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HT-MERCURY

All-in-one meeting collaboration with ultra-wide angle 4KAI camera, microphone and speaker features, along with wired and wireless screen casting capability.

API Command List

Version: V1.0

Introduction

The following sections include a list of API commands and examples of what each of the API commands do.

1.1 Preparation

This section takes a third-party control device such as Telnet on Windows 7. You may also use other control devices.

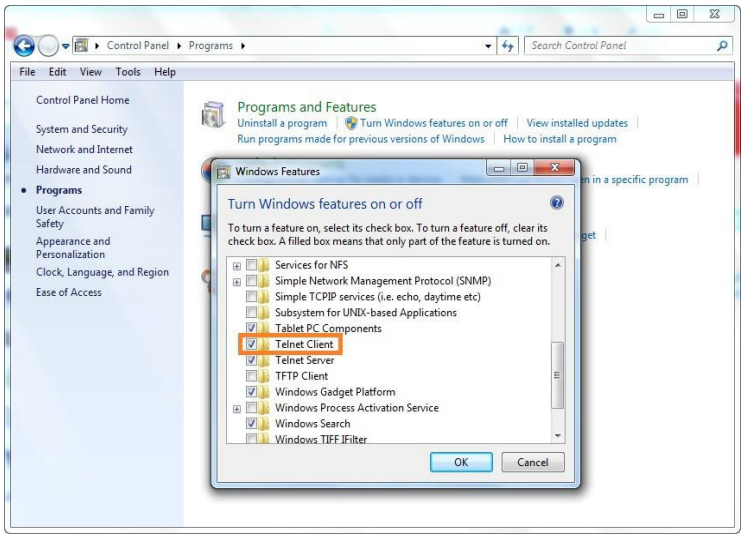
1.1.1 Setting IP Address in Your Computer

To connect to and communicate with the HT-MERCURY, the controlling device needs to be on the same network. If needed, change the IP address on your PC to be in the same IP range and same subnet as the HT-MERCURY. You can find out the IP address of the HT-MERCURY by looking in the bottom right corner of the Guide Screen (you will need to connect the HT-MERCURY to a display).

1.1.2 Enabling Telnet Client

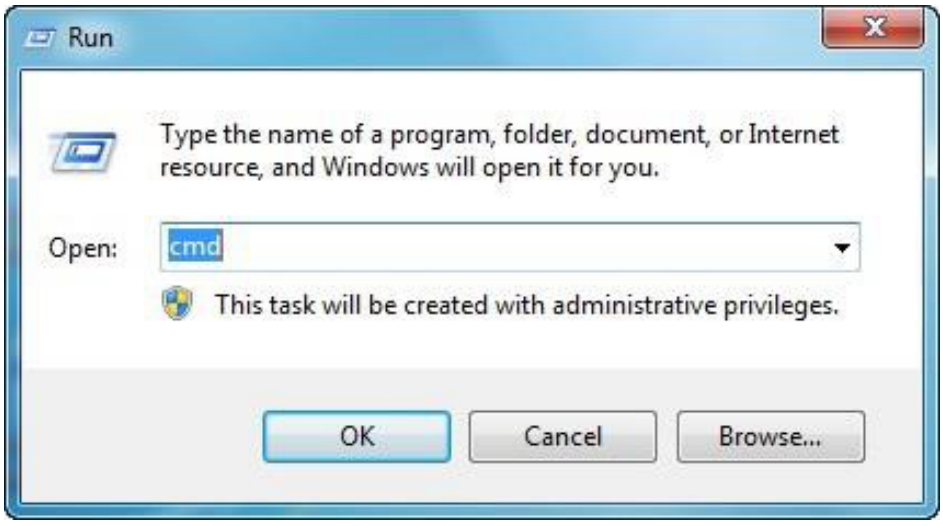
Before logging in to IP controller via command-line interface, make sure that **Telnet Client** is enabled. By default, **Telnet Client** is disabled in Windows OS. To turn on **Telnet Client**, do as follows.

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.

