

# Grandstream Networks, Inc.

DP755/DP730/DP722

**User Guide** 



# DP755/DP730/DP722 - User Guide

# **WELCOME**

Thank you for purchasing Grandstream DP755 DECT Cordless VoIP Base Station and DP722/DP730 DECT Cordless HD Handsets.

The DP755 is a powerful Dect VoIP Phone Base station that pairs with up to 10 of Grandstream's DP series DECT handsets to offer mobility to business and residential users. It supports a range of up to 400 meters with DP730 and up to 350 meters with DP722/DP720 outdoors and 50 meters indoors to give users the freedom to move around their work or home space, delivering efficient flexibility. This DECT VoIP Phone Base Station supports up to 10 handsets and 20 SIP accounts while also offering 3-way voice conferencing, full HD audio, and integrated PoE. A shared SIP account on all handsets will add seamless unified features that give users the ability to answer all calls regardless of location in real-time. The DP755 supports a variety of auto-provisioning methods and TLS/SRTP/HTTPS encryption security. When paired with Grandstream's DP720, DP722, or DP730 handsets, the DP755 offers a powerful cordless DECT solution for any business or residential user.

The DP730 is a DECT cordless IP phone that allows users to mobilize their VoIP network throughout any business, warehouse, retail store, or residential environment. It is supported by Grandstream's DP750, DP752, and DP755 DECT VoIP base stations and delivers a combination of mobility and top-notch telephony performance. Up to ten DP730 handsets are supported on each base station while each DP730 supports a range of up to 400 meters outdoors and 50 meters indoors from the base station. It touts a suite of robust telephony features including support for up to 10 SIP accounts and 2 concurrent calls per handset, full HD audio, a 3.5mm headset jack, push-to-talk, a speakerphone, and more. When paired with Grand stream's DECT Base Stations, the DP730 offers a powerful cordless DECT solution for any business or residential user.

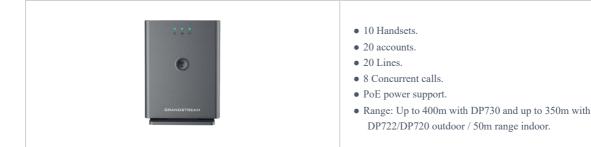
The DP722 is a DECT cordless IP phone that allows users to mobilize their VoIP network throughout any business, warehouse, retail store, or residential environment. It is supported by Grandstream's DP750, DP752, and DP755 DECT VoIP base stations and delivers a combination of mobility and top-notch telephony performance. Up to ten DP722 handsets are supported on each base station while each DP722 supports a range of up to 350 meters outdoors and 50 meters indoors from the base station. It touts a suite of robust telephony features including support for up to 20 SIP accounts and two concurrent calls per handset, full HD audio, a 3.5mm headset jack, push-to-talk, a speakerphone and more. When paired with Grandstream's DECT Base Stations, the DP722 offers a powerful cordless DECT solution for any business or residential user.

# PRODUCT OVERVIEW

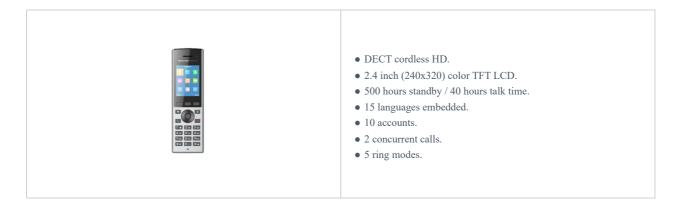
# **Feature Highlights**

The following tables contain the major features of the DP755 / DP730 / DP722:

#### o DP755

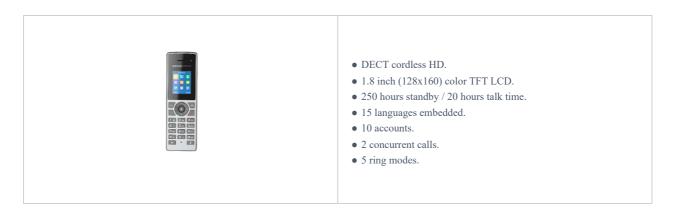


DP755 Features at a Glance



DP730 Features at a Glance

### o DP722



DP722 Features at a Glance

# **DP755 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 the Base station DP755.

Air Interface	Telephony standards: DECT Frequency bands:  • 1880 – 1900 MHz (Europe), 1920 – 1930 MHz (US)  • 1910 – 1920 MHz (Brazil), 1786 – 1792 MHz (Korea)  • 1893 – 1906 MHz (Japan), 1880 – 1895 MHz (Taiwan)  Number of channels: 10 (Europe), 5 (US, Brazil or Japan), 3 (Korea), 8 (Taiwan)  Range: up to 400 meters outdoor and 50 meters indoor
Peripherals	3 LED indicators: Power, Network, DECT. Pairing/Paging button. One 10/100 Mbps auto-sensing Ethernet port with integrated PoE
Protocols/Standards	SIP RFC3261, TCP/IP/UDP, RTP/RTCP, HTTP/HTTPS, ARP/RARP, ICMP, DNS (A record, SRV, NAPTR), DHCP, PPPoE, SSH, TFTP, NTP, STUN, SIMPLE, LLDP-MED, LDAP, TR-069, 802.1x, TLS, SRTP
Voice Codecs	G.711µ/a-law, G.723.1, G.729A/B, G.726-32, iLBC, G.722, OPUS, G.722.2/AMR-WB (special order), in-band and out-of-band DTMF (in audio, RFC2833, SIP INFO), VAD, CNG, PLC, AJB

Hold, transfer, forward, 3-way conference, push to talk, intercom, downloadable phonebook (XML, LDAP, up to 3000 entries), call waiting, call log (up to 300 records), auto answer, flexible dial plan, server redundancy and fail-over
Layer 2 QoS (802.1Q, 802.1p) and Layer 3 QoS (ToS, DiffServ, MPLS)
User and administrator level access control, MD5 and MD5-sess based authentication, 256-bit AES encrypted configuration file, TLS, SRTP, HTTPS, 802.1x media access control, DECT authentication & encryption
Chinese Simple, Chinese Tradition, Czech, Danish, Dutch, English, Estonian, Finnish, French, German, Hebrew, Hungarian, Japanese, Korean, Norwegian, Portuguese, Romanian, Spanish, Swedish, Turkish.
Firmware upgrade via HTTP/HTTPS or FTP/FTPS, mass provisioning using TR-069 or AES encrypted XML configuration file
Up to twenty (20) distinct SIP accounts per system  Each handset may map to any SIP account(s)  Each SIP account may map to any handsets(s)
Parallel Mode: All phones ring concurrently; after one phone answers, the remaining available phones can make new calls
Universal Power Supply Input AC 100-240V 50/60Hz; Output 5VDC, 1A; Micro-USB connection; PoE: IEEE802.3af Class 1, 0.44W–3.84W
Base unit, Universal Power Supply, Ethernet cable, Quick Installation Guide, GPL Statement
to be defined.
Base unit: 140g; Universal power supply: 50g; Package: 370g
Operation: -10° to 50°C (14 to 122°F); Storage: -20° to 60°C (-4 to 140°F); Humidity: 10% to 90% non-condensing
FCC: FCC Part 15B; FCC Part 15D; SAR (FCC 47 CFR Part2.1093; IEEE 1528; IEC 62209-2); FCC Part68 HAC; FCC ID  CE: EN 55032; EN 55035; EN 61000-3-2; EN 61000-3-3; EN 60950-1; EN 301 489-1/-6; EN 301 406; EN 50332-2; SAR(EN50360; EN50566; EN 50663; EN62209-1; EN62209-2; EN 62479); RED NB Cert  RCM: AS/NZS CISPR32; AS/NZS 60950.1; AS/CA S004; AS/ACIF S040. ANATEL, EAC, UL(adapter).

DP755 Technical Specifications

# **DP730 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 the DP730 handsets.

Air Interface	Telephony standards: DECT Frequency bands:  • 1880 – 1900 MHz (Europe), 1920 – 1930 MHz (US)  • 1910 – 1920 MHz (Brazil), 1786 – 1792 MHz (Korea)  • 1893 – 1906 MHz (Japan), 1880 – 1895 MHz (Taiwan)  Number of channels: 10 (Europe), 5 (US, Brazil or Japan), 3 (Korea), 8 (Taiwan)  Range: up to 400 meters outdoor and 50 meters indoor
Peripherals	2.4 inch (240×320) color TFT LCD 27 keys including 3 soft keys, 5 navigation/ menu keys, 4 dedicated function keys for SEND, POWER/END, SPEAKERPHONE, MUTE, 3 side keys including 2 volume (up and down) and 1 Push-to-Talk key 3-color MWI LED 3.5mm headset jack Proximity and accelerometer sensors Backlit keypad Removable belt clip Micro-USB port for alternative charging and non-battery operation
Protocols/Standards	Hearing Aid Compatibility (HAC) compliant
Voice Codecs	G.722 codec for HD audio and G.726 codec for narrow band audio (G.711µ/a-law, G.723.1, G.729A/B, iLBC and OPUS are supported via companion DECT base station DP755), AEC, AGC, Ambient noise reduction on microphone capturing and advanced noise suppression on audio playing
Telephony Features	Hold, transfer, forward, 3-way conference, push-to-talk, intercom, call park, call pickup, downloadable phonebook, call waiting, call log, auto answer, click-to-dial, flexible dial plan
HD Audio	Yes, in both Handsets and Speakerphone modes
Security	DECT authentication & encryption
Multi-language	Chinese Simple, Chinese Tradition, Czech, Danish, Dutch, English, Estonian, Finnish, French, German, Hebrew, Hungarian, Japanese, Korean, Norwegian, Polish, Portuguese, Romanian, Spanish, Turkish.
Upgrade/ Provisioning	Software Upgrade Over-The-Air (SUOTA), handsets provisioning Over-The-Air
Multiple Line Access	Each handset may access up to 10 lines
Power & Green Energy Efficiency	Universal Power Supply Input AC 100-240V 50/60Hz; Output 5VDC 1A; Micro-USB connection; Rechargeable Li-ion battery (500 hours of standby time and 40 hours of talk time)
Package Content	Handset unit, universal power supply, charger cradle, belt clip, 1 battery, Quick Installation Guide
Dimensions (H x W x D)	Handset: 168.5 x 52.5 x 21.8mm; Charger cradle: 76 x 73 x 81mm

Weight	Handset: 180g; Charger cradle: 78g; Universal power supply: 50g; Package: 465g
Temperature and Humidity	Operation: -10° to 50°C (14 to 122°F); Charging: 0 to 45°C (32 to 113°F); Storage: -20° to 60°C (-4 to 140°F); Humidity: 10% to 90% non-condensing
Compliance	FCC: FCC Part 15B; FCC Part 15D; SAR (FCC 47 CFR Part2.1093; IEEE 1528; IEC 62209-2); FCC Part68 HAC; FCC ID  CE: EN 55032; EN 55035; EN 61000-3-2; EN 61000-3-3; EN 60950-1;EN 301 489-1/-6; EN 301 406; EN 50332-2; SAR(EN50360;EN50566;EN 50663;EN62209-1; EN62209-2; EN 62479); RED NB Cert  RCM: AS/NZS CISPR32; AS/NZS 60950.1;AS/CA S004;AS/ACIF S040. ANATEL, EAC, UL(adapter).

