

Grandstream Networks, Inc.

GVC3202 Video Conferencing System for Android™

User Guide



GVC3202 User Guide

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DOCUMENT PURPOSE

This User Guide describes the basic concept and tasks necessary to use and configure your GVC3202. This document covers the topics of device installation, making basic conference calls and using basic call features.

To learn the advanced features and configurations, please visit <http://www.grandstream.com/support> to download the latest "GVC3202 Administration Guide".

GNU GPL INFORMATION

GVC3202 firmware contains third-party software licensed under the GNU General Public License (GPL). Grandstream uses software under the specific terms of the GPL. Please see the GNU General Public License (GPL) for the exact terms and conditions of the license.

Grandstream GNU GPL related source code can be downloaded from Grandstream Web site from:
http://www.grandstream.com/support/faq/gnu_gpl.

CHANGE LOG

This section documents significant changes from previous versions of GVC3202 user manuals. Only major new features or major document updates are listed here. Minor updates for corrections or editing are not documented here.

FIRMWARE VERSION 1.0.0.X

- This is the initial version.

WELCOME

Thank you for purchasing Grandstream GVC3202 Android™ Video Conferencing System. This document introduces the LCD settings, web UI settings and advanced configurations of GVC3202. To learn the basic configuration and how to use GVC3202, please visit <http://www.grandstream.com/support> to download the latest "GVC3202 User Guide".

The GVC3202 is a ground-breaking solution that offers businesses a revolutionary video conferencing system with unprecedented flexibility and the power of support for multiple popular video conferencing protocols and platforms right out of the box. The SIP-based GVC3202 supports Grandstream's robust IPVideoTalk Pro platform for plug and play video conferencing while also being interoperable with any 3rd party SIP video conferencing platform - thus offering a great option to expand or implement a 3rd party platform. Additionally, since it is based on Android 4.4, the GVC3202 offers full access to all video conferencing apps in the Google Play Store. The GVC3202 sports an innovative, patent-pending embedded MCU that supports up to 3-way conferencing with local mixing between SIP and other protocols.

**Caution:**

Changes or modifications to this product not expressly approved by Grandstream, or operation of this product in any way other than as detailed by this User Manual, could void your manufacturer warranty.

**Warning:**

Please do not use a different power adaptor with GVC3202 as it may cause damage to the products and void the manufacturer warranty.

This document is subject to change without notice. The latest electronic version of this user manual is available for downloading here:

<http://www.grandstream.com/support>

Reproduction or transmittal of the entire or any part, in any form or by any means, electronic or print, for any purpose without the express written permission of Grandstream Networks, Inc. is not permitted.

**FCC Caution:**

Any Changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment.

This device complies with part 15 of the FCC Rules. Operation is subject to the following two conditions: (1) This device may not cause harmful interference, and (2) this device must accept any interference received, including interference that may cause undesired operation.

Note: This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

- Reorient or relocate the receiving antenna.
- Increase the separation between the equipment and receiver.
- Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
- Consult the dealer or an experienced radio/TV technician for help.

This transmitter must not be co-located or operating in conjunction with any other antenna or transmitter. For operation within 5.15 ~ 5.25GHz / 5.47 ~5.725GHz frequency range, it is restricted to indoor environment. The band from 5600-5650MHz will be disabled by the software during the manufacturing and cannot be changed by the end user. This device meets all the other requirements specified in Part 15E, Section 15.407 of the FCC Rules.

Radiation Exposure Statement:

This equipment complies with FCC radiation exposure limits set forth for an uncontrolled environment. This equipment should be installed and operated with minimum distance 20cm between the radiator & your body.

PRODUCT OVERVIEW

FEATURE HIGHLIGHTS

- Supports any SIP platform and any Android app - and can bridge calls from Android™ apps into SIP conference
- Proprietary, patent pending embedded MCU supports up to 2-way 1080p Full HD (or 3-way 720p HD, or 3-way VGA) video conferencing, collaborative sharing of computer screen at 1080p resolution, and cross-protocol local conference mixing between SIP and any other Android™ video conferencing apps (e.g., Skype®, Skype for Business®, Google Hangouts™, etc)
- Built-in Bluetooth for use with Bluetooth speakers/microphones, keyboards, data exchange, etc
- Local & far-end controllable PTZ camera with wideangle lens. a powerful 9x optical zoom offers robust video clarity
- State-of-the-art H.264 High Profile video compression and FEC (Forward Error Correction) technology to ensure high resolution stunning video quality using low-to-modest bandwidth (e.g., 512kbps)
- FPGA based hardware implementation of advanced ISP (Image Signal Processing - including auto-focus, auto exposure, auto white balance, noise reduction, wide dynamic range, etc) technology
- Interoperable with 3rd party SIP-based video conferencing solutions (such as Blue Jeans, Cisco, Polycom, and Huawei) using BFCP and TIP (pending)
- Embedded MCU to allow up to 3 video attendees, remind attendees 10mn before start-time and automatically call all participants
- 2 x HDMI output, 1 x VGA/HDMI input
- Integrated Bluetooth 4.0, Gigabit network port, SD interface (for local recording)

Table 1: GVC3202 Technical Specifications

Specification	Description
Protocols/ Standards	SIP RFC3261, BFCP, TIP (pending), RTP/RTCP, HTTP/HTTPS, ARP, ICMP, DNS (A record, SRV, NAPTR), DHCP, PPPoE, SSH, TFTP, NTP, STUN, LLDP-MED, LDAP (pending), TR-069, 802.1x, TLS, SRTP, TCP/IP/UDP, IPv6 (pending), FEC, FECC, (pending: H.323, H.245, H.225, H.235, H.241, H.460)
Camera	1/3" 2 Megapixel CMOS 1920H x 1080V@30fps
Lens	9 x optical zoom, +/-23° tilt, +/- 90° pan, 70°(W)*- 6.3° (T) field of view
Network Interface	1 x RJ45 10/ 100/ 1000 Mbps port
Bluetooth	Yes, integrated. Bluetooth 4.0 + EDR
Video Outputs	2 x HDMI up to 1080p with CEC

Video Input	1 x VGA/1 x HDMI with resolution up to 1080p
Microphone/ Speaker	External MIC/Speaker, built-in MIC, cascadable external MIC/speaker (pending)
Remote Control	Bluetooth remote control with multi-touch touchpad
Auxiliary Ports	1 x USB 2.0, SD, external speaker port, reset pin
Graphic Display	OLED with 128x32 resolution
Voice Codecs	G.711μ/a, G.722 (wide-band), G.726-32, iLBC (pending), Opus, G.722.1, G.722.1c (pending), in-band and out-of-band DTMF (In audio, RFC2833, SIP INFO)
Video Codecs	H.264 BP/MP/HP, H.323, video resolution up to 1080p, frame rate up to 30fps, bitrate up to 4Mbps
People Video Resolution	1080p from 512 Kbps, 720p from 384 Kbps, 4SIF/4CIF from 128 Kbps, SIF/CIF/QSIF/QCIF/SQSIF/SQCIF from 64 Kbps
Content Video Resolution	Input: VGA, SVGA, XGA, WXGA, WXGA, SXGA, 1440×900, 720p, 1600×1200, 1080p (HDMI), up to 60fps; Encoding: 1280×720, 1920×1080
Output Resolution	720p, 1080p
Embedded MCU	Up to 2-way 1080p conference, 3-way 720p conference, 3-way VGA conference
Dual-Stream	BFCP, people video (up to 1080p@30fps) + content video (up to 1080p@15fps, 720p@30fps)
Audio Features	AEC, ANS, AGC, PLC, CNG/VAD
Video Features	FEC, dynamic display layout, picture-in-picture, picture-outside-picture, digital caption (pending)
Platform Bridging	Bridge SIP calls with any Android VoIP apps such as Skype, Skype for Business, Google Hangouts and more
Telephony Features	Hold, transfer, forward (unconditional/no-answer/busy), call park/pickup, 3-way audio/video conference, downloadable XML phone book, LDAP (pending), call waiting, call history, flexible dial plan, personalized music ring tones, server redundancy & fail-over
Sample Applications	Skype, Google Hangouts, Skype for Business, Web browser, Facebook, Twitter, YouTube, Google calendar, mobile phone data import/export via Bluetooth, etc. API/SDK available for advanced custom application development
Application Deployment	Allows Android 4.4.2 compliant applications to be deployed in the device with provisioning control
QoS	Layer 2 QoS (802.1Q, 802.1p) and Layer 3 (ToS, DiffServ, MPLS) QoS
Security	User and administrator level passwords, MD5 and MD5-sess based authentication, 256-bit AES encrypted configuration file, TLS, 128/256-bit SRTP, HTTPS, 802.1x media access control

Multi-Language	English, German, Italian, French, Spanish, Portuguese, Russian, Turkish, Polish, Chinese, Korean, Japanese, and more
Upgrade/ Provisioning	Firmware upgrade via TFTP / HTTP / HTTPS or local HTTP upload, mass provisioning using TR-069 or AES encrypted XML configuration file
Power & Green Energy Efficiency	Universal power adapter included: Input 100-240VAC 50-60Hz; Output 12VDC/5A (60W)
Package Content	GVC3202 video conference system, external USB speaker/MIC, remote control, lens cover, universal power supply, network cable (1.5 meters), USB extension cable (5 meters), mounting kit, 3 HDMI cables (one 1.5 meter cable, one 3 meter cable and one 5 meter cable), lens cover, quick installation guide, brochure, GPL license
Temperature and Humidity	Operation: 0°C to 40°C, Storage: -10°C to 60°C, Humidity: 10% to 90% Non-condensing
Compliance	FCC: Part 15 (CFR 47) Class B; UL 60950 (power adapter), Part 15C, Part 15E.407, Part 2.1091 CE: EN55022 Class B, EN55024, EN61000-3-2, EN61000-3-3, EN60950-1, EN62479, RoHS, EN301893, EN62311 RCM: AS/NZS CISPR22/24; AS/NZS 60950; AS/NZS 4268

SAFETY COMPLIANCES

GVC3202 complies with FCC/CE, RCM and various safety standards. GVC3202 power adapter is compliant with the UL standard. Use the universal power adapter provided with GVC3202 package only. The manufacturer's warranty does not cover damages to the phone caused by unsupported power adapters.

WARRANTY

If GVC3202 is purchased from a reseller, please contact the company where the device is purchased for replacement, repair or refund. If the phone is purchased directly from Grandstream, please contact Grandstream Support for a RMA (Return Materials Authorization) number before the product is returned. Grandstream reserves the right to remedy warranty policy without prior notification.

