

# Grandstream Networks, Inc.

# GAC2500 Audio Conference Phone for Android<sup>™</sup> User Guide





# **GAC2500 User Guide**

# Index

CHANGE LOG	g
FIRMWARE VERSION 1.0.1.26	9
FIRMWARE VERSION 1.0.1.18	9
FIRMWARE VERSION 1.0.1.6	9
WELCOME	10
PRODUCT OVERVIEW	12
FEATURE HIGHTLIGHTS	12
SAFETY COMPLIANCES	13
WARRANTY	13
INSTALLING GAC2500	14
EQUIPMENT PACKAGE CONTENT	14
PRODUCT APPEARANCE	14
CONNECTING GAC2500	15
IP MODE	16
USB SLAVE MODE	17
CASCADE MODE	17
MOBILE PHONE MODE	18
GETTING TO KNOW GAC2500	20
DESKTOP	20
STATUS ICONS	20
USING THE ONSCREEN KEYBOARD	21
ENGLISH KEYBOARD	21
CHINESE KEYBOARD	22
NUMBERS AND SYMBOLS	22
USING THE LED INDICATOR	23
ASSISTIVE TOUCH	24
USING TOUCHSCREEN	24
SHORTCUT KEYS	25
MANAGING STATUS BAR	25
DESKTOP MENU	26
EDIT WALLPAPER	26
EDIT DESKTOP	27
ADDING AN ITEM TO DESKTOP	27
MANAGING DESKTOP APPS AND ITEMS	28
MANAGING APPLICATIONS	30
HOME SCREEN	30
CONNECTING TO NETWORK AND DEVICES	32



NETWORK	32
ETHERNET	32
WI-FI	32
TURNING WI-FI ON OR OFF	32
SEARCH AND ADD WI-FI	33
BLUETOOTH	
TURNING BLUETOOTH ON OR OFF	33
PAIRING GAC2500 WITH A BLUETOOTH DEVICE	33
CONNECTING TO A BLUETOOTH DEVICE	34
SENDING FILES VIA BLUETOOTH	35
VPN SETTINGS	35
VLAN SETTINGS	37
LLDP SETTINGS	37
802.1X MODE	37
MAKING PHONE CALLS	39
ACCOUNT	39
MAKING A CALL	39
DIRECT DIALING	39
ANSWERING A CALL	41
REJECT CALL VIA SMS	42
CALL MANAGEMENT	42
CALL TRANSFER	45
DND (DO NOT DISTURB)	48
MISSED CALL	49
CALL FORWARD	49
SET ON LCD	49
SET FROM WEB GUI	50
7-WAY CONFERENCE	50
INITIATING CONFERENCE	50
CONFERENCE MANAGEMENT	52
END CONFERENCE	54
SCHEDULE CONFERENCE	55
VIEW CONFERENCE DETAILS	55
ADD SCHEDULED CONFERENCE	56
EDIT SCHEDULED CONFERENCE	57
RESCHEDULE CONFERENCE	57
DELETE SCHEDULED CONFERENCE	57
DELETE HISTORY CONFERENCE	58
VOICEMAIL	59
APPLICATIONS	61
CONTACTS	61



LOCAL CONTACTS	61
GROUPS	68
BLACKLIST	70
LDAP	72
CALL HISTORY	75
ADD CONTACT FROM CALL HISTORY	76
DELETE CALL HISTORY	77
SCHEDULE CONFERENCE VIA CALL HISTORY	77
INTERCEPTED HISTORY	78
MPK	78
EVENR LIST URL	80
MPK SETTINGS	8′
NOTICES	82
VIEW NOTICES	82
DELETE NOTICES	82
NOTICES SETTINGS	83
FILE MANAGER	83
COPY FILE	84
SEND FILE	84
DELETE FILE	84
RENAME FILE	84
RECORDER	85
NORMAL RECORDER	85
CALL RECORDER	86
RECORDER SETTINGS	86
DIAGNOSIS	87
BROWSER	87
GS MARKET	88
SEARCH APPS	88
DOWNLOAD AND INSTALL APPS	88
UPDATE APPS	88
FTP SERVER	88
USER HELPER	89
GAC2500 WEB UI FEATURES	90
ACCESSING GAC2500 WEB GUI	90
SAVING CHANGES	91
DEFINITIONS	9
CALL PAGE	92
MAKING A CALL	93
SINGLE INCOMING CALL	93
CONFERENCE CONTROL	94



CONTACTS PAGE	95
CONTACTS	95
SCHEDULE	98
CALL HISTORY	99
LDAP	100
EXPERIENCING GAC2500	101



# Table of Tables GAC2500 User Guide

Table 1 GAC2500 Tenical Specifications	12
Table 2 GAC2500 Package List	14
Table 3 GAC2500 Interfaces Explanations	15
Table 4 GAC2500 Status Icons Descriptions	
Table 5 GAC2500 LED Indicator Descriptions	23
Table 6 GAC2500 VPN File Parameters	36
Table 7 GAC2500 VLAN Configuration Parameters	37
Table 8 GAC2500 LLDP Configuration Parameters	37
Table 9 GAC2500 802.1X Mode Parameters	38
Table 10 GAC2500 Add Conference Parameters	56
Table 11 GAC2500 Import Contacts Parameters	64
Table 12 GAC2500 Download Contacts Parameters	65
Table 13 GAC2500 Export Contacts Parameters	66
Table 14 GAC2500 Blacklist Settings Parameters	71
Table 15 GAC2500 MOK Settings Parameters	81
Table 16 GAC2500 Users Access Permissions	92



# Table of Figures GAC2500 User Guide

Figure 1 GAC2500 Host Interface	14
Figure 2 GAC2500 Connection Mode	16
Figure 3 GAC2500 Slave Mode Screen	17
Figure 4 GAC2500 Cascade Mode Screen	18
Figure 5 GAC2500 Select line Sequence Screen	19
Figure 6 GAC2500 Multi-screens	20
Figure 7 GAC2500 Soft Keyboard - English Input Method	22
Figure 8 GAC2500 English Keyboard - Uppercase	22
Figure 9 GAC2500 Chinese Keyboard - Google Pinyin Method	22
Figure 10 GAC2500 Soft Keyboard - Symbols and Numbers	23
Figure 11 GAC2500 Soft Keyboard - More Symbols and Numbers	23
Figure 12 GAC2500 Finger Gestures	24
Figure 13 GAC2500 Status Bar - Notifications	25
Figure 14 GAC2500 Choose Wallpaper	26
Figure 15 GAC2500 Edit Desktop	27
Figure 16 GAC2500 Weather Forecast Screen	28
Figure 17 GAC2500 Move Weather Forecast to Desktop	29
Figure 18 GAC2500 Remove Weather Forecast from Desktop	29
Figure 19 GAC2500 Managing Applications	30
Figure 20 GAC2500 Home Screen	31
Figure 21 GAC2500 Add Wi-Fi Screen	33
Figure 22 GAC2500 Bluetooth - Paired Device	34
Figure 23 GAC2500 Bluetooth – Headset Mode	35
Figure 24 GAC2500 Add VPN Files Screen	36
Figure 25 GAC2500 Registered Account Status	39
Figure 26 GAC2500 Single Incoming Call Screen	41
Figure 27 GAC2500 New Incoming Call Screen	42
Figure 28 GAC2500 Single Calling Screen	43
Figure 29 GAC2500 Call On Hold Screen	44
Figure 30 GAC2500 Mew - Start Recording	44
Figure 31 GAC2500 Mute Call Screen	45
Figure 32 GAC2500 Transfer - Blind Transfer	46
Figure 33 GAC2500 Transfer - Attended Transfer	47
Figure 34 GAC2500 Call Forward - Select Forward Mode	47
Figure 35 GAC2500 Call Forward - Transferring	48
Figure 36 GAC2500 Call Forward - Split	
Figure 37 GAC2500 Call Forward Type Setting Screen	
Figure 38 GAC2500 Call Forward Mode On Web GUI	
Figure 39 GAC2500 Conference Screen	
<del>-</del>	_



Figure 40 GAC2500 Add Party To Conference	51
Figure 41 GAC2500 3-Way Conference	52
Figure 42 GAC2500 Conference-More	53
Figure 43 GAC2500 Schedule Screen	55
Figure 44 GAC2500 Conference Details Screen	55
Figure 45 GAC2500 Add Conference Screen	56
Figure 46 GAC2500 Delete Scheduled Conference Screen	58
Figure 47 GAC2500 Delete History Conference Screen	58
Figure 48 GAC2500 Batch Delete History Conference Screen	59
Figure 49 GAC2500 Voice Mail Application	60
Figure 50 GAC2500 Contacts Screen	61
Figure 51 GAC2500 Local Contacts Screen	62
Figure 52 GAC2500 Add New Contact Screen	63
Figure 53 GAC2500 Import Contacts Parameters Screen	63
Figure 54 GAC2500 Download Contacts Screen	64
Figure 55 GAC2500 Export Contacts Screen	66
Figure 56 GAC2500 Contacts Storage Status Screen	67
Figure 57 GAC2500 Add Google Account - Wizard 1	67
Figure 58 GAC2500 Add Google Account - Wizard 2	68
Figure 59 GAC2500 Groups Screen	68
Figure 60 GAC2500 Add Group Screen	69
Figure 61 GAC2500 Dial Group Members Screen	69
Figure 62 GAC2500 Edit Group Screen	70
Figure 63 GAC2500 Blacklist Screen	70
Figure 64 GAC2500 Manual Add Blacklist Screen	71
Figure 65 GAC2500 Blacklist Settings Screen	71
Figure 66 GAC2500 LDAP Book Screen	72
Figure 67 GAC2500 LDAP Settings	73
Figure 68 GAC2500 Web GUI Maintenance - LDAP Book	74
Figure 69 GAC2500 Add LDAP Contact To Local	75
Figure 70 GAC2500 Call History Screnn	75
Figure 71 GAC2500 Call History Details	76
Figure 72 GAC2500 Add Contact Screen	77
Figure 73 GAC2500 Conference Call History Screen	77
Figure 74 GAC2500 Intercepted History Screen	78
Figure 75 GAC2500 Add MPK Number	79
Figure 76 GAC2500 MPK Number List	79
Figure 77 GAC2500 Add Number from Contacts	80
Figure 78 GAC2500 MPK Number Screen	80
Figure 79 GAC2500 MPK URI Screen	81
Figure 80 GAC2500 MPK Settings Screen	81



Figure 81 GAC2500 Notices Screen	82
Figure 82 GAC2500 View Notices	82
Figure 83 GAC2500 Notices Settings Screen	83
Figure 84 GAC2500 Incoming Call Screen	83
Figure 85 GAC2500 Recorder Main Screen	85
Figure 86 GAC2500 Normal Record - Recording	86
Figure 87 GAC2500 Call Recordings	86
Figure 88 GAC2500 Recorder Settings Screen	87
Figure 89 GAC2500 FTP Server Connection	89
Figure 90 GAC2500 FTP Server Settings	89
Figure 91 GAC2500 Quick User Guide	90
Figure 92 GAC2500 Web GUI - Login	91
Figure 93 GAC2500 Web UI Tool Bar	92
Figure 94 GAC2500 Web UI - Call	93
Figure 95 GAC2500 Web UI - Single Incoming Call	94
Figure 96 GAC2500 Web UI - Minimize Call Screen	94
Figure 97 GAC2500 Web UI - Conference Control	95
Figure 98 GAC2500 Web UI - Minimize Conference Screen	95
Figure 99 GAC2500 Web UI - Contacts	96
Figure 100 GAC2500 Web UI - Groups	97
Figure 101 GAC2500 Web Page - Blacklist	97
Figure 102 GAC2500 Web Page - Upcoming Conference	98
Figure 103 GAC2500 Web Page - History Conference	99
Figure 104 GAC2500 Web UI - Call History	100



# **CHANGE LOG**

This section documents significant changes from previous versions of GAC2500 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 1.0.1.26**

- Add LCD settings
- Add hold/unhold for individual conference participant
- Add FTP server
- Add GAC2500 quick guide

# **FIRMWARE VERSION 1.0.1.18**

- Increase call history to 2000 entries
- Update 3.5mm AUX line sequence interface
- Update the screenshots
- Add cycle conference
- Update the chapter of third party application

# **FIRMWARE VERSION 1.0.1.6**

This is the initial version.



# **WELCOME**

Thank you for purchasing Grandstream GAC2500 Audio Conference Phone for Android<sup>™</sup>. This User Guide describes the basic concept and tasks necessary to use and configure your GAC2500. This document covers the topics of conference environment setups, start conference and the relevant operations like conference reservation. To learn the advanced features and configurations, please visit <a href="http://www.grandstream.com">http://www.grandstream.com</a> to download the latest "GAC2500 Administration Guide".

GAC2500 is a next generation enterprise-grade 6-line Android IP conference phone with a 4.3" capacitive touch screen that that runs the Android Operating System and therefore offers full access to the hundreds of thousands of Android apps in the Google Play Store, including business productivity apps such as Skype™, Skype for Business™, and Google Hangouts™. The phone features Gigabit ports, 7-way conference, 3x microphones, 1 Micro USB port, integrated WiFi and Bluetooth for network flexibility. The GAC2500 delivers superior HD audio quality, rich and leading edge telephony features, automated provisioning for easy deployment, advanced security protection for privacy, and broad interoperability with most 3<sup>rd</sup> party SIP devices and leading SIP/NGN/IMS platforms. GAC2500 is a perfect choice for enterprise users looking for a high performance, feature rich conference phone with superb audio quality at competitive price.



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.



Please do not use a different power adaptor with the GAC2500 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 download here:

http://www.grandstream.com/support

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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.

Firmware Version 1.0.1.26 GVC2500 User Guide Page 11 of 101



# PRODUCT OVERVIEW

# **FEATURE HIGHTLIGHTS**

- Runs Android<sup>™</sup> 4.4 and offers full access to all Android<sup>™</sup> conference apps in the Google Play Store (e.g., Skype<sup>™</sup>, Skype for Business<sup>™</sup>, Google Hangouts<sup>™</sup>, etc.)
- World-class high fidelity sound quality with audio bandwidth of up to 18Khz
- 4.3" capacitive touch screen LCD with support for flexible layout/content customization
- 3x microphones (12 ft. pickup range), 1x speaker (15 ft. coverage range)
- Auto-sensing Gigabit Ethernet port, Wi-Fi, PoE+, Bluetooth, Micro-USB with 3.5mm audio interface
- Supports standalone IP mode or USB slave mode
- Supports daisy chain (up to 2 units via RJ48 CAT5) mode in large conference room for better audio quality
- NAT-T enables the phone being the Plug and Play device
- Automated provisioning using TR-069 or AES encrypted XML configuration file, TLS/SRTP/HTTPS for advanced security and privacy protection

**Table 1 GAC2500 Tenical Specifications** 

Specification	Description	
Protocols/ Standards	SIP RFC3261, TCP/IP/UDP, RTP/RTCP, HTTP/HTTPS, ARP, ICMP, DNS (A record, SRV, NAPTR), DHCP, PPPoE, SSH, TFTP, NTP, STUN, SIMPLE, LLDP, LDAP, TR-069, 802.1x, TLS, SRTP, IPv6 (pending), OpenVPN (pending)	
Voice Codec	Support for G.711µ/a, G.722, G.726, iLBC, Opus, G.722.1, G.722.1c (pending), inband and out-of-band DTMF (In audio, RFC2833, SIP INFO)	
Platform Bridging	Bridge SIP calls with any Android™ VoIP apps such as Skype™, Skype for Business (Lync), Google Hangouts™ and more	
Telephony Features	Hold, transfer, forward (unconditional/no-answer/busy/conditional), call park/pickup, 7-way audio conference, auto answer, downloadable XML phone book (up to 2000 entries), LDAP, call waiting, call history (up to 2000 entries), flexible dial plan, personalized music ringtones, server redundancy & fail-over	
Sample Applications	Skype™, Google Hangouts™, Skype for Business (Lync), 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 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/TLS, 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	
Network Interface	1x auto-sensing Gigabit Ethernet port, integrated 2.4GHZ auto-band Wi-Fi (802.11a/b/g/n) and 4.0 Bluetooth.	
HD Audio	3x microphones (12 ft. pickup range), 1x speaker (220-18,000 Hz, 15 ft. coverage range up to 86dB)	
<b>Auxiliary Ports</b>	3.5mm audio interface, Micro-USB interface, RJ48 interface, reset pin	
Graphic Display	4.3" (800*480) capacitive touch screen LCD	
Power & Green Energy Efficiency	Universal power adapter included: Input: 100-240VAC 50-60Hz; Output: 12VDC, 2A (24W)	
Temperature and Humidity	Sicratic, 14 - 140 1 / -10 - 00 C	
Compliance	FCC: Part 15 (CFR 47) Class B; UL 60950 (power adapter) CE: EN55022 Class B, EN55024, EN61000-3-2, EN61000-3-3, EN60950-1, EN62479, RoHS RCM: AS/ACIF S004; AS/NZS CISPR22/24; AS/NZS 60950; AS/NZS 4268	

## **SAFETY COMPLIANCES**

The GAC2500 complies with FCC/CE, RCM and various safety standards. The GAC2500 power adapter is compliant with the UL standard. Use the universal power adapter provided with the GAC2500 package only. The manufacturer's warranty does not cover damages to the phone caused by unsupported power adapters.