DP730 Technical Specifications

# **DP722 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 the DP722 handsets.

Air Interface	Telephony standards: DECT Frequency bands:  • 1880 – 1900 MHz (Europe), 1920 – 1930 MHz (US)  • 1910 – 1920 MHz (Brazil), 1786 – 1792 MHz (Korea)  • 1893 – 1906 MHz (Japan), 1880 – 1895 MHz (Taiwan)  Number of channels: 10 (Europe), 5 (US, Brazil or Japan), 3 (Korea), 8 (Taiwan)  Range: up to 350 meters outdoor and 50 meters indoor
Peripherals	1.8 inch (128×160) color TFT LCD 23 keys including 2 softkeys, 5 navigation / menu keys, 4 dedicated function keys for SEND, POWER/END, SPEAKERPHONE, MUTE 3-color MWI LED 3.5mm headset jack Removable belt clip Micro-USB port for alternative charging and non-battery operation
Protocols/Standards	Hearing Aid Compatibility (HAC) compliant
Voice Codecs	G.722 codec for HD audio and G.726 codec for narrow band audio (G.711µ/a-law, G.723.1, G.729A/B, iLBC and OPUS are supported via companion DECT base station DP755), AEC, AGC, Ambient noise reduction on microphone capturing and advanced noise suppression on audio playing
Telephony Features	Hold, transfer, forward, 3-way conference, push-to-talk, intercom, call park, call pickup, downloadable phonebook, call waiting, call log, auto answer, click-to-dial, flexible dial plan
HD Audio	Yes, in both Handsets and Speakerphone modes
Security	DECT authentication & encryption

Multi-language	Chinese Simple, Chinese Tradition, Czech, Danish, Dutch, English, Estonian, Finnish, French, German, Hebrew, Hungarian, Japanese, Korean, Norwegian, Polish, Portuguese, Romanian, Spanish, Turkish.
Upgrade/ Provisioning	Software Upgrade Over-The-Air (SUOTA), handsets provisioning Over-The-Air
Multiple Line Access	Each handset may access up to 10 lines
Power & Green Energy Efficiency	Universal Power Supply Input AC 100-240V 50/60Hz; Output 5VDC 1A; Micro-USB connection; Rechargeable Li-ion battery (500 hours of standby time and 40 hours of talk time)
Package Content	Handset unit, universal power supply, charger cradle, belt clip, 1 battery, Quick Installation Guide
Dimensions (H x W x D)	Handset: 158 x 50 x 28.1mm; Charger cradle: 81.15 x 75.89 x 36.36mm
Weight	Handset: 110g; Charger cradle: 44g; Universal power supply: 50g; Package: 328g
Temperature and Humidity	Operation: -10° to 50°C (14 to 122°F); Charging: 0 to 45°C (32 to 113°F); Storage: -20° to 60°C (-4 to 140°F); Humidity: 10% to 90% non-condensing
Compliance	FCC: FCC Part 15B; FCC Part 15D; SAR (FCC 47 CFR Part2.1093; IEEE 1528; IEC 62209-2); FCC Part68 HAC; FCC ID CE: EN 55032; EN 55035; EN 61000-3-2; EN 61000-3-3; EN 60950-1;EN 301 489-1/-6; EN 301 406; EN 50332-2; SAR(EN50360;EN50566;EN 50663;EN62209-1; EN62209-2; EN 62479); RED NB Cert RCM: AS/NZS CISPR32; AS/NZS 60950.1;AS/CA S004;AS/ACIF S040. ANATEL, EAC, UL(adapter).

DP722 Technical Specifications

# **GETTING STARTED**

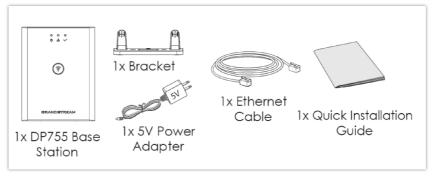
This chapter provides basic installation instructions including the list of the packaging contents and also information for obtaining the best performance with the DP730/DP722 DECT Cordless HD Handsets and the DP755 DECT Cordless VoIP Base Station.

# **Equipment Packaging**

### o DP755

DP755	<ul> <li>1 Base unit</li> <li>1 Universal power supply 5V</li> <li>1 Bracket</li> <li>1 Ethernet cable</li> <li>1 Quick Installation Guide</li> </ul>
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# Equipment Packaging – DP755

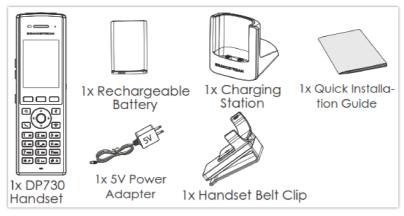


DP755 Package Content

### o DP730

DP730	<ul> <li>1 Handset unit</li> <li>1 Universal power supply 5V</li> <li>1 Charging station</li> <li>1 Handset Belt</li> <li>1 Rechargeable Li-ion battery</li> <li>1 Quick Installation Guide</li> </ul>
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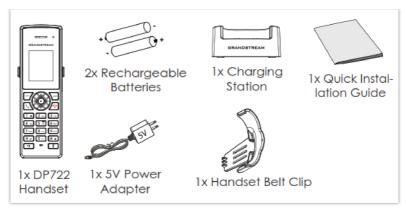
# Equipment Packaging – DP730



DP730 Package Content

# o DP722

DP722	<ul> <li>1 Handset unit</li> <li>1 Universal power supply 5V</li> <li>1 Charging station</li> <li>1 Handset Belt</li> <li>2 Rechargeable batteries</li> <li>1 Quick Installation Guide</li> </ul>
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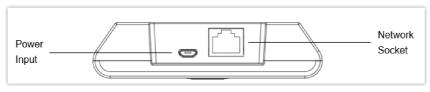
DP722 Package Content

#### Note

Check the package before installation. If you find anything missing, contact your system administrator.

# **Connecting DP755**

To set up the DP755 DECT Cordless VoIP Base Station, please follow the steps below:



DP755 Back View

You have two options for power and network connection of the base station: AC power or Power over Ethernet (PoE).

#### Note

For better signal range, we recommend installing DP755 with LED side facing toward the usage area. Ceiling mount is recommended for better coverage.

#### Connecting via AC power

- 1. Connect the micro-USB connector into the related port on the base station and connect the other end of the power adapter into an electrical power outlet.
- 2. Connect the supplied Ethernet cable between the Internet port on the base station and the Internet port in your network or the switch/hub device port.

# **Connecting via PoE**

To connect the base station using PoE, you need to connect the Ethernet cable provided (or 3rd party network cable) between the Network Socket on the base station to Ethernet port of your PoE switch/hub.

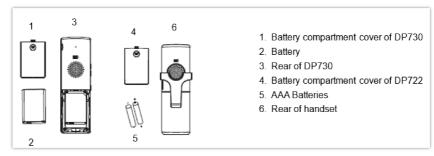
# Setting up DP730/DP722 Handsets

Please follow below steps to insert batteries into the Handsets:

- o Open the battery compartment cover.
- o For DP730: Inset Li-ion battery with the electrodes in the bottom left corner.
- For DP722: Insert AAA batteries with correct polarity (+ / -).
- o Close the battery compartment cover.

#### Note

Please charge the batteries fully before using the Handsets for the first time.



Setting up the DP730/DP722

# **Battery Information**

DP722 Batteries Specifications	DP730 battery specifications
<ul> <li>Technology: Nickel Metal Hydride (Ni-MH)</li> <li>Size: AAA</li> <li>Voltage: 1.2V</li> <li>Capacity: 800mAh</li> <li>Charging time: 12 hours from empty to full</li> <li>Standby time: up to 250 hours</li> <li>Talk time: up to 20 hours' active talk time</li> </ul>	<ul> <li>Technology: Li-ion</li> <li>Nominal Voltage: 3.8V</li> <li>Capacity: 1500mAh</li> <li>Charging time: 12 hours from empty to full</li> <li>Standby time: up to 500 hours</li> <li>Talk time: up to 40 hours' active talk time</li> </ul>

Table 10: DP722/DP730 Battery Specifications

In order to get the best performance of your DP730/DP722 Handsets, we recommend using original batteries provided in the package or batteries compliant with above specifications.

#### Disclaimer

The abovementioned battery specifications can vary and depend on many factors (age of the battery, number of recharge cycles, real capacity...). The recharge cycles of the battery are limited; thus, it might need to be replaced if the battery performance is low. The number of charge cycles and battery life are affected by usage and configuration.

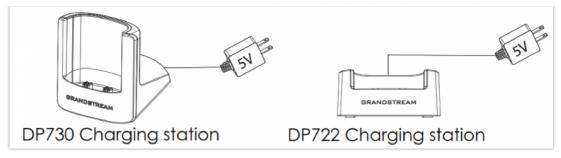
#### **Important Note**

Be careful when inserting the batteries into your handset to avoid any risk of short-circuit, which lead to damage your batteries and/or the handset itself. Do not use damaged batteries which can increase the risk of serious harm.

# **Setting up the Charge Station**

Please refer to the following steps for setting up the charge station and charging the Handsets:

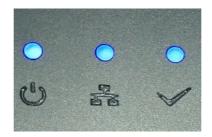
- 1. Connect the DC plug on the power adapter to the micro-USB connector on the charge station.
- 2. Connect the other end of the power adapter into an electrical power outlet.
- 3. After setting up the Handsets and the charge station, place the Handsets in the charge station.



Setting up Charging Stations

# **DP755 LED Patterns**

The DP755 has 3 LED lights on it. Please refer to the following table for the meaning of each light.



