

# Grandstream Networks, Inc.

DP752/DP730/DP722

**DECT Cordless VolP System** 

# **Administration Guide**



DP752

DECT Cordless VolP

Base Station



DP730

DECT Cordless

HD Handset



DP722
DECT Cordless
HD Handset





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## **CAUTION**

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

## **WARNING**

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





# **FCC Warning**

This device complies with part 15 of the FCC Rules. Operation is subject to the following two conditions:

(1) This device may not cause harmful interference, and (2) this device must accept any interference received, including interference that may cause undesired operation. Any Changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment.

**Note:** This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

- Reorient or relocate the receiving antenna.
- Increase the separation between the equipment and receiver.
- Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
- Consult the dealer or an experienced radio/TV technician for help.

# FCC Exposure to Radio Frequency (RF) Signals

#### **For Handset**

This is a radio transmitter and receiver. It is designed and manufactured not to exceed the emission limits for exposure to radio frequency (RF) energy set by the Federal Communications Commission (FCC) of the U.S. Government. These limits are part of comprehensive guidelines and establish permitted levels of RF energy for the general population. The guidelines are based on the safety standards previously set by both U.S. and international standards bodies. These standards include a substantial safety margin designed to assure the safety of all persons, regardless of age and health. This device and its antenna must not be collocated or operating in conjunction with any other antenna or transmitter. This product has been shown to be capable of compliance for localized specific absorption rate (SAR) for uncontrolled environment/general population exposure limits specified in ANSI/IEEE Std. C95.1-1992 and had been tested in accordance with the measurement procedures specified in FCC/OET Bulletin 65 Supplement C (2001) and IEEE 1528.





#### For Base

This equipment complies with FCC radiation exposure limits set forth for an uncontrolled environment. This equipment should be installed and operated with minimum distance 20cm between the radiator & your body.

This transmitter must not be co-located or operating in conjunction with any other antenna or transmitter.

# **Operating Frequency Band (RF):**

DECT: 1881.792 MHz - 1897.344 MHz (TX/RX)

# **Modulation Mode:**

**DECT: GFSK** 

# **Max. Of Transmit Power:**

| DP752    | DP730    | DP722    |
|----------|----------|----------|
| 22.9 dBm | 22.5 dBm | 22.3 dBm |





# **GNU GPL INFORMATION**

DP752 firmware contains third-party software licensed under the GNU General Public License (GPL). Grandstream uses software under the specific terms of the GPL. Please see the GNU General Public License (GPL) for the exact terms and conditions of the license.

Grandstream GNU GPL related source code can be downloaded from Grandstream web site from: http://www.grandstream.com/support/faq/gnu-general-public-license/gnu-gpl-information-download





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# **DOCUMENT PURPOSE**

This document describes how to configure DP752 DECT Cordless VoIP Base Station features via DP730/DP722 DECT Cordless HD Handsets LCD menu and Web GUI menu. The intended audiences of this document are VOIP administrators. To learn the basic functions of DP752/DP730/DP722, please visit <a href="http://www.grandstream.com/support">http://www.grandstream.com/support</a> to download the latest "DP752/DP730/DP722 User Guide".

This guide covers following topics:

- Product Overview
- Getting Started
- Configuration Guide
- DP752 Association with DP760 Repeater
- <u>DP760 DECT Repeater Dissociation from DP752</u>
- Upgrading and Provisioning
- Restore factory default settings.





# **CHANGE LOG**

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

#### Firmware version 1.0.9.1

- Added option to enable or disable Session Timer for DP75x. [Enable Session Timer]
- Added option to enable or disable DP730 keypad backlight. [Display]
- Added support of EXTRA DEBUG level Syslog for DP75X. [Syslog Level]
- Add ability to manually configure date and time on the base Web GUI. [Manual Time Settings]
- Added support to enable or disable "Allow Unsolicited REFER" option for DP750/DP752. [Allow Unsolicited REFER]
- Change DP730 Preferences option "Mute as DND" default to "Enabled" from "Disabled" to make enabling DND more convenient.
- Added support for Intercom feature. [Shortcut]

#### Firmware version 1.0.7.5

This is the initial version for DP752/DP730/DP722.





# **GUI INTERFACE EXAMPLES**

http://www.grandstream.com/sites/default/files/Resources/DP752 web gui.zip

- 1. Screenshot of Login Page
- 2. Screenshots of Status Pages
- 3. Screenshots of Profiles Pages
- 4. Screenshots of DECT Pages
- 5. Screenshots of Settings Pages
- 6. Screenshots of Maintenance Pages
- 7. Screenshots of Phonebook Pages





# **WELCOME**

Thank you for purchasing Grandstream DP752 DECT Cordless VoIP Base Station and DP730/DP722 DECT Cordless HD Handsets.

