Grandstream Networks, Inc.

GHP63X/W - User Guide

GHP63X/W - User Guide

WELCOME

The GHP series of hotel phones features the GHP630(W) and GHP631(W), easy-to-use IP phones for any hotel room that can be programmed and customized based on the needs of hotels and their guests. The GHP630W and GHP631W models are equipped with integrated dual-band Wi-Fi. The features of the GHP series include an HD speaker, 2 SIP accounts/lines, 6 programmable keys, 10 speed dial keys, 3-way voice conferencing, full-band Opus voice codec, and an advanced jitter-resilience algorithm that tolerates up to 30% packet loss without impacting voice quality. The GHP series is supported by the Grandstream Device Management System (GDMS), which provides a centralized interface to configure, provision, manage, and monitor the deployment of Grandstream endpoints. The GHP series IP phones can be installed on a desktop or wall-mounted and can be powered by PoE (GHP630/GHP631), a power adapter (GHP630W/GHP631W), or a USB Type-C charger. Its elegant and compact design makes it perfect for not only hotels, but also hospitals, apartments, dormitories, and much more.

PRODUCT OVERVIEW

Feature Highlights

 GHP63X/W	3.5" High-Resolution (480x320) Color LCD Screen Integrated dual-band2.4G/5G 802.11a/b/g/n/ac/ax Wi-Fi 6 (GHP630W &GHP631W only) 2 SIP lines with wideband Opus codec. 6 programmable keys and 10-speed dial keys to customize different services. One 100Mbps network port with PoE (PoE available on GHP630/GHP631). Desk/Wall mounted. Tolerate up to 30% packet loss without impacting voice quality. Supports provision and management via GDMS. New voice message and mute LED indicator. HAC/VCH (ADA) compliant handset volume boost. Magnetic Hook Switch feature.

Technical Specification

- **GHP63X/W**

Protocols/Standards	SIP: SIP RFC3261, TCP/IP/UDP, RTP/RTCP, RTCP-XR, Simple, TLS, SRTP.
Graphic Display	3.5" High-Resolution (480x320) Color LCD
Network Interface	One auto-negotiation 10/100 Mbps ethernet port integrated PoE Class 2
Wi-Fi	GHP630W/GHP631W integrated dual-band 2.4GHz & 5GHz 802.11 a/b/g/n/ac/ax
Keypad	26 keys, including: -6 Context-Sensitive Soft keys; -12 Standard Phone Digits keys (0-9: speed dial keys configuration on web page, * , #); -5 Function keys (Flash, Redial, Hands-free, Voice Mail, Hold); -3 Volume Control keys, Up/Down/Mute (with red color LED)
HD Audio	One HD handset support for wide band audio

Voice Codecs	Support for G.729A/B, G.711?/a-law, G.726, G.722 (wide-band), G.723, iLBC, full band Opus, Inband and out-of-band DTMF (in audio, RFC2833, SIP INFO), VAD, AEC, CNG, PLC, AGC, AJB
Voice Capabilities	Dial, Answer, Redial, Flash ,Hands-free, Voice Mail(with the server), Transfer, Conference, Hold/Unhold, Mute /Unmute, flexible dial plan, Speed dial server redundancy & fail-over Call out
Telephony Features	Dial, Answer, Redial, Flash, Hands-free, Voice mail (with the server) Hold/Unhold, Mute/Unmute, flexible dial plan, Speed dial server redundancy, fail-over Call out.
Advanced Features	Support for multicast paging and E911 service. Support GDS Door opening. Support for advanced jitter-resilience algorithm.
USB	USB Type-C port for charging external devices (500mA MAX)
QoS	Layer 2 QoS (802.1Q, 802.1p) and Layer 3 (ToS, DiffServ, MPLS) QoS
Security	Secure boot, random default password, unique security certificate per device, administrator level passwords, 256-bit AES encrypted configuration file, SRTP, TLS, 802.1x media access control
Multi-language	English, Spanish, French, Chinese (pending)
Upgrade/Provisioning	Firmware upgrade via FTP / TFTP / HTTP / HTTPS, fast boot in 15 seconds, mass provisioning using GDMS/TR-069 or AES encrypted XML configuration file
Power & Green Energy Efficiency	Universal power adapter (GHP630W/GHP631W): Input: 100~240Vac 50~60Hz Output: 12V/0.5A(6W)
Temperature and Humidity	Operation: 0°C to 40°C Storage: -10°C to 60°C Humidity: 10% to 90% (Non-condensing)
Package Content	GHP phone, handset with cord, Base Stand, universal power supply (GHP630W, GHP631W), faceplate, Quick Installation Guide
Color	White (GHP630,GHP630W), Black (GHP631,GHP631W)
Physical	Unit size:210mm(L)*147mm(W)*89.8mm(H) (with handset and base stand) Unit weight: 601g (GHP630/GHP631), 658g (GHP630W/GHP631W US), 668g (GHP630W/GHP631W World) Package weight: 824g (GHP630/GHP631), 881g (GHP630W/GHP631W US),891g (GHP630W/GHP631W World)
GHP630 & GHP631 Compliance	FCC: Part 15 Subpart B, Class B; Part 68. 316/317. CE: EN 55032; EN 55035; EN IEC 61000-3-2; EN 61000-3-3; EN IEC 62368-1. UKCA: BS EN 55032; BS EN 55035; BS EN IEC 61000-3-2; BS EN 61000-3-3; BS EN 62368-1. RCM: AS/NZS CISPR32; AS/NZS 62368.1; AS/CA S004. IC: ICES-003; CS-03 Part V.
GHP630W & GHP631W Compliance	FCC: Part 15 Subpart B, Class B; Part 15 Subpart C,15.247; Part 15 Subpart E,15.407; Part 68. 316/317. CE: EN 55032; EN 55035; EN IEC 61000-3-2; EN 61000-3-3; EN IEC 62368-1; ETSI EN 301489-1- 17; ETSI EN 300 328; ETSI EN 301 893; EN IEC 62311. UKCA: BS EN 55032; BS EN 55035; BS EN IEC 61000-3-2; BS EN 61000-3-3; BS EN 62368-1; ETSI EN 301489-1-17; ETSI EN 300 328; ETSI EN 301 893; BS EN IEC 62311. RCM: AS/NZS CISPR32; AS/NZS 4268; AS/NZS 2772.2; AS/NZS 62368.1; AS/CA S004. IC: RSS-247; RSS-Gen; RSS-102; ICES-003; CS-03 Part V.

GETTING STARTED

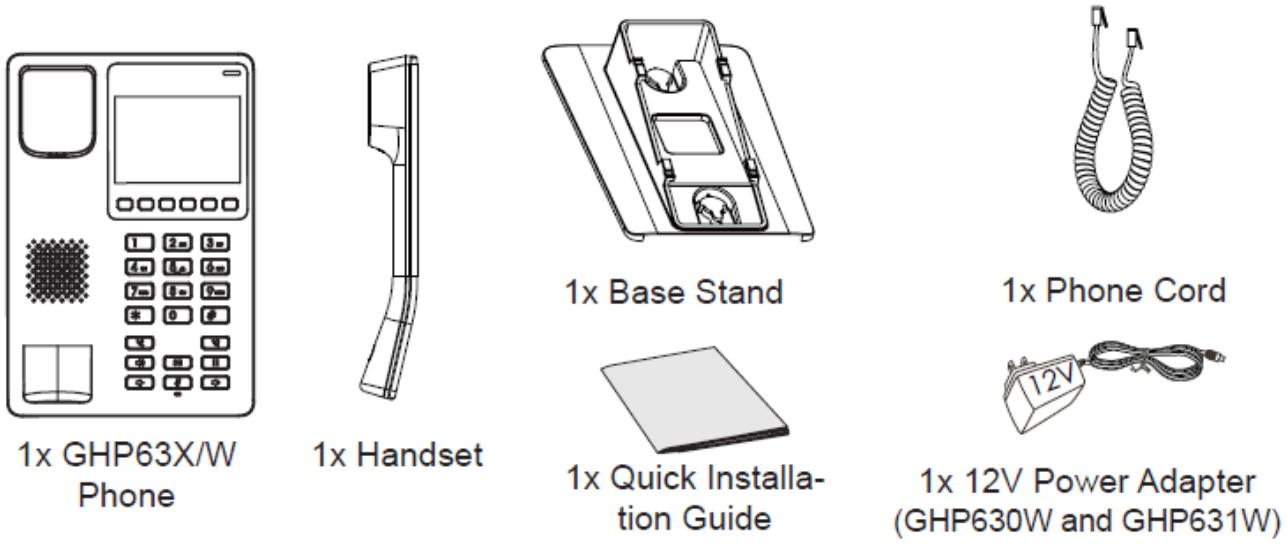
This chapter provides basic installation instructions, including the list of the packaging contents, and also information for obtaining the best performance with the GHP63X/W.

Equipment Packaging

GHP63X/W

GHP63X/W

1x GHP63X/W Phone 1x Handset 1x Base Stand 1x Quick Installation Guide 1x Phone Cord 1x 12V Power Adapter (GHP630W and GHP631W)



GHP63x/W Package Content

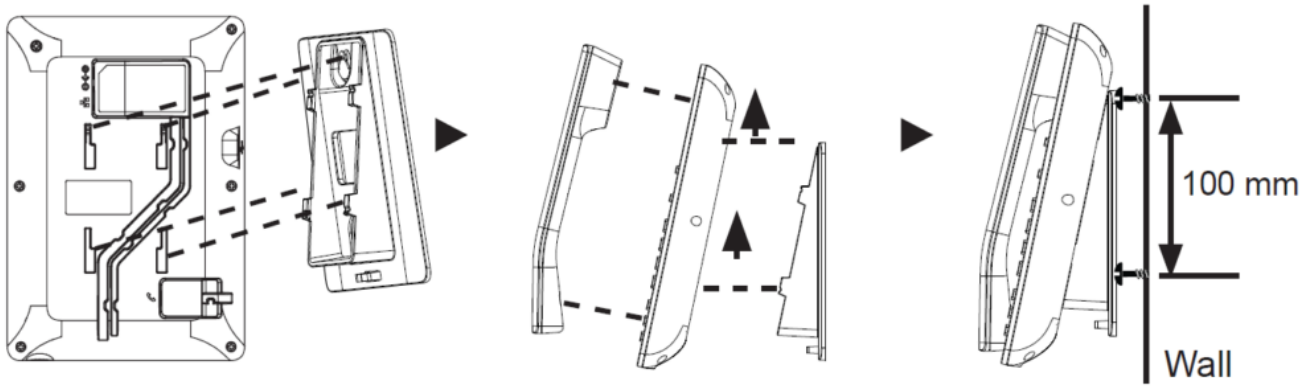
Please check the package before installation. If you find any one of the components missing, please contact your system administrator.