INSTALLING GVC3202

EQUIPMENT PACKAGE CONTENT

GVC3202 package contains the following items:

Table 2: GVC3202 Package List

Name	Number
GVC3202 Main Case	1
External USB Speakerphone	1
Remote Control (a pair of AAA batteries)	1
12V Universal Power Adapter with power cable	1
1.5m Ethernet Cable	1
5m USB Extension Cable	1
1.5m HDMI Cable	1
3m HDMI Cable	1
5m HDMI Cable	1
Wall Mount Kit, including: Top bracket Bottom bracket Hook & Loop tape	1
Screws and bolts: 4 screws and 4 bolts to install bracket to the wall 2 screws to fix bracket 2 screws for bracket	12
Lens Cap	1
Lens Cleaning Cloth	1
Quick Installation Guide	1
GPL License	1

CONNECTING GVC3202

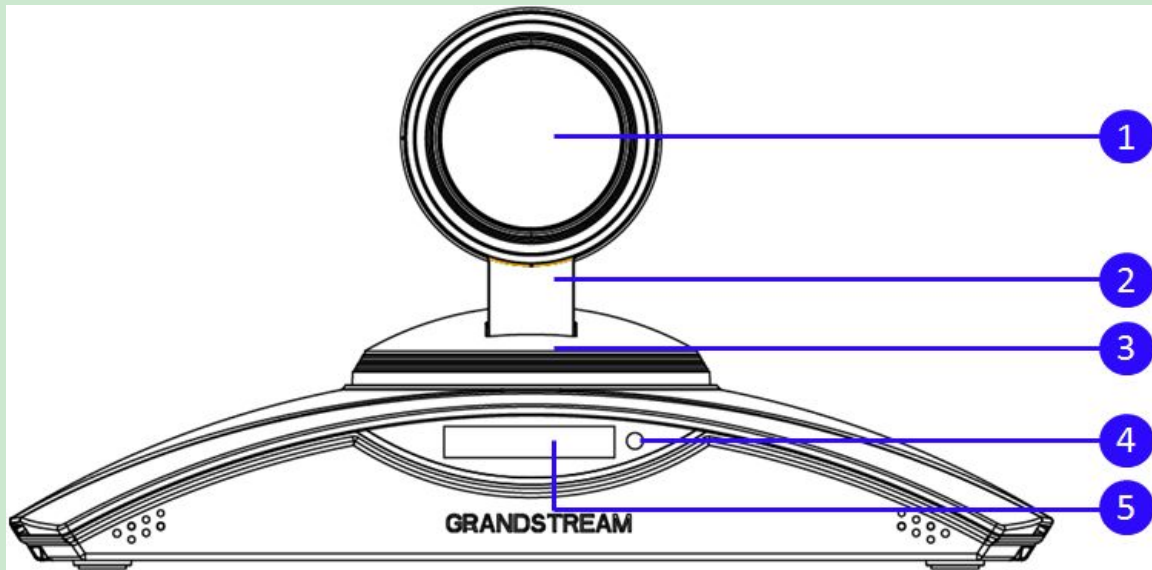


Figure 1: GVC3202 Front Panel

Table 3: GVC3202 Front Panel

NO.	Name	Explanation
①	Camera	1/3" 2 Megapixel CMOS 70° (W)*- 6.3° (T) field of view
②	Vertical Rotating Stent	+/-23° tilt
③	Horizontal Rotating Platform	+/-90° pan
④	LED Indicator	Power on / Normal Running: Green Standby: Flash red Shutdown: Red Pressing any key on the remote control - Green light flashes once.
⑤	OLED Display	Graphic display with 128x32 resolution shows device status.

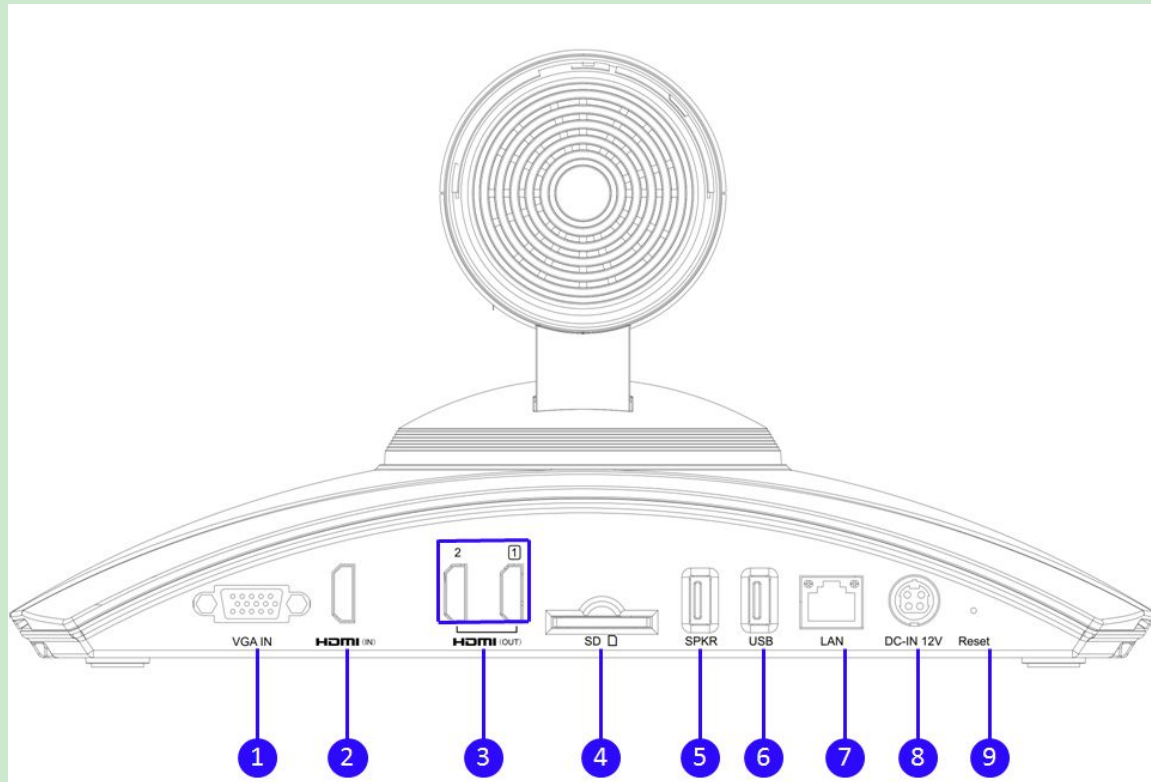


Figure 2: GVC3202 Back Panel

Table 4: GVC3202 Back Panel

NO.	Name	Explanation
①	VGA Input Interface	Connect to VGA input devices.
②	HDMI Input Interface	Connect to HDMI input devices. Note: The HDMI input interface has higher priority than the VGA interface when both interfaces are connected.
③	HDMI Output Interfaces	Connect to HDMI display devices. Note: There are 2 HDMI output ports. The interface marked with number "1" is the primary interface to output primary video. Please make sure to follow the port order when connecting HDMI port 1 and 2. When there is only 1 HDMI output, it has to use HDMI output 1. Connect HDMI port 2 if you have additional display devices. GVC3202 will not work correctly if connecting HDMI port 2 without HDMI port 1 connected.

④	SD Card Slot	Insert SD card to store call recordings and other necessary files.
⑤	External USB Speaker/MIC Jack	Connect to external speakerphone.
⑥	USB Interface	Connect to USB cable or USB storage device.
⑦	Network Interface	Connect to LAN port.
⑧	Power Interface	Connect to power adapter. The arrow indicator on the power adapter should face upwards when the power adapter is plugged in.
⑨	Factory Restore	- When GVC3202 is powered up, use a small pin to press the button one time to reboot. - When powering up GVC3202, keep pressing the button with a small pin for more than 10 seconds to restore to factory settings.

To deploy a working video conferencing system, it is recommended for the users to prepare the following equipment based on your own requirements. The following table is for reference only.

Table 5: GVC3202 Optional Equipment List

Device Name	Number	Explanation
HDMI Display Device	1 (minimum), 2	To display video conference view, for example, high definition TV. The HDMI display device is connected to HDMI output interface 1/2.
VGA Input	Optional	For presentation
HDMI Input	Optional	For presentation If both HDMI input and VGA input are plugged in, HDMI input has higher priority, it means VGA input will not be displayed.
USB Mouse	Optional	It can be used to help navigate and operate the GVC3202 besides using remote control. For example, when viewing a web page, USB mouse can be used to control the cursor.

USB Keyboard	Optional	It can be used to help input characters when operating GVC3202 besides using remote control. For example, typing in username and password to log in Skype app installed on GVC3202.
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Please connect GVC3202 according to the following procedures:

1. Connect the primary video output device (e.g., high-definition TV) to HDMI output interface 1 on GVC3202 with HDMI cable.
2. (Optional) Connect the second video output devices to HDMI output interface 2 on GVC3202 with HDMI cable.
3. Connect input device (e.g., a laptop or GXV3275) to GVC3202 VGA IN/HDMI IN port with VGA/HDMI cable.
4. Connect the external speakerphone to the USB speaker interface on GVC3202.
5. Connect to Ethernet or LAN with Ethernet cable for network access. It is recommended to use Gigabit network to assure audio and video quality of video conference.
6. Plug in the power adapter into the power supply interface to power up GVC3202.



Note:

For detailed instructions about installing GVC3202 on wall mount and etc., please refer to the GVC3202 quick installation guide on www.grandstream.com.

A sample of GVC3202 back panel connection is shown below:

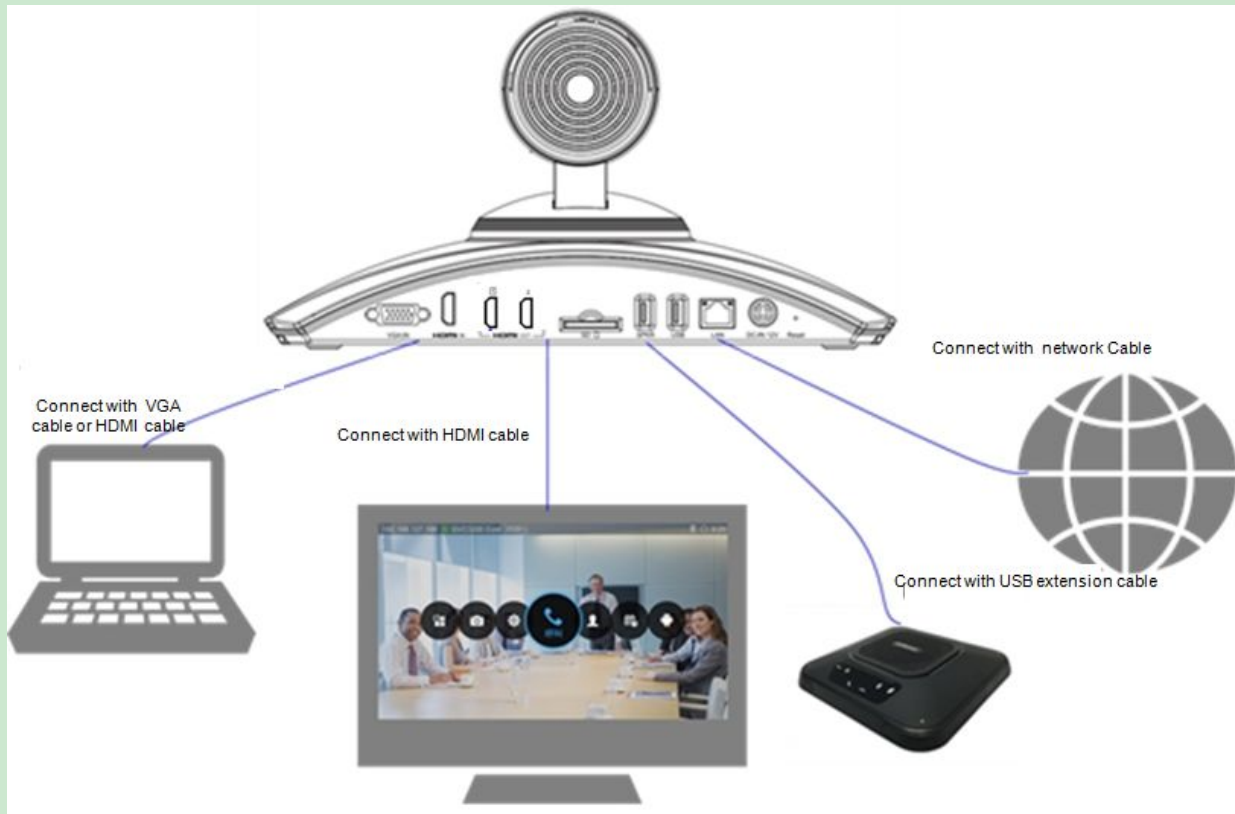


Figure 3: GVC3202 Back Panel Connection Diagram

The following figure shows multiple GVC3202 devices deployed with other VoIP/network devices for video conference and collaboration.

