APO-VX20-UC API

Version: 1.0

Connection Information

The APO-VX20-UC API can be accessed through a Telnet connection on port 23.

Contents

1.3 API Commands Overview

This device's API commands are mainly classified into the following types.

➔ gbconfig: manage the configurations of the device.

➔ gbcontrol: control the device to do something.

1.3.1 gbconfig Commands

gbconfig commands are mainly classified into two types **gbconfig** and **gbconfig --s** commands.

Commands	Description
gbconfig --camera-mode	Set the camera's tracking mode for the device.
gbconfig -s camera-mode	Get the camera's tracking mode for the device.
gbconfig --camera-zoom	Set the camera's zoom.
gbconfig -s camera-zoom	Get the camera's zoom.
gbconfig --camera-savecoord	Save the coordinates as preset 1 or preset 2.
gbconfig -s --camera-savecoord	Get which preset corresponds to the coordinates.
gbconfig --camera-loadcoord	Load specific preset to the camera.
gbconfig --camera-mirror	Turn on/off camera's mirroring.
gbconfig -s camera-mirror	Get the camera's mirroring status.
gbconfig --camera-powerfreq	Set powerline frequency.
gbconfig -s camera-powerfreq	Get powerline frequency.
gbconfig --camera-geteptz	Get eptz information.
gbconfig --hdcp-enable hdmi	Set HDCP on/off for HDMI Out
gbconfig -s hdcp-enable	Get HDCP status for HDMI out
gbconfig --cec-enable	Set CEC enable/disable.
gbconfig -s cec-enable	Get CEC status.
gbconfig --cec-cmd hdmi	Configure CEC commands for controlling display on/off.
gbconfig -s cec-cmd	Get CEC commands for controlling display on/off.
gbcontrol --send-cmd hdmi	Send CEC commands for controlling display on/off.
gbconfig --mic-mute	Set microphone mute on/off.
gbconfig -s mic-mute	Get microphone mute on/off status.
gbconfig --volume	Set audio volume.
gbconfig -s volume	Get audio volume.
gbconfig --autovolume	Adjust audio volume (increase/decrease).

1.3.2 gbcontrol Commands

Command	Description
gbcontrol --send-cmd hdmi	To send CEC command to the display immediately.

2 Command Sets

2.1 gbconfig Commands

Camera:

2.1.1 gbconfig --camera-mode

Command	gbconfig --camera-mode *{normal	autoframing	speakertracking	presentertracking}*
Response	The camera will change to specified tracking mode.
Description	Set camera's tracking mode from the following: • normal: Users need to adjust the camera to appropriate angle manually. • autoframing: Camera automatically tracks the people based on face recognition. • speakertracking: Camera automatically tracks the speaker based on speech recognition. • presentertracking: Camera automatically tracks the presenter always.

Example:

To set the tracking mode to autoframing:

Command:

> *gbconfig --camera-mode autoframing*

Response:

The camera tracking mode will be set to autoframing.

2.1.2 gbconfig -s camera-mode

Command	gbconfig -s camera-mode
Response	*{normal	autoframing	speakertracking	presentertracking}*
Description	Get camera's tracking mode.

Example:

To get the camera's tracking mode:

Command:

> *gbconfig -s camera-mode*

Response:

> *normal*

This indicates that the tracking mode is set as "normal".

2.1.3 gbconfig --camera-zoom

Command	gbconfig --camera-zoom *{[100, gbconfig -s camera-phymaxzoom]}*

Response	The camera zoom will be changed.
Description	Set camera's zoom. The available value ranges from 100% (1x) to the camera's maximum physical zoom. For example, if the camera's maximum physical zoom is 500, the available range of the zoom is [100, 500]. (1x to 5x)

Example:

To set the camera zoom as 100:

Command:

      gbconfig --camera-zoom 100

Response:

The camera zoom will be set to 1x.

2.1.4   gbconfig -s camera-zoom

Command	gbconfig -s camera-zoom
Response	*xxx*
Description	Get camera's zoom.

Example:

To get the camera zoom:

Command:

      gbconfig -s camera-zoom

Response:

      100

The camera zoom is 1x.