DP755 LED Patterns

LED Light	Status
<b>U</b>	Indicates Power ON/OFF.
<u></u>	Indicates status of SIP account registration and network  Solid ON: SIP account registered. Blinking: SIP account not registered or network error
<b>✓</b>	<ul> <li>Indicates status of the DECT handset registration:</li> <li>Solid ON: Handset registered to base.</li> <li>Fast Blinking (0.25s ON/0.25s OFF): Paging handset.</li> <li>Blinking (0.5s ON/0.5s OFF): Pairing mode.</li> </ul>

Table 11: DP755 LED Patterns

# **DP730/DP722 Handsets Description**

The LCD screen and the Keypad are the main hardware components of the DP730/DP722.

	Кеу	Description
1.	Earphone	Delivers audio output.
2.	LED Indication	Red: Charging. Green: Charge completed.  Blinking: Missed call(s) or Voice Mail received.
3, 5	Left and right softkeys	Correspond to functions displayed on the LCD. These functions change depending on the current context.

4.	LCD display	Shows call information, handset status icons, prompt messages, etc.
6.	4 Arrow key combination	Permits navigation of the cursor through the displayed menu options.
7.	Men/Ok key	Selects the option chosen by the cursor. (Enters the main menu from the home screen.)
8.	Off-hook / Dial key	Enters dialing mode, or dials number entered.
9.	On-hook / Power key	Terminates calls, or turns the handset on / off.
10	Alphanumeric Keypad	Provides the digits, letters, and special characters in context-sensitive applications. For + sign, press and hold key 0.
		Locks keypad against unintentional entries when keep pressing #.
11	# / Lock key	Press and hold # key for approximately 2 seconds to lock the keys.
		Press <b>Unlock</b> softkey and then # to unlock the keys.
12	Mute key	Activates or deactivates the mute feature.
13	Hands-free / Speaker key	Switches between handset and hands-free / speaker modes.
14	Microphone	Picks up audio earpiece and hands-free calls.

Table 12: Keypad Keys Description

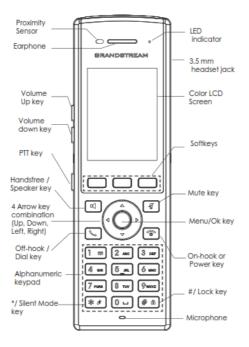


Figure 9: DP730 Keys Description

	Key	Description
1.	Proximity sensor	The proximity senor can detect and measure gravitational acceleration, tilt, vibration, altitude changes, and static position.

2.	Earphone	Delivers audio output.
3, 4	Volume up / Down Keys	Configure the handset and ringtone volume.
5.	PTT Key	PTT (Push-to-Talk) button, to initiate PTT call.
6.	Hands-free / Speaker key	Switches between Handset and Hands-free / Speaker modes.
7.	Arrow key combination (Up, Down, Left, Right)	Allows navigation of the cursor through the displayed menu options.
8.	Off-hook / Dial key	Enters dialing mode, or dials number entered.
9.	Alphanumeric Keypad	Provides the digits, letters, and special characters in context-sensitive applications. For + sign, press and hold key 0.
1 0.	* / Silent Mode key	Activates or deactivates the silent mode (no ringtone heard during incoming call) when keep pressing on * in idle screen.
1 1.	LED indicator	1dual-color LED indicator indicating power, call, battery, message waiting
1 2.	3.5 mm headset jack	Phone connector for the headphones/headsets.
1 3.	Color LCD Screen	2.4-inch (240×320) TFT color LCD
1 4.	Softkeys	Correspond to functions displayed on the LCD. These functions change depending on the current context.
1 5.	Mute	Mute microphone during conversation.
1 6.	Menu/OK key	Selects the option chosen by the cursor or enters the main menu from the home screen.
1 7.	On-hook or Power key	Terminates calls or turns the handset on / off.
1 8.	# / Lock key	Locks keypad against unintentional entries when keep pressing #.  • Press and hold # key for approximately 2 seconds to lock the keys.  • Press <b>Unlock</b> softkey and then <b>#</b> to unlock the keys.
1 9.	Microphone	Picks up audio earpiece and hands-free calls.

Table 13: Keypad Keys Description

# **DP730/DP722 Icons Description**

The following table contains description of each icon that might be displayed on the LCD screen of the DP730/DP722 Handsets.

	Battery status
	Not equipped with battery
	Battery status
	Battery empty
	Battery status
	Battery low
	Battery status
	Battery normal
	Battery status
	Battery full
	Battery status
	Charging
	Signal status
٣×	Not subscribed
_	Signal status
<b>T</b> = 1	Not in range
_	Signal status
<b>T.</b> 111	Signal very low
	Signal status
Tall	Signal low
	Signal status
Tar	Signal normal
	Signal status
Tail	Signal good
	Signal status
Tail	Signal very good
	Microphone MUTE Status
<u> </u>	OFF – Not muted ON – Muted

	Speaker status
<b>■</b> 0)	OFF – Speaker is inactivated
<b>₩</b>	ON – Speaker is activated
0	Headset icon
ए	Missed Call icon
·••	Voicemail icon
	Ringtone status
<b>5</b>	OFF – Ringtone off (Silent mode)
_	ON – Ringtone on
	Keypad Lock status
	OFF – Keypad unlock
	ON – Keypad locked
	DND Status.
•	OFF – Do Not Disturb disabled
	ON – Do Not Disturb enabled
	Call forward
<b>e</b>	Call waiting
0	Information
1	Account not registered
1	Account Registered
•	Error message
0	Handset number
٧	Incoming Call notification
<u> </u>	Outgoing Call notification
<b>₹</b> ×	Missed Call notification
<del>©</del>	Voicemail notification

1	Contacts
<u>v</u>	Call History
2.	Registration
Ö	Voice Mail
A	Preferences
7	Shortcut
<b>©</b>	Call Features
0	Status
<b>©</b>	Settings

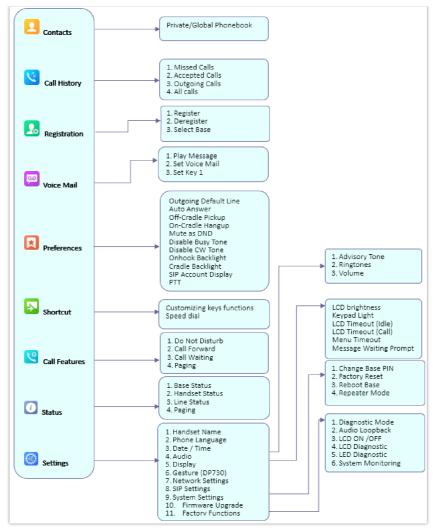
DP730/DP722 Icons Description

# DP730/DP722 Handsets Menu

The Handsets has an easy-to-use menu structure. Every menu opens a list of options. To open the main menu, press "Menu" (left softkey) when the Handsets is on and in standby mode. Press Arrow keys to navigate to the menu option you require. Then press "Select" (left softkey) or **OK/Selection key** to access further options or confirm the setting displayed. To go to the previous menu item, press "Back" (right softkey). You can press **Power** key at any time to cancel and return to standby mode. If you do not press any key, the Handsets automatically reverts to standby mode after 20 seconds.

# Note

Users can navigate by through handset menu by pressing menu number when displayed.



DP730/DP722 Menu Structure

Contacts	<ul> <li>Private: Private contacts include contacts visible in the current Handsets only.</li> <li>Global: Global phonebook contacts are the contacts shared between the Handsets subscribed to the DP755 base station.</li> <li>Note: Private/Global Phonebooks will be merged on the handset.</li> </ul>
Call History	Display the call history:  1. Missed Calls. 2. Accepted Calls. 3. Outgoing Calls. 4. All Calls.  Note: You can add contacts to Shared Contacts directly from call logs.
Registration	<ul> <li>Register: Register your handset to base station.</li> <li>Deregister: Deregister your handset from base station.</li> <li>Select Base: Select base station.</li> </ul>
Voice Mail	<ul> <li>Play Message: Play voice mail messages received.</li> <li>Set Voice Mail: Configure voice mail parameters.</li> <li>Set Key 1: Configure Key 1 as VM speed dial for selected account.</li> </ul>
Preferences	<ul> <li>Outgoing Default Line: Select account to be use by default for outgoing calls.</li> <li>Auto Answer: Enable/Disable Auto Answer. (Default is Disabled).</li> </ul>

- Off-Cradle Pickup: Enable/Disable Off-Cradle Pickup. If enabled, users can answer the calls by picking up the handset off-cradle. (Default is Disabled).
- On-Cradle Hangup: Enable/Disable On-Cradle Hangup. If enabled, users can end the call by placing the handset on-cradle. (Default is Disabled)
- Mute as DND: Enable/Disable Mute as DND. If enabled, pressing mute key on idle state will set the phone to DND mode. (Default is Enabled)
- Disable Busy Tone: Enable/Disable Busy Tone. If set to enabled, busy tone will not be played. (Default is Disabled).
- **Disable CW Tone**: Enable/Disable CW Tone. If set to enabled, Call Waiting Tone will not be played. (Default is Disabled).
- Onhook Backlight: Enable/Disable Onhook Backlight. If enabled, pressing "Hangup" key on idle screen will switch off LCD screen. (Default is Disabled)
- Cradle Backlight: Enable/Disable/Dim Cradle Backlight. If enabled, LCD will remain backlit when the handset is placed on-cradle/charging.
   If set to "Dim", LCD brightness will be reduced when the handset is placed on-cradle/charging. (Default is Disabled)
- SIP Account Display: Select which SIP Account information will be displayed on the screen.
- Name Only: Display SIP Account Name only. (Default)
- ID Only: Display SIP User ID only.
- None: No account information will be displayed.
- PTT (Push To Talk): Enable/Disable Push To Talk. If set to enabled, pressing and hold PTT hard/soft key, a PTT call will be initiated.
   Pressing the PTT hard/soft key, it will redirect you to the setting to enable or disable it. (Default is Disabled)

#### **Customizing keys functions:**

- L: Configure Left Softkey function in idle. Function can be set as Menu, History, Contacts, Line or PTT. Default is Menu.
- R: Configure Right Softkey function. Function can be set as History, Contacts, Line or PTT Default is Contacts.
- ▼ : Configure Arrow DOWN key function. Default is Accepted Calls (Call History).
- **4** : Configure Arrow LEFT key function. Default is Ringer Volume
- > : Configure Arrow RIGHT key function. Default is Ringer Volume Up.