GHP63X/W Phone Setup

The GHP63X/W can be installed on the desk or mounted on the wall. Please follow the instructions below for each installation method

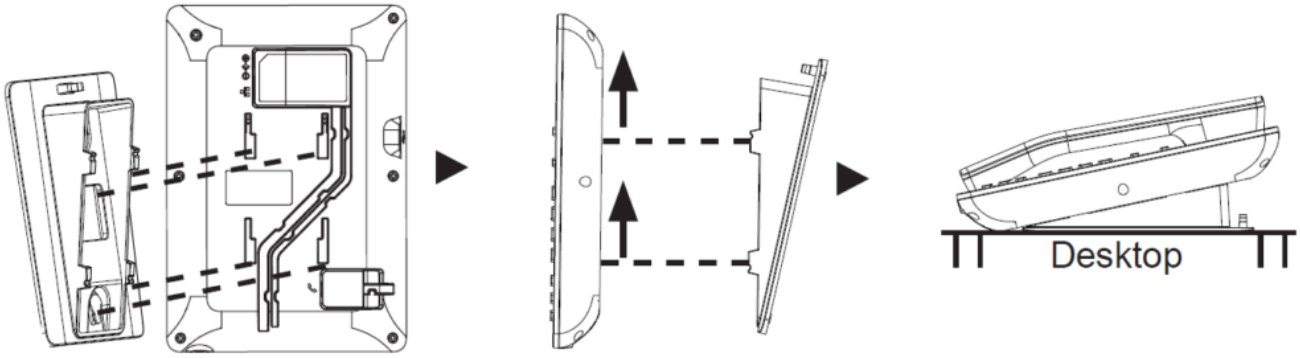
Wall Mount

1. On the wall where the GHP630/W & GHP631/W will be mounted, mark two dots with a 100mm distance in between vertically.
2. Using a drill, make a hole in each marked dot. Put a plastic expansion bolt and screw (not provided) into each hole. Leave enough space on the screws to mount the GHP630/W & GHP631/W.
3. Attach the wall mount spacers to the slot for the wall mount spacers on the back of the phone.
4. Mount the GHP630/W & GHP631/W on the screws using their "Wall Mount Slots".



Desktop Installation

To install the phone on the table with the phone stand, attach the phone stand to the bottom of the phone where there is a slot for the phone stand.

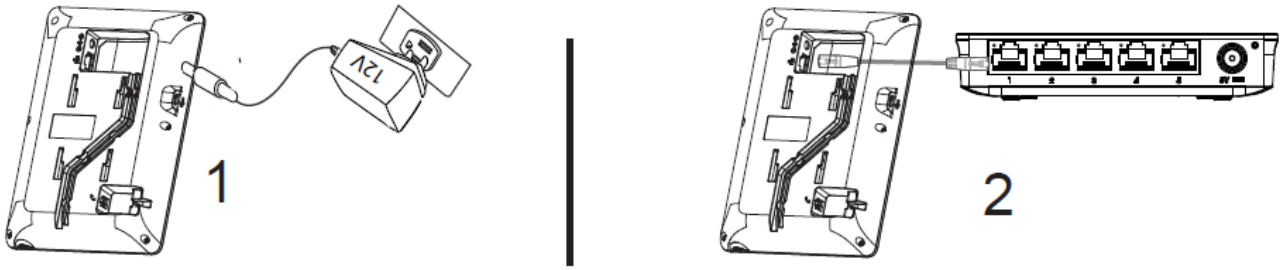


GHP63X Desktop Mount

Power on the phone

To power on the GHP630/W & GHP631/W:

- For **GHP630W & GHP631W**: Connect the 12V DC output plug to the power jack on the phone; plug the power adapter into an electrical outlet.
- For **GHP630 & GHP631:** A PoE switch can be used to power up the device without the need of the 12V power adapter.



Power on the phone

Connecting the GHP63X/W

To set up the phone, follow the steps below:

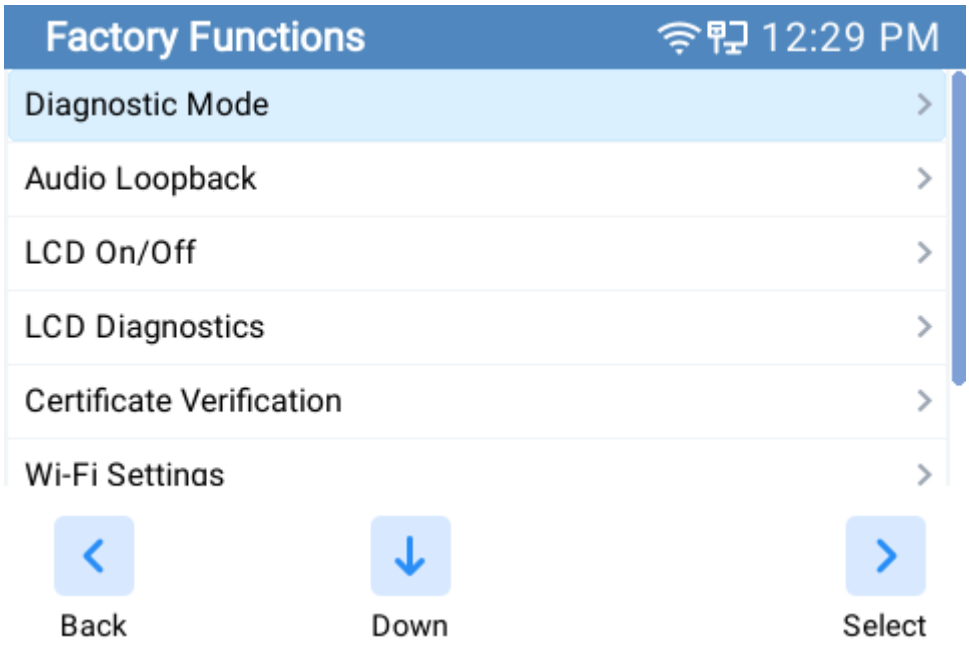
1. Plug in the phone cord to the handset RJ9 port and then connect it to the base.
2. Connect the LAN port of the phone to the RJ45 socket of a hub/switch or a router (LAN side of the router) using the Ethernet cable. This step can be skipped if using GHP630W & GHP631W with Wi-Fi.

For easy deployment, the GHP63x/W is out-of-the-box pre-configured to connect to default SSID named **wp_master** with a password (WPA/WPA2PSK) equal to **wp!987@dmin**, users can adapt these settings from the web UI as well to make it easier for deployment on a customer's site.

Display factory functions

To display factory functions

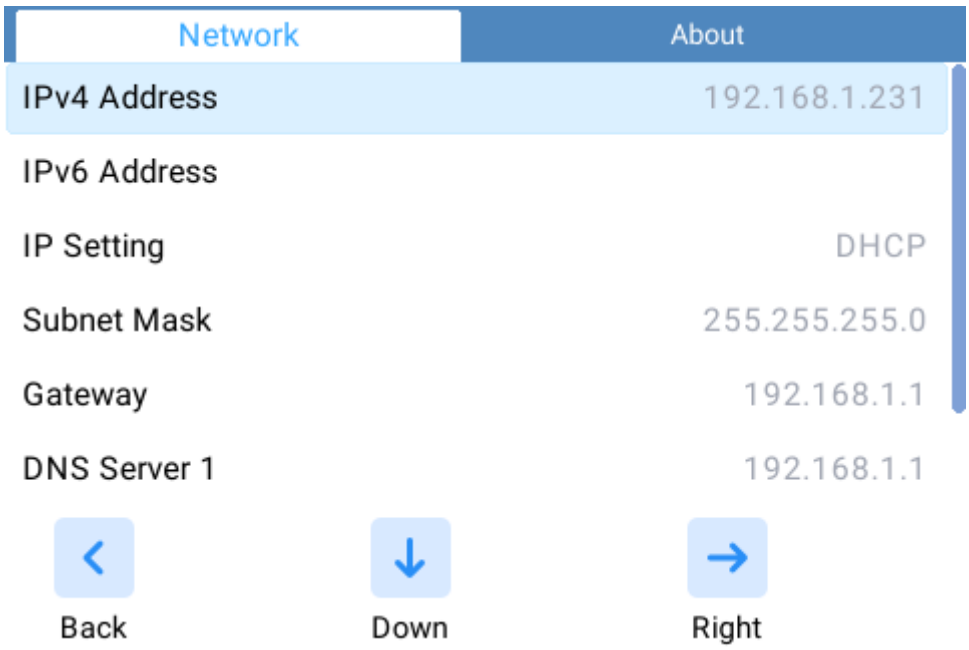
1. Make sure your phone is powered on
2. Press the **"HOLD" + 2** at the same time, to display the factory functions (including Wi-Fi settings for GHP631W/GHP630W version only)



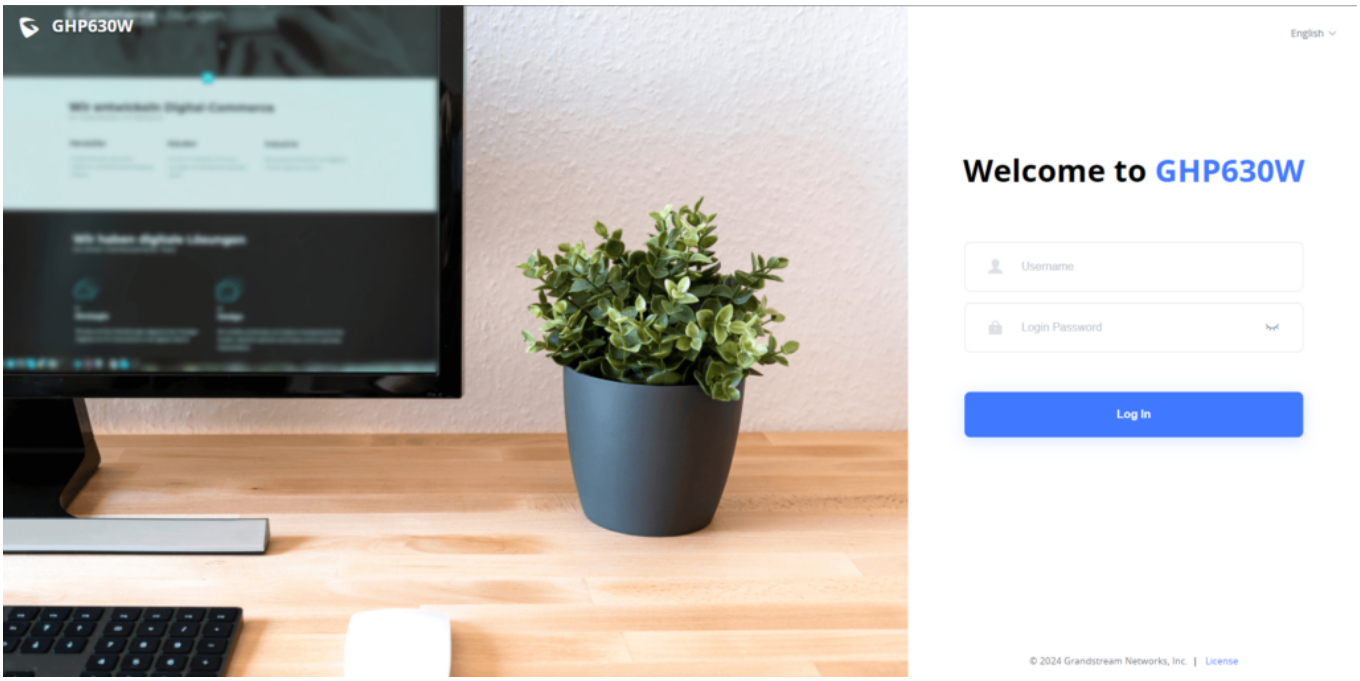
Phone Configuration via Web Browser

1. Ensure your phone is powered up and connected to the network.
2. Locate the MAC address on the bottom of the device or the package.
3. From a computer connected to the same network as the GHP63X, do one of the following:

