



HDBaseT™ Scaler

with HDMI and Analog Audio Outputs

Application Programming Interface

Version Information

Version	Release Date	Notes
1	06/18	Initial release

Commands

The following tables provide an alphabetical list of commands available on the AT-HDVS-150-RX and AT-HDVS-RX. All commands are case-sensitive and must be entered as documented. Each command must include the “\$” character as the terminating character. If the command fails or is entered incorrectly, then the feedback is “COMMAND FAIL”.



IMPORTANT: Each command must be terminated with a carriage-return (0x0d) and the feedback is terminated with a carriage-return and line-feed (0x0a).

Command	Description
WP_Aspect	Sets the output aspect ratio
WP_AudioEn	Enables or disables the audio output; all outputs are affected
WP_AudioHdmi	Enables or disables the HDMI audio output
WP_AutoDispOff	Enables or disables DisplayOn
WP_AutoDispOn	Enables or disables DisplayOff
WP_AutoSwitch	Enable or disables auto switching or display auto switching status
WP_Display	Sets Display On/Off control
WP_DisplayMode	Sets the display mode for power-on and power-off
WP_DisplayOff	Sends the Display Off command to the projector
WP_DisplayOn	Sends the Display On command to the projector
WP_DisplaySet	Sets the baud rate, data bits, stop bits, and parity for the projector’s port
WP_HdcpInput	Sets the HDCP reporting mode for the specified input
WP_IdentifyTx	Displays the TX model name
WP_Info	Displays the version of firmware for the RX
WP_InfoTx	Displays the version of both TX and RX firmware
WP_Input	Sets the input source
WP_InputPrefer	Sets the preferred input resolution
WP_Output	Sets the output resolution
WP_OverscanEn	Enables or disables overscan
WP_OverscanH	Sets the horizontal overscan size (%)
WP_OverscanV	Sets the vertical overscan size (%)
WP_PictureBri	Sets the picture brightness
WP_PictureCon	Sets the picture contrast
WP_PictureHue	Sets the picture hue
WP_PictureRst	Executes a picture reset
WP_PictureSat	Sets the picture saturation
WP_PictureSha	Sets the picture sharpness
WP_ProjSW	Set the time interval between received commands
WP_Standby	Places the unit in standby mode
WP_SystemRst	Sets the unit to factory-default settings

Commands

Command	Description
WP_VgaAuto	Resets the VGA clock and phase
WP_VgaClock	Sets the VGA polarity

WP_Aspect

Sets the output aspect ratio. Use the ? argument to display the current setting.

Syntax

```
WP_Aspect[X]$
```

Parameter	Description	Range
X	Aspect ratio	Full, 16:9, 16:10, 4:3, Keep, ?

Example

```
WP_Aspect[16:10]$
```

Feedback

```
WP_Aspect[16:10]
```

WP_AudioEn

Enables or disables audio output. When disabling audio output, both outputs (HDMI, analog) are disabled. Use the ? argument to display the current setting.

Syntax

```
WP_AudioEn[X]$
```

Parameter	Description	Range
X	State	On, Off, ?

Example

```
WP_AudioEn[Off]$
```

Feedback

```
WP_AudioEn[Off]
```

WP_AudioHdmi

Enables or disables the HDMI audio output. The analog output is unaffected. Use the ? argument to display the current setting.

Syntax

```
WP_AudioHdmi[X]$
```

Parameter	Description	Range
X	State	On, Off, ?

Example

```
WP_AudioHdmi[Off]$
```

Feedback

```
WP_AudioHdmi[Off]
```

WP_AudioLR

Enables or disables the analog audio output. The HDMI output is unaffected. Use the ? argument to display the current setting.

Syntax

```
WP_AudioLR[X]
```

Parameter	Description	Range
X	State	On, Off, ?

Example

```
WP_AudioLR[Off]$
```

Feedback

```
WP_AudioLR[Off]
```

WP_AutoDispOff

Enables or disables DisplayOff. Use the ? argument to display the current setting.