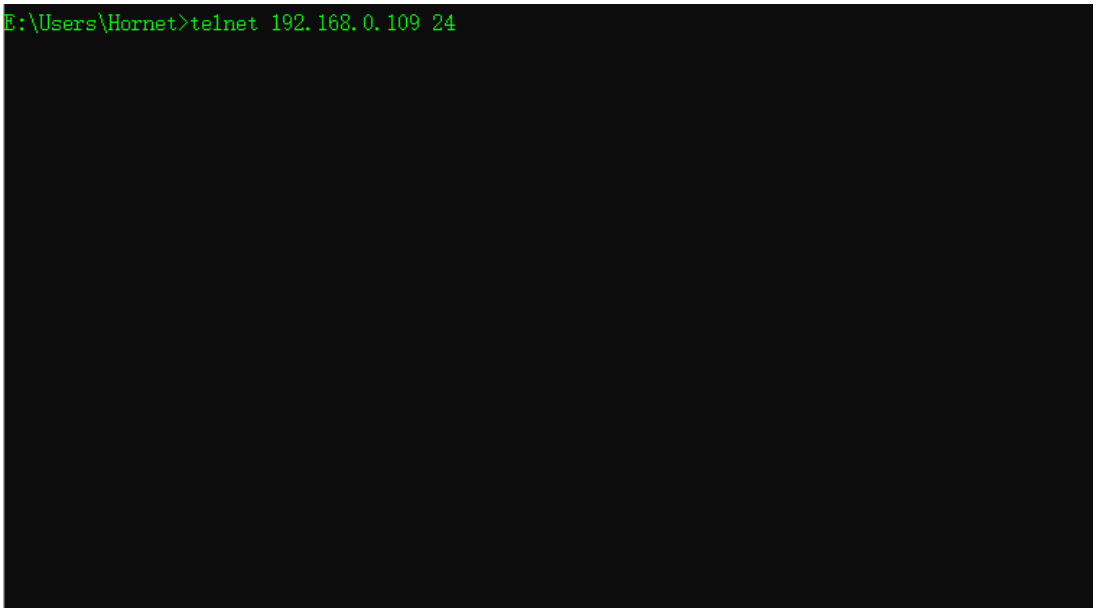


1.2 Logging In via Command-line Interface

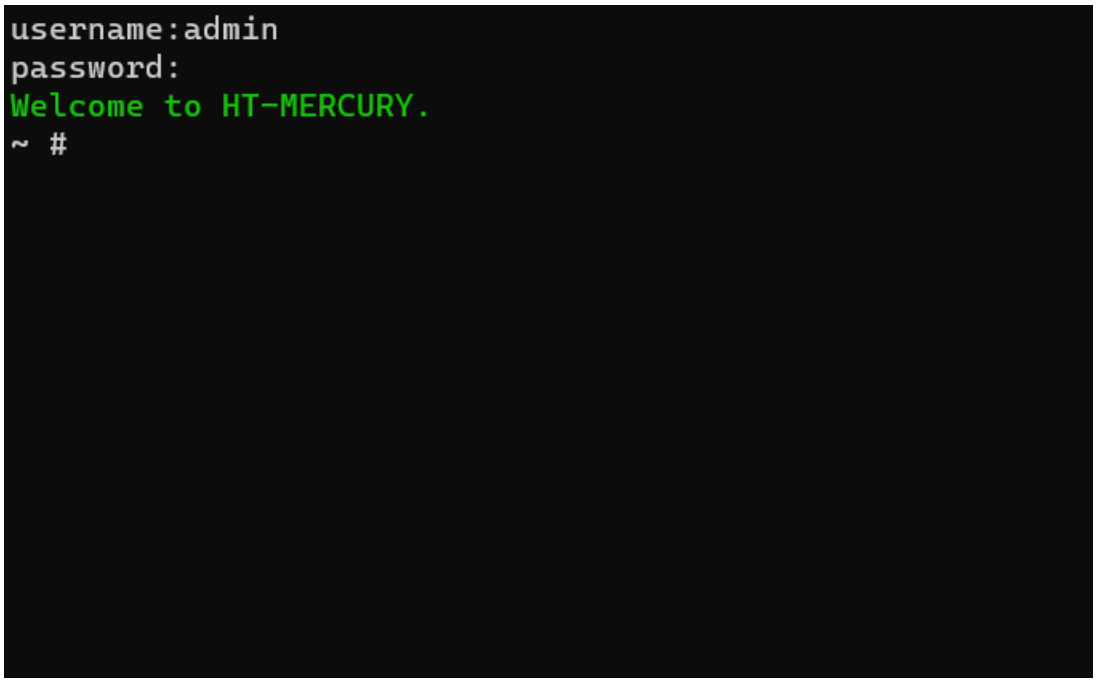
1. Choose **Start** > **Run**.
2. In the **Run** dialog box, enter **cmd** then click **OK**.



3. Enter **telnet 192.168.0.109 23** if the device's IP address is 192.168.0.109, and then press **Enter**. (The 23 on the end changes port communication to 23.)



4. The device will display a **#** as the command prompt.



Now, the device is ready to execute the CLI API commands.

