

# VideoCapX control ActiveX control

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*By Fath Software*

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### **World Wide Web**

The Fath Software web site is located at <http://www.fathsoft.com> . You can access our web site for up-to-date information about the product, support forum, knowledgebase and news.

## VideoCapX control reference

<a href="#">vcxCKFlags</a>	Chroma key flags
<a href="#">vcxStretchModeEnum</a>	Stretch mode values
<a href="#">vcxUseDeinterlaceEnum</a>	UseDeinterlace values
<a href="#">vcxUseVideoFilterEnum</a>	UseVideoFilter values
<a href="#">vcxVideoRendererEnum</a>	VideoRenderer values
<a href="#">AudioCodecIndex</a>	Set index of audio codec to use for audio compression
<a href="#">AudioDeviceIndex</a>	Set index of audio device to use for capturing audio
<a href="#">AudioInputIndex</a>	Specify input port for audio on multi-port audio input cards
<a href="#">BackColor</a>	property BackColor
<a href="#">CapFilename</a>	Filename for captured media file. Extension can be AVI or WMV.
<a href="#">CapTimeLimit</a>	Time limit for capturing, in seconds
<a href="#">CapTimeLimitEnabled</a>	Indicate is CapTimeLimit property valid
<a href="#">CaptureAudio</a>	Indicate will audio be captured
<a href="#">CaptureBufferLength</a>	Sets video buffer length in seconds. Use SaveBuffer method to save this buffer into a video file.
<a href="#">CaptureRate</a>	Get/Set video capture rate (number of frames per second)
<a href="#">ColorFormat</a>	Specify color format of the source video stream
<a href="#">Connected</a>	Get/set connection to video device
<a href="#">DebugMode</a>	Internal. Do not use.
<a href="#">DeviceType</a>	Returns connected video device type. 0,1,2,3 for unknown, TV tuner, DV camera, DV VCR .
<a href="#">EnableNewFrameEvent</a>	If set to TRUE, every new video frame will generate NewFrame event
<a href="#">FTPPassiveMode</a>	If set to TRUE, FTP transfer methods will use passive mode.
<a href="#">HasOverlay</a>	(Read-only) Returns TRUE if selected video device supports video overlay feature
<a href="#">hWnd</a>	Returns Windows window handle of VideoCapX control
<a href="#">IsCapturing</a>	Returns TRUE if video-capture is in progress
<a href="#">LocalAddress</a>	If multiple network adapters are installed, this property specifies which one to use in network communication.
<a href="#">MasterStream</a>	Specify master stream in AVI file (audio or video or none)
<a href="#">MouseIcon</a>	Set custom mouse icon
<a href="#">MousePointer</a>	Set mouse pointer shape
<a href="#">Overlay</a>	Enable/disable video overlay preview
<a href="#">Overscan</a>	Specify how many pixels to discard at video borders.
<a href="#">Preview</a>	Enable/disable video preview

<a href="#"><u>PreviewAudio</u></a>	Set this property to TRUE if you want audio in preview mode
<a href="#"><u>PreviewFullScreen</u></a>	When set to TRUE, preview video will cover the whole screen
<a href="#"><u>ProfileData</u></a>	Set custom WM profile XML data
<a href="#"><u>ProfileIndex</u></a>	Specify system profile to use when creating WMV files
<a href="#"><u>RelayServer</u></a>	property RelayServer
<a href="#"><u>RelayUsername</u></a>	property RelayUsername
<a href="#"><u>ResizeBroadcast</u></a>	resize broadcast video to specified ratio
<a href="#"><u>ResizeCapture</u></a>	Resize captured video using specified ratio, 2 for double, 0.5 for half size.
<a href="#"><u>ScaleVideo</u></a>	property ScaleVideo
<a href="#"><u>ServerMode</u></a>	If set to TRUE, the control will listed for TCP connections on ServerPort mode and send video frames
<a href="#"><u>ServerPassword</u></a>	Sets password for server access
<a href="#"><u>ServerPort</u></a>	Number of TCP port for ServerMode
<a href="#"><u>ServerQuality</u></a>	Specify quality of video images transfered by ReceiveFrame method. Range 10-100. Default 30.
<a href="#"><u>StretchMode</u></a>	Control how video will be resized
<a href="#"><u>SyncUsingStreamOffset</u></a>	Is stream offset used to synchronize audio/video streams in captured file
<a href="#"><u>UseDeinterlace</u></a>	Deinterlace video
<a href="#"><u>UseOverlay</u></a>	If set to TRUE, VideoCapX will output video preview to overlay surface of graphics adapter.
<a href="#"><u>UserFilter2CLSID</u></a>	Second user filter
<a href="#"><u>UserFilter3CLSID</u></a>	Third user filter
<a href="#"><u>UserFilterCLSID</u></a>	Specify user video filter by CLSID
<a href="#"><u>UserFilterIUnknown</u></a>	Set IUnknown pointer of custom video filter.
<a href="#"><u>UseVideoFilter</u></a>	Determine if VideoCapX video filter will be used. This filter handles frame grabbing, video cropping and text/bitmap overlay. Without it, video stream can be much faster.
<a href="#"><u>Version</u></a>	Returns VideoCapX.OCX version number
<a href="#"><u>VideoCodecIndex</u></a>	Set index of video codec to use for on-the-fly compression of video
<a href="#"><u>VideoCodecQuality</u></a>	Sets quality parameter for video codec
<a href="#"><u>VideoDeviceIndex</u></a>	Set index of video device to use for capture
<a href="#"><u>VideoFlip</u></a>	Sets video flipping. Flips video image horizontally and/or vertically.
<a href="#"><u>VideoHeight</u></a>	Returns current video height in pixels. This property is read-only.
<a href="#"><u>VideoInputIndex</u></a>	Sets channel to use on multi-port capture cards
<a href="#"><u>VideoRenderer</u></a>	Select video renderer to use for video preview.
<a href="#"><u>VideoSourceURL</u></a>	URL of network camera acting as video source

<a href="#"><u>VideoWidth</u></a>	Returns current video width in pixels. This property is read-only.
<a href="#"><u>WMAttributes</u></a>	Windows Media attributes to set when capturing into WMV files or broadcasting
<a href="#"><u>WMTVersion</u></a>	Sets WindowsMedia system profiles version to use. See ProfileIndex property. Default is 7. Possible values are 4,7 and 8.
<a href="#"><u>AboutBox</u></a>	Shows About Box of VideoCapX
<a href="#"><u>Acquire</u></a>	Acquires an image from TWAIN source (like scanner).
<a href="#"><u>AllocCapFile</u></a>	Pre-allocates space on disk for capture file
<a href="#"><u>AutoTune</u></a>	The AutoTune method scans for a precise signal on the channel's frequency.
<a href="#"><u>CameraControlGet</u></a>	Returns value of camera-control properties
<a href="#"><u>CameraControlGetRange</u></a>	Retrieve camera control range values.
<a href="#"><u>CameraControlSet</u></a>	Sets camera-control properties
<a href="#"><u>CompareImages</u></a>	Returns difference between two images.
<a href="#"><u>ConnectionState</u></a>	returns current DisplayRemote connection state
<a href="#"><u>CopyCaptureFile</u></a>	Copies AVI file from pre-allocated storage into new file
<a href="#"><u>CopyFrame</u></a>	Copy current vide frame into clipboard
<a href="#"><u>DetectMotion</u></a>	Detect changes in video frames
<a href="#"><u>DetectObjects</u></a>	Detects moving objects on the image and returns their coordinates
<a href="#"><u>DisplayRemote</u></a>	Starts a video-conference call
<a href="#"><u>ExportToDV</u></a>	Export DV-compatible AVI file to DV VTR device
<a href="#"><u>GetActualFrameRate</u></a>	Returns current actual frame rate. Some devices may provide lower frame rates than requested because of bandwidth availability. This is only available during video streaming.
<a href="#"><u>GetAudioCodecCount</u></a>	Returns installed audio codec count
<a href="#"><u>GetAudioCodecName</u></a>	Returns audio codec name
<a href="#"><u>GetAudioDeviceCount</u></a>	Returns number of audio devices in the system
<a href="#"><u>GetAudioDeviceName</u></a>	Returns audio device name
<a href="#"><u>GetAudioFormat</u></a>	Returns audio format parameters
<a href="#"><u>GetAudioInputCount</u></a>	Returns number of input ports on audio source
<a href="#"><u>GetAudioInputName</u></a>	Returns audio input port name
<a href="#"><u>GetAudioLevel</u></a>	Returns audio level in preview mode
<a href="#"><u>GetAudioLevel2</u></a>	Get audio levels for left and right channel
<a href="#"><u>GetCapFileSize</u></a>	Returns file size (in bytes) of capture file
<a href="#"><u>GetCapInfo</u></a>	method GetCapInfo
<a href="#"><u>GetCapStatus</u></a>	Retrieves video capture parameters
<a href="#"><u>GetControlRef</u></a>	Get control reference pointer
<a href="#"><u>GetDateCode</u></a>	Returns time on DV video tape (the time when the video has

	been taken)
<a href="#"><u>GetDeviceDesc</u></a>	Returns device description string
<a href="#"><u>GetDeviceID</u></a>	Returns unique device ID string
<a href="#"><u>GetFilterSettings</u></a>	Returns current filter settings
<a href="#"><u>GetFrameAsHBITMAP</u></a>	Return Windows HBITMAP value of current video frame.
<a href="#"><u>GetProfileCount</u></a>	Returns number of WindowsMedia system profiles
<a href="#"><u>GetProfileDesc</u></a>	Returns WindowsMedia profile description
<a href="#"><u>GetProfileName</u></a>	Returns WindowsMedia profile name
<a href="#"><u>GetRGB</u></a>	Returns current video frame image as array of RGB values.
<a href="#"><u>GetTimecode</u></a>	Return timecode value on digital VCR video type
<a href="#"><u>GetTunerSignal</u></a>	Returns 1 if TV signal is present on current channel
<a href="#"><u>GetVideoCaps</u></a>	Returns an array of supported video formats
<a href="#"><u>GetVideoCodecCount</u></a>	Returns installed video codec count
<a href="#"><u>GetVideoCodecName</u></a>	Returns video codec name.
<a href="#"><u>GetVideoDeviceCount</u></a>	Returns number of video-capture devices in the system
<a href="#"><u>GetVideoDeviceDesc</u></a>	Returns video device description
<a href="#"><u>GetVideoDeviceName</u></a>	Returns video device name
<a href="#"><u>GetVideoFormat</u></a>	Returns video size.
<a href="#"><u>GetVideoInputCount</u></a>	Returns number of video inputs on currently selected video device (card).
<a href="#"><u>GetVideoInputName</u></a>	Returns name of specified video channel on multiple-input capture cards.
<a href="#"><u>GetVideoProcAmp</u></a>	Get video properties
<a href="#"><u>GetVideoProcAmpValueRange</u></a>	Retrieve value range for video property.
<a href="#"><u>GetVRIUnknown</u></a>	Returns IUnknown interface of current video renderer filter. See 'VideoRenderer' property.
<a href="#"><u>GrabFrame</u></a>	Returns current video frame as VB Picture object
<a href="#"><u>HTTPUpload</u></a>	Use HTTP upload protocol to send information and files to web server
<a href="#"><u>LoadProfileFromURL</u></a>	Loads WM profile data from .prx file. URL argument must start with 'http://' or 'file://'. Return value is 1 on success or 0 on failure.
<a href="#"><u>PauseCapture</u></a>	Pause capture
<a href="#"><u>Ping</u></a>	method Ping
<a href="#"><u>PlayerClose</u></a>	Closes media playback.
<a href="#"><u>PlayerGetFrame</u></a>	Returns current video frame number
<a href="#"><u>PlayerGetFrameCount</u></a>	Returns number of video frames in the movie
<a href="#"><u>PlayerGetLenMS</u></a>	Returns media file length in milliseconds.
<a href="#"><u>PlayerGetPos</u></a>	Returns current playing position.

<a href="#"><u>PlayerGetVideoSize</u></a>	Returns video size for media player.
<a href="#"><u>PlayerOpen</u></a>	Opens media file for playback.
<a href="#"><u>PlayerOpenDVD</u></a>	Open DVD volume
<a href="#"><u>PlayerSetFrame</u></a>	Sets current video frame
<a href="#"><u>PlayerSetFullScreen</u></a>	Opens full-screen playback.
<a href="#"><u>PlayerSetMute</u></a>	Mutes sound of media player.
<a href="#"><u>PlayerSetPos</u></a>	Sets current position for playback.
<a href="#"><u>PlayerSetRate</u></a>	Sets the playback rate
<a href="#"><u>PlayerSetSize</u></a>	Sets media player window size.
<a href="#"><u>PlayerStart</u></a>	Start playing media file.
<a href="#"><u>PlayerStepFrames</u></a>	Steps nFrames in player mode
<a href="#"><u>PlayerStepOneFrame</u></a>	Display next frame
<a href="#"><u>PlayerStop</u></a>	Stop playing media file.
<a href="#"><u>PlayRemoteAudio</u></a>	Connects to remote VideoCapX server and receives only audio stream.
<a href="#"><u>ReceiveAudio</u></a>	Receive audio data packet from server
<a href="#"><u>ReceiveFrame</u></a>	Return video frame from remote server as Picture object.
<a href="#"><u>Recompress</u></a>	Copies AVI/WMV into new file using specified video compression.
<a href="#"><u>RecompressEx</u></a>	Use this method to merge video and audio files and/or crop video files.
<a href="#"><u>ResumeCapture</u></a>	Resume capture paused with PauseCapture method
<a href="#"><u>SaveBuffer</u></a>	Saves current video buffer into a file with a name specified by CapFilename property and using video/audio codecs specified with VideoCodecIndex/AudioCodecIndex.
<a href="#"><u>SaveFrame</u></a>	Saves video image into file
<a href="#"><u>SaveFrameJPG</u></a>	Saves current video frame into JPG file
<a href="#"><u>SavePictureJPG</u></a>	Saves Picture object into JPG file.
<a href="#"><u>SelectSource</u></a>	Let the user select TWAIN source.
<a href="#"><u>SendScriptCommand</u></a>	Send script type/command pair to broadcast client. This method works only if WM broadcast started with StartBroadcast method is running.
<a href="#"><u>SetAudioBalance</u></a>	Sets the balance of the audio signal
<a href="#"><u>SetAudioDelay</u></a>	Sets audio delay (positive or negative) in captured AVI file. DelayMS argument is in milliseconds.
<a href="#"><u>SetAudioFormat</u></a>	Sets audio format for capture
<a href="#"><u>SetAudioInputLevel</u></a>	Sets the recording level for audio input selected with AudioInputIndex property. Level value is in range 0 to 100.
<a href="#"><u>SetAudioVolume</u></a>	Sets audio renderer volume. Volume argument range is 0 - 100. if Volume is -1, this method returns current audio volume.