Select key and press OK button to configure function. Following functions are available for arrow keys: 1. Disabled, 2. Missed Calls, 3: Accepted Calls, 4: Outgoing Calls, 5: History, 6: Contacts, 7: Status, 8: Line, 9: Voice Mail, 10: Ringer Volume Up, 11: Ringer Volume Down, 12: Audio Volume Up, 13: Audio Volume Down, 14: Intercom.

• Speed Dial: Assign contact numbers as speed dial.

Select a key [2], [3], [4], [5], [6], [7], [8] or [9] and press OK button. Select "Edit" to manually specify the destination number or select "From Contacts" to select a contact as speed dial destination.

#### **Call Features**

**Customizing** keys functions

- Do Not Disturb: Enable/disable do not disturb mode on the phone.
- Call Forward: Configure call forward feature.
- Call Waiting: Configure call waiting feature.
- Paging: Configures Inter-Handsets paging feature.

#### Status

- Base Status: Display Base status (Firmware, IP address, Subnet mask, Gateway, MAC Address)
- Handset Statut: Display Handsets status (Model RF, Firmware, IPEI)
- Line Status: Display Line status (Account name, Status)

- Handset Name: Change the Handset name.
- Phone Language: Select the language to be displayed on the phone's LCD. (Default is English.)
- Date/Time: Configure date and time on the Handsets.
- Audio: Specify ringtones for internal/external calls, the volume, advisory tones (Keypad, Confirmation, Low battery notifications) and Vibration mode (DP730 only).
- Display: Configure backlight, LCD timeout (Idle/Call), LCD brightness, Message Waiting Prompt and menu key timeout.
- Gestures (DP730 only): Configure Close-to-Ear Backlight and Facedown Hangup.
- Network Settings: Configure IP addresses and select DHCP/Static IP mode.
- SIP Settings: Configure/View SIP accounts settings.
- System Settings: Change Base PIN code, perform factory reset, reboot base and configure repeater mode.
- Firmware Upgrade: Upgrade the firmware version of the Handsets.
- Factory Functions: Diagnostic Mode (DP722) / Keypad Diagnostic

#### **Settings**

All LEDs will light up, and the LCD will display a table listing the names of all keys in red. Press any key to diagnose; the key's name will display in blue. After all keys are diagnosed, a prompt message ("PASS") will display; press "Back" (right softkey) to exit.

Note: User can long press arrow UP key to exit at any time.

- Audio Loopback: Speak to the phone using speaker/Handsets/headset. If you can hear your voice, your audio is working fine. Press "Exit" softkey to exit audio loopback mode.
- LCD ON / OFF: Select this option to turn off LCD. Press any button to turn on LCD.
- LCD Diagnostic: Select this option to enter LCD Diagnostic mode. Press "Next" (left softkey) to display white screen. Continue pressing the left softkey to view all remaining screens (black, blue, red, and green) and then exit. End the test early by pressing the right softkey.
- LED Diagnostic: Enters this option and press "1" to start LED Diagnostic (you will notice that the color of the LED will be changing). Press "2" to quit.
- System Monitoring: Displays RSSI, battery voltage and RPN information.
- Vibration (DP730 only): Test vibration on DP730.
- Acceleration Sensor (DP730): Displays X, Y, Z coordinates.
- Proximity Sensor (DP730): Test proximity sensor on DP730.

DP730/DP722 Menu Structure Definitions

# **BASIC OPERATIONS**

### Turning the Handsets ON / OFF

#### To turn ON the handsets



#### To turn OFF the handsets



# **Setup Wizard**

Setup wizard shows at first access to DP722/DP730 or factory reset allowing users to configure handsets language and date/time. Users can quit at any time by pressing "**Skip**" (left softkey).

### Register DP730/DP722 Handsets to DP755 Base Station

1. On DP755 Base station, press and hold the Radio/Page



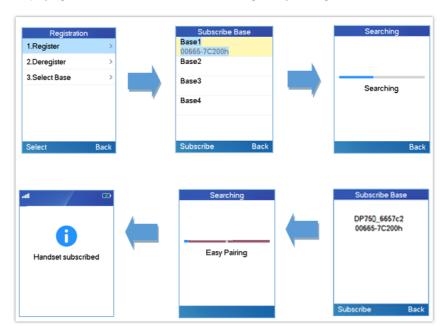
button for 4 seconds until the Radio icon starts

blinking to start Subscription process. Or Access web UI, and press **Subscribe** icon (१०) to **Open Subscription.** 

2. On DP730/DP722, press "Subscribe" softkey if available on the main screen or access **Menu** → **Registration** → **Register** while the DP755 Radio icon is blinking.

Note: "Subscribe" softkey appears only if DP730/DP722 is not registered to any DP755 base station.

- 3. Select **BaseX** (X=1-4) corresponding to the desired base station DP755, then press **Subscribe**.
- 4. The DP730/DP722 will search for nearby base stations and will display the RFPI code and Base station name of the discovered DP755.
- 5. Press **Subscribe** to pair with the displayed DP755.
- 6. The DP730/DP722 will display **Easy Pairing** on the LCD and play an audible buzz when successful. Then it will return to the home screen, displaying the Handsets name and number assigned by the registered base station.



Registration Process

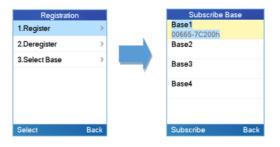
### Using DP730/DP722 with Multiple DP755 Base Stations

DP730/DP722 is able to be registered to up four different DP755 base stations.

# Registering DP730/DP722 to an additional DP755 base station

Considering DP730/DP722 is previously registered to an initial base station, please follow below steps to register a Handset to an additional base station:

- 1. Press Menu (left softkey or the selection key) to bring up operation menu.
- 2. Use arrow keys to reach **Registration** and select **Register**.
- 3. Navigate to an unsubscribed base using arrow keys, and click on **Subscribe**.
- 4. Make sure that the subscription is opened on the new base station.



Multiple Base Stations Registration

# **Switching Between Different Base Stations**

- 1. Press "Menu" (left softkey or the selection key) to bring up operation menu.
- 2. Use arrow keys to reach **Registration**.
- 3. Navigate to **Select Base** using arrow keys.
- 4. Select the desired base station and press **Select**.





Switching Between Base Stations

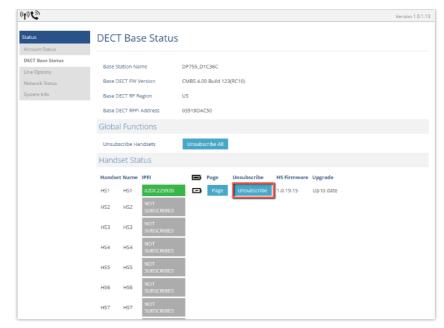
# Unregister the DP730/DP722

# ○ Using DP730/DP722 Handsets:

- 1. On DP730/DP722, press "Menu" (left softkey or the selection key) to bring up operation menu.
- 2. Press arrow keys to move the cursor to **Registration**, then press "Select" (left softkey).
- 3. Navigate to **Deregister**.
- 4. Select the Handsets to be unregistered and press "Deregister" (left softkey).
- 5. Enter the system PIN code (default: 0000).
- 6. Press "Done" (left softkey) to confirm or "Back" (right softkey) to cancel.

## ○ Using DP755 Base Station UI:

- 1. Access DP755 Web Interface.
- 2. Go to **Status** → **DECT Base Status**.
- 3. Locate the Handsets to unregister and press "Unsubscribe" button.



Unregister DP730/DP722 from DP755 web UI

# **Setting the Key Lock**

You can lock the keypad against unintentional entries. It is, however, still possible to pick up incoming calls even with the keypad locked.

- o To enable the Keypad Lock
- 1. Press the **Pound key "#"** # and hold for approximately 2 seconds.
- 2. The display shows Keypad Locked briefly and the key lock icon appears in the display.
- o To disable the Keypad Lock
- 1. Press and hold **Pound key "#"** to unlock the keys.
- 2. Keypad Unlocked appears briefly in the display and a windows prompt will be displayed to confirm that the keypad is unlocked.

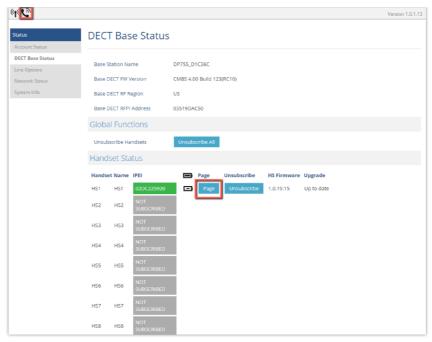
### Locating a DP730/DP722 Handset from DP755 Base station

In some situations, you may have a DP730/DP722 Handsets incorrectly positioned and you don't know its current location. You can locate a DP730/DP722 Handsets from his registered DP755 base station using below steps:

### Locate via DP755 Web UI

- 1. Access the Web GUI of your DP755 using the admin's username and password.
- 2. Press **Login** to access your settings and navigate to **Status > DECT Base Status** tab.
- 3. Choose which Handsets to locate and press its corresponding Page button.
- 4. A paging call will be received on the selected DP730/DP722 Handsets.

  Note: If you press Page All icon , all registered DP730/DP722 handsets will be receiving paging call.
- 5. Once located, you can press End Softkey on the DP730/DP722 to end paging call.



Locate Handsets via Web UI

### Locate via DP755 Base station

1. On DP755 Base station front side, press Radio/Page



- 2. All registered Handsets will receive Paging call.
- 3. Once located, you can end the paging calling by pressing any key on the Handsets or by pressing again **Radio/Page** button.

# **Checking System Status**

You can view the system status on your handsets including the following information of the system:

Item	Description
Firmware	Current firmware version installed on DP722/DP730.
IP Address	IP address of the base station DP755 if registered.
Subnet Mask	Subnet Mask of the base station DP755 if registered.
Gateway	Gateway IP of the base station DP755 if registered.
MAC address	MAC address of the base station DP755 if registered.

Table 15: DP755 Info description

Item	Description
Model (RF)	Displays the product model, hardware version and DECT region of DP722/DP730. i.e.: <b>DP722/DP730 1.4A</b> (EU)
Firmware	Current firmware version installed on DP722/DP730.

International Portable Equipment Identifier.

IPEI

Unique "serial number" for DECT handsets.

Table 16: DP722/DP730 Info description

- o To check the Handsets Status
- 1. Press Menu to bring up operation menu.
- 2. Use arrow keys to reach **Status** menu



, then select Handset Status.

- o To check the Base Status
- 1. Press Menu to bring up operation menu.
- 2. Use arrow keys to reach **Status** menu



, then select Base Status.

