

# HCS

MISSION CRITICAL



# INF2616



# 911inform INF2616

## Quick Start Guide

This guide serves as a quick-use guide for the HCS INF2616 6-Line phone system. Reproduction or transmittal of the contents without the express written permission of Hunter Carrier Services is not permitted. Information within this guide is subjetc to change without notice.

## INF2616

Built for the needs of busy desktop workers and designed for easy deployment by enterprises, service providers and other high-volume markets, the INF2616 offers an easy-to-use and easy-to-deploy voice platform. Grandstream's GRP2616 is a high-end carrier-grade IP phone designed with zero-touch provisioning for mass deployment and easy management. It supports 6 lines and 6 SIP accounts while featuring a sleek design and a suite of

next-generation features including integrated Wi-Fi, Bluetooth support, 48 virtual multi-purpose keys (MPKs), dual Gigabit ports and more. This device features a 4.3 inch color LCD screen with swappable face plates to allow for easy logo customization and an additional 2.4 inch display screen. The GRP series includes carrier-grade security features to provide enterprise-level security, including secure boot, dual firmware images and encrypted data storage.

## HCS and 911inform

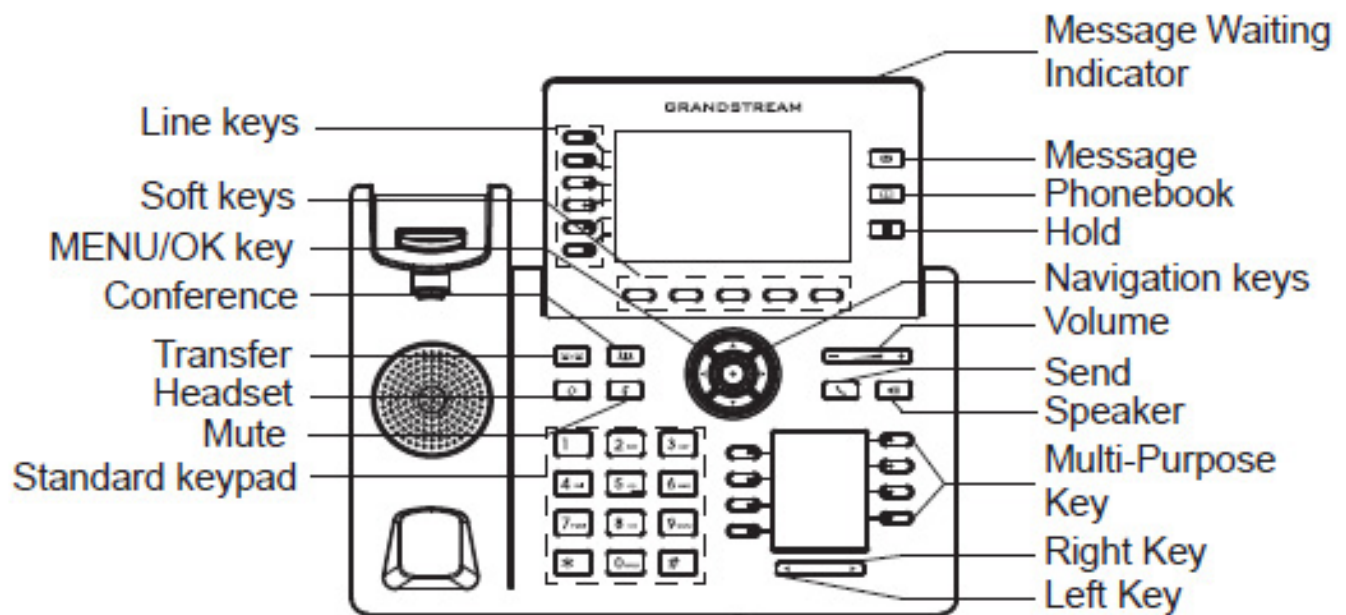
HCS utilizes 911inform hardware for carrier services deployments.