2.1.5   gbconfig --camera-savecoord

Command	gbconfig --camera-savecoord *{1|2}*
Response	Current coordinates will be saved to preset 1 or 2.
Description	Save current coordinates to specified preset. Preset 1 and 2 are offered.

Example:

To set current coordinates to preset 1:

Command:

      gbconfig --camera-savecoord 1

Response:

The coordinates will be saved to preset 1.

2.1.6   gbconfig -s --camera-savecoord

Command	gbconfig --s camera-savecoord *{1	2}*
Response	*true/false*
Description	To get if the coordinates are saved to the specified preset. • True: The coordinates have been saved to the specified preset already. • False: The coordinates are not saved to the specified preset.

Example:

To get if current coordinates are save to preset 1:

Command:

> *gbconfig --s camera-savecoord 1*

Response:

> *false*

The coordinates are not saved to preset 1.

2.1.7   gbconfig --camera-loadcoord

Command	gbconfig --camera-loadcoord *{1	2}*
Response	The specified preset will be loaded to the camera.
Description	Load preset 1/2 to the camera.

Example:

To load preset 1 to the camera:

Command:

> *gbconfig --camera-loadcoord 1*

Response:

Preset 1 will be loaded to the camera.

2.1.8   gbconfig --camera-mirror

Command	gbconfig --camera-mirror *{n	y}*
Response	The camera mirroring function will be turned on or off.
Description	To turn on or off the camera's mirroring function. • n: Mirroring off. • y: Mirroring on.

Example:

To turn on mirroring:

Command:

> *gbconfig --camera-mirror y*

Response:

Camera mirroring function will be turned on.

2.1.9   gbconfig -s camera-mirror

Command	gbconfig -s camera-mirror
Response	*n/y*
Description	To get the mirroring status. • n: Mirroring off. • y: Mirroring on.

Example:

To get the mirroring status:

Command:

gbconfig -s camera-mirror

Response:

y

Camera mirroring function is turned on.

2.1.10 gbconfig --camera-powerfreq

Command	gbconfig --camera-powerfreq *{50	60}*
Response	The frequency will be changed to *50/60.*
Description	To change the powerline frequency to prevent flicker in the video. • 50: Change the frequency to 50Hz. • 60: Change the frequency to 60Hz.

Example:

To change the powerline frequency to 60Hz:

Command:

gbconfig --camera-powerfreq 60

Response:

The powerline frequency will be changed to 60Hz.

2.1.11 gbconfig --s camera-powerfreq

Command	gbconfig --s camera-powerfreq
Response	*n/50/60*
Description	Get the powerline frequency. • 50: Change the frequency to 50Hz. • 60: Change the frequency to 60Hz.

Example:

To get the powerline frequency:

Command:

gbconfig --s camera-powerfreq

Response:

60

The anti-flicker function is 60Hz.

Video:

2.1.12 gbconfig --hdcp-enable

Command	gbconfig --hdcp-enable hdmi { *n	auto	hdcp14	hdcp22*}
Response	The HDCP of HDMI Out will be enabled or disabled.
Description	Configure HDCP capability for HDMI Out. • n: Turn off HDCP. • auto: HDCP will be turned on/off automatically based on actual situation. e.g. when "auto" is set, if both the source and HDMI display support HDCP 2.2, the HDMI output signal will be HDCP 2.2 encrypted; if the source doesn't support HDCP, the HDCP of HDMI output signal will be off. • hdcp14: The HDCP of HDMI Out will be set as 1.4. • hdcp22: The HDCP of HDMI Out will be set as 2.2.

Example:

To set HDCP of HDMI out as 2.2:

Command:

> *gbconfig --hdcp-enable hdmi hdcp22*

Response:

The HDCP of HDMI out is set as 2.2.

2.1.13 gbconfig -s hdcp-enable

Command	gbconfig -s hdcp-enable
Response	*n/auto/hdcp14/hdcp22*
Description	Get HDCP status of HDMI Out.

Example:

To get HDCP status of HDMI out:

Command:

> *gbconfig -s hdcp-enable*

Response:

> *n*

The HDCP of HDMI out is turned off.

2.1.14 gbconfig --cec-enable

Command	gbconfig --cec-enable *{n	y}*
Response	The CEC will be turned on or off.
Description	Set the CEC on/off. • n: Turn off CEC. • y: Turn on CEC.