1.3 Introduction to Terminology

The terminology used in the API command's description is listed as follows.

Terminology	Description
Device	The unit being controlled.
Airplay Mirroring	A screen mirroring approach developed by Apple, it is supported by many Apple devices, such as MacBook, iPad and iPhone. In this document, we use AirPlay as its abbreviation.
Miracast	A screen mirroring approach developed by Wi-Fi alliance, it is supported by all Android devices and Windows PC.
BYOD Source	AirPlay, Miracast are BYOD solutions, are named **BYOD (video) source**.
Hardware Source	The device has some hardware video input interfaces, such as HDMI, VGA or Type-C, they are named **hardware (video) source**.
Software Source	Certain devices can obtain and display the video content from a USB camera. These are named **software (video) source**. AirPlay Mirroring, and Miracast, are also called software source too.

1.4 API Commands Overview

API commands of IP controller are mainly classified into the following types.

- ✧ gbconfig: manages the configurations of the device
- ✧ gbcontrol: controls the device
- ✧ gblayout: adjusts the features related to screen layout
- ✧ Event: message from the device to report that the device state changes

Every API command is supported by all models unless there is special comment in the context.

1.4.1 gbconfig Commands

Commands	Description
gbconfig --help	Displays all available gbconfig commands.
gbconfig --cascade-mic-num	Sets the total number of cascaded microphones.
gbconfig --get-cascade-mic-online-num	Displays the total number of connected expansion microphones.
gbconfig --camera-mode	Sets the camera's tracking mode.

gbconfig -s camera-mode	Displays the camera's tracking mode.
gbconfig --camera-zoom	Sets the camera's zoom.
gbconfig -s camera-zoom	Displays the camera's zoom setting.
gbconfig --camera-savecoord	Saves the camera's coordinates as preset 1 or 2.
gbconfig -s camera-savecoord	Displays if the current coordinates are saved to preset 1 or 2.
gbconfig --camera-loadcoord	Recalls preset 1 or 2.
gbconfig --camera-mirror	Turns on/off camera's mirroring.
gbconfig -s camera-mirror	Displays the camera's mirroring setting.
gbconfig --camera-powerfreq	Sets the powerline frequency.
gbconfig -s camera-powerfreq	Displays the powerline frequency setting.
gbconfig --camera-geteptz	Display ePTZ information about the camera.
gbconfig --hdcp-enable hdmi	Sets the HDCP on/off for HDMI out.
gbconfig -s hdcp-enable	Displays the HDCP status for HDMI out.
gbconfig --cec-enable	Sets CEC on/off.
gbconfig -s cec-enable	Displays the CEC status.
gbconfig --cec-cmd hdmi	Configure CEC commands for turning a display on/off.
gbconfig -s cec-cmd	Displays the CEC commands for turning a display on/off.
gbconfig --send-cmd hdmi	Tests CEC commands for turning a display on/off.
gbconfig --mic-mute	Mutes all microphones
gbconfig -s mic-mute	Displays the status of the microphone mute.
gbconfig --autovolume	Adjusts audio volume (increase/decrease)
gbconfig --aec	Enables/disables AEC
gbconfig -s aec	Displays if the AEC mode is enabled/disabled.
gbconfig --anc	Enables/disables ANC
gbconfig -s anc	Displays if the ANC mode is enabled/disabled.
gbconfig --agc	Enables/disables AGC
gbconfig -s agc	Displays if the AGC mode is enabled/disabled.

1.4.2 gbcontrol Commands

Command	Description
gbcontrol --help	Displays all available gbcontrol

	commands.
gbcontrol --reboot	Reboot the device
gbcontrol --reset-to-default	Restore factory defaults
gbcontrol --reset-web-passwd	Resets the web login password.
gbcontrol --video-source	Control the device to display a video source
gbcontrol --audio-source	Control the device to play the audio of the designated video source
gbcontrol --stop-video	Stop displaying a video source, do not change the screen layout.
gbcontrol --show-osd	Show all OSD items for ten seconds
gbcontrol --device-info	Obtain the information about the device model and firmware version

1.4.3 gblayout Commands

Command	Description
gblayout --help	Show a simple guide of gblayout command
gblayout --start-video	Start to display a video source, the screen layout will be changed automatically.
gblayout --stop-video	Stop displaying a video source, the screen layout will be changed automatically.
gblayout --show	Query the detail of a screen layout
gblayout --set	Designate the current screen layout
gblayout --get	Query the information related to the current screen layout
gblayout --set-sequence	Designate the screen layout sequence
gblayout --get-sequence	Query the screen layout sequence
gblayout --auto	Configure whether the device change the screen layout automatically
gblayout --list	List all screen layouts in the device

