

HDMI OVER IP H.264 DECODER APPLICATION PROGRAM INTERFACE

24/7 TECHNICAL SUPPORT AT 1.877.877.2269 OR VISIT BLACKBOX.COM

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CHAPTER 1: COMMANDS LIST OVERVIEW

1.1 GBCONFIG COMMANDS/GBCONFIG

TABLE 1-1. GBCONFIG COMMANDS/GBCONFIG

COMMAND FORMAT	DESCRIPTION
gbconfig --hdcv-method	Set the output HDCP
gbconfig --name	Set the alias of device
gbconfig --ip-mode	Set IP Address Mode
gbconfig --ip4-addr	Set Static IP Address
gbconfig --net-mask	Set IP Address mask
gbconfig --gateway-ip	Set Gateway
gbconfig --network-url	Set the URL of decoder or the IP Address of encoder that will be connected
gbconfig -s, --show	Show the current configuration contents of one configured item
gbconfig -h, --help	Show the help information
gbconfig --preferred-transport-mode	Set the transmit method
gbconfig --low-delay	Set the mode of video delay time
gbconfig --audio-delay	Set the mode of audio delay time
gbconfig --hdmi-out-audio --mute	Set the output audio of HDMI mute
gbconfig --line-out --mute	Set the analog audio output mute
gbconfig --hdmi-out-audio	HDMI output volume control
gbconfig --hdmi-out-audio -level-control	Set the volume of HDMI output
gbconfig --line-out	Analog audio output volume control
gbconfig --line-out --level-control	Set the volume of analog audio output
gbconfig --png-overlay-pos-h	Set the picture showing horizontal position
gbconfig --png-overlay-pos-v	Set the picture showing vertical position
gbconfig --png-overlay-enable	Set the pictures showing enable
gbconfig --source-select	Set the video input
gbconfig --rs232-param	Set the RS-232 parameter of SinkPower
gbconfig --rs232-hex-cmd-enable	Set RS-232 of SinkPower command Hex mode enable or unable
gbconfig --sinkpower-mode	Set the work mode of SinkPower



CHAPTER 1: COMMANDS LIST OVERVIEW

1.2 GBPARAM COMMANDS/GBPARAM

TABLE 1-2. GBPARAM COMMANDS/GBPARAM

COMMAND FORMAT	DESCRIPTION
gbparam s ip_mode	Set IP Address Mode
gbparam s ipaddr	Set Static IP Address
gbparam s netmask	Set IP Address mask
gbparam s fouce_output_color_space e e_reoutput	Set the format of output color space
gbparam s rs232_poweron_cmd	Set the RS-232 message content of SinkPowerOn
gbparam s rs232_standby_cmd	Set the RS-232 message content of SinkPowerOff

1.3 GBCONTROL COMMAND/GBCONTROL

TABLE 1-3. GBCONTROL COMMAND/GBCONTROL

COMMAND FORMAT	DESCRIPTION
gbcontrol --blink-led	The LED of status flashes for 10 seconds at 5 Hz

1.4 GBSET COMMANDS/GBSET

TABLE 1-4. GBSET COMMANDS/GBSET

COMMAND FORMAT	DESCRIPTION
gbset fvo	Set the resolution of output
gbset vi	Set the input video source

CHAPTER 1: COMMANDS LIST OVERVIEW

1.5 OTHER COMMANDS

TABLE 1-5. OTHER COMMANDS

COMMAND FORMAT	DESCRIPTION
e e_cec_system_standby	CEC for taking off TV/CEC
e e_cec_one_touch_play	CEC for power on TV/CEC
cec -s "addr opcode;addr opcode;..."	Send cec command. "addr" means source + dest address. "opcode" means CEC operation code
e e_vw_enable_M_N_X_y e e_reoutput	Set the output to a picture of Video Wall
reset_to_default.sh	Restore to factory settings
osd_on.sh	OSD menu on
osd_off.sh	OSD menu off
cat /var/tmpfs/monitor_info	Get the EDID information
gbstatus	Get the status information
sinkpower {on/off}	Power on/off control commands



CHAPTER 2: COMMANDS LIST DETAILS

2.1 GBCONFIG COMMANDS/GBCONFIG

2.1.1 GBCONFIG --HDCP-METHOD

TABLE 2-1. GBCONFIG --HDCP-METHOD

PARAMETER	DESCRIPTION
Direction	telnet users side -> Device
Command	gbconfig --hdcpc-method {Disable force1.4 force2.2}
Response	None
Description	Set the HDCP mode of VS-2001-DEC HDMI input port, disable is default
Example	Command: gbconfig --hdcpc-enable=disable Response: None

