

The Fusion Research Video Player can be controlled through Serial and HTTP request.

The format is the same for either:

The "URI" sent to the server on port 4440, or player on port 4121 is:

/Set?Group=[Group]&Prop=[Property]&Op=[Operator]&Value=[Value]&Dir=[Direction]&Param1=[Param1]

where words in braces are replaced with entries from the table below

	Group	Property	Operator	Value	Direc Param1	What is does
	Navigation	NavAction	Set	VideoListGrid	[na]	Jump to Spreadsheet view
	Navigation	NavAction	Set	VideoArtGrid	[na]	Jump to CoverArt view
	Navigation	NavAction	Set	ArtListToggle	[na]	Toggle between Art and List views
	Navigation	NavAction	Set	OSDMenu	[na]	Bring up the ODS menu (while playing a video)
	Navigation	NavAction	Set	Title	[na]	Go to Title menu
	Navigation	NavAction	Set	Root	[na]	Go to Root menu
	Navigation	NavAction	Set	PageUp	[na]	Move up one "page"
	Navigation	NavAction	Set	PageDown	[na]	Move down one "page"
	Navigation	NavAction	Set	Up	[na]	Move up
	Navigation	NavAction	Set	Down	[na]	Move Down
	Navigation	NavAction	Set	Left	[na]	Move Left
	Navigation	NavAction	Set	Right	[na]	Move Right
	Navigation	NavAction	Set	Enter	[na]	"Select" current "thing"
	Navigation	NavAction	Set	Cancel	[na]	Exit an operation
Depricated	Navigation	NavAction	Set	Back	[na]	Return from a menu
	Navigation	NavAction	Set	Sort	[na]	Sort records
	Navigation	NavAction	Set	Filter	[na]	Filter Records
	Navigation	NavAction	Set	TitleOrMenu	[na]	Open user Menu (or Title then Root in DVD)
	Navigation	NavAction	Set	RootOrMenu	[na]	Open user Menu (or Root then Title in DVD)
	Navigation	NavAction	Set	MusicQueue	[na]	Open the Music Queue (in music mode only, Exit leaves the Queue)

	Transport	State	Set	Play	[na]	Play video (discrete)
	Transport	State	Set	Pause	[na]	Pause video (discrete)
	Transport	State	Set	Stop	[na]	Stop video (discrete)
	Transport	State	Set	PlayPause	[na]	Play/Pause toggle video
	Transport	State	Set	Record	[na]	Rip a disc (if available)
Depricated	Transport	Scan	Inc	[na]	1	Fast Forward (more)
	Transport	Slow	Inc	[na]	1	Slow Forward (more)
Depricated	Transport	Scan	Inc	[na]	-1	Fast Rewind (more)
	Transport	Slow	Inc	[na]	-1	Slow Rewind (more)
	Transport	Frame	Set	1	[na]	Frame advance
	Transport	Position	Set	[HH:MM:SS]	[na]	Jump to a video position by Hour/Minute/Second
TBD	Transport	Position	Inc	SS		Jump ahead in the title by SS seconds.
TBD	Transport	Position	Dec	SS		Jump back in the title by SS seconds.
	DVD	Title	Set	[#]	[na]	Go to specific Title
	DVD	Title	Inc	[na]	[na]	Next Title
	DVD	Title	Dec	[na]	[na]	Previous Title
	DVD	Chapter	Set	[#]	[na]	Go to specific Chapter
	DVD	Chapter	Inc	[na]	[na]	Next Chapter
	DVD	Chapter	Dec	[na]	[na]	Previous Chapter
	DVD	Audio	Set	[#]	[na]	Go to specific Audio stream
	DVD	Audio	Inc	[na]	[na]	Next Audio stream
	DVD	Audio	Dec	[na]	[na]	Previous Audio stream
	DVD	Angle	Set	[#]	[na]	Go to specific Angle
	DVD	Angle	Inc	[na]	[na]	Next Angle
	DVD	Angle	Dec	[na]	[na]	Previous Angle
	DVD	Subpicture	Set	[#]	[na]	Go to specific Subpicture stream
	DVD	Subpicture	Inc	[na]	[na]	Next Subpicture stream
	DVD	Subpicture	Dec	[na]	[na]	Previous Subpicture stream
	DVD	SubpictureOn	Set	[True/False]	[na]	Set Subpicture display on (true) or off (False)
	DVD	ClosedCaption	Set	[#]	[na]	Go to Closed Caption format
	DVD	ClosedCaption	Inc	[na]	[na]	Next CC format
	DVD	ClosedCaption	Dec	[na]	[na]	Previous CC format
	GUI	DBRec_JumpAlpha	Set	[A]	[na]	Jump to a video starting with the specified letter
	GUI	DBRec_JumpPct	Set	[#]	[na]	Jump to a video at this percent position in the list
	GUI	DBRec_JumpNumeric	Set	[#]	[na]	Jump to (1=Beginning of list; 2=A,B,C; 3=D,E,F; 4=G,H,I; 5=J,K,L; 6=M,N,O; 7=P,Q,R,S; 8=T,U,V; 9=W,X,Y,Z; 0=End of list)
	GUI	PopupKeyboard	Set	[na]	[na]	Opens on-screen keyboard, cancel (Vavigation/NavAction/Set/Cancel) closes