<a href="#"><u>SetBitmapOverlay</u></a>	Sets bitmap to show on-video
<a href="#"><u>SetChromaKey</u></a>	Sets chroma-key effect. BackImage parameter is a filename of static image background which will be visible through video. Color parameters are RGB values.
<a href="#"><u>SetCrop</u></a>	Crops live-video stream to the rectangle of dimensions (W,H) and with top-left coordinate of (X,Y).
<a href="#"><u>SetFadeLevel</u></a>	Sets fade level (the range is 0-100, 0 is neutral) for video
<a href="#"><u>SetFilterSettings</u></a>	Set filter settings
<a href="#"><u>SetHighPriority</u></a>	Sets priority class for the current process. High argument is TRUE for high priority or FALSE for normal priority.
<a href="#"><u>SetMasterAudioVolume</u></a>	Set master volume for specified mixer line. Volume argument range is 0 - 100. if Volume is -1, this method returns current audio volume.
<a href="#"><u>SetMotionMask</u></a>	Sets rectangle(s) to ignore on the image while detecting motion.
<a href="#"><u>SetOption</u></a>	method SetOption
<a href="#"><u>SetSlaveControl</u></a>	Set video source control
<a href="#"><u>SetTextOverlay</u></a>	Sets on-video text caption.
<a href="#"><u>SetTunerChannel</u></a>	Set TV tuner channel
<a href="#"><u>SetTunerCountryCode</u></a>	Set/Get TV tuner country code
<a href="#"><u>SetTunerInputType</u></a>	Set / retrieve TV tuner input type; cable or antenna.
<a href="#"><u>SetTunerMode</u></a>	Sets a multifunction tuner to the specified mode.
<a href="#"><u>SetTVFormat</u></a>	Set TV format (PAL, NTSC, etc.)
<a href="#"><u>SetVideoFormat</u></a>	Set video image dimensions
<a href="#"><u>SetVideoFormatEx</u></a>	Sets video format by capability index returned by GetVideoCaps method
<a href="#"><u>SetVideoProcAmp</u></a>	Set video properties
<a href="#"><u>SetZoom</u></a>	Set zoom rectangle on video. Use all zeros as parameters to this method to reset zoom.
<a href="#"><u>ShowAudioCodecDlg</u></a>	Shows audio codec dialog.
<a href="#"><u>ShowAudioFormatDlg</u></a>	Shows audio format dialog.
<a href="#"><u>ShowAudioSourceDlg</u></a>	Shows audio source dialog.
<a href="#"><u>ShowTunerDlg</u></a>	Display TV tuner properties dialog
<a href="#"><u>ShowUserFilterDlg</u></a>	Display user filter property page
<a href="#"><u>ShowVideoCodecDlg</u></a>	Shows video codec dialog.
<a href="#"><u>ShowVideoCrossbarDlg</u></a>	Display video crossbar dialog
<a href="#"><u>ShowVideoFormatDlg</u></a>	Shows video format dialog.
<a href="#"><u>ShowVideoSourceDlg</u></a>	Shows video source dialog.
<a href="#"><u>SingleFrameAdd</u></a>	Adds current video frame into AVI file opened by SingleFrameOpen method
<a href="#"><u>SingleFrameAddPicture</u></a>	Adds a Windows bitmap to the AVI file created with

	SingleFrameAdd method.
<a href="#">SingleFrameClose</a>	Closes single-frame AVI capture
<a href="#">SingleFrameOpen</a>	Creates AVI file for single-frame capturing.
<a href="#">StartBroadcast</a>	Starts WindowsMedia network broadcast at specified port. Use Windows MediaPlayer's OpenURL command to see video on network.
<a href="#">StartBroadcastPush</a>	Start sending broadcast to Windows Media server publishing point
<a href="#">StartCapture</a>	Starts video capture
<a href="#">StopBroadcast</a>	Stops WM broadcast
<a href="#">StopCapture</a>	Stops video capture
<a href="#">StoreAutoTune</a>	The StoreAutoTune method saves the fine-tuning information for all channels.
<a href="#">UploadFile</a>	Upload a file to FTP server
<a href="#">UploadFrame</a>	Sends current video frame to FTP server
<a href="#">VCRSetMode</a>	Control Digital Video VCR. Use this method to change VCR modes of DV camcorder.
<a href="#">CaptureEnd</a>	Triggered when capture is ended
<a href="#">CaptureReady</a>	Raised after StartCapture is called but before any video is actually captured into file. It gives application the opportunity to display 'press to start capture...' message.
<a href="#">CaptureStart</a>	Triggered when capture is started
<a href="#">DeviceLost</a>	Raised when device lost is detected. Such as camera removal or cable plug-out.
<a href="#">FullscreenLost</a>	Raised when full-screen mode ends due to user action
<a href="#">NewFrame</a>	Raised when new video frame is available
<a href="#">RecompressCompleted</a>	Recompress method runs in background. This event is fired when recompression is finished.
<a href="#">RecompressProgress</a>	Reports progress of Recompress method processing.

## Constants

### DVD\_AUDIO\_APPMODE

DVD_AudioMode_None	0
DVD_AudioMode_Karaoke	1
DVD_AudioMode_Surround	2
DVD_AudioMode_Other	3

### DVD\_AUDIO\_FORMAT

DVD_AudioFormat_AC3	0
DVD_AudioFormat_MPEG1	1

DVD_AudioFormat_MPEG1_DRC	2
DVD_AudioFormat_MPEG2	3
DVD_AudioFormat_MPEG2_DRC	4
DVD_AudioFormat_LPCM	5
DVD_AudioFormat_DTS	6
DVD_AudioFormat_SDDS	7
DVD_AudioFormat_Other	8

#### **DVD\_AUDIO\_LANG\_EXT**

DVD_AUD_EXT_NotSpecified	0
DVD_AUD_EXT_Captions	1
DVD_AUD_EXT_VisuallyImpaired	2
DVD_AUD_EXT_DirectorComments1	3
DVD_AUD_EXT_DirectorComments2	4

#### **DVD\_CMD\_FLAGS**

DVD_CMD_FLAG_None	0
DVD_CMD_FLAG_Flush	1
DVD_CMD_FLAG_SendEvents	2
DVD_CMD_FLAG_Block	4
DVD_CMD_FLAG_StartWhenRendered	8
DVD_CMD_FLAG_EndAfterRendered	16

#### **DVD\_DISC\_SIDE**

DVD_SIDE_A	1
DVD_SIDE_B	2

#### **DVD\_DOMAIN**

DVD_DOMAIN_FirstPlay	1
DVD_DOMAIN_VideoManagerMenu	2
DVD_DOMAIN_VideoTitleSetMenu	3
DVD_DOMAIN_Title	4
DVD_DOMAIN_Stop	5

#### **DVD\_FRAMERATE**

DVD_FPS_25	1
DVD_FPS_30NonDrop	3

#### **DVD\_KARAOKE\_ASSIGNMENT**

DVD_Assignment_reserved0	0
DVD_Assignment_reserved1	1

DVD_Assignment_LR	2
DVD_Assignment_LRM	3
DVD_Assignment_LR1	4
DVD_Assignment_LRM1	5
DVD_Assignment_LR12	6
DVD_Assignment_LRM12	7

### **DVD\_KARAOKE\_CONTENTS**

DVD_Karaoke_GuideVocal1	1
DVD_Karaoke_GuideVocal2	2
DVD_Karaoke_GuideMelody1	4
DVD_Karaoke_GuideMelody2	8
DVD_Karaoke_GuideMelodyA	16
DVD_Karaoke_GuideMelodyB	32
DVD_Karaoke_SoundEffectA	64
DVD_Karaoke_SoundEffectB	128

### **DVD\_KARAOKE\_DOWNMIX**

DVD_Mix_0to0	1
DVD_Mix_1to0	2
DVD_Mix_2to0	4
DVD_Mix_3to0	8
DVD_Mix_4to0	16
DVD_Mix_Lto0	32
DVD_Mix_Rto0	64
DVD_Mix_0to1	256
DVD_Mix_1to1	512
DVD_Mix_2to1	1024
DVD_Mix_3to1	2048
DVD_Mix_4to1	4096
DVD_Mix_Lto1	8192
DVD_Mix_Rto1	16384

### **DVD\_MENU\_ID**

DVD_MENU_Title	2
DVD_MENU_Root	3
DVD_MENU_Subpicture	4
DVD_MENU_Audio	5
DVD_MENU_Angle	6
DVD_MENU_Chapter	7

### **DVD\_OPTION\_FLAG**

DVD_ResetOnStop	1
DVD_NotifyParentalLevelChange	2
DVD_HMSF_TimeCodeEvents	3
DVD_AudioDuringFFwdRew	4

### **DVD\_PARENTAL\_LEVEL**

DVD_PARENTAL_LEVEL_8	32768
DVD_PARENTAL_LEVEL_7	16384
DVD_PARENTAL_LEVEL_6	8192
DVD_PARENTAL_LEVEL_5	4096
DVD_PARENTAL_LEVEL_4	2048
DVD_PARENTAL_LEVEL_3	1024
DVD_PARENTAL_LEVEL_2	512
DVD_PARENTAL_LEVEL_1	256

### **DVD\_PREFERRED\_DISPLAY\_MODE**

DISPLAY_CONTENT_DEFAULT	0
DISPLAY_16x9	1
DISPLAY_4x3_PANSCAN_PREFERRED	2
DISPLAY_4x3_LETTERBOX_PREFERRED	3

### **DVD\_RELATIVE\_BUTTON**

DVD_Relative_Upper	1
DVD_Relative_Lower	2
DVD_Relative_Left	3
DVD_Relative_Right	4

### **DVD\_SUBPICTURE\_CODING**

DVD_SPCoding_RunLength	0
DVD_SPCoding_Extended	1
DVD_SPCoding_Other	2

### **DVD\_SUBPICTURE\_LANG\_EXT**

DVD_SP_EXT_NotSpecified	0
DVD_SP_EXT_Caption_Normal	1
DVD_SP_EXT_Caption_Big	2
DVD_SP_EXT_Caption_Children	3
DVD_SP_EXT_CC_Normal	5
DVD_SP_EXT_CC_Big	6
DVD_SP_EXT_CC_Children	7

DVD_SP_EXT_Forced	9
DVD_SP_EXT_DirectorComments_Normal	13
DVD_SP_EXT_DirectorComments_Big	14
DVD_SP_EXT_DirectorComments_Children	15

### **DVD\_SUBPICTURE\_TYPE**

DVD_SPTType_NotSpecified	0
DVD_SPTType_Language	1
DVD_SPTType_Other	2

### **DVD\_TextCharSet**

DVD_CharSet_Unicode	0
DVD_CharSet_ISO646	1
DVD_CharSet_JIS_Roman_Kanji	2
DVD_CharSet_ISO8859_1	3
DVD_CharSet_ShiftJIS_Kanji_Roman_Katakana	4

### **DVD\_TextStringType**

DVD_Struct_Volume	1
DVD_Struct_Title	2
DVD_Struct_ParentalID	3
DVD_Struct_PartOfTitle	4
DVD_Struct_Cell	5
DVD_Stream_Audio	16
DVD_Stream_Subpicture	17
DVD_Stream_Angle	18
DVD_Channel_Audio	32
DVD_General_Name	48
DVD_General_Comments	49
DVD_Title_Series	56
DVD_Title_Movie	57
DVD_Title_Video	58
DVD_Title_Album	59
DVD_Title_Song	60
DVD_Title_Other	63
DVD_Title_Sub_Series	64
DVD_Title_Sub_Movie	65
DVD_Title_Sub_Video	66
DVD_Title_Sub_Album	67
DVD_Title_Sub_Song	68

DVD_Title_Sub_Other	71
DVD_Title_Orig_Series	72
DVD_Title_Orig_Movie	73
DVD_Title_Orig_Video	74
DVD_Title_Orig_Album	75
DVD_Title_Orig_Song	76
DVD_Title_Orig_Other	79
DVD_Other_Scene	80
DVD_Other_Cut	81
DVD_Other_Take	82

### **DVD\_TIMECODE\_FLAGS**

DVD_TC_FLAG_25fps	1
DVD_TC_FLAG_30fps	2
DVD_TC_FLAG_DropFrame	4
DVD_TC_FLAG_Interpolated	8

### **DVD\_TITLE\_APPMODE**

DVD_AppMode_Not_Specified	0
DVD_AppMode_Karaoke	1
DVD_AppMode_Other	3

### **DVD\_VIDEO\_COMPRESSION**

DVD_VideoCompression_Other	0
DVD_VideoCompression_MPEG1	1
DVD_VideoCompression_MPEG2	2

### **VALID\_UOP\_FLAG**

UOP_FLAG_Play_Title_Or_AtTime	1
UOP_FLAG_Play_Chapter	2
UOP_FLAG_Play_Title	4
UOP_FLAG_Stop	8
UOP_FLAG_ReturnFromSubMenu	16
UOP_FLAG_Play_Chapter_Or_AtTime	32
UOP_FLAG_PlayPrev_Or_Replay_Chapter	64
UOP_FLAG_PlayNext_Chapter	128
UOP_FLAG_Play_Forwards	256
UOP_FLAG_Play_Backwards	512
UOP_FLAG_ShowMenu_Title	1024
UOP_FLAG_ShowMenu_Root	2048

UOP_FLAG_ShowMenu_SubPic	4096
UOP_FLAG_ShowMenu_Audio	8192
UOP_FLAG_ShowMenu_Angle	16384
UOP_FLAG_ShowMenu_Chapter	32768
UOP_FLAG_Resume	65536
UOP_FLAG_Select_Or_Activate_Button	131072
UOP_FLAG_Still_Off	262144
UOP_FLAG_Pause_On	524288
UOP_FLAG_Select_Audio_Stream	1048576
UOP_FLAG_Select_SubPic_Stream	2097152
UOP_FLAG_Select_Angle	4194304
UOP_FLAG_Select_Karaoke_Audio_Presentation_Mode	8388608
UOP_FLAG_Select_Video_Mode_Preference	16777216

### **vcxCKFlags**

vcxCkFront 0  
vcxCkBack 1

### **vcxStretchModeEnum**

None 0  
Stretch 1  
KeepAspectRatio 2

### **vcxUseDeinterlaceEnum**

vcxNone 0  
vcxSimple 1  
vcxBob 2  
vcx50fps 4

### **vcxUseVideoFilterEnum**

vcxNo 0  
vcxBoth 1  
vcxPreviewOnly 2  
vcxGrabOnly 3  
vcxCaptureOnly 4

### **vcxVideoRendererEnum**

vcxSystemDefaultRenderer 0  
vcxVMR9 1  
vcxVMR7 2  
vcxGDI 3



vcxDeckLinkVideoRenderer 4  
vcxOverlaySurfaceRenderer 10  
vcxEVR 11

## Properties

### AudioCodecIndex

Property AudioCodecIndex As Long

Set index of audio codec to use for audio compression

### AudioDeviceIndex

Property AudioDeviceIndex As Long

Set index of audio device to use for capturing audio

If this property is set to value of 100 and CaptureAudio is TRUE, VideoCapX uses video device for audio capturing also.