# **Basic Network Settings**

Once connected to the network, DP755 base station will attempt to contact a DHCP server to obtain valid network settings (e.g., IP address, subnet mask, gateway address and DNS address) by default.

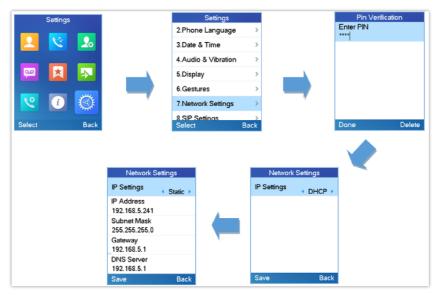
The users could also configure basic network settings manually from a registered DP722/DP730 Handsets. In order to configure the network settings manually, please follow the steps below:

- 1. Press Menu to bring up operation menu.
- 2. Use arrow keys to reach **Settings**



and access Network Settings menu.

- 3. Enter the system PIN code (default: 0000) and press the softkey "Done".
- 4. To change to static IP, press ◀ or ▶ to select **Static** from the **IP Settings** field.
- 5. Enter valid values in the IP Address, Subnet Mask, Gateway, DNS Server fields.
- Press softkey "Save" to save and apply the new changes.
   Note: A prompt message will be displayed to confirm that the new settings are saved successfully
- 7. The DP722/DP730 will display a reboot confirmation message, select "Yes" to apply the new settings or "No" to avoid rebooting the DP755.



**Network Settings Configuration** 

### **Change Menu and LCD Timeout**

- 1. Press Menu to bring up operation menu.
- 2. Use arrow keys to reach Settings



- 3. Navigate to **Display**, and then press "Select" (left softkey).
- 4. Set desired time in seconds for Backlight timeout and for Menu timeout. Available value: 15 seconds, 30 seconds, 60 seconds or disabled. (Default is 30 seconds)
- 5. Press **Save** (left softkey) to save and apply the new settings.

#### **Return to Idle Screen**



Press the **Power Key** to quickly exit the menu and return back to the main idle screen.

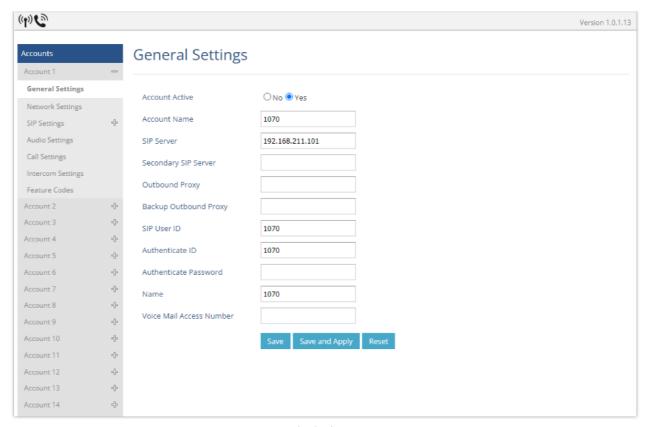
If you do not press any key in a period of time, the LCD screen will automatically exit the menu and return to the idle screen as well.

When you are navigating on the handset's menu, and you receive an incoming call, the LCD screen will automatically exit the menu and you can either accept or reject the call. When the call is terminated, the LCD screen will return back to the idle screen.

### **Register SIP Account**

### Register Account via Web User Interface

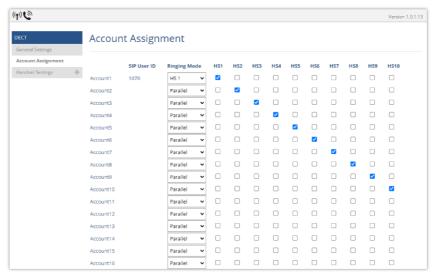
- 1. Access the Web GUI of your DP755 using the admin's username and password.
- 2. Press Login to access your settings and navigate to Accounts tab and select an account to use. Note: DP755 supports up to 20 accounts . An account is a set of settings including general settings, network settings, SIP setting, audio setting, call settings and ring tones, etc.
- 3. In General Settings, set the following:
  - Account Active to Yes.
  - o SIP Server field with your SIP server IP address or FQDN.
  - o Failover SIP Server with your Failover SIP Server IP address or FQDN. Leave empty if not available.
  - o Prefer Primary SIP Server to No or Yes depending on your configuration. Set to No if no Failover SIP Server is defined. If "Yes", account will register to Primary SIP Server when failover registration expires.
  - o **Outbound Proxy** with your Outbound Proxy IP Address or FQDN. Leave empty if not available.
  - o SIP User ID User account information, provided by VoIP service provider (ITSP). Usually in the form of digit similar to phone number or actually a phone number.
  - o Auhentificate ID: SIP service subscriber's Authenticate ID used for authentication. Can be identical to or different from SIP User ID.
  - o Authentificate Password: SIP service subscriber's account password to register to SIP server of ITSP. For security reasons, the password will field will be shown as empty.
  - o Name: Any name to identify this specific user.
- 4. Press Save and Apply to save your configuration.



SIP Settings

# 5. Go to **DECT** → **ACCOUNT ASSIGNEMENT**

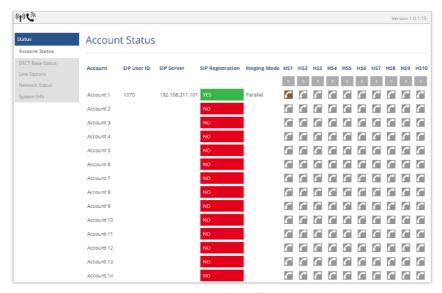
- 6. Configure your SIP details in desired account:
- **Ringing Mode**: Select the corresponding Ringing mode of the assigned account, which handset will ring when extension 1070 is called, selecting parallel will mean all selected handsets will be ringing at the same time.
- 7. Press Save and Apply to save your configuration.



Account Status

After applying your configuration, your phone will register to your SIP Server.

You can verify if your DECT phone has registered with your SIP server from your DP755 web interface under **Status** → **Account Status** (a green background with Yes under SIP Registration column for corresponding account indicates the account(s) has been successfully registered).



Accoun registered

# **PHONE SETTINGS**

This chapter will help you with the instruction for configuring and changing the settings of your DP722/DP730,

# **Editing the Handset Name**

The procedure to change the handset name is as follows:

- o Using DP722/DP730 Handsets:
- 1. Press Menu to bring up operation menu.
- 2. Use arrow keys to reach **Settings**

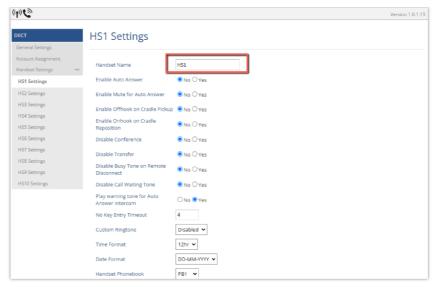


- 3. Navigate to select **Handsets Name**, and then press "Select".
- 4. Enter the desired name and press "Rename" and then the DP722/DP730 will display a confirmation message that the rename operation was successful.



Handsets Name-editing

- o Using DP755 Base Station UI:
- 1. Access DP755 Web Interface.
- 2. Go to **DECT** → **Handset Settings**.
- 3. In "Handsets Settings" section for a specific handset, change Handset Name to desired name.



Edit Handsets Name from DP755

# **Changing the Base PIN Code**

Users can change their code PIN by following the steps below:

- o Using DP722/DP730 Handsets:
- 1. Press Menu to bring up operation menu.
- 2. Use arrow keys to reach **Settings**



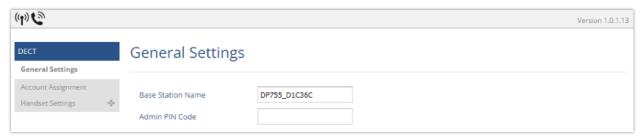
- 3. Navigate to select System Settings, and then press "Select".
- 4. Enter the current code PIN (By Default is 0000), a new window will be displayed inviting you to enter the new password, when done press "Save" (left softkey) and a prompt message will be displayed to confirm that the new code PIN has been saved successfully.



Changing Admin Base PIN Code from DP722/DP730

- Using DP755 Base Station UI:
- 1. Access DP755 Web interface.
- 2. Go to **DECT** → **General Settings**.
- 3. Set new PIN code in Admin PIN Code field.

Note: Only digits accepted. Minimum allowed length is 4 digits.



### **Selecting Phone Language**

The DP722/DP730 supports displaying texts in different languages. The handsets supports 20 languages (see the table of the technical specifications). The default language of the handsets is English. You can change the language according to your requirement. To change the language of the handsets, please proceed as follows:

- 1. Press Menu (left softkey or the selection key) to bring up operation menu.
- 2. Use arrow keys to reach **Settings**



- 3. Navigate to select **Phone language**, then select the desired language and press "Select" (Left softkey). The LCD screen prompts "Change phone language to xxx (xxx it' the language you selected)"
- 4. Press "Yes" (left softkey) to accept the change. Text displayed on the handsets will change to the selected language.



Handsets Language

#### **Activate/Deactivate Hands-Free Mode**

This function allows you to make a call without having to hold the handsets in your hand.

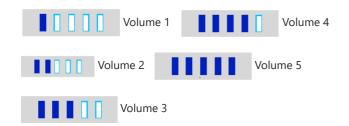
- 1. Press the **Hands-free key** while you are making a call or on the idle screen to activate hands free mode.
- 2. Press the **Hands-free key** again to deactivate the hands-free function.

# **Muting the Microphone**

Press the **Mute key** to switch off the microphone during an established call. You can now talk freely without the other party hearing you and the icon of mute will be displayed on the screen. Press the **Mute key** again to switch the microphone back on.

### **Adjusting Speaker and Earpiece Volume**

Press left key ◀ or right key ▶ while you are on an established call to set the volume of the earphone / speaker. You can choose between 5 different levels. The default level is 3:



### Ringtones

### **Setting the Ringer Volume on the Handsets**

You can adjust the ringer volume for an incoming call to one of 6 levels (level 1 to 5 and off). Level 5 is the highest level. (The DP722/DP730 Handsets are set to level 3 by default).

In order to configure the desired ringer volume, proceed as follows:

- 1. Press Menu to bring up operation menu.
- 2. Use arrow keys to reach **Settings**
- 3. Navigate to select **Audio** (For DP722) and **Audio & Vibration** (for DP730) → **Volume**.
- 4. Press the left and right arrow keys to change repeatedly and set the desired volume.
- 5. Press "Save" to confirm the volume, and a message prompt will be displayed to confirm that the new volume has been successfully saved.
- If you select **OFF**, the icon appears in the display and the handsets will not ring for incoming calls.