- Type in the following address using the GHP63X's MAC address on your browser: https://.local (Example: https://c074adffffff.local)
- Press the **"HOLD" + 0** at the same time, to display its local IP address and use it to access the Web UI



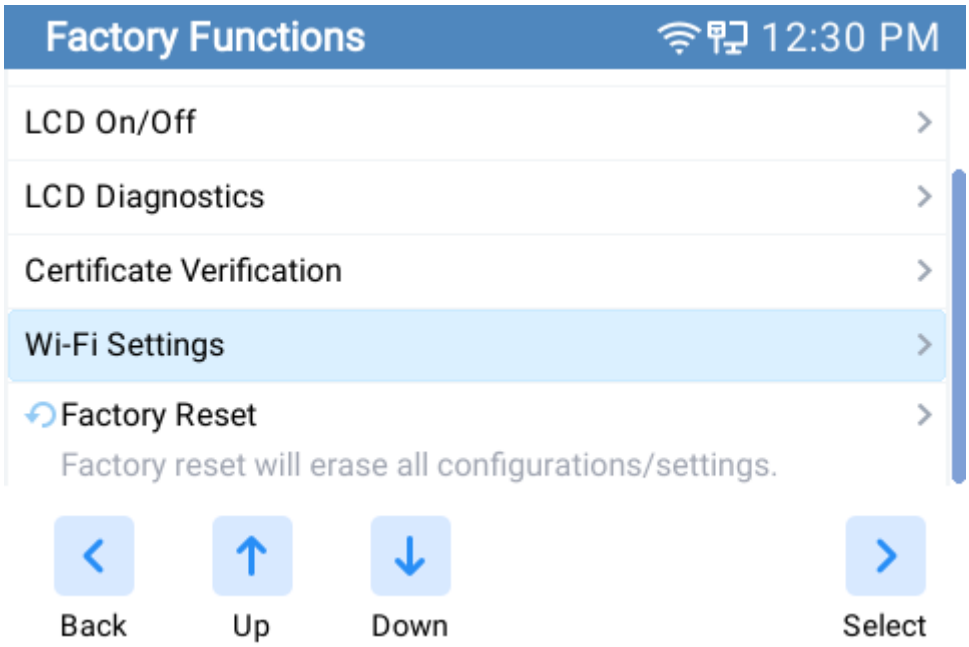
1. Enter the admin's username and password to access the configuration menu. (The factory default username is "admin" while the default random password can be found on the sticker at the back of the unit).



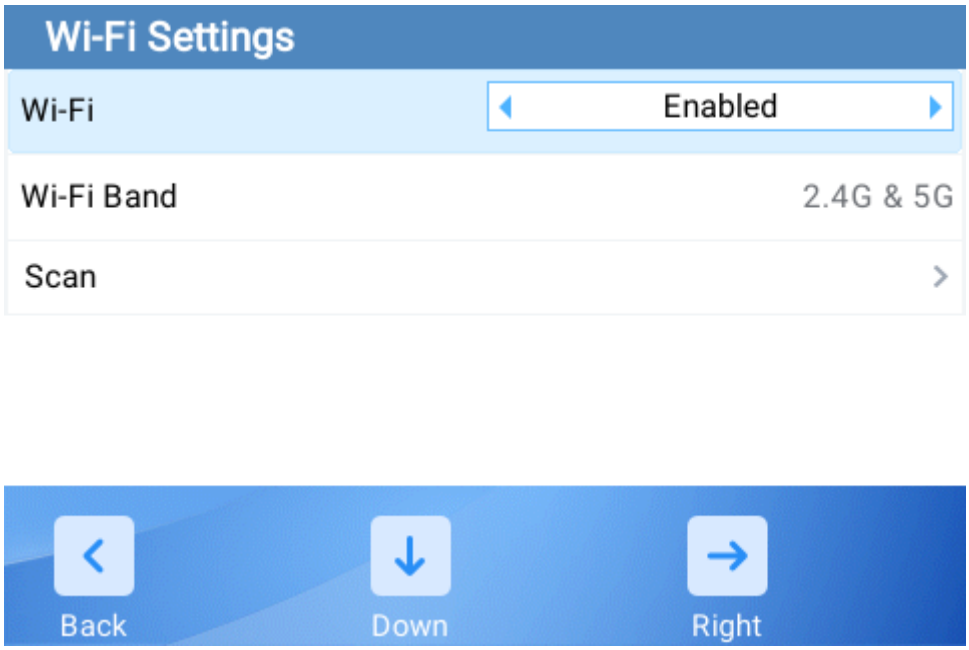
Connect to Wi-Fi (only for GHP630W/GHP631W)

To connect to Wi-Fi from your GHP63xW device, follow the steps below:

- Press **"HOLD" + 2** to access the factory functions of the GHP63x/W from the LCD
- Go to **Factory Functions -> Wi-Fi Settings**



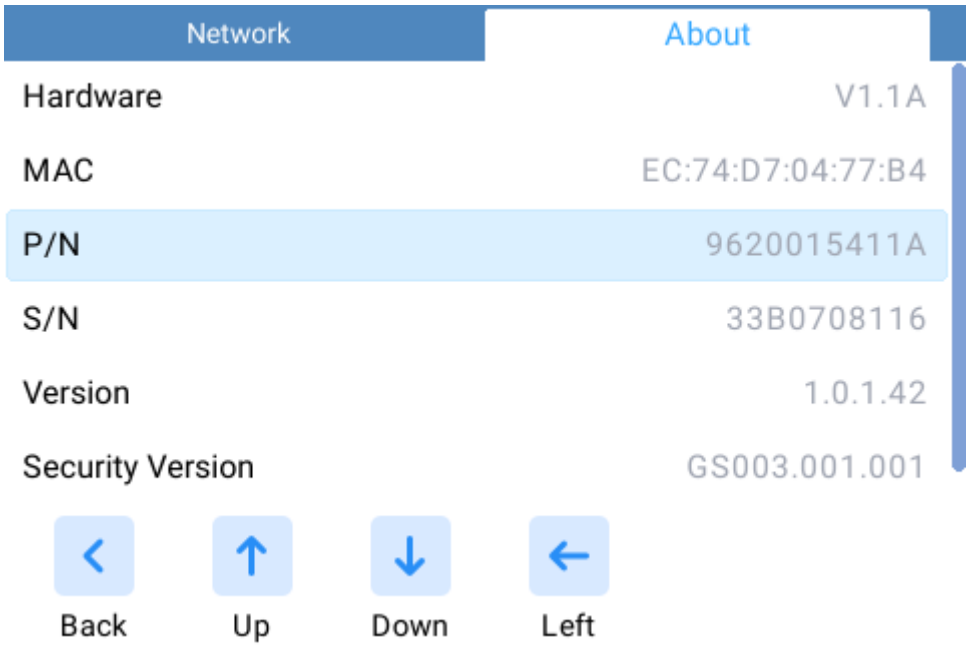
- Enable Wi-Fi, select the Wi-Fi Band (2.4G, 5G, or both), and scan for nearby networks



- Once the desired network is discovered, you can connect to it by providing its secret key if available

Display Phone Information

To view phone information such as hardware version, MAC address, part number, serial number, software version, security version, etc, press the "HOLD" button + 0 then press "Right".

