meaning that they require subscripts to gain information access. For example, ListFrameObjID(3) indicates the use of the third object ID of the current frame.

<b><u>Property Name</u></b>	<b>Type</b>	<b>Description</b>
<b>ListFrameObjID</b>	integer	This is an array property that lists the Objects that are defined for the current frame of the movie.
<b>ListFrameObjLeft</b>	integer	This is an array property that contains all the objects of the current frame's left rectangle coordinate.
<b>ListFrameObjTop</b>	integer	This is an array property that contains all the objects of the current frame's top rectangle coordinate.
<b>ListFrameObjRight</b>	integer	This is an array property that contains all the objects of the current frame's right rectangle coordinate.
<b>ListFrameObjBottom</b>	integer	This is an array property that contains all the objects of the current frame's bottom rectangle coordinate.

Related Topic:

[Relationship between ListObject..., CurObject... and ListFrameObj... properties](#)

---

## Loop Property

---

<b>Description</b>	Indicates if the movie will loop to the beginning when the last frame is reached.	
<b>Visual Basic</b>	[form.]IAVI.Loop[=setting]	
<b>Remarks</b>	Setting this property will change the looping behaviour of the movie.	
	<b>Setting</b>	<b>Description</b>
	TRUE	Re-start the movie once the end is reached.
	FALSE	(Default) Stop the movie once the end is reached.
<b>Data Type</b>	<b>Integer (Boolean)</b>	

---




















## RunCursor and DefaultCursor Properties

---

The following two properties are used for cursor status.

Property Name	Type	Description
RunCursor	integer	Indicates the cursor that is to be used when the movie is being played. The following is a list of the available cursors and their IDs:

### List of Built-In Cursors:

	Cursor Resource Name	Logical Cursor Number	Windows Built-In Cursors Label Name
	FINGER_CURSOR		
	HAND_CURSOR		
	HANDUP_CURSOR	1	
	HANDLEFT_CURSOR	2	
	HANDRGHT_CURSOR	3	
	HANDWALK_CURSOR	4	
	HANDGRAB_CURSOR	5	
	MAGNIFY_CURSOR	6	
	QUESTION_CURSOR	7	
	SOUND_CURSOR	8	
	10000 IDC_ARROW		
	10001 IDC_IBEAM		
	10002 IDC_WAIT		
	10004 IDC_UPARROW		
	10005 IDC_SIZE		
		10006	IDC_ICON
	10007 IDC_SIZENWSE		
	10008 IDC_SIZENESW		
	10009 IDC_SIZEWE		
	10010 IDC_SIZENS		

Property Name	Type	Description
DefaultCursor	integer	Specifies the cursor to be used if the cursor is over no defined object in the current frame of the movie. See also RunCursor.

---

## Frame Event

---

**Description**                      Notifies Visual Basic that the current frame has changed.

**Visual Basic**                      **Sub IAVI\_Frame ( )**

**Remarks**                          Parameters: FrameNum As Integer

**Visual Basic Example**                      The following codes will play an .AVI movie and display the current frame number on label1 at real time.

```
Sub IAVI1_Frame (FrameNum As  
Long)  
    IAVI1.Play = True  
    Label1.Caption = "Current Frame no.:" + IAVI1.CurFrame  
End Sub
```

---

## **Load Event**

---

<b>Description</b>	Notifies Visual Basic that the current movie has been loaded. This indicates that the run-time variables are now valid.
--------------------	---

<b>Visual Basic</b>	<b>Sub /AVI_Load ( )</b>
---------------------	--------------------------

<b>Remarks</b>	Parameters: None
----------------	------------------

---

## **Unload Event**

---

**Description**                Notifies Visual Basic that the current movie (if any) has been closed.  
This indicates that the run-time variables are no longer valid.

**Visual Basic**                **Sub /AVI\_Unload ( )**

**Remarks**                    Parameters: None

---

## **ObjMouseDownClick Event**

---

**Description**                Notifies Visual Basic that a double click was detected within the IAVI Control. The object's ID as well as the location of the mouse cursor is returned.