Ringer Volume

# **Setting Ringtones on the Handsets**

You can change the ringtone for an incoming call. The device has 9 different ringer melodies for you to choose from (System Ring, Ring 1-8). The default setting for the ring tone for a call is melody 1.

In order to configure the desired melody, proceed as follows:

- 1. Press **Menu** (left softkey or the selection key) to bring up operation menu.
- 2. Use arrow keys to reach **Settings**



- 3. Navigate to select **Audio** → **Ringtones**.
- 4. Press "Select" (left softkey) to confirm the ringtones selected and a message prompt will be displayed

to confirm that the new ringtones has been set successfully.



Calls Ringtones

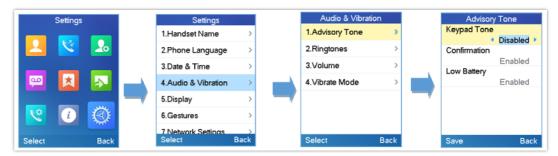
### **Advisory Tones**

Advisory tones are acoustic signals, which inform you of different actions and states on your handsets. The following advisory tones can be configured independently of each other:

- Keypad tone: it's played when a user presses any key of the keypad (even during calls).
- **Confirmation:** it's played when a user saves settings or places the handsets in the charger cradle.
- Low battery: it's played if the capacity of the batteries is low or the handsets requires charging.

To configure the advisory tones

- 1. Press Menu (left softkey or the selection key) to bring up operation menu.
- 2. Use arrow keys to reach **Settings**
- 3. Navigate to select **Audio**  $\rightarrow$  **Advisory tones**, and choose which tone you want to change it.
- 4. Press the left and right arrow keys to either enable or disable the desired tones.
- 5. Press "Save" (left softkey) to confirm, and a message prompt will be displayed to confirm that the new settings has been successfully saved.



Advisory Tone

### **Ringtones Customization**

DP755/730/722 allow users to use custom ringtones. Custom ringtones will be stored on DP755 base station and only selected custom ringtone will be downloaded to specific DP722/DP730 handsets.

DP755 base station supports up to 10 custom ringtones.

Custom ringtone should be generated using GS Ringtone Tool and named *ring[1-10].bin* (example: ring1.bin , ring6.bin).

To use custom ringtones, follow below steps:

# Step 1: Generate Custom Ringtone(s)

- 1. Download "Ringtone Generator" tool available at http://www.grandstream.com/support/tools
- 2. Run the tool and select your ringtone file to convert.



Generating Custom Ringtone (Windows)

#### Note

Currently only 16-bit linear PCM audio is supported for .wav files. The sampling rate should be automatically detected and the audio will automatically be down sampled to 8kHz. Stereo channels are also detected and mixed to produce mono output.

.pcm files should be pre-formatted to 16-bit 8kHz mono format.

3. Press "Generate Ringfile" to finish the process. Ringtone with filename "ring1.bin" will be created at same location as ringtone tool.

- 1. Make generated ringtone files available in your FTP, HTTP or HTTPS server.
- 2. Access DP755 Web GUI and go Maintenance -> Firmware Upgrade page.
- 3. Set "Upgrade Via" to HTTP/HTTPS or FTP/FTPS (depending on server type hosting ringtone files).
- 4. Set "Firmware Server Path" to IP address or the FQDN of the server.
- 5. Set "Firmware Upgrade and Provisioning" to "Always Check for New Firmware".
- 6. Update the change by clicking the "**Save and Apply**" button. Then "**Reboot**" or power cycle the base station to download the ringtone(s).



**Downloading Custom Ringtones** 

#### Step 3: Assigning a Custom Ringtone for a DP722/DP730 Handsets

- 1. Access DP755 Web GUI and go **DECT** → **HS Settings** → **HS# Settings** page.
- In Custom Ringtone, select a custom ringtone from the dropdown list.
   Note: If the list is not showing downloaded custom ringtone(s), press and check again.
- 3. Press "Save and Apply". DP722/DP730 handsets will download the ringtone locally before using it. (DP722/DP730 LCD screen will display download progress at this stage).
- 4. On DP722/DP730 Handsets menu, access Settings → Audio → Ringtones. Select **Custom Ringtone** using up/down arrow keys and press "Select" softkey.

#### Note

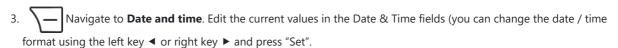
DP722/DP730 handsets can use one custom ringtone only.

#### **Date and Time**

On the DP722/DP730, the Date and time are displayed on the idle screen and it obtains the date and time from the Simple Network Time Protocol (SNTP) server by default. If your handsets cannot obtain the date and time from the SNTP server, you need to configure the date and time manually. You can configure the time format and date format respectively. The handsets supports two formats for time (12 Hour or 24 Hour) and three date formats (DD/MM/YYYY; MM/DD/YYYY; YYYY/MM/DD).

#### To configure date and time manually

- 1. Press **Menu** to bring up operation menu.
- 2. Use arrow keys to reach **Settings**



4. Press "Save" softkey to apply your changes.



# Gestures (DP730 only)

To configure Gesture options, follow instructions below:

- 1. On DP730 LCD Menu Settings, select **Settings** → **Gestures**.
- 2. Set "Close-to-Ear Backlight" to On, to enable the LCD backlight when the handset is close to ear.
- 3. Set "Facedown Hangup" to On, to enable the call hangup when the handset is put down on its face.



DP730 Gestures

# **Facedown Hangup**

If "Facedown Hangup" option is set to ON, if DP730 is placed face down it will:

- o Reject incoming calls.
- o Hang up ongoing call.



DP730 Gestures – Facedown Hangup

# Close-to-Ear Backlight



DP730 Gestures - Close-to-Ear Backlight

# **Factory Functions**

The factory functions include the following diagnostic options:

- o Keypad Diagnostic (on DP730) / Diagnostic Mode (on DP722)
- o Audio loopback
- o LCD on / off
- o LCD diagnostic
- System Monitoring
- Vibration (DP730 only)
- o Acceleration Sensor (DP730 only)
- o **Proximity sensor** (DP730 only)
- 1. Press **Menu** (left softkey or the selection key) to bring up operation menu.
- 2. Use arrow keys to reach **Settings**



- 3. Navigate to select **Factory Functions** and choose which diagnostic, you need to perform:
- 1. Diagnostic Mode (DP722) / Keypad Diagnostic (DP730)

All LEDs will light up. All keys' name will display in red on LCD screen before diagnosing. Press any key on the keypad to diagnose the key's function. When done, the key's name will display in blue on LCD with a prompt message (**PASS**). To exit press "Back" (right softkey).

Note: Long arrow UP key at any time to exit diagnostic mode.

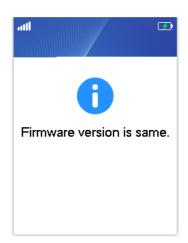
- 2. **Audio loopback**: Speak to the phone using speaker/handsets/headset. If you can hear your voice, your audio is working fine. Press "Back" (left softkey) to exit audio loopback mode.
- 3. LCD ON / OFF: Selects this option to turn off LCD. Press any button to turn on LCD.
- 4. **LCD Diagnostic**: Enters this option and press Left/Right arrow key to do LCD Diagnostic (you will notice that the color of the LCD will be changing). Press right softkey to quit.
- 5. System Monitoring: Displays RSSI, battery voltage and RPN information.
- 6. Vibration (DP730 only): Press "Vibrate" key to test if device vibrates normally. Press right softkey to quit.
- 7. **Acceleration Sensor** (DP730 only): Displays X, Y, Z coordinates. Change handset position and check new values. Press right softkey to quit.
- 8. **Proximity Sensor** (DP730 only): Cover the proximity sensor, when the sensor is covered, the gray dot displayed on screen will become green. Press right softkey to quit.



Factory Functions

### DP722/DP730 Handsets Firmware Upgrade

The DP722/DP730 handsets can detect if a new firmware is available when it is registered to a base station.



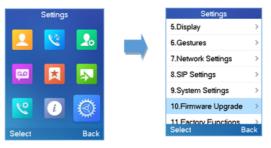
Firmware Notification

To upgrade the firmware on your handsets, follow the steps below:

- 1. Press Menu to bring up operation menu.
- 2. Use arrow keys to reach **Settings**



- 3. Navigate to select **Firmware Upgrade** and press the softkey "Select".
- 4. The LCD screen will display a prompt message to confirm the firmware downloading / upgrading press the right softkey "Back" to dismiss the upgrade process.



Firmware Upgrade

### **Reboot DP755 Base Station**

- 1. Press **Menu** to bring up operation menu.
- 2. Use arrow keys to reach **Settings**



- 3. Navigate to select  $\textbf{Settings} \boldsymbol{\rightarrow} \textbf{System Settings}$  and choose Reboot Base.
- 4. Enter Base PIN code (by default the PIN code is: 0000).
- 5. The LCD screen will display a prompt message to confirm rebooting the base station, press "Yes" (left softkey) to confirm or press "No" (right softkey) to cancel.

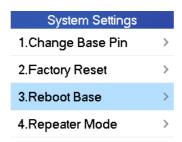






Figure 36: Rebooting the Base Station

# Reset DP722/DP730 Handsets

The users can reset the new settings made on the handsets after performing factory reset. To reset your handsets to the default settings:

- 1. Press Menu to bring up operation menu.
- 2. Use arrow keys to reach **Settings**



- 3. Navigate to select **Settings** → **System Settings** and choose **Factory Reset.**
- 4. The LCD screen will display a prompt message to confirm restoring factory settings, press "Yes" (left softkey) to confirm and then the handsets will reboot to apply the default settings or press "No" (right softkey) to cancel.



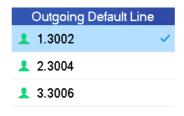


Figure 37: Resetting the Base Station

# CALL OPERATIONS

Outgoing Default Line

When a Handsets is configured with more than one line, users can change the default outgoing line on DP730/DP722 handset using keypad Menu → Preferences → Outgoing Default Line.



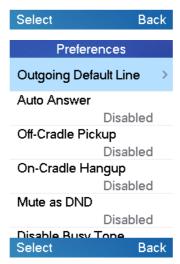


Figure 38: Outgoing Default Line

# **Placing calls**

To place calls, you can use the following mode:

- o Earpiece mode: pressing the off-hook key to dial out.
- **Speakerphone mode:** pressing the speakerphone key to dial out.
- Headset mode: pressing the off-hook key to dial out using connected headset.