1.4.4 Event Commands

Commands	Description
[Event] VideoSource	The state of one video source has changed
[Event] WorkMode	The device work mode has changed
[Event] Layout	The screen layout has changed

2 Command Sets

2.1 gbconfig Commands

2.1.1 gbconfig --help

Command	gbconfig --help
Response	A simple description of the gbconfig command is shown.
Description	Show a simple guide of all available gbconfig commands

2.1.2 gbconfig --cascade-mic-num

Command	gbconfig --cascade-mic-num *{1-7}*
Response	Sets the number of cascaded microphones
Description	This command sets the number of cascaded expansion HT-Satellite-EXT microphones

Example:

To set total number of connected HT-Satellite-EXT microphones to 3:

Command:

gbconfig --cascade-mic-num 3

Response:

The total number of microphones connected is set to 3.

2.1.3 gbconfig --get-cascade-mic-online-num

Command	gbconfig --get-cascade-mic-online-num

Response	0-7
Description	This command displays the total number of HT-Satellite-EXT microphones connected to the HT-MERCURY.

Example:

To display the total number of expansion microphones connected:

Command:

gbconfig --get-cascade-mic-online-num

Response:

1

One expansion microphone is connected to HT-MERCURY.

Camera:

2.1.4 gbconfig --camera-mode

Command	gbconfig --camera-mode *{normal | autoframing | speakertracking | presentertracking}*
Response	The device name will change to the specified tracking mode.
Description	Set camera's tracking mode to the following: • normal: Users adjust the camera's pan, tilt, and zoom manually • autoframing: The camera automatically tracks the people based on face recognition. • speakertracking: The camera automatically tracks the speaker based on speech recognition. • presentertracking: The camera tracks a single presenter.

Example:

To change the name to autoframing:

Command:

gbconfig –camera-mode autoframing

Response:

The camera's tracking mode will be set to autoframing.

2.1.5 gbconfig -s camera-mode

Command	gbconfig -s camera-mode

Response	*{normal | autoframing | speakertracking | presentertracking}*
Description	Display camera's tracking mode.

Example:

To display the camera's tracking mode:

Command:

gbconfig -s camera-mode

Response:

normal

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

2.1.6 gbconfig --camera-zoom

Command	gbconfig –camera-zoom *{[100, gbconfig -s camera-phymaxzoom]}*
Response	The camera's zoom will be changed.
Description	Set the camera's zoom. The available values range from 100% (1x) to the camera's maximum physical zoom. For the HT-MERCURY the camera's maximum physical zoom is 500 and so the available range of the zoom is [100, 500] (1x to 5x)

Example:

To set the camera's zoom to 100:

Command:

gbconfig --camera-zoom 100

Response:

The camera's zoom will be set to 1x.

2.1.7 gbconfig -s camera-zoom

Command	gbconfig -s camera-zoom
Response	The response will be the number the zoom is set to (between 100 and 500)
Description	This command displays the zoom the camera is set to.

Example:

To display what the camera's zoom is set to:

Command:

gbconfig -s camera-zoom

Response:

100

If the zoom is set to 100.

2.1.8 gbconfig --camera-savecoord

Command	gbconfig --camera-savecoord *{1 | 2}*
Response	Current coordinates of the camera will be stored to preset 1 or preset 2.
Description	Save current coordinates to a specified preset for easy recall.

Example:

To set current coordinates to preset 1:

Command:

gbconfig --camera-savecoord 1

Response:

The current coordinates of the camera will be saved to preset 1.

2.1.9 gbconfig -s camera-savecoord

Command	gbconfig -s camera-savecoord *{1 | 2}*
Response	*true/false*
Description	This command allows you to see if the current coordinates of the camera are saved to a certain preset. • True: The coordinates have been saved to the specified preset. • False: The coordinates have not been saved to the specified preset.

Example:

To see if the current coordinates are saved to preset 1:

Command:

gbconfig -s camera-savecoord 1

Response:

true

The coordinates are saved to preset 1.

2.1.10 gbconfig --camera-loadcoord

Command	gbconfig --camera-loadcoord *{1	2}*
Response	The specified preset will be loaded to the camera (preset recall).
Description	This command loads preset 1 or 2 to the camera.

Example:

To recall preset 1 to the camera:

Command:

gbconfig --camera-loadcoord 1

Response:

Preset 1 is loaded to the camera.