**Visual Basic**                **Sub IAVI\_ObjMouseDownClick ( )**

**Remarks**                    Parameters: X As Integer, Y As Integer, ObjID As Integer  
ObjName As Integer

---

## **ObjMouseDown Event**

---

**Description**                      Notifies Visual Basic that a mouse down was detected within the IAVI Control. The object's ID as well as the location of the mouse cursor is returned.

**Visual Basic**                      **Sub IAVI\_ObjMouseDown ( )**

**Remarks**                      Parameters: X As Integer, Y As Integer, ObjID As Integer  
ObjName As Integer

---

## ObjMouseUp Event

<b>Description</b>	Notifies Visual Basic that a mouse up was detected within the IAVI Control. The object's ID as well as the location of the mouse cursor is returned.
<b>Visual Basic</b>	<b>Sub <i>IAVI_ObjMouseUp</i> ( )</b>
<b>Remarks</b>	Parameters: X As Integer, Y As Integer, ObjID As Integer ObjName As Integer

## ObjMouseMove Event

<b>Description</b>	Notifies Visual Basic that a mouse move was detected within the IAVI Control. The object's ID as well as the location of the mouse cursor is returned.
<b>Visual Basic</b>	<b>Sub IAVI_ObjMouseMove ( )</b>
<b>Remarks</b>	Parameters: X As Integer, Y As Integer, ObjID As Integer ObjName As Integer

## **Play Event**

---

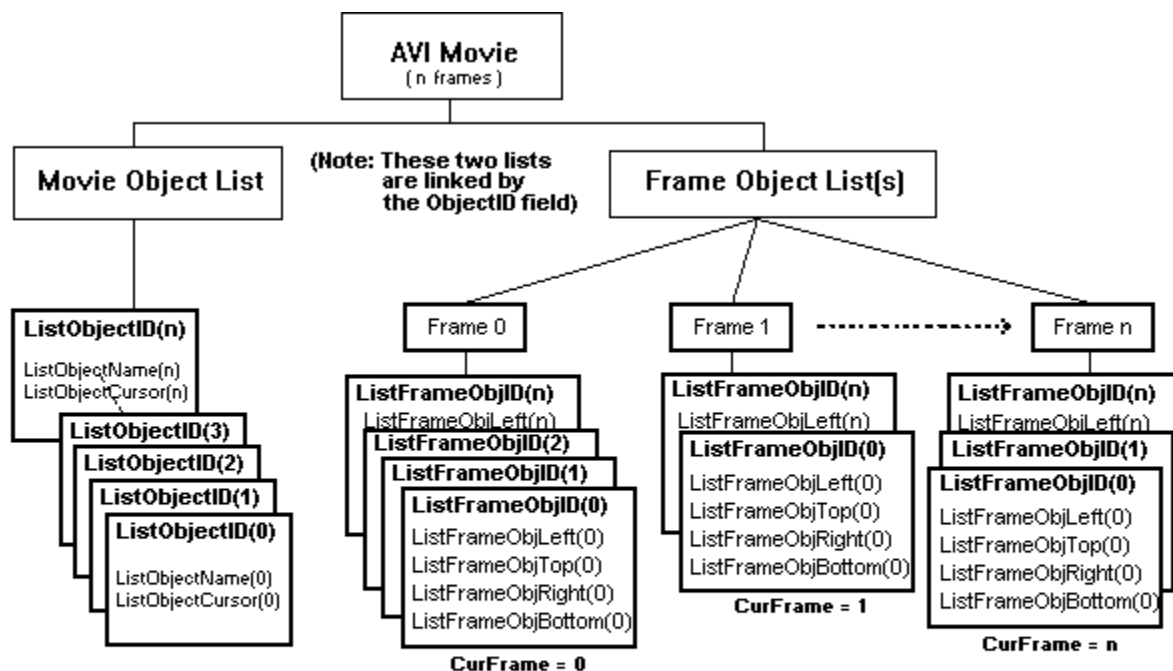
**Description**                      Notifies Visual Basic that the play status has changed.