2.1.2 GBCONFIG --NAME

TABLE 2-2. GBCONFIG --NAME

PARAMETER	DESCRIPTION
Direction	telnet users side
Command	gbconfig --name namestring
Response	
Description	Set the alias of VS-2001-DEC, this alias is used when bonjour is discovered, the configuration will take effect after the VS-2001-DEC reboots. namestring includes letters, numbers, "-", "_". 4KDecoder-MACADDR is the default
Example	Command: gbconfig --name MyVS-2001-DEC Response: None

CHAPTER 2: COMMANDS LIST DETAILS

2.1.3 GBCONFIG --IP-MODE

TABLE 2-3. GBCONFIG --IP-MODE

PARAMETER	DESCRIPTION
Direction	telnet users side
Command	gbconfig --ip-mode {autoip static dhcp}
Response	None
Description	Set the mode of IP address, it can be configured to STATIC or DHCP. STATIC mode is the default. Restart to take effect after it is modified.
Example	Command: gbconfig --ip-mode static Response: None

2.1.4 GBCONFIG --IP4-ADDR

TABLE 2-4. GBCONFIG --IP4-ADDR

PARAMETER	DESCRIPTION
Direction	telnet users side -> Device
Command	gbconfig --ip4-addr ip4addr
Response	None
Description	Set the IP address, it will be valid when the IP mode is on static; restart to take effect after it is modified. The default IP address is 192.168.1.40
Example	Command: gbconfig --ip4-addr 192.168.1.11 Response: None

2.1.5 GBCONFIG --NET-MASK

TABLE 2-5. GBCONFIG --NET-MASK

PARAMETER	DESCRIPTION
Direction	telnet users side
Command	gbconfig --net-mask netmask
Response	None
Description	Set the IP address mask, it will be valid when the IP mode is on static; restart to take effect after it is modified. The default is 255.255.0.0
Example	Command: gbconfig --net-mask 255.255.0.0 Response: None



CHAPTER 2: COMMANDS LIST DETAILS

2.1.6 GBCONFIG --GATEWAY-IP

TABLE 2-6. GBCONFIG --GATEWAY-IP

PARAMETER	DESCRIPTION
Direction	telnet users side -> Device
Command	gbconfig --gateway-ip gateway
Response	None
Description	Set the gateway, it will be valid when the IP mode is on static; restart to take effect after it is modified. The default is none
Example	Command: gbconfig --gateway-ip 192.168.1.1 Response: None

2.1.7 GBCONFIG --NETWORK-URL

TABLE 2-7. GBCONFIG --NETWORK-URL

PARAMETER	DESCRIPTION
Direction	telnet users side -> Device
Command	gbconfig --network-url {encoderip4addr mediaURL}
Response	None
Description	Set the IP address of VS-2001-DEC that will be connected or the URL of playing
Example	Command: gbconfig --network-url=192.168.10.254 Response: None

2.1.8 GBCONFIG --AUDIO-DELAY

TABLE 2-8. GBCONFIG --AUDIO-DELAY

PARAMETER	DESCRIPTION
Direction	telnet users side -> Device
Command	gbconfig --audio-delay {0,500}
Response	None
Description	Set the audio output delay time of the decoder
Example	Command: gbconfig --audio-delay=200 Response: None

CHAPTER 2: COMMANDS LIST DETAILS

2.1.9 GBCONFIG --HDMI-OUT-AUDIO --MUTE

TABLE 2-9. GBCONFIG --HDMI-OUT-AUDIO --MUTE

PARAMETER	DESCRIPTION
Direction	telnet users side -> Device
Command	gbconfig --hdmi-out-audio --mute {y/n}
Response	None
Description	Set the HDMI output audio of the VS-2001-DEC mute, n is default
Example	Command: gbconfig --hdmi-out-audio --mute=y Response: None

2.1.10 GBCONFIG --LINE-OUT --MUTE

TABLE 2-10. GBCONFIG --LINE-OUT --MUTE

PARAMETER	DESCRIPTION
Direction	telnet users side -> Device
Command	gbconfig --line-out --mute {y/n}
Response	None
Description	Set the analog audio output of the decoder mute, n is default
Example	Command: gbconfig --line-out --mute=y Response: None

2.1.11 GBCONFIG --LOW-DELAY

TABLE 2-11. GBCONFIG --LOW-DELAY

PARAMETER	DESCRIPTION
Direction	telnet users side -> Device
Command	gbconfig --low-delay {y/n}
Response	None
Description	Set the output pictures of the decoder to higher quality and less delay time. n is the default
Example	Command: gbconfig --low-delay=y Response: None