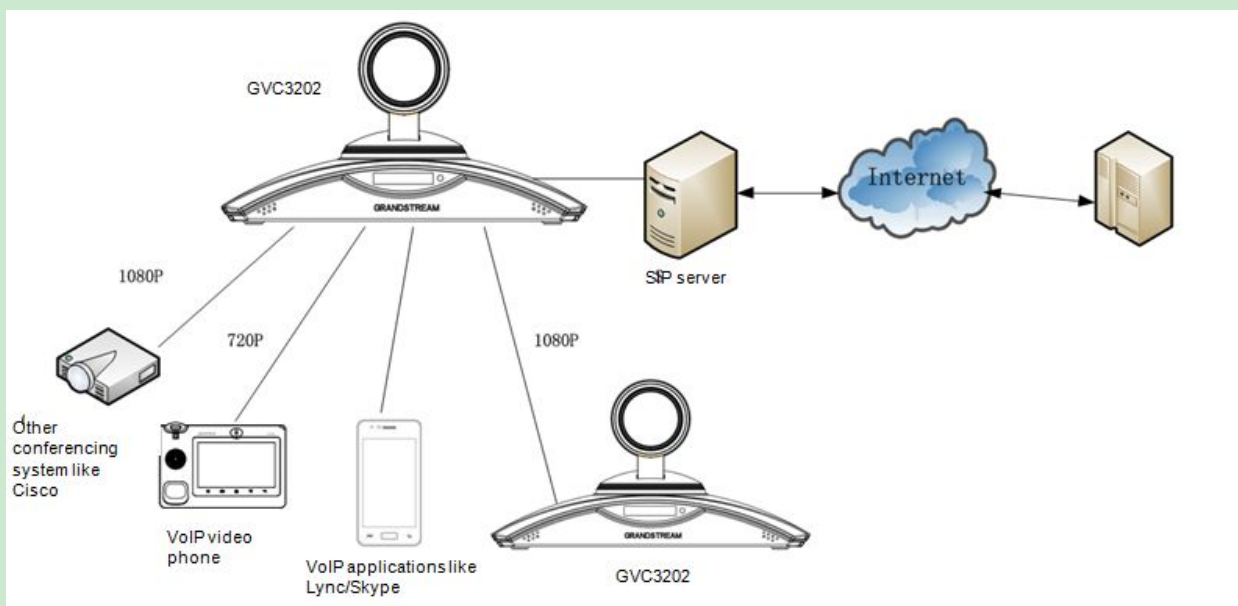


Figure 4: GVC3202 Deploy GVC3202 with Other Devices

GETTING TO KNOW GVC3202

REMOTE CONTROL

REMOTE CONTROL KEYS AND TOUCHPAD

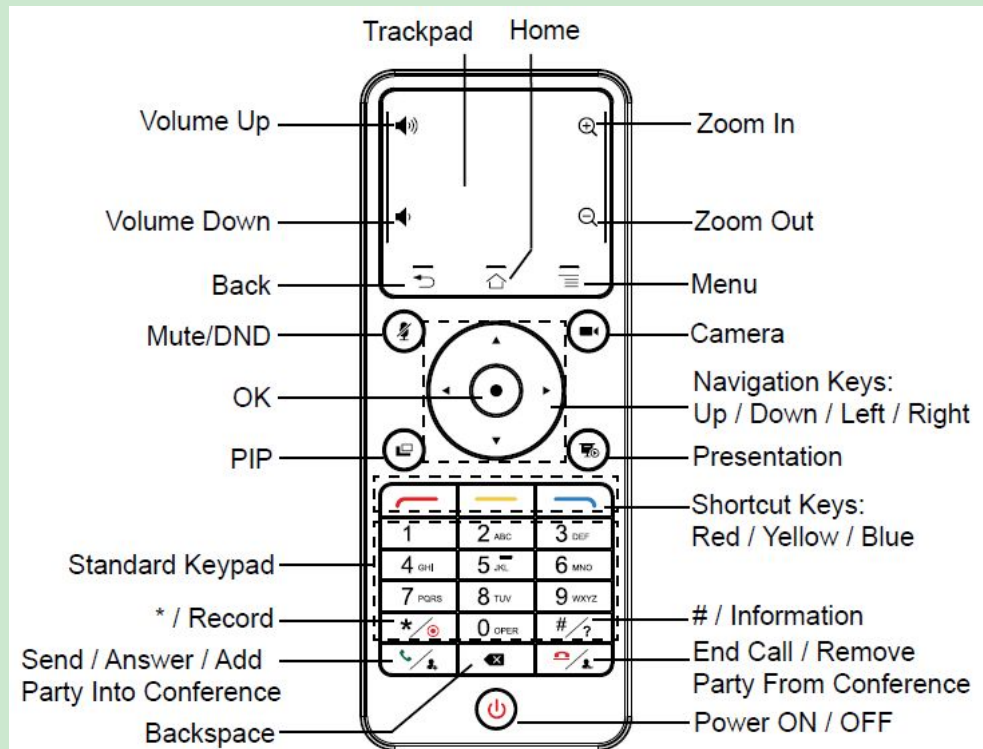


Figure 5: GVC3202 Remote Control

Table 6: GVC3202 Remote Control Keys

Icon	Name	Explanation
1, 2, 3, 4...9	Digital Keys	Input number 1-9 and letters. The letter input using digital keys will not be displayed as letter, but it can be used to search for contacts in Call interface. For example, typing 5 (JKL), 6 (MNO), 4 (GHI), 6 (MNO) can look for John if it exists in GVC3202 contacts list.
	Camera	Switch to PTZ control mode during a call or in idle status.
	PIP	Switch screen layout in conference.

	Mute/DND	- Mute GVC3202 in conference. - Press the MUTE key to enable/disable DND mode when GVC3202 is in idle.
	Presentation	- Enable/Disable presentation function to send presentation to all members in the conference. - Enable/Disable presentation function to show presentation on displayed device which is connected to HDMI output 1 as projection when GVC3202 is in standby mode.
	Send/Answer/Add Party Into Conference	- Access the dial screen by default when GVC3202 is in idle mode. - Enter phone number and press the key to dial out. - Access the invite screen to add members in a conference. - Press the key to bring out the backstage conference. - Press the key to redial the last outgoing call.
	End Call/Remove Party From Conference	- Delete members in conference. - Hang up the conference.
	Backspace	Press the key to delete input characters.
	Navigation Keys: Up/Down/Left/Right	- Press to adjust cursor movement. - Control PTZ movement in camera mode.
	OK	- Press to confirm operations. - Bring up the soft keypad when the cursor is in an input box.
	Power On/Off	LCD prompt shows the following three options after pressing this key: - Switch GVC3202 into sleep mode. - Power Off - Reboot

	*/Record	- Input * in input field. - Used as "." when dialing direct IP call. For example, 192.168.40.5. - Start/stop recording in camera control mode. - Start/stop recording in a call.
	#/Details	- Input "#" in input field. - Used as ":" when dialing direct IP Call e.g., 192.168.40.5:5060. - Input "#" on dialing screen to use it as REDIAL key. - Display call details on call screen during a call.
	Shortcut Key: Red	Press each shortcut key for designated functions on different screen context.
	Shortcut Key: Yellow	
	Shortcut Key: Blue	
	Home	Press the key to go back to home screen.
	Menu	Press the key to view more options.
	Back	Press the key to go back to the previous screen or exit the current screen.
	Volume Down	Turn down the device volume.
	Volume Up	Turn up the device volume.
	Zoom In	Zoom in screen or adjust close focus.
	Zoom Out	Zoom out screen or adjust distant focus.
Trackpad		- Slide on the trackpad to move the mouse cursor. - Press the trackpad to confirm operations. - Using two fingers to press on the trackpad and slide up/down for page up/down.

CAPTURING SCREENSHOT USING THE REMOTE CONTROL

To capture a screenshot on GVC3202, the users can press the red shortcut key  and blue shortcut key  at the same time for about 3 seconds. The screenshot picture will be saved in the internal storage of GVC3202. The users can access the screenshot in GVC3202 LCD menu->Applications->File Manager->Internal Storage->Pictures->Screenshot.

Please note the screenshot captured here doesn't have the image captured from the camera in the background. If you would like the image captured from camera, you can press the CAMERA button on the remote control and then press the blue shortcut key.

USING THE REMOTE CONTROL

GVC3202 remote control is connected to GVC3202 via Bluetooth, and it's already pre-paired when the user receives GVC3202 packages. Before using the remote control, please make sure:

1. A pair of AAA batteries are correctly installed on the back of the remote control.
2. The remote control needs to be placed within the Bluetooth effective range, i.e., 10m from GVC3202.

After powering up GVC3202, pressing "OK" key on the remote control, it will initiate connection and the remote control can be used right away.

If the remote control fails to pair and connect to GVC3202, please follow the steps below to troubleshoot:

- Check the battery polarity when placed into the battery case. Make sure the batteries are placed in the correct direction in the remote control.
- Check the battery power.

If GVC3202 remote control still does not work with the diagnosis above, please try another remote control or contact the device provider.

USING MOUSE & KEYBOARD

When the USB mouse is plugged into GVC3202, users could make the following operations with the mouse.

- Single click the left key of the USB mouse to perform the following operations:
 - Access menu

- Check in the checkbox or enable/disable an option
- Bring up the drop-down list when clicking on a combo box
- Switch input methods in the input box, tap on the corresponding buttons on the soft keyboard to input characters

- Double left click  on the soft keyboard can switch to "Always use upper case" in English input method.
- Single click the right key of the USB mouse to exit the current displayed menu. It will go back to the previous menu without saving the configurations.

OLED SCREEN

Table 7: GVC3202 OLED Screen Status Descriptions

OLED Screen Status	Descriptions
Bootling	Display "BOOTING..." when GVC3202 boots up.
IP	Display GVC3202 IP address. For example, IP: 192.168.40.5.
Call Status	Display "Ringing", "Calling", "Talking", "Call Waiting", "Missed Call", "New Voicemail" and etc.
Upgrade Status	• Display "New Version" when a new firmware version is detected. • Display "Upgrading" in the process of upgrading. • Display failure reason when upgrade fails. For example, "Incompatible Hardware", "Insufficient Space", "Same Version", etc.
Sleep Mode	When the device is in sleep mode, the OLED shows "Standby".
Abnormal Status	It is used to display abnormal status information. The hexadecimal error code will be displayed next to the abnormal status.

USING THE LED INDICATOR

GVC3202 LED indicator is located next to the OLED. It can be used to notify the users with current status of the device. Please refer to the status description below.

Table 8: GVC3202 LED Indicator Status Descriptions

LED Indicator Status	Descriptions
Solid Green	Booting or the device is already booted up
Flash Red	Standby (Sleep Mode)
Solid Red	Shut down but powered on (power adapter is connected)
Green Flashing once	Key pressing on the remote control
OFF	Power off

STATUS ICONS

GVC3202 status icons are displayed on the right side of top status bar on GVC3202 LCD display device.

