Ethernet-Enabled
HDBaseT™ Scaler
with HDMI and Analog Audio Outputs

Application Programming Interface

AT-HDVS-200-RX

Atlona Manuals
Scalers

Version Information

Version	Release Date	Notes
1	Oct 2019	Updated for 2.0.36 firmware; various bug fixes; added Letterbox Top setting to Aspect commandd; added RelayPulseTime and RelayType commands.

Commands

The following tables provide an alphabetical list of commands available on the AT-HDVS-200-RX. All commands are case-sensitive and must be entered as documented. If the command fails or is entered incorrectly, then the feedback is “Command FAILED”.

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

Command	Description
Aspect	Sets the aspect ratio of the output signal
BASS	Increases or decreases the amount of bass on the output
Blink	Enables or disables blinking of the **DN** button on the front panel
Broadcast	Enables / disables broadcast mode
BRT	Sets the picture brightness
CSpara	Sets the baud rate, data bits, stop bits, and parity for the **RS-232 2** port
CTRST	Sets the picture contrast
HDBTRS232	Sets the baud rate, data bits, parity bit, and stop bits for the HDBaseT IN port.
HDCPSet	Sets the HDCP reporting mode for the HDMI input on the transmitter
HDMIAUD	Enables / disables audio on the HDMI output
help	Displays the list of available commands
HUE	Sets the picture hue
HZoom	Sets the horizonal overscan setting for the output image
Input	Sets the active input
IPAddUser	Adds a user for Telnet control
IPCFG	Displays the current network settings for the AT-HDVS-200-RX
IPDelUser	Deletes the specified Telnet user
IPDHCP	Enables / disables DHCP mode on the AT-HDVS-200-RX
IPLogin	Enables / disables login credentials when starting a Telnet session
IPPort	Sets the Telnet listening port for the AT-HDVS-200-RX
IPStatic	Sets the static IP address, subnet mask, and gateway for the AT-HDVS-200-RX
IPTimeout	Specifies the time interval of inactivity before the Telnet session is closed
KitMode	Displays the model information and the IP address of the transmitter
Mreset	Resets the AT-HDVS-200-RX to factory-default settings
PictureRst	Resets all picture settings
PrefTimg	Sets the preferred HDMI input timing

Commands

Command	Description
RelayAct	Configures the specified relay port
RelayAuto	Sets the state of the specified relay
RelayPulseTime	Sets the relay pulse time interval
RelayType	Sets the relay type
RS232para	Sets the baud rate, data bits, stop bits, and parity for the **RS-232 1** port
RS232zone	Send a command to the display device
SATRT	Sets the picture color saturation
SHARP	Sets the picture sharpness
System	Displays system information about the AT-HDVS-200-RX
TREBLE	Increases / decreases the treble on the output
Type	Displays model information
Version	Displays the current firmware version of the AT-HDVS-200-RX
VidOutRes	Sets the video output resolution
VOUT	Increases / decreases the audio volume
VOUTMute	Mutes / unmutes the audio
VZoom	Adjusts the vertical zoom (overscan) of the output image
Zoom	Enables / disables overscan

Aspect

Sets the aspect ratio of the output signal. The default setting is **Full**.

Syntax
Aspect X

Parameter	Description	Range
X	Aspect ratio	0 = Full 1 = 16:9 2 = 16:10 3 = 4:3 4 = Keep Ratio 5 = Letterbox Top

Example
Aspect 1

Feedback
Aspect 1

BASS

Increases / decreases the amount of bass on the output. In addition to specifying an integer value, the **+** and **-** arguments can be used, by themselves, to increase or decrease the bass by 1 value, respectively. To display the current value, use the sta argument.

Syntax
BASS1 X

Parameter	Description	Range
X	Value	-15 ... 12, sta

Example
BASS1 -5
BASS1 +

Feedback
BASS1 -5
BASS1 -4

Blink

Enables or disables blinking of the **DN** button on the front panel. When set to on, the **DN** button will flash red and can be used to physically identify the unit on a network. on = enables **DN** button blinking; off = disables **DN** button blinking; sta = displays the current Blink setting. The default setting is off.