2.1.11 gbconfig --camera-mirror

Command	gbconfig --camera-mirror *{n	y}*
Response	The camera mirroring function will be turned on or off.
Description	This command turns on or off the mirror function. • n: Mirroring is off • y: Mirroring is on

Example:

To turn on mirroring:

Command:

gbconfig --camera-mirror y

Response:

Camera mirroring function will be turned on.

2.1.12 gbconfig -s camera-mirror

Command	gbconfig -s camera-mirror
Response	n/y
Description	To display the mirroring mode: • n: Mirroring off • y: Mirroring on

Example

To see the status of the mirroring mode:

Command:

gbconfig -s camera-mirror

Response:

y

The camera mirroring mode is turned on.

2.1.13 gbconfig --camera-powerfreq

Command	gbconfig --camera-powerfreq *{50	60}*
Response	The refresh frequency of the camera will be changed to 50 or 60 (Hz).
Description	To change the powerline frequency to prevent flicker in the video: • 50: Changes the frequency to 50Hz • 60: Changes 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.

2.1.14 gbconfig -s camera-powerfreq

Command	gbconfig -s camera-powerfreq
Response	*n/50/60*
Description	This command shows the camera's powerline frequency setting. • 50: Displays the frequency as 50Hz • 60: Displays the frequency as 60Hz

Example:

To show the powerline frequency:

Command:

gbconfig -s camera-powerfreq

Response:

60

The anti-flicker function is 60Hz.

2.1.15 gbconfig --camera-geteptz

Command	bconfig --camera-geteptz
Response	Information about the ePTZ camera.
Description	This command displays the information about the ePTZ camera.

Example:

To show information about the ePTZ camera:

Command:

gbconfig --camera-geteptz

Response:

{"result" : {"autozoomunit" :1, "phymaxzoom" : 800, "xmax" : 108000, "xmin" : -108000, "xstep" : 3600, "ymax" : 108000, "ymin" : -108000, "ystep" : 3600, "zoom" : 500}}

Video:

2.1.16 gbconfig --hdcp-enable

Command	gbconfig --hdcp-enable hdmi *{n | auto | hdcp14 | hdcp22}*
Response	The HDCP feature of the HDMI out interface will be enabled or disabled
Description	Configure the HDCP capability for HDMI out. • n: Turn of HDCP • auto: HDCP will be turned on/off automatically depending on what the display supports. • hdcp14: The HDCP of HDMI out will be set to 1.4. • hdcp22: The HDCP of HDMI out will be set to 2.2.

Example:

To set HDCP of HDMI out to 2.2:

Command:

gbconfig --hdcp-enable hdmi hdcp22

Response:

The HDCP of HDMI out is set to 2.2.

2.1.17 gbconfig -s hdcp-enable

Command	gbconfig -s hdcp-enable
Response	*n/auto/hdcp14/hdcp22*
Description	Displays the status of the HDCP for HDMI out.

Example:

To get the HDCP setting of HDMI out:

Command:

gbconfig -s hdcp-enable

Response:

n

The HDCP of HDMI out is turned off.

2.1.18 gbconfig --cec-enable

Command	gbconfig --cec-enable
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.

2.1.19 gbconfig -s cec-enable

Command	gbconfig -s cec-enable
Response	n/y
Description	Show the 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 mode and standby mode will be disabled as well.

Example:

To see the CEC status:

Command:

gbconfig -s cec-enable

Response:

y

CEC is turned on.

2.1.20 gbconfig --sinkpower

Command	gbconfig --sinkpower *{on | off}*
Response	The CEC command for controlling the display on/off will be sent from HDMI out to the connected display.
Description	To send a CEC command for turning on/off a display: • on: Send CEC command for turning the display on. • off: Send CEC command for turning the display off.

Example:

To send CEC command for turning the display on:

Command:

gbconfig --sinkpower on

Response:

The CEC command to turn on the display will be sent from the HDMI out.

2.1.21 gbconfig --cec-cmd hdmi

Command	gbconfig --cec-cmd hdmi *{on | off} {CmdStr}*
Response	CEC commands for turning the display on/off are configured and saved on the HT-MERCURY.
Description	To configure and save CEC commands for turning the display on or off on the HT-MERCURY. • on: Configure CEC command for turning the display on. • off: Configure the CEC command for turning the display off. • CmdStr: The CEC command in string or hex format. For example, the CEC command to power on a display may be “40 04”.

Example:

To configure and save the CEC command “40 04” to turn on a display:

Command:

gbconfig --cec-cmd hdmi on 4004

Response:

The CEC command “40 04” to turn on the display is saved to HT-MERCURY.