Syntax

```
WP_AutoDispOff[X]$
```

Parameter	Description	Range
X	State	On, Off, ?

Example

```
WP_AutoDispOff[On]$
```

Feedback

```
WP_AutoDispOff[On]
```

WP_AutoDispOn

Enables or disables DisplayOn. Use the ? argument to display the current setting.

Syntax

```
WP_AutoDispOn[X]$
```

Parameter	Description	Range
X	State	On, Off, ?

Example

```
WP_AutoDispOn[On]$
```

Feedback

```
WP_AutoDispOn[On]
```

WP_AutoSwitch

Enables or disables auto switching or display auto switching status. Use the ? argument to display the current setting.

Syntax

```
WP_AutoSwitch[X]$
```

Parameter	Description	Range
X	State	On, Off, ?

Example

```
WP_AutoSwitch[On]$
```

Feedback

```
WP_AutoSwitch[On]
```

WP_Display

Enables or disables Display control. Use the ? argument to display the current setting.

Syntax

```
WP_Display[X]$
```

Parameter	Description	Range
X	State	On, Off, ?

Example

```
WP_Display[On]$
```

Feedback

```
WP_Display[On]
```

WP_DisplayMode

Sets the auto-switching display mode. Use the ? argument to display the current setting.

Syntax

```
WP_DisplayMode[X]$
```

Parameter	Description	Range
X	Mode	DispSWAVOn, DispSWAVW, AVSW, AlwaysOn, ?

Example

```
WP_DisplayMode[AVSW]$
```

Feedback

```
WP_DisplayMode[AVSW]
```

WP_DisplayOff

Projector Display-Off command. The first argument is the length of the command string; maximum length is 50 characters. The second argument is the command string plus the carriage return, if required. Multiple commands may be specified using the comma delimiter. Time delay for the comma delimiter is five seconds.

Syntax

```
WP_DisplayOff[X,Y]$
```

Parameter	Description	Range
X	Command length	1 ... 50
Y	Command string	String value

Example

```
WP_DisplayOff[4, AVON]$
```

Feedback

```
WP_DisplayOff[4, AVON]
```

WP_DisplayOn

Projector Display-On command. The first argument is the length of the command string; maximum length is 50 characters. The second argument is the command string plus the carriage return, if required. Multiple commands may be specified using the comma delimiter. Time delay for the comma delimiter is five seconds.

Syntax

```
WP_DisplayOn[X,Y]$
```

Parameter	Description	Range
X	Command length	1 ... 50
Y	Command string	String value

Example

```
WP_DisplayOn[4, AVON]$
```

Feedback

```
WP_DisplayOn[4, AVON]
```


WP_DisplaySet

Sets the baud rate, data bits, parity bit, and stop bits for the **RS-232** port on the projector. Each argument must be separated by a comma; no spaces are permitted. Brackets must be included when typing this command. Use the ? argument, *without brackets and including a space*, to display the current settings.

Syntax

```
DisplaySet[W,X,Y,Z]$
```

Parameter	Description	Range
W	Baud rate	2400, 9600, 19200, 38400, 56000, 57600, 115200
X	Data bits	7, 8
Y	Parity bit	None, Odd, Even
Z	Stop bits	1, 2

Example

```
DisplaySet[115200,8,0,1]$
```

Feedback

```
DisplaySet[115200,8,0,1]
```

WP_HdcpInput

Set the HDCP reporting mode. Some computers will send HDCP content if an HDCP-compliant display is detected. HDCP = reports to the source device that the display (sink) is HDCP-compliant, NotHDCP = reports to the source device that the display (sink) is not HDCP-compliant (HDCP content will not be sent), Auto = uses the attributes of the display device to accept or not accept HDCP content. Setting this value to off *does not* decrypt HDCP content. Use the ? argument to display the current setting.