Syntax
Blink X

Parameter	Description	Range
X	Value	on, off, sta

Example
Blink on

Feedback
Blink on

Broadcast

Enables / disables broadcast mode. By default, broadcast mode is set to off. When set to on, changes in the web GUI will also be affected on the control system (if connected), via TCP/IP. To separate control between web GUI and Telnet, set this feature off. on = enables broadcast mode; off = disables broadcast mode; sta = displays the current Broadcast setting.

Syntax
Broadcast X

Parameter	Description	Range
X	Value	on, off, sta

Example
Broadcast on

Feedback
Broadcast on

BRT

Sets the picture brightness. Use the sta argument to display the current brightness setting.

Syntax
BRT X

Parameter	Description	Range
X	Value	0 ... 100, sta

Example
BRT 60

Feedback
BRT 60

CSpara

Sets the baud rate, data bits, parity bit, and stop bits for the **RS-232 2** port on the AT-HDVS-200-RX. Use this port to control the AT-HDVS-200-RX. Each argument must be separated by a comma; no spaces are permitted. Brackets must be used when typing this command. Use the sta argument to display the current serial port settings.

Syntax
CSpara[W,X,Y,Z]

Parameter	Description	Range
W	Baud rate	2400, 4800, 9600, 19200, 38400, 57600, 115200
X	Data bits	7, 8
Y	Parity bit	None, Odd, Even
Z	Stop bits	1, 2

Example
CSpara[115200,8,0,1]
CSpara[sta]

Feedback
CSpara[115200,8,0,1]
CSpara [115200,8,0,1]

CTRST

Sets the picture contrast. Use the sta argument to display the current contrast setting.

Syntax
CTRST X

Parameter	Description	Range
X	Contrast	0 ... 100, sta

Example
CTRST 65

Feedback
CTRST 65

HDBTRS232

Sets the baud rate, data bits, parity bit, and stop bits for the **HDBaseT IN** port. Each argument must be separated by a comma; no spaces are permitted. Brackets must be used when typing this command. Use the sta argument, *without brackets and including a space*, to display the current settings.

Syntax
HDBTRS232[W,X,Y,Z]

Parameter	Description	Range
W	Baud rate	2400, 4800, 9600, 19200, 38400, 57600, 115200
X	Data bits	7, 8
Y	Parity bit	None, Odd, Even
Z	Stop bits	1, 2

Example
HDBTRS232[115200,8,0,1]

Feedback
HDBTRS232[115200,8,0,1]

HDCPSet

Set the HDCP reporting mode of the **HDMI IN** port on the transmitter. Some computers will send HDCP content if an HDCP-compliant display is detected. Setting this value to off, will report to the source device that the AT-HDVS-200-RX is not an HDCP-compliant device. This allows the source to transmit non-HDCP content to the sink. Setting this value to off will *not* decrypt HDCP content. on = enables HDCP detection; off = disables HDCP detection; sta = displays the current HDCPSet setting.

Syntax
HDCPSet X

Parameter	Description	Range
X	Value	on, off, sta

Example
HDCPSet on

Feedback
HDCPSet on

HDMIAUD

Enables / disables audio on the HDMI output. on = enables HDMI audio output; off = disables HDMI audio output; sta = displays the current HDMIAUD setting.

Syntax
HDMIAUD

Parameter	Description	Range
X	Value	on, off, sta

Example
HDMIAUD off

Feedback
HDMIAUD off

help

Displays the list of available commands. To obtain help on a specific command, enter the **Help** command followed by the name of the command.

Syntax
help X

Parameter	Description	Range
X	Command name (optional)	Command

Example
help

Feedback
Command List:

Aspect
HDMIAUD
RS232para
RS232zone
HDCPSet
Version
Input
VidOutRes
Zoom
HZoom
...
...