### AudioInputIndex

Property AudioInputIndex As Long

Specify input port for audio on multi-port audio input cards

### BackColor

Property BackColor As Long

property BackColor

## CapFilename

Property CapFilename As String

Filename for captured media file. Extension can be AVI or WMV.

The default capture filename is "c:\capture.avi".

To split captured movie into several files, just change this property to a new filename while capture is running.

If capture filename ends with ".WMV", WindowsMedia format is used.

## CapTimeLimit

Property CapTimeLimit As Long

Time limit for capturing, in seconds

The default value is 60.

This property will work only if CapTimeLimitEnabled is set to TRUE.

## CapTimeLimitEnabled

Property CapTimeLimitEnabled As Boolean

Indicate is CapTimeLimit property valid

The default value for this property is FALSE.  
If this value is TRUE video capture will stop after CapTimeLimit seconds.

## **CaptureAudio**

Property CaptureAudio As Boolean

Indicate will audio be captured

The default value is TRUE.  
If this value is FALSE, captured video will have no sound.

## **CaptureBufferLength**

Property CaptureBufferLength As Double

Sets video buffer length in seconds. Use SaveBuffer method to save this buffer into a video file.

## **CaptureRate**

Property CaptureRate As Double

Get/Set video capture rate (number of frames per second)

The default value is 15. CaptureRate property, to have an effect, must be set before connecting

capture driver.

## ColorFormat

Property ColorFormat As Long

Specify color format of the source video stream

Values are:

- 0 = RGB24 (default),
- 1 = CLPL,
- 2 = YUYV,
- 3 = IYUV,
- 4 = YVU9,
- 5 = Y411,
- 6 = Y41P,
- 7 = YUY2,
- 8 = YVYU,
- 9 = UYVY,
- 10 = Y211,
- 11 = YV12,
- 12 = CLJR,
- 13 = IF09,
- 14 = CPLA,
- 15 = MJPG,
- 16 = TVMJ,
- 17 = WAKE,
- 18 = CFCC,
- 19 = IJPG,
- 20 = Plum,
- 21 = DVCS,
- 22 = DVSD,
- 23 = MDVF,
- 24 = RGB1,
- 25 = RGB4,
- 26 = RGB8,
- 27 = RGB565,
- 28 = RGB555,
- 29 = RGB32

VideoCapX.Connected = True  
VideoCapX.ColorFormat = 3  
VideoCapX.StartCapture

### **Connected**

Property Connected As Boolean

Get/set connection to video device

Connects VideoCapX control onto video capture device specified with VideoDeviceToUse property.

VideoCapX.Connected = True

### **DebugMode**

Property DebugMode As Long

Internal. Do not use.

### **DeviceType**

Property DeviceType As Long

Returns connected video device type. 0,1,2,3 for unknown, TV tuner, DV camera, DV VCR .

Values are:

0,1,2,3 for unknown, TV tuner, DV camera, DV VCR .

### **EnableNewFrameEvent**

Property EnableNewFrameEvent As Boolean

If set to TRUE, every new video frame will generate NewFrame event

### **FTPPassiveMode**

Property FTPPassiveMode As Boolean

If set to TRUE, FTP transfer methods will use passive mode.

Passive FTP mode is firewall / proxy friendly.

### **HasOverlay**

Property HasOverlay As Boolean

(Read-only) Returns TRUE if selected video device supports video overlay feature

### **hWnd**

Property hWnd As Long

Returns Windows window handle of VideoCapX control

## **IsCapturing**

Property IsCapturing As Boolean

Returns TRUE if video-capture is in progress

## **LocalAddress**

Property LocalAddress As String

If multiple network adapters are installed, this property specifies which one to use in network communication.

## **MasterStream**

Property MasterStream As Long

Specify master stream in AVI file (audio or video or none)

Values are:

-1 = none

0 = video

1 = audio (default)

## MouseIcon

Property MouseIcon As stdole.Picture

Set custom mouse icon

## MousePointer

Property MousePointer As Long

Set mouse pointer shape

Mouse pointer values are:

- 0 (Default) Shape determined by the object.
- 1 Arrow.
- 2 Cross (crosshair pointer).
- 3 I beam.
- 4 Icon (small square within a square).
- 5 Size (four-pointed arrow pointing north, south, east, and west).
- 6 Size NE SW (double arrow pointing northeast and southwest).
- 7 Size N S (double arrow pointing north and south).
- 8 Size NW SE (double arrow pointing northwest and southeast).
- 9 Size W E (double arrow pointing west and east).
- 10 Up Arrow.
- 11 Hourglass (wait).
- 12 No Drop.
- 13 Arrow and hourglass.
- 14 Arrow and question mark.
- 15 Size all.

## Overlay

Property Overlay As Boolean

Enable/disable video overlay preview



If HasOverlay property is TRUE, Overlay can be used instead of Preview property to show live video on-screen. Overlay video doesn't travel through main memory and it consumes almost no CPU resources. However, frame grabbing doesn't work. To be able to capture still frames and put text/bitmap over the video, you must use Preview property.  
Connected property must be set to TRUE before you can use this property.

```
VideoCapX.Connected = True  
VideoCapX.Overlay = True
```

### **Overscan**

Property Overscan As Long

Specify how many pixels to discard at video borders.

### **Preview**

Property Preview As Boolean

Enable/disable video preview

If set to True, starts video preview in VideoCapX window. Must be connected to use this property.

```
VideoCapX.Preview = True
```

### **PreviewAudio**

Property PreviewAudio As Boolean

Set this property to TRUE if you want audio in preview mode

This property should be set before Preview=True.

## PreviewFullScreen

Property PreviewFullScreen As Boolean

When set to TRUE, preview video will cover the whole screen

PreviewFullScreen property should be set to TRUE after form (window) with VideoCapX is shown on screen.

## ProfileData

Property ProfileData As String

Set custom WM profile XML data

Custom profiles for WMV capture (for example: high quality video stream of 10Mbps) can be created with Windows Media Profile Editor tool included with MS Media Encoder9 . Custom profiles are saved into .prx files. PRX files are in plain-text XML format. You can copy XML data to ProfileData property to use this custom profile while capturing to WMV file.

## ProfileIndex

Property ProfileIndex As Long

Specify system profile to use when creating WMV files

A profile is a collection of data that describes the configuration of an WMV file. The stream information in a profile contains the bit rate, buffer window, and media properties for the stream. The stream information for audio and video describes exactly how the media is configured in the file, including which codec (if any) will be used to compress the data.

You can create custom profiles with ProfileEdit tool of WMFormat SDK. To use custom profile,

set ProfileData property.

Use GetProfileCount, GetProfileName and GetProfileDesc methods to enumerate system profiles.

```
VideoCapX.Connected=True  
VideoCapX.Preview=True  
VideoCapX.CapFilename="capture.wmv"  
VideoCapX.ProfileIndex=26  
VideoCapX.StartCapture
```

## RelayServer

Property RelayServer As String

```
property RelayServer
```

In order to improve broadcasting performance and client experience, a relay server can be used. VideoCapX video server sends just one video stream to relay server and relay server with high bandwidth internet connected then sends that stream to all connected clients.

For more info on how to obtain relay server, contact [support@fathsoft.com](mailto:support@fathsoft.com) .

```
' on server side  
vcxsrvc.Connected=True  
vcxsrvc.RelayServer="192.168.1.123"  
vcxsrvc.RelayUsername = "myServer"  
vcxsrvc.ServerPassword="pass"  
vcxsrvc.ServerMode=True  
vcxsrvc.Preview=True
```

```
'on client side  
cln.RelayServer="192.168.1.123"  
cln.RelayUsername = "client"  
vcxsrvc.ServerPassword="pass"  
cln.DisplayRemote "myServer",1
```

## RelayUsername

Property RelayUsername As String

```
property RelayUsername
```

## **ResizeBroadcast**

Property ResizeBroadcast As Single

resize broadcast video to specified ratio

## **ResizeCapture**

Property ResizeCapture As Single

Resize captured video using specified ratio, 2 for double, 0.5 for half size.

## **ScaleVideo**

Property ScaleVideo As Double

property ScaleVideo

Set this property to 1.0 for original video size, 2.0 for double size and 0.5 for half-sized video on screen.

## **ServerMode**

Property ServerMode As Boolean

If set to TRUE, the control will listed for TCP connections on ServerPort mode and send video frames

If set to TRUE, the control will listed for TCP connections on ServerPort mode and send video frames

## **ServerPassword**

Property ServerPassword As String

Sets password for server access

## **ServerPort**

Property ServerPort As Long

Number of TCP port for ServerMode

## **ServerQuality**

Property ServerQuality As Long

Specify quality of video images transfered by ReceiveFrame method. Range 10-100. Defult 30.

## StretchMode

Property StretchMode As vcxStretchModeEnum

Control how video will be resized

none = video is not resized

stretch = video is resized to fit control rectangle without preserving aspect ratio

zoom = video is resized to fit control and preserve aspect ratio

## SyncUsingStreamOffset

Property SyncUsingStreamOffset As Boolean

Is stream offset used to synchronize audio/video streams in captured file

## UseDeinterlace

Property UseDeinterlace As vcxUseDeinterlaceEnum

Deinterlace video

Possible values are:

vcxNone=0 - no deinterlacing

vcxSimple=1 - simple (fast) deinterlacing

vcxBob=2 - Better deinterlacing

UseVideoFilter must be enabled for deinterlacing to work.

### **UseOverlay**

Property UseOverlay As Boolean

If set to TRUE, VideoCapX will output video preview to overlay surface of graphics adapter.

### **UserFilter2CLSID**

Property UserFilter2CLSID As String

Second user filter

### **UserFilter3CLSID**

Property UserFilter3CLSID As String

Third user filter

### **UserFilterCLSID**

Property UserFilterCLSID As String

Specify user video filter by CLSID

Set this property to CLSID string of custom video filter you want to use. It should be set before setting Connected to TRUE.

VideoCapX will create instance of this CLSID and release it after Connected is set to FALSE.

```
VideoCapX.UserFilterCLSID = "{c200e360-38c5-11ce-ae62-08002b2b79ef}"
```

```
VideoCapX.Connected = TRUE
```

```
VideoCapX.Preview = TRUE
```

## UserFilterIUnknown

Property UserFilterIUnknown As Unknown

Set IUnknown pointer of custom video filter.

You must create the filter, set its properties and QueryInterface for IUnknown. Then, set this property to your filter IUnknown pointer before setting Connected property of VideoCapX to TRUE.

VideoCapX doesn't call AddRef or Release on this interface. It will QueryInterface for IBaseFilter and call AddRef/Release on it.

## UseVideoFilter

Property UseVideoFilter As vcxUseVideoFilterEnum

Determine if VideoCapX video filter will be used. This filter handles frame grabbing, video cropping and text/bitmap overlay. Without it, video stream can be much faster.

Possible values are:

vcxNo=0,

vcxBoth=1,

vcxPreviewOnly=2,

vcxGrabOnly=3

"vcxNo" means fastest preview and capture,

"vcxGrabOnly" is little to nothing slower but offer still video frame grabbing capability (with GrabFrame method) without text/image overlay,



"vcxPreviewOnly" can be used when you want to put text/image overlay on video preview while capturing unmodified video,  
"vcxBoth" means that both video preview and captured video will have text/image overlays.

```
VideoCapX.UseVideoFilter = vcxNo  
VideoCapX.Connected = True  
VideoCapX.Preview = True
```

## **Version**

Property Version As String

Returns VideoCapX.OCX version number

## **VideoCodecIndex**

Property VideoCodecIndex As Long

Set index of video codec to use for on-the-fly compression of video

## **VideoCodecQuality**

Property VideoCodecQuality As Long

Sets quality parameter for video codec

## VideoDeviceIndex

Property VideoDeviceIndex As Long

Set index of video device to use for capture

## VideoFlip

Property VideoFlip As Long

Sets video flipping. Flips video image horizontally and/or vertically.

VideoFlip values are:

0 = no flipping (default)

1 = horizontal flip

2 = vertical flip

3 = horizontal+vertical flip

If the video capture device doesn't support video flipping, you can use VideoCapX video filter to manually flip the image. Just use -1, -2 or -3 as values for this property.

If VideoFlip property returns -1, it indicates that Connected property should be set to TRUE. If VideoFlip value is -2, it means that video flipping isn't supported by current video device.

```
VideoCapX.Connected = True
```

```
VideoCapX.Preview = True
```

```
VideoCapX.VideoFlip = 1
```

## VideoHeight

Property VideoHeight As Long

Returns current video height in pixels. This property is read-only.

## VideoInputIndex

Property VideoInputIndex As Long

Sets channel to use on multi-port capture cards

## VideoRenderer

Property VideoRenderer As vcxVideoRendererEnum

Select video renderer to use for video preview.

- 0 = vcxSystemDefault: Use default DirectShow video renderer,
- 1 = vcxVMR9: Use new Direct3D VMR9 renderer
- 2 = vcxVMR7: use older VMR7 DirectDraw-based renderer
- 3 = vcxGDI: use GDI-based video renderer

## VideoSourceURL

Property VideoSourceURL As String

URL of network camera acting as video source

VideoDeviceIndex property must be set to -2 for this property to work.

```
vcx.VideoDeviceIndex = -2  
vcx.VideoSourceURL = "http://mycam/image.jpg"  
vcx.AudioDeviceIndex = -1
```

```
vcx.Connected = True
```

vcx.Preview = True

### **VideoWidth**

Property VideoWidth As Long

Returns current video width in pixels. This property is read-only.

### **WMAttributes**

Property WMAttributes As String

Windows Media attributes to set when capturing into WMV files or broadcasting

**WMAttributes** property is a string delimited with '|' with these fields: Title, Author, Copyright, Rating, Description . It can be an empty string if no attributes are needed.

vcx.WMAttributes="my title|author is me|copyright to me|rating is 5|this is description "

### **WMTVersion**

Property WMTVersion As Long

Sets WindowsMedia system profiles version to use. See ProfileIndex property. Default is 7. Possible values are 4,7 and 8.

## Methods

### AboutBox

Sub AboutBox

Shows About Box of VideoCapX

### Acquire

Function Acquire As stdole.Picture

Acquires an image from TWAIN source (like scanner).

```
Form1.Picture = VideoCapX.Acquire
```

### AllocCapFile

Function AllocCapFile (FileSizeMb As Long) As Long

Pre-allocates space on disk for capture file

You can improve streaming capture performance significantly by preallocating a capture file large enough to store an entire video clip and by defragmenting the capture file before capturing the clip.

