

Grandstream Networks, Inc.

GXP1760 & GXP1780/1782

Mid-Range IP Phones

User Guide



COPYRIGHT

©2017 Grandstream Networks, Inc. <http://www.grandstream.com>

All rights reserved. Information in this document is subject to change without notice. Reproduction or transmittal of the entire or any part, in any form or by any means, electronic or print, for any purpose without the express written permission of Grandstream Networks, Inc. is not permitted.

The latest electronic version of this guide is available for download here:

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

Grandstream is a registered trademark and Grandstream logo is trademark of Grandstream Networks, Inc. in the United States, Europe and other countries.

CAUTION

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

WARNING

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



GNU GPL INFORMATION

GXP1760/GXP1780/GXP1782 firmware contains third-party software licensed under the GNU General Public License (GPL). Grandstream uses software under the specific terms of the GPL. Please see the GNU General Public License (GPL) for the exact terms and conditions of the license.

Grandstream GNU GPL related source code can be downloaded from Grandstream web site from:

<http://www.grandstream.com/support/faq/gnu-general-public-license/gnu-gpl-information-download>



Table of Contents

CHANGE LOG	6
Firmware Version 1.0.1.28	6
Firmware Version 1.0.1.8	6
Firmware Version 1.0.0.48	6
Firmware Version 1.0.0.38	6
Firmware Version 1.0.0.37	6
Firmware Version 1.0.0.13	6
GUI INTERFACE EXAMPLES	7
WELCOME	8
PRODUCT OVERVIEW	9
Feature Highlights	9
GXP1760 Technical Specifications	9
GXP1780/GXP1782 Technical Specifications	10
INSTALLATION	12
Equipment Packaging	12
GXP1760 Package Contents	12
GXP1780/GXP1782 Package Contents	13
Connecting Your Phone	13
GETTING STARTED	14
Idle Screen	14
Using the Keypad	16
Making Phone Calls	18
<i>Handset, Speaker and Headset Mode</i>	<i>18</i>
<i>Multiple SIP Accounts and Lines</i>	<i>18</i>
<i>Establishing Calls</i>	<i>19</i>
<i>Making Calls Using IP Addresses</i>	<i>21</i>



Answering Phone Calls.....	22
<i>Receiving Calls</i>	22
<i>Do Not Disturb</i>	22
During A Phone Call.....	22
<i>Call Waiting/Call Hold</i>	22
<i>Mute</i>	23
<i>Call Transfer</i>	23
<i>Transfer Softkey</i>	23
<i>5-Way Conferencing</i>	24
<i>Target Softkey to Select Lines During Transfer / Conference Calls</i>	25
<i>Voice Messages (Message Waiting Indicator)</i>	25
<i>Shared Call Appearance (SCA)</i>	25
Call Features.....	26
CONNECTING TO DEVICES.....	28
EHS Headset	28
RESTORE FACTORY DEFAULT SETTINGS.....	29
EXPERIENCING THE GXP1760/GXP1780/GXP1782.....	30



Table of Tables

Table 1: GXP1760/GXP1780/GXP1780 Features at a Glance.....	9
Table 2: GXP1760 Technical Specifications.....	9
Table 3: GXP1780/GXP1782 Technical Specifications	10
Table 4: GXP1760/GXP1780/GXP1782 Equipment Packaging	12
Table 5: LCD Display Definitions.....	14
Table 6: GXP17xx Keypad Buttons.....	17
Table 7: Call Features	26

Table of Figures

Figure 1: GXP1760 Package Contents.....	12
Figure 2: GXP1780/GXP1782 Package Contents	13
Figure 3: GXP17xx Idle Screen	14
Figure 4: GXP1760 Keyboard.....	16
Figure 5: GXP1780/GXP1782 Keyboard	17



CHANGE LOG

This section documents significant changes from previous versions of user guide for GXP1760/GXP1780/GXP1782. Only major new features or major document updates are listed here. Minor updates for corrections or editing are not documented here.

Firmware Version 1.0.1.28

- Added Static/Dynamic auto-attended transfer support [Transfer Softkey]

Firmware Version 1.0.1.8

- Added “New Call” softkey for account mode [New Call]
- Added “Target” softkey under account mode for transfer and conference in call screen [Target Softkey to Select Lines During Transfer / Conference CallsTarget Softkey to Select Lines During Transfer / Conference CallsTarget Softkey to Select Lines During Transfer / Conference CallsTarget Softkey to Select Lines During Transfer / Conference Calls]

Firmware Version 1.0.0.48

- No major changes

Firmware Version 1.0.0.38

- No major changes

Firmware Version 1.0.0.37

- No major changes

Firmware Version 1.0.0.13

- This is the initial version for GXP1760/GXP1780/GXP1782



GUI INTERFACE EXAMPLES

http://www.grandstream.com/sites/default/files/Resources/gxp17xx_web_gui.zip

1. Screenshot of Login Page.
2. Screenshots of Status Pages.
3. Screenshots of Accounts Pages.
4. Screenshots of Settings Pages.
5. Screenshots of Network Pages.
6. Screenshots of Maintenance Pages.
7. Screenshots of Phonebook Pages.



WELCOME

Thank you for purchasing Grandstream GXP1760/GXP1780/GXP1782 mid-range IP phones. The GXP1760 features 6 dual-color line keys with 3 SIP accounts, 4 XML programmable context-sensitive Softkeys, 200 x 80-pixel backlit LCD display, the GXP1780/GXP1782 supports 8 dual-color lines with 4 SIP accounts, 4 XML programmable keys, 200 x 80-pixel backlight LCD display.



The GXP1760/GXP1780/GXP1782 contains dual network ports with PoE, EHS (Electronic Hook-Switch) with Plantronics headsets, superb full-duplex hands-free speakerphone with advanced acoustic echo cancellation, advanced security protection for privacy, and compatible with Grandstream UCM Features. It is a perfect choice for small-to-medium businesses looking for a high quality, feature rich IP phone with affordable cost.