The following table lists the main status icons used on GVC3202.

Table 9: GVC3202 Status Icons Descriptions

Icon	Descriptions	Icon	Descriptions	Icon	Descriptions
	Missed Call		Ongoing call		Auto answer is enabled
	Ethernet is connected		Ethernet is disconnected		Trying to connect to the Ethernet
	PPPoE is connected		PPPoE connection is failed		PPPoE is disconnected
	VLAN is successfully configured		VLAN is being configured		Unread voicemail
	VPN is connected		VPN connection is failed		Using third party applications for mixing calls
	Bluetooth is connected		DND mode is enabled		Remote control Low battery
	Remote control is connected and paired		Remote control is paired but not connected		Remote control is not connected and paired
	SD Card is inserted		USB flash drive is inserted		Speaker is being used
	Call recording storage is full		Contacts storage is full		SD card storage is full
	Call forward is set up		Volume is turned to silent		

USING THE ONSCREEN KEYBOARD

ENGLISH KEYBOARD

This is the default keyboard on GVC3202. GVC3202 English keyboard supports multiple languages input methods. Users could tap on  to switch among different languages. See figure below.

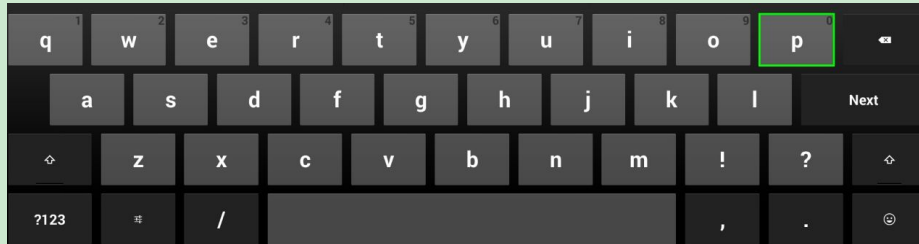


Figure 6: GVC3202 Soft Keyboard - English Input Method

Tap on  to switch CapsLock:

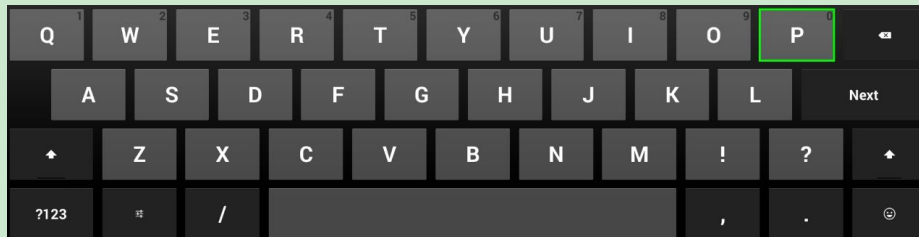


Figure 7: GVC3202 English Input Method – Capslock

NUMBERS AND SYMBOLS

To input numbers and symbols, tap on button  on the default keyboard to switch to numbers/symbols. Tap on  for more numbers/symbols.

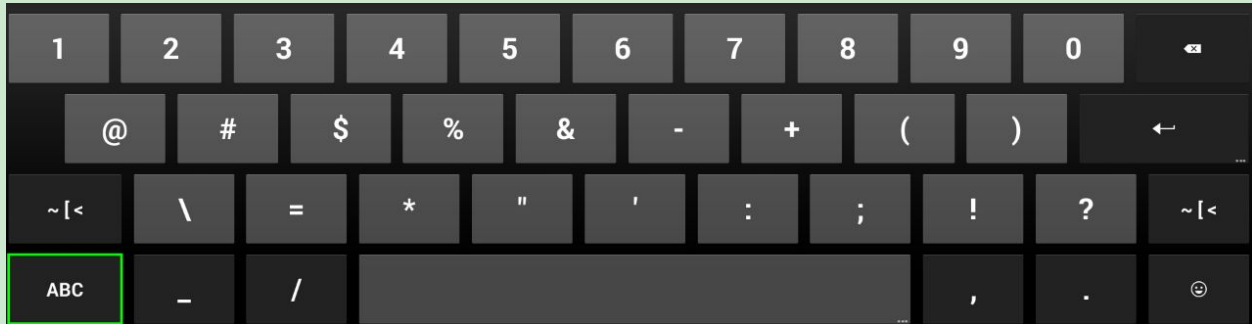


Figure 8: GVC3202 Soft Keyboard - Symbols and Numbers

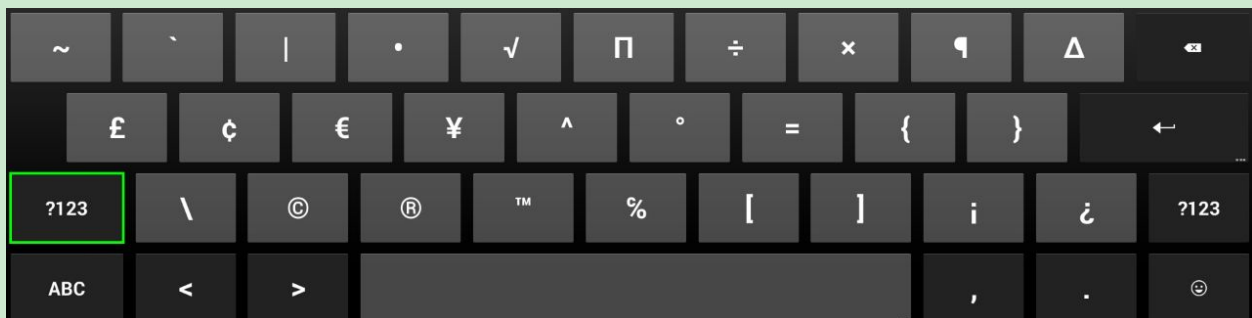


Figure 9: GVC3202 Soft Keyboard - More Symbols and Numbers

HOME SCREEN

GVC3202 Home screen displays the icons for users to easily access applications, camera, schedule, call, contacts, settings and custom applications. Press the Left/Right keys on GVC3202 remote control to navigate.

If there is no activity on main screen, the icons will be hidden and the video local loopback is displayed. Press OK button on GVC3202 remote control to bring up the icons to display again.

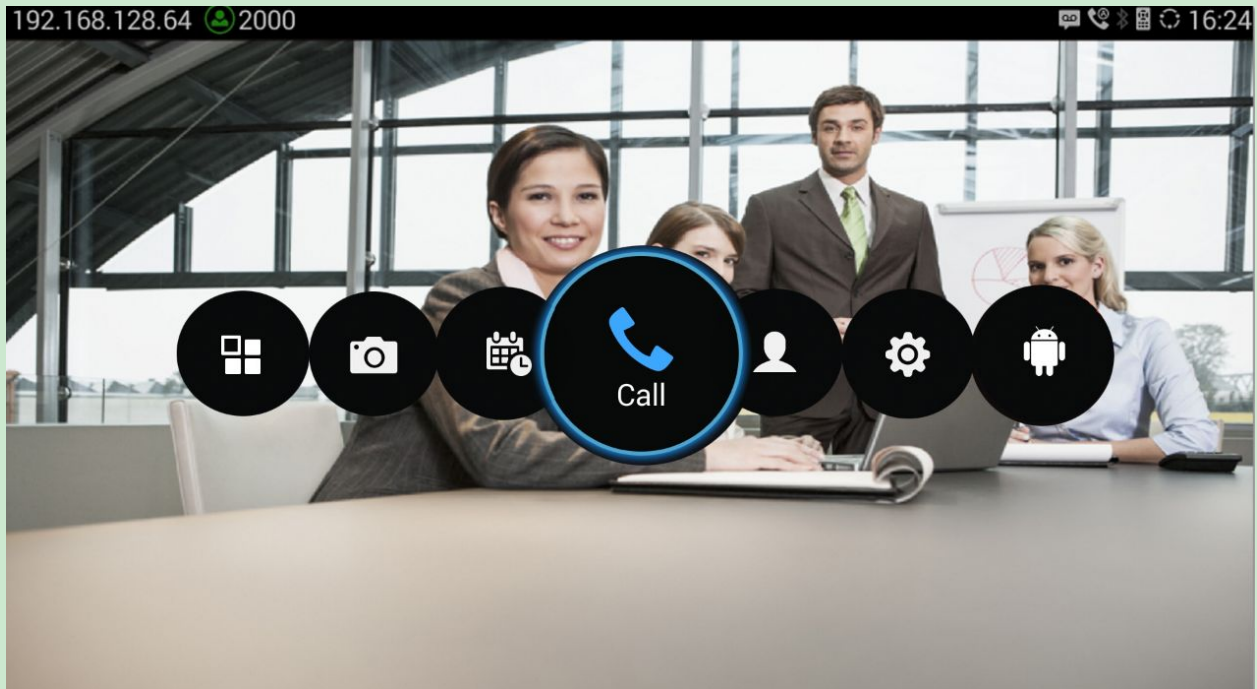


Figure 10: GVC3202 Home Screen

CONNECTING TO NETWORK AND DEVICES

GVC3202 supports a variety of network connections (Ethernet) and device connections, including USB, SD card and Bluetooth devices. When the GVC3202 boots up for the first time, a setup wizard will guide the users to pair and connect the remote control to GVC3202 and get started with the basic configurations.

ETHERNET

If the user would like to use Ethernet connection for network access, please plug the Ethernet cable into the LAN port on the back of GVC3202. Ethernet connection is turned on as DHCP by default.

To configure Ethernet settings on GVC3202:

1. Plug the Ethernet cable into the LAN port on the back of GVC3202.
2. Go to LCD menu->Settings->Network->Ethernet->IPv4 Settings.
3. Tap on "Address Type" to select DHCP, Static IP or PPPoE as the address type.
 - For DHCP, save the setting and GVC3202 should be able to get IP address from the DHCP server in the network.
 - For static IP, enter IP Address, Subnet Mask, Default Gateway, DNS Server and Alternative DNS server for GVC3202 to correctly connect to the network.
 - For PPPoE, enter PPPoE account ID and password so that GVC3202 can get IP address from the PPPoE server.

BLUETOOTH

On GVC3202, Bluetooth is enabled by default. Users could connect Bluetooth by remote control, send or receive files to cellphone, or use Bluetooth speaker and etc on GVC3202.

TURNING BLUETOOTH ON / OFF

1. On the LCD display device, go to Settings->Network->Bluetooth.
2. Tap on the green switch on the top row to turn on/off Bluetooth. Please note the Bluetooth needs to be turned on, in order to use the remote control.

PAIRING GVC3202 WITH A BLUETOOTH DEVICE

Before connecting GVC3202 with other Bluetooth device, users must pair them first. They will stay paired afterwards unless they are manually unpaired. To pair Bluetooth device:

1. On the LCD display device, go to Settings->Network->Bluetooth.
2. Press  button on the remote control and select "Search for devices".
3. GVC3202 scans and displays the IDs of all available Bluetooth devices in range. Once the Bluetooth device shows up in the result, tap on it to start pairing.
4. Confirm the passkey in the prompted message (if any). Or, if passcode is required, please refer to the device's documentation or contact with the device administrator to obtain the passcode.



Note:

The external speaker provided with GVC3202 is not pre-paired to GVC3202. If the user would like to use external speaker via Bluetooth connection with GVC3202, the user must pair and connect it to GVC3202 manually before using it for audio output.