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# Phone Description

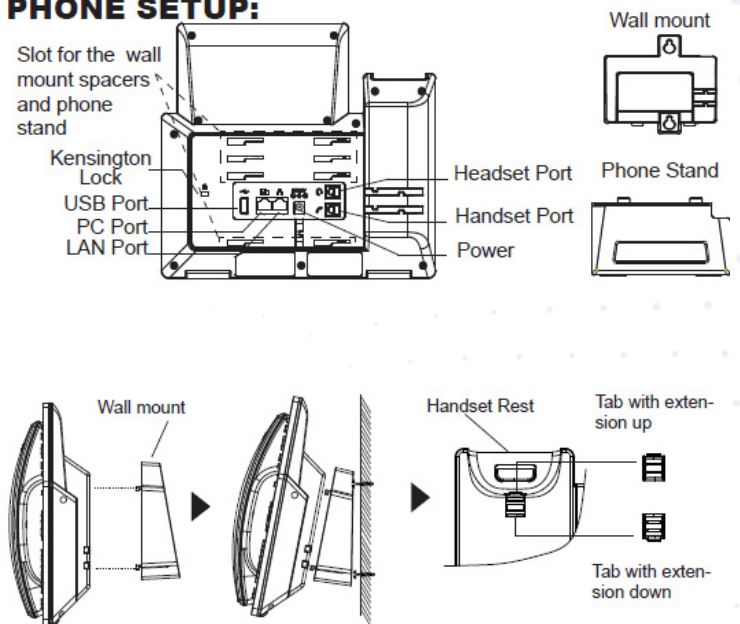


# Installation

## Wall Mount Installation

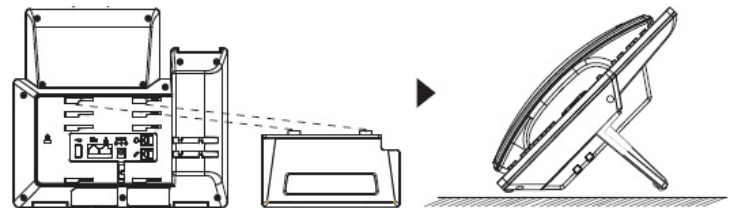
1. Attach the wall mount spacers to the slot for wall mount spacers on the back of the phone.
2. Attach the phone to the wall via the wall mount hole.
3. Pull out the tab from the handset cradle (see figure to right):
4. Rotate the tab and plug it back into the slot with the extension up to hold the handset while the phone is mounted to the wall (see figure to right):

### PHONE SETUP:



## Phone Stand Installation

1. For installing 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 (upper half, bottom part).



## Connecting the Phone

1. Connect the handset and main phone case with the phone cord.
2. Connect the 12V DC output plug to the power jack on the phone; plug the power adapter into an electrical outlet.
  - a. NOTE: If a PoE switch is used in Step 3, this step can be skipped.
3. Network connection is possible using two methods, described below:
  - a. Ethernet:
    - i. Connect the LAN port of the phone to the RJ-45 socket of a hub/switch or a router (LAN side) using the Ethernet cable.
  - b. Wi-Fi:
    - i. On the LCD menu, navigate to "System > WiFi Settings" and enable Wi-Fi.
    - ii. Select "Scan" and the phone will automatically start scanning within the range.
    - iii. A list of Wi-Fi networks will be displayed; select the desired network, and if required, enter the correct password.
4. The LCD will display provisioning or firmware upgrade information; before continuing, please wait for the "Date/Time" display to prompt.
5. Using the phone-embedded web server or keypad configuration menu, the phone can be further configured using a static IP or DHCP.

# Basic Phone Operation

## Use of the Headset or Speaker

1. Use the "Speaker" button to turn speaker ON/OFF.
2. Use the "Headset" button to use the headset once it has been connected.

## Making a Call

1. Take the Handset/Headset off-hook or press the "Speaker" button or an available LINE key (activates speakerphone).
2. The line will have dial tone and the corresponding line's LED will turn green.
3. If you wish, select another LINE key (alternative SIP account).
4. Enter the phone number.
5. Press the "Send" button or press the "Dial" soft key.

## Redial

1. Press the "Redial" softkey to call the last dialed number.
  - a. NOTE: The phone will redial using the same SIP account as was used for the last call.

## Answering Calls

### Single Incoming Call:

1. Answer call by taking Handset/Headset off hook or pressing "Speaker" or by pressing the corresponding account LINE key.

### Multiple Incoming Calls::

1. When there is a call waiting, users will hear a "Call Waiting" tone.
2. The next incoming call will appear on the screen.
3. Answer the incoming call by pressing the "Answer" softkey.
4. The current call will be put on hold.
5. Toggle between the calls using the "Up" or "Down" buttons.

## Ending a Call

1. End a call by pressing the "End Call" softkey or by hanging up the phone.

## Call Hold/Resume

1. Hold: Place a call on "hold" by pressing the "Hold" softkey.
2. Resume: Resume a call by pressing the corresponding blinking LINE key.