The DP752 is a powerful DECT VoIP base station that pairs with up to 5 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 base station supports up to 10 SIP accounts and 5 concurrent calls 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 gives users the ability to answer all calls regardless of location in real-time. The DP752 supports a variety of auto-provisioning methods and TLS/SRTP/HTTPS encryption security. When paired with Grandstream's DP720, DP722 or DP730 handsets, the DP752 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 and residential environment. It is supported by Grandstream's DP750 and DP752 DECT VoIP base stations and delivers a combination of mobility and top-notch telephony performance. Up to five 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 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 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 and residential environment. It is supported by Grandstream's DP750 and DP752 DECT VoIP base stations and delivers a combination of mobility and top-notch telephony performance. Up to five 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 10 SIP accounts 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 DP752 / DP730/DP722:

Table 1: DP752 Features at a Glance

# DP752



- 5 Handsets.
- 10 accounts.
- 10 Lines.
- 5 Concurrent calls.
- PoE power support.
- Range: Up to 400m with DP730 and up to 350m with DP722/DP720 outdoor / 50m range indoor.

Table 2: DP730 Features at a Glance

#### **DP730**



- DECT cordless HD.
- 2.4 inch (240x320) color TFT LCD
- 500 hours standby / 40 hours talk time.
- 15 languages embedded.
- 10 accounts.
- 10 lines.
- 5 ring modes.

Table 3: DP722 Features at a Glance

#### **DP722**



- DECT cordless HD.
- 1.8 inch (128x160) color TFT LCD
- 250 hours standby / 20 hours talk time.
- 15 languages embedded.
- 10 accounts.
- 10 lines.
- 5 ring modes.





# **DP752 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 DP752.

**Table 4: DP752 Technical Specifications** 

|                     | ·  |
|---------------------|--|
| 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 with DP730 and up to 350 meters with DP722/DP720                                   |
|                     | outdoor / 50m range 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        | $G.711\mu/a\text{-law},\ G.723.1,\ G.729A/B,\ G.726\text{-}32,\ iLBC,\ G.722,\ OPUS,\ G.722.2/AMR\text{-}$ |
|                     | WB (special order), in-band and out-of-band DTMF (in audio, RFC2833, SIP                                   |
|                     | INFO), VAD, CNG, PLC, AJB  |
| Telephony Features  | 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                                 |
| QoS                 | Layer 2 QoS (802.1Q, 802.1p) and Layer 3 QoS (ToS, DiffServ, MPLS)   |
| Security            | 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  |
| Multi-language      | Chinese Simple, Chinese Tradition, Czech, Danish, Dutch, English, Estonian,                                |
|                     | Finnish, French, German, Hebrew, Hungarian, Japanese, Korean, Norwegian,                                   |
|                     | Portuguese, Romanian, Spanish, Swedish, Turkish.   |
| Upgrade/            | Firmware upgrade via TFTP/HTTP/HTTPS, mass provisioning using TR-069 or                                    |
| Provisioning        | AES encrypted XML configuration file   |
| Multiple SIP        | Up to ten (10) distinct SIP accounts per system  |
| Accounts            | Each handset may map to any SIP account(s)   |
|                     | Each SIP account may map to any handsets(s)  |





| Ring Group        | Flexible options when multiple handsets share the same SIP account  |
|-------------------|---|
|                   | <ul> <li>Circular Mode:         All phones ring sequentially, starting with the phone after the one which rang last.     </li> </ul>            |
|                   | <ul> <li>Linear Mode:         All phones ring sequentially in the predetermined order, starting with the first phone each time.     </li> </ul> |
|                   | ■ Parallel Mode:  |
|                   | All phones ring concurrently; after one phone answers, the remaining available phones can make new calls  |
| Power & Green     | Universal Power Supply Input AC 100-240V 50/60Hz; Output 5VDC, 1A; Micro-   |
| Energy Efficiency | USB connection; PoE: IEEE802.3af Class 1, 0.44W–3.84W   |
| Package Content   | Base unit, Universal Power Supply, Ethernet cable, Quick Installation Guide, GPL Statement  |
| Dimensions        | 140.31 x 64.98 x 105 mm   |
| (H x W x D)       |   |
| Weight            | Base unit: 140g;<br>Universal power supply: 50g;  |
|                   | Package: 370g   |
| Temperature       | Operation: -10° to 50°C (14 to 122°F); Storage: -20° to 60°C (-4 to 140°F);   |
| and Humidity      | Humidity: 10% to 90% non-condensing   |
| Compliance        | FCC: FCC Part 15B; FCC Part 15D;MPE; 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 50385; RED NB Cert  RCM: AS/NZS 32; AS/NZS 60950.1.  |
|                   | ANATEL, EAC, UL(adapter).   |
|                   | 7117 (1 LL, L/10, OL(udaptor).  |





# **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.

**Table 5: DP730 Technical Specifications** 

|                     | iubie e. Si 766 feetimoul opeetimoulons   |
|---------------------|---|
| 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 (240x320) 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 DP752), 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/            | Software Upgrade Over-The-Air (SUOTA), handsets provisioning Over-The-Air           |
| Provisioning        |   |
| Multiple Line       | Each handset may access up to 10 lines  |
| Access              |   |





| Power & Green<br>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<br>(H x W x D)          | Handset: 168.5 x 52.5 x 21.8mm;<br>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). |