Syntax

```
WP_HdcpInput[X]$
```

Parameter	Description	Range
X	Mode	HDCP, NotHDCP, Auto

Example

```
WP_HdcpInput[NotHDCP]$
```

Feedback

```
WP_HdcpInput[NotHDCP]
```

WP_IdentifyTx

Displays the version of firmware running on the transmitter. The ? argument must be specified.

Syntax

```
WP_IdentifyTx[?]$
```

Parameter	Description	Range
X	Constant	?

Example

```
WP_IdentifyTx[?]$
```

Feedback

```
WP_IdentifyTx[1.0.6]
```

WP_Info

Displays the version of firmware running on the receiver. The ? argument must be specified.

Syntax

```
WP_Info[?]$
```

Parameter	Description	Range
X	Constant	?

Example

```
WP_Info[?]$
```

Feedback

```
WP_Info[1.0.6]
```

WP_InfoTx

Displays the version of firmware running on both the transmitter and the receiver. The ? argument must be specified.

Syntax

```
WP_InfoTx[?]$
```

Parameter	Description	Range
X	Constant	?

Example

```
WP_InfoTx[?]$
```

Feedback

```
WP_InfoTx[1.0.6]
```

WP_Input

Sets the active input on the transmitter. Use the ? argument to display the current setting.

Syntax

```
WP_Input[X]$
```

Parameter	Description	Range
X	Input	Hdmi1, Hdmi2, Vga, ?

Example

```
WP_Input[Hdmi2]$
```

Feedback

```
WP_Input[Hdmi2]
```

WP_InputPrefer

Sets the preferred input resolution. Use the ? argument to display the current setting.

Syntax

```
WP_InputPrefer[X]$
```

Parameter	Description	Range
X	Resolution	0 ... 6

0 = 800 x 600
 1 = 1024 x 768
 2 = 1280 x 720
 3 = 1280 x 800

4 = 1366 x 768
 5 = 1920 x 1080
 6 = 1920 x 1200

Example

```
WP_InputPrefer[5]$
```

Feedback

```
WP_InputPrefer[5]
```

WP_Output

Sets the output resolution. Use the ? argument to display the current setting.

Syntax

```
WP_Output[X]$
```

Parameter	Description	Range
X	Resolution	0 ... 24, ?

0 = 1024 x 768	9 = 720p29.97	18 = 1080p25
1 = 1280 x 800	10 = 720p30	19 = 1080p29.97
2 = 1280 x 1024	11 = 720p50	20 = 1080p30
3 = 1366 x 768	12 = 720p59.94	21 = 1080p50
4 = 1400 x 1050	13 = 720p60	22 = 1080p59.94
5 = 1600 x 1200	14 = 1080i50	23 = 1080p60
6 = 1680 x 1050	15 = 1080i59.94	24 = Native
7 = 1920 x 1080	16 = 1080p23.98	
8 = 720p25	17 = 1080p24	

Example

```
WP_Output[13]$
```

Feedback

```
WP_Output[13]
```

WP_OverscanEn

Enables or disables overscan. Use the ? argument to display the current setting.

Syntax

```
WP_OverscanEn[X]$
```

Parameter	Description	Range
X	State	Yes, No, ?

Example

```
WP_OverscanEn[Yes]$
```

Feedback

```
WP_OverscanEn[Yes]$
```

WP_OverscanH

Sets the horizontal overscan size. The command argument is a percentage of the horizontal size of the image. Use the **WP_OverscanEn** command to enable overscan, before using this command. Specify the ? argument to display the current setting.

Syntax

```
WP_OverscanH[X]$
```

Parameter	Description	Range
X	Percentage	0 ... 50, ?

Example

```
WP_OverscanH[25]$
```

Feedback

```
WP_OverscanH[25]
```

WP_OverscanV

Sets the vertical overscan size. The command argument is a percentage of the vertical size of the image. Use the **WP_OverscanEn** command to enable overscan, before using this command. Specify the ? argument to display the current setting.