## Call Transfer

### Blind Transfer:

1. Press the "Transfer" button.
2. Dial the number and press the "BlindTrnf" softkey to complete transfer of the active call.

### Attended Transfer:

1. Press the "Transfer" button and the active LINE will be placed on hold automatically.
2. Dial the number; once the call is established, press the "AttTmf" softkey.
3. Once the call is answered, press the "Transfer" softkey.
4. After the call is transferred, the phone will display an idle screen.

### Dynamic Attended Transfer:

1. Set "Attended Transfer Mode" to "Dynamic" on Web GUI.
2. Establish one call first.
3. Press the "Tranfer" key to bring up a new line, and the first call will automatically be placed on hold.
4. Dial the number and press the "Send" button to make a second call.
5. Press "Transfer" again to make the transfer.
  - a. Note: For Dynamic Attended Transfer, after dialing out the number for the second call, when the second call is not established yet (ringing), pressing "Cancel" will hang up the second call. If the second call is established (answered), pressing "Split" will resume the second call and keep the first on hold.
  - b. Note: Make sure that the "Disable Transfer" option is set to "No" from Web UI.

## 3-Way Conference

### Initiate a Conference Call::

1. Assuming a conversation is live and wish to add a third party, press the "Conference" button to bring up the "Conference Dialing" screen.
2. Dial the third party number, followed by the "Send" key.
3. When the call is established to the third party, press the "Conference" button to initiate.

### Cancel a Conference Call:

1. Press the "Kick" softkey on the "Conference Dialing" screen to remove one party and resume the two-way conversation.

### Hold the Conference:

1. Press the "Hold" button to hold the conference call with all parties on hold.
2. Press the "ReConf" softkey to resume the conference call, or select the corresponding blinking LINE key to speak with an individual party.

### End the Conference:

1. The conference will be terminated for all three parties if the initiator hangs up or presses the "EndCall" softkey.

## **Voicemail Message**

1. A blinking green MWI (Message Waiting Indicator) indicates a message is waiting.
2. Press the "Message" button to retrieve the message. An IVR will prompt the user through the process of message retrieval.
3. Press a specific LINE to retrieve messages from a specific line account.
  - a. NOTE: Each account requires a voicemail portal number configured in the "Voicemail User ID" field.

## **Mute/Delete**

1. Press the "Mute" button to mute/unmute the microphone.
2. The Mute icon indicates whether the microphone is muted.

## **Volume Adjustments**

1. Use the "Volume" button to adjust the ring volume when the phone is idle.
2. Press the "Volume" button during an active call to adjust the call volume.

## **BLF (Busy Lamp Field)**

1. BLF mode allows users to monitor status (available, ringing, busy) of an extension.
2. Select the "Account" to monitor the BLF status.
3. Enter the extension number in the "Value" field to be monitored.

## **Paging (Internal)**

1. On the keypad, dial \*80 followed by the desired party's extension.

## **Contacts**

1. Press the "Contacts" button and a contact list will appear.
2. Highlight and select a contact from the list and press the "OK" button to dial the extension or number.
3. To add a new Contact, press "New" on the Contact List.
  - a. Use the dial pad to enter name, details, phone number, or extension in the respective fields.
  - b. Press "Save" to complete adding the contact to the list.



## Call Forwarding

1. Press the "Features" key and select "Forward All."
2. Enter the desired phone number or extension and press "OK."
3. The phone lines on the phone will flash between the name and the forward destination.
  - a. Calls to the extension will not ring the phone and instead ring the forward destination.
4. To turn off, press the "Features" key and select "Cancel Call Forwarding Always."

## Do Not Distrurb

1. When not on a call, press the "Mute" button.
  - a. The screen will display "Do Not Distrurb."
2. While active, any calls to the phone will not ring the phone and they will be directed to Voicemail.
3. To disable, press the "Mute" button again.

## Call Parking

1. Parking is a public hold.
2. When on a call, press the "Park" button, which will light up red on all other phones that have the "Park" button.
3. Press the "Park" button on any phone with it enabled to answer the call from that phone.
4. To configure, select "Account" and enter the call park extension in the "Value" field to park/pick up the call.

## Panic Button

1. Press the "Panic" Button to initiate an emergency alert with 911inform.
2. The "Panic" Button will automatically dial 911 and create an emergency notification in 911inform.