# **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.

**Table 6: DP722 Technical Specifications** 

|                     | tubic of bi 722 footilious oppositioustorio  |
|---------------------|--|
| 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 (128x160) 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.711 $\mu$ /a-law,  |
|                     | G.723.1, G.729A/B, iLBC and OPUS are supported via companion DECT base               |
|                     | station DP752), 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, 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/            | Software Upgrade Over-The-Air (SUOTA), handsets provisioning Over-The-Air            |
| Provisioning        |  |
| Multiple Line       | Each handset may access up to 10 lines   |
| Access              |  |
| Power & Green       | Universal Power Supply Input AC 100-240V 50/60Hz; Output 5VDC 1A; Micro-USB          |
| Energy Efficiency   | connection; Rechargeable 800mAh Ni-MH Low Self-Discharge (LSD) AAA                   |
|                     | batteries (250 hours of standby time and 20 hours of talk time)                      |





| Package Content | Handsets unit, universal power supply, charger cradle, belt clip, 2 batteries, Quick |  |
|-----------------|--|--|
|                 | Installation Guide   |  |
| Dimensions      | Handset: 158 x 50 x 28.1mm;  |  |
| (H x W x D)     | Charger cradle: 81.15 x 75.89 x 36.36mm  |  |
| Weight          | Handset: 110g;   |  |
|                 | Charger cradle: 44g;   |  |
|                 | Universal power supply: 50g;   |  |
|                 | Package: 328g  |  |
| Temperature     | Operation: -10° to 50°C (14 to 122°F); Charging: 0 to 45°C (32 to 113°F); Storage:   |  |
| and Humidity    | -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).  |  |





# **GETTING STARTED**

This chapter provides basic installation instructions including the list of the packaging contents and also information for obtaining best performance with the DP730/DP722 DECT Cordless HD Handsets and the DP752 DECT Cordless VoIP Base Station.

# **Equipment Packaging**

Table 7: Equipment Packaging - DP752

# DP752 e unit

- 1 Base unit
- 1 Universal power supply 5V
- 1 Bracket
- 1 Ethernet cable
- 1 Quick Installation Guide
- 1 GPL Statement

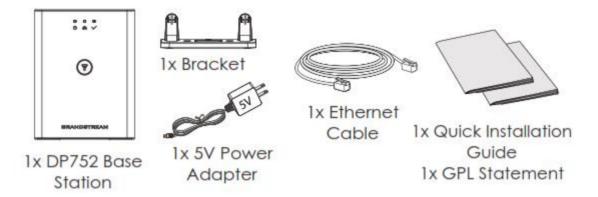


Figure 1: DP752 Package Content

Table 8: Equipment Packaging - DP730

# DP730

- 1 Handset unit
- 1 Universal power supply 5V
- 1 Charging station
- 1 Handset Belt
- 1 Rechargeable Li-ion battery
- 1 Quick Installation Guide





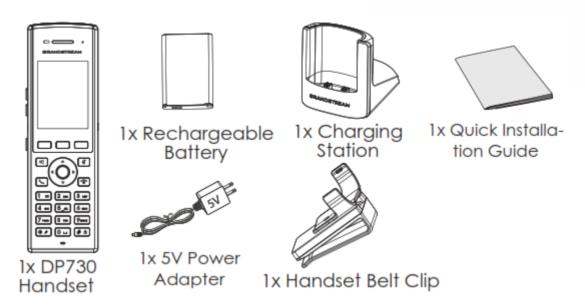


Figure 2: DP730 Package Content

Table 9: Equipment Packaging - DP722

# DP722 1 Handset unit 1 Universal power supply 5V 1 Charging station 1 Handset Belt 2 Rechargeable batteries

1 Quick Installation Guide

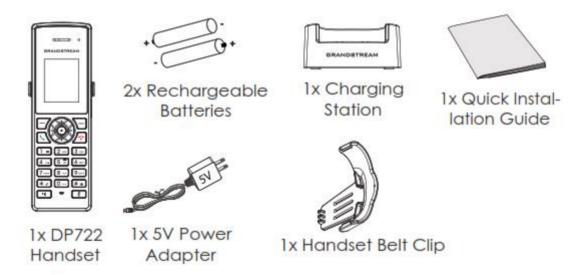


Figure 3: DP722 Package Content

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





## **Connecting DP752**

To setup the DP752 Cordless VoIP Base Station, please follow the steps below:

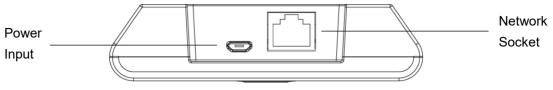


Figure 4: DP752 Back View

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 DP752 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

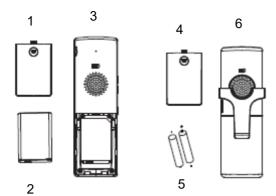
Please follow below steps to insert batteries into the Handsets:

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

Note: Please charge the batteries fully before using the Handsets for the first time







- 1. Battery compartment cover of DP730
- 2. Battery
- 3. Rear of DP730
- 4. Battery compartment cover of DP722
- 5. AAA Batteries
- 6. Rear of handset

Figure 5: Setting up the DP730/DP722

## **Battery Information**

Table 10: DP722/DP730 Battery Specifications

|   | Table 10. DF /22/DF / 30                    | battery opecinications                      |
|---|---|---|
|   | DP722 Batteries Specifications              | DP730 battery specifications                |
| • | Technology: Nickel Metal Hydride (Ni-MH)    | Technology: Li-ion                          |
| • | Size: AAA                                   | • Nominal Voltage: 3.8V                     |
| • | Voltage: 1.2V                               | Capacity: 1500mAh                           |
| • | Capacity: 800mAh                            | Charging time: 12 hours from empty to full  |
| • | Charging time: 12 hours from empty to full  | Standby time: up to 500 hours               |
| • | Standby time: up to 250 hours               | Talk time: up to 40 hours' active talk time |
| • | Talk time: up to 20 hours' active talk time |   |

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.