CHAPTER 2: COMMANDS LIST DETAILS

2.1.12 GBCONFIG --HDMI-OUT-AUDIO

TABLE 2-12. GBCONFIG --HDMI-OUT-AUDIO

PARAMETER	DESCRIPTION
Direction	telnet users side -> Device
Command	gbconfig --hdmi-out-audio [--level-up --level-down]
Response	None
Description	Set the HDMI output audio gain
Example	Command: gbconfig --hdmi-out-audio --level-up Response: None

2.1.13 GBCONFIG --HDMI-OUT-AUDIO --LEVEL-CONTROL

TABLE 2-13. GBCONFIG --HDMI-OUT-AUDIO --LEVEL-CONTROL

PARAMETER	DESCRIPTION
Direction	telnet users side -> Device
Command	gbconfig --hdmi-out-audio --level-control {-100,12}
Response	None
Description	Set the HDMI output audio level. 0 is the default
Example	Command: gbconfig --hdmi-out-audio --level-control=0 Response: None

2.1.14 GBCONFIG --LINE-OUT

TABLE 2-14. GBCONFIG --LINE-OUT

PARAMETER	DESCRIPTION
Direction	telnet users side -> Device
Command	gbconfig --line-out [--level-up --level-down]
Response	None
Description	Set the output analog audio gain
Example	Command: gbconfig --line-out --level-up Response: None

CHAPTER 2: COMMANDS LIST DETAILS

2.1.15 GBCONFIG --LINE-OUT --LEVEL-CONTROL

TABLE 2-15. GBCONFIG --LINE-OUT --LEVEL-CONTROL

PARAMETER	DESCRIPTION
Direction	telnet users side -> Device
Command	gbconfig --line-out --level-control {-100,12}
Response	None
Description	Set the output analog audio level. 0 is the default
Example	Command: gbconfig --line-out --level-control=10 Response: None

2.1.16 GBCONFIG --PREFERRED-TRANSPORT-MODE

TABLE 2-16. GBCONFIG --PREFERRED-TRANSPORT-MODE

PARAMETER	DESCRIPTION
Direction	telnet users side -> Device
Command	gbconfig --preferred-transport-mode {udp tcp}
Response	None
Description	Set the transmit method of the decoder
Example	Command: gbconfig --preferred-transport-mode=tcp Response: None

2.1.17 GBCONFIG --PNG-OVERLAY-POS-H

TABLE 2-17. GBCONFIG --PNG-OVERLAY-POS-H

PARAMETER	DESCRIPTION
Direction	telnet users side -> Device
Command	gbconfig --png-overlay-pos-h [0,1919]
Response	None
Description	Set the overlay picture horizontal
Example	Command: gbconfig --png-overlay-pos-h=0 Response: None



CHAPTER 2: COMMANDS LIST DETAILS

2.1.18 GBCONFIG --PNG-OVERLAY-POS-V

TABLE 2-18. GBCONFIG --PNG-OVERLAY-POS-V

PARAMETER	DESCRIPTION
Direction	telnet users side -> Device
Command	gbconfig --png-overlay-pos-v [0,1079]
Response	None
Description	Set the overlay picture vertical
Example	Command: gbconfig --png-overlay-pos-v=1 Response: None

2.1.19 GBCONFIG --PNG-OVERLAY-ENABLE

TABLE 2-19. GBCONFIG --PNG-OVERLAY-ENABLE

PARAMETER	DESCRIPTION
Direction	telnet users side -> Device
Command	gbconfig --png-overlay-enable {y n}
Response	None
Description	Set the overlay pictures showing, n is the default
Example	Command: gbconfig --png-overlay-enable=n Response: None

2.1.20 GBCONFIG --SOURCE-SELECT

TABLE 2-20. GBCONFIG --SOURCE-SELECT

PARAMETER	DESCRIPTION
Direction	telnet users side -> Device
Command	gbconfig --source-select
Response	None
Description	Set the input source of the decoder, input the Mac address of TX, then send the command e e_ reconnect to activate the function
Example	Command: gbconfig --source-select=341b2211ab Response: None

CHAPTER 2: COMMANDS LIST DETAILS

2.1.21 GBCONFIG --RS232-PARAM

TABLE 2-21. GBCONFIG --RS232-PARAM

PARAMETER	DESCRIPTION
Direction	telnet users side -> Device
Command	gbconfig --rs232-param RS232-PARAM
Response	None
Description	Set parameter of SinkPower command, the format is b-dps, b is Baud rate, d is data rate, p is parity, s is stop bit
Example	Command: gbconfig --rs232-param 115200-8n1 Response: None

