



iCam VB80

Platform API Commands Manual

Document Version: V1.0.3

www.infobitav.com info@infobitav.com

Revision History

Doc Version	Date	Contents	Remarks
V1.0.0	2022/04/02	initial	
V1.0.1	2022/04/22	Revised typo	
V1.0.2	2023/06/05	Add new API	
V1.0.3	2024/03/22	Modified	

Contents

Revision History	2
1 Introduction.....	5
1.1 Preparation.....	5
1.1.1 Setting IP Address in Your Computer	5
1.1.2 Enabling Telnet Client.....	5
1.2 Logging In via Command-line Interface	5
1.3 API Commands Overview	6
1.3.1 gbconfig Commands	7
1.3.2 gbcontrol Commands	7
2 Command Sets	8
2.1 gbconfig Commands	8
Camera:	8
2.1.1 gbconfig --camera-mode	8
2.1.2 gbconfig -s camera-mode	8
2.1.3 gbconfig --camera-zoom.....	8
2.1.4 gbconfig -s camera-zoom	9
2.1.5 gbconfig --camera-savecoord	9
2.1.6 gbconfig -s --camera-savecoord	9
2.1.7 gbconfig --camera-loadcoord	10
2.1.8 gbconfig --camera-mirror	10
2.1.9 gbconfig -s camera-mirror	10
2.1.10 gbconfig --camera-powerfreq.....	11
2.1.11 gbconfig --s camera-powerfreq	11
Video:.....	12
2.1.12 gbconfig --hdcpc-enable.....	12
2.1.13 gbconfig -s hdcpc-enable.....	12
2.1.14 gbconfig --cec-enable	12
2.1.15 gbconfig -s cec-enable	13
2.1.16 gbcontrol --sinkpower	13
2.1.17 gbconfig --cec-cmd hdmi	13
2.1.18 gbconfig -s cec-cmd	14
2.1.19 gbcontrol --send-cmd hdmi	14

2.1.20	gbconfig --mice-enable	15
2.1.21	gbconfig -s mice-enable.....	15
2.1.22	gbconfig --display-mode	15
2.1.23	gbconfig -s display-mode.....	16
2.1.24	gbcontrol --set-layout-video.....	16
2.1.25	gbcontrol --get-layout-video.....	16
Audio:	16
2.1.26	gbconfig --mic-mute	16
2.1.27	gbconfig -s mic-mute	16
2.1.28	gbconfig --autovolume.....	17
2.1.29	gbconfig --volume	17
2.1.30	gbconfig -s volume.....	17
2.1.31	gbconfig --speaker-mute	18
2.1.32	gbconfig -s speaker-mute	18
2.1.33	gbconfig --vb10-mic-disable	18
2.1.34	gbconfig -s vb10-mic-disable	19
System:	19
2.1.35	gbcontrol --device-info	19
2.1.36	gbconfig --hibernate	19
2.1.37	gbconfig -s hibernate.....	20
2.1.38	gbconfig --show-guide	20
2.1.39	gbconfig -s show-guide.....	20
3	Appendix	22

1 Introduction

1.1 Preparation

This section takes a third-party control device windows 7 as an example. You may also use other control devices.

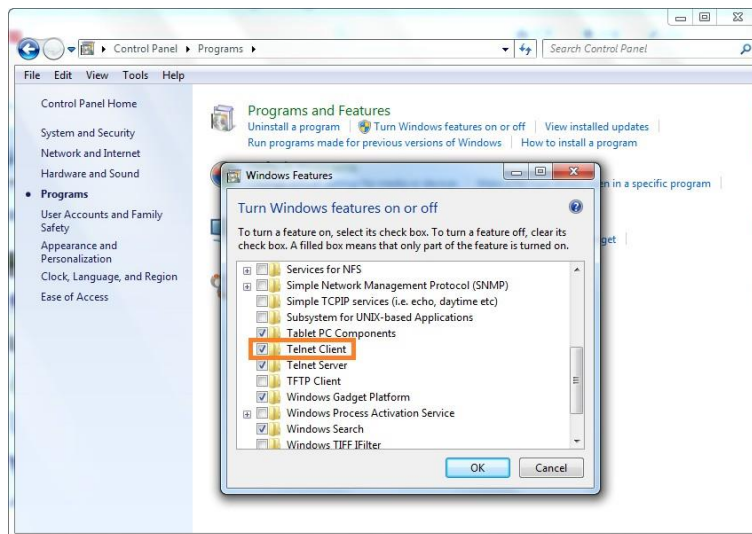
1.1.1 Setting IP Address in Your Computer

The detailed operation steps are omitted here.

1.1.2 Enabling Telnet Client

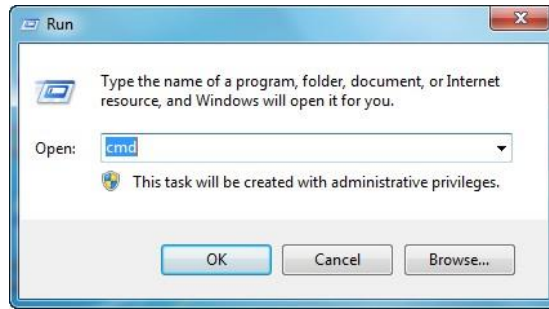
Before logging in to the device via command-line interface, make sure that **Telnet Client** is enabled. By default, **Telnet Client** is disabled in Windows OS. To turn on **Telnet Client**, do as follows.