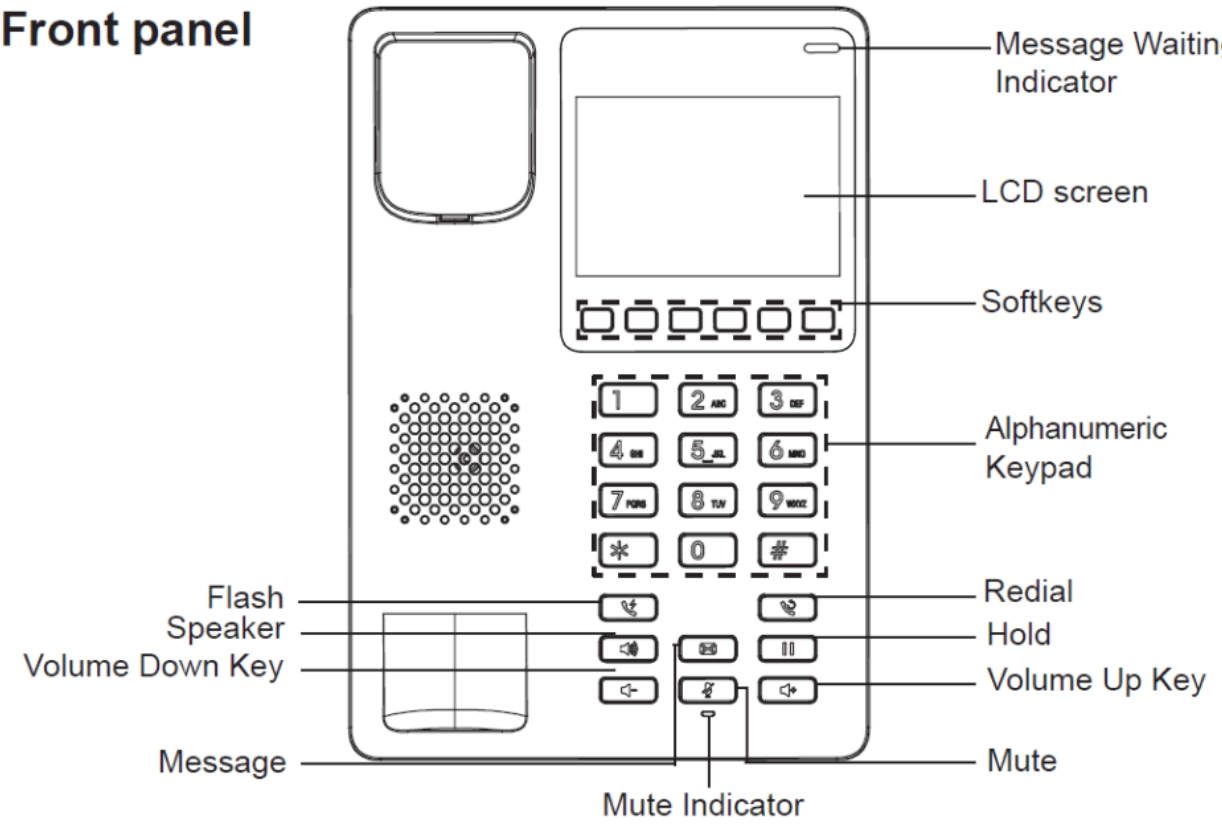


About Phone

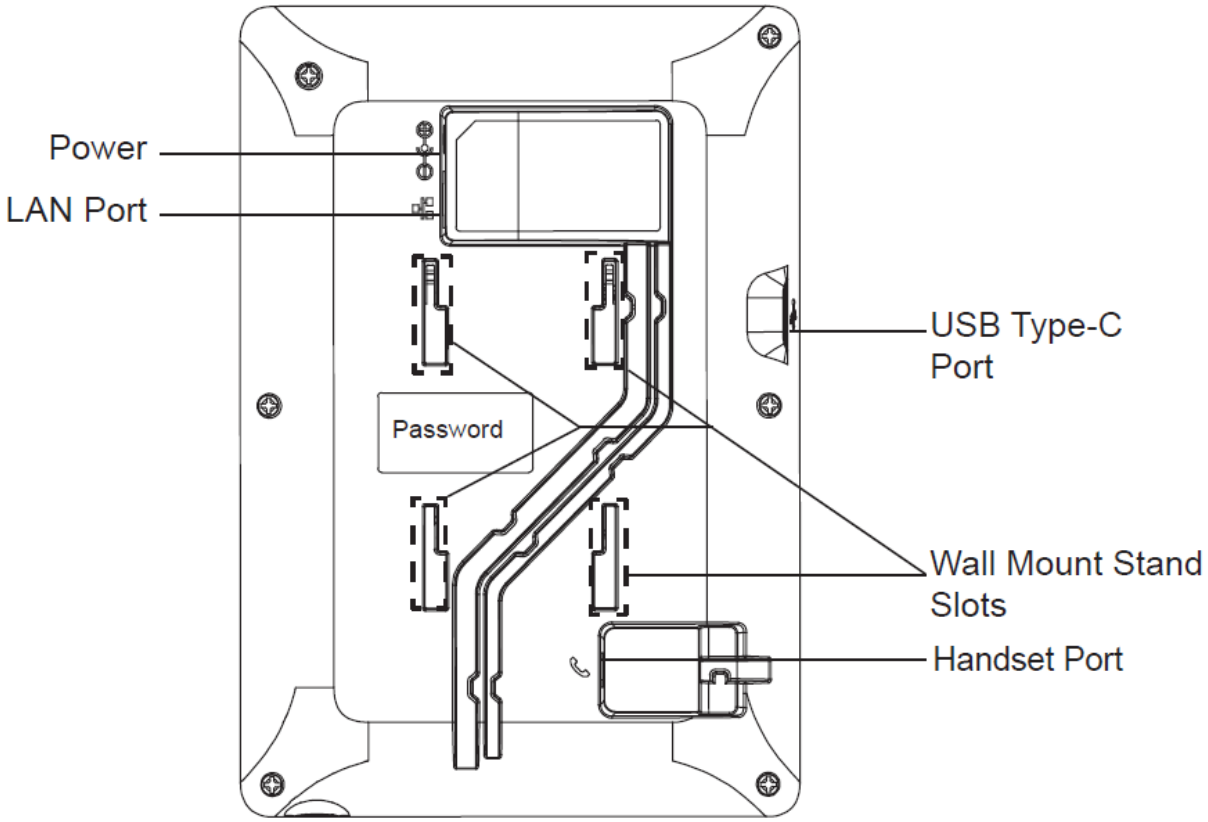
GETTING TO KNOW GHP63X/W

- **GHP63X/W**

Front panel



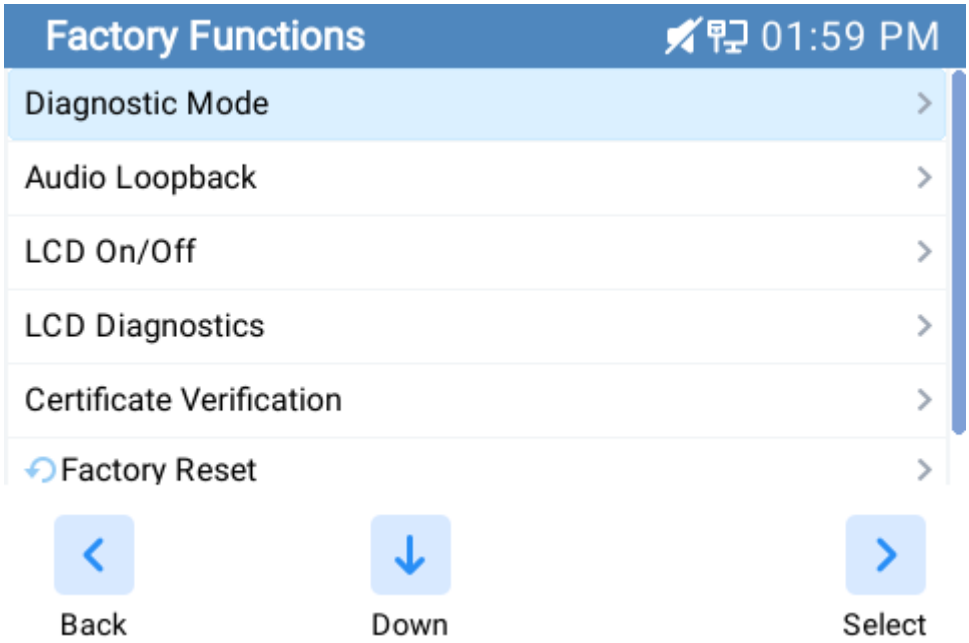
GHP63x/W Front view



GHP63x/W Back view

FACTORY FUNCTIONS

The GHP63x/W hotel phone offers a list of factory functions that can be displayed and configured from the LCD screen. To access the factory functions, click "**HOLD" + "2"** both at the same time.



The following list will be displayed:

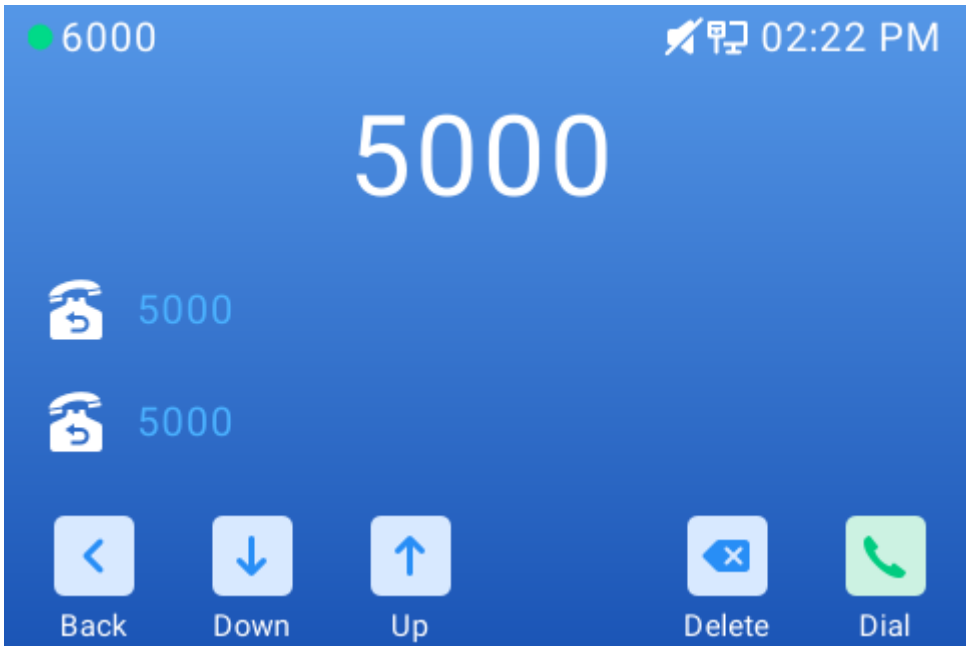
- **Diagnostic Mode**: Conducts a diagnostic assessment of the device's physical keys to ensure their proper functionality.
- **Audio Loopback**: Performs a test on the phone's microphone
- **LCD On/Off**: Performs the action of turning the LCD screen ON and OFF
- **LCD Diagnostics**: Displays a blue-colored screen to check for potential damage or flaws in any area of the LCD screen.
- **Wi-Fi Settings (GHP630W/GHP631W)** : Connects the GHP63x/W to a nearby Wi-Fi network
- **Certificate Verification**: runs a verification test of the authenticity of certificates, safeguarding against potential security breaches or unauthorized access
- **Factory Reset**: This option allows the user to factory reset the device from the LCD screen

TELEPHONY FEATURES

Making Phone Calls

Handset and Speaker Mode

- The GHP63X/W allows switching between the handset and the speaker when making calls. Please press the speaker button to start using the speaker . If you wish to switch to the handset after activating the speaker, just unhook the handset, and the audio will be emitted through the handset's speaker.
- Dial the number that you wish to call and press # or key to send the call, or wait for a second for the number to be sent.



SIP Accounts and Lines

The GHP63X/W supports 2 SIP accounts and 2 lines; Each account is capable of independent SIP servers and users. One account is configured by the administrator to initiate calls and receive calls. While the other account is configured to receive calls. The default account can be switched only by the administrator.

Completing Calls

The Web UI access is disabled during active calls, to improve the device performance.

There are several ways to complete a call.

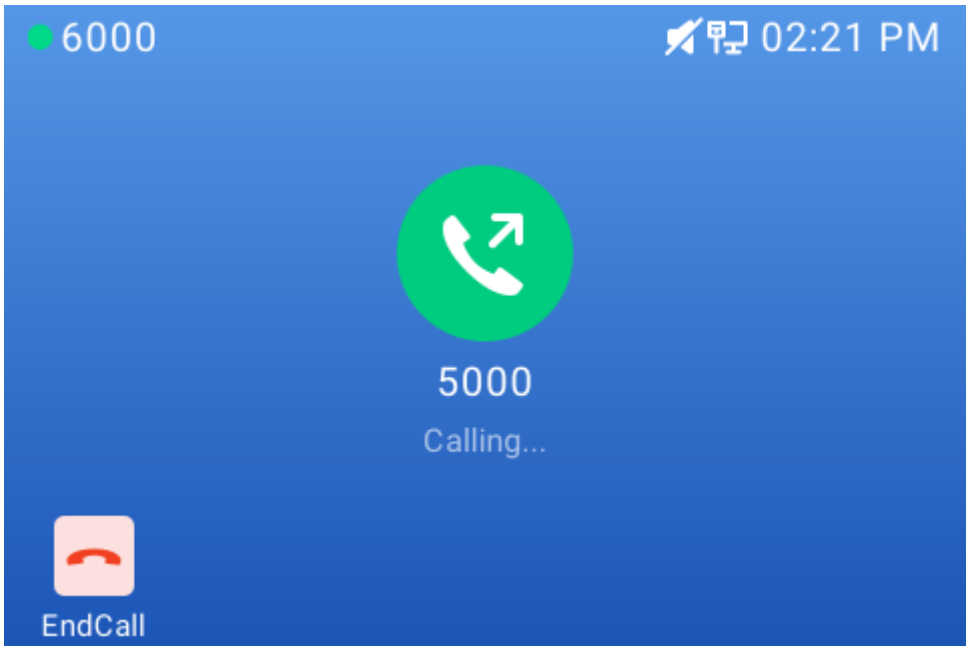
- **On-hook** dialing. Enter the number when the phone is on hook and then send it out.