PRODUCT OVERVIEW

Feature Highlights

The following table contains the major features of the GXP1760 & GXP1780/1782:

Table 1: GXP1760/GXP1780/GXP1782 Features at a Glance

 GXP1760	<ul style="list-style-type: none"> • 6 lines • 200*80-pixel backlit LCD display • 4 XML programmable Softkeys • 8 Dedicated function Keys • 5-way conference
 GXP1780 GXP1782	<ul style="list-style-type: none"> • 8 lines • 200*80-pixel backlit LCD display • 4 XML programmable Softkeys • 8 Dedicated function Keys • 5-way conference

GXP1760 Technical Specifications

The following table resumes all the technical specifications including the protocols / standards supported, voice codecs, telephony features, languages and upgrade/provisioning settings for GXP1760.

Table 2: GXP1760 Technical Specifications

Protocols/Standards	SIP RFC3261, TCP/IP/UDP, RTP/RTCP, HTTP/HTTPS, ARP, ICMP, DNS (A record, SRV, NAPTR), DHCP, PPPoE, TELNET, TFTP, NTP, STUN, SIMPLE, LLDP, LDAP, TR-069, 802.1x, TLS, SRTP, IPv6.
Network Interface	Dual switched auto-sensing 10/100 Mbps Ethernet ports with integrated PoE.
Graphic Display	200*80 pixel backlit LCD display.
Features Keys	6 line keys with up to 3 SIP accounts, 4 XML programmable context sensitive Softkeys, 5 navigation/menu keys, 8 dedicated function keys for : PHONEBOOK, TRANSFER, CONFERENCE, HEADSET, MUTE, SEND/REDIAL, SPEAKERPHONE, VOLUME.
Voice Codecs	Support for G.729A/B, G.711 μ /a-law, G.726, G.722(wide-band), G.723, iLBC, in-band and out-of-band DTMF (in audio, RFC2833, SIP INFO).
Auxiliary Ports	RJ9 headset jack (allowing EHS with Plantronics headsets).



Telephony Features	Hold, transfer, forward, 5-way conference, call park, call pickup, shared-call-appearance (SCA) / bridged-line-appearance (BLA), downloadable phonebook (XML, LDAP, up to 500 items), call waiting, call log (up to 500 records), XML customization of screen, off-hook auto dial, auto answer, click-to-dial, flexible dial plan, Hot Desking, personalized music ringtones and music on hold, server redundancy and fail-over.
HD Audio	Yes, HD handset and speakerphone with support for wideband audio.
Base Stand	Yes, 2 angle positions available. Wall Mount stand sold separately.
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, SRTP, TLS, 802.1x media access control.
Multi-Language	English, German, Italian, French, Spanish, Portuguese, Russian, Croatian, Chinese, Korean, Japanese.
Upgrade/Provisioning	Firmware upgrade via TFTP / HTTP / HTTPS, mass provisioning using TR-069 or AES encrypted XML configuration file.
Power & Green Energy Efficiency	Universal power adapter included: Input:100-240V, Output: +5V, 1A. Integrated Power-over-Ethernet (802.3af). Max power consumption: 5W.
Physical	Dimension: 231mm(W) x 167mm(L) x 86mm(H). Unit weight: 0.925kg. Package weight: 1.55kg.
Temperature and Humidity	Operation: 0°C to 40°C. Storage: -10°C to 60°C. Humidity: 10% to 90% Non-condensing.
Package Content	GXP1760 phone, handset with cord, base stand, universal power supply, network cable, Quick Installation Guide, GPL license.
Compliance	FCC: Part 15 (CFR 47) Class B. CE: EN55022 Class B, EN55024 Class B, EN61000-3-2, EN61000-3-3, EN60950-1. RCM: AS/ACIF S004, AS/NZS CISPR22/24, AS/NZS 60950.1

GXP1780/GXP1782 Technical Specifications

The following table resumes all the technical specifications including the protocols / standards supported, voice codecs, telephony features, languages and upgrade/provisioning settings for GXP1780/GXP1782.

Table 3: GXP1780/GXP1782 Technical Specifications

Protocols/Standards	SIP RFC3261, TCP/IP/UDP, RTP/RTCP, HTTP/HTTPS, ARP, ICMP, DNS (A record, SRV, NAPTR), DHCP, PPPoE, TELNET, TFTP, NTP, STUN, SIMPLE, LLDP, LDAP, TR-069, 802.1x, TLS, SRTP, IPv6.
Network Interface	Dual switched Ethernet ports with integrated PoE. Auto-sensing 10/100Mbps (GXP1780), 10/100/1000Mbps (GXP1782).



Graphic Display	200*80 pixel backlit LCD display.
Features Keys	8 line keys with up to 4 SIP accounts, 4 XML programmable context sensitive Softkeys, 5 navigation/menu keys, 8 dedicated function keys for: PHONEBOOK, TRANSFER, CONFERENCE, HEADSET, MUTE, SEND/REDIAL, SPEAKERPHONE, VOLUME.
Voice Codecs	Support for G.729A/B, G.711 μ /a-law, G.726, G.722(wide-band), G.723, iLBC, in-band and out-of-band DTMF (in audio, RFC2833, SIP INFO).
Auxiliary Ports	RJ9 headset jack (allowing EHS with Plantronics headsets).
Telephony Features	Hold, transfer, forward, 5-way conference, call park, call pickup, shared-call-appearance(SCA)/bridged-line-appearance(BLA), downloadable phonebook (XML, LDAP, up to 500 items), call waiting, call log (up to 500 records), XML customization of screen, off-hook auto dial, auto answer, click-to-dial, flexible dial plan, Hot Desking, personalized music ringtones and music on hold, server redundancy and fail-over.
HD Audio	Yes, HD handset and speakerphone with support for wideband audio.
Base Stand	Yes, 2 angle positions available. Wall Mount stand sold separately.
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, SRTP, TLS, 802.1x media access control.
Multi-Language	English, German, Italian, French, Spanish, Portuguese, Russian, Croatian, Chinese, Korean, Japanese.
Upgrade/Provisioning	Firmware upgrade via TFTP / HTTP / HTTPS, mass provisioning using TR-069 or AES encrypted XML configuration file.
Power & Green Energy Efficiency	Universal power adapter included: Input:100-240V, Output: +5V, 1A. Integrated Power-over-Ethernet (802.3af). Max power consumption: 5W.
Physical	Dimension: 231mm(W) x 167mm(L) x 86mm(H). Unit weight: 0.925kg. Package weight: 1.55kg.
Temperature and Humidity	Operation: 0°C to 40°C. Storage: -10°C to 60°C. Humidity: 10% to 90% Non-condensing.
Package Content	GXP1780/GXP1782 phone, handset with cord, base stand, universal power supply, network cable, Quick Installation Guide, GPL license.
Compliance	FCC: Part 15 (CFR 47) Class B. CE: EN55022 Class B, EN55024 Class B, EN61000-3-2, EN61000-3-3, EN60950-1 RCM: AS/ACIF S004, AS/NZS CISPR22/24, AS/NZS 60950.1