**Visual Basic**                      **Sub IAVI\_Play ( )**

**Remarks**                      Parameters: Play As Integer

---

## Relationship between ListObject..., CurObject... and ListFrameObj... properties



eg. There are 4 Objects Defined for the current movie:

Position In List	ObjectID	ObjectName	ObjectCursor
0	52	Computer	10004
1	78	Desk	3
2	101	Note Pad	7
3	135	Chair	10003

The above diagram shows how ListObject... and ListFrameObj... properties are different from each other. CurObject... properties are used together with AddObject and AddObjecRec properties to add or delete objects in the interactivity files (essentially manipulating ObjectIDs which is unique to both Movie Object List and Frame Object List).

See Also...

[ListObject...](#)

[ListFrameObj...](#)

[CurObject...](#)



## Interactive Video Tool

### Description:

The Interactive Video Tool is an editor used to combine data from both an Audio Visual Interleaved or AVI file and text to produce an output file (an extension of IVD file) which will be used by the Interactive Video Control within Visual Basic. The interactive video Control will then match the appropriate region of the AVI picture to the assigned text.

### How To...

(General Step by Step Tutorial )

The following are instruction steps of general and frequently used operations in the Interactive Video Tool. Various ways of performing each of the general operation will be discussed. For a detail discussion of every features and operations of this editor, please refer to the Reference Section.

[Invoke the Editor](#)

[Open a Movie File](#)

[Use the General Object Name List](#)

[Use the Hot Object Name List](#)

[Add Object Name to Hot Object Name List](#)

[Delete Object Name from the Hot Object Name List](#)

[Create HotSpots on selected Objects](#)

[Move between different Frames of the Movie](#)

[Link HotSpots to different Objects on different Frames of the Movie](#)

[Change a HotSpot Object's Layer](#)

[Play a Movie](#)

[Save](#)

[Exit the Editor](#)

[Link the HotSpot Movie File to an Interactive Video Visual Basic Control](#)

### Reference Section...


#### User Interface, Menu and Dialogs Explained

[The Main Editor Screen](#)

[The Movie Playing Screen](#)

[The Object Editor](#)

## To invoke the Editor

To use the Interactive Video Tool simply select "**Run...**" from the File menu in Program Manager and then execute "**IAVIEDIT.EXE**" (\*\* Note: Remember to enter the correct path as well \*\*). Another way is to create a icon in the Program Manager for the application and then double click on the icon .

## **To Open a Movie File**

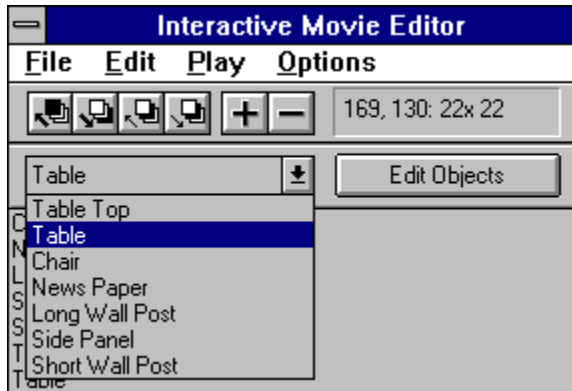
Select "Open" under the File Menu Bar (the movie file should have an extension of .AVI).


### **To Create HotSpots on selected objects**

Press down on the left mouse button and drag out a rectangle on the area of the bitmap where you want to identify as a HotSpot.

## To Use the General Object Name List

The general object name list is shown underneath the combo box. All members of this list are permanent. The general object name list simply provides a selection of all the objects available to the hot object list.



Once the object name is selected and becomes "hot" (e.g. ) , this hot object name can be added to or changed positions in the hot object list. To add an object to the Hot Object List, see topic [To add an Object to the Hot Object Name List](#). To Change Object Name Position, see topic [To Change HotSpot Object Layer](#)


## To Use the Hot Object Name List

The hot object name list is shown as the following.




The list with a highlighted object is the hot object name list. A highlighted member of this list can be deleted as instructed by the user. To delete an object, member off the list, see topic [To Delete Object Name from Hot Object List](#) .