#### **WARRANTY**

If the GAC2500 phone 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 GAC2500**

# **EQUIPMENT PACKAGE CONTENT**

The GAC2500 package contains the following items:

Table 2 GAC2500 Package List

Name	Number
GAC2500 Main Case	1
12V Universal Power Adapter with power cable	1
Ethernet Cable	1
Micro-USB Cable	1
RJ48 CAT5 1	
Quick Installation Guide	1
GPL license	1

# **PRODUCT APPEARANCE**

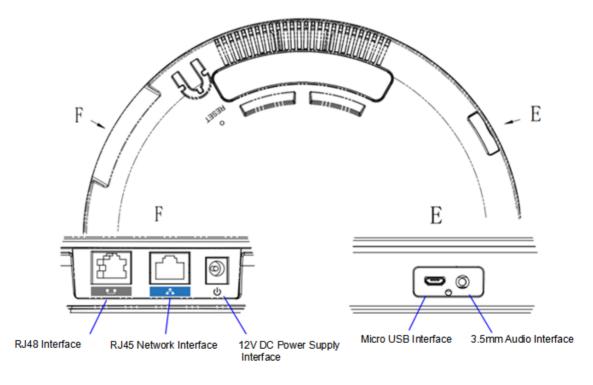


Figure 1 GAC2500 Host Interface



Table 3 GAC2500 Interfaces Explanations

NO.	Name	Explanation
1)	RJ48 Interface	Daisy chain (up to 2 units via RJ48 CAT5) mode in large conference room for better audio quality.
2	RJ45 Network Interface	Connect to LAN port.
3	12V DC Power Supply Interface	Connect to Power Adaptor.
4	Micro USB Interface	USB OTG devices can be connected to GAC2500 via the USB cable. For example, connect a USB flash drive to read data, or PC USB Interface or GVC32XX SPKR Interface can be connected to the GAC2500 USB Interface via USB cable for audio pickup and play
(5)	3.5mm Audio Interface	Connect to 3.5mm devices like mobile phone or PC for mobile audio pickup and play
6	Reset Pin	<ul> <li>When the GAC2500 is powered up, use a small pin to press the button one time to reboot.</li> <li>When powering up GAC2500, long press the button for 4 to 9 seconds to detect whether firmware file exists in USB OTG device to update system.</li> <li>When powering up GAC2500, long press the button for more than 10 seconds to quick restore factory settings.</li> </ul>

# **CONNECTING GAC2500**

To deploy a working conferencing system, users could select standalone IP mode, USB slave mode, cascade mode or mobile phone mode. Please connect the GAC2500 for each mode according to different procedures.



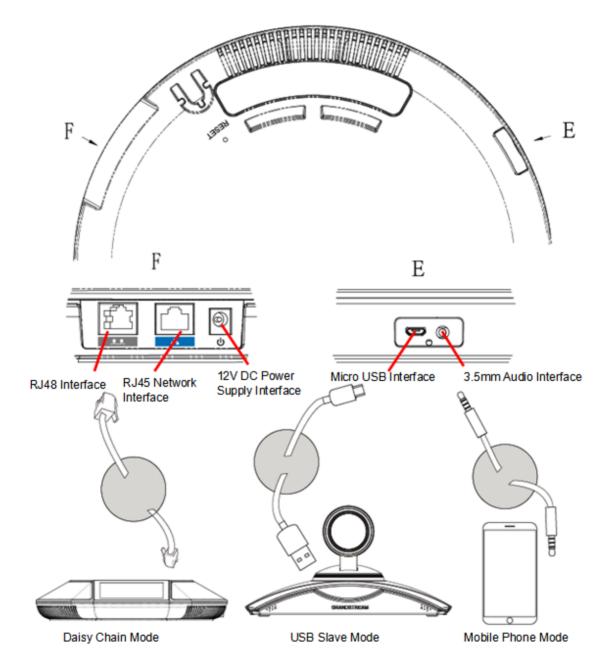


Figure 2 GAC2500 Connection Mode

# **IP MODE**

The GAC2500 is used as an independent phone in IP mode. Please follow the steps below to connect.

- 1. Connect the LAN port of the device to the external network port (the port in the office or at home) via Ethernet cable;
- Plug in the power adapter into the power supply interface then power up the GAC2500.





It is recommended to use IP mode in room 3.6m\* 7.2m or smaller.

#### **USB SLAVE MODE**

GAC2500 can be used as auxiliary device for GVC3200 or PC for audio acquisition and play. The conference feature will be disabled in USB slave mode. Follow the steps below to connect route.

- 1. Connect one end of the USB cable to the Micro USB port of the device and the other end to the USB port of GVC3200/PC;
- 2. Plug in the power adapter into the power supply interface then power up the GAC2500.

The GAC2500 screen is as shown below in USB slave mode, you can tap on the volume icon to adjust the volume of GVC3200/PC. When connecting to GVC3200, tap on "Mute", "Answer" or "Hangup" icons for more operations.



Figure 3 GAC2500 Slave Mode Screen



If GAC2500 is connecting to PC via Micro-USB but there is no audio output from GAC2500, it is because the PC uses default audio output in most cases. Please configure GAC2500 as default audio output.

#### **CASCADE MODE**

Connect two GAC2500 (s) via RJ48 CAT5 for larger space. Please follow the steps below to connect.

- 1. Connect the LAN port of the device to the external network port (the port in the office or at home) via Ethernet cable:
- Connect the RJ48 ports of two devices with RJ48 CAT5;
- 3. Plug in two power adapters into the power supply interfaces then power up two devices;



4. The screen is as shown below. Tap on "Yes" on the first device and set it to be the master while the other the slave.



Figure 4 GAC2500 Cascade Mode Screen



- 1. It is recommended to use cascade mode in room 7.2m\*12.2m or smaller.
- 2. Please keep a distance of 5m between two devices.
- 3. Please make sure the master device is connected to the network or it may not work properly.
- The slave device will synchronize with the master device and their dial screens will be shown synchronously.

#### **MOBILE PHONE MODE**

GAC2500 could be connected to mobile phone for expanded use. Please follow the steps to connect.

- 1. Connect the LAN port of the device to the external network port (the port in the office or at home) via Ethernet cable;
- 2. Plug in the power adapter into the power supply interface then power up the GAC2500;
- 3. Connect one end of the via 3.5mm audio aux cable to 3.5mm headset interface on the mobile phone first, then connect the other end to 3.5mm audio interface on GAC2500, once connected, it will access 3.5mm AUX call screen;

If the audio quality is not good, it may be the line sequence issue, you can hold the screen at the top of the status bar, drag and drop down to open the status bar, tap on line sequence notifications and select the line sequence the same as the one of 3.5mm headset interface on the mobile phone.



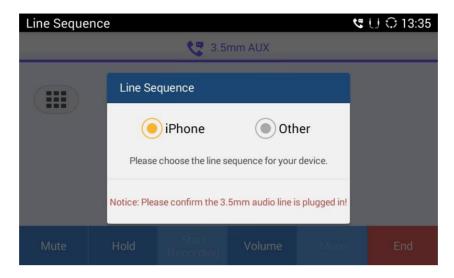


Figure 5 GAC2500 Select line Sequence Screen

4. When the mobile phone is answering an incoming call or dialing out, GAC2500 will collect and play the sound.



- The GAC2500 package contains no 3.5mm audio aux cable, you can buy one at electronic gadgets store.
- 2. The line sequence of GAC2500 must be the same as the one of your mobile phone, or the microphone may work improperly.
- 3. It is recommended to connect mobile phone first, then GAC2500.
- 4. You cannot dial or call a number via GAC2500 keypad directly.
- 5. Once mobile phone mode is enabled, the 3.5mm audio aux line is regarded as one call line.
- Once a conference is established, the 3.5mm audio aux line is regarded as one party of the conference.
- 7. Please do not unplug the 3.5mm audio aux cable or it may cause call exception.
- 8. The audio quality may vary according to different types of 3.5mm audio aux cable and mobile phones.
- 9. Once the 3.5mm male to male cable is inserted, some types of mobile phones may be detected by GAC2500 only after the call is established.



# **GETTING TO KNOW GAC2500**

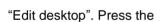
### **DESKTOP**

When the GAC2500 is on idle screen, hold the screen at the bottom of the screen, drag upward to bring up 5 soft keys; hold the screen at the top of the status bar, drag and drop down to open the status bar,.



Figure 6 GAC2500 Multi-screens

• **Home Screen**. GAC2500 Home screen is a dial screen by default. You can dial up or start a conference on this screen. To change the home screen, please long press the blank area and select





button in the preview desktop to set it as home screen.

- Widget. GAC2500 supports tools and Apps like Weather Forecast, Clock, MPK, and etc.
- **Status Bar**. The GAC2500 status bar is located on the top of the screen to indicate the current status of the device. Please refer to chapter **Status Icons** for more details.
- Soft Keys. 5 sofkeys Including Volume+, Volume-, Back, Home, and Process Manager. Drag and slide upward at the bottom of the screen o bring out soft keys, the keys will be hidden automatically if no operation timeout.

# **STATUS ICONS**

Touch the status bar of GAC2500 and slowly drag it down to display the full status list. Users could view status icons that indicate the current status of the device.

The following table lists the main status icons used on GAC2500.

Table 4 GAC2500 Status Icons Descriptions

Icon	Descriptions	Icon	Descriptions	Icon	Descriptions
------	--------------	------	--------------	------	--------------

Firmware Version 1.0.1.26 GVC2500 User Guide Page 20 of 101



$\odot$	Ethernet is connected	$\bigcirc$	Trying to connect to Ethernet	Û	Ethernet is disconnected
<b>C</b> ×	Missed call	<b>5</b>	One line is in active	9	Unread voicemail
6	Calls from blacklist	ţ	Call forward is set up	€	Auto answer is set up
•	DND mode is enabled	<u>÷</u>	Wi-Fi is connected	×	Wi-Fi is enabled but not connected
*	Bluetooth is connected	<b>*</b> :	Sending files via Bluetooth	Ū	Bluetooth has been plugged in
<b>_</b> \$\bar{\bar{Q}}	Using Bluetooth headset for calls	<b>■</b> ×	Volume is turned to silent	<u> </u>	Mute is enabled.
<u>+</u>	Downloading	₹	Download failed	<b>1</b>	Updating Application
$\bigcup$	3.5mm headset is inserted	<b>( )</b> ™	Switch 3.5mm headset line sequence	ਚ੍ਹ	Powering the device with PoE
<u></u>	PPPoE is connected	ĒŽ	PPPoE connection failed	# <b>2</b> 6	Missed conference
A	Warnings	•	New message	€	Full messages storage
VPN	VPN is connected	VPP.	VPN connection failed	€	More notifications
	The USB mouse is connected		The USB keyboard is connected	VLAN	VPN is connected
<u>_</u> @	RJ48 CAT5 is connected	٢	Set GAC2500 as master device	L	Set GAC2500 as slave device
ල	Hotspot is enabled	Ü	USB device is inserted		Full USB device storage

# **USING THE ONSCREEN KEYBOARD**

# **ENGLISH KEYBOARD**

This is the default keyboard on the GAC2500. The GAC2500 English keyboard supports multiple languages input methods. Users could tap on to switch among different languages. See figure below.

Firmware Version 1.0.1.26 GVC2500 User Guide Page 21 of 101





Figure 7 GAC2500 Soft Keyboard - English Input Method

Tap on to switch Caps Lock.



Figure 8 GAC2500 English Keyboard - Uppercase

#### **CHINESE KEYBOARD**

GAC2500 supports Google Pinyin Input, go to Settings->Language & Keyboard to configure.



Figure 9 GAC2500 Chinese Keyboard - Google Pinyin Method

### **NUMBERS AND SYMBOLS**

To input numbers and symbols, tap on on the default keyboard to switch to numbers/symbols.

Tap on for more numbers/symbols.





Figure 10 GAC2500 Soft Keyboard - Symbols and Numbers



Figure 11 GAC2500 Soft Keyboard - More Symbols and Numbers

# **USING THE LED INDICATOR**

The GAC2500 LED indicator is located on the top part of the device. It can be used to notify the users with current status of the device. The priority of the indicator from high to low is shown below.

**Table 5 GAC2500 LED Indicator Descriptions** 

Color	LED Indicator Status	Descriptions
	Fast Flashing	Incoming call (including calls when conferencing and when phone is busy).
	Solid	Calling, Talking, Conferencing, Screensaver status.
	Slow Flashing	Call on hold.
	Slow Flashing	Unhandled events. Including missed call (s), new voicemail (s), new SIP message (s).
	Solid	High memory usage, full message box, full contacts storage, network disconnection.
	Rapid Flashing	Upgrading.
None	OFF	Normal.



The colors and statuses of LED indicators are by default. You can go to Web page->Maintenance->Device Manager to custom indicators.



# **ASSISTIVE TOUCH**

GAC2500 screen supports multi-touch in full screen, users could operate the GAC2500 with touch or drag gestures.

# **USING TOUCHSCREEN**

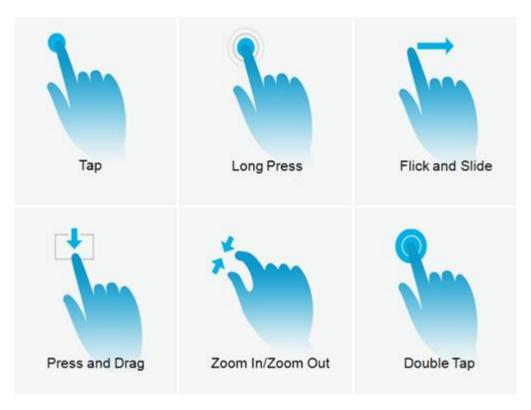


Figure 12 GAC2500 Finger Gestures

Use your fingers to operate the following gestures on the GAC2500 as shown in figure above:

- **Tap**: Briefly touch surface with fingertip once to initiate the menu, options or applications.
- Long Press: Touch the app for extended period of time for 2 seconds bring up operation options.
- **Flick and Slide**: Touch surface with one finger and slide over surface down to open the pull-down menu, slide over surface left, right or up to page up or make some operations.
- Press and Drag: Press the item and move it by dragging the finger up and down, left and right.
- **Zoom In/Zoom Out:** Touch surface with two fingers and bring them closer together to zoom out, Touch surface with two fingers and move them apart to zoom in.
- **Double Tap:** Rapidly touch surface twice with the fingertip to rearrange the zoomed page to fit the screen when viewing photos or Webpages.