2.1.22 gbconfig -s cec-cmd

Command	gbconfig -s cec-cmd
Response	HDMI ON: xxxx HDMI OFF: xxxx
Description	See the saved CEC commands for turning a display on or off. • on: shows the saved on command. • off: shows the saved off command. • CmdStr: shows the string for the on or off command.

Example:

To see the saved CEC commands for turning the display on and off:

Command:

gbconfig -s cec-cmd

Response:

HDMI ON: 4004

HDMI OFF: ff36

Displays the saved CEC commands for turning on and off the display.

2.1.23 gbconfig --send-cmd hdmi

Command	gbcontrol --send-cmd hdmi *{CmdStr}*
Response	The CEC command {CmdStr} will be sent to the display for testing.
Description	This command tests CEC commands {CmdStr} to turn the display on or off. **Note:** This command is only for testing and is not saved on the HT-MERCURY.

Example:

To test the CEC command “44 04” to the display

Command:

gbcontrol --send-cmd hdmi 4004

Response:

The CEC command “40 04” will be sent to the display.

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 the array microphones and connected expansion microphones to mute on/off. • n: mute off. • y: mute on.

Example:

To mute all microphones:

Command:

gbconfig --mic-mute y

Response:

All microphones will be muted.

2.1.25 gbconfig -s mic-mute

Command	gbconfig -s mic-mute
Response	n/y
Description	Displays the status of the microphones, muted or unmuted. • n: mute off. • y: mute on.

Example:

To get the status of the microphones:

Command:

gbconfig -s mic-mute

Response:

N

The microphones are unmuted.

2.1.26 gbconfig --autovolume

Command	gbconfig --autovolume *{inc | dec}*
Response	The volume gain will be increased or decreased in increments of 2 steps.
Description	To increase or decrease the volume: • inc: Increases the gain of the output by 2 steps. • dec: Decreases the gain of the output by 2 steps.

Example:

To increase the volume:

Command:

gbconfig --autovolume inc

Response:

The volume will be increased by 2 steps.

2.1.27 gbconfig --aec

Command	gbconfig --aec
Response	Enables or disables AEC
Description	This command enables/disables AEC (Acoustic Echo Cancellation) on the microphones. • n: disables AEC. • y: enables AEC.

Example:

To turn off AEC:

Command:

gbconfig --aec n

Response:

The AEC is disabled in HT-MERCURY.

2.1.28 gbconfig -s aec

Command	gbconfig -s aec
Response	n/y
Description	Displays the status of the AEC, enabled or disabled. • n: AEC disabled. • y: AEC enabled.

Example:

To get the status of the AEC:

Command:

gbconfig -s aec

Response:

N

The AEC is disabled in HT-MERCURY.

2.1.29 gbconfig --anc

Command	gbconfig --anc
Response	Enables or disables ANC
Description	This command enables/disables ANC (Active Noise Cancellation) on the microphones. • n: disables ANC. • y: enables ANC.

Example:

To turn off ANC:

Command:

gbconfig --anc n

Response:

The ANC is disabled in HT-MERCURY.

2.1.30 gbconfig -s anc

Command	gbconfig -s anc
Response	n/y
Description	Displays the status of the ANC, enabled or disabled. • n: ANC disabled. • y: ANC enabled.

Example:

To get the status of the ANC:

Command:

gbconfig -s anc

Response:

N

The ANC is disabled in HT-MERCURY.

2.1.31 gbconfig --agc

Command	gbconfig --agc
Response	Enables or disables AGC
Description	This command enables/disables AGC (Automatic Gain Control) on the microphones. • n: disables AGC. • y: enables AGC.

Example:

To turn off AGC:

Command:

gbconfig --agc n

Response:

The AGC is disabled in HT-MERCURY.

2.1.32 gbconfig -s agc

Command	gbconfig -s agc
Response	n/y
Description	Displays the status of the AGC, enabled or disabled. • n: AGC disabled. • y: AGC enabled.

Example:

To get the status of the AGC:

Command:

gbconfig -s agc

Response:

N

The AGC is disabled in HT-MERCURY.

2.2 gbcontrol Commands

2.2.1 gbcontrol --help

Command	gbcontrol --help
Response	A simple description of the gbcontrol command is shown.
Description	Show a simple guide of all available gbcontrol commands

2.2.2 gbcontrol --reboot

Command	gbconfig --reboot
Response	The device will reboot.
Description	Reboot the device manually

Example:

To reboot the device:

Command:

gbconfig --reboot

Response:

The device will start to reboot.