CONNECTING TO A BLUETOOTH DEVICE

After pairing successfully, the device will be connected to GVC3202 immediately. Users will see this

device listed under "Paired Devices". Tap on  next to the connected device. Users will see options "Rename", "Unpair" and etc.

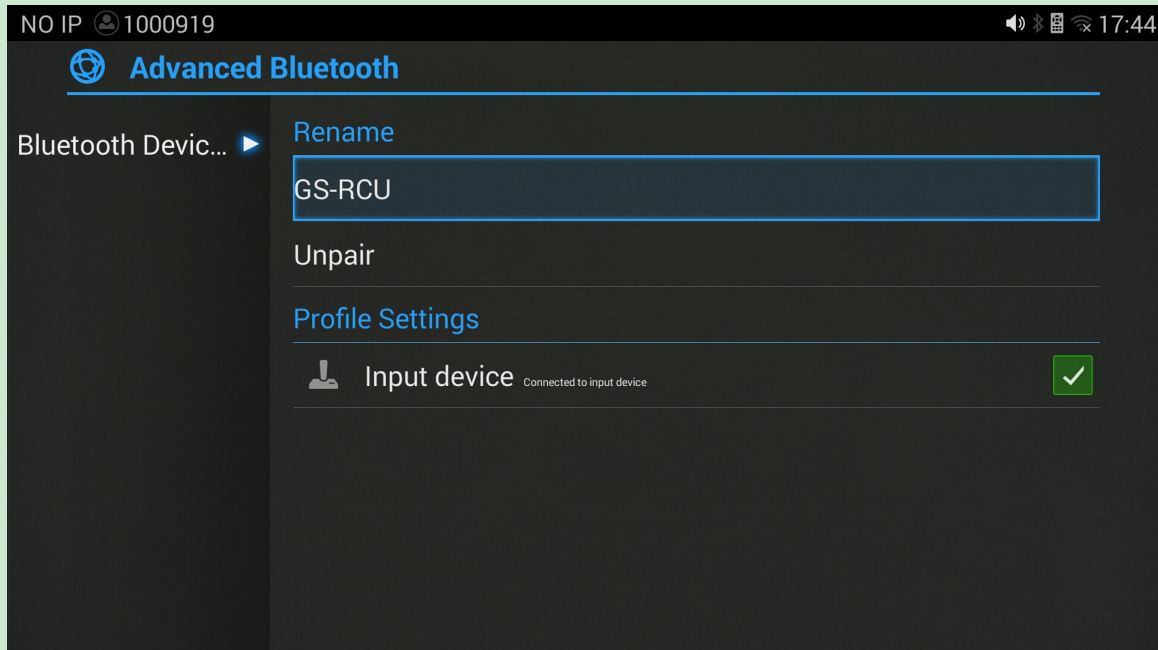


Figure 12: GVC3202 Bluetooth - Paired Device

If the connection is lost between the Bluetooth device and GVC3202, go to LCD menu->Settings->Network->Bluetooth and click on the device name under “Paired devices” again to reconnect.

USING BLUETOOTH REMOTE CONTROL

Users could use GVC3202 Bluetooth remote control that comes with GVC3202 packaging to control and configure GVC3202. When the GVC3202 boots up for the first time, a setup wizard will guide the users to pair and connect the remote control to the GVC3202. When the remote control is connected to GVC3202,

users will see  icon on the top status bar of GVC3202 LCD display device.

If the user happens to reset the GVC3202, or replace the remote control, the user will need pair and connect remote control to the GVC3202 again. Please follow the steps below:

1. Connect a USB mouse or open the virtual remote control after logging in GVC3202 web UI.
2. On the LCD display device, go to Settings->Network->Bluetooth.
3. Select  and click "Search for devices".
4. On the remote control you would like to pair with GVC3202, press "OK" and digit 5 keys at the same time for about 5 seconds.
5. The pairing and connection process will be initiated and finished in a few seconds. Please do not

press any keys on the remote control or switch screens during this process to avoid connection failure.



Note:

1. Please use the proprietary factory remote control that comes with the GVC3202.
 2. GVC3202 could connect to multiple remote controls, but only one remote control at a time. Factory reset is required on GVC3202 if the user needs switch to another remote control.
-

TRANSFER FILES WITH BLUETOOTH

Users could transfer files, share contacts information with other Bluetooth portable devices after pairing and connection. A prompt for file transferring will be displayed on GVC3202 LCD display device when GVC3202 receives the file transferring request. Accept the request to receive file and the file will be stored under LCD->Applications->File Manager->Internal Storage->Bluetooth folder.

USING BLUETOOTH HEADSET

Once the Bluetooth headset is connected with GVC3202, it will automatically use Bluetooth headset for calls. By default, the ringing tone will be generated in Bluetooth headset when there is an incoming call. If the user would like to have the ringing tone generated in GVC3202 internal ringer as well, please select enable "Always Ring Internal Ringer" under GVC3202 web UI->Settings->Call Features.

VPN SETTINGS

Users can add VPN using different protocols (PPTP, L2TP/IPSec PSK, L2TP/IPSec CRT). Follow the steps below to set up VPN:

1. Access GVC3202 home screen, go to Applications ->Settings ->Network->VPN.
2. Tap on "Add VPN file" to access configuration page as shown below:

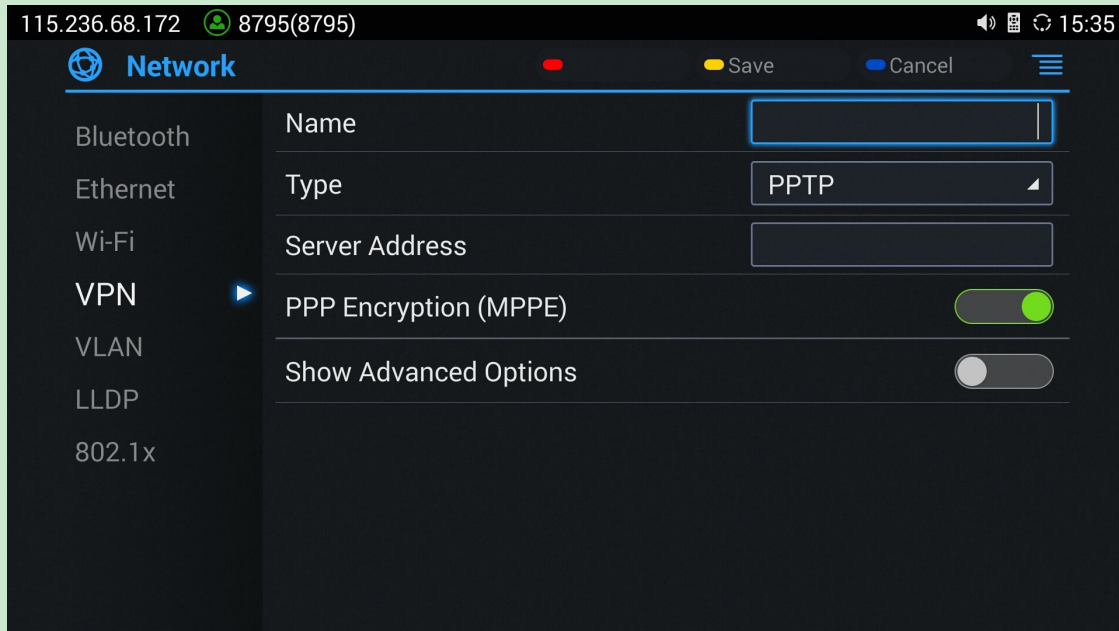


Figure 13: GVC3202 Add VPN Files Screen

3. Fill in and save the configurations, go back to VPN page, you will find the new VPN file you just added.
4. Tap on the VPN file to open the validation page as shown below:

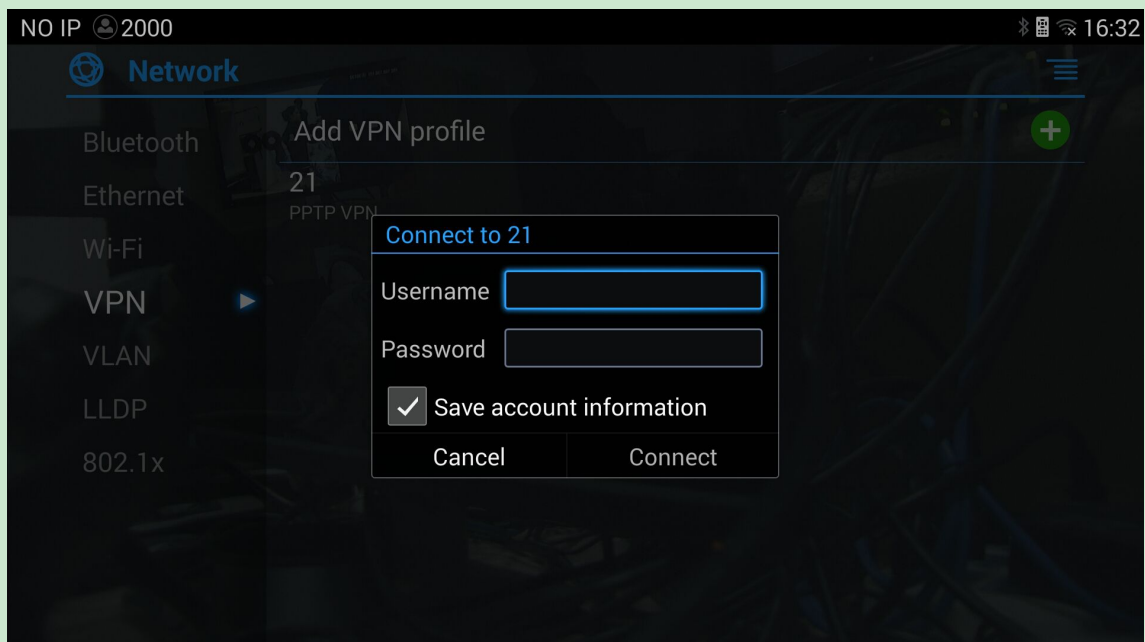


Figure 14: GVC3202 VPN Validation Screen

5. Fill in correct username and password to connect to VPN.

If GVC3202 is connected to VPN successfully, icon  will be shown in the top status bar; if the connection is failed, a prompt box will pop up to remind users whether to reconnect to VPN. If icon  displays in the top status bar, please check whether if your VPN configuration is correct.

Table 10: GVC3202 VPN File Parameters

Parameters	Descriptions
Name	Fill in your company address or the server you are connecting to.
Type	Set to PPTP, L2TP/IPSec PSK, L2TP/IPSec RSA, IPSec Xauth PSK, IPSeXauth RSA or IPSec Hybrid RSA.
Server Address	Fill in the server URL or IP address.
PPP Encryption (MPPE)	Defines whether to use PPP encryption.
Show Advanced Options	Check this option to display more options below.
DNS Search Domains	Enter DNS search domain.
DNS Server	Enter DNS server address.
Forwarding Routes	Enter Forwarding Routes, for example, 10.0.0.0/8.

VLAN SETTINGS

Access GVC3202 home screen, go to Applications->Settings->Network->VLAN to configure VLAN settings on GVC3202.

Table 11: GVC3202 VLAN Configuration Parameters

Parameters	Descriptions
Layer 2 QoS 802.1q/VLAN Tag	Assigns the VLAN Tag of the Layer 2 QoS packets for LAN port. The default value is 0. Note: Please do not change the setting before understanding the VLAN's settings or consulting with the network administrator. Otherwise, the device might not be able to get the correct IP address.
Layer 2 QoS 802.1p Priority	Assigns the priority value of the Layer 2 QoS packets. The default value is 0.