Syntax

```
WP_OverscanV[X]$
```

Parameter	Description	Range
X	Percentage	0 ... 50, ?

Example

```
WP_OverscanV[25]$
```

Feedback

```
WP_OverscanV[25]
```

WP_PictureBri

Sets the picture brightness. Specify the ? argument to display the current setting.

Syntax

```
WP_PictureBri[X]$
```

Parameter	Description	Range
X	Level	0 ... 100, ?

Example

```
WP_PictureBri[60]$
```

Feedback

```
WP_PictureBri[60]
```

WP_PictureCon

Sets the picture contrast. Specify the ? argument to display the current setting.

Syntax

```
WP_PictureCon[X]$
```

Parameter	Description	Range
X	Level	0 ... 100, ?

Example

```
WP_PictureCon[55]$
```

Feedback

```
WP_PictureCon[55]
```

WP_PictureHue

Sets the picture hue. Specify the ? argument to display the current setting.

Syntax

```
WP_PictureHue[X]$
```

Parameter	Description	Range
X	Hue	0 ... 100, ?

Example

```
WP_PictureHue[48]$
```

Feedback

```
WP_PictureHue[48]
```

WP_PictureRst

Resets the brightness, contrast, hue, saturation, and sharpness values to the factory-default settings. The Go argument must be specified.

Syntax

```
WP_PictureRst[Go]$
```

Parameter	Description	Range
X	Constant	Go

Example

```
WP_PictureRst[Go]$
```

Feedback

```
WP_PictureRst[Go]
```

WP_PictureSat

Sets the picture saturation. Specify the ? argument to display the current setting.

Syntax

```
WP_PictureSat[X]$
```

Parameter	Description	Range
X	Level	0 ... 100, ?

Example

```
WP_PictureSat[48]$
```

Feedback

```
WP_PictureSat[48]
```

WP_PictureSha

Sets the picture sharpness. Specify the ? argument to display the current setting.

Syntax

```
WP_PictureSha[X]$
```

Parameter	Description	Range
X	Level	0 ... 100, ?

Example

```
WP_PictureSha[48]$
```

Feedback

```
WP_PictureSha[48]
```

WP_ProjSW

Sets the time interval before the “display on” command is sent. This value should be the same as the projector’s delay setting. Use the ? argument to display the current setting.

Syntax

```
WP_ProjSW[X]$
```

Parameter	Description	Range
X	Time interval	0 ... 300, ?

Example

```
WP_ProjSW[30]$
```

Feedback

```
WP_ProjSW[30]$
```

WP_Standby

Sets the standby timer, in minutes. Use the ? argument to display the current setting.

Syntax

```
WP_Standby[X]$
```

Parameter	Description	Range
X	Time interval	0 ... 10, ?

Example

```
WP_Standby[5]$
```

Feedback

```
WP_Standby[5]
```

WP_SystemRst

Resets the unit to factory-default settings. The Go argument must be specified.

Syntax

```
WP_SystemRst[Go]$
```

Parameter	Description	Range
X	Constant	Go

Example

```
WP_SystemRst[Go]$
```

Feedback

```
WP_SystemRst[Go]
```

WP_VgaAuto

Executes the VGA auto-adjust. This command automatically adjusts the phase and clock of the VGA signal. A VGA display must be connected to the HDVS unit, when executing this command. Otherwise, the command will fail. The Go argument must be specified.

Syntax

```
WP_VgaAuto[Go]$
```

Parameter	Description	Range
X	Constant	Go

Example

```
WP_VgaAuto[Go]$
```

Feedback

```
WP_VgaAuto[Go]
```


WP_VgaClock

Sets the VGA ADC clock polarity. Use the ? argument to display the current setting.

Syntax

```
WP_VgaClock[X]$
```

Parameter	Description	Range
X	Setting	Normal, Inverse, ?

Example

```
WP_VgaClock[Inverse]$
```

Feedback

```
WP_VgaClock[Inverse]
```