The specifications may differ depending on the age and capacity of the batteries used.

**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.





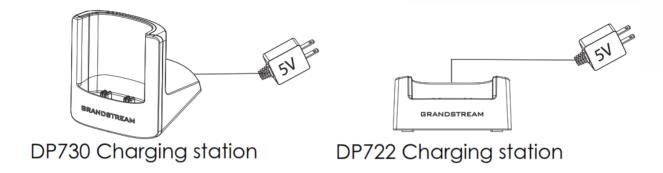


Figure 6: Setting up Charging Stations

#### **DP752 LED Patterns**

The DP752 has 5 LED lights on it. Please refer to the following table for the meaning of each light.



Figure 7: DP752 LED Patterns

Table 11: DP752 LED Patterns

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

# **DP730/DP722 Handsets Description**

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







Figure 8: DP722 Keys Description

Table 12: Keypad Keys Description

|     | Key                     | 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-<br>sensitive applications. For + sign, press and hold key 0. |





| 11. | # / 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. |
|-----|--------------------------|---|
| 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.   |

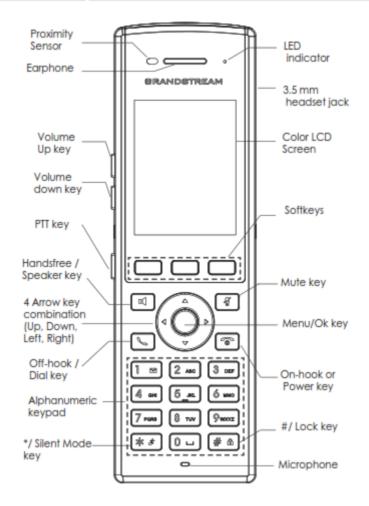


Figure 9: DP730 Keys Description

Table 13: Keypad 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.   |
| <b>5.</b> | 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.   |
| 10. | * / Silent Mode key                           | Activates or deactivates the silent mode (no ringtone heard during incoming call) when keep pressing on * in idle screen.   |
| 11. | LED indicator                                 | 1dual-color LED indicator indicating: power, call, battery, message waiting   |
| 12. | 3.5 mm headset jack                           | Phone connector for the headphones/headsets.  |
| 13. | Color LCD Screen                              | 2.4-inch (240x320) TFT color LCD  |
| 14. | Softkeys                                      | Correspond to functions displayed on the LCD. These functions change depending on the current context.  |
| 15. | Mute  | Mute microphone during conversation.  |
| 16. | Menu/OK key                                   | Selects the option chosen by the cursor or enters the main menu from the home screen.   |
| 17. | On-hook or Power key                          | Terminates calls or turns the handset on / off.   |
| 18. | # / 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. |
| 19. | Microphone                                    | Picks up audio earpiece and hands-free calls.   |

# **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.

Table 14: DP730/DP722 Icons Description

| 0 | Battery status  Not equipped with battery |
|---|---|
| В | Battery status Battery empty              |
|   | Battery status Battery low                |
| • | Battery status Battery normal             |
|   | Battery status Battery full               |

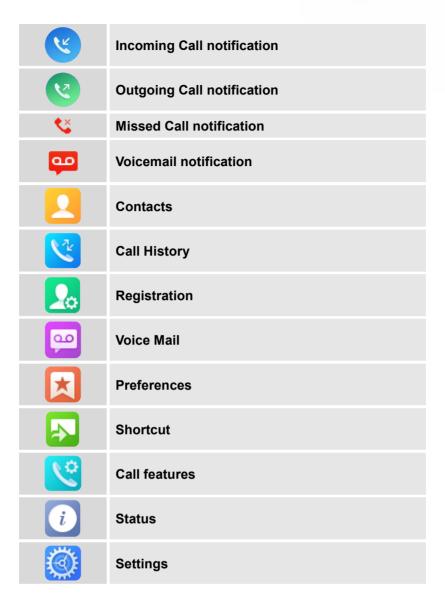




| NK)  | Battery status   |
|------|--|
| •    | Charging   |
|      | Signal status  |
|      | Not subscribed   |
| Tail | Signal status  |
|      | Not in range   |
| Tall | Signal status  |
|      | Signal very low  |
| Tall | Signal status Signal low                               |
|      | Signal status  |
| Tall | Signal normal  |
|      | Signal status  |
| Tall | Signal good  |
| ⊽.,  | Signal status  |
| î.al | Signal very good                                       |
|      | Microphone MUTE Status                                 |
|      | OFF - Not muted  |
|      | ON – Muted   |
|      | Speaker status   |
|      | OFF - Speaker is inactivated ON - Speaker is activated |
|      | OIN - Speaker is activated                             |
|      | Headset icon   |
| <<   | Missed Call icon                                       |
|      | Voicemail icon   |
|      | Ringtone status  |
|      | OFF - Ringtone off (Silent mode)                       |
|      | ON - Ringtone on                                       |
|      | Keypad Lock status                                     |
|      | OFF - Keypad unlock ON - Keypad locked                 |
|      |  |