INSTALLATION

Equipment Packaging

The following table describe the equipment packaging:

Table 4: GXP1760/GXP1780/GXP1782 Equipment Packaging

Main Case	Yes	1
Handset	Yes	1
Phone Cord	Yes	1
Power Adaptor	Yes	1
Ethernet Cable	Yes	1
Phone Stand	Yes	1
Quick Installation Guide	Yes	1

GXP1760 Package Contents

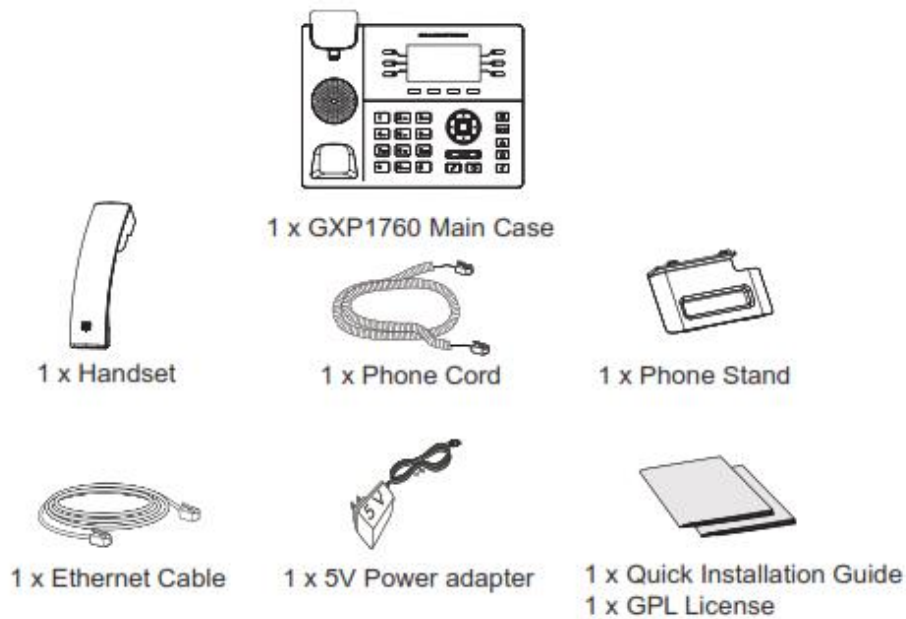


Figure 1: GXP1760 Package Contents



GXP1780/GXP1782 Package Contents

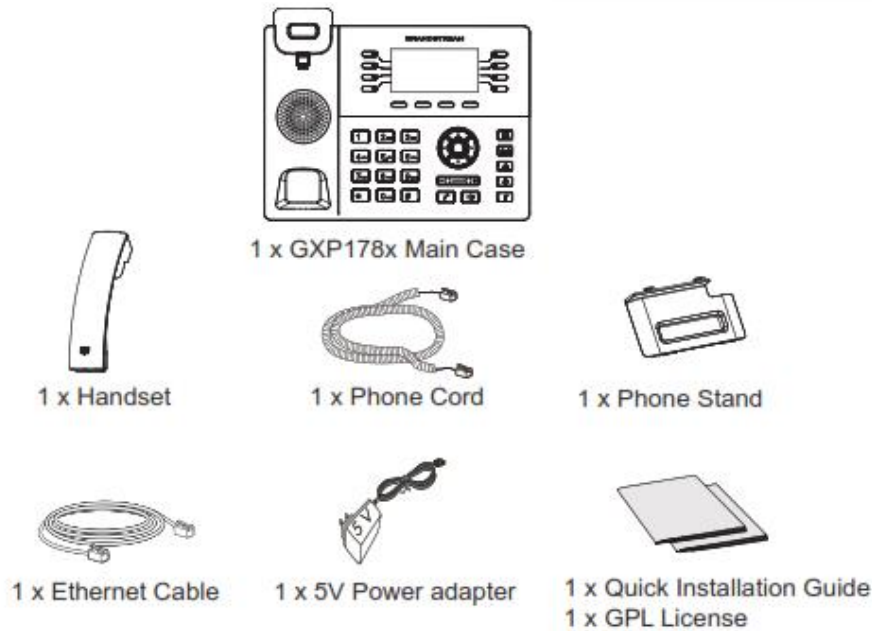


Figure 2: GXP1780/GXP1782 Package Contents

Connecting Your Phone

Handset Port	RJ9 handset connector port.
Headset Port	RJ9 headset connector port (supporting EHS with Plantronics headset).
LAN Port	RJ-45 port connecting to Ethernet. 10/100Mbps for GXP1760/GXP1780 and 10/100/1000Mbps for GXP1782.
PC Port	RJ-45 port connecting to PC. 10/100Mbps for GXP1760/GXP1780 and 10/100/1000Mbps for GXP1782.
Power Jack	5V DC Power connector port.

To set up the GXP1760/GXP1780/GXP1782, follow the steps below:

1. Attach the phone stand or wall mount to the slots on back of the phone.
2. Connect the handset and main phone case with the phone cord.
3. Connect the LAN port of the phone to the RJ45 socket of a hub/switch or a router (LAN side of the router) using the Ethernet cable.
4. Connect the 5V DC output plug to the power jack on the phone, then plug the power adapter into an electrical outlet. If PoE switch is used in step 3, this step could be skipped.
5. The LCD will display provisioning or firmware upgrade information. Please wait for the date/time display to show up before continuing.
6. Use the keypad configuration menu or phone's embedded web server (Web GUI via IP address in web browser) for further configuration on the phone.