## To Add Object Name to Hot Object Name List

Select an object name by highlighting one object name from combo box (e.g. ) , and then do one of the following to Add the object name to the hot object list. Note that the object must be selected from the combo box first before adding to the hot object list.

Menu: Select "Add/Modify Rect" under Edit menu.

Key Board: Ctrl + A


Toolbar: 

## To Delete Object Name from Hot Object Name List

Highlight a hot object name from the hot object name list, and then do one of the following to delete the object name from the hot object name list.

Menu: Select "Delete Rect" under Edit menu.

Key Board: Ctrl + D

Toolbar: 


## To Move between different Frames of the Movie




Use the horizontal scroll bar to move along different frames of the Movie. The frame counter is located at the bottom left corner of the bar to indicate the current playing frame.

## To Link HotSpots to different Objects of a Movie

Steps in linking HotSpots to different objects of a Movie:

1. Select an object name under the combo box .
2. Create a HotSpot on a selected object. (Assuming that the selected object exists under the current frame. If the object does not exist in the current frame, go to the frame where the selected object starts.)
3. Use the scroll bar to move to the next frame. (This step can be eliminated if "Auto Advance" is selected under the Options Menu.)
4. Repeat Steps 2 and 3 until the last frame existence of the object in the movie.
5. Repeat Steps 1 to 4 for linking a new object to the movie.

Once the object is linked to an object name, the mouse will change to icon  when it is moved over the hot objects.

## To Change a HotSpot Object's Layer


Choices:

1. Bring an Object to the front of the screen
2. Send an Object to the back of the screen
3. Bring an Object one layer closer to the screen
4. Send an Object one layer away from the screen

## To Bring an object to the front of the screen

Menu: Select "Bring to front" under the Edit menu.

Toolbar:


Click on the icon . The object that is the closest to the computer screen is located at bottom of the Hot Object List.

## **To Send an object to the back of the screen**

Menu:

Select "Send to back" under the Edit menu to bring the selected object to the farthest layer from the front of the screen.

Toolbar:


Click on the icon . The object that is the farthest from the computer screen is located at top of the Hot Object List.

## **To Bring an object one layer closer to the screen**

Menu:

Select "Bring higher" under the Edit menu to bring the selected object closer to the front of the screen.

Toolbar:


Click on the icon . The object will go one layer down on the on Hot Object List.

## To Send an object one layer away from the screen

Menu:

Select "Bring lower" under the Edit menu to bring the selected object farther from the front of the screen.

Toolbar:

Click on the icon . The object will go one layer up on the on Hot Object List.

## **To Play a movie**

Select "Play" under the "Play Menu". User may also select "start" or "end" under the same menu to start or end a movie respectively.



## **To Save an Edited HotSpot Movie file**

Choose 'Save' or 'Save As...' from the File Menu. For the Save As option, you will be prompted with the *Save As... dialog*, where you will have the opportunity to specify a filename of your choice as the name of the to-be-saved HotSpot Movie file.

## **To Exit the Editor**

Choose 'Exit' from the File Menu or left double-click on the editor window's system box (located on the top-left corner of the editor's window)

## To link the HotSpot Movie File to an Interactive Video Visual Basic Control

1. Add the IAVI.VBX module to your Visual Basic project. (Choose 'Add File...' from the the *File Menu* in Visual Basic). The  icon will appear on the toolbox palette if the Interactive Video custom control is loaded successfully.
2. Double-click on the  icon on the toolbox to create a Interactive Video control on the Form you are working on.
3. Double-click on the FileName property from the Property Window and choose the Movie Data File that you have just created and saved using the Interactive Video Editor. If the Movie Data file (extension .IVD) is loaded successfully, the Filename property should contain the path of Movie Data file created using the editor.