2.2.3 gbcontrol --reset-to-default

Command	gbcontrol --reset-to-default
Response	The HT-MERCURY will reboot to recovery mode to restore factory defaults, and then reboot again for normal usage.
Description	This command restores the HT-MERCURY to its factory defaults.

Example:

To reset the HT-MERCURY to the factory default:

Command:

gbconfig --reset-to-default

Response:

The device will start to restore all factory defaults.

2.2.4 gbcontrol --reset-web-passwd

Command	gbcontrol --reset-web-passwd
Response	The HT-MERCURY's web password will be reset to default.
Description	This command restores the HT-MERCURY's Web UI password to the factory default (**admin**).

Example:

To reset the Web UI password of the HT-MERCURY to the factory default:

Command:

gbconfig --reset-web-passwd

Response:

The Web UI password is reset to the factory default.

2.2.5 gbcontrol --video-source

Command	gbcontrol --video-source *VideoName* [*WinNo*]
Response	The device displays the video source with the designated mode.
Description	This command displays the selected video source.

2.2.6 gbcontrol --audio-source

Command	gbcontrol --audio-source *VideoName*
Response	The device plays the audio of the designated video source.
Description	This command selects the desired audio source.

2.2.7 gbcontrol --stop-video

Command	gbcontrol --stop-video {*VideoName*}
Response	The device stops displaying the designated video, then prints a list of

	the video sources which are displayed.
Description	This command makes the HT-MERCURY stop displaying a specified video source.

Example:

To stop HDMI2 when it is currently being displayed:

Command:

gbconfig --stop-video HDMI2

Response:

The device will stop displaying video connected into HDMI2.

2.2.8 gbcontrol --show-osd

Command	gbcontrol --show-osd
Response	The HT-MERCURY displays the OSD for ten seconds.
Description	This command displays the OSD for ten seconds. This allows users to see the OSD for access code or soft AP password when video is displayed. After 10 seconds the OSD will disappear.

Example:

Command:

gbcontrol --show-osd

Response:

The device shows all OSD items for ten seconds.

2.2.9 gbcontrol --device-info

Command	gbcontrol --device-info
Response	The HT-MERCURY displays the model and firmware version
Description	This command shows information about the device and firmware version.

2.3 gblayout Commands

2.3.1 gblayout --help

Command	gblayout --help
Response	A simple description of the gblayout command is shown.
Description	Shows a simple guide of all available gblayout commands

2.3.2 gblayout --start-video

Command	gblayout --start-video *VideoName*
Response	The device starts to display the designated video source, then prints a list of the video sources which are displayed.
Description	Start to display a video source. Some details are below: ➢ If the video source is displayed already, the device does nothing. ➢ If there is no free window (view) which can be used to display the video source, the device switches to a screen layout which has more windows firstly, then start to display the video source. ➢ If there is neither free window nor screen layout having more windows, the device stops displaying the "oldest" video source so to get a free window for the video source. **Note:** If the device is disabled to change the screen layout automatically, this command does not work. Please refer the chapter related to the **gblayout --auto** command to get more details.

Example:

To start to display USB-C when HDMI is displayed:

Command:

gblayout --start-video USB-C

Response:

HDMI USB-C

2.3.3 gblayout --stop-video

Command	gblayout --stop-video { *VideoName* | *WinNo* }
Response	The device stops displaying the designated video, then prints a list of the video sources which are displayed.
Description	The reverse operation of the command gblayout --start-video. **Note:** If the device is disabled to change the screen layout automatically, this command does not work. Please refer the chapter related to the **gblayout --auto** command to get more details.

Example:

To stop USB-C when HDMI and USB-C are displayed:

Command:

gblayout --stop-video USB-C

Response:

HDMI

2.3.4 gblayout --show

Command	gblayout –-show *LayoutNo*
Response	The HT-MERCURY outputs the details of the screen layout.
Description	This command queries the detail of a screen layout. The HT-RANGER will print the number, name, quantity of windows, position, and size of every window. (An asterisk (“*”) is the mark of the main window, if designated). The second part of the command, LayoutNo, is the number of the layout.

Example:

To query the detail of a layout having only one window:

Command:

gblayout --show 0x100

Response:

Layout #: 0x0100 Name:layout0 1 windows

1 0 0 16000 9000

2.3.5 gblayout --set

Command	gblayout --set *LayoutNo*

Response	The HT-MERCURY starts using the designated screen layout.
Description	Designate the current screen layout. The argument *LayoutNo* is the number of the layout.

Example:

To use the layout 0x0101:

Command:

gblayout --set 0x101

Response:

The HT-MERCURY starts using the layout whose number is 0x0101 as the current screen layout.