GETTING STARTED

Idle Screen

GXP1760/GXP1780/GXP1782 screen displays differently depending on whether the phone is idle or in use (active). The following figure shows the idle screen of GXP1780/GXP1782 as example.

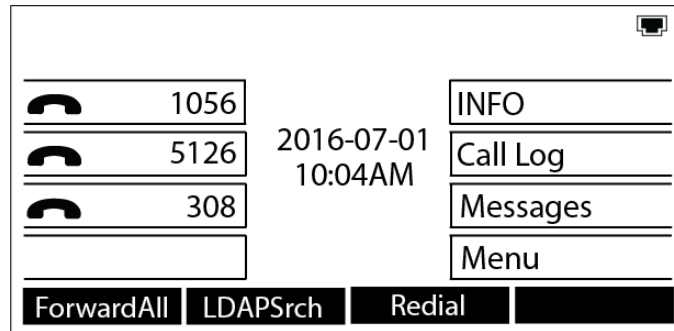


Figure 3: GXP17xx Idle Screen

The following table describes the items displayed on GXP1760/GXP1780/GXP1782 idle screen.

Table 5: LCD Display Definitions

Date and time	Displays the current date and time. It can be synchronized with Internet time servers.
Network icon	Shows the status of network. It will indicate whether the network is down or starting.
Status icon	Shows the status of the phone for registration status, call features and etc. using icons as shown in the next table.
Line status indicator	Displays the name of the account that is in use.
Softkeys in idle screen	<p>The Softkeys are context sensitive and will change depending on the status of the phone. Typical functions assigned to Softkeys are:</p> <ul style="list-style-type: none"> • Next Toggles between different idle screens. For example, for GXP1760 & GXP1780/82, pressing most left softkey (switch screen) will toggle among default idle screen, Virtual Multi-Purpose Keys. • Redial Redials the last dialed number when dialed call log exists. • ForwardAll Unconditionally forwards the phone line (account 1) to another phone. • Missed Shows up unanswered calls to this phone.









<p style="text-align: center;">Softkeys in call screen</p>	<p>The Softkeys are context sensitive and will change depending on the call status of the phone. Here are the main Softkeys in call screen.</p> <ul style="list-style-type: none"> • Redial Redials the last dialed number after off hook when there is existed call log. • Dial Dials the call out after off hook and entering the number. • Answer Answers the incoming call when the phone is ringing. • Reject Rejects the incoming call when the phone is ringing. • EndCall Ends the active call. • Transfer Transfer softkey will show up after pressing TRAN button and entering transfer target number. Press Transfer softkey to do blind transfer. • Split In auto-attended transfer mode, after establishing the second call, press Split to quit transfer and go back to normal talking status. • ConfCall Conferences the active calls. • ReConf Re-establish the conference among the calls on hold.
<p style="text-align: center;">Special Softkeys (only when device integrated with ucm61xx)</p>	<ul style="list-style-type: none"> • CallPark When the phone dials out, the CallPark softkey will display on screen. To park the call, press it to park the call on available parking lot. • RecordOn During an active call, the RecOn softkey will display on screen. Press it to trigger UCM call recording. • RecordOff During an active call, after RecOn softkey is pressed and call recording starts, RecOff softkey will appear on screen. Press it to stop call recording on UCM. Note: Please refer to UCM61xx User Manuals for the UCM configurations.

GXP1760/GXP1780/GXP1782 LCD Icons

	<p>Registration Status. Solid – Registered. Hollow – Unregistered.</p>
	<p>Handset Status. Off - Handset On Hook. On - Handset Off Hook.</p>



	<p>Speaker Status. Off - Speaker Off. On - Speaker On.</p>
	<p>Headset Status. Off - Headset Off. On - Headset On.</p>
	<p>Mute Status. Off - The Active Call Is Not Muted. On - The Active Call Is Muted.</p>
	<p>Call Forward Status. Off - Call Forward Feature Disabled. On - Call Forward Feature Enabled.</p>
	<p>DND Status. Off - Do Not Disturb Disabled. On - Do Not Disturb Enabled.</p>
	<p>SRTP Status. OFF - SRTP is not used. ON - SRTP is being used.</p>