# 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.





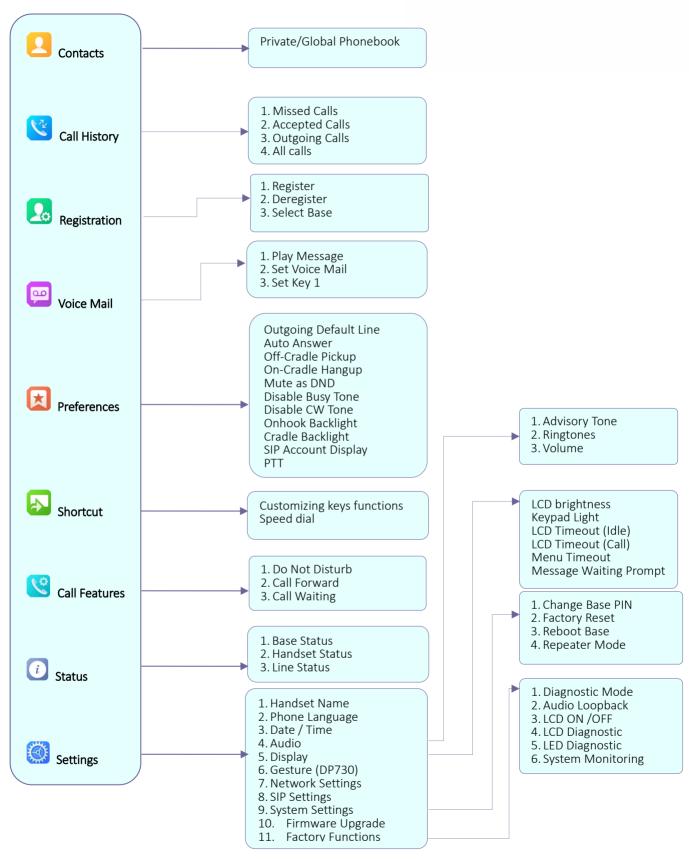


Figure 10: DP730/DP722 Menu Structure





| 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 DP752 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 | <ol> <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> </ol>   |
| Voice Mail   | <ol> <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> </ol>  |
| 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> <li>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).</li> <li>On-Cradle Hangup Enable/Disable On-Cradle Hangup. If enabled, users can end the call by placing the handset on-cradle. (Default is Disabled).</li> <li>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)</li> <li>Disable Busy Tone Enable/Disable Busy Tone. If set to enabled, busy tone will not be played. (Default is Disabled).</li> </ul> |





#### • 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 for 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)

#### **Shortcut**

#### Customizing keys functions

: 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 UP Key function. Default is Outgoing Calls (Call History).

▼ : Configure Arrow DOWN key function. Default is Accepted Calls (Call History).

◀: Configure Arrow LEFT key function. Default is Ringer Volume Down.

: 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 | <ol> <li>Do Not Disturb         Enable/disable do not disturb mode on the phone.     </li> <li>Call Forward         Configure call forward feature.     </li> <li>Call Waiting         Configure call waiting feature.     </li> </ol>   |
|---------------|--|
| Status        | <ol> <li>Base Status         <ul> <li>Display Base status (Firmware, IP address, Subnet mask, Gateway, MAC Address)</li> </ul> </li> <li>Handset Status         <ul> <li>Display Handsets status (Model RF, Firmware, IPEI)</li> </ul> </li> <li>Line Status         <ul> <li>Display Line status (Account name, Status)</li> </ul> </li> </ol>  |
| Settings      | <ol> <li>Handset Name         Change the Handset name.</li> <li>Phone Language         Select the language to be displayed on the phone's LCD. (Default is English.)</li> <li>Date/Time         Configure date and time on the Handsets.</li> <li>Audio         Specify ringtones for internal/external calls, the volume, advisory tones (Keypad, Confirmation, Low battery notifications) and Vibration mode (DP730 only).</li> <li>Display         Configure backlight, LCD timeout (Idle/Call), LCD brightness, Message Waiting Prompt and menu key timeout.</li> <li>Gestures (DP730 only)         Configure Close-to-Ear Backlight and Facedown Hangup.</li> <li>Network Settings</li> </ol> |

# 8. SIP Settings

Configure/View SIP accounts settings.

# 9. System Settings

Change Base PIN code, perform factory reset, reboot base and configure repeater mode.

# 10. Firmware Upgrade

Upgrade the firmware version of the Handsets.



Configure IP addresses and select DHCP/Static IP mode.



#### 11. Factory Functions

• Diagnostic Mode (DP722) / Keypad Diagnostic (DP730)

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.