### AutoTune

Function AutoTune (nChannel As Long) As Long

The AutoTune method scans for a precise signal on the channel's frequency.

TV channels generally map to a unique frequency depending on regional variances. To avoid interference between multiple transmitters that are assigned the same channel when they are in close geographic proximity, small frequency offsets are introduced at each transmitter. In the United States, this offset ranges up to  $\pm 26.25$  kilohertz (kHz).

This method handles the channel-to-frequency conversion and scans for the most precise frequency. Store these values by calling the StoreAutoTune method. You can find base frequencies for channels in the appendix "International Analog TV Tuning" of DirectShow SDK documentation.

## CameraControlGet

Function CameraControlGet (Prop As Long) As Long

Returns value of camera-control properties

**Prop** values are:

CameraControl\_Pan = 0

CameraControl\_Tilt = 1

CameraControl\_Roll = 2

CameraControl\_Zoom = 3

CameraControl\_Exposure = 4

CameraControl\_Iris = 5

CameraControl\_Focus = 6

### CameraControl\_Pan

Specifies the camera's pan setting, in degrees. Values range from  $-180$  to  $+180$ , with the default set to zero. Positive values are clockwise from the origin (the camera rotates clockwise when viewed from above), and negative values are counterclockwise from the origin.

### CameraControl\_Tilt

Specifies the camera's tilt setting, in degrees. Values range from  $-180$  to  $+180$ , with the default set to zero. Positive values point the imaging plane up, and negative values point the imaging plane down.

## **CameraControl\_Roll**

Specifies the camera's roll setting, in degrees. Values range from  $-180$  to  $+180$ , with the default set to zero. Positive values cause a clockwise rotation of the camera along the image-viewing axis, and negative values cause a counterclockwise rotation of the camera.

## **CameraControl\_Zoom**

Specifies the camera's zoom setting, in millimeters. Values range from 10 to 600, and the default is specific to the device.

## **CameraControl\_Exposure**

Specifies the exposure setting, in log base 2 seconds. In other words, for values less than zero, the exposure time is  $1/2^n$  seconds, and for values zero or above, the exposure time is  $2^n$  seconds. For example:

Value	Seconds
-------	---------

-3	$1/8$
----	-------

-2	$1/4$
----	-------

-1	$1/2$
----	-------

0	1
---	---

1	2
---	---

2	4
---	---

## **CameraControl\_Iris**

Specifies the camera's iris setting, in units of  $fstop * 10$ .

## **CameraControl\_Focus**

Specifies the camera's focus setting, as the distance to the optimally focused target, in millimeters. The range and default value are specific to the device.

## **CameraControlGetRange**

Function CameraControlGetRange (Prop As Long, MinVal As Long, MaxVal As Long, SteppingDelta As Long, DefaultValue As Long, CapsFlags As Long) As Long

Retrieve camera control range values.

**Prop** values are:

CameraControl\_Pan = 0

CameraControl\_Tilt = 1

CameraControl\_Roll = 2

CameraControl\_Zoom = 3

CameraControl\_Exposure = 4

CameraControl\_Iris = 5

CameraControl\_Focus = 6

Return value 0 means success, otherwise, it's one of DirectX error codes.

CapsFlags arguments receive value of 1 if the property is controlled automatically, or 2 if it is controlled manually, or 3 if both is possible.

## CameraControlSet

Function CameraControlSet (Prop As Long, Val As Long) As Long

Sets camera-control properties

**Prop** values are:

CameraControl\_Pan = 0

CameraControl\_Tilt = 1

CameraControl\_Roll = 2

CameraControl\_Zoom = 3

CameraControl\_Exposure = 4

CameraControl\_Iris = 5

CameraControl\_Focus = 6

### CameraControl\_Pan

Add 10 to Prop value to use RELATIVE flag.

Specifies the camera's pan setting, in degrees. Values range from -180 to +180, with the default set to zero. Positive values are clockwise from the origin (the camera rotates clockwise when viewed from above), and negative values are counterclockwise from the origin.

### CameraControl\_Tilt



Specifies the camera's tilt setting, in degrees. Values range from  $-180$  to  $+180$ , with the default set to zero. Positive values point the imaging plane up, and negative values point the imaging plane down.

### **CameraControl\_Roll**

Specifies the camera's roll setting, in degrees. Values range from  $-180$  to  $+180$ , with the default set to zero. Positive values cause a clockwise rotation of the camera along the image-viewing axis, and negative values cause a counterclockwise rotation of the camera.

### **CameraControl\_Zoom**

Specifies the camera's zoom setting, in millimeters. Values range from 10 to 600, and the default is specific to the device.

### **CameraControl\_Exposure**

Specifies the exposure setting, in log base 2 seconds. In other words, for values less than zero, the exposure time is  $1/2^n$  seconds, and for values zero or above, the exposure time is  $2^n$  seconds. For example:

Value Seconds

-3  $1/8$

-2  $1/4$

-1  $1/2$

0 1

1 2

2 4

### **CameraControl\_Iris**

Specifies the camera's iris setting, in units of fstop \* 10.

### **CameraControl\_Focus**

Specifies the camera's focus setting, as the distance to the optimally focused target, in millimeters. The range and default value are specific to the device.

## **CompareImages**

Function CompareImages (Picture1 As stdole.Picture, Picture2 As stdole.Picture, Sensitivity As Long) As Long

Returns difference between two images.

Suggested value for Sensitivity parameter is 25.

This method returns percent of different pixels in two images. So, return value is 0 for identical images and 100 for completely different.

```
Picture1.Picture = VideoCapX.GrabFrame
```

-or-

```
Picture1.Picture = VideoCapX.ReceiveFrame ( serveraddr )
```

```
If VideoCapX.CompareImages(Picture1, Picture2, 25) > 20 Then
```

```
    MsgBox "Where are you going?"
```

```
End If
```

### **ConnectionState**

```
Function ConnectionState As Long
```

returns current DisplayRemote connection state

0 = no connection

1 = resolving network address

2 = connecting

3 = connected to host

4 = connection established

### **CopyCaptureFile**

```
Function CopyCaptureFile (New As String) As Long
```

Copies AVI file from pre-allocated storage into new file

## CopyFrame

Function CopyFrame As Boolean

Copy current vide frame into clipboard

none

## DetectMotion

Function DetectMotion (Sensitivity As Long) As Long

Detect changes in video frames

The DetectMotion method returns the number between 0 and 100, reflecting the change detected in front of the camera.

Call this method every second or two and check the result it returns. If the result is greater than 30, there is something moving in front of the camera. Experiment with this to see which value to use.

See SetMotionMask method.

```
Sub Timer1_OnTimer()  
If VideoCapX1.DetectMotion>30 then  
Beep  
MsgBox "Where are you going?"  
End If  
End Sub
```

## DetectObjects

Function DetectObjects (Threshold As Long) As String

Detects moving objects on the image and returns their coordinates

## DisplayRemote

Function DisplayRemote (RemoteAddress As String, Audio As Boolean) As Long

Starts a video-conference call

'call a computer with IP address of 192.168.0.5  
clientvcx.DisplayRemote "192.168.0.5", True

'or, with a network address as 'johnsoffice'  
clientvcx.DisplayRemote "johnsoffice", True

## ExportToDV

Function ExportToDV (filename As String) As Long

Export DV-compatible AVI file to DV VTR device

First, connect to DV device. Then call ExportToDV method.

Use VCRSetMode to start RECORD mode on DV VTR and STOP it after the file is finished playing.

Use PlayerGetPos to track progress. PlayerEnd event is triggered on export finish.

After you finish exporting to DV, call PlayerClose.

If you abort this method (by exiting your application), don't forget to STOP video recorder (using VCRSetMode method).

```
VideoCapX.Connected=True  
VideoCapX.ExportToDV "movie.avi"
```

## GetActualFrameRate

Function GetActualFrameRate As Double

Returns current actual frame rate. Some devices may provide lower frame rates than requested because of bandwidth availability. This is only available during video streaming.

### **GetAudioCodecCount**

Function GetAudioCodecCount As Long

Returns installed audio codec count

### **GetAudioCodecName**

Function GetAudioCodecName (Index As Long) As String

Returns audio codec name

### **GetAudioDeviceCount**

Function GetAudioDeviceCount As Long

Returns number of audio devices in the system

### **GetAudioDeviceName**

Function GetAudioDeviceName (Index As Long) As String

Returns audio device name

### **GetAudioFormat**

Function GetAudioFormat (FmtTag As Long, nChannels As Long, nSamplesPerSec As Long, nAvgBytesPerSec As Long, nBlockAlign As Long, wBitsPerSample As Long) As Boolean

Returns audio format parameters

### **GetAudioInputCount**

Function GetAudioInputCount As Long

Returns number of input ports on audio source

### **GetAudioInputName**

Function GetAudioInputName (Index As Long) As String

Returns audio input port name

## **GetAudioLevel**

Function GetAudioLevel As Long

Returns audio level in preview mode

## **GetAudioLevel2**

Function GetAudioLevel2 (left As Long, right As Long) As Long

Get audio levels for left and right channel

## **GetCapFileSize**

Function GetCapFileSize As Double

Returns file size (in bytes) of capture file

On error, value of -1 is returned.

By using this method, you can check capture file size while capturing is in progress. That way, it gives you a chance to stop capture, change CapFilename and Startcapture again, if you want to keep capture files under some size limit.

## **GetCapInfo**

Function GetCapInfo (ValueIndex As Long) As String

method GetCapInfo

## **GetCapStatus**

Function GetCapStatus (ImageWidth As Long, ImageHeight As Long, CurrentVideoFrame As Long, CurrentVideoFramesDropped As Long, CurrentTimeElapsedMS As Long, fCapturingNow As Long) As Long

Retrieves video capture parameters

Returns TRUE if successful or FALSE if window is not connected to a capture driver.

This method returns various status information in variables passed to it as arguments. ImageHeight and Width are in pixels, fCapturingNow is TRUE if capture is in progress.

## **GetControlRef**

Function GetControlRef As Long

Get control reference pointer

## **GetDateCode**

Function GetDateCode As Date

Returns time on DV video tape (the time when the video has been taken)

See [GetTimecode](#) method.



## GetDeviceDesc

Function GetDeviceDesc (DeviceIndex As Long) As String

Returns device description string

## GetDeviceID

Function GetDeviceID (DeviceIndex As Long) As String

Returns unique device ID string

If DeviceIndex parameter is in range 0-1000, video device ID is returned. If DeviceIndex is in range 1000-2000, audio device ID is returned (first audio device is 1000, second 1001, etc)

## GetFilterSettings

Function GetFilterSettings (FilterID As Long) As String

Returns current filter settings

FilterID values:

1 = video compress filter

2 = audio compress filter

3 = video source filter

4 = audio source filter

5 = user filter

This method returns current settings of the filter as string. To set filter, call SetFilterSettings method.

If returned value is an empty string, selected filter doesn't support settings retrieval by code.

```
Dim s As String
VideoCapX.VideoCodecIndex = 6
VideoCapX.ShowVideoCodecDlg
s=VideoCapX.GetFilterSettings(1)
```

### **GetFrameAsHBITMAP**

Function GetFrameAsHBITMAP As Long

Return Windows HBITMAP value of current video frame.

.

### **GetProfileCount**

Function GetProfileCount As Long

Returns number of WindowsMedia system profiles

See WMTVersion property.

### **GetProfileDesc**

Function GetProfileDesc (ProfileIndex As Long) As String

Returns WindowsMedia profile description

### **GetProfileName**

Function GetProfileName (ProfileIndex As Long) As String

Returns WindowsMedia profile name

## GetRGB

Function GetRGB

Returns current video frame image as array of RGB values.

```
Dim a() As Byte
a = VideoCapX1.GetRGB
For y = 0 To 239 'image height is 240 pixels in this case
For x = 0 To 319 '320 pixels
i = (y * (320 * 3)) + (x * 3)
'NOTE: byte order isn't RGB, it's BGR
PSet (x, y), RGB(a(i + 2), a(i + 1), a(i))
Next x
Next y
```

## GetTimecode

Function GetTimecode As Long

Return timecode value on digital VCR video type

Returned value is:

Hours, minutes, seconds, and frames, as a binary coded decimal (BCD) value: 0xhhmmssff.

```
Dim h As Long, m As Long, s As Long, f As Long, tc As Long, str As String
tc = vcx.GetTimecode
str = String(8 - Len(Hex(tc)), "0") + Hex(tc)
s = Val(Mid(str, 5, 2))
m = Val(Mid(str, 3, 2))
h = Val(Mid(str, 1, 2))
f = Val(Mid(str, 7, 2))
```

Label1.Caption = h & ":" & m & ":" & s & ":" & f

## **GetTunerSignal**

Function GetTunerSignal As Long

Returns 1 if TV signal is present on current channel

## **GetVideoCaps**

Function GetVideoCaps

Returns an array of supported video formats

Call this method after Connected has been set to TRUE, but, before starting video preview.  
If device drivers doesn't support this feature, this method returns empty variable.

Returned array has four columns:

1. Video width
2. Video height
3. Bit per pixel value
4. Color format (see ColorFormat property for list of values)

Dim a, f

a = vcx.GetVideoCaps()

vidsize.Clear

For f = LBound(a) To UBound(a)

vidsize.AddItem a(f, 0) & "x" & a(f, 1) & "x" & a(f, 2) & "," & a(f, 3)

Next f

## **GetVideoCodecCount**

Function GetVideoCodecCount As Long

Returns installed video codec count

### **GetVideoCodecName**

Function GetVideoCodecName (nIndex As Long) As String

Returns video codec name.

### **GetVideoDeviceCount**

Function GetVideoDeviceCount As Long

Returns number of video-capture devices in the system

### **GetVideoDeviceDesc**

Function GetVideoDeviceDesc (Index As Long) As String

Returns video device description

### **GetVideoDeviceName**

Function GetVideoDeviceName (Index As Long) As String

Returns video device name

Index parameter is in range 0 to GetVideoInputCount-1

### **GetVideoFormat**

Function GetVideoFormat (width As Long, height As Long) As Long

Returns video size.

Returns TRUE if successful or FALSE if control is not connected to a capture driver.

ImageHeight and ImageWidth are in pixels.

Dim w As Long, h As Long  
VideoCapX.GetVideoFormat w,h

### **GetVideoInputCount**

Function GetVideoInputCount As Long

Returns number of video inputs on currently selected video device (card).

Returns 0 if your video device doesn't have multiple video inputs.

### **GetVideoInputName**

Function GetVideoInputName (Index As Long) As String

Returns name of specified video channel on multiple-input capture cards.