LLDP SETTINGS

Access GVC3202 home screen, go to Applications->Settings->Network->LLDP to configure LLDP settings on GVC3202.

Table 12: GVC3202 LLDP Configuration Parameters

Parameters	Descriptions
LLDP	Enable or disable LLDP. The default setting is disabled.
Layer 3 QoS for SIP	This field defines the layer 3 QoS parameter for SIP packets. It is the value used for IP Precedence, Diff-Serv or MPLS. The default value is 48.
Layer 3 QoS for Audio	This field defines the layer 3 QoS parameter for audio packets. It is the value used for IP Precedence, Diff-Serv or MPLS. The default value is 48.
Layer 3 QoS for Video	This field defines the layer 3 QoS parameter for video packets. It is the value used for IP Precedence, Diff-Serv or MPLS. The default value is 48.

802.1X MODE

Access GVC3202 home screen, go to Applications->Settings->Network->802.1x Mode. By default, 802.1x is disabled. Selecting 802.1x mode to "EAP-MD5", "EAP-TLS5" or "EAP-PEAP" to turn on 802.1x. Once it is enabled, the user will be required to enter the identity and password to be authenticated in the network.

Table 13: GVC3202 802.1x Mode Parameters

Parameters	Descriptions
802.1x Mode	Allows the user to enable/disable 802.1x and configure 802.1x mode. The default setting is disabled.
Identity	Enter the Identity information for 802.1x mode.
MD5 Password	Enter the MD5 Password for 802.1x mode.
CA Certificate	Upload the CA certificate for 802.1x mode.
Client Certificate	Upload the CA certificate for 802.1x mode.
Private Key	Upload the private key for 802.1x mode.

CAMERA

Users could set preset, configure camera parameters, start recording and make screenshots on camera screen. There are 3 ways to access camera screen:

- Click on  icon on home screen.
- Press key  on the remote control.
- Select  on home screen to access Applications, then click on .

GVC3202 camera screen has the following options:

- Press recording button on the remote control to start or stop local recording.
- Press the red shortcut button on the remote control to edit preset.
- Press the yellow shortcut button on the remote control to edit image parameters such as scene, white balance, MF/AF and etc.
- Press the blue shortcut button on the remote control for screenshot.
- Press digit key on the remote control to apply a pre-configured preset.



Figure 15: GVC3202 Camera Screen

PRESET

ADD PRESET

Users can create and save maximum of 24 camera presets, with each preset storing the camera position and focal length. Follow the steps below to add preset:

1. Access camera screen and press the red shortcut key on the remote control to access preset screen.

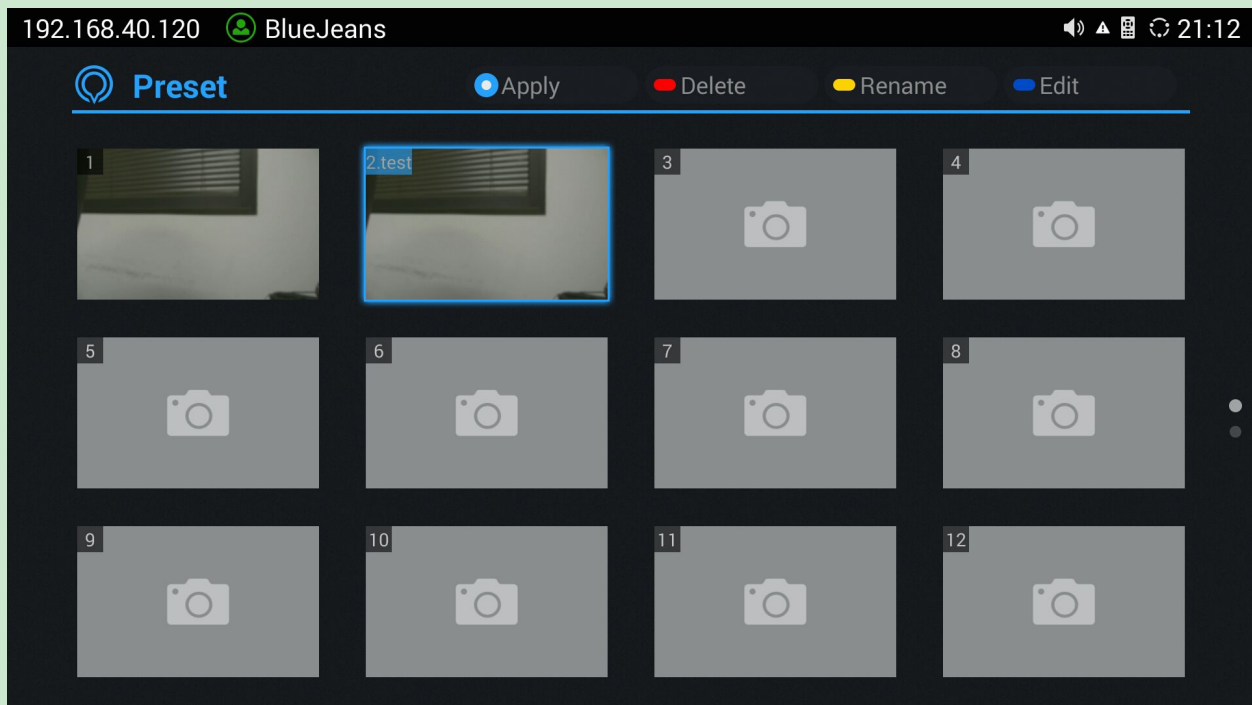


Figure 16: GVC3202 Add Preset Screen

2. Select the preset window and press the blue shortcut key on the remote control to access the editing screen.
3. Adjust camera position and zoom in/zoom out using the remote control.
4. On GVC3202 remote control, press "OK" key to save the preset, or press Back key  to cancel.

EDIT PRESET

To edit an existing preset, press the blue shortcut key on the remote control to access the editing screen to edit. The created preset can also be renamed by pressing the yellow shortcut key on the remote control for better identification purpose.

DELETE PRESET

Access the preset editing screen, select preset and press the red shortcut key on GVC3202 remote control to delete it.

APPLY PRESET

If you have already set preset on camera, you can apply preset via one of the following two ways:

- Access camera screen and press the digital keys on the remote control to adjust camera to the preset.
- Access preset screen and press the digital keys to switch to the corresponding preset, press the yellow shortcut key to apply.

CAMERA PARAMETERS CONFIGURATIONS

Press the yellow shortcut key on GVC3202 remote control to bring out camera parameters setting screen as shown below. Refer to the table below and configure the parameters using navigation keys on the remote control.

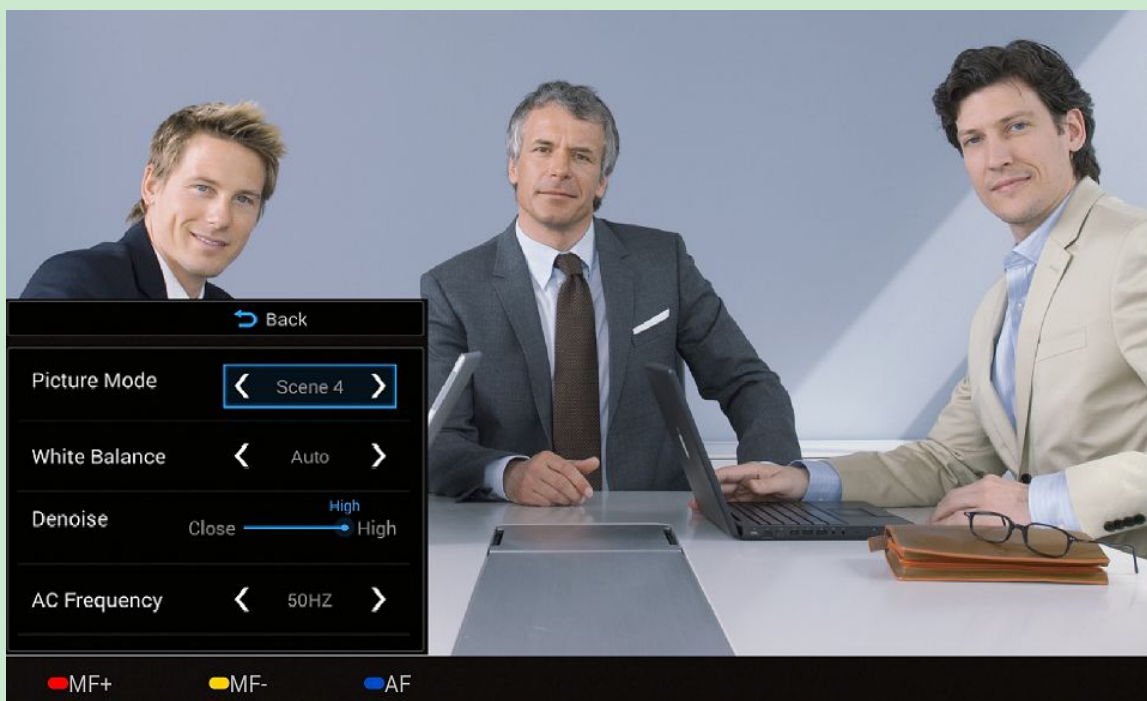


Figure 17: GVC3202 Camera Parameters Setting Screen

Table 14: GVC3202 Camera Parameters

Parameters	Descriptions
Picture Mode	GVC3202 has 4 built-in modes as well as "Manual" for customization. When set to "Manual", press "OK" key to access each setting to configure sharpness, contrast, saturation, and brightness. - Sharpness: Higher sharpness brings higher screen clarity. The object displayed on the screen has more sharpen edge. - Contrast: Higher value brings more distinct color contrast. - Saturation: Higher value brings deeper color. - Brightness: Higher value brings brighter color.
White Balance	This is used to display accurate images. Users could set to "Manual" or "Auto". - When set to "Auto", the device will adjust parameters automatically according to the current environment. - When set to "Manual", the device will disable "Auto" mode. Press "OK" key to access manual setting screen, and adjust red or blue gain manually for better white balance.
De-noise	Users could set to "off", "low", "medium" or "high". Higher reduction level brings less image noises.
Frequency of A.C.	Users could set to 50HZ or 60HZ.
Red Shortcut Key (MF+)	Manual focus: increase the focal length.
Yellow Shortcut Key (MF-)	Manual focus: decrease the focal length.
Blue Shortcut Key (AF)	Auto focus

PERIPHERAL

EXTERNAL USB DEVICE

GVC3202 USB interface could be connected with a USB mouse, a USB keyboard, or a USB storage device.

USING USB MOUSE/KEYBOARD

When a USB mouse is plugged into GVC3202, users could see the cursor on the screen, move the cursor to perform operations. When a USB keyboard is plugged into GVC3202, users could use GVC3202 remote control to navigate to an input interface, and click on the keys on the keyboard to check if it is installed successfully.

USING USB STORAGE DEVICE

To connect and access USB storage device:

1. Insert USB storage device into USB port at the back of GVC3202.
2. It will take a few seconds for GVC3202 to prepare the connection.
3. Once it is installed successfully, the USB storage icon will show up on the status bar. Users could go to GVC3202 LCD->Applications->File Manager->USB to access and manage your data.
4. Users could view, copy and paste files by using the USB storage device.