HUE

Sets the picture hue. Use the sta argument to display the current HUE value.

Syntax
HUE X

Parameter	Description	Range
X	Value	0 ... 100, sta

Example
HUE 40

Feedback
HUE 40

HZoom

Set the horizontal zoom for the output image. Use the sta argument to display the current HZoom value.

Syntax
HZoom X

Parameter	Description	Range
X	Value	0 ... 50, sta

Example
HZoom 10

Feedback
HZoom 10

Input

Sets the active input. When specifying an HDMI input, the number of the input must also be specified. Do not add a space between HDMI argument and the input number. Use the sta argument to display the currently active input.

Syntax
Input X Y

Parameter	Description	Range
X	Input	HDMI, VGA, sta
Y	HDMI port identifier	1 ... 2

Example
Input HDMI2

Feedback
Input HDMI2

IPAddUser

Adds a user for Telnet control. This command performs the same function as adding a user within the **Config** page of the web GUI.

Syntax
IPAddUser X Y

Parameter	Description	Range
X	User name	20 characters (max)
Y	Password	20 characters (max)

Example
IPAddUser BigBoss b055man

Feedback
IPAddUser BigBoss b055man
TCP/IP user was added

IPCFG

Displays the current network settings for the AT-HDVS-200-RX.

Syntax
IPCFG

This command does not require any parameters

Example
IPCFG

Feedback
IP Addr: 10.0.1.101
Netmask: 255.255.255.0
Gateway: 10.0.1.1
IP Port: 23

IPDelUser

Deletes the specified TCP/IP user. This command performs the same function as removing a user within the **Config** page of the web GUI.

Syntax
IPDelUser X

Parameter	Description	Range
X	User	User name

Example
IPDelUser BigBoss

Feedback
IPDelUser BigBoss
TCP/IP user was deleted

IPDHCP

Enables / disables DHCP mode on the AT-HDVS-200-RX. on = enables DHCP mode; off = disables DHCP mode; sta = displays the current IPDHCP setting. If this feature is disabled, then a static IP address must be specified for the AT-HDVS-200-RX. Refer to the IPStatic command for more information.

Syntax
IPDHCP X

Parameter	Description	Range
X	Value	on, off, sta

Example
IPDHCP on

Feedback
IPDHCP on

IPLogin

Enables / disables the use of login credentials when starting a Telnet session on the AT-HDVS-200-RX. If this feature is set to on, then the AT-HDVS-200-RX will prompt for both the username and password. Use the same credentials as the web GUI. on = login credentials required; off = no login required; sta = displays the current IPLogin setting.

Syntax
IPLogin X

Parameter	Description	Range
X	Value	on, off, sta

Example
IPLogin off

Feedback
IPLogin off

IPPort

Sets the Telnet listening port for the AT-HDVS-200-RX. Use the sta argument to display the current port setting.

Syntax
IPPort X

Parameter	Description	Range
X	Port	0 ... 65535, sta

Example
IPPort 23

Feedback
IPPort 23

IPStatic

Sets the static IP address, subnet mask, and gateway (router) address of the AT-HDVS-200-RX. Before using this command, DHCP must be disabled on the AT-HDVS-200-RX. Refer to the IPDHCP command for more information. Each argument must be entered in dot-decimal notation and separated by a space. The default static IP address is 192.168.1.254.

Syntax
IPStatic X Y Z

Parameter	Description	Range
X	IP address	0 ... 255 (per byte)
Y	Subnet mask	0 ... 255 (per byte)
Z	Gateway (router)	0 ... 255 (per byte)

Example
IPStatic 192.168.1.112 255.255.255.0 192.168.1.1

Feedback
IPStatic 192.168.1.112 255.255.255.0 192.168.1.1

IPTimeout

Specifies the time interval of inactivity before the Telnet session is automatically closed.