1. When the phone is idle, enter the number to be dialed.
2. Take the handset off-hook, press the Speaker button, or press the Headset button on the headset plugged in.
3. The call will be dialed out.

- **Off-hook and dial.** Off-hook the phone, enter the number, and send it out.

1. Take the handset off-hook, or

   - Press the speaker button
   - You shall hear the dial tone after off-hook
2. Enter the number.
3. Press the # key to dial out.



Redial

Redial the last composed number

1. To redial a number, you can either :

- Press the redial hard key , this will compose the last entered number.
- Press the redial softkey , when the handset is off-hook.
- Press the # key; this will trigger a DTMF call to the last composed number

Direct IP Calling

Direct IP Call allows two phones to contact each other 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:

1. Take the handset off-hook, press the Speaker button, or press the Headset button on the headset plugged in.
2. Input the target IP address (Please see the example below).
3. Press the **Send** key or wait for the timeout.

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 (.), and the # key represents the colon (:).

When only dialing the IP address (example: 192*168*1*60), the call will automatically go through the default port 5060.

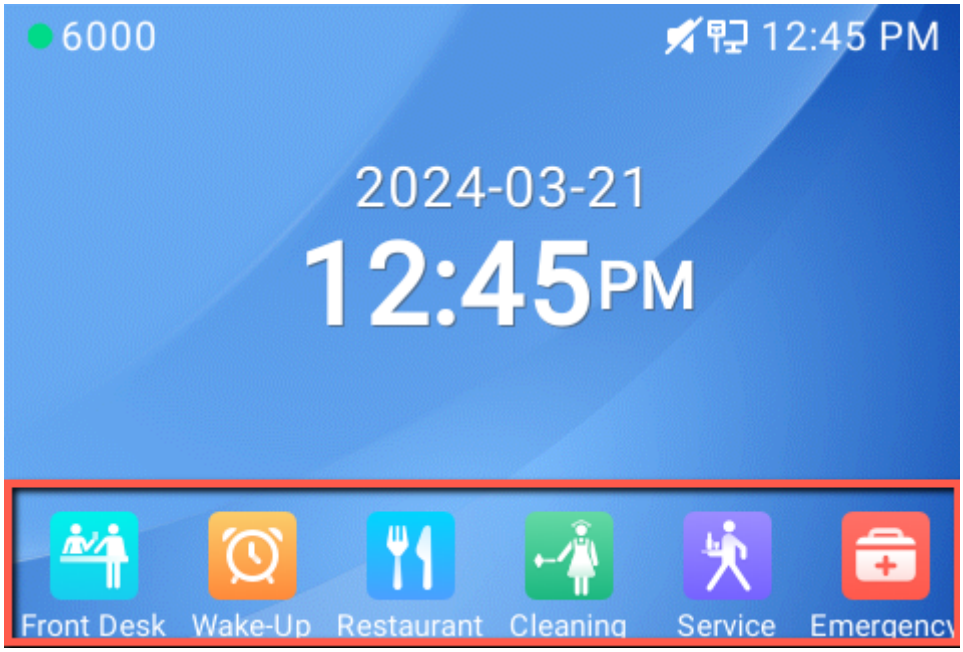
- Users need to Enable Direct IP Call under **Phone Settings->Call Settings->Outgoing**, before attempting

to make calls using IP addresses.

- When using direct IP calls, the "**Use Random Port**" option in **Phone Settings->Basic Settings** should be set to "No".

Multi-Purpose Keys

Multi-purpose keys can be configured to quickly dial a certain extension. When the MPK has been pressed, the number will be quickly dialed and the call sent out.

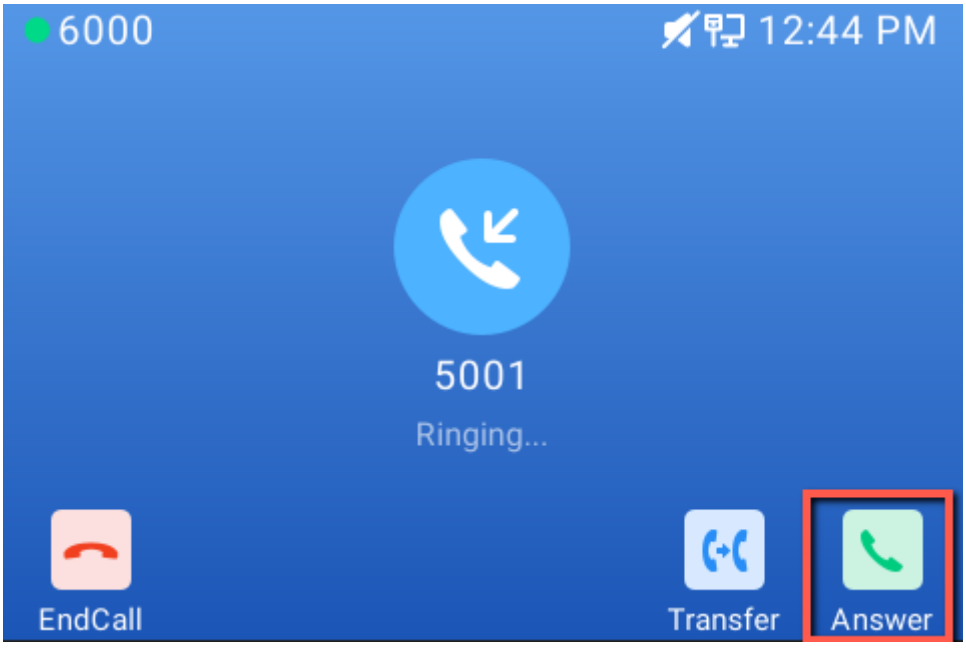


Answering Phone Calls

Receiving Calls

The phone rings with the selected ringtone. Unhook the handset or press the speaker button to answer the call.

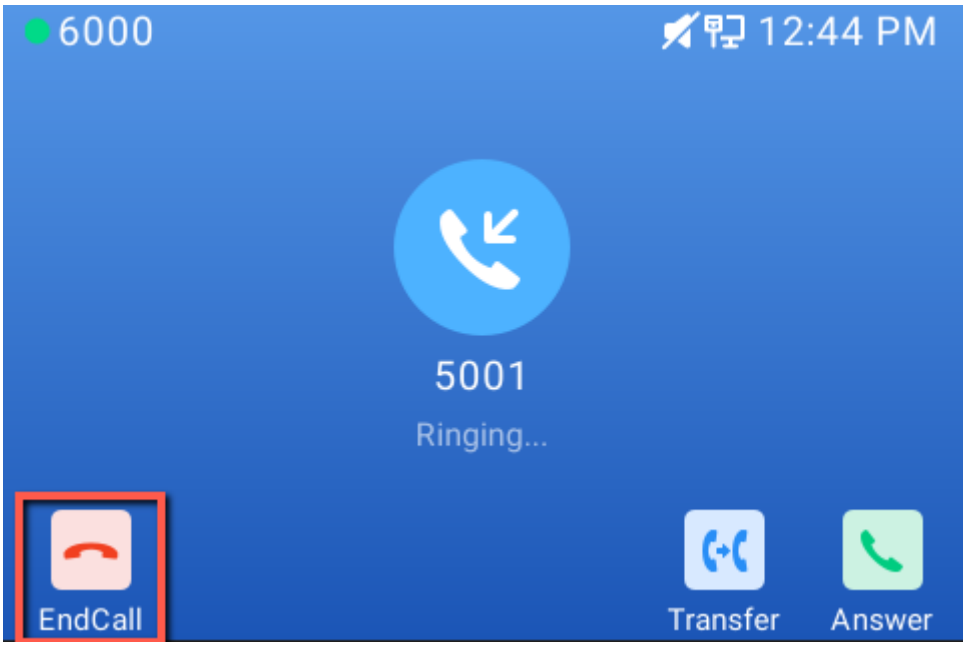
You can also click on the answer soft key on the LCD screen to answer the phone call



By default, if a call is not answered, a pop-up notification will appear on the LCD informing the user that the call was missed. It is possible to prevent this message prompt from appearing by accessing the phone's Web UI and disabling **"Enable Missed Call Notification"** under **Phone Settings -> Call Settings -> Incoming**.

Rejecting Calls

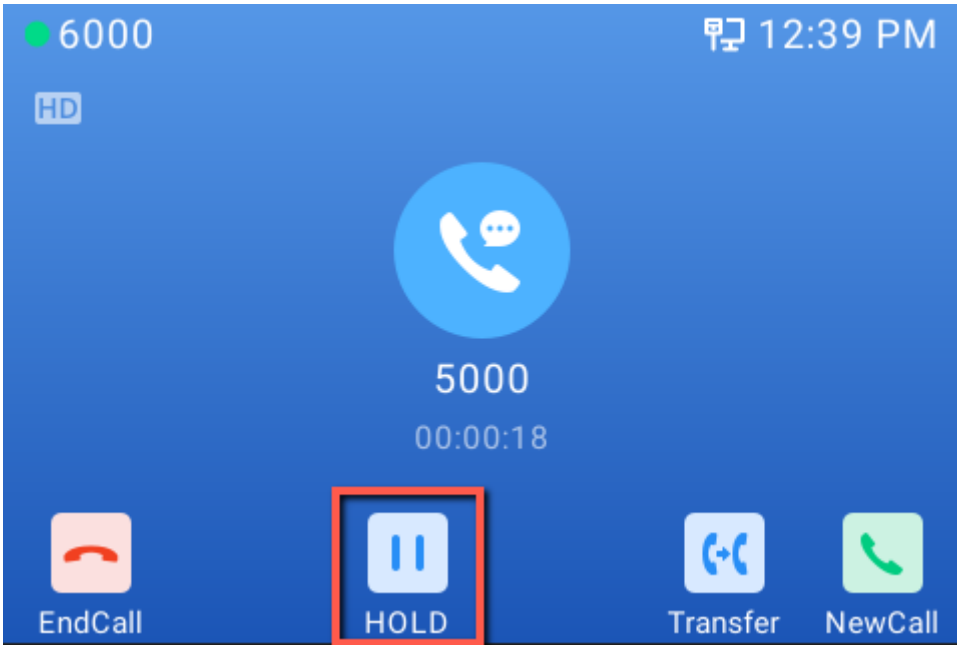
To reject an incoming call, click on the "End call" soft key on the LCD screen



During a Phone Call

Call Waiting/Hold Call

- The user can use the hold button to put the call on hold.
- When receiving a call on the second line, the user can use the Flash key to hold the call on the first line and switch to the call on the second line. If the user wants to resume the first call, the user may press the Flash key again to recover the call.
- The user can also click the Hold soft key on the LCD screen to put the call on hold