#### **CONFIGURATION GUIDE**

The DP752 can be configured using:

- 1. Web GUI embedded on the DP752 using PC's web browser.
- 2. LCD Configuration Menu using the paired DP730/DP722 keypad.

Via Web GUI you can configure all the functions supported by the DP752; while via paired DP730/DP722, you can access limited configuration and need the base station PIN code for some options.

#### Obtain DP752 Base Station IP Address via Paired DP730/DP722

DP752 is by default configured to obtain IP address from DHCP server where the unit is located. In order to know which IP address is assigned to your DP752, please follow below steps using a paired DP730/DP722 Handsets with your DP752 base station. Please see <a href="Register DP730/DP722 Handsets to DP752">Register DP730/DP722 Handsets to DP752 Base Station</a>.

- 1. Press "Menu" (left softkey) or **OK** button on DP730/DP722 to view operation menu.
- 2. Press Arrow (Up, Down, Left, Right) keys to move the cursor to **Status** icon *i*, then press "Select" (left softkey) or **OK** button, then select **Base Status**.
- 3. Using Arrow keys, navigate down to view the IP address of the DP752.



Figure 11: Base Status

#### **Configuration via Web Browser**

The DP752 embedded Web server responds to HTTP/HTTPS GET/POST requests. Embedded HTML pages allow a user to configure the DP752 through a Web browser such as Google Chrome, Mozilla Firefox and Microsoft's IE.





#### **Accessing the Web UI**

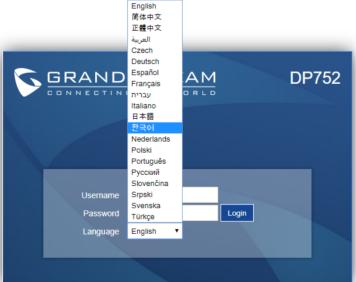
- 1. Connect the computer to the same network as DP752.
- 2. Make sure the DP752 is booted up.
- You may check DP752 IP address via a subscribed DP730/DP722 on its LCD menu at Status →
   Base Status → IP Address. Please see Obtain DP752 Base station IP Address via paired
   DP730/DP722
- 4. Open Web browser on your computer.
- 5. Enter the DP752's IP address in the address bar of the browser.
- 6. Enter the administrator's username and password to access the Web Configuration Menu.

**Note:** The computer must be connected to the same sub-network as the DP752. This can be easily done by connecting the computer to the same hub or switch as the DP752.

#### **Web GUI Languages**

Currently the DP752 series web GUI supports English, Czech, German, Spanish, French, Arabic, Hebrew, Italian, Russian, Netherlands, Japanese, Polish, Chinese Simple, Chinese Tradition, Korean, Portuguese, Slovakian, Serbian, Swedish and Turkish.

Users can select the displayed language in web GUI login page, or at the upper right of the web GUI after logging in











#### **Icons Bar Shortcut**

Users can find the icon bar right below the main menu of every page as displayed on following screenshot:



Figure 13: Icons Bar Shortcut

Please refer to following table describing the use of each icon:

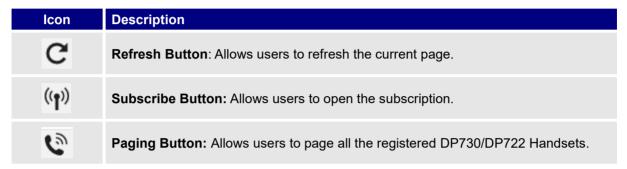


Figure 14: Icons Bar Description

#### **Saving the Configuration Changes**

After users makes changes to the configuration, pressing the **Save** button will save but not apply the changes until the **Apply** button on the top of web GUI page is pressed. Users can instead directly press the **Save and Apply** button. We recommend rebooting or powering cycle the phone after applying all the changes.

#### **Web UI Access Level Management**

There are two default passwords for the login page:

| User Level          | Username | Password  | Web Pages Allowed                     |
|---------------------|----------|---|---------------------------------------|
| End User Level      | user     | 123   | Only Status, Settings and Maintenance |
| Administrator Level | admin    | Random password available on the sticker at the back of the unit. | All pages                             |

The password is case sensitive with maximum length of 25 characters.

**Note:** When accessing the web GUI with end-user level, "Advanced Settings" page will be hidden.

When changing any settings, always SUBMIT them by pressing the **Save** or **Save and Apply** button on the bottom of the page. If using the **Save** button, after making all the changes, click on the **Apply** button on top of the page to submit. After submitting the changes in all the Web GUI pages, reboot DP752 to have the changes take effect if necessary; most of the options under the **Settings** page require reboot, but options under the **Accounts** and **Phonebook** pages do not.





#### **Changing User Level Password**

- 1. Access the Web GUI of your DP752 using the admin's username and password.
- 2. Press Login to access your settings.
- Go to Maintenance → Web/SSH Access.
- 4. In Web/SSH Access page, locate User Password section:
  - a. Type in your new user password in **New Password** field.
  - b. Type in again same entered password in Confirm Password field.
- 5. Press Save and Apply to save your new setting.