## GetVideoProcAmp

Function GetVideoProcAmp (ValueIndex As Long) As Long

Get video properties

## GetVideoProcAmpValueRange

Function GetVideoProcAmpValueRange (ValueIndex As Long, Min As Long, Max As Long, SteppingDelta As Long, Default As Long) As Long

Retrieve value range for video property.

ValueIndex parameter is:

Brightness = 0,

Contrast = 1,

Hue = 2,

Saturation = 3,

Sharpness = 4,

Gamma = 5,

ColorEnable = 6,

WhiteBalance = 7,

BacklightCompensation = 8,

Gain = 9

Dim Brightness As Long

VideoCapX.GetVideoProcAmp 0, Brightness

Dim MinVal As Long ,MaxVal As Long ,StepD As Long ,DefVal As Long

VideoCapX.GetVideoProcAmpValueRange 0, MinVal, MaxVal, StepD, DefVal

'set brightness here

Brightness=MinVal+((MaxVal-MinVal)/2)

VideoCapX.SetVideoProcAmp 0, Brightness

### **GetVRIUnknown**

Function GetVRIUnknown As Unknown

Returns IUnknown interface of current video renderer filter. See 'VideoRenderer' property.

### **GrabFrame**

Function GrabFrame As stdole.Picture

Returns current video frame as VB Picture object

With this method you can load video frame into PictureBox control.

```
PictureBox.Picture = VideoCapX.GrabFrame
```

### **HTTPUpload**

Function HTTPUpload (WebServer As String, WebPage As String, Fields As String, Files As String)

Use HTTP upload protocol to send information and files to web server

Arguments:

WebServer = web server address

WebPage = name of upload web page

Fields = list of 'fieldname' and 'fieldvalue' values delimited with '|'

Files = list of 'fieldname' and 'file path' values delimited with '|'

Returns TRUE if successful, or FALSE otherwise.



```
vcx.HTTPUpload "www.mysite.com" , "upload.asp",  
"field1|value1|field2|value2" ,  
"file1|c:\folder\mypic.jpg|file2|c:\folder\myvideo.avi"
```

## **LoadProfileFromURL**

Function LoadProfileFromURL (URL As String) As Long

Loads WM profile data from .prx file. URL argument must start with 'http://' or 'file://'. Return value is 1 on success or 0 on failure.

## **PauseCapture**

Function PauseCapture As Long

Pause capture

## **Ping**

Function Ping (ServerAddress As String, Timeout As Long) As Long

method Ping

## **PlayerClose**

Function PlayerClose As Long

Closes media playback.

## **PlayerGetFrame**

Function PlayerGetFrame As Double

Returns current video frame number

See [UseVideoFilter](#).

## **PlayerGetFrameCount**

Function PlayerGetFrameCount As Double

Returns number of video frames in the movie

## **PlayerGetLenMS**

Function PlayerGetLenMS As Long

Returns media file length in milliseconds.

## **PlayerGetPos**

Function PlayerGetPos As Long

Returns current playing position.

### **PlayerGetVideoSize**

Function PlayerGetVideoSize (width As Long, height As Long) As Long

Returns video size for media player.

### **PlayerOpen**

Function PlayerOpen (filename) As Long

Opens media file for playback.

### **PlayerOpenDVD**

Function PlayerOpenDVD (path As String, AudioStream As Long, SubpictureStream As Long) As Long

Open DVD volume

## **PlayerSetFrame**

Function PlayerSetFrame (nFrame As Double) As Double

Sets current video frame

## **PlayerSetFullScreen**

Function PlayerSetFullScreen (Full As Long) As Long

Opens full-screen playback.

## **PlayerSetMute**

Function PlayerSetMute (Mute As Long) As Long

Mutes sound of media player.

## **PlayerSetPos**

Function PlayerSetPos (PosMS As Double) As Long

Sets current position for playback.

## **PlayerSetRate**

Function PlayerSetRate (NewRate As Double) As Double

Sets the playback rate

The playback rate is expressed as a ratio of the normal speed. Thus, 1.0 is normal playback speed, 0.5 is half speed, and 2.0 is twice speed. For audio streams, changing the rate also changes the pitch.

Negative values indicate reverse playback. Most filters do not support negative playback, but instead return an error code if the dRate parameter is negative.

If NewRate parameter is 0, this method returns current playback rate.  
Call this method only after player is initialized with PlayerOpen method.

## **PlayerSetSize**

Function PlayerSetSize (width As Long, height As Long) As Long

Sets media player window size.

## **PlayerStart**

Function PlayerStart As Long

Start playing media file.

## **PlayerStepFrames**

Function PlayerStepFrames (nFrames As Long) As Long

Steps nFrames in player mode

## **PlayerStepOneFrame**

Function PlayerStepOneFrame As Long

Display next frame

## **PlayerStop**

Function PlayerStop As Long

Stop playing media file.

## **PlayRemoteAudio**

Function PlayRemoteAudio (RemoteAddress As String) As Long

Connects to remote VideoCapX server and receives only audio stream.

## ReceiveAudio

Function ReceiveAudio (ServerAddress As String, Play As Boolean, nChannels As Long, nSamplesPerSecond As Long, nBytesPerSample As Long, PCMDData) As Long

Receive audio data packet from server

If you are not interested in PCM data, set last four parameters to 0.  
To play a received sound, set Play parameter to TRUE.  
Address parameter is a network address of remote VideoCapX server.

```
VideoCapX.ReceiveAudio "127.0.0.1", True, 0, 0, 0, 0
```

## ReceiveFrame

Function ReceiveFrame (ServerName As String) As stdole.Picture

Return video frame from remote server as Picture object.

Remote server must run VideoCapX control with ServerMode set to TRUE.  
Also, ServerPort and ServerPassword on both computers must be set to identical value.

```
Picture1.Picture = VideoCapX.ReceiveFrame("myvideoserver")
```

## Recompress

Function Recompress (SrcFile As String, DestFile As String) As Long

Copies AVI/WMV into new file using specified video compression.

If DestFile has an .AVI extension, VideoCodecIndex/AudioCodecIndex settings are used, or, if DestFile has .WMV extension, ProfileIndex/ProfileData settings are used for compression.

## RecompressEx

Function RecompresEx (SrcFile1 As String, SrcFile2 As String, DestFile As String, TimeStart As Double, TimeEnd As Double) As Long

Use this method to merge video and audio files and/or crop video files.

SrcFile1 is source video.

SrcFile2 is source audio MP3, WAV, WMA or AVI file.

DestFile is file to be created.

TimeStart and TimeEnd are time boundaries in milliseconds. If cropping is not needed, set these arguments to 0.

Destination AVI (or WMV) file is compressed using currently selected video/audio codec (or WM profile) .

Cut video file:

```
RecomrpessEx "original.avi", "", "new.avi", 5000, 15000
```

Merge video and audio into new file.

```
RecompressEx "video.avi", "audio.wav", "new.avi", 0, 0
```

## ResumeCapture

Function ResumeCapture As Long

Resume capture paused with PauseCapture method

## SaveBuffer

Sub SaveBuffer (fromTime As Double, timeLength As Double)

Saves current video buffer into a file with a name specified by CapFilename property and using video/audio codecs specified with VideoCodecIndex/AudioCodecIndex.

"fromTime" and "timeLength" parameters are in milliseconds from the beginning of the buffer. To save 5 seconds of video starting at 8-th second in buffer, use SaveBuffer(8000,5000) .



While the operation is running, `RecompressProgress` event is fired after every video frame saved.

### **SaveFrame**

Function `SaveFrame (filename As String) As Boolean`

Saves video image into file

### **SaveFrameJPG**

Function `SaveFrameJPG (filename As String, quality As Long) As Boolean`

Saves current video frame into JPG file

Quality parameter is a JPEG image quality setting (0-100).

```
Vcx1.SaveFrameJPG("C:\mypic.jpg",80)
```

### **SavePictureJPG**

Function `SavePictureJPG (Picture As stdole.Picture, filename As String, quality As Long) As Long`

Saves Picture object into JPG file.

Quality parameter is a JPEG image quality setting (0-100).

If `GetHBitmap()` method of .NET `Bitmap` class is used to get bitmap handle, it must be deleted after use to avoid memory leaks.

Example .NET code:

```

[System.Runtime.InteropServices.DllImport("gdi32.dll")]
public static extern bool DeleteObject(IntPtr hObject);

private void axVideoCapX1_NewFrame(object sender, EventArgs e)
{
    pictureBox1.Image = axVideoCapX1.GrabFrame();
    {
        IntPtr hb = ((System.Drawing.Bitmap)(pictureBox1.Image)).GetHbitmap();
        axVideoCapX2.SingleFrameAddPicture(hb.ToInt32());
        DeleteObject(hb);
    }
}

Vcx1.SaveFrameJPG(Picture1.Picture,"C:\mypic.jpg",80)
Vcx1.SaveFrameJPG(LoadPicture("c:\windows\setup.bmp"),"C:\setup.jpg",90)

```

## SelectSource

Function SelectSource As Long

Let the user select TWAIN source.

## SendScriptCommand

Function SendScriptCommand (Type As String, Data As String) As Long

Send script type/command pair to broadcast client. This method works only if WM broadcast started with StartBroadcast method is running.

Before you call StartBroadcast, you must load a custom WM profile with script stream enabled. See [ProfileData](#) property. To create a custom WM profile, you can use Windows Media Profile Editor tool available for free at Microsoft's web site. If currently selected WM profile doesn't have script stream configured, this method returns -1. On success, this method returns 0.

The following table lists script types that are supported by Windows Media Player.

<b>Script type</b>	<b>Description</b>
URL	The player sends the specified URL to the browser for display to the user. If an embedded player control is being used, you can add a specific frame reference to the URL by using the <i>&amp;&amp;framename</i> syntax.
FILENAME	A URL to another media file to be played.
CAPTION	A text string that is displayed in the captions area of Windows Media Player. This type supports standard HTML formatting, so the text can be formatted as you wish. An example of use is closed captioning.
EVENT	The name of an event that is to occur. The EVENT type supports customization for your own uses. The code for the specified event must be defined in the <u>Windows Media metafile</u> for the stream in order for the player to perform the specified event. An example of use is ad insertion.
OPENEVENT	This script precedes the actual EVENT. The OPENEVENT allows the player to pre-buffer the content so that when the EVENT occurs, the switch between streams appears to be seamless.
TEXT	A TEXT string that is displayed in the captions area of Windows Media Player. Can be plain text, SAMI, or HTML formatted text.

`vcx.SendScriptCommand "TEXT", "this is a caption / subtitle"`

### **SetAudioBalance**

Function SetAudioBalance (Balance As Long) As Long

Sets the balance of the audio signal

### **SetAudioDelay**

Function SetAudioDelay (DelayMS As Long) As Long

Sets audio delay (positive or negative) in captured AVI file. DelayMS argument is in milliseconds.

## SetAudioFormat

Function SetAudioFormat (FmtTag As Long, nChannels As Long, nSamplesPerSec As Long, nAvgBytesPerSec As Long, nBlockAlign As Long, nBitsPerSample As Long) As Boolean

Sets audio format for capture

FormatTag

Waveform-audio format type. Format tags are registered with Microsoft Corporation for many compression algorithms. A complete list of format tags can be found in the MMREG.H header file.

WAVE\_FORMAT\_PCM = 1

nChannels

Number of channels in the waveform-audio data. Monaural data uses one channel and stereo data uses two channels.

nSamplesPerSec

Sample rate, in samples per second (hertz), that each channel should be played or recorded. If wFormatTag is WAVE\_FORMAT\_PCM, then common values for nSamplesPerSec are 8.0 kHz, 11.025 kHz, 22.05 kHz, and 44.1 kHz. For non-PCM formats, this member must be computed according to the manufacturer's specification of the format tag.

nAvgBytesPerSec

Required average data-transfer rate, in bytes per second, for the format tag. If wFormatTag is WAVE\_FORMAT\_PCM, nAvgBytesPerSec should be equal to the product of nSamplesPerSec and nBlockAlign. For non-PCM formats, this member must be computed according to the manufacturer's specification of the format tag.

Playback and record software can estimate buffer sizes by using the nAvgBytesPerSec member.

nBlockAlign

Block alignment, in bytes. The block alignment is the minimum atomic unit of data for the wFormatTag format type. If wFormatTag is WAVE\_FORMAT\_PCM, nBlockAlign should be

equal to the product of `nChannels` and `wBitsPerSample` divided by 8 (bits per byte). For non-PCM formats, this member must be computed according to the manufacturer's specification of the format tag.

Playback and record software must process a multiple of `nBlockAlign` bytes of data at a time. Data written and read from a device must always start at the beginning of a block. For example, it is illegal to start playback of PCM data in the middle of a sample (that is, on a non-block-aligned boundary).

`nBitsPerSample`

Bits per sample for the `wFormatTag` format type. If `wFormatTag` is `WAVE_FORMAT_PCM`, then `wBitsPerSample` should be equal to 8 or 16. For non-PCM formats, this member must be set according to the manufacturer's specification of the format tag. Note that some compression schemes cannot define a value for `wBitsPerSample`, so this member can be zero.

## **SetAudioInputLevel**

Function `SetAudioInputLevel (Level As Long) As Long`

Sets the recording level for audio input selected with `AudioInputIndex` property. Level value is in range 0 to 100.

Call this method after you have set `Connected` property to `TRUE` and after you set `AudioInputIndex` property.

## **SetAudioVolume**

Function `SetAudioVolume (Volume As Long) As Long`

Sets audio renderer volume. Volume argument range is 0 - 100. if Volume is -1, this method returns current audio volume.

## SetBitmapOverlay

Function SetBitmapOverlay (Index As Long, BitmapHandle As Long, left As Long, top As Long, width As Long, height As Long, TransColor As Long, Alpha As Long) As Long

Sets bitmap to show on-video

There can be 40 bitmap overlays on video, use Index parameter (range 0-39) to set overlays.

BitmapHandle parameter is a Windows handle of the bitmap.  
For standard PictureBox control, use Picture.Handle property to get this value.

TransColor parameter is a RGB value of transparent color, if no transparency is used, set this parameter to -1.

Alpha parameter is in range 0 (transparent) to 255 (opaque) .

Use SetBitmapOverlay 0,0,0,0,0 to remove bitmap overlay.

VideoCapX.SetBitmapOverlay 0, Picture1.Picture.Handle, 0, 0, 320,240, -1,127

## SetChromaKey

Function SetChromaKey (BackImage As String, MinTransparentColor As Long, MaxTransparentColor As Long, BackOrFront As vckFlags) As Long

Sets chrom-key effect. BackImage parameter is a filename of static image background which will be visible through video. Color parameters are RGB values.