## **SHORTCUT KEYS**

GAC2500 supports shortcuts for some special operation like Screenshots, Factory Reset, Upgrade and Security.

- Screenshot. Long press the Process Manager icon on GAC2500 screen, the screenshot file will be saved automatically in the screenshot folder under SD card. Go to File Manager->Storage->Pictures->Screenshots to view files.
- **Factory Reset**. When powering up GAC2500, long press the reset button on the back of the device for more than 10 seconds to restore to factory settings.
- Upgrade. When powering up GAC2500, long press the button for 4 to 9 seconds to update system.

#### **MANAGING STATUS BAR**

The GAC2500 status bar is located on the top of the screen. Touch the bar and slowly drag it down to display the full status list. Once the status bar is opened, users could view Notifications.

The Notifications in the Status Bar is as shown in figure below.

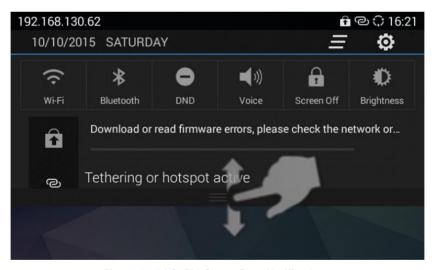


Figure 13 GAC2500 Status Bar - Notifications

Click on button on the upper right corner to clear all notification messages.

- Slide a notification message to left or right to delete it.
- Click a notification message to view the details.
- Tap on the corresponding icon on the top of the screen to quick turn on/off the applications.
- Long press the corresponding icon on the top of the screen to quick access the applications.



Firmware Version 1.0.1.26 GVC2500 User Guide Page 25 of 101



### **DESKTOP MENU**

When the GAC2500 is on idle screen, long press the blank area, then you can tap on "Edit desktop" or "Set wallpaper". See figure below.

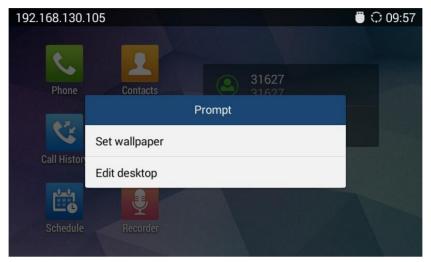


Figure 14 GAC2500 Idle Screen Menu

- Edit Wallpaper: Edit the idle screen wallpaper.
- Edit Desktop: Add, delete, edit desktop or add widgets on the desktop.

#### **EDIT WALLPAPER**

You can set wallpapers, live wallpapers or choose photo from gallery. See figure below.

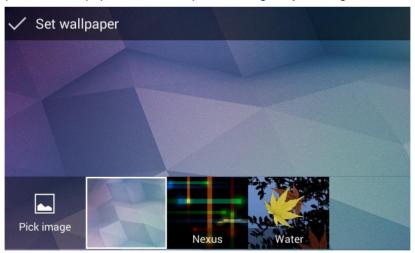


Figure 14 GAC2500 Choose Wallpaper

1. Long press the blank area on home screen then tap on "Set Wallpaper";

Slide wallpapers to left or right to view a list of sample wallpapers embedded in the GAC2500, tap on wallpaper to preview, tap on "Set Wallpaper" to confirm the selection. You can also select photo from gallery or file manager, or set live wallpapers.



#### **EDIT DESKTOP**

The desktop screen is as shown below.



Figure 15 GAC2500 Edit Desktop

- Add Desktop: Press finger slightly in free space of the screen and fast slide to the last screen and click
   on the middle screen to add a new desktop. Users could add up to 15 desktops.
- Delete Desktop: Click on the upper right corner of the blank desktop to delete it. The desktop with widgets and shortcuts on it is undeletable.
- Tap on the icon of a preview desktop to set it as home screen.

# **ADDING AN ITEM TO DESKTOP**

Users could add commonly used items (Weather Forecast, RSS News, etc.) to the desktop. Follow the steps below:

- 1. When the GAC2500 is running on idle screen, long press the blank area, then tap on "Edit Desktop";
- 2. Slide left or right to view a list of options;
- 3. Press and drag the shortcut or widget you would like to add and drag it to the desktop you want to put on.





Please ensure that there is enough space on the desktop when adding widget.
 Users may need to select the specific items before add them to the desktop. i.e., browser, bookmark, star-labeled contact, photos, etc.

#### MANAGING DESKTOP APPS AND ITEMS

All the GAC2500 apps/items can be accessed /removed. Take Weather Forecast as an example in the following chapter.

#### **OPENING AN APP**

Tap on Weather Forecast icon to access screen as shown in figure 17.



Figure 16 GAC2500 Weather Forecast Screen

Users could edit Weather Forecast after accessing it.

#### **MOVING AN APP**

Touch and hold the Weather Forecast icon, when the icon begins to float, drag it to any desktop with free space.





Figure 17 GAC2500 Move Weather Forecast to Desktop

#### **REMOVING AN APP**

Touch and hold the Weather Forecast icon until the Recycle Bin icon displayed on the top as shown in figure 18, drag the widget to the Recycle Bin, when the item gets close to the Recycle Bin, it will turn red. Now release your finger to delete.

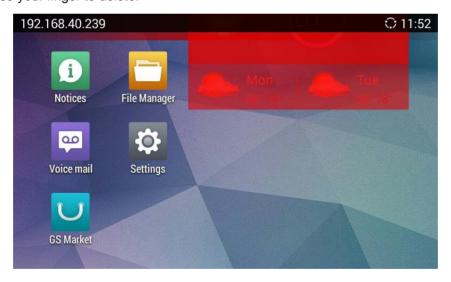


Figure 18 GAC2500 Remove Weather Forecast from Desktop



The system applications cannot be deleted.



# MANAGING APPLICATIONS

Tap on the Process Manager icon shown below.

on screen to view the running applications on the GAC2500 as

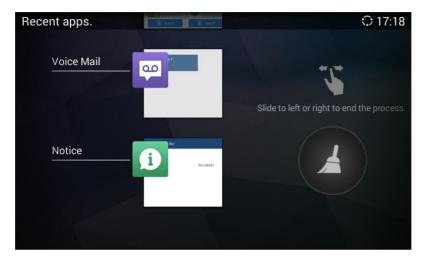


Figure 19 GAC2500 Managing Applications

Slide up/down to view the applications, tap on one and slide left/right to turn it off, or tap on it to access the corresponding interface.



# **HOME SCREEN**

GAC2500 has only one default home screen, drag and slide upward at the bottom of the screen o bring out soft keys, tap on the icon on the middle bottom of the screen to go back to home screen anytime.

Firmware Version 1.0.1.26 GVC2500 User Guide Page 30 of 101



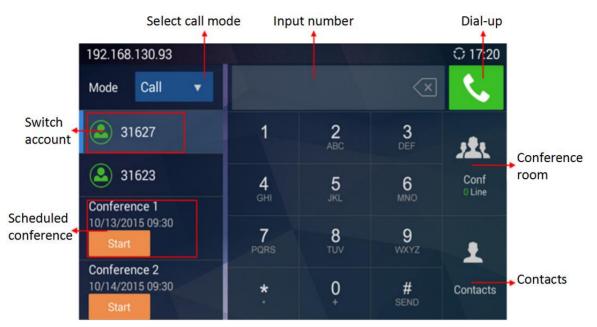


Figure 20 GAC2500 Home Screen

- 1. **Mode**. Set the call mode.
- 2. Account. Display all registered accounts. Tap to select account.
- 3. **Input box**. Tap on digits below to input phone number, or tap on the input box to bring out the soft keyboard. You'll see all the matching numbers on the left when you inputting digits, tap on the number to add it to input box directly, you can add up to 6 numbers.
- 4. **Dial-up**. Tap to dial out.
- 5. **Conference**. Display the conference line. Tap to access conference interface.
- 6. Contacts. Tap to access Contacts interface to add more contacts to the input box.
- 7. **Schedule Conference**. Display the latest 2 scheduled conferences. Tap on "Start" to start conference at once.

You can slide left or right to the Conference app on other desktops, or dial out multiple numbers to start a conference on home screen.



# **CONNECTING TO NETWORK AND DEVICES**

The GAC2500 supports a variety of network connections (Ethernet, Wi-Fi) and device connections, you can configure on GAC2500 or log in the GAC2500 web UI to configure. For more information about using web UI, please refer to the GAC2500 Administration Guide in <a href="https://www.grandstream.com">www.grandstream.com</a>.

# **NETWORK**

Network connection has a variety of ways, one is wired connection via the cables, and the other way is to connect via Wi-Fi.

#### **ETHERNET**

If the user would like to use Ethernet connection for network access, please connect the Ethernet cable to the LAN port of the GAC2500. Ethernet connection is turned on as DHCP by default.

To configure Ethernet settings on GAC2500:

- 1. Plug the Ethernet cable into the LAN port on the back of the GAC2500.
- 2. Go to LCD menu->Settings->Advanced settings -> Wireless & 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 the GAC2500 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 the GAC2500 to correctly connect to the network.
  - ➤ For PPPoE, enter PPPoE account ID and password so the GAC2500 can get IP address from the PPPoE server.

#### WI-FI

#### **TURNING WI-FI ON OR OFF**

Wi-Fi is supported and built-in on the GAC2500. On the LCD display, go to Settings->Advanced settings->Wireless & network -> Wi-Fi to turn on and configure Wi-Fi.



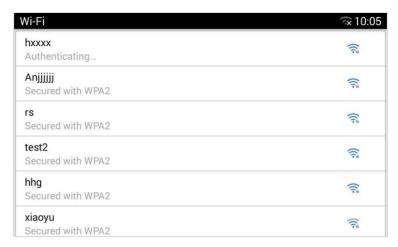


Figure 21 GAC2500 Add Wi-Fi Screen

#### **SEARCH AND ADD WI-FI**

Once Wi-Fi is turned on, GAC2500 will automatically start the scanning within the range. A list of Wi-Fi networks will be displayed as scanning result. Tap on the SSID and enter the correct password information to connect to the selected Wi-Fi network.

Follow the steps below for static IP usage in Wi-Fi environment:

- 1. Tap on one Wi-Fi network in the scanned Wi-Fi list to bring up the dialog that shows signal strength, security, password and option "Show advanced options".
- 2. Select "Show advanced options". The dialog will show additional option "IP settings".
- 3. In "IP settings", select Static IP, enter IP Address, Subnet Mask, and Default Gateway for the GAC2500 to correctly connect to the network.

# **BLUETOOTH**

Users could use the Bluetooth to send or receive files to cellphone, or use Bluetooth speaker and etc.

#### TURNING BLUETOOTH ON OR OFF

There are two ways to enable Bluetooth:

- On the LCD display device, go to Settings->Network->Bluetooth.
- Click
  - Click to enable the Bluetooth in the drop-down status bar.

#### PAIRING GAC2500 WITH A BLUETOOTH DEVICE

Before connecting GAC2500 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->Bluetooth. Switch the "Bluetooth" option.



- 2. Select "Bluetooth settings", drag up from LCD bottom and press button on the remote control and select "Search for devices".
- 3. The GAC2500 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 other procedures to obtain the passcode.

#### CONNECTING TO A BLUETOOTH DEVICE

After successfully paired, the device will be connected to the GAC2500 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 22 GAC2500 Bluetooth - Paired Device

If the connection is lost between the Bluetooth device and GAC2500, go to LCD menu->Settings->Bluetooth->Bluetooth setting and click on the device name under "Paired devices" again to reconnect. When enabled headset mode, the connected Bluetooth device could use GAC2500 as a headset audio device. You can see the Bluetooth device is displayed as an account on the left home screen. You can make dial-ups with this account directly, or as a party to join conference.

Firmware Version 1.0.1.26 GVC2500 User Guide Page 34 of 101





Figure 23 GAC2500 Bluetooth - Headset Mode



- 1. When enabled Bluetooth headset mode, a pop-up dialog will prompt to remind users whether import contact or call history from Bluetooth device(your phone), if agree, when you input digits in input box, the device will automatically start contact/call history matching.
- 2. When enabled Bluetooth headset mode, when your Bluetooth device has an incoming call, GAC2500 also rings and displays call screen at the same time. You can either answer the call with your Bluetooth device or GAC2500.
- 3. When enabled Bluetooth headset mode, you can switch audio channels freely on your Bluetooth device.
- 4. please note when enabled Bluetooth headset mode, making calls with Bluetooth account is actually with your device and it may generate flow/communication fees, GAC2500 only serves as a Bluetooth headset to transmit and control audio.

#### SENDING FILES VIA BLUETOOTH

Users could transfer files, share contacts information from other Bluetooth portable devices to GAC2500 after pairing and connection. A prompt for file transferring will be displayed on GAC2500 LCD display device when the GAC2500 receives the file transferring request. Accept the request to receive file and the file will be stored under SD Card/bluetooth directory.

### **VPN SETTINGS**

Users can add VPN using different protocols. Follow the steps below to set up VPN.

- On the LCD display device, go to Settings ->Advanced settings->Wireless & network->VPN;
- 2. Tap on "Add VPN file" to access configuration page as shown below;





Figure 24 GAC2500 Add VPN Files Screen

- 3. Fill in parameters and save, 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, fill in correct username and password to connect to VPN.

If the GAC2500 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 connect again. If icon displays in the top status bar, please check whether your VPN configuration is correct.

Table 6 GAC2500 VPN File Parameters

Parameters	Descriptions
Name	Fill in your company address or the server you are connecting to.
Туре	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)	Define whether to use PPP encryption.
Show Advanced Options	Check to display more options below.
DNS Search Domains	Define search domain.
DNS Server	Input DNS server address.
Forwarding Routes	Input Forwarding Routes. For example, 10.0.0.0/8.





Please ask network administrator for configuration.

**VLAN SETTINGS** 

# Access GAC2500 home screen, go to Settings->Advanced settings->Wireless & network->Additional network settings to configure VLAN settings on the GAC2500.

**Table 7 GAC2500 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 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 GAC2500 home screen, go to Settings->Advanced settings->Wireless & network->Additional network settings to configure LLDP settings on the GAC2500.

**Table 8 GAC2500 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 GAC2500 home screen, go to Settings->Advanced settings->Wireless & network->Additional

Firmware Version 1.0.1.26 GVC2500 User Guide Page 37 of 101



network settings->802.1X Mode. By default 802.1X is disabled. Select 802.1X mode to "EAP-MD5", "EAP-TLS5" or "EAP-PEAP" to turn on 802.1X. Once 802.1X mode is enabled, the user will be required to enter the identity and Password to be authenticated in the network.

#### Table 9 GAC2500 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 the 802.1X mode.
MD5 Password	Enter the MD5 Password for the 802.1X mode.
CA Certificate	Upload the CA certificate for the 802.1X mode.
Client Certificate	Upload the CA certificate for the 802.1X mode.
Private Key	Upload the private key for the 802.1X mode.