Example:

To turn on CEC:

Command:

> *gbconfig --cec-enable y*

Response:

CEC will be turned on.

2.1.15 gbconfig -s cec-enable

Command	gbconfig -s cec-enable
Response	*n/y*
Description	Get CEC status. • n: CEC is off. • y: CEC is on. Note: Once CEC is off, the command "*gbcontrol --sinkpower*" will be unavailable, and the switching between normal working and standby for VX20 will be invalid as well.

Example:

To get CEC status:

Command:

> *gbconfig -s cec-enable*

Response:

> y

CEC is turned on.

2.1.16 gbcontrol --sinkpower

Command	gbcontrol --sinkpower *{on	off}*
Response	CEC command for controlling display on/off will be sent from HDMI Out to connected display.
Description	To send CEC command for controlling display on or off. • on: Send CEC command for controlling display on. • Off: Send CEC command for controlling display off.

Example:

To send CEC command for controlling display on:

Command:

> *gbcontrol --sinkpower on*

Response:

The CEC command to power on CEC-enabled display will be sent from HDMI out.

2.1.17 gbconfig --cec-cmd hdmi

Command	gbconfig --cec-cmd hdmi *{on	off} {CmdStr}*
Response	CEC commands for controlling display on/off will be configured and saved on the

	device.
Description	To configure and save CEC commands for controlling display on or off on the device. • on: Configure CEC command for controlling display on. • off: Configure CEC command for controlling display off. • CmdStr: CEC command in string or hex format. For example, the CEC command to power on display may be "40 04".

Example:

To configure and save CEC command "40 04" for powering on display on the device:

Command:

     gbconfig --cec-cmd hdmi on 4004

Response:

The CEC command to power on CEC-enabled display "40 04" will be saved on the device.

2.1.18 gbconfig -s cec-cmd

Command	gbconfig -s cec-cmd
Response	*HDMI ON: xxxx* *HDMI OFF: xxxx*
Description	Get CEC commands for controlling display on and off. • on: Configure CEC command for controlling display on. • Off: Configure CEC command for controlling display off. • CmdStr: CEC command in string or hex format. For example, the CEC command to power on display may be "40 04".

Example:

To get CEC commands for controlling display on and off:

Command:

     gbconfig -s -cec-cmd

Response:

     HDMI ON: 4004

     HDMI OFF: ff36

The CEC command to power on CEC-enabled display: "40 04"; command to power off display: "ff 36".

2.1.19 gbcontrol --send-cmd hdmi

Command	gbcontrol --send-cmd hdmi *{CmdStr}*
Response	The CEC command *{CmdStr}* will be sent to the display immediately for testing.
Description	To send CEC command {CmdStr} to the display immediately. Note: This command will not be saved on the device.

Example:

To send CEC commands "44 04" to the display:

Command:

     gbcontrol --send-cmd hdmi 4004

Response:

The CEC command "40 04" will be sent to the display immediately.

Audio:

2.1.20 gbconfig --mic-mute

Command	gbconfig --mic-mute *{n	y}*
Response	All microphones will be set as mute on/off.
Description	Set all microphones (including VX20's and extension microphones) mute on/off. • n: mute off. • y: mute on.

Example:

To set all microphone mute off:

Command:

gbconfig --mic-mute n

Response:

The microphones will be set as mute off.

2.1.21 gbconfig -s mic-mute

Command	gbconfig -s mic-mute
Response	*n/y*
Description	To get all microphones (including VX20's and extension microphones) mute on/off status. • n: mute off. • y: mute on.

Example:

To get all microphone mute on/off status:

Command:

gbconfig -s mic-mute

Response:

n

The microphones are mute off.

2.1.22 gbconfig –autovolume

Command	gbconfig --autovolume *{inc	dec}*
Response	The volume gain will be increased or decreased by 2 per step.
Description	To increase or decrease the volume. • inc: To increase the gain of the output volume by 2 per step. • dec: To decrease the gain of the output volume by 2 per step.

Example:

To increase volume:

Command:

gbconfig --autovolume inc

Response:

The volume will be increased by 2 per step.

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