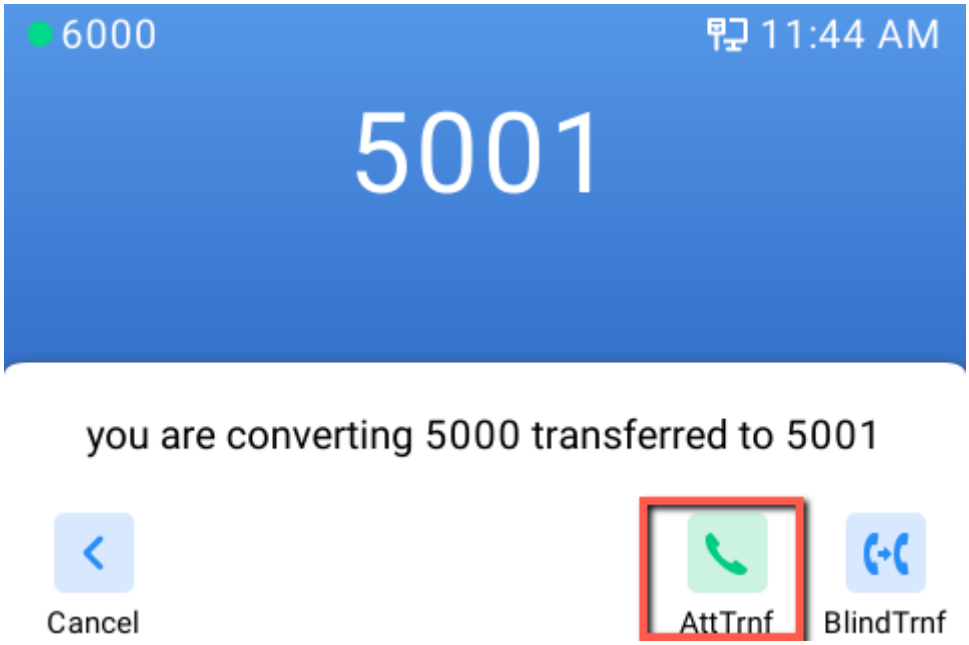
Mute

During an active call, press the MUTE button to mute/unmute the microphone. The LED will light up in red to indicate that your microphone is muted.

Call Transfer

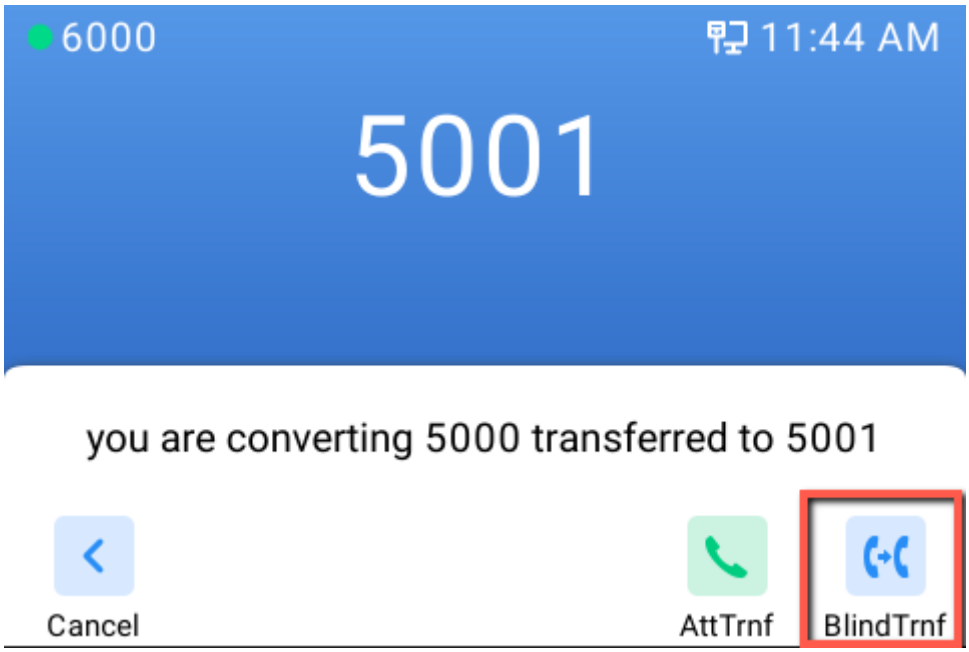
- **Attended Transfer**

1. Alice is talking with Bob.
2. Alice presses Flash, "Transfer", or "New Call" to initiate a new call to Carl, and Bob is held automatically.
3. Carl answers the call, and Alice talks with Carl about Bob, then Alice clicks on the transfer soft key, and Bob will be transferred to Carl.



- **Blind Transfer**

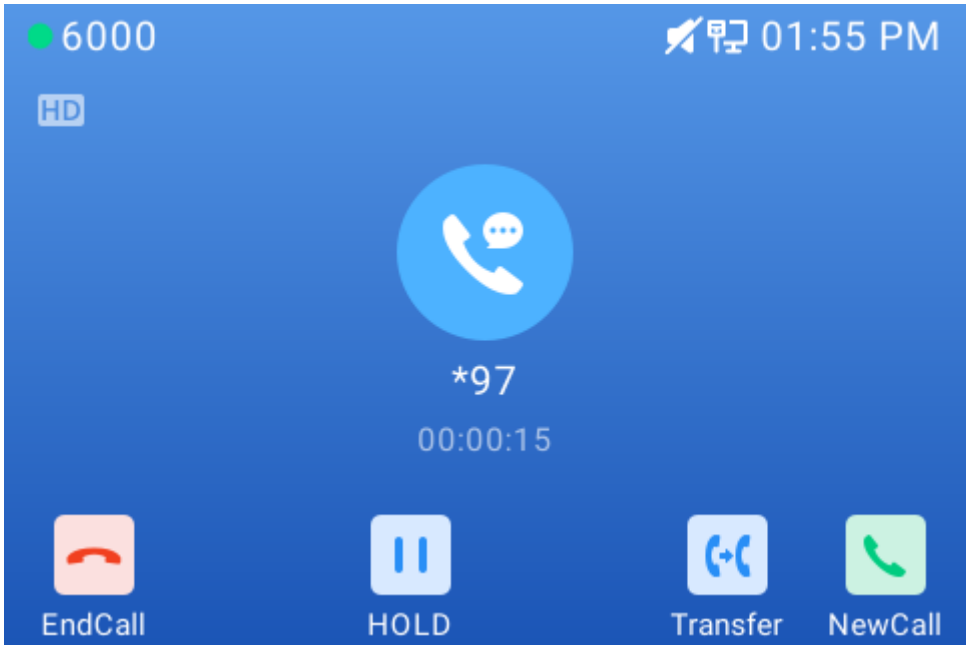
1. Alice is talking with Bob.
2. Alice presses Flash or "New call" to initiate a new call to Carl, and Bob is held automatically.
3. Alice composes Carl's extension and clicks on "Transfer", then clicks on Blind Transfer,
4. Carl will be transferred directly to Bob.
5. If Carl rejects or does not answer the call, Bob is automatically sent back to Alice, the initial Transferee.



For the blind transfer recovery to work, the "Enable Recovery on Blind Transfer" feature needs to be enabled in the web UI under Account -> Call Settings -> Transfer.

Voicemail

In case of a new voicemail, the Waiting Message Indicator will blink in green color, and a pop-up notification message will appear on the LCD screen. To listen to the voicemail, please press the voicemail button on the phone, and provide the voicemail Password



Users have the option to disable the voicemail LCD pop-up notification by unchecking **"Enable Missed Call Notification"** from the Web UI under **Phone Settings -> Call Settings -> Incoming**.

Contacts

Users can access the contact list to retrieve phone numbers and names for making calls.

To display the phonebook on the LCD screen, press "**HOLD + 3**."



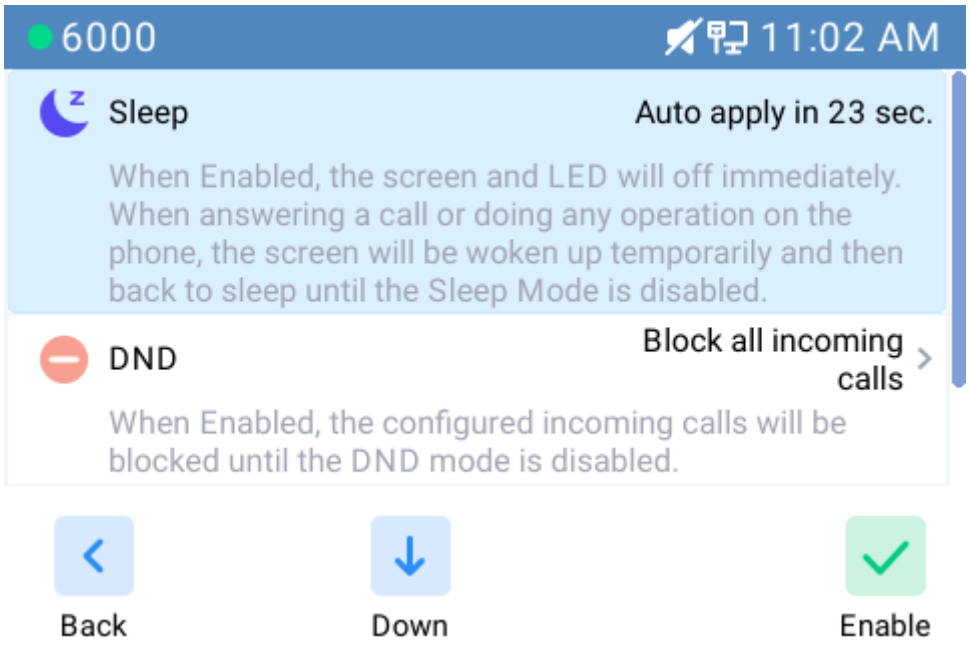
Sleep Mode

Sleep mode is a feature available on the GHP630x/W to enable the screen and LED to be off immediately. When answering a call or doing any operation on the phone, the screen will be woken up temporarily, then go back to sleep until the sleep mode is disabled.