# MAKING PHONE CALLS

# **ACCOUNT**

GAC2500 supports up to 6 independent SIP account and 1 BlueJeans™ account. Users need to register their own accounts to the SIP server to make calls via the accounts.

The following figure shows the account is successfully registered (account icon is highlighted in green).



Figure 25 GAC2500 Registered Account Status

#### MAKING A CALL

# **DIRECT DIALING**

GAC2500 home screen is the dial screen or you can tap on on desktop to access dial screen.

- 1. Enter the dial screen, select account and call mode;
- 2. Enter the necessary digits on the keypad;
- 3. Tap on to dial out.



- 1. GAC2500 allows users to configure the "#" key as the "Send" key. If users need to cancel this setting, please log in the built-in Web page to set the parameter "use # as the dial key" to "No".
- 2. Enter digits in the dial-up box. If the digits or the letters for the digit matches contacts and call history, 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. Users can then select it to dial out.



#### **REDIAL**

Redial is to dial the last dialed-out number. It is only available when the call log exists.

- 1. Enter the dial screen;
- 2. Press the button or tap on "#" to dial the last dialed-out number automatically.



You can redial the last dialed-out number, but unable to dial the conference.

#### **DIALING A NUMBER VIA CONTACT**

Follow the steps below to dial a number via Contacts.



- 2. Navigate and select in the Contacts entries using the remote control navigation keys.
- 3. Tap on the dial key to dial out.

#### **DIALING A NUMBER VIA CALL HISTORY**

- 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 to dial out.

#### **DIRECT IP CALL**

Direct IP Call allows GAC2500 and another VoIP device to talk to each other in an ad-hoc fashion without a SIP proxy. VoIP calls can be made between these two if:

- Both GAC2500 and VoIP phone have public IP addresses
   Or
- Both GAC2500 and VoIP phone are on the same LAN / VPN using private or public IP addresses
   Or
- NAT is disabled in network or GAC2500 NAT is disabled for the account.

Firmware Version 1.0.1.26 GVC2500 User Guide Page 40 of 101



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 GAC2500;
- 2. 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 to dial out.

#### **PAGING/INTERCOM**

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

- 1. Access the dial screen on GAC2500;
- 2. Set the mode to "Paging";
- 3. Enter the number to dial;
- 4. Press to dial out.

#### **ANSWERING A CALL**

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

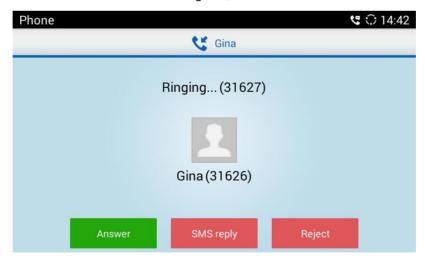


Figure 26 GAC2500 Single Incoming Call Screen

Select "Answer" to answer the call, or reject the call by pressing the "Reject" softkey.

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.



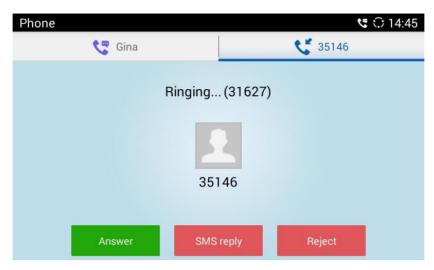


Figure 27 GAC2500 New Incoming Call Screen

Users could select "Answer" to answer with audio only, or eject the call by pressing the "Reject" softkey.

# **REJECT CALL VIA SMS**

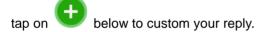
Users could reject incoming calls via messages. Please access Notices application



and tap on Settings



on the upper right corner, and enable "Enable Quick Reply". You can also



Once enabled "Enable quick reply", when there is an incoming call, you can tap on "SMS reply" to access quick reply list, select the reply to send the reject call.



Notices reject function works when the callee sends the SIP message to the caller to reject call, please confirm your service provider supports this service.

# **CALL MANAGEMENT**

During an active call, you can make other operations like hold/hold, mute/unmute, call recording, add a new call, start conference, or end the call.



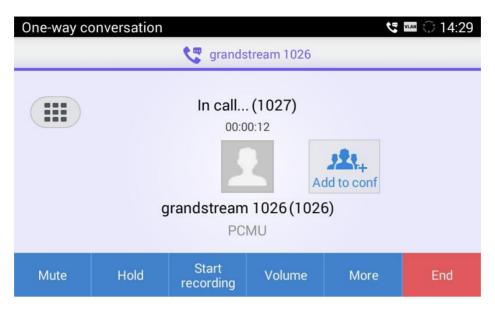


Figure 28 GAC2500 Single Calling Screen

- Call Lines. Display the current line status: active, hold, incoming, outgoing.
- Add to Conf. Tap to add all active lines to conference members.
- Mute/Unmute. Tap to mute/unmute the call.
- Hold/Unhold. Tap to hold/hold the call.
- Start/Stop recording. Tap to start/stop recording.
- Volume. Tap to bring up the volume bar to adjust the volume.
- More. Bring up more options including like MPK, Transfer, etc.
- DTMP Keypad. Tap to bring up the DTMF keypad.
- End. End the current line.

## **CALL HOLD AND CALL RESUME**

# **CALL HOLD**

During the active call, press HOLD button to put the current call on hold. Users could then make or answer a new call. It shows as follows:



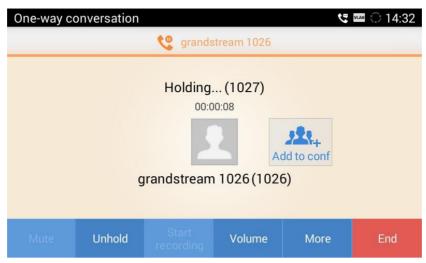


Figure 29 GAC2500 Call On Hold Screen

#### **RESUME TO CALL**

If the active call is on hold, users could press the "Unhold" button to resume call or tap on the "End" button to hang up the call.

#### **CALL RECORD**

Users could save the call conversations to the GAC2500 by recording during an active call. You can listen to the recordings from Recorder, please refer to the chapter Recorder for details.

1. During an active call, tap on the "Start Recording" softkey in the bottom to start recording as shown in the figure below:

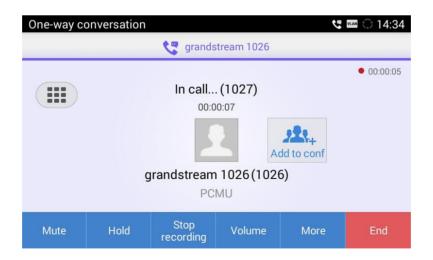


Figure 30 GAC2500 Mew - Start Recording

2. Tap on the Stop Recoding softkey to stop recording.



#### **MUTE**

During the active call, you can tap on the "Mute" button to mute the call, you will not be heard by others. The screen is as shown below.

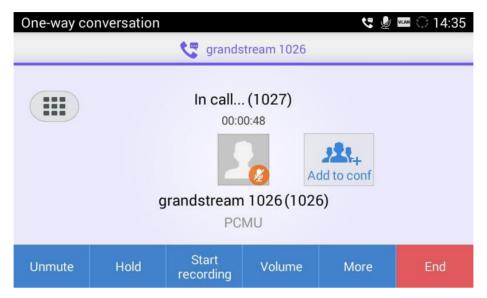


Figure 31 GAC2500 Mute Call Screen

#### **CALL TRANSFER**

Call transfer is to transfer one call to another call. Call transfer including blind transfer and attended transfer according to different situations. For example, if user A wants to transfer the call with user B to user C, blind transfer or attended transfer is optional.



The result of step 4 and 5 may differ because of SIP servers. The result described below is based on Grandstream SIP server.

#### **BLIND TRANSFER**

- 1. User A and user B are in an active call.
- 2. User A tap on Transfer button to bring up the transfer screen;
- 3. Set the transfer mode to Blind .The default mode is Blind;
- 4. Enter the digits and press the SEND to transfer the call with user B to User C. When user C's phone rings, the phone interface of user A is shown in figure 32. If user C answers the call, user A will automatically go back to the idle screen, which indicates the successful transfer;



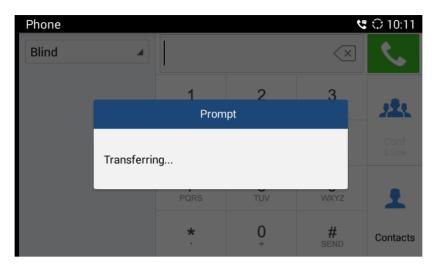


Figure 32 GAC2500 Transfer - Blind Transfer

5. User C's phone will ring, the phone with CID function will display user B's number on screen as the caller.



- 1. If inputted the wrong digits, press the button to delete the digit one by one, or long press the button to empty all digits.
- Users could drag up the bottom of LCD and tap on Back icon to go back to the active call interface if wants to cancel transfer.

#### ATTENDED TRANSFER

There are two ways of attended transfer: Call Forward and Call Transfer.

#### **CALL TRANSFER**

- User A and user B are in an active call;
- 2. User A presses the button to add a new line with user C. The call with user B will be automatically put on hold;
- 3. User C answers the phone to set up the line with user A; User A taps on More button in the menu then choose Transfer to bring up the transfer screen. The line with user B will be displayed on screen;
- 4. User A sets the transfer mode to Attended then choose to display user B's number, the call will be transferred to user C. User B and user C could talk directly via the phone.



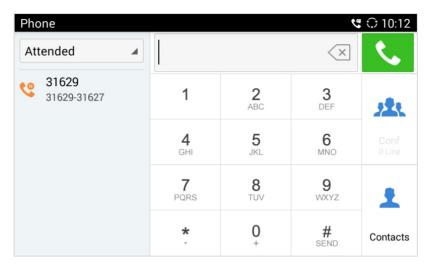


Figure 33 GAC2500 Transfer - Attended Transfer

#### **CALL FORWARD**

- 1. User A and user B are in an active call. User A tap on More button in the menu to choose Transfer to bring up the transfer screen;
- 2. Select the Transfer mode. As shown in figure 35;

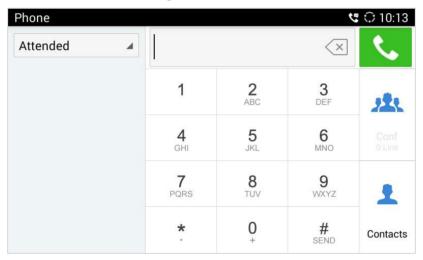


Figure 34 GAC2500 Call Forward - Select Forward Mode

- 3. Input digits and then press the Send soft key;
- 4. Users will hear the ringback tone and see the prompt as shown below. Hang up the phone to transfer the call to the third party C automatically; press the "Cancel" button will cancel the transfer;



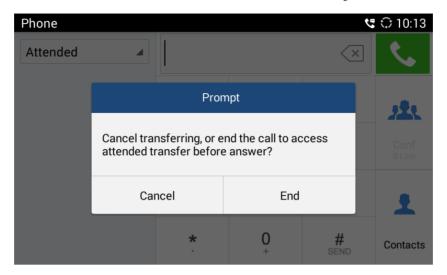


Figure 35 GAC2500 Call Forward - Transferring

5. User A could press the "Transfer" button to forward the call to user C. Click on "Split" button to establish line with the third patty, while user B will be put on hold.

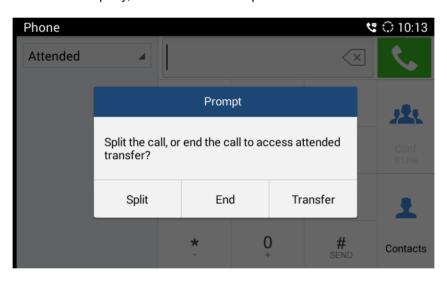


Figure 36 GAC2500 Call Forward - Split

# **DND (DO NOT DISTURB)**

When DND is on, the incoming calls to the GAC2500 will be blocked without ringing. Users could see the blocked calls in call history. Once enabled, the DND icon will be displayed in the status bar on the top of the screen.

1. Hold the screen at the top of the status bar, drag and drop down to open the status bar.



2. Touch the DND icon to turn it on/of



- When DND is on, the active call will not be affected, all the calls after to the registered accounts will be blocked.
- 2. When DND is on, the incoming calls to the GAC2500 will be saved in the call history.

## MISSED CALL

When there is a missed call, the LCD will show missed call screen instead of regular idle screen.

Users can tap on the one of missed call entry to access the missed call log. To close the missed call screen and return to the idle screen, tap on on the upper right.

# **CALL FORWARD**

Call forward (Unconditional/No-answer/Busy/Time-based) can be set up on device or from web GUI. Log in GAC2500 web GUI and go to Settings page->Account->Call Settings. For details, please refer to "GAC2500 Administration Guide".

#### **SET ON LCD**

Go to Settings->Personalized account to select the account and access configuration page;

1. Tap on Call forwarding Type to access and specify the forward type:

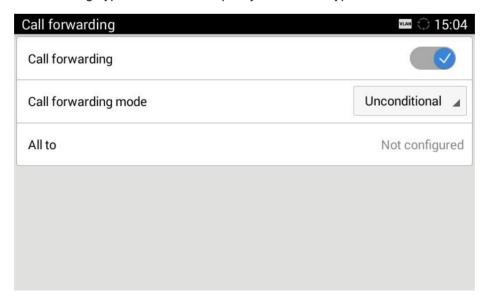


Figure 37 GAC2500 Call Forward Type Setting Screen



- Unconditional: Forward all calls to particular number
- **Time based**: Forward calls based on the time range.
- Busy: Forward calls when an active call exists.
- No-answer: Forward calls when phone is not answered.

### **SET FROM WEB GUI**

Log in the Web GUI and go to Account->Call Settings to find Call Forward option as shown below and specifies the call forward mode in the drop-down list.



Figure 38 GAC2500 Call Forward Mode On Web GUI

#### 7-WAY CONFERENCE

The GAC2500 supports up to 7-way conference. The GAC2500 can be the host to initiate a conference or join other conferences as a party.

#### **INITIATING CONFERENCE**

The conference can be initiated from dial screen, or start conference from schedule.

The following steps introduces the 2 ways to start conference from dial screen, please refer to chapter Schedule for more details about initiating conference from schedule.

- Enter multiple numbers in the text box or select parties from the list below.
- 1. Access dial screen when the phone is on idle;
- 2. Set call mode and select account;
- 3. Enter digits in the textbox;
- 4. Tap on the matching phone number on the left to add it to the textbox, you can add multiple numbers.
- 5. Repeat the steps 3-4 to add more numbers;
- 6. Tap on to dial out.
- Press to access conference page, then tap on to add parties.
- 1. Access dial screen when the phone is on idle;
- 2. Tap on Conf button or the icon on desktop to access conference page as shown below;



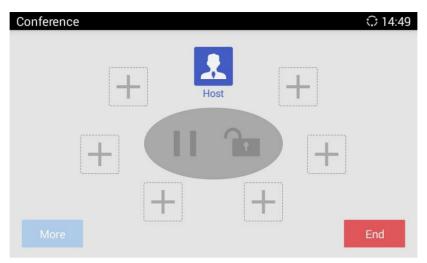


Figure 39 GAC2500 Conference Screen

3. Tap on to start adding parties to conference;

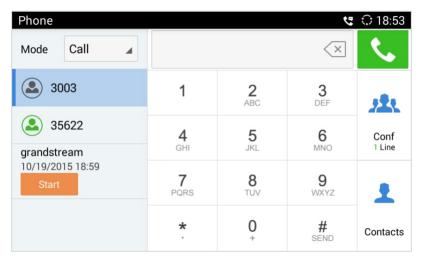


Figure 40 GAC2500 Add Party To Conference

- 4. Enter digits and then tap on to dial out;
- 5. Repeat the steps 3-4 to add more parties.