Syntax
IPTimeout X

Parameter	Description	Range
X	Interval (in seconds)	1 ... 60000

Example
IPTimeout 300

Feedback
IPTimeout 300

KitMode

Displays the model information and the IP address of the transmitter. The sta argument must be specified.

Syntax
KitMode X

Parameter	Description	Range
X	Value	sta

Example
KitMode sta

Feedback
AT-HDVS-200-TX IP:10.0.1.161

Mreset

Resets the AT-HDVS-200-RX to factory-default settings.

Syntax
MReset

This command does not require any parameters

Example
Mreset

Feedback
Mreset

PictureRst

Resets the picture settings to factory-default settings. This command does not reset the unit to factory-default settings. Refer to the Mreset command for more information.

Syntax
PictureRst

This command does not require any parameters

Example
PictureRst

Feedback
PictureRst

PrefTimg

Sets the preferred input timing. Specify a value from 0 to 8.

Syntax
PrefTimg X

Parameter	Description	Range
X	Timing	0 .. 9

Input Timing List
0 = Native
1 = 1280x800
2 = 1920x1080
3 = 1024x768
4 = 1280x720
5 = 1920x1200
6 = 1366x768
7 = 800x600
8 = 1600x900
9 = 1440x900

Example
PrefTimg 3

Feedback
PrefTimg 3

RelayAct

Sets the initial state of the specified relay: normally-open (NO) or normally-closed (NC). The first argument specifies the relay and the second argument sets the state. open = opens the relay, close = closes the relay; sta = displays the current state of the **RelayAct** setting. When returning the relay state, the relay number must also be specified.

Syntax
Relay X Y

Parameter	Description	Range
X	Relay	1 ... 2
Y	State	open, close, sta

Example
RelayAct 1 open
RelayAct 1 sta

Feedback
RelayAct 1 open
RelayAct1 open

RelayAuto

Toggles the state of both relays. on = toggles the relay state and sets the control state to “follow display status”; off = toggles the relay state and set the control state to “manual”; sta = returns the current **RelayAuto** setting.
An example of the “follow display status” state would be: When the projector is powered on, relay 1 (C1) could lower the projecftor screen and relay 2 (C2) might dim the lights. The “manual” control state provides the ability to override the current relay settings.

Syntax
RelayAuto X

Parameter	Description	Range
X	Value	on, off, ?

Example
RelayAuto on

Feedback
RelayAuto on

RelayPulseTime

Sets the relay pulse time interval. Specify the sta argument to display the current setting.

Syntax
RelayPulseTime X

Parameter	Description	Range
X	Time interval (sec)	0 ... 30, sta

Example
RelayPulseTime 5

Feedback
RelayPulseTime 5

RelayType

Sets the relay type. Specify the sta argument to display the current setting.

Syntax
RelayType X

Parameter	Description	Range
X	Type	pulse, closed, sta

Example
RelayType pulse

Feedback
RelayType pulse

RS232para

Sets the baud rate, data bits, parity bit, and stop bits for the **RS-232 1** port on the AT-HDVS-200-RX. This port is used to send commands to the connected display. Each argument must be separated by a comma; no spaces are permitted. Brackets must be used when typing this command. Use the sta argument, *without brackets and including a space*, to display the current settings.

Syntax
RS232para[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
RS232para[115200,8,0,1]
RS232para sta

Feedback
RS232para[115200,8,0,1]
RS232para[115200,8,0,1]

RS232zone

Sends commands to the connected display. Refer to the User Manual of the display device for a list of available commands. Brackets must be used when specifying the command to be sent. The command line string must not contain any spaces.

Syntax
RS232zone[X]

Parameter	Description	Range
X	Command	String

Example
RS232zone[command]

Feedback
RS232zone[command]

SATRT

Sets the picture color saturation value. Use the sta argument to display the current SATRT setting.