Parameter:

BackOrFront=1 ... Back image is behind video

BackOrFront=0 ... Back image is in front of video

MinTransparentColor=-2 ... "Green key" effect. Green color is replaced.

MinTransparentColor=-3 ... "Blue key" effect. Blue color is replaced.

In case green or blue key is used, MaxTransparentColor specifies tolerance.

' view lake image through dark pixels on video

vcx.SetChromaKey App.Path + "\lake.jpg", 0, RGB(90, 90, 90), 1

'view video through green pixels in effect.avi video .  
vcx.SetChromaKey "c:\effect.avi", -2, 20, 0

## **SetCrop**

Function SetCrop (x As Long, y As Long, W As Long, H As Long) As Long

Crops live-video stream to the rectangle of dimensions (W,H) and with top-left coordinate of (X,Y).

This method must be called before connecting VideoCapX to video source.

To capture a face in front of camera (if camera has 320x240 resolution), use:

VideoCapX.SetCrop 110, 45, 100, 150

## **SetFadeLevel**

Function SetFadeLevel (NewLevel As Long) As Long

Sets fade level (the range is 0-100, 0 is neutral) for video

## **SetFilterSettings**

Function SetFilterSettings (Filter As Long, Data As String) As Long

Set filter settings

Filter argument values:

- 1 = video compress filter
- 2 = audio compress filter
- 3 = video source filter
- 4 = audio source filter
- 5 = user filter

This method returns 0 on success or negative value on error.  
Data parameter is string retrieved by GetFitlerSettings method. Make sure that same filter is selected as when GetFilterSettings is called. Every fitler returns/accepts different format of settings binary data.

```
'before this, load filter data in string variable d  
VideoCapX.VideoCodecIndex = 6  
VideoCapX.SetFitlerSettings 1, d
```

### **SetHighPriority**

Function SetHighPriority (High As Boolean) As Boolean

Sets priority class for the current process. High argument is TRUE for high priority or FALSE for normal priority.

### **SetMasterAudioVolume**

Function SetMasterAudioVolume (LineID As Long, Volume As Long) As Long

Set master volume for specified mixer line. Volume argument range is 0 - 100. if Volume is -1, this method returns current audio volume.

LineID values:

DST_DIGITAL	1
DST_LINE	2
DST_MONITOR	3
DST_SPEAKERS	4
DST_HEADPHONES	5
DST_TELEPHONE	6
DST_WAVEIN	7
DST_VOICEIN	8
SRC_DIGITAL	11



SRC_LINE	12
SRC_MICROPHONE	13
SRC_SYNTHESIZER	14
SRC_COMPACTDISC	15
SRC_TELEPHONE	16
SRC_PCSPEAKER	17
SRC_WAVEOUT	18
SRC_AUXILIARY	19
SRC_ANALOG	20

### **SetMotionMask**

Function SetMotionMask (Index As Long, left As Long, top As Long, width As Long, height As Long) As Long

Sets rectangle(s) to ignore on the image while detecting motion.

Index parameter is in range 0 - 9. Dimmensions are in pixels.

### **SetOption**

Function SetOption (OptionIndex As Long, Value)

method SetOption

### **SetSlaveControl**

Function SetSlaveControl (Index As Long, CtlRef As Long, PosX As Long, PosY As Long, PosW As Long, PosH As Long, BorderWidth As Long, BorderColor As Long) As Long

Set video source control

## SetTextOverlay

Function SetTextOverlay (Index As Long, Caption As String, x As Long, y As Long, FontName As String, FontSize As Long, FColor As Long, BColor As Long) As Long

Sets on-video text caption.

Returns TRUE on succes, FALSE otherwise.

ID parameter is in range 0 to 19.

X, Y and FontSize parameters are in device pixels.

Use VisualBasic RGB function to set TextColor and TextBgColor parameters.

Set TextBgColor parameter to -1 for transparent text output.

Special values are "TIME" for Text parameter to show time-stamp and "SMPTE" for SMPTE-format time display.

To clear text caption, use SetTextOverlay method with an empty string as Text parameter.

To set date-time stamp in top-left corner on video, use:

```
VideoCapX.SetTextOverlay 0, "TIME", 0, 0, "Arial", 14, RGB(255,0,0), -1
```

## SetTunerChannel

Function SetTunerChannel (nChannel As Long, VideoSubChannel As Long, AudioSubChannel As Long) As Long

Set TV tuner channel

If nChannel argument is -1, the method returns current channel number.

If nChannel argument is -2, the method returns minimal channel number.

If nChannel argument is -3, the method returns maximal channel number.

Error return values:

-1 = Connected property not set

-2 = No TV tuner detected

-3 = Set/get channel failed

## SetTunerCountryCode

Function SetTunerCountryCode (Code As Long) As Long

Set/Get TV tuner country code

Codes are:

---

```
// Each entry consists of:  
// Country/region code  
// Cable frequency table ID  
// Broadcast frequency table ID  
// Analog video standard  
1, F_USA_CABLE, F_USA_BROAD, AnalogVideo_NTSC_M, // USA  
// Anguilla  
// Antigua  
// Bahamas  
// Barbados  
// Bermuda  
// British Virgin Islands  
// Canada  
// Cayman Islands  
// Dominica  
// Dominican Republic  
// Grenada  
// Jamaica  
// Montserrat  
// Nevis  
// St. Kitts  
// St. Vincent and the Grenadines  
// Trinidad and Tobago  
// Turks and Caicos Islands  
// Barbuda  
// Puerto Rico  
// Saint Lucia
```

// United States Virgin Islands  
2, F\_USA\_CABLE, F\_USA\_BROAD, AnalogVideo\_NTSC\_M, // Canada  
20, F\_UNI\_CABLE, F\_WEU\_BROAD, AnalogVideo\_SECAM\_B, // Egypt  
212, F\_UNI\_CABLE, F\_FIX\_BROAD, AnalogVideo\_SECAM\_B, // Morocco  
213, F\_UNI\_CABLE, F\_WEU\_BROAD, AnalogVideo\_PAL\_B, // Algeria  
216, F\_UNI\_CABLE, F\_WEU\_BROAD, AnalogVideo\_SECAM\_B, // Tunisia  
218, F\_UNI\_CABLE, F\_WEU\_BROAD, AnalogVideo\_SECAM\_B, // Libya  
220, F\_UNI\_CABLE, F\_FOT\_BROAD, AnalogVideo\_SECAM\_K, // Gambia  
221, F\_UNI\_CABLE, F\_FOT\_BROAD, AnalogVideo\_SECAM\_K, // Senegal Republic  
222, F\_UNI\_CABLE, F\_FIX\_BROAD, AnalogVideo\_SECAM\_B, // Mauritania  
223, F\_UNI\_CABLE, F\_USA\_BROAD, AnalogVideo\_SECAM\_K, // Mali  
224, F\_UNI\_CABLE, F\_USA\_BROAD, AnalogVideo\_SECAM\_K, // Guinea  
225, F\_UNI\_CABLE, F\_FIX\_BROAD, AnalogVideo\_SECAM\_K, // Cote D'Ivoire  
226, F\_UNI\_CABLE, F\_USA\_BROAD, AnalogVideo\_SECAM\_K, // Burkina Faso  
227, F\_UNI\_CABLE, F\_FOT\_BROAD, AnalogVideo\_SECAM\_K, // Niger  
228, F\_UNI\_CABLE, F\_FOT\_BROAD, AnalogVideo\_SECAM\_K, // Togo  
229, F\_UNI\_CABLE, F\_FOT\_BROAD, AnalogVideo\_SECAM\_K, // Benin  
230, F\_UNI\_CABLE, F\_WEU\_BROAD, AnalogVideo\_SECAM\_B, // Mauritius  
231, F\_UNI\_CABLE, F\_WEU\_BROAD, AnalogVideo\_PAL\_B, // Liberia  
232, F\_UNI\_CABLE, F\_WEU\_BROAD, AnalogVideo\_PAL\_B, // Sierra Leone  
233, F\_UNI\_CABLE, F\_WEU\_BROAD, AnalogVideo\_PAL\_B, // Ghana  
234, F\_UNI\_CABLE, F\_WEU\_BROAD, AnalogVideo\_PAL\_B, // Nigeria  
235, F\_UNI\_CABLE, F\_WEU\_BROAD, AnalogVideo\_PAL\_B, // Chad  
236, F\_UNI\_CABLE, F\_WEU\_BROAD, AnalogVideo\_PAL\_B, // Central African Republic  
237, F\_UNI\_CABLE, F\_WEU\_BROAD, AnalogVideo\_PAL\_B, // Cameroon  
238, F\_UNI\_CABLE, F\_FIX\_BROAD, AnalogVideo\_NTSC\_M, // Cape Verde Islands  
239, F\_UNI\_CABLE, F\_USA\_BROAD, AnalogVideo\_PAL\_B, // Sao Tome and Principe  
240, F\_UNI\_CABLE, F\_FIX\_BROAD, AnalogVideo\_SECAM\_B, // Equatorial Guinea  
241, F\_UNI\_CABLE, F\_FOT\_BROAD, AnalogVideo\_SECAM\_K, // Gabon  
242, F\_UNI\_CABLE, F\_FOT\_BROAD, AnalogVideo\_SECAM\_D, // Congo  
243, F\_UNI\_CABLE, F\_FOT\_BROAD, AnalogVideo\_SECAM\_K, // Congo(DRC)  
244, F\_UNI\_CABLE, F\_FIX\_BROAD, AnalogVideo\_PAL\_I, // Angola  
245, F\_UNI\_CABLE, F\_FIX\_BROAD, AnalogVideo\_NTSC\_M, // Guinea-Bissau  
246, F\_USA\_CABLE, F\_USA\_BROAD, AnalogVideo\_NTSC\_M, // Diego Garcia  
247, F\_UNI\_CABLE, F\_USA\_BROAD, AnalogVideo\_NTSC\_M, // Ascension Island  
248, F\_UNI\_CABLE, F\_USA\_BROAD, AnalogVideo\_PAL\_B, // Seychelle Islands  
249, F\_UNI\_CABLE, F\_WEU\_BROAD, AnalogVideo\_PAL\_B, // Sudan  
250, F\_UNI\_CABLE, F\_WEU\_BROAD, AnalogVideo\_PAL\_B, // Rwanda  
251, F\_UNI\_CABLE, F\_WEU\_BROAD, AnalogVideo\_PAL\_B, // Ethiopia  
252, F\_UNI\_CABLE, F\_WEU\_BROAD, AnalogVideo\_PAL\_B, // Somalia  
253, F\_UNI\_CABLE, F\_FOT\_BROAD, AnalogVideo\_SECAM\_K, // Djibouti  
254, F\_UNI\_CABLE, F\_WEU\_BROAD, AnalogVideo\_PAL\_B, // Kenya  
255, F\_UNI\_CABLE, F\_WEU\_BROAD, AnalogVideo\_PAL\_B, // Tanzania  
256, F\_UNI\_CABLE, F\_WEU\_BROAD, AnalogVideo\_PAL\_B, // Uganda  
257, F\_UNI\_CABLE, F\_FIX\_BROAD, AnalogVideo\_SECAM\_K, // Burundi  
258, F\_UNI\_CABLE, F\_FIX\_BROAD, AnalogVideo\_PAL\_B, // Mozambique  
260, F\_UNI\_CABLE, F\_WEU\_BROAD, AnalogVideo\_PAL\_B, // Zambia

261, F\_UNI\_CABLE, F\_FOT\_BROAD, AnalogVideo\_SECAM\_K, // Madagascar  
262, F\_UNI\_CABLE, F\_FOT\_BROAD, AnalogVideo\_SECAM\_K, // Reunion Island  
263, F\_UNI\_CABLE, F\_WEU\_BROAD, AnalogVideo\_PAL\_B, // Zimbabwe  
264, F\_UNI\_CABLE, F\_USA\_BROAD, AnalogVideo\_PAL\_I, // Namibia  
265, F\_UNI\_CABLE, F\_USA\_BROAD, AnalogVideo\_NTSC\_M, // Malawi  
266, F\_UNI\_CABLE, F\_USA\_BROAD, AnalogVideo\_PAL\_I, // Lesotho  
267, F\_UNI\_CABLE, F\_USA\_BROAD, AnalogVideo\_SECAM\_K, // Botswana  
268, F\_UNI\_CABLE, F\_USA\_BROAD, AnalogVideo\_PAL\_B, // Swaziland  
269, F\_UNI\_CABLE, F\_USA\_BROAD, AnalogVideo\_SECAM\_K, // Mayotte Island  
269, F\_UNI\_CABLE, F\_USA\_BROAD, AnalogVideo\_NTSC\_M, // Comoros  
27, F\_UNI\_CABLE, F\_UK\_BROAD, AnalogVideo\_PAL\_I, // South Africa  
290, F\_UNI\_CABLE, F\_USA\_BROAD, AnalogVideo\_NTSC\_M, // St. Helena  
291, F\_UNI\_CABLE, F\_USA\_BROAD, AnalogVideo\_NTSC\_M, // Eritrea  
297, F\_UNI\_CABLE, F\_USA\_BROAD, AnalogVideo\_NTSC\_M, // Aruba  
298, F\_UNI\_CABLE, F\_USA\_BROAD, AnalogVideo\_PAL\_B, // Faroe Islands  
299, F\_USA\_CABLE, F\_USA\_BROAD, AnalogVideo\_NTSC\_M, // Greenland  
30, F\_UNI\_CABLE, F\_WEU\_BROAD, AnalogVideo\_SECAM\_B, // Greece  
31, F\_UNI\_CABLE, F\_WEU\_BROAD, AnalogVideo\_PAL\_B, // Netherlands  
32, F\_WEU\_CABLE, F\_WEU\_BROAD, AnalogVideo\_PAL\_B, // Belgium  
33, F\_UNI\_CABLE, F\_FRA\_BROAD, AnalogVideo\_SECAM\_L, // France  
34, F\_UNI\_CABLE, F\_WEU\_BROAD, AnalogVideo\_PAL\_B, // Spain  
350, F\_UNI\_CABLE, F\_WEU\_BROAD, AnalogVideo\_PAL\_B, // Gibraltar  
351, F\_UNI\_CABLE, F\_WEU\_BROAD, AnalogVideo\_PAL\_B, // Portugal  
352, F\_UNI\_CABLE, F\_WEU\_BROAD, AnalogVideo\_PAL\_B, // Luxembourg  
353, F\_UNI\_CABLE, F\_IRE\_BROAD, AnalogVideo\_PAL\_I, // Ireland  
354, F\_UNI\_CABLE, F\_WEU\_BROAD, AnalogVideo\_PAL\_B, // Iceland  
355, F\_UNI\_CABLE, F\_ITA\_BROAD, AnalogVideo\_PAL\_B, // Albania  
356, F\_UNI\_CABLE, F\_WEU\_BROAD, AnalogVideo\_PAL\_B, // Malta  
357, F\_UNI\_CABLE, F\_WEU\_BROAD, AnalogVideo\_PAL\_B, // Cyprus  
358, F\_UNI\_CABLE, F\_WEU\_BROAD, AnalogVideo\_PAL\_B, // Finland  
359, F\_UNI\_CABLE, F\_EEU\_BROAD, AnalogVideo\_SECAM\_D, // Bulgaria  
36, F\_UNI\_CABLE, F\_EEU\_BROAD, AnalogVideo\_SECAM\_D, // Hungary  
370, F\_UNI\_CABLE, F\_USA\_BROAD, AnalogVideo\_PAL\_B, // Lithuania  
371, F\_UNI\_CABLE, F\_USA\_BROAD, AnalogVideo\_SECAM\_D, // Latvia  
372, F\_UNI\_CABLE, F\_USA\_BROAD, AnalogVideo\_PAL\_B, // Estonia  
373, F\_UNI\_CABLE, F\_EEU\_BROAD, AnalogVideo\_SECAM\_D, // Moldova  
374, F\_UNI\_CABLE, F\_EEU\_BROAD, AnalogVideo\_SECAM\_D, // Armenia  
375, F\_UNI\_CABLE, F\_EEU\_BROAD, AnalogVideo\_SECAM\_D, // Belarus  
376, F\_UNI\_CABLE, F\_USA\_BROAD, AnalogVideo\_NTSC\_M, // Andorra  
377, F\_UNI\_CABLE, F\_WEU\_BROAD, AnalogVideo\_SECAM\_G, // Monaco  
378, F\_UNI\_CABLE, F\_ITA\_BROAD, AnalogVideo\_PAL\_B, // San Marino  
380, F\_UNI\_CABLE, F\_EEU\_BROAD, AnalogVideo\_SECAM\_D, // Ukraine  
381, F\_UNI\_CABLE, F\_WEU\_BROAD, AnalogVideo\_PAL\_B, // Serbia and Montenegro  
385, F\_UNI\_CABLE, F\_WEU\_BROAD, AnalogVideo\_PAL\_B, // Croatia  
386, F\_UNI\_CABLE, F\_WEU\_BROAD, AnalogVideo\_PAL\_B, // Slovenia  
387, F\_UNI\_CABLE, F\_WEU\_BROAD, AnalogVideo\_PAL\_B, // Bosnia and Herzegovina  
389, F\_UNI\_CABLE, F\_WEU\_BROAD, AnalogVideo\_PAL\_B, // F.Y.R.O.M. (Former