- 1. You can add multiple members to conference at one time.
- 2. You cannot stay in one single active line once joined conference.

Firmware Version 1.0.1.26 GVC2500 User Guide Page 51 of 101



#### ANSWERING AN INCOMING CALL IN CONFERENCE

You can specify how your GAC2500 handles incoming calls. Depending on your configuration, your GAC2500 automatically answers a call or prompts you to answer a call manually:

Log in GAC2500 web GUI and go to Account->Call Settings and set "Auto-answer" option to "Yes", or go to Settings->Personalized Account->Account and set "Auto-answer" option to "Yes" on GAC2500. Once

enabled, All incoming calls will be automatically answered, you can see the icon displayed on the status bar.

#### **CONFERENCE MANAGEMENT**

The following figure shows a 3-way conference established.

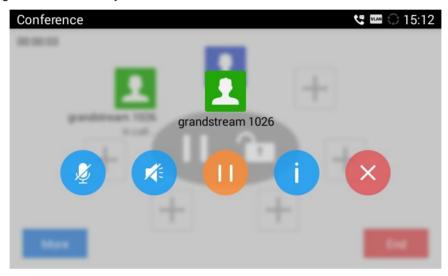
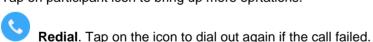


Figure 41 GAC2500 3-Way Conference

Tap on participant icon to bring up more oprtations.



Mute. Once enabled, the icon next to the conference member will turn to , and the Mute icon

becomes 2. The selected member will not be heard by other parties. You can tap on to unmute the member.

Block. Once enabled, the icon next to the conference member will turn to , and the Block icon

becomes . The selected member will not hear other members. You can tap on to unblock the member.



- Hold. Tap to put participant on hold.
- **Details**. Tap to view conference details, including whether to use SRTP or codec.
- **Delete**. Tap to delete conference members.

More. Bring up more options including Open DTMF, Mute All, Block All.etc.

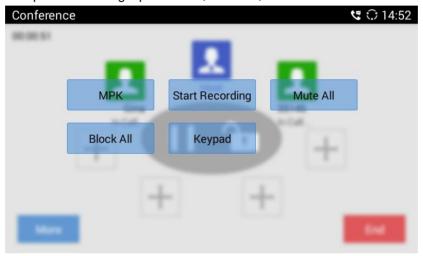


Figure 42 GAC2500 Conference-More

- MPK. Tap to access MPK interface.
- Mute All. Tap to mute/unmute all parties except the host.
- Block All. Tap to block/unblock all parties except the host.
- Start Recording. Tap to start/stop recording. The recording file will be saved automatically.
- Keypad. Tap to pen DTMF keyboard.
- Hold. Hold/Unhold conference.
- **Lock**. Lock/Unlock conference.

End. End conference and go back to home screen.

#### **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.



- to access the dial 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 join conference automatically.

#### REMOVING MEMBER FROM CONFERENCE

To remove a member from the conference, tap on the member icon and click



#### THIRD PARTY APPLICATIONS

The GAC2500 runs the Android Operating System and therefore offers full access to the hundreds of thousands of Android apps in the Google Play Store, including Skype for Business™, Google Hangouts™ etc.

For example, to use third party app Skype for Business™ during the conference:

- Establish a conference call on the GAC2500:
- On conference screen, click on 2.
- Input numbers or contacts of Skype for Business<sup>™</sup> and dial out;
- The new call will be added to conference.

- 1. You should install the third party app and sign in first.
- You should go to Web GUI->Advanced -> Call Features and set Display Soft Keyboard as Yes.
- Some third party apps may not support the GAC2500's dial pad, you have to go to the application's GUI to dial out.
- If you dial SIP numbers and third party apps' numbers at the same time, the SIP numbers will be dialed out first and go to the conference room, you need return to the dial pad, and then the third party apps' numbers will be dialed out automatically.
- In order to fully use of Skype for Business™ (Lync), you should download it from the GS Market. Other versions may not compatible.

#### **END CONFERENCE**

To end the conference, tap on END button to disconnect. If the GAC2500 is the conference host, ending the conference will disconnect all the members from the conference. If the conference member hangs up the call, it will be disconnected from the conference but other parties in the conference will stay in the conference.



# **SCHEDULE CONFERENCE**

SCHEDULE feature allows the user to set a specific time to hold a conference in advance, with conference reminder and members.

Tap on desktop to access Schedule screen, the schedule page is shown below, including upcoming conferences and conferences that has been held:

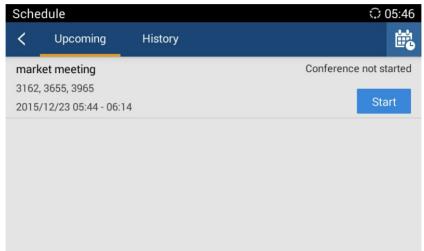


Figure 43 GAC2500 Schedule Screen

#### **VIEW CONFERENCE DETAILS**

Users could view scheduled conference details after the current time. Select one conference and tap to

view conference details. Press on the upper left corner or to exit.

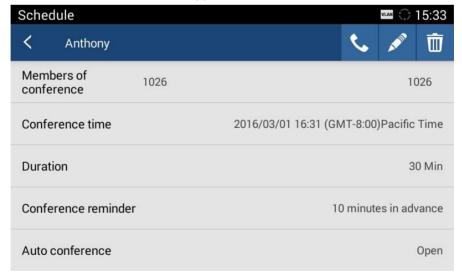


Figure 44 GAC2500 Conference Details Screen



# **ADD SCHEDULED CONFERENCE**

Follow the steps below to add a scheduled conference:

Tap on on desktop to access Schedule screen.

2. Tap on on the upper right corner to access "Add Conference" screen as below.

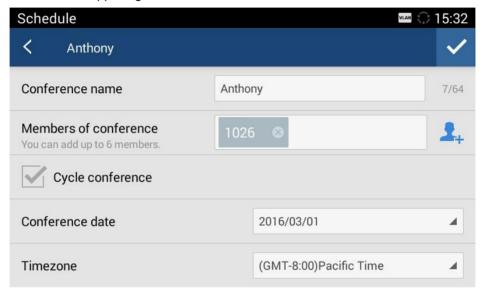


Figure 45 GAC2500 Add Conference Screen

- 3. Fill in conference name, members, start time, conference duration, etc.;
- 4. Tap on to save the scheduled conference and go back to schedule screen.

Table 10 GAC2500 Add Conference Parameters

Parameters	Descriptions
Conference name	Set the conference name to identify this conference.
Members of conference	Click on button to access the Add Member screen. You can add one member or a group of members. Tap on on the upper right corner to save and go back to Add Conference screen. Up to 6 members can be added.  Note: You can only add up to 6 members.
Cycle conference	Set conference cycle.
Conference date	Configure the date when the conference starts. It should not be earlier than the current date.
Timezone	Configure conference time zone.
Start Ttme	Configure the time when the conference starts. It should not be earlier than the current time.
Duration (Min)	Configure conference duration.

Firmware Version 1.0.1.26 GVC2500 User Guide Page 56 of 101



Reminder time	Configure whether to remind users in advance. A prompt dialog box will pop up on the GAC2500 screen before the conference starts.
Auto conference	Configure whether to initiate conference when the conference time comes. If disabled, a prompt dialog box will pop up on the GAC2500 screen 10 minutes before the conference starts to reminder users whether to start conference.
Auto answer for conference mem ber	Configure whether to answer the call from the conference member automatically. If the call is not from the conference member, it will not be answered automatically.
Lock	Users could lock/unlock the scheduled conference. Once locked, the other incoming calls will not be able to join conference. The conference screen will display the lock icon when the scheduled conference started, you can also disable this function, please refer to chapter <i>Conference Management</i> for more details.
Auto record	Configure whether to record automatically once the conference started. If enabled, it will record when the conference starts (with active line).
Block when enter	Configure whether to block conference members when they enter conference. If enabled, conference members who auto answered will not hear others unless unblocked by the host.

#### **EDIT SCHEDULED CONFERENCE**

Follow the steps below to edit scheduled conference:

- 1. Access conference schedule screen and select the conference entry you would like to edit.
- 2. Tap on on the upper right corner to access edit screen.
- 3. Tap on on the upper right corner to save changes and go back to schedule screen.

#### RESCHEDULE CONFERENCE

If you want to reschedule the conference that has been held, please refer to steps in chapter *Edit Scheduled Conference* to edit conference again and save.

#### **DELETE SCHEDULED CONFERENCE**

Follow the steps below to delete the existing scheduled conference:

- 1. Access Schedule screen;
- 2. Long press the conferences entry to access the edit screen as shown below:



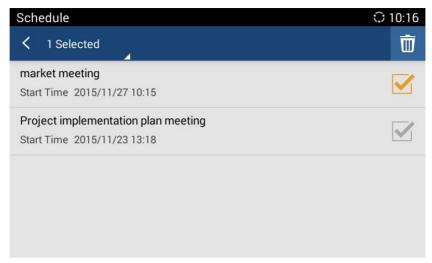


Figure 46 GAC2500 Delete Scheduled Conference Screen

3. Check the conference (s) you want to delete and tap on on the upper right corner to delete.

#### **DELETE HISTORY CONFERENCE**

You can see all scheduled conferences which has passed the scheduled time in "History" option, you can edit/delete/reschedule the conference here.

There are 2 ways to delete history conference.

- Delete single conference entry.
- 1. Access schedule screen and select the conference entry you would like to delete;
- 2. Slide left on screen as shown below and tap on to delete conference.

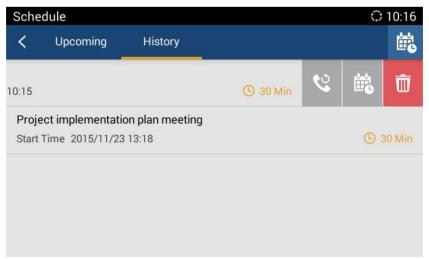


Figure 47 GAC2500 Delete History Conference Screen

- Batch delete conference entries.
- Access Schedule screen;



2. Long press the conferences entry to access the edit screen as shown below:

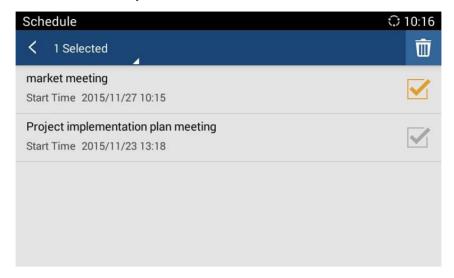


Figure 48 GAC2500 Batch Delete History Conference Screen

3. Check the conferences you want to delete and tap on on the upper right corner to batch delete conferences.



If you edit a history conference, it will become a new scheduled conference after save.

# **VOICEMAIL**

When there is a new voicemail, voice mail icon will show up as a notification in the status bar. Users could go to LCD Settings->Advanced settings->Account, or login the web UI->Settings->Account->General Settings ->Voice Mail UserID to configure the access number for the voicemail.

- 1. Access the dial screen and input voicemail access number;
- 2. Tap on on the dial screen to dial into the voicemail box;
- 3. Follow the Interactive Voice Response (IVR) for the message retrieval process.



Users could also tap on to access the voicemail box. The number of new voicemail messages will be shown on the voice mail app icon as well. See figure below.

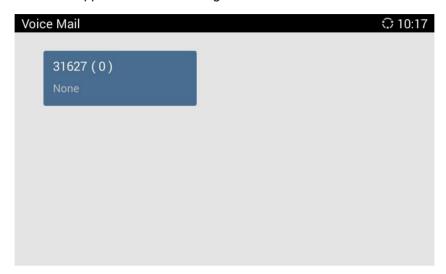


Figure 49 GAC2500 Voice Mail Application

Firmware Version 1.0.1.26 GVC2500 User Guide Page 60 of 101



# **APPLICATIONS**

GAC2500 provides built-in applications such as like Contacts, Call History, File Manager, Browser and etc. Users could also download the apps from GS market to install on the GAC2500.

# **CONTACTS**

GAC2500 Contacts app helps users to easily store and manage phone number and contact information. Users can add contacts on the GAC2500 or import contacts from external devices as well as download from a server.

On the GAC2500 home screen, you can see local Contacts and LDAP Contacts.

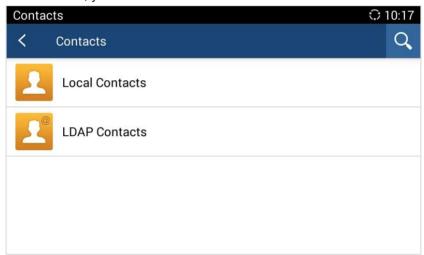


Figure 50 GAC2500 Contacts Screen

#### LOCAL CONTACTS

The Local Contacts screen shows as follows:





Figure 51 GAC2500 Local Contacts Screen

- Back. Back to the previous page.
- Contacts. Display all contacts.
- Groups. View groups. Select one group to view group details.
- Blacklist. Display blacklist.
- Call. Tap on the contact you would like to call.
- Add Contact. Tap to access New Contact screen. Fill in contact information and save.
- Search Contact. Tap to access Search Contact screen.
- More. Tap on to export/import/download Contacts, view storage status or sort Contacts.
- Contact Details. Select one contact to view contact details.

#### **ADD CONTACT**

#### **ADD SINGLE CONTACT**

Follow the steps below to add one single contact.

1. On the Contacts screen, tap on the button to access New Contact screen;



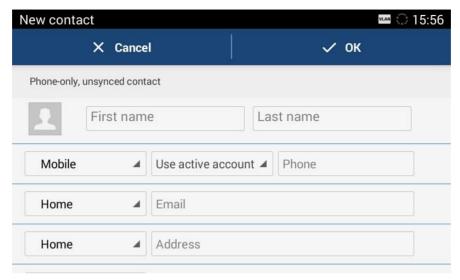


Figure 52 GAC2500 Add New Contact Screen

- 2. Enter contact information. Choose the account on the left of the "Phone" field to dial out this number;
- 3. Click "OK" to save the contact information.

#### **BATCH IMPORT CONTACTS**

Import function allows users to batch import contacts. The phonebook with compatible format needs to be saved to the storage devices like SD card/USB flash drive and plugged into the GAC2500.

- 1. On the Contacts screen, tap on the MENU key on Contacts screen and select "Import" to access Import Contacts screen;
- 2. Configure parameters and select the path to save the imported file;
- 3. Click "OK" to save the contact information.

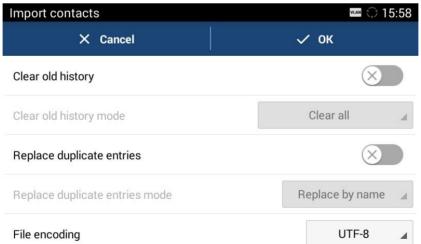


Figure 53 GAC2500 Import Contacts Parameters Screen



**Table 11 GAC2500 Import Contacts Parameters** 

Parameters	Descriptions
Clear old history	If enabled, the previous contact records will be deleted when a new phonebook file is loaded into the phone. If disabled, both the old contacts and new contacts will be kept in the GAC2500.
Clear old history Mode	Configures whether clear all contacts or reserve local contacts when clear old list. The default setting is "Clear All".
Replace duplicate Entries	If enabled, when the phonebook file is imported to the phone, the duplicated entries will be removed. If disabled, both the old contacts and new contacts will be kept in the GAC2500.
Replace duplicate Entries Mode	You can replace duplicate entries by name or number.
File encoding	Select the encoding format for XML contact file.
File type	Select the file format for phonebook file import. The device supports xml, csv and VCard format.
Select file	Select file from storage device plugged into the GAC2500.