2.1.22 GBCONFIG --RS232-HEX-CMD-ENABLE

TABLE 2-22. GBCONFIG --RS232-HEX-CMD-ENABLE

PARAMETER	DESCRIPTION
Direction	telnet users side -> Device
Command	gbconfig --rs232-hex-cmd-enable {y n}
Response	None
Description	Set RS-232 of SinkPower command Hex mode to enable or unable
Example	Command: gbconfig --rs232-hex-cmd-enable y Response: None

2.1.23 GBCONFIG --SINKPOWER-MODE

TABLE 2-23. GBCONFIG --SINKPOWER-MODE

PARAMETER	DESCRIPTION
Direction	telnet users side -> Device
Command	gbconfig --sinkpower-mode {cec rs232 both}
Response	None
Description	Set the work mode of SinkPower, cec means sending CEC command only, rs232 means sending RS-232 command only, both means not only sending CEC commands, also sending RS-232 command; cec mode is the default
Example	Command: gbconfig --sinkpower-mode rs232 Response: None



CHAPTER 2: COMMANDS LIST DETAILS

2.1.24 GBCONFIG -S

TABLE 2-24. GBCONFIG -S

PARAMETER	DESCRIPTION
Direction	telnet users side -> Device
Command	gbconfig -s, --show param
Response	Parameters corresponding to the current value of the configuration items
Description	Get the current value of one configuration item
Example	Command: gbconfig -s --name Response: MyVS-2001-DEC

2.1.25 GBCONFIG -H

TABLE 2-25. GBCONFIG -H

PARAMETER	DESCRIPTION
Direction	telnet users side -> Device
Command	gbconfig -h, --help
Response	Show the help information
Description	Show the help information of gbconfig command
Example	<p>Command: gbconfig -h Response: Usage: gbconfig [options] Options: -H, --hdcpc-enable=VALUE [y/n], HDCP enable switch --name=[VALUE] localname for bonjour --ip-mode=[VALUE] [dhcp/static] --ip4-addr=[VALUE] ip4 addr --net-mask=[VALUE] ip4 netmask --gateway-ip=[VALUE] gateway ip --encoder-ip=[VALUE] encoder ip addr -s, --show show the value for the specified items -h, --help show this message Example: gbconfig --name MyEncoder gbconfig --ip-mode=static --ip4-addr=192.168.10.254 --net-mask=255.255.0.0 gbconfig -s --name gbconfig --show --ip4-addr --net-mask</p>

CHAPTER 2: COMMANDS LIST DETAILS

2.2 GBPARAM COMMAND/GBPARAM

2.2.1 GBPARAM S IP_MODE

TABLE 2-26. GBPARAM S IP_MODE

PARAMETER	DESCRIPTION
Direction	telnet users side -> Device
Command	gbparam s ip_mode {static dhcp}
Response	None
Description	Set the IP address mode, it can be configured to static or dhcp. Static is the default. Restart to take effect after it is modified
Example	Command: gbparam --ip_mode static Response: None

2.2.2 GBPARAM S IPADDR

TABLE 2-27. GBPARAM S IPADDR

PARAMETER	DESCRIPTION
Direction	telnet users side -> Device
Command	gbparam s ipaddr ipaddr
Response	None
Description	Set the IP address, it will go into effect on static mode, restart to take effect after it is modified. The default is 192.168.10.253
Example	Command: gbparam s ipaddr 192.168.10.11 Response: None

2.2.3 GBPARAM S NETMASK

TABLE 2-28. GBPARAM S NETMASK

PARAMETER	DESCRIPTION
Direction	telnet users side -> Device
Command	gbparam s netmask netmask
Response	None
Description	Set the IP address mask, it will go into effect on static mode, restart to take effect after it is modified. The default is 255.255.0.0
Example	Command: gbparam s netmask 255.255.0.0 Response: None



CHAPTER 2: COMMANDS LIST DETAILS

2.2.4 GBPARAM S FORCE_OUTPUT_COLOR_SPACE

TABLE 2-29. GBPARAM S FORCE_OUTPUT_COLOR_SPACE

PARAMETER	DESCRIPTION
Direction	telnet users side -> Device
Command	gbparam s force_output_color_space{auto/YUV/RGB}
Response	None
Description	Set the color space of output, auto is the default, then send e_e_reoutput command to take effect
Example	Command: gbparam s force_output_color_space=auto Response: None