Using the Keypad

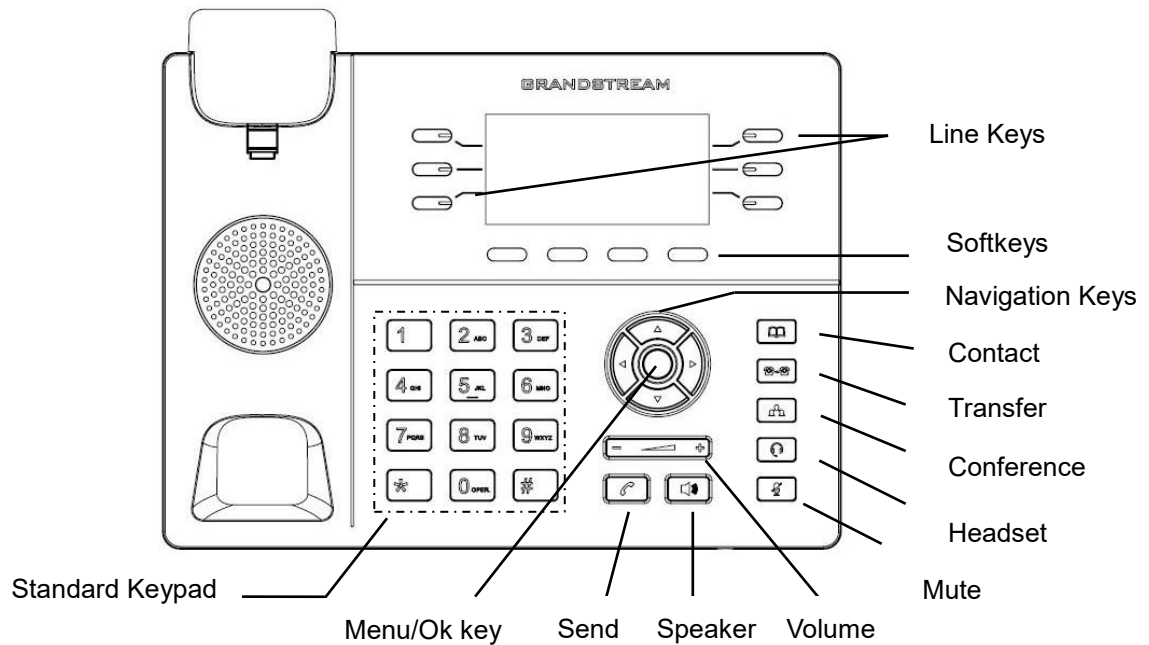


Figure 4: GXP1760 Keyboard



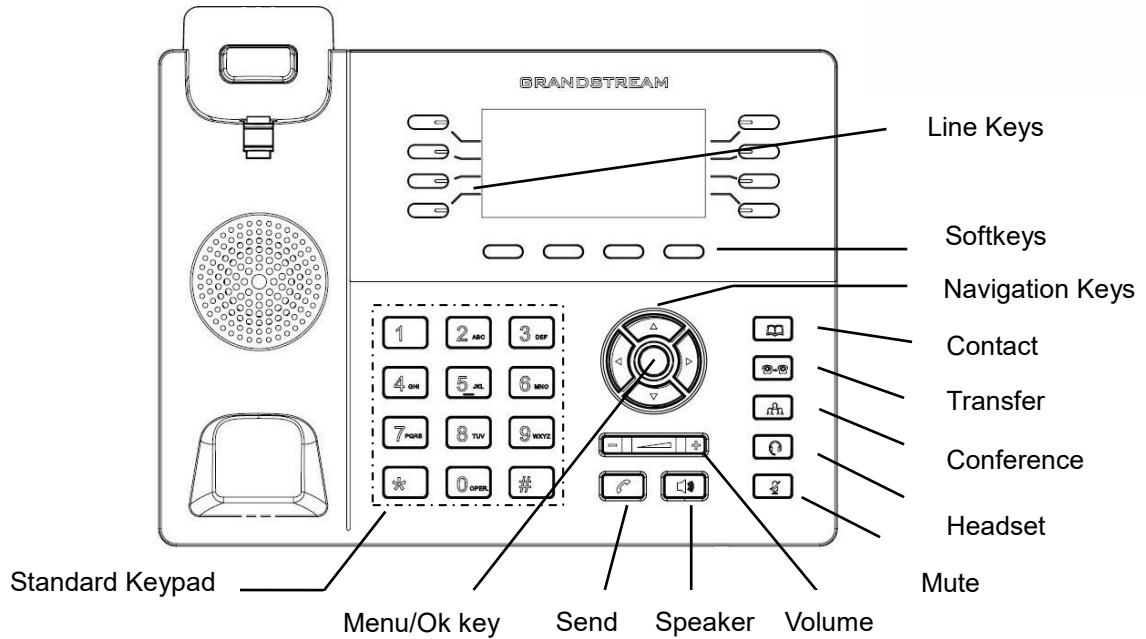












Figure 5: GXP1780/GXP1782 Keyboard

Table 6: GXP17xx Keypad Buttons


<p>Line Key</p>	<p>Switch between line 1 and line 2.</p> <ul style="list-style-type: none"> • Solid Green: Calling, Talking. • Flash Green: Call on hold. • Flash Red: Incoming call.
<p>Softkeys</p>	<p>The Softkeys are context sensitive and will change depending on the status of the phone.</p>
	<p>Navigation Keys:</p> <p>When entered the menu:</p> <ul style="list-style-type: none"> • Press the UP/DOWN keys to scroll through menu options. • Press the LEFT key to go back to the previous menu. • The RIGHT key has no function. <p>In Idle:</p> <ul style="list-style-type: none"> • Press the UP key to view missed calls. • Press the DOWN key to view dialed calls. • Press the RIGHT key to view answered calls.
	<p>Menu/OK Key:</p> <p>In Idle:</p> <ul style="list-style-type: none"> • Press to enter the main menu. • Confirm the current selection or the inputted info. <p>Off hook:</p> <ul style="list-style-type: none"> • Switch between outgoing call and paging call.



	Contacts: Press to view and edit contact information.
	Mute: Press to mute or unmute the call.
	Headset: Press to switch to headset mode.
	Transfer: Press to transfer call.
	Conference: Press to conference call.
	Speaker.
	Send/Redial.
	Volume.

Making Phone Calls

Handset, Speaker and Headset Mode

The GXP1760/GXP1780/GXP1782 allows users to switch among handset, speaker or headset when making calls. Press the Hook Switch to switch to handset, press the Headset button to switch to headset, or press the Speaker button  to switch to speaker.

Multiple SIP Accounts and Lines

GXP1760 can support up to 3 independent SIP accounts, GXP1780/GXP1782 can support up to 4 independent SIP accounts. Each account is capable of independent SIP server, user and NAT settings. Each of the line buttons is "virtually" mapped to an individual SIP account. In off hook state, select an idle line and the dial tone will be heard.

To make a call, select the line you wish to use. The corresponding LINE LED will light up in green. The user can switch lines before dialing any number by pressing the LINE buttons.

To toggle between SIP accounts when the line is off-hook, keep pressing the line key until the desired account show up.

For example: If 2 independent accounts are registered on GXP1760/GXP1780/GXP1782, when LINE 1 is pressed, the LINE 1 LED will light up in green. If LINE 2 is pressed, the LINE 2 LED will light up in green and the subsequent call will be made through SIP account 2.



Incoming calls to a specific account will attempt to use its corresponding LINE if it is not in use. When the "virtually" mapped line is in use, the phone will flash the other available LINE in red. A line is ACTIVE when it is in use and the corresponding LED is red.