## Threat Button

1. The "Threat" button records and transcribes a threatening inbound call.
  - a. Currently, the functionality related to inbound calls only.
2. Press the "Threat" button when receiving a call that is suspicious or hazardous.
3. Threat functions:
  - a. Creates a 911inform notification through the organization
  - b. Call transcription
  - c. Call recording
  - d. Gathers information regarding the caller, including phone number and caller ID (if available)
  - e. HCS will grade the call, using stir/shaken attestation protocols, to determine the validity of the caller and threat; the grade will be recorded within the 911inform notification created by the "Threat" button for interpretation by organization security personnel.



# Technical Specifications

<b>Protocols/Standards</b>	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
<b>Network Interfaces</b>	Dual switched auto-sensing 10/100/1000 Mbps Gigabit Ethernet ports with integrated PoE
<b>Graphic Display</b>	4.3 inch (480x272) TFT color LCD, 2.4 inch (240x320) additional screen
<b>Wi-Fi</b>	Yes, Integrated dual-band (2.4GHz and 5GHz) Wi-Fi 6 (802.11a/b/g/n/ac/ax) - hardware version 5.0 and above
<b>USB</b>	Yes
<b>Bluetooth</b>	Yes, integrated
<b>Feature Keys</b>	6 dual-color line keys with up to 16 SIP accounts(can be digitally programmed as up to 24 provisionable BLF/fast-dial keys), 5 XML programmable context sensitive softkeys, 5 navigation/menu keys, 10 dedicated function keys for:MESSAGE(with LED indicator),PHONEBOOK,TRANSFER,CONFERENCE,HOLD, HEADSET, MUTE, SEND/ REDIAL, SPEAKERPHONE, VOL+, VOL- THREAT TRACKING, PANIC BUTTON
<b>Auxiliary Port</b>	RJ9 headset jack (allowing EHS with Plantronics headsets), USB
<b>Voice Codecs and Capabilities</b>	Support for G.729A/B, G.711μ/a-law, G.726, G.722(wide-band), G.723, iLBC, OPUS, in-band and out-of-band DTMF(in audio, RFC2833, SIP INFO), VAD, CNG, AEC, PLC, AJB, AGC
<b>Telephony Features</b>	Hold, transfer (blind and assisted), forward, conference, BLF (Busy Lamp Field), paging, call forward, DND, contacts, speed dial, call parking, voicemail, threat tracking, webphone, 911inform Panic Button
<b>HD Audio</b>	Yes, HD handset and speakerphone with support for wideband audio, and dual microphone.
<b>Extension Module</b>	Yes, GBX20
<b>Base Stand</b>	Yes, 2 angle positions available, Wall Mountable (Wall Mount *sold separately)
<b>QoS</b>	Layer 2 QoS (802.1Q, 802.1P) and Layer 3 (ToS, DiffServ, MPLS) QoS
<b>Security</b>	User and administrator level passwords, MD5 and MD5-sess based authentication, 256-bit AES encrypted configuration file, SRTP, TLS, 802.1x media access control, secure boot.
<b>Multi-Language</b>	English, German, Italian, French, Spanish, Portuguese, Russian, Croatian, Chinese, Korean, Japanese and more
<b>Upgrade/Provisioning</b>	Firmware upgrade via FTP/TFTP/TFTPS/HTTP/HTTPS, mass provisioning using GDMS/TR-069 or AES encrypted XML configuration file.
<b>Power &amp; Green Energy Efficiency</b>	Universal power adapter included: Input: 100-240V; Output: +12V, 1A; Integrated Power-over-Ethernet (802.3af) IEEE 802.3az Energy-Efficient Ethernet Max power consumption 9.5W (power adapter) or 10.8W (PoE)
<b>Temperature &amp; Humidity</b>	Operation: 0°C to 40°C Storage: -10°C to 60°C Humidity: 10% to 90% Non-condensing
<b>Package Content</b>	INF2616 phone, handset with cord, phone stand, 12V power adapter, network cable, Quick Installation Guide, GPL license
<b>Physical</b>	Unit weight:1020g; Package weight:1650g; Dimension: 247mm x 228mm x 82.4mm
<b>INF2624 Compliance</b>	FCC: Part 15 Class B; Part 15 Subpart C 15.247; Part 15 Subpart E 15.407; FCC Part 68 HAC; Part 1 Subpart I(MPE) CE: EN 55032; EN 55035; EN 61000-3-2; EN 61000-3-3; EN 62368-1; EN 301489-1; EN 301489-17; EN 300328; EN 301893; EN 62311 RCM: AS/NZS CISPR32; AS/NZS 4268; AS/NZS 62368.1; AS/CA S004; AS NZS 2772.2 IC: ICES-003; CS-03; RSS-247; RSS-102(MPE).