Yugoslav Republic of Macedonia)

39, F\_UNI\_CABLE, F\_ITA\_BROAD, AnalogVideo\_PAL\_B, // Italy  
39, F\_UNI\_CABLE, F\_ITA\_BROAD, AnalogVideo\_PAL\_B, // Vatican City  
40, F\_UNI\_CABLE, F\_EEU\_BROAD, AnalogVideo\_PAL\_D, // Romania  
41, F\_UNI\_CABLE, F\_WEU\_BROAD, AnalogVideo\_PAL\_B, // Switzerland  
41, F\_UNI\_CABLE, F\_WEU\_BROAD, AnalogVideo\_PAL\_B, // Liechtenstein  
420, F\_UNI\_CABLE, F\_CZE\_BROAD, AnalogVideo\_PAL\_D, // Czech Republic  
421, F\_UNI\_CABLE, F\_WEU\_BROAD, AnalogVideo\_PAL\_B, // Slovak Republic  
43, F\_UNI\_CABLE, F\_WEU\_BROAD, AnalogVideo\_PAL\_B, // Austria  
44, F\_UK\_CABLE, F\_UK\_BROAD, AnalogVideo\_PAL\_I, // United Kingdom  
45, F\_UNI\_CABLE, F\_WEU\_BROAD, AnalogVideo\_PAL\_B, // Denmark  
46, F\_WEU\_CABLE, F\_WEU\_BROAD, AnalogVideo\_PAL\_B, // Sweden  
47, F\_UNI\_CABLE, F\_WEU\_BROAD, AnalogVideo\_PAL\_B, // Norway  
48, F\_UNI\_CABLE, F\_EEU\_BROAD, AnalogVideo\_PAL\_B, // Poland  
49, F\_WEU\_CABLE, F\_WEU\_BROAD, AnalogVideo\_PAL\_B, // Germany  
500, F\_UNI\_CABLE, F\_UK\_BROAD, AnalogVideo\_PAL\_I, // Falkland Islands (Islas Malvinas)  
501, F\_USA\_CABLE, F\_USA\_BROAD, AnalogVideo\_NTSC\_M, // Belize  
502, F\_USA\_CABLE, F\_USA\_BROAD, AnalogVideo\_NTSC\_M, // Guatemala  
503, F\_USA\_CABLE, F\_USA\_BROAD, AnalogVideo\_NTSC\_M, // El Salvador  
504, F\_USA\_CABLE, F\_USA\_BROAD, AnalogVideo\_NTSC\_M, // Honduras  
505, F\_USA\_CABLE, F\_USA\_BROAD, AnalogVideo\_NTSC\_M, // Nicaragua  
506, F\_USA\_CABLE, F\_USA\_BROAD, AnalogVideo\_NTSC\_M, // Costa Rica  
507, F\_USA\_CABLE, F\_USA\_BROAD, AnalogVideo\_NTSC\_M, // Panama  
508, F\_UNI\_CABLE, F\_FOT\_BROAD, AnalogVideo\_SECAM\_K, // St. Pierre and Miquelon  
509, F\_USA\_CABLE, F\_USA\_BROAD, AnalogVideo\_NTSC\_M, // Haiti  
51, F\_USA\_CABLE, F\_USA\_BROAD, AnalogVideo\_NTSC\_M, // Peru  
52, F\_USA\_CABLE, F\_USA\_BROAD, AnalogVideo\_NTSC\_M, // Mexico  
53, F\_USA\_CABLE, F\_USA\_BROAD, AnalogVideo\_NTSC\_M, // Cuba  
53, F\_USA\_CABLE, F\_USA\_BROAD, AnalogVideo\_NTSC\_M, // Guantanamo Bay  
54, F\_USA\_CABLE, F\_USA\_BROAD, AnalogVideo\_PAL\_N, // Argentina  
55, F\_USA\_CABLE, F\_USA\_BROAD, AnalogVideo\_PAL\_M, // Brazil  
56, F\_USA\_CABLE, F\_USA\_BROAD, AnalogVideo\_NTSC\_M, // Chile  
57, F\_USA\_CABLE, F\_USA\_BROAD, AnalogVideo\_NTSC\_M, // Colombia  
58, F\_USA\_CABLE, F\_USA\_BROAD, AnalogVideo\_NTSC\_M, // Bolivarian Republic of Venezuela  
590, F\_UNI\_CABLE, F\_FOT\_BROAD, AnalogVideo\_SECAM\_K, // Guadeloupe  
590, F\_UNI\_CABLE, F\_USA\_BROAD, AnalogVideo\_NTSC\_M, // French Antilles  
591, F\_USA\_CABLE, F\_USA\_BROAD, AnalogVideo\_PAL\_N, // Bolivia  
592, F\_UNI\_CABLE, F\_FOT\_BROAD, AnalogVideo\_SECAM\_K, // Guyana  
593, F\_USA\_CABLE, F\_USA\_BROAD, AnalogVideo\_NTSC\_M, // Ecuador  
594, F\_UNI\_CABLE, F\_FOT\_BROAD, AnalogVideo\_SECAM\_K, // French Guiana  
595, F\_USA\_CABLE, F\_USA\_BROAD, AnalogVideo\_PAL\_N, // Paraguay  
596, F\_UNI\_CABLE, F\_FOT\_BROAD, AnalogVideo\_SECAM\_K, // Martinique  
597, F\_USA\_CABLE, F\_USA\_BROAD, AnalogVideo\_NTSC\_M, // Suriname  
598, F\_USA\_CABLE, F\_USA\_BROAD, AnalogVideo\_PAL\_N, // Uruguay  
599, F\_USA\_CABLE, F\_USA\_BROAD, AnalogVideo\_NTSC\_M, // Netherlands Antilles

60, F\_UNI\_CABLE, F\_WEU\_BROAD, AnalogVideo\_PAL\_B, // Malaysia  
61, F\_UNI\_CABLE, F\_OZ\_\_BROAD, AnalogVideo\_PAL\_B, // Australia  
61, F\_UNI\_CABLE, F\_USA\_BROAD, AnalogVideo\_NTSC\_M, // Cocos-Keeling Islands  
62, F\_UNI\_CABLE, F\_USA\_BROAD, AnalogVideo\_PAL\_B, // Indonesia  
63, F\_USA\_CABLE, F\_USA\_BROAD, AnalogVideo\_NTSC\_M, // Philippines  
64, F\_UNI\_CABLE, F\_NZ\_\_BROAD, AnalogVideo\_PAL\_B, // New Zealand  
65, F\_UNI\_CABLE, F\_WEU\_BROAD, AnalogVideo\_PAL\_B, // Singapore  
66, F\_UNI\_CABLE, F\_WEU\_BROAD, AnalogVideo\_PAL\_B, // Thailand  
670, F\_UNI\_CABLE, F\_USA\_BROAD, AnalogVideo\_NTSC\_M, // Saipan Island  
670, F\_UNI\_CABLE, F\_USA\_BROAD, AnalogVideo\_NTSC\_M, // Rota Island  
670, F\_UNI\_CABLE, F\_USA\_BROAD, AnalogVideo\_NTSC\_M, // Tinian Island  
671, F\_USA\_CABLE, F\_USA\_BROAD, AnalogVideo\_NTSC\_M, // Guam  
672, F\_UNI\_CABLE, F\_USA\_BROAD, AnalogVideo\_NTSC\_M, // Christmas Island  
672, F\_UNI\_CABLE, F\_USA\_BROAD, AnalogVideo\_NTSC\_M, // Australian Antarctic  
Territory  
672, F\_UNI\_CABLE, F\_USA\_BROAD, AnalogVideo\_PAL\_B, // Norfolk Island  
673, F\_UNI\_CABLE, F\_WEU\_BROAD, AnalogVideo\_PAL\_B, // Brunei  
674, F\_UNI\_CABLE, F\_USA\_BROAD, AnalogVideo\_NTSC\_M, // Nauru  
675, F\_UNI\_CABLE, F\_USA\_BROAD, AnalogVideo\_PAL\_B, // Papua New Guinea  
676, F\_UNI\_CABLE, F\_USA\_BROAD, AnalogVideo\_NTSC\_M, // Tonga  
677, F\_UNI\_CABLE, F\_USA\_BROAD, AnalogVideo\_NTSC\_M, // Solomon Islands  
678, F\_UNI\_CABLE, F\_USA\_BROAD, AnalogVideo\_NTSC\_M, // Vanuatu  
679, F\_UNI\_CABLE, F\_USA\_BROAD, AnalogVideo\_NTSC\_M, // Fiji Islands  
680, F\_UNI\_CABLE, F\_USA\_BROAD, AnalogVideo\_NTSC\_M, // Palau  
681, F\_UNI\_CABLE, F\_USA\_BROAD, AnalogVideo\_SECAM\_K, // Wallis and Futuna Islands  
682, F\_UNI\_CABLE, F\_USA\_BROAD, AnalogVideo\_PAL\_B, // Cook Islands  
683, F\_UNI\_CABLE, F\_USA\_BROAD, AnalogVideo\_NTSC\_M, // Niue  
684, F\_USA\_CABLE, F\_USA\_BROAD, AnalogVideo\_NTSC\_M, // Territory of American  
Samoa  
685, F\_UNI\_CABLE, F\_USA\_BROAD, AnalogVideo\_PAL\_B, // Samoa  
686, F\_UNI\_CABLE, F\_USA\_BROAD, AnalogVideo\_PAL\_B, // Kiribati Republic  
687, F\_UNI\_CABLE, F\_FOT\_BROAD, AnalogVideo\_SECAM\_K, // New Caledonia  
688, F\_UNI\_CABLE, F\_USA\_BROAD, AnalogVideo\_NTSC\_M, // Tuvalu  
689, F\_UNI\_CABLE, F\_FOT\_BROAD, AnalogVideo\_SECAM\_K, // French Polynesia  
690, F\_UNI\_CABLE, F\_USA\_BROAD, AnalogVideo\_NTSC\_M, // Tokelau  
691, F\_USA\_CABLE, F\_USA\_BROAD, AnalogVideo\_NTSC\_M, // Micronesia  
692, F\_UNI\_CABLE, F\_USA\_BROAD, AnalogVideo\_NTSC\_M, // Marshall Islands  
7, F\_UNI\_CABLE, F\_EEU\_BROAD, AnalogVideo\_SECAM\_D, // Russia  
7, F\_UNI\_CABLE, F\_EEU\_BROAD, AnalogVideo\_SECAM\_D, // Kazakhstan  
7, F\_UNI\_CABLE, F\_EEU\_BROAD, AnalogVideo\_SECAM\_D, // Kyrgyzstan  
7, F\_UNI\_CABLE, F\_EEU\_BROAD, AnalogVideo\_SECAM\_D, // Tajikistan  
7, F\_UNI\_CABLE, F\_EEU\_BROAD, AnalogVideo\_SECAM\_D, // Turkmenistan  
7, F\_UNI\_CABLE, F\_EEU\_BROAD, AnalogVideo\_SECAM\_D, // Uzbekistan  
81, F\_JAP\_CABLE, F\_JAP\_BROAD, AnalogVideo\_NTSC\_M\_J, // Japan  
82, F\_USA\_CABLE, F\_USA\_BROAD, AnalogVideo\_NTSC\_M, // Korea (South)  
84, F\_USA\_CABLE, F\_USA\_BROAD, AnalogVideo\_NTSC\_M, // Vietnam  
850, F\_UNI\_CABLE, F\_EEU\_BROAD, AnalogVideo\_SECAM\_D, // Korea (North)