Note: Regularly, to make another call under normal Line mode, users can press another line to access new call screen and initiate the outgoing calls. However, when enabling **Account Mode** under web GUI → **Settings** → **Programmable Keys Settings** → **Call Screen Settings**, a softkey **"New Call"** will be displayed to get another line for initiating calls on the same account with the same line key button, so lines will be grouped by account. Users can switch between lines by pressing on **"Swap"** softkey or navigate between lines using the up/down arrow keys.

Establishing Calls

There are several ways to make a call.

- **On hook dialing:** Enter the number when the phone is on hook and then send out.
 - When the phone is in idle, or
 - Press Speaker button,
 - Press Headset button with headset plugged in,
 - Select an available LINE key, enter the number to be dialed out.
 - The call will be dialed out.
- **Off hook and dial:** Off hook the phone, enter the number and send out.
 - Take handset off hook, or
 - Press Speaker button,
 - Press Headset button with headset plugged in,
 - Press an available LINE key to activate speaker.
 - You shall hear dial tone after off hook.
 - Enter the number.
 - Press SEND key or # to dial out.
- **Predictive dialing:** While dialing, the phone will predict and list candidates of the target number based on the entered digits. If the target number exists in the phonebook/call log, the phone will display a list of matched numbers and the user could select the number using the Up/Down key and dial out.
- **Redial:** Redial the last dialed number.
 - Take handset off hook, or
 - Press Speaker button,
 - Press Headset button with headset plugged in,
 - Press an available LINE key to activate speaker,
 - press SEND key, or the REDIAL softkey.
- **Via Call History:** Dial the number logged in phone's call history.
 - Press MENU button to bring up the main menu.
 - Enter Call History, then select Local Call Log or Broadsoft Call log.
 - Select the entry you would like to call using the navigation arrow keys.

- Press SEND button to dial out.
- **Via Phonebook:** Dial the number from the phonebook.
 - Press Contacts button.
 - Under Contacts, enter Local Phonebook/ Broadsoft Phonebook/LDAP directory using the navigation arrow key.
 - Select the contact you would like to call using the navigation arrow key.
 - Press SEND button to dial the selected contact.
- **Speed Dial from Line Key:** Dial the number configured as Speed Dial on Line Key.
 - Go to phone's Web GUI→Settings→Programmable Keys→virtual Multi-Purpose Keys, configure the Line's Key Mode as Speed Dial. Select the account to dial from, then enter the Name and User ID (the number to be dialed out) for the Line Key. Click on "Save VPK" at the bottom of the Web GUI page.
 - Directly press the Speed Dial key to dial out.
- **Call Return:** Dial the last answered call.
 - Go to phone's Web GUI→Settings→Programmable Keys→virtual Multi-Purpose Keys, configure the Line's Key Mode as Call Return. Select the account to dial from, no Name or User ID has to be set on for Call Return.
 - Directly press the Call Return key to dial out.
- **Via Paging/Intercom.**
 - Take handset off hook, or
 - Press Speaker button,
 - Press Headset button with headset plugged in,
 - Press an available LINE key to activate speaker,
 - You shall hear dial tone after one of the previous manipulation.
 - Press MENU button to switch the call screen from "DIAL" to "PAGE",
 - Enter the number,
 - Press SEND key or # to dial out.

Notes:

- After entering the number, the phone waits for the No Key Entry Timeout (Default timeout is 4 seconds, configurable via Web GUI) before dialing out. Press SEND or # key to override the No Key Entry Timeout.
- If digits have been entered after handset is off hook, the SEND key will works as SEND instead of REDIAL.
- By default, # can be used as SEND to dial the number out. Users could disable it by setting "User # as Dial Key" to "No" from Web GUI→Account X→Call Settings.
- If the SIP Server/PBX supports Paging/Intercom and has feature codes set up already, users do not necessarily need toggle to paging mode in the call screen. Simply dial the feature code with extension as a normal call.

- When dial out via paging, user can see the “call-info” header contains “answer-after=0” and “the “alert-info” header contains “info=alert-autoanswer; delay=0” in the outgoing INVITE.

During an active call, user can see call info on LCD such as: the call lasting time, contact information if the number already be saved in phonebook. When dialing DTMF, user can press round OK button to switch to call info page.

Making Calls Using IP Addresses

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

- Both phones have public IP addresses, or
- Both phones are on the same LAN/VPN using private or public IP addresses, or
- Both phones 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:

- Press MENU button to bring up main menu.
- Select "Direct IP Call" using the navigation arrow keys.
- Press MENU to enter the Direct IP Call mode.
- Input the 12-digit target IP address (Please see example below).
- Press the "More" softkey to make sure the softkey selection "IPv4" or "IPv6" is correctly selected depending on your network environment.
- Press "OK" softkey to dial.

For example:

If the target IP address is 192.168.1.60 and the port is 5062 (i.e., 192.168.1.60:5062), input the following: 192*168*1*60#5062. The * key represents the dot (.), the # key represents colon (:).

Quick IP Call Mode:

The GXP17xx also supports Quick IP Call mode. This enables the phone to make direct IP calls using only the last few digits (last octet) of the target phone's IP address. This is possible only if both phones are under the same LAN/VPN. This simulates a PBX function using the CSMA/CD without a SIP server. Controlled static IP usage is recommended.

To enable Quick IP Call Mode, go to phone's Web GUI→Settings→Call Features, set "Use Quick IP Call Mode" to "Yes". Clicking on "Save and Apply" on the bottom of Web GUI page to apply the change. To make Quick IP Call, take the phone off hook first. Then dial #xxx where x is 0-9 and xxx<255. Press # or SEND and a direct IP call to aaa.bbb.ccc.XXX will be completed. "aaa.bbb.ccc" is from the local IP address regardless of subnet mask. The number #xx or #x are also valid. The leading 0 is not required (but it's OK).



For example:

- 192.168.0.2 calling 192.168.0.3 -- dial #3 followed by # or "SEND".
- 192.168.0.2 calling 192.168.0.23 -- dial #23 followed by # "SEND".
- 192.168.0.2 calling 192.168.0.123 -- dial #123 followed by # "SEND".
- 192.168.0.2: dial #3 and #03 and #003 results in the same call -- call 192.168.0.3.