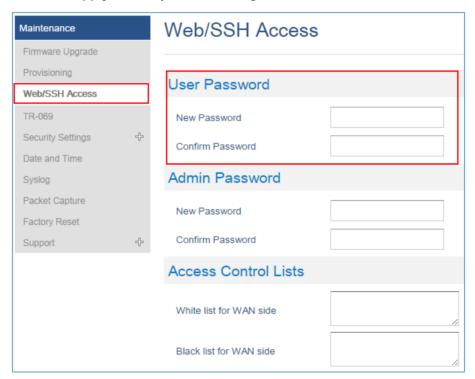


Figure 15: User Level Password

Note: DO NOT USE same password for both user and admin accounts.

#### **Changing Admin Level Password**

- 1. Access the Web GUI of your DP752 using the admin's username and password.
- 2. Press Login to access your settings.
- 3. Go to Maintenance → Web/SSH Access.
- 4. In Web/SSH Access page, locate Admin Password section:
  - a. Type in your new Admin Password in **New Password** field.
  - b. Type in again same entered password in **Confirm Password** field.





5. Press Save and Apply to save your new setting.

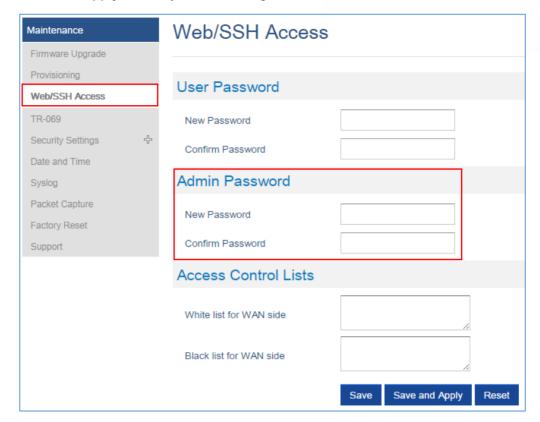


Figure 16: Admin Level Password

Note: DO NOT USE same password for both user and admin accounts.

#### **Changing HTTP / HTTPS Web Access Port**

- 1. Access the Web GUI of your DP752 using the admin's username and password.
- 2. Press Login to access your settings.
- 3. Go to Maintenance → Security Settings → Web/SSH.
- In Web/SSH Settings page, locate HTTP / HTTPS Web Port field and change it to your desired/new HTTP / HTTPS port.
  - Note: By default, the HTTP port is 80 and HTTPS is 443.
- 5. Select the Web Access Mode depending on desired protocol (HTTP or HTTPS).
- 6. Press Save and Apply to save your new setting.

Note: A reboot is required for this change to take effect.





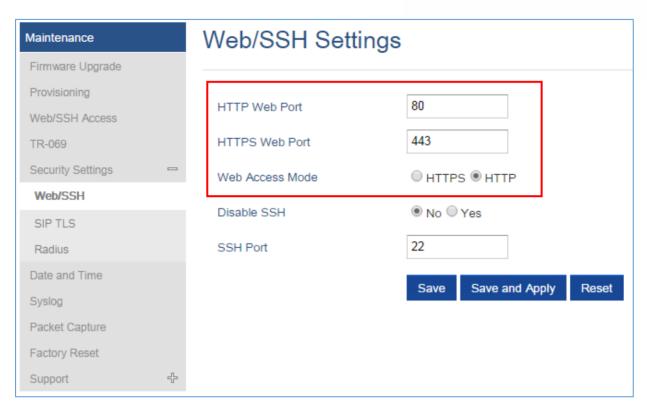


Figure 17: Web Access Port

#### **Web Configuration Definitions**

This section describes the options in the DP752 Web UI. As mentioned, you can log in as an administrator or an end user.

- Status: Display system info, network status, base and repeater status, account status, and line options.
- **Profiles:** Configure the profiles with general settings, network settings, SIP settings, audio settings, call settings and ring tones.
- DECT: Configure DECT general settings, account settings and Handsets line settings.
- Settings: Configure ring tones and system features.
- **Maintenance:** Configure networks, upgrading and provisioning, web/SSH access, TR-069, security settings, date and time, and syslog.
- Phonebook: Manage phonebooks: global (XML or LDAP) and private (XML).





## **Status Page Definitions**

**Table 15: Status Page Definitions** 

| Account Status            |   |
|---------------------------|---|
| Account                   | Displays list of configured accounts' names, from Account 1 to Account 10.  |
| SIP User ID               | Displays list of SIP user id registered.  |
| SIP Server                | Displays list of SIP Server.  |
| SIP Registration          | Shows the status of SIP registration. If the SIP account is successfully registered, it will display "YES" with green background. If the SIP account is not registered, it will display "NO" with red background. |
| HS Mode                   | Displays the HS mode configured for each account.   |
| HS status table           | Illustrates both Handsets and SIP accounts statuses. Each column is dedicated to one HS; each row shows the status of the account on that HS:   |
|                           | Gray: HS is not configured to use this account.   |
|                           | Green: HS is idle on this account.  |
|                           | Green Blinking: HS is using this account.   |
|                           | Red: HS is not available.   |
|                           | Red/Orange Blinking: HS is ringing on this account.   |
|                           | <b>Brown:</b> The line is configured, but the handset is not subscribed.  |
|                           | For example, if accounts 1, 3 and 4 are assigned to HS3 with account 3 in use, the column for HS3 will have cell 3 with red icon, cells 1 and 4 with green icon, and cells 2 and 5 with gray icon.                |
| DECT Base Status          |   |
| <b>Base Station Name</b>  | Displays name of base station. Default is <b>DP752_[last 6 digits of MAC address]</b> .   |
| Base DECT FW<br>Version   | Shows firmware version of base DECT.  |
| Base DECT RF<br>Region    | Indicates region of base DECT RF.   |
| Base DECT RFPI<br>Address | Specifies DECT RFPI (Radio Fixed Part Identity) address which is a unique identity for the base.  |