2.3.6 gblayout --get

Command	gblayout --get [detail]
Response	The HT-MERCURY outputs the information about the current screen layout.
Description	This command queries the information related to the current screen layout. The second part of the command, detail, lets the HT-MERCURY know to output the details: ➢ If this part of the command is not used, the HT-MERCURY prints the number of the current screen layout and the quantity of the windows. The word **auto** is included in this information if the HT-MERCURY is enabled to change the screen layout automatically. ➢ If this part of the command is used, the HT-MERCURY prints the position and size of every window and the video source displayed in the window.

Example 1:

To display basic information of the current screen layout:

Command:

gblayout --get

Response:

Layout #: 0x0101 2 windows auto

Example 2:

To display more detailed information of the current screen layout:

Command:

gblayout --get detail

Response:

Layout #: 0x0101 Name:layout1 2 windows

1 0 2250 8000 4500 [HDMI1]
2 8000 2250 8000 4500 [HDMI2]

2.3.7 gblayout --set-sequence

Command	gblayout --set-sequence *Layout1No* [*Layout2No* [*Layout3No*]]…
Response	The screen layout sequence is updated according to the command
Description	This command is used to designate the screen layout sequence, which with the HT-MERCURY, is either full screen or dual view.

Example 1:

The below command disables the multivew feature:

Command:

gblayout --set-sequence 0x0100

Example 2:

The below command enables the multivew feature with up to dual view

Command:

gblayout --set-sequence 0x0100 0x101

2.3.8 gblayout --get-sequence

Command	gblayout --get-sequence
Response	The HT-MERCURY outputs the screen layout sequence.
Description	This command queries the screen layout sequence and the HT-MERCURY prints the numbers of all layouts in the sequence.

Example:

To get the screen layout sequence:

Command:

gblayout --get-sequence

Response:

[0x0100] [0x0101]

2.3.9 gblayout --auto

Command	gblayout --auto { y | n } [runtimeonly]
Response	The HT-MERCURY is enabled or disabled to change the screen layout automatically.
Description	This command allows the configuration of automatic screen layout. The auto screen layout feature is enabled as the default and this command can modify that. ➢ Enabled The HT-MERCURY will change the screen layout automatically, at the same time, The **gblayout --set** command can be used to change the screen layout manually. ➢ Disabled The device never changes the screen layout automatically. The **gblayout --start-video** and **gblayout --stop-video** commands do not work because these two commands are based on the requirement that the device changes the screen layout automatically. The **gblayout --set** command still works. The first part of the command y or n means enabled or disabled, respectively. If the that part of the command is omitted, y is selected as default. The second part of the command "runtimeonly" is optional, and temporarily sets the change. When this command is sent, the change will not be saved to the file system, and once the HT-MERCURY reboots or goes into standby mode, the device will reload this configuration from the file system.

Example:

To disable the device to change the screen layout automatically:

Command:

gblayout --auto n

2.3.10 gblayout --list

Command	gblayout --list
Response	The HT-MERCURY outputs a list of every possible layout with its corresponding number and name.
Description	The command lists all screen layouts in the device.

Example:

To list all screen layouts

Command:

gblayout --list

Response:

Layout # Name:

0x100 layout0

0x101 layout1

2.4 Event Commands

Event commands are not API commands that can be sent by the controller. These are messages sent by the HT-MERCURY to announce that a certain state of the device has changed.

2.4.1 [Event] VideoSource

Command	[Event] VideoSource *VideoName* { NoSignal | { *VideoTiming* { YUV444 | YUV422 | RGB888 | MJPEG | H.264 | H.265 }}
Description	This message means that the state of one video source has changed and has two parts to it. The first is the name of the video source with the changed state. The second part varies on the new state: ➢ If the video source has lost signal, a word **NoSignal** is used as the second argument. ➢ If the video source is connected, the second and third parts provide the timing and format respectively.

Example:

HDMI lost signal

Message:

[Event] VideoSource HDMI NoSignal

2.4.2 [Event] WorkMode

Command	[Event] WorkMode { Normal | Sleep }
Description	This message means that the HT-MERCURY's work mode has changed.

Example:

The HT-MERCURY went into standby mode:

Message:

[Event] WorkMode Sleep

2.4.3 [Event] Layout

Command	[Event] Layout { LayoutNo } { LayoutName }
Description	This message means that the screen layout has changed and includes the layout ID and its name.

Example:

The current screen layout attributes: ID - 0x101, name – Layout101

Message:

[Event] Layout 0x101 Layout101

3 Appendix

No appendix items at this release.