Note:

- The # will represent colon ":" in direct IP call rather than SEND key as in normal phone call.
- If you have a SIP server configured, direct IP call still works. If you are using STUN, direct IP call will also use STUN.
- Configure the "User Random Port" to "No" when completing direct IP calls.

Answering Phone Calls

Receiving Calls

- **Single incoming call.** Phone rings with selected ring tone. The corresponding LINE key will flash in red. Answer call by taking handset off hook, or using Speaker/Headset, or pressing the flashing LINE key.
- **Multiple incoming calls.** When another call comes in while having an active call, the phone will produce a Call Waiting tone (stutter tone). The other LINE key will flash in red. Answer the incoming call by pressing the flashing LINE key. The current active call will be put on hold automatically.

Do Not Disturb

Do Not Disturb can be enabled/disabled from phone's LCD by following the steps below:

- Press the Menu button and select "Preference" using navigation keys.
- Select Do Not Disturb.
- Select "Enable DND" or "Disable DND".
- Press MENU/OK key to save the changes.

When Do Not Disturb feature is turned on, the DND icon will appear on the top of the LCD. The incoming call will not be accepted or the call will directly go into voicemail.

During A Phone Call

Call Waiting/Call Hold

- **Hold.** Place a call on hold by pressing the HOLD Softkey. The active LINE key will blink in green.
- **Resume.** Resume call by pressing the blinking LINE key.
- **Multiple calls.** Automatically place active call on hold or switch between calls by pressing the LINE key. Call waiting tone (stutter tone) will be audible on new incoming call during the active call.

Mute

During an active call, press the MUTE button to mute/unmute the microphone. The LCD will show the Mute icon on top of the screen when the call is muted.

Call Transfer

GXP17xx Blind Transfer, Attended Transfer and Auto-Attended Transfer.

- **Blind Transfer.**
 - During the first active call, press TRANSFER and dial the number to transfer to.
 - Press SEND key or # to complete transfer of active call.
- **Attended Transfer.**
 - During the first active call, press LINE key. The first call will be put on hold.
 - Enter the number for the second call in the new line and establish the call.
 - Press TRANSFER.
 - Press the other LINE key which is on hold to transfer the call.
- **Auto-Attended Transfer.**
 - Set "Auto-Attended Transfer" to "Yes" under Web GUI→Settings→Call Features. And then click "Save and Apply" on the bottom of the page.
 - Establish one call first.
 - During the call, press TRANSFER. A new line will be brought up and the first call will be automatically placed on hold.
 - Dial the number and press SEND or # to make a second call. (Once the number is entered, a "Transfer" softkey will show. If "Transfer" softkey is pressed instead of SEND or #, a blind transfer will be performed).
 - Press TRANSFER again. The call will be transferred.
 - For Auto-Attended Transfer, after dialing out the number for the second call, a "Split" softkey will show. If the second call is not established yet (ringing), pressing "Split" will hang up the second call. If the second call is established (answered), pressing "Split" will resume the second call and keep the first call on hold.

Note: To transfer calls across SIP domains, SIP service providers must support transfer across SIP domains.

Transfer Softkey

When Attended Transfer Mode is set to "Static", only Blind Transfer softkey is available on LCD after the user presses TRANSFER button and enters the number for transferring call. When Attended Transfer Mode is set to "Dynamic", both Blind Transfer and Attended Transfer softkeys are available.

5-Way Conferencing

GXP17xx can host up to 5-way conference call.

- **Initiate a conference call.**
 - Establish calls with 2 or more parties respectively.
 - While 1 call is active, the other call will be put on hold with its LINE key blinking in green.
 - Press CONF key.
 - Press the desired LINE key on hold, the conference will be established.
 - Repeat the previous 2 steps for all the other parties on hold to join the conference.
- **Cancel Conference.**
 - If after pressing the CONF key, the user decides not to conference, press Cancel softkey or the current active LINE key (LED in solid green).
 - This will resume the 2-way conversation with the current line.
- **Split and Re-conference.**
 - During the conference, press HOLD Softkey. The conference call will be split and the calls will be put on hold separately with the LINE keys blinking in green.
 - Select 1 LINE key and press to resume the 2-way conversation.
 - If users would like to re-establish conference call, before 1 separate LINE is selected, press the ReConf softkey right after the conference call is held/split.
- **End Conference.**
 - Users could press the EndCall softkey or simply hang up the call to terminate the conference call.

GXP1760/GXP1780/GXP1782 supports **Easy Conference Mode**, which can be used combined with the traditional way to establish the conference.

- **Initiate a conference call.**
 - Establish 1 call.
 - Press CONF key and a new line will be brought up using the same account.
 - Dial the number and press SEND key to establish the second call.
 - Press CONF key or press the ConfCall softkey to establish the conference.
- **Join more parties in established conference call.**
 - Establish conference call.
 - Press CONF key and a new line will be brought up using the same account.
 - Dial the number and press SEND key to establish the second call.
 - Press CONF key or press the ConfCall softkey to join the new party in the established conference.
- **Split and Re-conference.**
 - During the conference, press HOLD softkey. The conference call will be split and both calls will be put on hold separately with 2 LINE keys blinking in green.



- Select 1 LINE key and press to resume the 2-way conversation.
- If users would like to re-establish conference call, before 1 separate LINE is selected, press the ReConf softkey right after the conference call is split.
- **Cancel Conference.**
 - If users decide not to conference after establishing the second call, press EndCall softkey instead of the ConfCall softkey/CONF key.
 - This will end the second call and the screen will show the first call on hold.
- **End Conference.**
 - Users could press the EndCall softkey or simply hang up the call to terminate the conference call.

Note:

- The party that starts the conference call has to remain in the conference for its entire duration, you can put the party on mute but it must remain in the conversation. Also, this is not applicable when the feature "Transfer on Conference Hang-up" is turned on.
- The option "Disable Conference" has to be set to "No" to establish conference.
- When using **Easy Conference Mode**, use SEND key to dial out the second call instead of using #, even when # could be used as SEND in normal phone calls.