## Movie Editor Screen

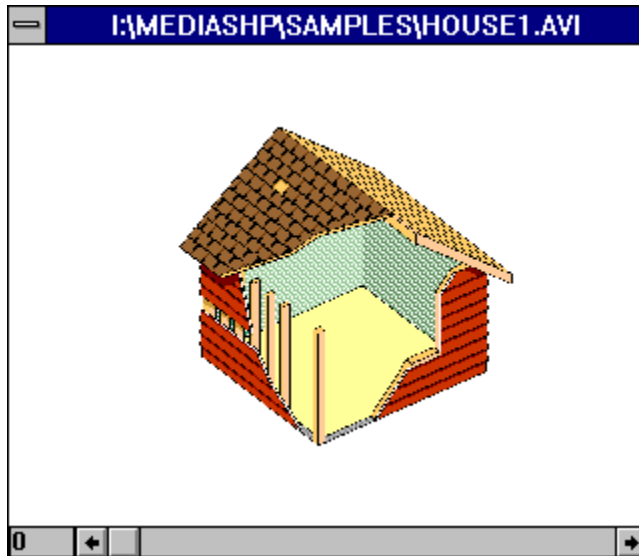
The following is a sample figure of the Interactive Movie Editor: This Editor allows user to open, save and display an AVI file within the Editor window.



## Movie Playing Screen

After the selection of the required .AVI file, the movie file will display on the Movie editor. There is also a controller that provides various adjustment to the display file. The controller is the heart of this Interactive Editor.

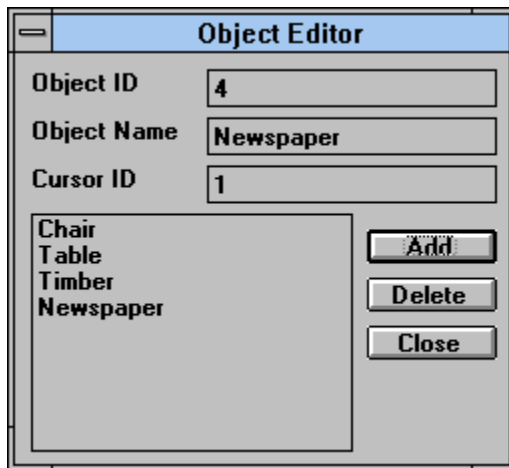
To start playing, just activate "Play" on the menu bar of the Movie Editor. The following is an example of an .AVI movie screen.



## Object Editor

Press this screen button  to activate the Object Editor.

The user may add or delete objects interactivity onto the AVI picture through the use of an Object Editor like the following diagram: (The three entries are Object ID, Object Name and Cursor ID. The ObjectID must be unique to each ObjectName, and the Cursor ID would identify different cursor icons associated with the specified AVI region. )



The Object Editor dialog box has a title bar labeled "Object Editor". It contains three input fields: "Object ID" with the value "4", "Object Name" with the value "Newspaper", and "Cursor ID" with the value "1". Below these fields is a list box containing the items "Chair", "Table", "Timber", and "Newspaper", with "Newspaper" selected. To the right of the list box are three buttons: "Add", "Delete", and "Close".

Note that the user must associate the selected region of the AVI picture with the text for every frame of the movie in order to allow interactivity throughout. To select an Hotspot, the user can simply drag the mouse and release on the same region. An automatic frame number advance mode can be set through the 'Option Menu'.

After editing the objects and saving the work, an interactive data file (an .IVD extension file) will be generated. ***This .IVD file together with its associated .AVI file will be needed for the use of the Interactive Video Control.***

## **Edit Object Activator Button**

Activate this button will bring up the "Object Editor".

## **General Object Name List Combo Box**

Click on the down arrow to see the general object name list.

## Hot Object Name Area

Display of Hot object names.

## **File Menu**

Open

Save

Save As

Close

Import Object

Exit

## **Edit Menu**

Add/Modify Rect  
Delete Rect

Bring to Front  
Send to Back  
Bring Higher  
Send Lower

## Play Menu

Start

Play

End

## Options Menu

Auto Advanced  
Loop Movie

## Close

The **Close** menu item will save and clear any existing movie file in the session.

## Import Object

## Start

Go to the first frame of the movie.

**End**

Go to the last frame of the movie

## **Auto Advanced**

When this command is active, advancing between frames in a movie will become automatic as HotSpots on an object is created.

## **Loop Movie**

Activating this command will automatically loop the movie to the beginning when the last frame is reached.