852, F\_UNI\_CABLE, F\_UK\_BROAD, AnalogVideo\_PAL\_I, // Hong Kong SAR  
853, F\_UNI\_CABLE, F\_UK\_BROAD, AnalogVideo\_PAL\_I, // Macao SAR  
855, F\_USA\_CABLE, F\_USA\_BROAD, AnalogVideo\_PAL\_B, // Cambodia  
856, F\_UNI\_CABLE, F\_USA\_BROAD, AnalogVideo\_PAL\_B, // Laos  
86, F\_CHN\_CABLE, F\_CHN\_BROAD, AnalogVideo\_PAL\_D, // China  
871, F\_UNI\_CABLE, F\_USA\_BROAD, AnalogVideo\_NTSC\_M, // INMARSAT (Atlantic-East)  
872, F\_UNI\_CABLE, F\_USA\_BROAD, AnalogVideo\_NTSC\_M, // INMARSAT (Pacific)  
873, F\_UNI\_CABLE, F\_USA\_BROAD, AnalogVideo\_NTSC\_M, // INMARSAT (Indian)  
874, F\_UNI\_CABLE, F\_USA\_BROAD, AnalogVideo\_NTSC\_M, // INMARSAT (Atlantic-West)  
880, F\_UNI\_CABLE, F\_WEU\_BROAD, AnalogVideo\_PAL\_B, // Bangladesh  
886, F\_USA\_CABLE, F\_USA\_BROAD, AnalogVideo\_NTSC\_M, // Taiwan  
90, F\_UNI\_CABLE, F\_USA\_BROAD, AnalogVideo\_PAL\_B, // Turkey  
91, F\_UNI\_CABLE, F\_WEU\_BROAD, AnalogVideo\_PAL\_B, // India  
92, F\_UNI\_CABLE, F\_WEU\_BROAD, AnalogVideo\_PAL\_B, // Pakistan  
93, F\_UNI\_CABLE, F\_WEU\_BROAD, AnalogVideo\_PAL\_B, // Afghanistan  
94, F\_UNI\_CABLE, F\_WEU\_BROAD, AnalogVideo\_PAL\_B, // Sri Lanka  
95, F\_UNI\_CABLE, F\_USA\_BROAD, AnalogVideo\_NTSC\_M, // Myanmar  
960, F\_UNI\_CABLE, F\_WEU\_BROAD, AnalogVideo\_PAL\_B, // Maldives  
961, F\_UNI\_CABLE, F\_WEU\_BROAD, AnalogVideo\_SECAM\_B, // Lebanon  
962, F\_UNI\_CABLE, F\_WEU\_BROAD, AnalogVideo\_PAL\_B, // Jordan  
963, F\_UNI\_CABLE, F\_WEU\_BROAD, AnalogVideo\_SECAM\_B, // Syria  
964, F\_UNI\_CABLE, F\_WEU\_BROAD, AnalogVideo\_SECAM\_B, // Iraq  
965, F\_UNI\_CABLE, F\_WEU\_BROAD, AnalogVideo\_PAL\_B, // Kuwait  
966, F\_UNI\_CABLE, F\_WEU\_BROAD, AnalogVideo\_SECAM\_B, // Saudi Arabia  
967, F\_UNI\_CABLE, F\_WEU\_BROAD, AnalogVideo\_PAL\_B, // Yemen  
968, F\_UNI\_CABLE, F\_WEU\_BROAD, AnalogVideo\_PAL\_B, // Oman  
971, F\_UNI\_CABLE, F\_WEU\_BROAD, AnalogVideo\_PAL\_B, // United Arab Emirates  
972, F\_UNI\_CABLE, F\_WEU\_BROAD, AnalogVideo\_PAL\_B, // Israel  
973, F\_UNI\_CABLE, F\_WEU\_BROAD, AnalogVideo\_PAL\_B, // Bahrain  
974, F\_UNI\_CABLE, F\_WEU\_BROAD, AnalogVideo\_PAL\_B, // Qatar  
975, F\_UNI\_CABLE, F\_USA\_BROAD, AnalogVideo\_NTSC\_M, // Bhutan  
976, F\_UNI\_CABLE, F\_EEU\_BROAD, AnalogVideo\_SECAM\_D, // Mongolia  
977, F\_UNI\_CABLE, F\_USA\_BROAD, AnalogVideo\_PAL\_B, // Nepal  
98, F\_UNI\_CABLE, F\_WEU\_BROAD, AnalogVideo\_SECAM\_B, // Iran  
994, F\_UNI\_CABLE, F\_EEU\_BROAD, AnalogVideo\_SECAM\_D, // Azerbaijan  
995, F\_UNI\_CABLE, F\_EEU\_BROAD, AnalogVideo\_SECAM\_D, // Georgia  
0, 0, 0, 0 // End of the list

## SetTunerInputType

Function SetTunerInputType (InputType As Long) As Long



Set / retrieve TV tuner input type; cable or antenna.

InputType parameter values:

1 = Cable

2 = Antenna

-1 = retrieve current input type

Negative return values indicate an error.

## SetTunerMode

Function SetTunerMode (Mode As Long) As Long

Sets a multifunction tuner to the specified mode.

Available mode constants are:

AMTUNER\_MODE\_DEFAULT = 0x0000,

AMTUNER\_MODE\_TV = 0x0001,

AMTUNER\_MODE\_FM\_RADIO = 0x0002,

AMTUNER\_MODE\_AM\_RADIO = 0x0004,

AMTUNER\_MODE\_DSS = 0x0008 ,

AMTUNER\_MODE\_DTV = 0x0010

If this method is called with Mode parameter = -2, a Long value with available modes are returned.

If Mode is -1, current tuner mode is returned.

## SetTVFormat

Function SetTVFormat (NewFormat As Long) As Long

Set TV format (PAL, NTSC, etc.)

If NewFormat argument is -1, this method returns current TV format.

TV format values are:

```
AnalogVideo_None = 0x00000000
AnalogVideo_NTSC_M = 0x00000001,
AnalogVideo_NTSC_M_J = 0x00000002,
AnalogVideo_NTSC_433 = 0x00000004,
AnalogVideo_PAL_B = 0x00000010,
AnalogVideo_PAL_D = 0x00000020,
AnalogVideo_PAL_H = 0x00000080,
AnalogVideo_PAL_I = 0x00000100,
AnalogVideo_PAL_M = 0x00000200,
AnalogVideo_PAL_N = 0x00000400,
AnalogVideo_PAL_60 = 0x00000800,
AnalogVideo_SECAM_B = 0x00001000,
AnalogVideo_SECAM_D = 0x00002000,
AnalogVideo_SECAM_G = 0x00004000,
AnalogVideo_SECAM_H = 0x00008000,
AnalogVideo_SECAM_K = 0x00010000,
AnalogVideo_SECAM_K1 = 0x00020000,
AnalogVideo_SECAM_L = 0x00040000,
AnalogVideo_SECAM_L1 = 0x00080000,
AnalogVideo_PAL_N_COMBO = 0x00100000
```

## SetVideoFormat

Function SetVideoFormat (width As Long, height As Long) As Boolean

Set video image dimensions

Returns TRUE if successful or FALSE otherwise.

Because video formats are device-specific, applications should check the return value from this function to determine if the format is accepted by the driver.

## SetVideoFormatEx

Function SetVideoFormatEx (CapabilityIndex As Long) As Long

Sets video format by capability index returned by GetVideoCaps method

### **SetVideoProcAmp**

Function SetVideoProcAmp (ValueIndex As Long, nNewValue As Long) As Long

Set video properties

### **SetZoom**

Function SetZoom (left As Long, top As Long, width As Long, height As Long) As Long

Set zoom rectangle on video. Use all zeros as parameters to this method to reset zoom.

Dim w, h

w = vcx.VideoWidth / 2

h = vcx.VideoHeight / 2

vcx.SetZoom w / 2, h / 2, w, h

### **ShowAudioCodecDlg**

Function ShowAudioCodecDlg As Long

Shows audio codec dialog.

Displays a settings dialog provided by video/audio device driver. Must be connected to use this method.

## **ShowAudioFormatDlg**

Function ShowAudioFormatDlg As Long

Shows audio format dialog.

Displays a settings dialog provided by video/audio device driver. Must be connected to use this method.

## **ShowAudioSourceDlg**

Function ShowAudioSourceDlg As Long

Shows audio source dialog.

Displays a settings dialog provided by video/audio device driver. Must be connected to use this method.

## **ShowTunerDlg**

Function ShowTunerDlg As Long

Display TV tuner properties dialog

## **ShowUserFilterDlg**

Function ShowUserFilterDlg (FilterIndex As Long) As Long

Display user filter property page

## **ShowVideoCodecDlg**

Function ShowVideoCodecDlg As Long

Shows video codec dialog.

Displays a settings dialog provided by video/audio device driver. Must be connected to use this method.

## **ShowVideoCrossbarDlg**

Function ShowVideoCrossbarDlg As Long

Display video crossbar dialog

## **ShowVideoFormatDlg**

Function ShowVideoFormatDlg As Long

Shows video format dialog.

Displays a settings dialog provided by video/audio device driver. Must be connected to use this method.

## ShowVideoSourceDlg

Function ShowVideoSourceDlg As Long

Shows video source dialog.

Displays a settings dialog provided by video/audio device driver. Must be connected to use this method.

## SingleFrameAdd

Function SingleFrameAdd As Long

Adds current video frame into AVI file opened by SingleFrameOpen method

Preview must be enabled.

Single frame capture and real-time capture can't run in the same time.

## SingleFrameAddPicture

Function SingleFrameAddPicture (BitmapHandle As Long) As Long

Adds a Windows bitmap to the AVI file created with SingleFrameAdd method.

If GetHBitmap() method of .NET Bitmap class is used to get bitmap handle, it must be deleted after use to avoid memory leaks.

Example:

```
[System.Runtime.InteropServices.DllImport("gdi32.dll")]
public static extern bool DeleteObject(IntPtr hObject);

private void axVideoCapX1_NewFrame(object sender, EventArgs e)
{
    pictureBox1.Image = axVideoCapX1.GrabFrame();
}
```

```
IntPtr hb = ((System.Drawing.Bitmap)(pictureBox1.Image)).GetHbitmap();
axVideoCapX2.SingleFrameAddPicture(hb.ToInt32());
DeleteObject(hb);
}
}
```

### **SingleFrameClose**

Function SingleFrameClose As Long

Closes single-frame AVI capture

### **SingleFrameOpen**

Function SingleFrameOpen (fps As Double) As Long

Creates AVI file for single-frame capturing.

Preview must be enabled.

Single frame capture and real-time capture can't run in the same time.

AVI filename is specified by CapFilename property of VideoCapX control.

Fps parameter sets frames-per-second value in new AVI file. Use SingleFrameOpen(5) for 5 frames-per-second AVI.

### **StartBroadcast**

Function StartBroadcast (port As Long, MaxConnections As Long) As Long

Starts WindowsMedia network broadcast at specified port. Use Windows MediaPlayer's OpenURL command to see video on network.

This method starts WindowsMedia broadcast from local PC.

Parameter:

**port** specifies TCP/IP port number to use for broadcast.

**MaxConnections** specifies how many clients can connect.

Before starting broadcast, you should select WM profile (bitrate, etc.) by setting ProfileIndex (ProfileData) property.

When a client (Windows Media Player) connects, ConnectionRequest event is raised. When client ends connection, ConnectionClosed event is raised.

```
vcx.Connected=TRUE
```

```
vcx.Preview=TRUE
```

```
vcx.WMAttributes="my title|author is me|copyright to me|rating is 5|this is description "
```

```
vcx.StartBroadcast 8080,5
```

### StartBroadcastPush

Function StartBroadcastPush (URL As String, User As String, password As String) As Long

Start sending broadcast to Windows Media server publishing point

String that contains the URL of the publishing point on the Windows Media server. For example, if the URL is "http://MyServer/MyPublishingPoint", the push sink connects to the publishing point named MyPublishingPoint on the server named MyServer. The default port number is 80. If the server is using a different port, specify the port number in the URL. For example, "http://MyServer:8080/MyPublishingPoint" specifies port number 8080.

If the publishing point specified in pwsURL does not exist, the server creates a new publishing point. The caller must have write and create permissions on the server. The new publishing point has the same configuration as the server's default publishing point.

Use **Username** and **Password** parameters to authorize to Windows Media Server.

```
vcx.WMAttributes="my title|author is me|copyright to me|rating is 5|this is description "
```

```
vcx.StartBroadcastPush "http://myserver:8080/pubpoint","mylogin","mypassword"
```

### StartCapture

Function StartCapture As Boolean

Starts video capture



Returns TRUE if successful or FALSE otherwise.  
Captured data is saved into file specified in CapFilename property.

Video can be captured in AVI or WMV files. If CapFilename property has .AVI extension, audio/video codec can be specified using AudioCodecIndex/VideoCodecIndex properties. If .WMV file is being captured, audio/video compression is determined by ProfileIndex or ProfileData properties.  
WM stream attributes can be set using WMAttributes property.

### **StopBroadcast**

Function StopBroadcast As Long  
Stops WM broadcast

### **StopCapture**

Function StopCapture As Boolean  
Stops video capture

### **StoreAutoTune**

Function StoreAutoTune As Long  
The StoreAutoTune method saves the fine-tuning information for all channels.

## UploadFile

Function UploadFile (server As String, username As String, password As String, path As String, server\_filename As String, local\_filepath As String, [port As Long = 21]) As Boolean

Upload a file to FTP server

## UploadFrame

Function UploadFrame (server As String, username As String, password As String, path As String, filename As String, port As Long, quality As Long) As Boolean

Sends current video frame to FTP server

Quality parameter is a JPEG image quality setting (0-100).  
Port is usually 21 for FTP service.

See FTPPassiveMode property.

```
Vcx1.UploadFrame("ftp.foo.com","john","tiger","images","mypic.jpg",21,70)
```

## VCRSetMode

Function VCRSetMode (Mode As Long) As Long

Control Digital Video VCR. Use this method to change VCR modes of DV camcorder.

Return value of -1 indicates an error or no VCR present.  
Return value of 0 indicates no media present in VCR.

Modes are:

- 1 play
- 2 stop
- 3 pause
- 4 resume
- 5 fast-forward
- 6 rewind
- 7 record
- 8 record single frame
- 9 record pause
- 10 frame-step forward
- 11 frame-step back
- 12 play-fastest-forward
- 13 play-fastest-rev
- 14 play-slowest-forward
- 15 play-slowest-rev

To get current VCR mode:

```
CurMode = VideoCapX.VCRSetMode(0)
```

To start playing:

```
VideoCapX.VCRSetMode(1)
```

## Events

### CaptureEnd

Sub CaptureEnd

Triggered when capture is ended

### CaptureReady

Sub CaptureReady

Raised after StartCapture is called but before any video is actually captured into file. It gives application the opportunity to display 'press to start capture...' message.

## **CaptureStart**

Sub CaptureStart

Triggered when capture is started

## **DeviceLost**

Sub DeviceLost

Raised when device lost is detected. Such as camera removal or cable plug-out.

## **FullscreenLost**

Sub FullscreenLost

Raised when full-screen mode ends due to user action

## **NewFrame**

Sub NewFrame

Raised when new video frame is available

## **RecompressCompleted**

Sub RecompressCompleted

Recompress method runs in background. This event is fired when recompression is finished.

## **RecompressProgress**

Sub RecompressProgress (nPercent As Long, Cancel As Long)

Reports progress of Recompress method processing.