During the call, you can switch the call mode by pressing the corresponding keys or connecting a headset.

# Make a Call using a Line

Making calls require the use of SIP lines. So, you should first register the SIP account to the handsets beforehand, after registering the SIP lines, you can assign one or more outgoing lines for the handsets. The handsets can only use the assigned outgoing line(s) to place calls.

Please refer to the following methods to make calls using a line:

## Method 1:

- o Via default outgoing line:
- 1. Enter the desired number using the keypad.

- or **Speaker key** 

  . The handsets will use the default outgoing line to dial out.
- 3. To terminate the call, press **Hang-Up key**



Note: To change the default outgoing line, please refer to [Outgoing Default Line].

- Selecting the outgoing line:
- 1. Enter the desired number using the keypad.
- 2. Press the left softkey "Call".
- 3. Select the desired line to dial out.
- 4. To terminate the call, press **Hang-Up key**

#### Method 2:

- 1. Press **Dial key** or **Speaker key** to enter the pre- dialing screen.
- 2. Enter the number to dial using the keypad.
- 3. Press **Dial key** , # key ("Use # as dial key" must be configured in web configuration) or wait for 4 seconds and the call will be initiated automatically.
- 4. To terminate the call, press **Hang-Up key**

During the call, you can switch the call mode by pressing the corresponding keys and cancel the dialing operation by pressing the on-hook key. During the call conversations, you can press the left and right navigation keys to adjust the volume. The call duration is displayed on the LCD screen while the call is in progress and call summary will be displayed once the call is terminated.

## Note

- To dial "+" please keep pressing "0" key for about 2 seconds.
- o To dial from contacts list, choose a contact using navigation keys and press Dial key.

# **Dialing from Call history**

Users may use their call history entries to initiate calls.

- 1. Press **Menu** to bring up operation menu.
- 2. Use arrow keys to reach **Call History** Icon and then press "Select".
- 3. Select the desired entry, then press **Dial key**

Note: In step 3, users can press "Options" softkey followed by "Edit Dial" option to initiate the call.

The call history list stores the last dialed phone numbers. When the memory of the redial number list is full, the handsets will automatically erase the oldest dialed number when a new number is dialed

## **Dialing from Phonebook**

Users may use their private or shared contacts to initiate calls.

- 1. Press **Menu** to bring up operation menu.
- 2. Press Contacts to access phonebook menu.
- 3. Select the contact to call.

4. Press **Dial Key** to initiate the call.

Note: In step 4, users can press "Options" softkey followed by "Edit Dial" option to initiate the call.

#### Note

Redialing can be performed via the pound key "#" when configured accordingly.

#### Intercommunication

Users may make phone calls between different handsets directly without remembering each user's phone number.

- 1. Go to Handset GUI -> Shortcut
- 2. Configure a navigation key (up, down, left or right key) to "Intercom".
- 3. Press the key just configured at the idle state.
- 4. Choose the handset name that you want to call.



Shortcut Setting

# **Answering Calls**

When receiving an incoming call, you can answer the call using following steps:

Earpiece mode:

Press **Dial Key** to pick up the call, or "Accept" softkey (left softkey).

Speakerphone mode:

Press **Speaker Key I** to pick up the call.

Headset mode:

Press **Dial Key** to pick up the call, or "Accept" softkey using a connected headset.

#### **Notes**

- To answer an incoming call during an established call, press **Dial Key**, or the **Speaker Key** , or the "Answer" softkey. The incoming call is answered, and the original call is placed on hold.
- You can switch off the ringer temporarily by pressing **Silent** softkey.

Users can enable Auto Answer feature to accept and automatically answer incoming calls.

If enabled, DP722/DP730 Handsets will automatically answer incoming calls using speaker mode.

To activate / deactivate the auto answer feature:

## o Using DP722/DP730 Handsets Menu

- 1. Press Menu to bring up operation menu.
- 2. Select **Preferences** → navigate to **Auto Answer** using the up/down arrow keys.
- 3. Switch between Enabled/Disabled using left/right arrow keys and "Save" after Enabling / Disabling the option.

# o Using DP755 Base Station Web Interface

- 1. Access DP755 Base Station Web Interface.
- 2. Go to DECT → Handsets Settings → HS# Settings.
- 3. Set "Enable Auto Answer" to "Yes". (By default, set to "No").

## **Off-Cradle Pickup**

Users can enable Off-Cradle Pickup feature to automatically answer incoming calls after picking up DP722/DP730 Handsets from its cradle. Incoming calls will be automatically answered using earpiece mode.

#### Note

- o DP722/DP730 Handsets should be resting on its cradling and then picked up for this feature to work.
- o "Auto Answer" feature should be set to "No" to work properly.

To activate / deactivate the off-cradle pickup:

## o Using DP722/DP730 Handsets Menu

- 1. Press Menu to bring up operation menu.
- 2. Select **Preferences** → navigate to **Off-Cradle Pickup** using the up/down arrow keys.
- 3. Switch between Enabled/Disabled using left/right arrow keys and "Save" after Enabling / Disabling the option.

# o Using DP755 Base Station Web Interface

- 1. Access DP755 Base Station Web Interface.
- 2. Go to DECT → Handsets Settings → HS# Settings.
- 3. Set "Enable Onhook on Cradle Reposition" to "Yes". (By default, set to "No").

## **Ending Calls**

To terminate the calls, press **Hang-Up key** 



# **On-Cradle Hang-up**

Users can enable On-Cradle Hang-up feature to automatically end ongoing calls after placing DP722/DP730 Handsets on its cradle.

To activate / deactivate the on-cradle hang-up feature:

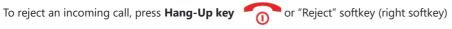
## o Using DP722/DP730 Handsets Menu

- 1. Press Menu to bring up operation menu.
- Select Preferences → navigate to On-Cradle Hang-up using the up/down arrow keys.
- 3. Switch between Enabled/Disabled using left/right arrow keys and "Save" after Enabling / Disabling the option.

## o Using DP755 Base Station Web Interface

- 1. Access DP755 Base Station Web Interface.
- 2. Go to DECT → Handsets Settings → HS# Settings.
- 3. Set "Enable Off hook on Cradle Pickup" to "Yes". (By default, set to "No").

# **Rejecting Calls**



## **Direct IP Call**

Direct IP calling allows two parties, that is, a handsets and another VoIP device, to talk to each other in an ad hoc fashion without a SIP proxy.

#### Elements necessary to complete a Direct IP Call:

- o Both DP722/DP730 and other VoIP Device, have public IP addresses, or
- o Both DP722/DP730 and other VoIP Device are on the same LAN using private IP addresses, or
- o Both DP722/DP730 and other VoIP Device can be connected through a router using public or private IP addresses (with necessary port forwarding or DMZ).

Users can perform IP calls using Star code following the below steps:

1. Pick up the handsets and press **Dial key** 



2. Dial \*47 followed by the target IP Address.

#### Note

You can enter directly \*47 + target IP address, and then press the dial key to initiate the call.

## Examples of direct IP calls

- 1. If the target IP address is 192.168.0.160, the dialing convention is \*47 then 192\*168\*0\*160, followed by pressing the "#" key if it is configured as a send key or wait 4 seconds. In this case, the default destination port 5060 is used if no port is specified.
- 2. If the target IP address/port is 192.168.1.20:5062, then the dialing convention would be: \*47 or Voice Prompt with option 47, then 192\*168\*0\*160\*5062 followed by pressing the "#" key if it is configured as a send key or wait for 4 seconds.

## Note

To accept incoming direct IP call, Use Random Port setting should be set to NO. If set to YES, it can only dial out. The setting is available on DP755 web interface → Settings → General Settings.

## Call Hold/Resume

During an established call, you can put the call on hold and resume following below steps:

- 1. Press the left softkey to access the call **Options** and then navigate to **Hold**.
- 2. Press "Select", left softkey to put the call on hold.
- 3. To resume the call, access the options menu again and navigate to Resume, then press Select.

Or you can press the softkey **Hold** to hold the call and **Resume** to resume it.

## **Call Waiting**

This feature will notify you of a new incoming call during an established call and display the incoming call information visually on the LCD screen and a call waiting tone will be heard. If this feature is disabled, the new incoming call will be automatically rejected.

There are 2 ways to activate call waiting feature either using DP722/DP730 Handsets Menu or using DP755 Base Station Web Interface.

#### o Using DP722/DP730 Handsets Menu

- 1. Press Menu to bring up operation menu.
- 2. Use arrow keys to reach **Call Features** → navigate to **Call waiting** sub-menu.
- 3. Select the account for which you want to enable the Call waiting feature, and then press left softkey "Select".
- 4. Choose between **Enabled** and **Disabled** options and press the softkey "Save", a prompt message will be displayed to confirm that the call waiting is **enabled / disabled**.
- 5. During an established call, press (dial key) to put first call on hold and answers second incoming call. If no second incoming call, pressing will give the ability to initiate another call while first one is on hold.

#### Note

You can switch between active/on-hold calls by pressing **Options** → **Swap**.

## o Using DP755 Base Station Web Interface

- 1. Access DP755 Base Station Web Interface.
- 2. Go to DECT → Handsets Settings → HS# Settings.
- 3. Set "Disable Call Waiting Tone" to "No". (Default is No).
- 4. Press "Save and Apply" button to confirm.

## Do Not Disturb

You can activate or deactivate the DND mode for your accounts registered on the handsets under the call settings. If DND mode is activated for a specific line, all incoming calls will receive busy treatment depending on your configuration (forward to voice mail, busy tone...)

## To enable or disable the DND mode, follow the next steps

- 1. Press Menu to bring up operation menu.
- 2. Use arrow keys to reach **Call Features** → navigate to **Do Not Disturb** sub-menu.
- 3. Select the account on which you want to enable / disable the DND mode and then press "Select"
- 4. Choose between **Enabled** and **Disabled** options and press softkey "Save" to accept the changes, a prompt message will be displayed to confirm that the DND is **enabled / disabled**.

You can navigate to Status  $\rightarrow$  Line status to check if the **DND** mode is enabled on the base station.

You can also navigate via web interface of DP755 → Status → Line Options.

## **Call Forward**

The call forward feature will allow you to forward all the incoming calls to the desired number. Three possible call forward types are available on the DP722/DP730.

o Forward all Dest: All the incoming calls are immediately forwarded.