To put the screen on Sleep mode, press the keys **"HOLD + 8."**

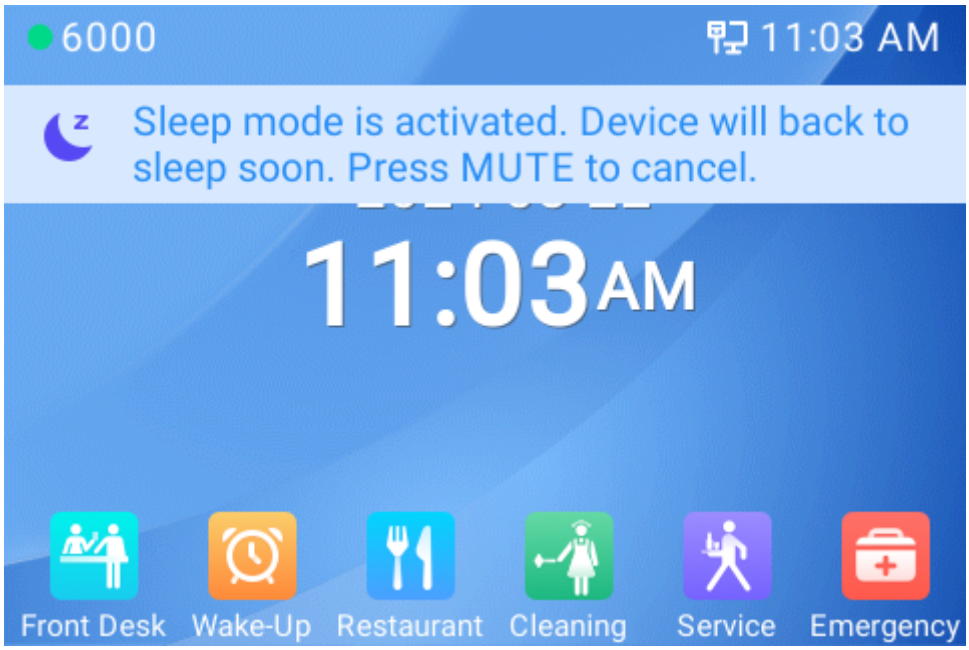
Enable Sleep Mode

To enable sleep mode, press the key , then select sleep mode and enable it



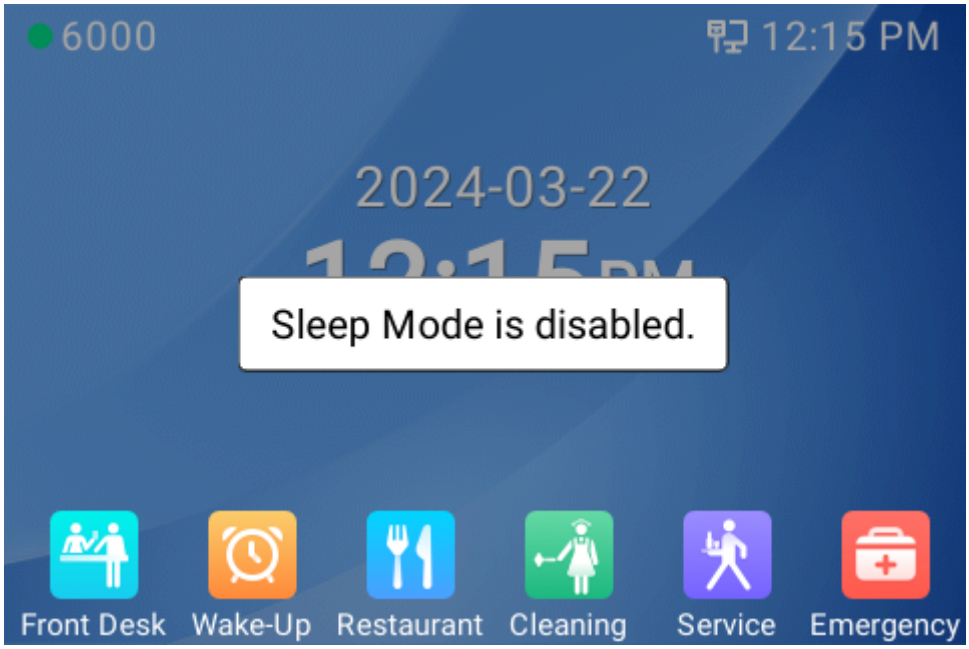
Enable Sleep Mode

Once enabled, the following message will be displayed on the main screen:



Disable Sleep Mode

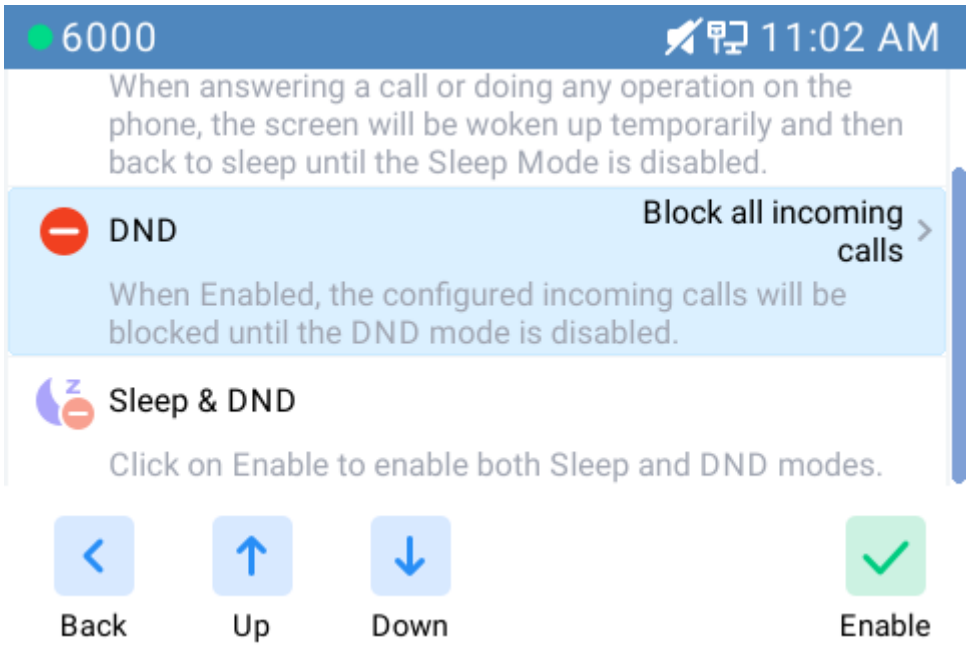
To disable sleep mode, click the mute icon , and the sleep mode will be disabled.



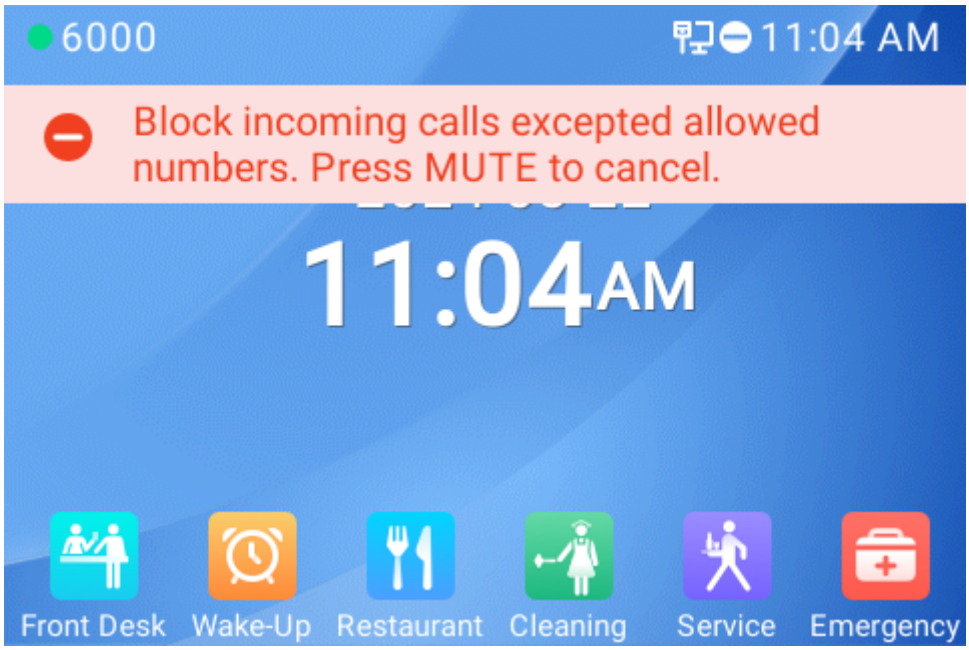
DND Mode

Enable DND

To enable Do Not Disturb mode, when the phone is idle, press the key , then enable DND mode. This will make the phone unavailable for all incoming calls



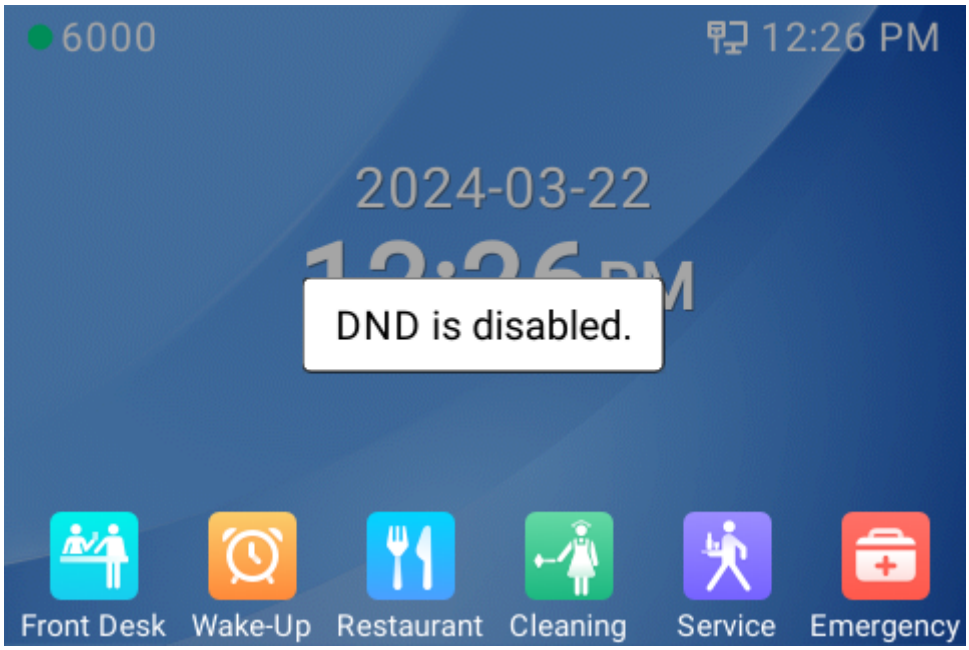
Once enabled, the following message will be displayed on the main screen



The user can enable both DND mode and sleep mode simultaneously.

Disable DND

To disable DND mode, click the mute icon , and then DND mode will be disabled.



Local Feature Codes

This feature enables the use of functions like Call Forwarding directly through the phone's local feature codes, rather than on the server's side. These feature codes are only used if the server does not provide any.