1. Choose **Start > Control Panel > Programs**.
2. In **Programs and Features** area box, click **Turn Windows features on or off**.
3. In **Windows Features** dialog box, select **Telnet Client** check box.



1.2 Logging In via Command-line Interface

1. Choose **Start > Run**.
2. In the **Run** dialog box, enter **cmd** then click **OK**.



3. Input **telnet x.x.x.x 23**. “23” is the port number.

For example, if the device's IP address is 192.168.20.140, input *telnet 192.168.20.140 23* and then press **Enter**.

```
C:\Users\DQA>telnet 192.168.20.140 23
```

4. When the device prompts login, input **admin** and press **Enter**, then the device prompts password, just press **Enter** directly because the user admin has no default password.

```
username:admin
password:
Welcome to VB10
~
#
```

The device is ready to execute the CLI API command. The status will show Welcome to VB10/ VB80.□

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	<code>gbconfig --camera-mode {normal autoframing speakertracking presentertracking}</code>
Response	The camera will change to specified tracking mode.
Description	Set camera's tracking mode from the following: <ul style="list-style-type: none">• 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	<code>gbconfig -s camera-mode</code>
Response	<code>{normal autoframing speakertracking presentertracking}</code>
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	<code>gbconfig --camera-zoom {[100, gbconfig -s camera-phymaxzoom]}</code>
----------------	--

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. <ul style="list-style-type: none"> • 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	<code>gbconfig --camera-loadcoord {1 2}</code>
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	<code>gbconfig --camera-mirror {n y}</code>
Response	The camera mirroring function will be turned on or off.
Description	To turn on or off the camera's mirroring function. <ul style="list-style-type: none"> • 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	<code>gbconfig -s camera-mirror</code>
Response	<i>n/y</i>
Description	To get the mirroring status. <ul style="list-style-type: none"> • 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	<code>gbconfig --camera-powerfreq {50 60}</code>
Response	The frequency will be changed to 50/60.
Description	To change the powerline frequency to prevent flicker in the video. <ul style="list-style-type: none">• 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	<code>gbconfig --s camera-powerfreq</code>
Response	<code>n/50/60</code>
Description	Get the powerline frequency. <ul style="list-style-type: none">• 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 --hdcpc-enable

Command	<code>gbconfig --hdcpc-enable hdmi { n auto hdcpc14 hdcpc22 }</code>
Response	The HDCPC of HDMI Out will be enabled or disabled.
Description	Configure HDCPC capability for HDMI Out. <ul style="list-style-type: none">• n: Turn off HDCPC.• auto: HDCPC will be turned on/off automatically based on actual situation. e.g. when "auto" is set, if both the source and HDMI display support HDCPC 2.2, the HDMI output signal will be HDCPC 2.2 encrypted; if the source doesn't support HDCPC, the HDCPC of HDMI output signal will be off.• hdcpc14: The HDCPC of HDMI Out will be set as 1.4.• hdcpc22: The HDCPC of HDMI Out will be set as 2.2.

Example:

To set HDCPC of HDMI out as 2.2:

Command:

```
gbconfig --hdcpc-enable hdmi hdcpc22
```

Response:

The HDCPC of HDMI out is set as 2.2.

2.1.13 gbconfig -s hdcpc-enable

Command	<code>gbconfig -s hdcpc-enable</code>
Response	<code>n/auto/hdcpc14/hdcpc22</code>
Description	Get HDCPC status of HDMI Out.

Example:

To get HDCPC status of HDMI out:

Command:

```
gbconfig -s hdcpc-enable
```

Response:

```
n
```

The HDCPC of HDMI out is turned off.

2.1.14 gbconfig --cec-enable

Command	<code>gbconfig --cec-enable { n y }</code>
Response	The CEC will be turned on or off.
Description	Set the CEC on/off. <ul style="list-style-type: none">• 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	<p>Get CEC status.</p> <ul style="list-style-type: none"> n: CEC is off. y: CEC is on. <p>Note: Once CEC is off, the command “<i>gbcontrol --sinkpower</i>” will be unavailable, and the switching between normal working and standby for VB10 will be invalid as well.</p>

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	<p>To send CEC command for controlling display on or off.</p> <ul style="list-style-type: none"> 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	<p>To configure and save CEC commands for controlling display on or off on the device.</p> <ul style="list-style-type: none"> 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	<p><i>HDMI ON: xxxx</i></p> <p><i>HDMI OFF: xxxx</i></p>
Description	<p>Get CEC commands for controlling display on and off.</p> <ul style="list-style-type: none"> 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	<p>To send CEC command {CmdStr} to the display immediately.</p> <p>Note: This command will not be saved on the device.</p>

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.

2.1.20 gbconfig --mice-enable

Command	gbconfig --mice-enable {n y}
Response	Miracast over Infrastructure feature enabled or disabled
Description	n, disabled. y, enabled.