#### **DOWNLOAD CONTACTS**

GAC2500 supports downloading phonebook from the file server to batch add contacts. The default file name the GAC2500 looks for is "phonebook.xml". The phonebook XML file should be placed under the file server directory for the GAC2500 to retrieve. The GAC2500 supports VCard/xml/csv file format.

1. On the Contacts screen, tap on the MENU key and select "Download" to bring up the Download Contacts screen;

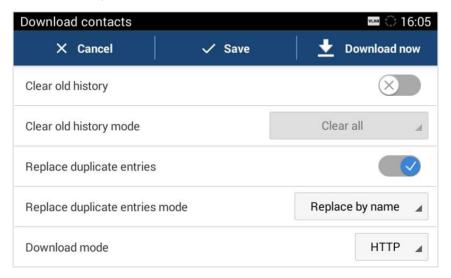


Figure 54 GAC2500 Download Contacts Screen

2. Configure parameters and select the path to save the file;



3. Tap on the "OK" key to save the contact information.

**Table 12 GAC2500 Download Contacts Parameters** 

Parameters	Descriptions
Clear old history	If enabled, the previous contact records will be deleted when a new phonebook file is loaded into the phone. If disabled, both the old contacts and new contacts will be kept in the GAC2500.
Clear old history mode	Configures whether clear all contacts or reserve local contacts when clear old list. The default setting is to "Clear All".
Replace duplicate entries	If enabled, when the phonebook file is downloaded to the GAC2500, the duplicated entries will be removed. If disabled, both the old contacts and new contacts will be kept in the GAC2500.
Replace duplicate entries mode	You can replace duplicate entries by name or number.
Download mode	Select the phonebook download mode from TFTP, HTTP or HTTPS.
File encoding	Select the encoding format for the XML contact file.
Time intervals	Configure the time interval to download XML contact file.
Download server	Fill in the server URL or IP address to download the XML contact file to the device.
Username	The username that may be used for download server login
Password	The password that may be used for download server login

#### **SEARCH CONTACTS**

GAC2500 supports Search function, users could tap on icon on the Contacts page and input the keyword to search in the pop-up dialog. GAC2500 will automatically display contacts items related to the search info. Fuzzy search and precise search are both supportive.

#### **MANAGE CONTACTS**

#### **DELETE CONTACT**

- 1. Long press the contact you would like to delete to access edit screen;
- 2. Check the contact, or click the button on the upper left corner of the toolbar for quick operation. "Select All" indicates check all select entries while "Cancel All" indicates uncheck all selected entries;
- The digit on the upper right corner indicates how many contacts you have selected, tap on delete contacts you selected.

#### **EXPORT CONTACTS**

The GAC2500 supports exporting phonebook as VCard/xml/csv files and save the files to other external



#### storage devices.

Press the MENU key on Contacts screen to bring up the Export contacts screen.

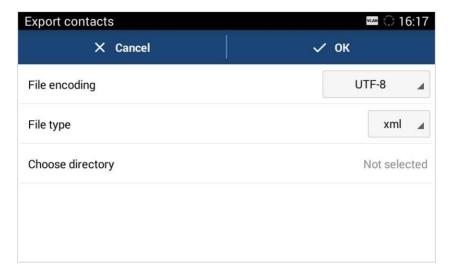


Figure 55 GAC2500 Export Contacts Screen

- 2. Configure parameters as shown in table below and select the directory to save the exported file.
- 3. Tap on the "OK" key to export the file.

**Table 13 GAC2500 Export Contacts Parameters** 

Parameters	Descriptions
File encoding	Select the encoding format for XML contact file.
File type	Select the file format for phonebook file export. The device supports xml, csv ,vcard.
Choose directory	Select directory to save file.

#### **SEND CONTACTS**

- 1. Long press the contact you would send to enable edit screen;
- 2. Check the contact you want to send;
- 3. Choose the way to send contact. If Bluetooth Device Chooser has been enabled, users could send the contact to the paired user via the Bluetooth.

# **CONTACTS STORAGE STATUS**

Tap on on the Contacts page to view the contacts storage. You can store up to 2000 entries.



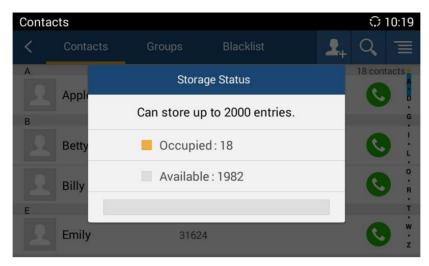


Figure 56 GAC2500 Contacts Storage Status Screen



The contacts synchronize with account do not occupy the storage space.

#### ADD GOOGLE ACCOUNT

Account allows users to add vast number of 3rd party Android applications (including Google, Lync, Skype, company, Email, and etc.). Users can also sync GAC2500 via Google Play account, corporate account or Email.

Tap "Add Account" button to add new account according to the installation wizard.

The following steps demonstrate how to add a Google account.

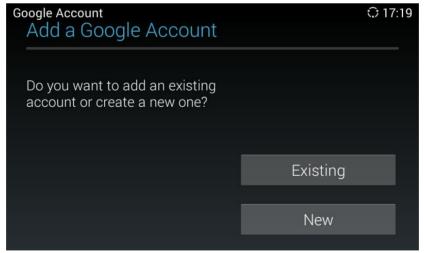


Figure 57 GAC2500 Add Google Account - Wizard 1



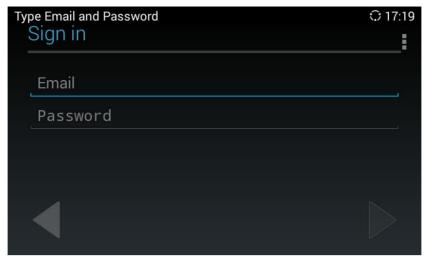


Figure 58 GAC2500 Add Google Account - Wizard 2

#### **GROUPS**

Users could divide contacts into different groups with specific names. Tap on one group entry to view group details.



Figure 59 GAC2500 Groups Screen

#### **ADD NEW GROUP**

There are 2 ways to add group members.

- Add the contact to the group when editing or adding a new contact.
- Select the contact you would to add to this group on Groups page when adding or editing a new group.

Follow the steps below to create a new group:

1. Tap on on the Groups page as shown below;



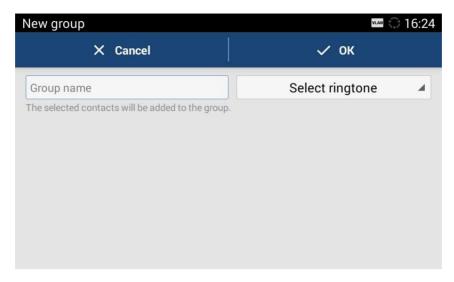


Figure 60 GAC2500 Add Group Screen

2. Input the group info and click "OK" to save group.



The priority of ringtones from high to low is "Custom", "Group", "Account" and "Default". If one group has set the custom ring for its contacts, the phone will ring the custom ringtone other than other group ringtones.

#### **CALL GROUPS**

1. Tap on on the upper right corner on Groups screen to access screen as shown below:

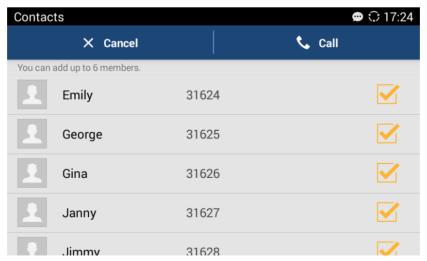


Figure 61 GAC2500 Dial Group Members Screen

2. Check group member (s) you want to call;



3. Tap on the CALL button to dial out.

#### **DELETE GROUP**

Follow the steps below to delete groups.

1. Long press the group entry you want to delete, the screen is shown below:

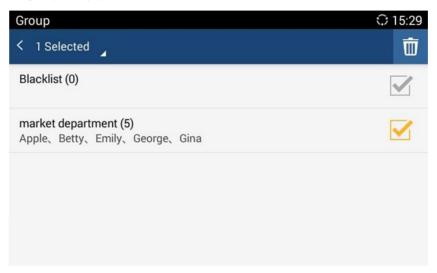


Figure 62 GAC2500 Edit Group Screen

- 2. Check to select the group (s) you would like to delete;
- 3. Tap on image on the upper right corner to delete.

#### **BLACKLIST**

Blacklist helps users to block calls from blacklist at the same time does not affect normally answering other incoming calls.

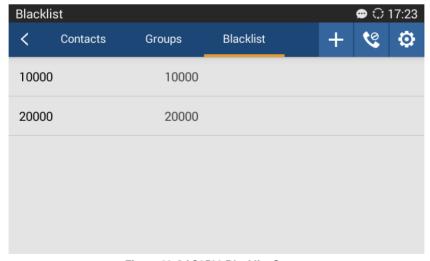


Figure 63 GAC2500 Blacklist Screen

: Display blocks history.



: Tap to add number to blacklist. There are 3 ways to add number: Manually add, Add from contacts, Add from call history. Select one way and tap on "OK" to add the corresponding number to blacklist. Long press one blacklist log to enter the editing mode to edit or delete the selected contact (s). Users could edit the blacklist entry when only one is selected.

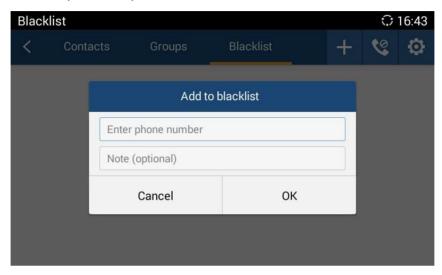


Figure 64 GAC2500 Manual Add Blacklist Screen



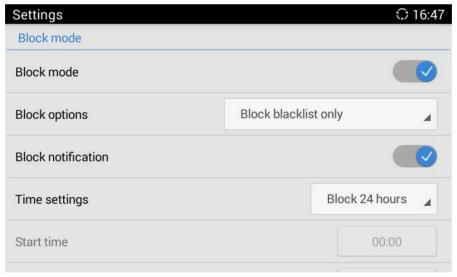


Figure 65 GAC2500 Blacklist Settings Screen

**Table 14 GAC2500 Blacklist Settings Parameters** 

Parameters	Specification
DND mode	Turn on/off DND mode. Once it's turned on, the phone would reject all incoming calls.

Firmware Version 1.0.1.26 GVC2500 User Guide Page 71 of 101



Block mode	Turn on/off Block Mode. Once it's turned on, the incoming calls from the numbers in the blacklist will be rejected.		
Block options	Set the types of incoming calls. This option is valid once the Block Mode is turned on.		
Block notification	Set up whether to notify user after blocked calls. Once it's turned on, the block icon will be displayed in the status bar after the device blocked calls. Users could go to the notification bar to view details.		
Time settings	Set up the block schedule.		

# **LDAP**

GAC2500 supports LDAP. Tap on LDAP Contacts to access the main interface as shown below:



Figure 66 GAC2500 LDAP Book Screen

Tap on on the upper right corner or login the Web page to configure it. (Maintenance ->LDAP Book).

Firmware Version 1.0.1.26 GVC2500 User Guide Page 72 of 101



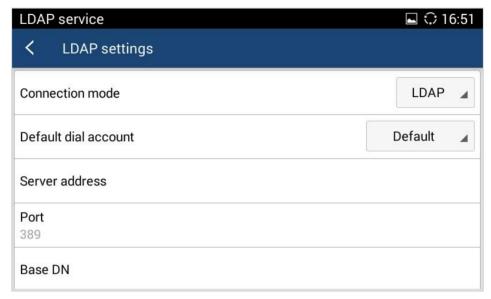


Figure 67 GAC2500 LDAP Settings

Table 14 GAC2500 LDAP Book Parameters

Parameters	Descriptions		
Connection mode			
Default dial account			
Server address	LDAP server address, users could input IP address or domain name.		
Port	Set up the port number of LDAP server.		
Base DN	Set up the base DN to inquire on the serve ,namely under which directory to inquire contacts. I.e.,		
	dc=grandstream, dc=com ou=Boston, dc=grandstream, dc=com		
User name (binding DN)	Set up the username to login LDAP server. Some LDAP servers support anonymous login without username.		
Password	Set up the password to login LDAP server. If the LDAP server support anonymous, users could login without password.		
LDAP name attributes	Set up the name attribute of each record returned from LDAP search. It allows users to configure multiple name attribute separated by spaces. i.e.,		
	gn cn sn description		
LDAP number	Set up the number attribute of each record returned from LDAP search. It allows users to configure multiple number attribute separated by spaces. i.e.,		
uttiibutes	telephoneNumber telephoneNumber Mobile		
LDAP mail attributes	Set up the mail attribute of each record returned from LDAP search. It allows users to configure multiple mail attribute separated by spaces. i.e.,		
	Mail mail mailbox		



LDAP name filter	Set up the filter when configure name inquiry.i.e.,  ( (telephoneNumber=%)(Mobile=%) return all "telephoneNumber" or contacts with specified filter value in "Mobile" field;  (&(telephoneNumber=%) (cn=*)) return all contacts with specified filter value with "cn" field in "telephoneNumber".		
LDAP number filter	Set up the filter when configure number inquiry.i.e.,  ( (telephoneNumber=%)(Mobile=%) return all "telephoneNumber" or contacts with specified filter value in "Mobile" field;  (&(telephoneNumber=%) (cn=*)) return all contacts with specified filter value and the set "cn" field in "telephoneNumber".		
LDAP mail filter	Set up the filter when configure mail inquiry.i.e.,  ( (mail=%)(mailBox=%)) return all contacts with specified filter value in "Mail" or "Mailbox";  (!(mail=%)) return all contacts without specified filter value in "Mail";  (&(mail=%)) (cn=*)) return all contacts with specified filter value and the set "cn" field in "mail".		
LDAP displaying name attributes	Display onscreen name attribute, up to three attributes.i.e., %cn %sn %telephoneNumber		
Max hits	Set up the max hit return to the LDAP server. If set to "0", the server will return all searched results. The default setting is "50".		
Search timeout (ms)	Set up the search timeout return after inputting search info. The default setting is "4000".		
LDAP lookup when dialing	Set up whether to appy LDAP lookup when dialing. The default setting is "No".		
Search LDAP for incoming call	Set up whether to apply LDAP lookup for incoming call. The default setting is "No".		

Once configured, you can tap on Search button to input digits or name to search LDAP contact as shown below.



Figure 68 GAC2500 Web GUI Maintenance - LDAP Book



Firmware Version 1.0.1.26 GVC2500 User Guide Page 74 of 101



Follow the steps below to batch add LDAP contacts:

- 1. Search LDAP contacts;
- 2. Tap on to access add contact screen as shown below:



Figure 69 GAC2500 Add LDAP Contact To Local

3. Check contacts entries to add contacts to local.

# **CALL HISTORY**

Call History provides users access to phone's recent call records. The user can view all records, or select different categories for incoming calls, outgoing calls, missed call and conference.

To access Call History, go to Home screen-> APPLICATIONS->

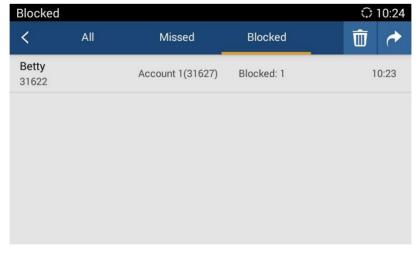


Figure 70 GAC2500 Call History Screnn



Click on a record in the call history and press to dial out this number directly. Tap one history entry to view call details for this number.