SD CARD

1. Insert your SD card into SD card slot at the back of GVC3202. Please make sure the SD card is inserted with right direction on GVC3202.
2. It will take a few seconds for GVC3202 to prepare the connection. Then, the SD card icon will show up on the status bar.
3. To access SD Card, go to GVC3202 LCD->Applications->File Manager->sdc card. Tap on it to access and manage your data.

**Note:**

The external SD card must be plugged in if the users would like to record calls and the recording files will be automatically saved in the external SD card. It is recommended to use an SD card with large capacity for call recording purpose.

MICROPHONE AND SPEAKER

GVC3202 is equipped with a built-in microphone. Alternatively, you can connect external audio devices to GVC3202 as audio input/output sources. It is recommended to use the external speaker that comes with your GVC3202 package for better compatibility.

If the external speaker supports Bluetooth, users could also pair and connect the speaker to the GVC3202 via Bluetooth. This will provide better mobility and make cabling easier when deploying the GVC3202 conference system in your conference room.

MAKING PHONE CALLS

ACCOUNT

GVC3202 comes with one IPVideoTalk account, supports one configurable SIP account registration and one Blue Jeans account. Please enable the IPVideoTalk account, or register SIP account to a SIP server before making calls. The following figure shows the SIP account is registered successfully (account icon is green). This displays on the left side of the top status bar on your LCD display device.

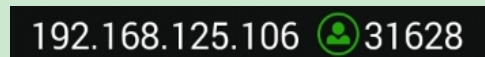


Figure 18: GVC3202 SIP Account

DIAL SCREEN

Once the account is registered successfully, users could use one of the following 3 ways to bring up dial screen to start making calls.

- Press the DIAL icon  in the lower right corner of the remote control.
- On the LCD display device, click on icon  on home screen.
- On the LCD display device, click on Applications and select  to bring up dial screen.

Enter digits in the dial-up box. If the digits or the letters for the digit match contacts and call history in GVC3202, a dropdown list of numbers will be displayed. For example, entering 5 (JKL), 6 (MNO), 4 (GHI) and 6 (MNO) will display “5646” or “john” if contact “john” exists. The matching characters will be highlighted in red.

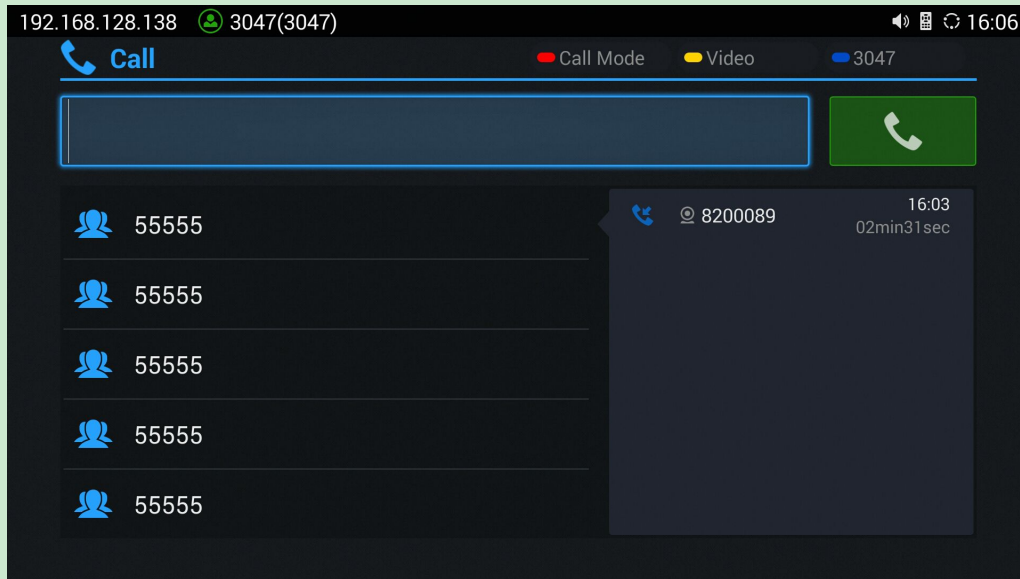


Figure 19: GVC3202 Call Screen

- Press the red shortcut key on GVC3202 remote control to bring up call mode setting screen, set call mode to Call, Paging or IP call.
- Press the yellow shortcut key to set call type to Audio or Video.
- Press the blue shortcut key to switch account among SIP account, IPVideoTalk account and Blue Jeans account.
- Click on "Cancel" icon on the screen, or press  key on the remote control to cancel the call.

DIALING A NUMBER DIRECTLY

1. Open the dial screen.
2. Use the remote control keyboard to enter digits, or click the input box to enter digits using the pop out soft keyboard.
3. Press  on the remote control to dial out, or move the cursor to the icon  on dial screen and click it to dial out.

**Note:**

1. By default, GVC3202 allows users to press # key as SEND key. This behavior can be disabled via option "Use # as Dial Key" in web GUI->SIP Account->Call page.
 2. When entering initials or full spellings of a name that exists in the contact, this contact will show up in the dropdown list. For example, if the user inputs Amy by pressing the corresponding digits "2" (ABC), "6" (MNO), "9" (WXYZ) on the remote control, Amy's name and number will be displayed in the list if it exists in the contact, users can select it to dial out.
-

REDIAL

Users can dial out the last dialed number if there is dialed call log. Access the dial screen, and then press

"#" key or  on the remote control to dial out.

DIALING A NUMBER VIA CONTACT

Follow the steps below to dial a number via Contacts.

1. On the LCD display device, access Contacts by tapping on button  on home screen.
2. Navigate and select in the contacts entries using the remote control navigation keys.
3. Press  on the remote control to dial out.

DIALING A NUMBER VIA CALL HISTORY

1. On the LCD display device, access Applications on home screen and access call history by selecting  icon.
2. The LCD will display all call history types. Navigate in the call history list by selecting the call history category. Select the call history entry you would like to dial out.
3. Press  on the remote control to dial out.

DIRECT IP CALL

Direct IP Call allows GVC3202 and another VoIP device to talk to each other in an ad-hoc fashion without a SIP proxy. Direct IP calls can be made if:

- Both GVC3202 and VoIP phone have public IP addresses
Or
- Both GVC3202 and VoIP phone are under the same LAN / VPN using private or public IP addresses
Or
- NAT is disabled or GVC3202 NAT is disabled.

Both devices can be connected through a router using public or private IP addresses (with necessary port forwarding or DMZ).

To make a direct IP call, please follow the steps below:

1. Access the dial screen on GVC3202.
2. Press the red shortcut key on the remote control to bring up call mode setting screen, set the mode to "IP Call".
3. Input the target IP address. For example, if the target IP address is 192.168.124.123 and the port is 5062, input the following:
192*168*124*123#5062
The * key represents the dot (.) and the # key represents the colon (:).
4. Press the yellow shortcut key on the remote control to select "Audio Call" or "Video Call".
5. Press  on the remote control to dial out.

PAGING/INTERCOM

Before placing paging/intercom, please make sure the callee has paging/intercom enabled so that it can answer the paging/intercom call automatically. To make paging/intercom call:

1. Access the dial screen on GVC3202.
2. Press the red shortcut key on the remote control to bring up call mode setting screen, set the mode to "Paging/Intercom".
3. Enter the number to dial.
4. Press the yellow shortcut key on the remote control to select "Audio Call" or "Video Call".

5. Press  on the remote control to dial out.

ANSWERING A CALL

When the device is in idle and there is an incoming video call, the device will show the call screen as below:

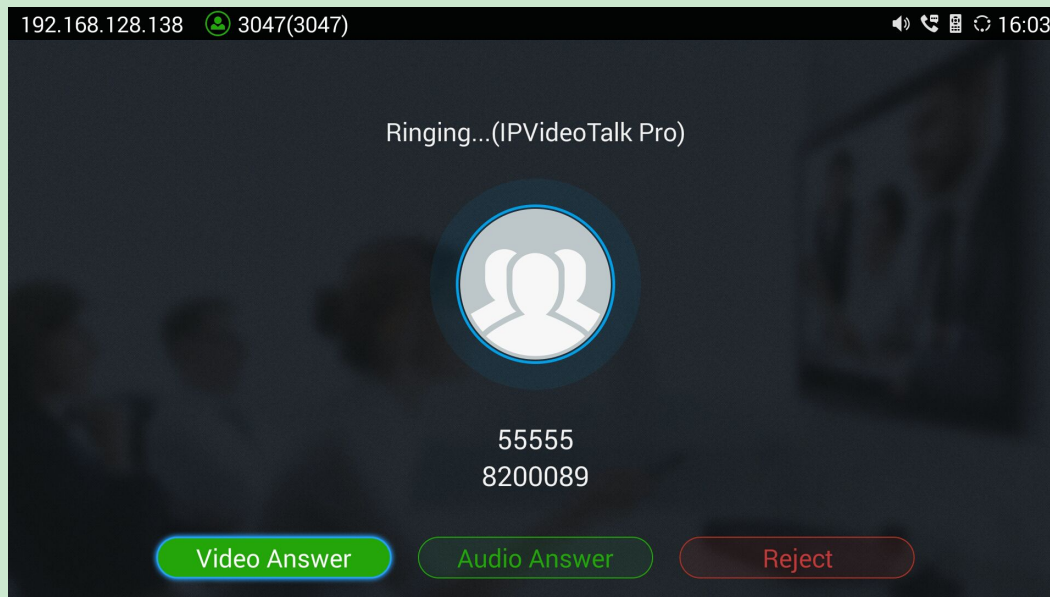


Figure 20: GVC3202 Single Incoming Call Screen

Select "Video Answer" to answer the call with both video and audio, "Audio Answer" to answer the call with audio only, or "End" to reject the call.

When there is an incoming call during an active call, users will hear a call waiting tone with the LCD displaying the caller name and ID for the incoming call.

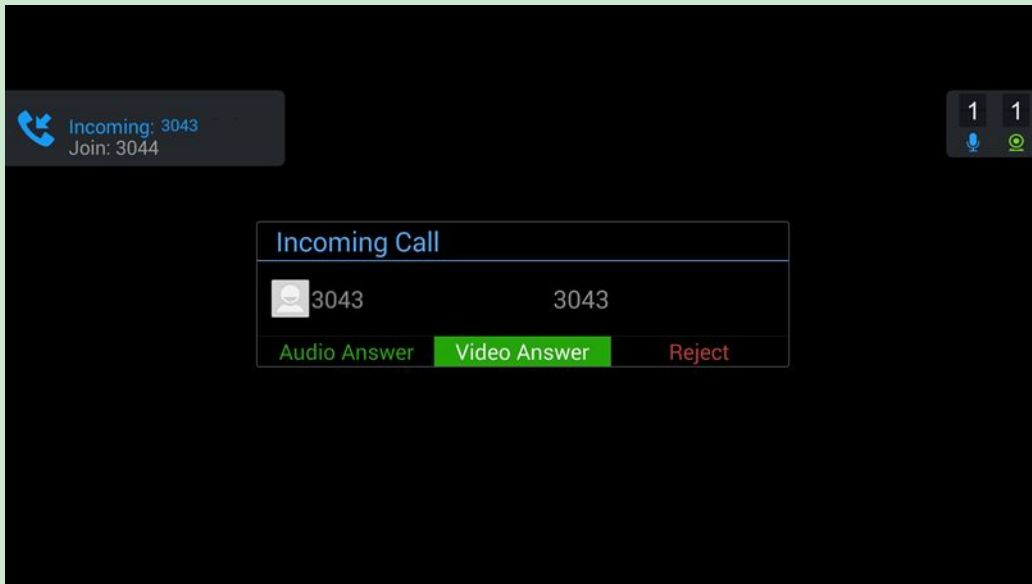


Figure 21: GVC3202 New Incoming Call Screen

Users could select "Audio" to answer with audio only, "Video" to answer with video and audio, or "End" to reject the call.