Example:

To set Miracast over Infrastructure as enabled:

Command:

```
gbconfig --mice-enable y
```

Response:

Miracast over Infrastructure feature will be enabled.

2.1.21 gbconfig -s mice-enable

Command	gbconfig -s mice-enable
Response	n/y
Description	n, disabled. y, enabled.

Example:

To get Miracast over Infrastructure status:

Command:

```
gbconfig -s mice-enable
```

Response:

```
n
```

The Miracast over Infrastructure is disabled.

2.1.22 gbconfig --display-mode

Command	gbconfig --display-mode {single dual}
Response	Set Display layout to single, split
Description	Single and Split are auto layout,

Example:

To Set Display layout to manual mode:

Command:

```
gbconfig --display-mode single
```

Response:

The display layout mode turned to single.

2.1.23 gbconfig -s display-mode

Command	gbconfig -s display-mode
Response	single/ dual/manual
Description	single, auto single layout dual, auto split layout manual, for manual layout setting

Example:

To get display mode status:

Command:

```
gbconfig -s display-mode
```

Response:

```
single
```

The display mode is single.

Audio:

2.1.24 gbconfig --mic-mute

Command	gbconfig --mic-mute {n y}
Response	All microphones will be set as mute on/off.
Description	Set all microphones (including VB10's and expansible microphones) mute on/off. <ul style="list-style-type: none">• 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.

2.1.25 gbconfig -s mic-mute

Command	gbconfig -s mic-mute
Response	n/y
Description	To get all microphones (including VB10's and expansible microphones) mute on/off status. <ul style="list-style-type: none">• 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.

2.1.26 gbconfig --autovolume

Command	<code>gbconfig --autovolume {inc dec}</code>
Response	The volume gain will be increased or decreased by 2 per step.
Description	To increase or decrease the volume. <ul style="list-style-type: none">• 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.

2.1.27 gbconfig --volume

Command	<code>gbconfig --volume {0,12,24,36,50,62,74,88,100}</code>
Response	Set the volume values.
Description	Volume can only be configured to specified values

Example:

To set the volume:

Command:

```
gbconfig --volume 50
```

Response:

The volume will be set to 50.

2.1.28 gbconfig -s volume

Command	<code>gbconfig -s volume</code>
Response	0~100
Description	Get the volume values.

Example:

To get the volume:

Command:

```
gbconfig -s volume
```

Response:

50

The volume is 50.

2.1.29 gbconfig --speaker-mute

Command	gbconfig --speaker-mute {n y}
Response	Set the speaker mute/unmute.
Description	n, unmute y, mute

Example:

To set the speaker mute:

Command:

```
gbconfig --speaker-mute y
```

Response:

The speaker will be mute.

2.1.30 gbconfig -s speaker-mute

Command	gbconfig -s speaker-mute
Response	n/y
Description	Get the speaker status.

Example:

To get the mute status of the speaker:

Command:

```
gbconfig -s speaker-mute
```

Response:

```
n
```

The speaker is unmute.

2.1.31 gbconfig --vb10-mic-disable

Command	gbconfig --vb10-mic-disable {n y}
Response	Set the internal mic of vb10 enabled/disabled.
Description	n, enabled y, disabled

Example:

To set the mic disabled:

Command:

```
gbconfig --vb10-mic-disable y
```

Response:

The mic of vb10 will be disabled.

2.1.32 gbconfig -s vb10-mic-disable

Command	gbconfig -s vb10-mic-disable
Response	n/y
Description	Get the mic status.

Example:

To get the mic status:

Command:

```
gbconfig -s vb10-mic-disable
```

Response:

```
n
```

The mic is enabled.

System:

2.1.33 gbcontrol --device-info

Command	gbcontrol --device-info
Response	Get the firmware version
Description	The firmware version for VB10

Example:

To get the firmware version:

Command:

```
gbcontrol --device-info
```

Response:

```
V1.3.10
```

2.1.34 gbconfig --hibernate

Command	gbconfig --hibernate {n y}
Response	Set the device to sleep.
Description	n, wake up y, sleep

Example:

To set the device sleep:

Command:

```
gbconfig --hibernate y
```

Response:

The device will sleep.

2.1.35 gbconfig -s hibernate

Command	gbconfig -s hibernate
Response	n/y
Description	Get the sleep status.

Example:

To get the sleep status of the device:

Command:

```
gbconfig -s hibernate
```

Response:

```
n
```

The device is working.

2.1.36 gbconfig --show-guide

Command	gbconfig --show-guide {n y}
Response	Show the guide screen manual.
Description	n, close y, show

Example:

To show the guide screen:

Command:

```
gbconfig --show-guide y
```

Response:

The guide screen will show.

2.1.37 gbconfig -s show-guide

Command	gbconfig -s show-guide
Response	n/y
Description	Get the guide screen status. Note that only the status of the manually set guide screen is fed back.

Example:

To get the guide screen status of the device:

Command:

```
gbconfig -s hibernate
```

Response:

```
n
```

The guide screen is not show.

3 Appendix

[To be added]

[To be added]