2.2.5 GBPARAM S RS232_POWERON_CMD

TABLE 2-30. GBPARAM S RS232_POWERON_CMD

PARAMETER	DESCRIPTION
Direction	telnet users side -> Device
Command	gbparam s rs232_poweron_cmd POWER_ON_RS232_CMD
Response	None
Description	Set the RS-232 message content that will be sent in the SinkPower On command, POWER_ON_RS232_CMD is the message content
Example	Command: gbparam s rs232_poweron_cmd " Power On" Response: None

2.2.6 GBPARAM S RS232_STANDBY_CMD

TABLE 2-31. GBPARAM S RS232_STANDBY_CMD

PARAMETER	DESCRIPTION
Direction	telnet users side -> Device
Command	gbparam s rs232_standby_cmd STANDBY_RS232_CMD
Response	None
Description	Set the RS-232 message content that will be sent in the SinkPower Off command, STANDBY_RS232_CMD is the message content
Example	Command: gbparam s rs232_standby_cmd "Power Off" Response: None

CHAPTER 2: COMMANDS LIST DETAILS

2.3 GBCONTROL COMMAND/GBCONTROL

2.3.1 GBCONTROL --BLINK-LED

TABLE 2-32. GBCONTROL --BLINK-LED

PARAMETER	DESCRIPTION
Direction	telnet users side -> Device
Command	gbcontrol --blink-led
Response	None
Description	Control the LED of the decoder flashing for 10 seconds at 5 Hz
Example	Command: gbcontrol --blink-led Response: None

2.4 OTHER COMMANDS

2.4.1 CEC -S "ADDR OPCODE ; ADDR OPCODE ; ..."

TABLE 2-33. CEC -S "ADDR OPCODE ; ADDR OPCODE ; ..."

PARAMETER	DESCRIPTION
Direction	telnet users side
Command	cec -s "addr opcode; addr opcode ; ..."
Response	None
Description	Send cec command, "Addr" means source + dest address. "OPCODE" means CEC operation code. cec -s "40 04"; cec -s "ff 36"
Example	Command: cec -s "ff 36" Response: None



CHAPTER 2: COMMANDS LIST DETAILS

2.4.2 E E_VW_ENABLE_M_N_X_Y

TABLE 2-34. E E_VW_ENABLE_M_N_X_Y

PARAMETER	DESCRIPTION
Direction	telnet users side -> Device
Command	e e_vw_enable_M_N_x_y
Response	None
Description	Set the position of the decoder in the video wall. M: M+1 lines video wall; N: N+1 column video wall; X: Decoder is located at x+1 line; y: Decoder is located at y+1 column; Sending e_e_reoutput to take effect after it is configured
Example	Command: e_e_vw_enable_1_1_0_0 Response: None

2.4.3 SINKPOWER

TABLE 2-35. SINKPOWER

PARAMETER	DESCRIPTION
Direction	telnet users side -> Device
Command	sinkpower {on off}
Response	None
Description	Power on/off control command, according to the sinkpower parameter to send CEC or RS-232 commands
Example	Command: sinkpower on Response: None

CHAPTER 2: COMMANDS LIST DETAILS

2.5 SERIAL CONTROL

TABLE 2-36. SERIAL CONTROL

PARAMETER	DESCRIPTION
Serial parameter setting [v1.2]	
Command	soip2 -S -b RS232-PARAM
Description	-S: Just means set the parameter RS232-PARAM: Format: b-dps b: baud rate d: data bits p: parity s: stop bit
Obtain the serial parameter setting [v1.2]	
Command	soip2 -G
Response	baud rate: BAUD-RATE data bits: DATA-BITS parity type: PARITY stop bits: STOP_BITS HEX mode: HEX
Description	-G: Just means get the serial parameter BAUD-RATE: Baud rate DATA-BITS: Data bits PARITY: Parity STOP-BITS: Stop bits HEX: Hex mode, "true" or "false"
Send serial content	
Command	soip2 -f /dev/ttyS0 -b RS232-PARAM [-r] [-n] -s "CONTENT"
Description	RS232-PARAM: Format: b-dps b: baud rate d: data bits p: parity s: stop bit [-r]: Attach a <CR> to the end of "CONTENT" [-n]: Attach a <LF> after <CR> or to the end of "CONTENT" CONTENT: The RS-232 content you want to send



APPENDIX: DISCLAIMER/TRADEMARKS

A.1 DISCLAIMER

Black Box Corporation shall not be liable for damages of any kind, including, but not limited to, punitive, consequential or cost of cover damages, resulting from any errors in the product information or specifications set forth in this document and Black Box Corporation may revise this document at any time without notice.

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NOTES

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