TBD	FilterVideo	Genre	Set	[genre]		Apply a genre filter to videos using this genre name.
TBD	FilterVideo	Category	Set	[category]		Apply a category filter to videos using this category name.
TBD	FilterVideo	Participant	Set	[participant]		Apply a participant filter to videos using this participant name.
	Photo	Rotate	Inc	[na]		Rotate the currently displayed photos
	Photo	Zoom	Inc	[na]		Toggle the "zoom" on the displayed photo
	Audio	Shuffle	Set	[True/False]		Set to True to shuffle playlist, setting to false does nothing.
	Audio	Repeat	Set	[True/False]		Set player to repeat (or not) the music queue
	Audio	Append	Set	[True/False]		In "append mode" new songs added through this API are added to the queue, otherqise, the queue is cleared on an add.
	Audio	Playlist	Set	GUID of Playlist / Album / Track		Add audio to queue based on Append setting.
	Misc	DisplayMode	Set	Select	[na]	Enter On-screen setup (changed from display mode adjustment)
	Misc	OverScan	Set	Adjust	[na]	Enter On-screen setup (chged from "overscan" adjustment mode)
	Misc	ZoomMode	Inc	[na]	[na]	Increase Zoom Mode (cycle)
	Misc	StartPosition	Set	Update	[na]	Set Start Position and Zoom for Video (playing)
	Misc	AudioVideoState	Set	ModeSwitch	[na]	Toggle between Sudio and Video playback
	Misc	AudioVideoState	Set	AudioMode	[na]	Minimize the Video player and switch to Audio
	Misc	AudioVideoState	Set	VideoMode	[na]	Minimize the Audio player and switch to Video
	Misc	AudioVideoState	Set	PhotoMode	[na]	Switch to Photo mode
	Misc	AudioVideoState	Set	BoxeeMode	[na]	Switch to Boxee
	Misc	RatingLimit	Set	[rating]		Set the player to a rating limit where the rating is one of the following: TV-Y, TV-Y7, G, PG, PG-13, TV-14, R, TV-MA, NC-17, NR
	Misc	AudioDecoder	Set	Analog / Digital		Set to Analog or Digital audio (temporary and only honored in GUI, not during video playback)
	File	OpenVideo	Set	GUID of Video	[na]	Analog / Digital Start playback of the video identified by the GUID (Analog or Digital audio out)
	File	SelectVideo	Set	GUID of Video	[na]	Action Move UI to highlight specified video. If Parameter = "Action" then open Action dialog.
Future ?	File	OpenAudio	Set	GUID of Audio	[na]	Insert / Append / C Param1 can be either Insert, Append or Clear. Insert is the default.

Append adds the audio item to the end of the queue, Clear clears the queue before adding the audio item.

Computer	TrayOpen	[na]	Open all DVD drives
Computer	TrayClose	[na]	Close all DVD drives

Notes:

- [na] no value permitted
- [#] value is an integer
- [A] value is a letter
- [True/False] value is either "True" or "False" (without quotes)
- [HH:MM:SS] value is a time position in the format shown

Note: Not all operations can be executed at any time.

Note: To send commands to the server, add the parameter SerialNo=XXX where XXX is the serial number of the player box and prepend /akemi/video/aionipassthru to the URL.

The "URI" sent to the server on port 4440, or player on port 4121 is:

/akemi/video/aionipassthru/Set?SerialNo={SerialNo}&Group={Group}&Prop={Property}&Op={Operator}&Value={Value}&Dir={Direction}

where words in braces are replaced with entries from the tables above and below

Notes:

- [SerialNo] Serial Number of Player (from chassis)

A Note about the HTTP protocol

An HTTP request looks like the following:

GET [url] HTTP/1.0[CR][LF][CR][LF]

Where [url] is replaced with the URL message, and [CR] is replaced with an ASCII Carriage Return and [LF] is replaced with an ASCII Linefeed

So, to send the following command to a server...

http://192.168.1.1:4440/akemi/video/aionipassthru/Set?SerialNo=0001001&Group=Navigation&Property=NavAction&Op=Set&Value=Down

You would write to the socket connected to 192.168.1.1 on port 4440 the following

GET /akemi/video/aionipassthru/Set?SerialNo=0001001&Group=Navigation&Property=NavAction&Op=Set&Value=Down HTTP/1.0

followed by two CRLF pairs.

This can be tested using the the Telnet application in Windows. Start it by typing Telnet [address] 4440 at the command prompt where [address] is the IP address of the server.

You can then put in exactly what you'd send over the TCP connection and see if the server responds and how.