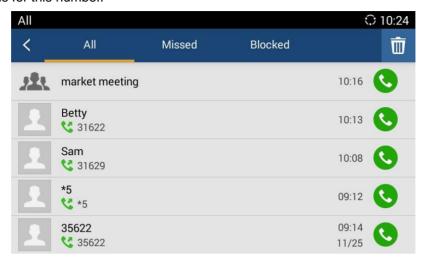


Figure 71 GAC2500 Call History Details



Call history displays all BlueJeans™ conference call history as well. Tap on to dial out directly and there is no need to input the password again. However, if the conference doesn't exist or the password has been changed, the re-dial will fail.

### ADD CONTACT FROM CALL HISTORY

- Access Call History screen;
- 2. Select one call history entry to access details screen;
- 3. Tap on the upper right corner and select "View contact" to access "Add a contact" screen;

Firmware Version 1.0.1.26 GVC2500 User Guide Page 76 of 101



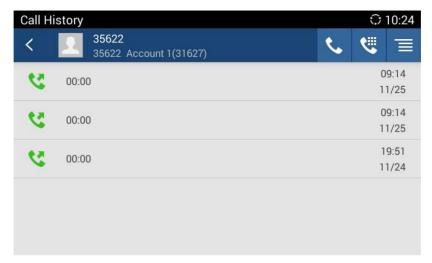


Figure 72 GAC2500 Add Contact Screen

- 4. Tap on "Create new contact" to add new contact information.
- Confirm to add contacts.

# **DELETE CALL HISTORY**

- 1. Long press the call history entry you want to delete to access editing mode;
- 2. Check the entry and tap on \_\_\_\_\_, click "OK" to delete.

### SCHEDULE CONFERENCE VIA CALL HISTORY

Select one call history entry you would like to add to scheduled conference;

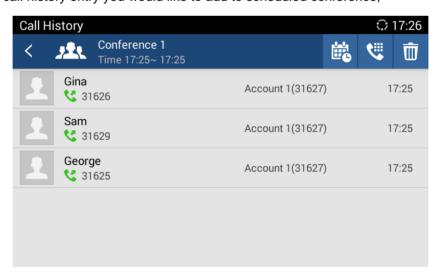


Figure 73 GAC2500 Conference Call History Screen

- 2. Tap on the upper right corner to access schedule screen;
- 3. Fill in information and tap on to save.

Firmware Version 1.0.1.26 GVC2500 User Guide Page 77 of 101





If the conference members are more than 6 people, you will enter the members select screen to check members first.

# **INTERCEPTED HISTORY**

When the incoming call is from contact in blacklist, the GAC2500 will reject it automatically. The screen is as shown below.

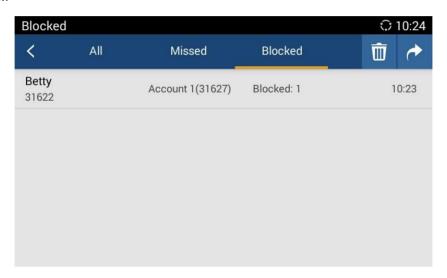
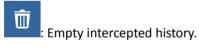
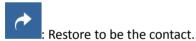


Figure 74 GAC2500 Intercepted History Screen





# **MPK**

User could login the Web page and go to Advanced->MPK LCD Settings or go to LCD menu->MPK to configure it.

1. Open MPK app from LCD menu, tap on on the upper right corner to access Number List page. Tap on to add number. As shown in figure 76.

Firmware Version 1.0.1.26 GVC2500 User Guide Page 78 of 101



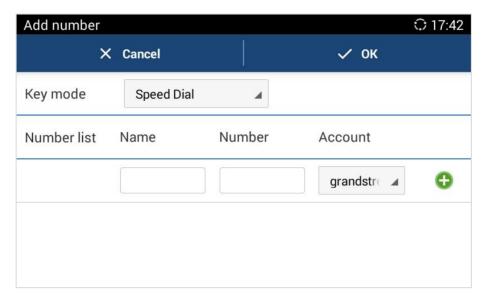


Figure 75 GAC2500 Add MPK Number



Figure 76 GAC2500 MPK Number List

2. Users could also tap on to add number directly from Contacts. See figure below.



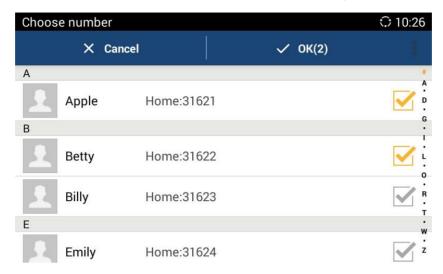


Figure 77 GAC2500 Add Number from Contacts

3. The MPK screen is shown in figure 79 after added numbers.

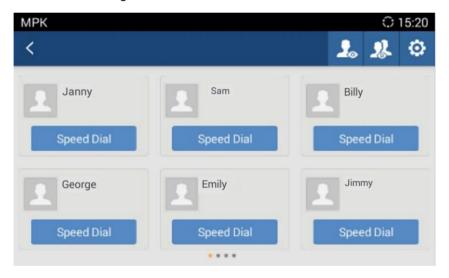


Figure 78 GAC2500 MPK Number Screen

# **EVENR LIST URL**

The Event List URI in MPK list, it requires server support. Users should firstly configure a Event List URI including expanded list on the server (e.g.: <u>BLF1006@myserver.com</u>) and fill in URI without a domain name (e.g.: <u>BLF1006</u>).

1. Open MPK, tap on on the upper right corner to access URL Settings page. Tap on screen as shown in figure 80.



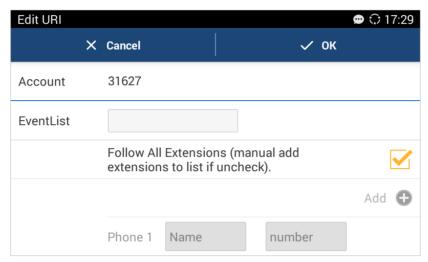


Figure 79 GAC2500 MPK URI Screen

2. Fill in information and save.

# **MPK SETTINGS**

Tap on on the upper right corner on MPK screen to access Settings screen as shown below:

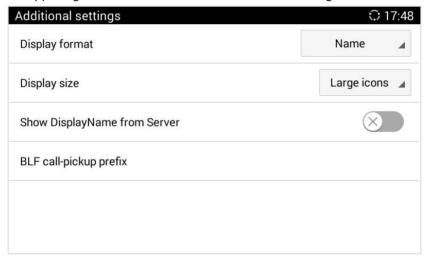


Figure 80 GAC2500 MPK Settings Screen

**Table 15 GAC2500 MOK Settings Parameters** 

Parameters	Descriptions
Display format	Configures the display format for the MPK. The default setting is "Name".
Display size	Configures the display size for the MPK. The default setting is "large icons".
<b>Show Display</b> If selected, the display name on the server will replace the name users configuration. The default is "No".	
BLF call-pickup prefix	If configured, the phone will add the prefix each time using MPK button to answer the call. The default setting of each account is "**".

Firmware Version 1.0.1.26 GVC2500 User Guide Page 81 of 101



# **NOTICES**

Users could receive SIP messages and set up reject calls in Notices function. The Notices page is as shown below:

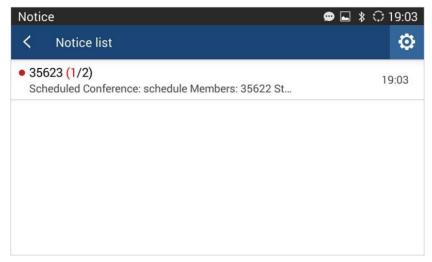


Figure 81 GAC2500 Notices Screen

# **VIEW NOTICES**

The Notices page displays notices list, the notices are classified by contacts name or phone number and sorted by the time when you received notices. Tap on one notice entry to view details.

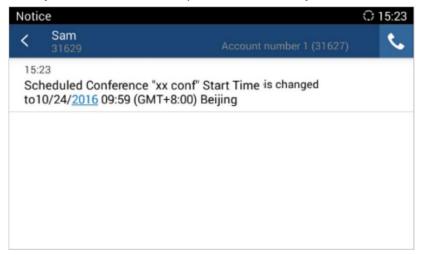


Figure 82 GAC2500 View Notices

# **DELETE NOTICES**

- 1. Long press one notice entry to access edit screen;
- 2. Check the notice (s) you want to delete and tap on to delete



### **NOTICES SETTINGS**

If enable "Allow Reminder", a warning will be sounded and you'll see notification on the status bar when receiving a notice; If enable "Quick Reply", a quick reply will be sent when the incoming call is rejected.

1. Tap on on the upper right corner on Notices page to access Settings screen;

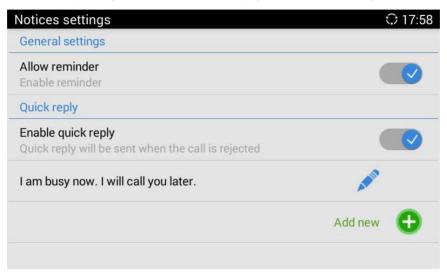


Figure 83 GAC2500 Notices Settings Screen

- 2. Enable quick reply and add reply content;
- 3. When there is an incoming call, the screen is as shown below:



Figure 84 GAC2500 Incoming Call Screen

- 4. Tap on "SMS Reply";
- 5. Select one reply to send, the call will be rejected and the caller will receive the message.

# **FILE MANAGER**

File Manager allows users to delete, move, copy, paste, send, rename files (including files on storage device such as USB flash drive), and query file properties on the GAC2500.

Firmware Version 1.0.1.26 GVC2500 User Guide Page 83 of 101



#### **COPY FILE**

To copy the file from the GAC2500 to USB storage device:

- Insert USB/SD storage device into USB port on the GAC2500. It will take a few seconds for the GAC2500 to prepare the connection;
- 2. The USB storage icon will show on the status bar;
- 3. Go to Home screen, find the application File Manager;
- 4. Open the target folder;
- 5. Long press the file to select;
- 6. Tap on on the upper right corner to copy file and press to go back to the upper level directory;
- 7. Select target storage device and go to the directory where the file will be pasted to paste the file.

### **SEND FILE**

The first 5 steps are the same as the ones in Copy File.

- 6. Tap on on the upper right corner select "Send" option;
- Select target location and confirm to send file.



If the user needs to send the file via Bluetooth, enable and connect Bluetooth device first. Otherwise, the interface will be redirected to the corresponding setting page to configure.

### **DELETE FILE**

The first 5 steps are the same as the ones in Copy File.

- 6. Tap on on the upper right corner, a dialog will pop up for users to confirm whether to delete the file or not.
- 7. Press the "OK" key to delete the file successfully.

#### **RENAME FILE**

- 1. Go to Home screen, find the application File Manager.
- 2. Open the target folder and long press the file.
- 3. Press MENU key on the upper right corner and select "Rename".
- 4. Input the new file name in the pop-up dialog and press the "OK" key to save, tap on "Cancel" or press to cancel.



# **RECORDER**

Users could record conference, institution and personal notes via GAC2500 Recorder conveniently. There is no time limit to recording time and the larger the available storage capacity is, the longer the recording time is. Users could also find the recording file from a call in the recorder and listen to it.

Long press the recording files to access editing interface, tap on the MENU key to make other operations to recording files like export, rename, and lock/unlock.

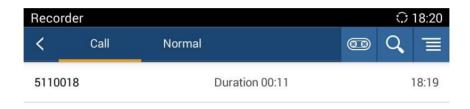


Figure 85 GAC2500 Recorder Main Screen



If the USB storage is where recordings are written, the recording capacity depends on the USB storage space.

### **NORMAL RECORDER**

- 1. Tap on on the upper right corner to access recording interface, Tap on to start recording;
- 2. Click "Save" to save the record file, click "Cancel" will bring out the dialog for users to confirm whether to save the file or not and to stop recording;

Firmware Version 1.0.1.26 GVC2500 User Guide Page 85 of 101



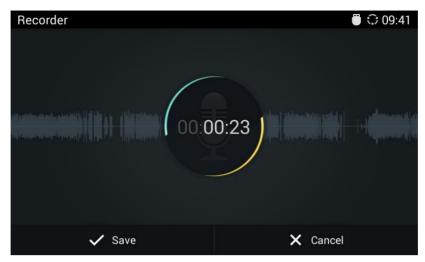


Figure 86 GAC2500 Normal Record - Recording

3. Go back to the Recorder page, select one recording file and click on the right of the progress bar to play the file.

# **CALL RECORDER**

In the process of an active call, the recording file will be saved on the phone. Users can only listen to it via Recorder. See figure 101 below.

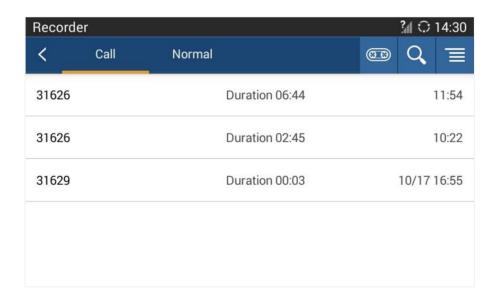


Figure 87 GAC2500 Call Recordings

# **RECORDER SETTINGS**

Tap on on the upper right corner on Recorder screen to sort the recording files, or access the recording setting screen as shown below:

Firmware Version 1.0.1.26 GVC2500 User Guide Page 86 of 101



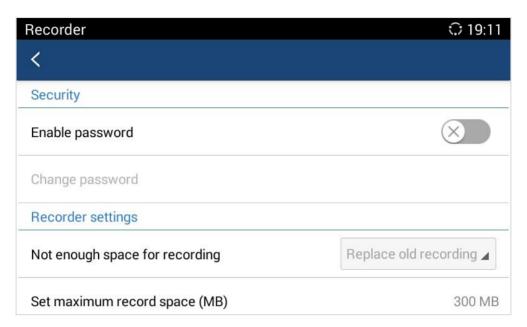


Figure 88 GAC2500 Recorder Settings Screen

**Enable password**. Enable and set password. Once set the password, input the password to access Recorder.

Change password. To change password, please enable "Enable Password" option first.

**Set store location.** When a USB disk is detected, you can set the recorder stored in the USB disk.

**Not enough space for recording**. Set "Replace Old Recording" or "Stop and Save" when there is no enough space for recording.

**Set maximum record space (MB)**. Set the maximum recording space on the device, you cannot view recording files via File Manager.

**Set export location**. It can be an SD card or external export device.

# **DIAGNOSIS**

Users could make operation like LCD Diagnosis, Keypad Diagnosis, and LED Diagnosis on GAC2500 via built-in Diagnosis app.

# **BROWSER**

Users could browse webpage, view news and watch video via the built-in GAC2500 Browser. Press on



in the main menu to open Browser.

- Slide up and down with slide gesture to scroll the screen.
- Zoom in/out the page via zoom gesture.



Press the menu button

on the upper right corner to open the menu bar for more operations.

# **GS MARKET**

GAC2500 provides direct access to apps via built-in GS market app. Users could download the apps from the market and install to the GAC2500.

# **SEARCH APPS**

In the GAC2500 Home screen, click on Applications->GS Market . The users could view the apps by category, or input key words and click on to search.

### **DOWNLOAD AND INSTALL APPS**

- Users could see if the app has been installed or downloaded by pressing the blue shortcut key.
- Press MENU key to view the downloaded apps and installed apps.
- Tap on to cancel download in process.
- Tap on to try again if the download failed.
- The installing process will be automatically started after downloading the app.
- Go to Installed screen to view the installed apps, or tap on to uninstall the downloaded apps.