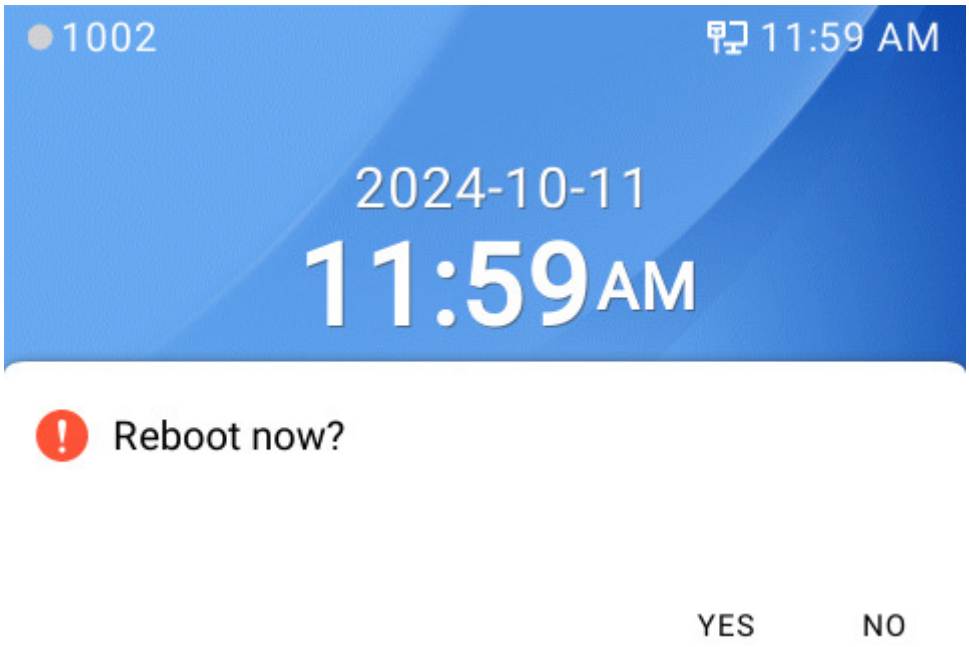
This table shows the list of the local feature codes for the GHP63x/W:

Enable Call Forward All	*72
Disable Call Forward All	*73
Enable Call Forward Busy	*90
Disable Call Forward Busy	*91
Enable Call Forward No Answer	*92
Disable Call Forward No Answer	*93
Enable Anonymous Call	*30
Disable Anonymous Call	*31
Enable Anonymous Call Once	*67
Enable Anonymous Callee Once	*68
Disable Anonymous Call Once	*82
Enable Call Waiting	*51
Disable Call Waiting	*50
Enable Call Waiting Once	*71
Disable Call Waiting Once	*70

Reboot Device

Users can reboot the GHP63x(W) using the unit's keypad. Please follow the steps below:

1. Press **"HOLD" + 4** on the main screen
2. The reboot pop-up will appear on the screen. Click on the "yes" key to reboot the device.



Reboot Device

GHP63X/W COMBO KEYS

The table below describes the function of each combination key supported by the GHP63x/W.

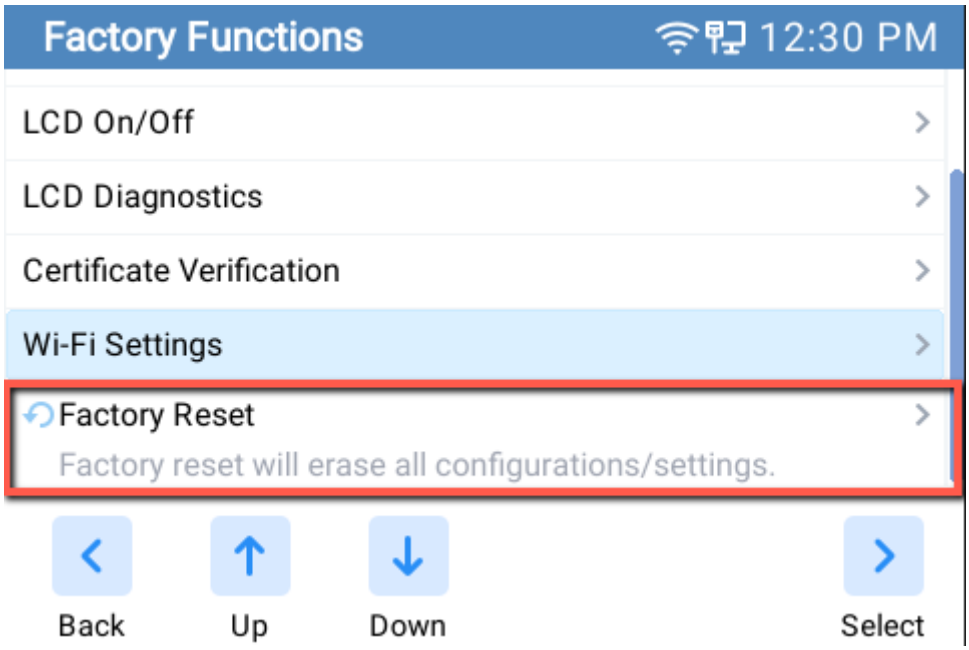
Combo Key	Function
HOLD + 0	Device Status Page (IP Address, Account Info)
HOLD + 3	Contacts Display
HOLD + 4	Soft Reboot
HOLD + 5	Screenshot
HOLD + 6	Start Provisioning
HOLD + 8	Force Screensaver

RESTORE FACTORY DEFAULT SETTINGS

Restore to Factory Default via LCD menu

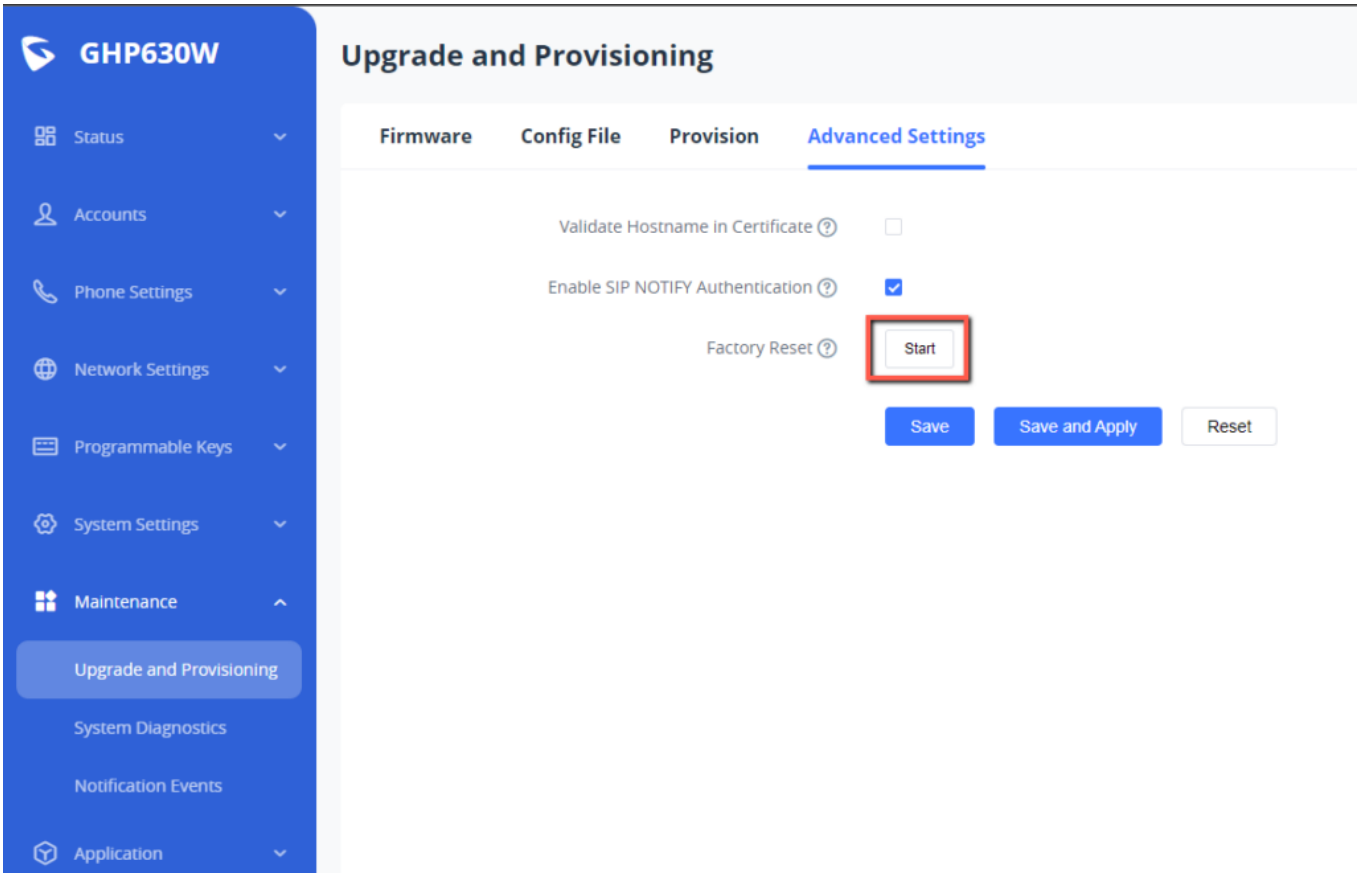
To restore the GHP63x/W to factory settings using the keypad lock :

1. Press **"HOLD" + 2** to access the factory functions of the GHP63x/W from the LCD
2. From the list of available options, select "Factory Reset" to perform a factory reset on the phone.



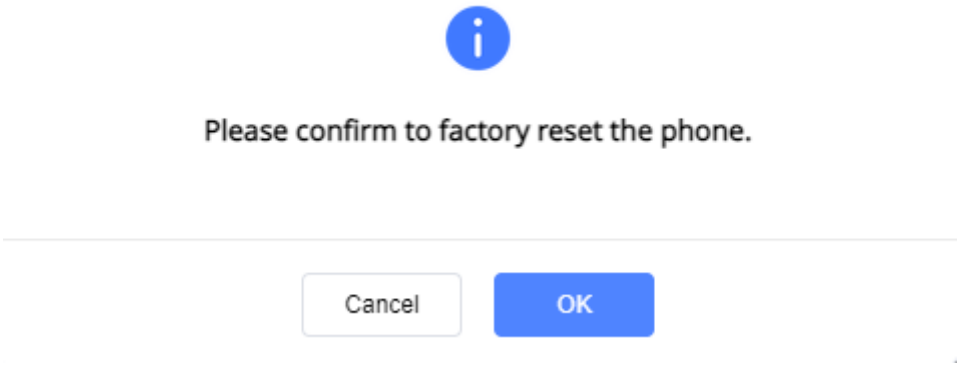
Restore to Factory Default via Web GUI

To reset the GHP63x to its factory settings using the web GUI, please navigate to **Upgrade and Provisioning** -> **Advanced Settings,** then click on the **Start** button to start the factory reset process.



Factory Reset via Web GUI

The factory reset will immediately start after you click **OK**.



Factory Reset Confirmation

Once the process of resetting to factory settings has started, it cannot be canceled, and all the configuration will be lost. To avoid losing your configuration, please back it up first.

CHANGELOG

This section documents significant changes from previous versions for the user guide of the GHP63x. Only major new features or major document updates are listed here. Minor updates for corrections or editing are not documented here.

Firmware 1.0.1.52

- No major changes

Firmware 1.0.1.50

- No major changes

Firmware 1.0.1.45

- Added Security Version to About phone information. [Security Version]

Firmware 1.0.1.41

- No major changes.

Firmware 1.0.1.40

- No major changes.

Firmware 1.0.1.28

- Added ability to disable missed calls and voicemail notifications. [Voicemail][Receiving Calls]

Firmware 1.0.1.26

- No major changes.

Firmware 1.0.1.24

- No major changes.

Firmware 1.0.1.23

- Disables web access while in-call to help improve performance. [Completing Calls]

Firmware 1.0.1.13

- This is the initial firmware.