Syntax
SATRT X

Parameter	Description	Range
X	Saturation	0 ... 100, sta

Example
SATRT 50

Feedback
SATRT 50

SHARP

Sets the picture sharpness. Use the sta argument to display the current SHARP setting.

Syntax
SHARP X

Parameter	Description	Range
X	Sharpness	0 ... 100, sta

Example
SHARP 70

Feedback
SHARP 70

System

Displays system information about the AT-HDVS-200-RX. The sta argument must be specified.

Syntax
System X

Parameter	Description	Range
X	Status	sta

Example
System sta

Feedback
Model: AT-HDVS-200-RX
MAC Addr: b8-98-b0-00-36-a6
Address Type: DHCP
IP Addr: 10.0.1.65
Netmask: 255.255.255.0
Gateway: 10.0.1.1
HTTP Port: 80
Telnet Port: 23
Firmware: 2.0.36
On/Up Time <dd HH:mm:ss>: 00 01:12:47

TREBLE

Increases / decreases the amount of treble. In addition to specifying an integer value, the **+** and **-** arguments can be used, by themselves, to increase or decrease the amount of treble by 1 value, respectively. To display the current value, use the sta argument.

Syntax
TREBLE X

Parameter	Description	Range
X	Value	-12 ... 15, sta

Example
Treble 7
Treble -

Feedback
Treble 7
Treble 6

Type

Displays the model information of the AT-HDVS-200-RX.

Syntax
Type

This command does not require any parameters

Example
Type

Feedback
AT-HDVS-200-RX

Version

Displays the firmware version of the AT-HDVS-200-RX. No spaces must exist between the command and the argument. MCU = displays the microprocessor firmware, VSRX = displays the Valens firmware.

Syntax
VersionX

Parameter	Description	Range
X	Value	MCU, VSRX

Example
VersionMCU

Feedback
V1.1.28

VidOutRes

Sets the video output resolution. Use the sta argument to display the current video output resolution.

Syntax
VidOutRes

Parameter	Description	Range
X	Value	0 ... 28, sta

Output Resolution List
0 = 800x600
1 = 1024x768
2 = 1280x800
3 = 1280x1024
4 = 1366x768
5 = 1400x1050
6 = 1600x900
7 = 1600x1200
8 = 1680x1050
9 = 1920x1200
10 = 720p25
11 = 720p29.97
12 = 720p30
13 = 720p50
14 = 720p59
15 = 720p60
16 = 1080i50
17 = 1080i59.94
18 = 1080i60
19 = 1080p23.98
20 = 1080p24
21 = 1080p25
22 = 1080p29.97
23 = 1080p30
24 = 1080p50
25 = 1080p59.94
26 = 1080p60
27 = Input
28 = Native

Example
VidOutRes 26

Feedback
VidOutRes 26

VOUT

Increases / decreases the audio output volume. In addition to specifying an integer value, the **+** and **-** arguments can be used, by themselves, to increase or decrease the volume by 1 value, respectively. To display the current value, execute the **VOUT** command without any arguments.

Syntax
VOUT

Parameter	Description	Range
X	Value	-80 ... 6

Example
VOUT 4
VOUT +

Feedback
VOUT 4
VOUT 5

VOUTMute

Mutes / unmutes the audio. on = enables muting; off = disables muting; sta = displays the current **VOUTMute** setting.

Syntax
VOUTMute X

Parameter	Description	Range
X	Value	on, off, sta

Example
VOUTMute on

Feedback
VOUTMute on

VZoom

Adjusts the vertical zoom (overscan) of the output image. Use the sta argument to display the current **VZoom** setting.

Syntax
VZoom X

Parameter	Description	Range
X	Value	0 ... 50, sta

Example
VZoom 10

Feedback
VZoom 10

Zoom

Enables / disables overscan. on = enables overscan; off = disables overscan; sta = displays the current **Zoom** setting.

Syntax
Zoom X

Parameter	Description	Range
X	Value	on, off, sta

Example
Zoom on

Feedback
Zoom on