- o Forward Busy Dest: Incoming calls are immediately forwarded if the line is busy.
- o Forward No Answer Dest: Incoming calls are forwarded if not answered after a period of time.

## To enable the call forward, please refer to the following steps:

- 1. Press Menu to bring up operation menu.
- 2. Use arrow keys to reach **Call Features** → navigate to **Call Forward** sub-menu.
- 3. Select the account on which you want to enable/disable the call forward feature and press "Select".
- 4. Select the type of call forwarding and enter the number to forward the calls, and then press "Save" (left softkey) to apply the settings, a prompt message will be displayed to confirm that the new settings have been saved successfully.

## **Paging**

The DP722/DP730 supports paging other handsets internally without having any sip Account registered. Similarly to the base station paging button, Inter-Handsets paging features enables handsets to ring other handsets. The feature can be enabled from LCD menu → Call Features → paging.

#### **Call Transfer**

The DP722/DP730 supports the Call Transfer feature, you can transfer a call to another party using one of the following ways:

- o Blind transfer: Transfer a call directly to another party without consulting
- o Attended transfer: Transfer a call with prior consulting.

## **Blind Transfer**

- 1. Press the "Options" softkey during a call, and then select **Blind Transfer**, or press the softkey **Transfer** for DP730.
- 2. The initial call will be on hold, enter the number you want to transfer the call to.
- 3. Press **Dial key** . The call is connected to the number or the handsets you specified, and the LCD screen prompts **Call Transferred**.

## **Attended Transfer**

- 1. Press Left softkey "Options" during a call, and then select **Attended Transfer**.
- 2. Enter the number you want to transfer the call to, then press **Dial key** or press Call Softkey.
- 3. Once the second call is established, press left softkey **Transfer** to finish the Attended transfer.

# **Transfer between handsets**

The Call Transfers can also be done between handsets without SIP account. The DP75x can transfer a call to another handset even if it has no SIP account registered.

## **Speed Dial**

Speed dial allows users to perform single-digit dialing to predefined numbers. This feature is particularly useful to speed up dialing frequently used or hard to remember numbers. A maximum of 8 speed dial numbers is allowed.

For example, the digit key 2 is configured as a speed dial key and assigned the number 2000, the phone will dial out the number 2000 directly when you long press digit key 2.

- o To assign the frequently used numbers as speed dial keys:
- 1. Press Menu to bring up operation menu.
- 2. Access to **Shortcut** and then use Arrow keys to reach **Speed Dial** sub-menu.

Or;

Long press the representative number from 2 to 9 to set. (Note: The Speed dial number should not be already set on chosen representative number, otherwise long press will initiate a call to configured speed dial number).

- 1. Choose the digit key (2-9) to set and press **Options** or **OK** button. Three options will be available:
- **Edit:** To configure manually a contact as speed dial. Users need to enter "First Name", "Last Name" and "Number". (Note: First Name + Number or Last Name + Number are accepted).
- From Contacts: To set a contact from the phonebook directory to be as speed dial.
- o To Modify a Speed Dial:

Repeat above 2 steps.

At step 2, re-edit /re-assign a contact from the shared or private directory as speed dial on selected key.

o To Delete a Speed Dial:

Repeat above 2 steps.

At step 2, select Clear Entry option and press OK or Select to confirm.

# 3-Way Conference

The DP722/DP730 supports creating a local conference with other parties (including handsets starting the conference).

## To start a 3 Way conference, follow below steps:

- 1. Press the **Dial key** to place a call to the first party.
- 2. Press left softkey "Options", then select Conference.
- 3. Enter second party number you want to add to the conference and press Dial Key

To drop the conference call, press



#### Note

Conference can be bridged before third party answers.

# **Voice Mail**

The voice mail feature ensures that you will never miss any important messages. It permits either to leave voice mails to someone else or receive and listen to voice mails via the handsets

#### Set Voice Mail Feature Code

There are 2 ways to set Voice Mail Feature Code, either using DP722/DP730 Handsets Menu or using DP755 Base Station Web Interface.

Note: The Voice Mail Feature Code depends on the service provider or IP-PBX used. For example, if UCM6xxx as SIP server, the Voice Mail Feature Code is \*97.

## o Using DP722/DP730 Handsets Menu

- 1. Press **Menu** (left softkey or the selection key) to bring up operation menu.
- 2. Access to **Voice Mail** and then select **Set Voice Mail** sub menu.
- 3. Select the account and enter the "VM Access Number", then press "Save" softkey.

## o Using DP755 Base Station Web Interface

- 1. Access DP755 Base Station Web Interface.
- 2. Go to Accounts → General settings.
- 3. Configure Voice Mail Access Number.

## **Play Voice Mail Messages**

- 1. Press "Menu" to bring up operation menu.
- 2. Access to **Voice Mail** and then select **Play Message** sub menu.
- 3. Select the account to retrieve your voice messages saved on your voice mail.

Or;

Long press digit "1" key to dial configured Voice Mail feature code using Default Line.

#### **Notes**

- Users can access directly voicemail menu to play messages, by clicking on "View" (left softkey) when the notification of a new voicemail pops up on the DP722/DP730's LCD screen.
- If VM is protected by a password, users can enter the password using DP722/DP730 keypad after reaching Voice Mail system. The password is defined on the service provider or IP-PBX side.

## **Push to talk (PTT)**

The DP730/DP722 support the Push to talk (PTT) features which is a technology based on the instantaneous communication commonly employed in wireless cellular phone services using a button to switch the device from voice transmission mode to voice reception mode. This feature is similar to "walkie talkie" used and the PTT mode switches a phone from full duplex mode, where both parties can hear each other simultaneously, to half duplex mode, where only one party can speak at one time. Multiple parties to the conversation may also be included.

1. Users could press and hold the Push-to-talk key from any screen to quickly initiate PTT call.

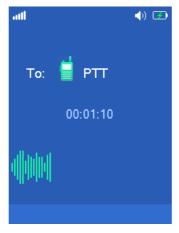


PTT Call Establishment

2. Available handsets (subscribed to the same base station) will receive the PTT call.

3. Keep holding PTT key while speaking.

The channel status will change to Sending PTT to indicate that you are transmitting as displayed on the following screenshot.



PTT Transmission

To terminate PTT call, press



#### Note

User should expect a delay of 6-8 seconds to establish PTT call due to DECT signaling, and which will not exist once PTT call is established.

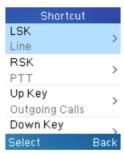
## **Configuration:**

PTT feature is always enabled on the base station, to use this feature, users need to enable the PTT on handset at: Handset Menu -> Preferences -> PTT -> set "Enabled".



Enable PTT

Also, to use PTT, the DP722 needs a dedicated button to push and then to talk, user can choose to use either LSK (Left Softkey) or RSK (Right Softkey) in Shortcuts settings. (If you forgot to enable the PTT, when you press the PTT softkey, it will redirect you to the setting to enable it before you can use it.)



Set a Softkey for PTT

Users can configure "DECT PTT Silence Timer" on the Web UI at -> DECT -> General Settings. When a PTT call established, any handset who enabled PTT feature will automatically join the PTT call. if there is no one talking, after certain time, the PTT call will be closed. This timeout setting is to determine how long the PTT call will be closed after being idle status. If set to 0, the timer will be disabled, and the PTT will be remaining forever until all party exit the PTT call.

# **Call Features**

The DP755/DP722/DP730 supports traditional and advanced telephony features including caller ID, caller ID with caller Name, call forward and etc.

	Block Caller ID (for all subsequent calls)
*30	Off hook the phone;
	<ul><li>Dial *30.</li></ul>
	Send Caller ID (for all subsequent calls)
*31	Off hook the phone;
	o Dial *31.
	Call with Caller ID Blocked (per call)
*67	Off hook the phone;
	Dial *67 and then enter the number to dial out.
	Call with Caller ID Enabled (per call)
*82	o Off hook the phone;
	o Dial *82 and then enter the number to dial out.
	Unconditional Call Forward. To set up unconditional call forward:
*72	Off hook the phone;
	<ul> <li>Dial *72 and then enter the number to forward the call;</li> </ul>
	Press OK softkey or SEND key.
	Cancel Unconditional Call Forward. To cancel the unconditional call forward:
*73	Off hook the phone;
	o Dial *73;
	Hang up the call.
	Busy Call Forward. To set up busy call forward:
*90	Off hook the phone;
	<ul> <li>Dial *90 and then enter the number to forward the call;</li> </ul>
	Press OK softkey or SEND key.
	Cancel Busy Call Forward. To cancel the busy call forward:
*91	Off hook the phone;
	o Dial *91;
	Hang up the call.

*92	<ul> <li>Delayed Call Forward. To set up delayed call forward:</li> <li>Off hook the phone;</li> <li>Dial *92 and then enter the number to forward the call;</li> <li>Press OK softkey or SEND key.</li> </ul>
*93	<ul> <li>Cancel Delayed Call Forward. To cancel the delayed call forward:</li> <li>Off hook the phone;</li> <li>Dial *93;</li> <li>Hang up the call.</li> </ul>

Table 17: Call Features

# 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 **Settings** and enter;
- 3. Select **System Settings** → **Factory Reset**;
- 4. A warning window will pop out to make sure a reset is requested and confirmed;
- 5. Press **Yes** softkey to confirm and the phone will reboot.
- 6. To cancel the Reset, press No softkey instead.

Users also can perform a factory reset using combo keys on DP722/DP730 during booting up prior it's fully booted, to give DP722/DP730 the ability to recover from some extreme cases like self-reboot or stuck right after booted up.

Please refer to the following procedure for DP722/DP730 factory reset using the combo key:

- 1. Connect the USB cable and power off DP722/DP730.
- 2. Power on DP722/DP730 and wait for Green LED.
- 3. Press 3 times Central Key (OK/Selection Key) quickly after Green LED on.
- 4. Press Speaker Key (left bottom) first and then Mute Key (right bottom) after Red LED on.
- 5. DP722/DP730 LED will start blinking in 3 colors: Green, Red and Orange if factory reset successful triggered.
- 6. Wait for about 1-3 minutes, the DP722/DP730 will boot up with setup wizard for initial language and date format settings.

# **CHANGE LOG**

This section documents significant changes from previous versions of the user guide for DP755/DP722/DP730. Only major new features or major document updates are listed here. Minor updates for corrections or editing are not documented here.

## Firmware Version 1.0.1.13

o This is the initial version for DP755/DP730/DP722.

# **Need Support?**

Can't find the answer you're looking for? Don't worry we're here to help!

CONTACT SUPPORT