Target Softkey to Select Lines During Transfer / Conference Calls

When having multiple calls on the same line, and users tried to transfer or conference the calls, a **"Target"** softkey will appear and when pressed, it will redirect user to the menu that shows all the calls on that line. Users can simply select the account to do Transfer/Conference on for performing Blind Transfer/Conference.

Voice Messages (Message Waiting Indicator)

A blinking red MWI (Message Waiting Indicator) on the top right corner of the phone indicates a message is waiting. Meanwhile, a message box symbol will show in the front of the specific account. Dial into the voicemail box to retrieve the message by entering the voice mail number of the server or pressing the Voicemail button (Voice Mail User ID has to be properly configured as the voice mail number under Web GUI → Account x → General Settings). An IVR will prompt the user through the process of message retrieval.

Shared Call Appearance (SCA)

The GXP1760/GXP1780/GXP1782 phone supports shared call appearance by Broadsoft standard. This feature allows members of the SCA group to share SIP lines and provides status monitoring (idle, active, progressing, hold) of the shared line. When there is, an incoming call designated for the SCA group, all of the members of the group will be notified of an incoming call and will be able to answer the call from the phone with the SCA extension registered.

All the users that belong to the same SCA group will be notified by visual indicator when a user seizes the line and places an outgoing call, and all the users of this group will not be able to seize the line until the line goes back to an idle state or when the call is placed on hold (with the exception of when multiple call appearances are enabled on the server side).



In the middle of the conversation, there are two types of hold: Public Hold and Private Hold. When a member of the group places the call on public hold, the other users of the SCA group will be notified of this by the red-flashing button and they will be able to resume the call from their phone by pressing the line button. However, if this call is placed on private-hold, no other member of the SCA group will be able to resume that call.

To enable shared call appearance, the user would need to register the shared line account on the phone. In addition, they would need to navigate to "Settings"→"Programmable Keys" on the web UI and set the line key mode as "Shared Line". If the user requires more shared call appearances, the user can configure multiple line buttons to be "shared line" buttons associated with the account.

Call Features

The GXP1760 and GXP1780/82 support traditional and advanced telephony features including caller ID, caller ID with caller Name, call forward and etc.

Table 7: Call Features

*30	Block Caller ID (for all subsequent calls) <ul style="list-style-type: none"> • Off hook the phone. • Dial *30.
*31	Send Caller ID (for all subsequent calls) <ul style="list-style-type: none"> • Off hook the phone. • Dial *31.
*50	Disable Call Waiting <ul style="list-style-type: none"> • Off hook the phone. • Dial *50.
*51	Enable Call Waiting <ul style="list-style-type: none"> • Off hook the phone. • Dial *51.
*67	Call with Caller ID Blocked (per call) <ul style="list-style-type: none"> • Off hook the phone. • Dial *67 and then enter the number to dial out.
*82	Call with Caller ID Enabled (per call) <ul style="list-style-type: none"> • Off hook the phone. • Dial *82 and then enter the number to dial out.



*70	Call with Call Waiting Disable (per Call) <ul style="list-style-type: none"> • Off hook the phone. • Dial *70 and then enter the number to dial out.
*71	Call with Call Waiting Enabled (per Call) <ul style="list-style-type: none"> • Off hook the phone. • Dial *71 and then enter the number to dial out.
*72	Unconditional Call Forward. To set up unconditional call forward: <ul style="list-style-type: none"> • Off hook the phone. • Dial *72 and then enter the number to forward the call. • Press OK softkey or SEND key.
*73	Cancel Unconditional Call Forward. To cancel the unconditional call forward: <ul style="list-style-type: none"> • Off hook the phone. • Dial *73. • Hang up the call.
*90	Busy Call Forward. To set up busy call forward: <ul style="list-style-type: none"> • Off hook the phone. • Dial *90 and then enter the number to forward the call. • Press OK softkey or SEND key.
*91	Cancel Busy Call Forward. To cancel the busy call forward: <ul style="list-style-type: none"> • Off hook the phone. • Dial *91. • Hang up the call.
*92	Delayed Call Forward. To set up delayed call forward: <ul style="list-style-type: none"> • Off hook the phone. • Dial *92 and then enter the number to forward the call. • Press OK softkey or SEND key.
*93	Cancel Delayed Call Forward. To cancel the delayed call forward: <ul style="list-style-type: none"> • Off hook the phone. • Dial *93. • Hang up the call.

Note: If the following feature codes don't work on your phone, please contact Administrator to turn on the Enable Call Features on phone's Web GUI. Enable Call Features is under phone's Web GUI→Account→Call Settings tab.



CONNECTING TO DEVICES

The GXP1760 & GXP1780/82 support EHS headset (Plantronics).

EHS Headset

The GXP1760 & GXP1780/82 supports normal RJ9 headset and Plantronics EHS headset. To use Plantronics EHS headset, go to the phone web GUI→Settings→Audio Control: Headset Type. Select "Plantronics EHS" and reboot the phone to take effect.

1. Connect EHS Headset (Plantronics) to GXP1760 & GXP1780/82. Insert headset connector into the RJ11 headset port on the back of GXP1760 & GXP1780/82.

2. To use headset mode, press headset button  on the GXP1760 & GXP1780/82. A headset

icon  will show on the GXP1760 & GXP1780/82 status bar.



RESTORE FACTORY DEFAULT SETTINGS

 **Warning:**

Restoring the Factory Default Settings will delete all configuration information on the phone. Please backup or print all the settings before you restore to the factory default settings. Grandstream is not responsible for restoring lost parameters and cannot connect your device to your VoIP service provider.

Please follow the instructions below to reset the phone:

1. Press MENU button to bring up the keypad configuration menu.
2. Select "System" and enter.
3. Select "Factory Reset".
4. A warning window will pop out to make sure a reset is requested and confirmed.
5. Press the "Yes" softkey to confirm and the phone will reboot. To cancel the Reset, press "No" softkey instead.

EXPERIENCING THE GXP1760/GXP1780/GXP1782

Please visit our website: <http://www.grandstream.com> to receive the most up- to-date updates on firmware releases, additional features, FAQs, documentation and news on new products.

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 IP phone. it will bring convenience and color to both your business and personal life.