Note:

By default, answering a call during an active call will automatically add this party into the conference.

CALL HOLD

During an active call, press HOLD button  to put the call on hold.

- On the LCD display, click on  to resume the call.
- On the LCD display, click on  or press  on the remote control to end the call.

If the current call is a video call, the screen will not display remote video when the call is on hold.

MUTE LOCAL AUDIO

During an active call, press the MUTE button  to mute the call, press the button again to unmute the call.

CALL RECORDING

During an active call, users could record the video to the external SD card plugged into GVC3202. Once recorded, users can view the recorded video in Recorder application, and download the video from web UI->Maintenance->Recording. For more details, please refer to the chapter **RECORDING**.

1. During an active call, press the recording key  on the remote control. A red Rec icon will show up on the upper left of the screen.
2. The recording files will be saved to the external SD card automatically when the call is finished.

Users could also press  on the remote control to stop recording anytime.

DND (DO NOT DISTURB)

When DND is on, the incoming calls to GVC3202 will be blocked without ringing. Users could see the blocked calls in call history. Once it is enabled, the DND icon  will be displayed in the status bar on the top of the screen.

- When GVC3202 is in idle screen, users can press  button on the remote control to turn on/off DND.
- When GVC3202 is in an active call, users could turn on/off DND in call screen->MORE options. This will not affect the current call, and it will take effect starting from the next incoming call.
- At any time, users could log in GVC3202 web UI and click on “DND” on the top tool bar of the web page to turn on/turn off DND.

MISSED CALL



When there is a missed call, the call icon  on home screen will show the number of missed calls. Once accessed the dial screen, the reminder icon will disappear.

CALL FORWARD

Call forward (Unconditional/No Answer/Busy/Time Based) can be set up from web GUI. Log in GVC3202 web GUI and go to Settings->SIP Account->Call page. For details, please refer to "GVC3202 Administration Guide".

CONFERENCE

DEVICE LAYOUT

GVC3202 supports up to 9-way conference. GVC3202 can be the host to initiate a conference or join other conferences as a member.

Users can connect 2 HDMI output devices for conference. HDMI 1 interface is the primary output when plugging in 2 HDMI display devices. The device connected to HDMI 1 interface will display local site by default while the other device automatically display remote sites. If the VGA/HDMI IN device is plugged in to GVC3202, the device connected to HDMI 1 interface displays presentation of VGA/HDMI input while the other device will display video view.

During a conference, user can tap on  button on GVC3202 remote control trackpad to go back to HOME screen, with the conference video displayed in the background.

INITIATING CONFERENCE

The conference can be initiated in multiple ways:

- **From Call Screen:**
 1. Access the call screen, enter the number in the text box or select members from the list below.
 2. Press  on the remote control or click on button  on the screen to dial out.
- **From Schedule:**

For more details, please refer to chapter **SCHEDULE**.

ANSWERING AN INCOMING CALL IN CONFERENCE

You can specify how your GVC3202 handles incoming calls. Depending on your configuration, your GVC3202 answers a call automatically or prompts you to answer a call manually:

- Log in GVC3202 web GUI and go to Settings->SIP Account->Call page, and set "Auto-answer" option to "Yes". All incoming calls will be answered automatically. If it is a video call, it will be answered with video as well.
- If "Auto Answer" is set to "No", users will need to select to answer with video manually, audio or reject the call using the remote control on the LCD prompt.
- If the conference host answers the call, the caller will join into the current active conference.

CONFERENCE MANAGEMENT

The following figure shows a 3-way conference:



Figure 22: GVC3202 3-Way Conference



Add member. Access dial screen and add more numbers to join conference.



Delete member. Select member to delete.



Conference control. Control conference members. It includes the following options for each party:



- The selected party will not be heard by other parties.



- The selected party will not hear other parties.



- The video call with the selected party will turn into audio call only. If user clicks on this icon again, a video invitation will be sent to this party. The party has to accept the video request in order to see the video again.



- Suspend video from the video party. Click on it again to resume video.



Suspend. It is used to pause/resume conference. Once it is paused, GVC3202 will stop sending local video to the remote parties.



Presentation. It is used to turn on/off presentation. HDMI IN or VGA IN has to be plugged in first.



More. Bring up more options including mixing video with third party applications (only available when the application is installed on GVC3202), view call details, set DND, open DTMF, switch mainstream and sub stream.



End. End conference and go back to home screen.

If the remote party is also using GVC3202, you can press the camera key  on the remote control to control PTZ device for the remote party.

Users could press the red/blue/yellow shortcut keys on the remote control to input DTMF, view notifications and view status.

During an active conference call, if there is a new member joining conference, an outgoing call failed or a member hanging up, there will be a prompt box on the left side of the conference screen showing notifications. The notification prompt will be hidden automatically if there is no new notification in 2 seconds.

On the right side of the video conference screen, users can see member status such as audio/video calls, or whether if the call is being muted.

Table 15: GVC3202 Conference Member Status Descriptions

Icons	Descriptions
	The current line is in an audio call.
	The current line is in a video call.
	The current line is being muted.
	The current line is not connected.

The operations toolbar on the bottom of the video conference screen will be hidden automatically if there is no operation in 5 seconds. Press any key to bring up the toolbar again.

INVITE MEMBERS TO CONFERENCE

Users could use one of the following ways to add members:

- Access the dial screen by clicking on the ADD icon  on conference screen. Then, enter the number to dial out. Once the member answers the call, it will be connected into the conference automatically.
- When GVC3202 is on conference screen, press  on the remote control to access the call screen. Then, enter the number to dial out. Once the member answers the call, it will be connected into the conference automatically.
- The member calls the conference number. If the host answers the call, the member will be added into conference automatically.

REMOVING MEMBER FROM CONFERENCE

To remove a member from the conference, click on the DELETE icon  on conference screen. Select the member from the member list and press "OK" key to delete it.

CONFERENCE CONTROL

Tap on  to make operations such as mute, disable sound, camera control and suspend video. The conference control screen is as shown below:

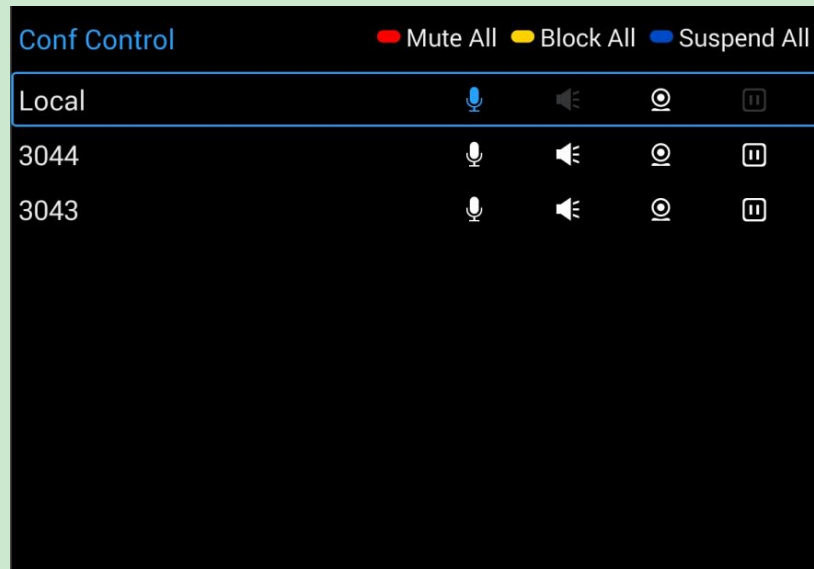


Figure 23: GVC3202 Conference Control Screen

1. Use Up/Down navigation keys on GVC3202 remote control to select conference member.
2. Use Left/Right navigation keys on GVC3202 remote control to make operations, press "OK" key to confirm the operation, press "OK" key again to cancel, e.g. tap on  to mute one member and the icon will turn to , tap on it again to restore.



Note:

Users could press the shortcut keys on GVC3202 remote control on conference control screen to mute all, block all or suspend videos.

PAUSE CONFERENCE

The video will be stopped if the conference is paused. You will not see the video view of the members and the other members will not see your video either.



Note:

1. The new incoming call will be rejected if the conference is paused.
2. The presentation will be displayed normally when the conference is paused.

PRESENTATION SHARING

GVC3202 supports dual stream video, with the presentation sharing function, you can connect VGA/HDMI input devices such as a computer, or a DVD player to GVC3202, and share the VGA/HDMI input sources with remote parties while they can still view the video of local GVC3202.

The following figure shows 2 TVs used for GVC3202. The one on the top shows presentation, the two on the bottom show remote party video.

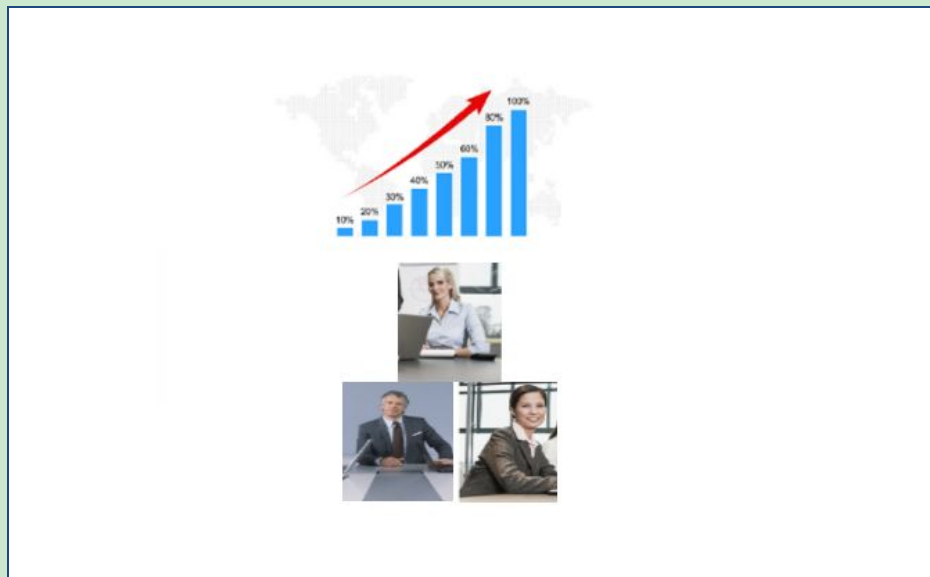


Figure 24: GVC3202 3-Way Conference with Presentation

**Note:**

1. When both HDMI IN interface and VGA IN interface are connected, GVC3202 will only display the device connected to HDMI IN port.
 2. Users could press PIP button  on GVC3202 remote control to change video display layout.
-

CONFERENCE RECORDING

During A video conference, press  on GVC3202 remote control to record conference, press the key again to stop recording. The recording files will be saved automatically to the external SD card plugged into GVC3202.

**Note:**

GVC3202 only supports to save the recording file to the external SD card, if external SD card is not detected or the SD card is full, the recording will fail.

CALL DETAILS

Users could view audio and video details of the conference members. On the conference screen, click on



and select "Call Details" to check the details.