# **UPDATE APPS**

The GAC2500 will automatically detect if there is new version available for the installed apps to upgrade when the network connection is normal. User can view the relevant information and update apps on the Installed screen.

# **FTP SERVER**

The GAC2500 supports file transferring via FTP Server app.



- · Go to LCD menu and tap on
- Tap on Start FTP server to start the server.



• Go to PC browser and type in the address on LCD to manage the files from PC.



Figure 89 GAC2500 FTP Server Connection

You can change the settings of FTP server before file transfer. Tap on the on up right to open FTP server settings. From here, user can set username and password to login, port number and directory

FTP Server

Settings

Enable username and password

Username and password

Port number

2121

Select directory

Internal storage 

Internal stor

Figure 90 GAC2500 FTP Server Settings

# **USER HELPER**

to access.

For the first time it powers up or after factory reset, GAC will open User helper and tips. Users can follow the guide to use GAC2500.

Firmware Version 1.0.1.26 GVC2500 User Guide Page 89 of 101



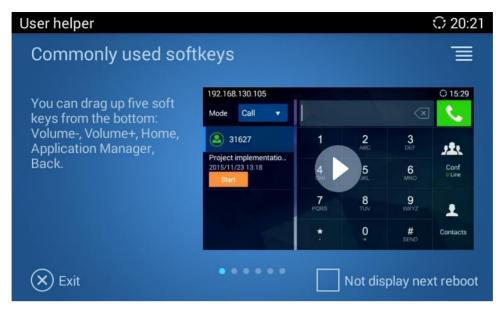


Figure 91 GAC2500 Quick User Guide

# **GAC2500 WEB UI FEATURES**

# **ACCESSING GAC2500 WEB GUI**

The IP address of the GAC2500 displays on LCD display screen.

To access the GAC2500 Web GUI:

- 1. Connect the computer to the same network as GAC2500.
- 2. Open a Web browser on your computer, enter the phone's IP address in the address bar of the browser; for example: http://192.168.124.111;
- Enter the administrator's login and password to access the Web Configuration Menu. The default username and password are: admin, admin; you can set language to English or Chinese in the dropdown menu of language;





Figure 92 GAC2500 Web GUI - Login

4. Click "Login" to access the configurations in web UI.

# **SAVING CHANGES**

When changing any settings on the web UI, always submit them by pressing the SAVE button on the bottom of the page, and then clicking the Apply button on the top of the page to apply the configuration changes. For those options with next to it in the Web page, users must reboot the GAC2500 for the changes to take effect.

# **DEFINITIONS**

This section describes the 6 options in the GAC2500 Web GUI. Please view Advanced, Maintenance and Status specifications in Administration Guide.

- Call
  - Users could start conference and control conference from Web GUI.
- Contacts
  - Contacts, Schedule, Call History.
- Account
  - Configure account info.
- Advanced
  - General Settings, Call Features, Tone Generator, MPK General Settings, MPK LCD Settings.
- Maintenance
  - Network Settings, Time & Language, Security Settings, Upgrade, Troubleshooting, Device Manager.
- Status



Account Status, Network Status, System Info.

You can log in as an administrator or a normal user. The following table shows the web pages accessible by normal user and administrator.

**Table 16 GAC2500 Users Access Permissions** 

User Type	Username	Default Password	Accessible Web Pages
Normal User	user	123	<ul> <li>Call</li> <li>Contacts</li> <li>Account: Call Settings</li> <li>Advanced: MPK General Settings, MPK LCD Settings</li> <li>Maintenance: Network Settings, Time &amp; Language, Security Settings, Device Manager</li> <li>Status: Account Status, Network Status, System Info</li> </ul>
Administrator	admin	admin	All pages

# **TOOLBAR**

The web UI tool bar is on the upper right corner of the web UI page.

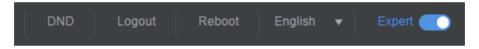


Figure 93 GAC2500 Web UI Tool Bar

### DND

Turn on/off DND mode. Once enabled, the DND text will turn into red and all incoming calls will be rejected.

# • English

Select the display language for the web UI.

### Reboot

Reboot the device.

### Expert

Click to switch to expert mode and click again to cancel. Once enabled, the administrator can view all settings items.

# Logout

Log out from the web UI.

# **CALL PAGE**

GAC2500 Web UI call page is shown below. Users could make calls and initiate conference from Web UI.



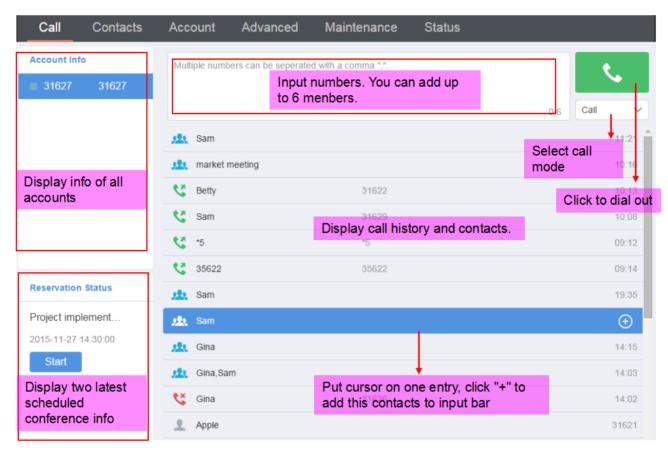


Figure 94 GAC2500 Web UI - Call

### **MAKING A CALL**

- 1. Select account in Account Info box;
- 2. Select call mode, then input phone number (s) in input box, use "," to separate different numbers or tap on other place on screen to confirm your input;
- 3. Tap on to dial out.

You can also tap on behind one call history entry to add the contact to input box.

# **SINGLE INCOMING CALL**

When the GAC is in idle, the dial screen will pop up when dialing out as shown below:



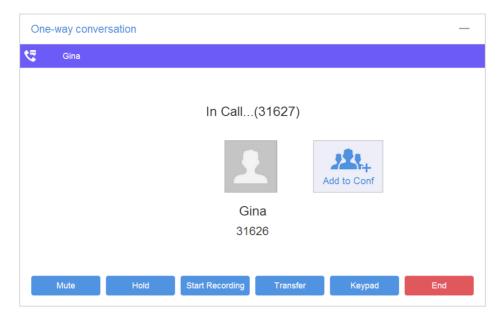


Figure 95 GAC2500 Web UI - Single Incoming Call

If the callee answers the call, you will see dial screen which is the same as the one on GAC2500 LCD.

Tap on on the upper right corner to minimize dial screen to the lower right corner as shown below:

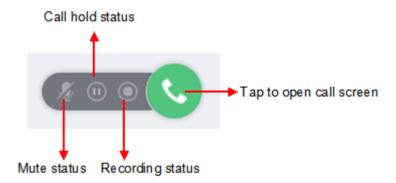


Figure 96 GAC2500 Web UI - Minimize Call Screen

When the line is in mute/hold/recording status, the corresponding icons will be highlighted.

# **CONFERENCE CONTROL**

When the GAC2500 is on conference, the conference screen is as shown below.



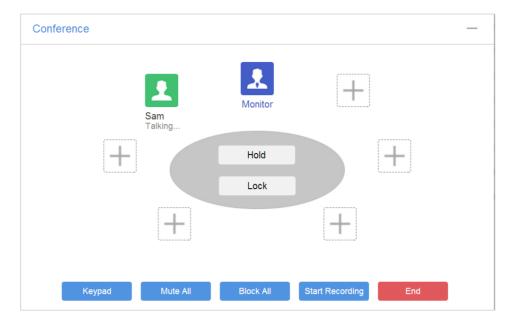


Figure 97 GAC2500 Web UI - Conference Control

The conference screen on Web is the same as the one on GAC2500 LCD.

Tap on \_\_\_ on the upper right corner to minimize conference screen to the lower right corner as shown below:

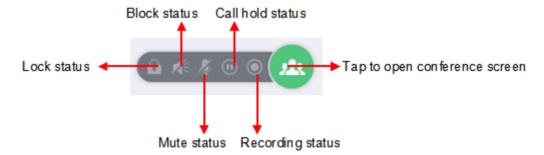


Figure 98 GAC2500 Web UI - Minimize Conference Screen

When the line is in lock/mute all/block all/hold/recording status, the corresponding icons will be highlighted.

# **CONTACTS PAGE**

This page lists Contacts, Schedule, Call History and LADP.

# **CONTACTS**

The operations will be synchronized and can be viewed from LCD as well.

# **CONTACTS**

Users could search/add/delete/edit contact on web page. The web UI contacts page is as shown below.



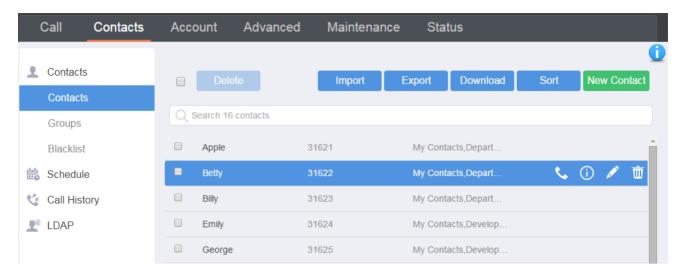


Figure 99 GAC2500 Web UI - Contacts

- Tap on "Import" option to access Import screen. Refer to chapter BATCH IMPORT CONTACTS to fill
  in info and import the contacts on PC to device.
- Tap on "Export" option to access Export screen. Refer to chapter **EXPORT CONTACTS** to fill in info and export the contacts on device to PC.
- Tap on "Download" option to access Download screen. Refer to chapter **DOWNLOAD CONTACTS** to fill in info and download the contacts on server to PC.
- Tap on "Sort" option to access Sort Phonebook screen. Sort the contacts by first name or last name.
- Tap on "New Contact" option to access Add Contact screen. Fill in contact information and save.

Put the cursor on contact to display more operation buttons.

- : Tap to dial this contact.
- : Tap to view the contact details.
- : Tap to access Edit screen, you can edit contact and save the changes.
- : Tap to delete this contact.



# **GROUPS**

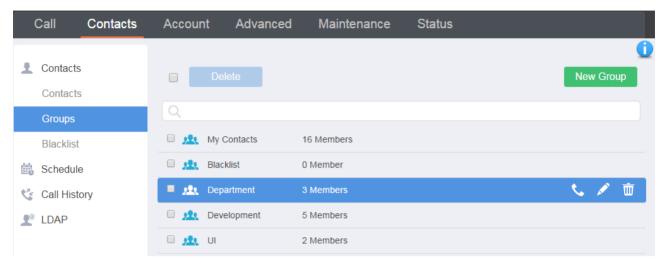
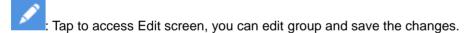


Figure 100 GAC2500 Web UI - Groups

- Tap on "New Contact" option to access New Group screen. Input group name and check group member (s) then save.
- Click on the group name to view all members in this group.

Put the cursor on group to display more operation buttons.

Tap to call this group. Please note that GAC2500 supports up to 6 lines (7-way) conference. If there are more than 6 conference members, check 6 members you want to add to conference first.



: Tap to delete this group, the contacts in this group will not be deleted the same time.

#### **BLACKLIST**

Blacklist function on Web UI is the same as on local. Please refer to chapter Blacklist for more details.



Figure 101 GAC2500 Web Page - Blacklist



### **SCHEDULE**

You can refer to chapter Schedule for more details.

### **UPCOMING CONFERENCE**

Conference can be scheduled, edited and deleted from web UI.

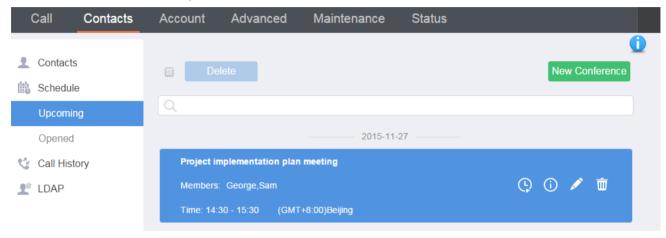


Figure 102 GAC2500 Web Page - Upcoming Conference

• Tap on "New Conference" option to access New Conference screen. Input conference name and check conference member (s) then save.

Put the cursor on conference to display more operation buttons.

- : Tap to call this conference.
- : Tap to access Details screen. You can also edit and save conference on this screen.
- : Tap to access Edit Schedule screen, you can edit conference and save the changes.
- : Tap to delete this conference.

# **HISTORY CONFERENCE**

History conference screen is as shown below, you can dial/reschedule/delete history conference from web UI.



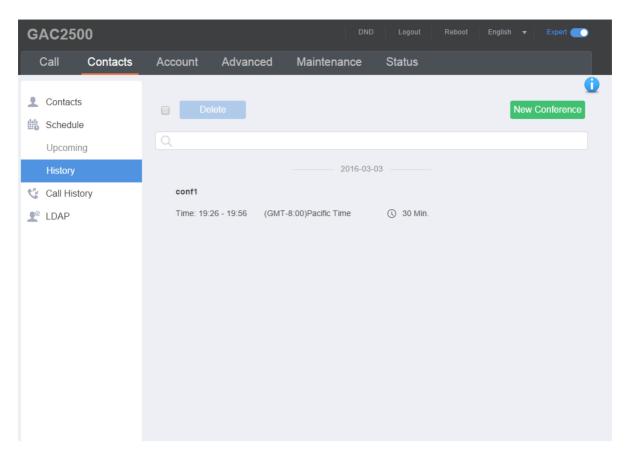


Figure 103 GAC2500 Web Page - History Conference

Put the cursor on conference to display more operation buttons.

- : Tap to call this conference.
- : Tap to access Details screen. You can also edit and save conference on this screen.
- : Tap to access Edit Schedule screen. You can reschedule the history conference on this screen.
- : Tap to delete this conference.

# **CALL HISTORY**

From web UI, users could also access Call history, which is synchronized with the call history from LCD.



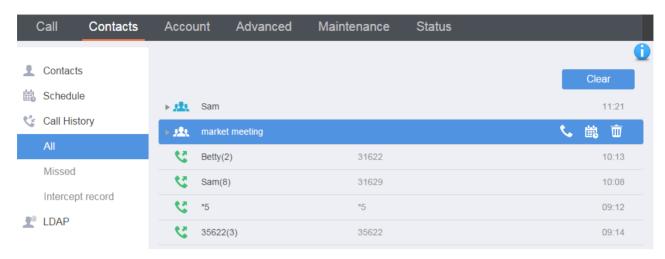


Figure 104 GAC2500 Web UI - Call History

• Tap on "Clear" option to clear all call history.

Put the cursor on call history to display more operation buttons.

- : Tap to call this contact.
- : Tap to access Edit Schedule screen. You can reschedule the history conference on this screen.
- : Tap to delete this conference.

# LDAP

From web UI, users can configure LDAP contacts. Please refer to chapter of **LDAP** under Application to fill in info and import LDAP contacts.



# **EXPERIENCING GAC2500**

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We encourage you to browse our product related documentation, FAQs and User and Developer Forum for answers to your general questions. If you have purchased our products through a Grandstream Certified Partner or Reseller, please contact them directly for immediate support.

Our technical support staff is trained and ready to answer all of your questions. Contact a technical support member or submit a trouble ticket online to receive in-depth support.

Thank you again for purchasing Grandstream Enterprise Conference Phone, it will be sure to bring convenience and color to both your business and personal life.

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