| Global Functions        |   |  |
|-------------------------|---|--|
| Unsubscribe<br>Handsets | Unsubscribes all Handsets from DECT base station.   |  |
| Upgrade Handsets        | Upgrade all Handsets from DECT base station.  |  |
| Handset Status          |   |  |
| Handset                 | Displays Handset index.   |  |
| Name                    | Displays Handsets names   |  |
| IPEI                    | Indicates IPEI number of each Handsets; this is the unique identity for the Handsets. If the Handsets is in range, the IPEI will be displayed with a green background, otherwise, it will be displayed with a red background. |  |
|                         | Illustrates battery status for each handset; it can be either:  Fully charged  Not fully charged  Low, needs to be charged or replaced  Charging  |  |
| Page                    | Sends paging request to corresponding Handsets, which will receive incoming ring tone and "Paging" will be displayed on their LCD screens; this function helps you locate the Handsets.                                       |  |
| Unsubscribe             | Unsubscribes corresponding handset from DECT base station.  |  |
| HS Firmware             | Indicates Handsets' firmware version number.  |  |
| Upgrade                 | Shows Handsets upgrade status or trigger handset upgrade process.   |  |
| RAM Dump                | Notifies when a debug file is available after recovery.   |  |
| Line Options            |   |  |
| Account                 | Account index.  |  |
| SIP User ID             | Displays the configured SIP User ID for the account.  |  |
| DND                     | DND status of the account. Default No.  |  |
| Forward                 | The unconditional forward number.   |  |
| <b>Busy Forward</b>     | The forward number for Call Forward Busy.   |  |
| Delayed Forward         | The no answer delayed forward number.   |  |





| Network Status   |   |  |
|------------------|---|--|
| MAC Address      | Shows Device ID in hexadecimal format. This is needed by network administrators for troubleshooting. The MAC address will be used for provisioning and can be found on the label on original box and on the label located on the bottom panel of the device.  |  |
| IP Address Mode  | Indicates used IP address mode: DHCP, Static IP or PPPoE.   |  |
| IP Address       | Displays assigned IP address. Example: 192.168.5.110  |  |
| Subnet Mask      | Displays assigned subnet mask. Example: 255.255.255.0   |  |
| Gateway          | Displays assigned default gateway.  Example: 192.168.5.1  |  |
| PPPoE Link Up    | Indicates PPPoE connection status.  |  |
| Primary DNS      | Shows assigned Primary DNS server address. Example: 8.8.8.8   |  |
| Secondary DNS    | Shows assigned Secondary DNS server address. Example: 8.8.4.4   |  |
| NAT Traversal    | Indicates type of NAT for each Profile. (Based on STUN protocol.)   |  |
| System Info      |   |  |
| Product Model    | Displays product model info. Default is <b>DP752</b> .  |  |
| Part Number      | Shows product part number. Example: 9610006512A (last 2 digits show HW version, in this example 12A for HW version 1.2A)  |  |
| Software Version | <ul> <li>Firmware Status: Displays the status of the firmware loaded.</li> <li>Boot: Specifies Boot version.</li> <li>Core: Specifies Core version.</li> <li>Base: Specifies Base version.</li> <li>Prog: Specifies Prog version. This is the main firmware release number, which is always used for identifying the software system of the DP752.</li> <li>Locale: Specifies Locale version.</li> <li>Recovery: Specifies Recovery version.</li> <li>Handset: Specifies Handset firmware version.</li> </ul> |  |
| System Up Time   | Indicates system uptime since last reboot.  |  |
| System Time      | Shows actual time and date according to your configuration.   |  |
| Service Status   | Reveals status of VoIP applications.  |  |





# **Profiles Page Definitions**

**Table 16: Profiles Page Definitions** 

| General Settings             |  |  |
|------------------------------|--|--|
| Profile Active               | Activates or deactivates SIP profile.  |  |
| Profile Name                 | Determines the name of the profile, this profile name can also be used in Handsets config provisioning for validation. By default, the values are profile 1 – profile 4.   |  |
| SIP Server                   | Configures SIP server IP address or domain name provided by VoIP service provider. This is the primary SIP server used to send/receive SIP messages from/to DP752.   |  |
| Failover SIP Server          | Specifies failover SIP server IP address or domain name provided by VoIP service provider. This server will be used if the primary SIP server becomes unavailable.   |  |
| Prefer Primary SIP<br>Server | Prefers primary SIP server. The profile will register to primary Server if registration with Failover server expires. Default is <b>No</b> .   |  |
| Outbound Proxy               | Specifies IP address or domain name of outbound proxy, media gateway or session border controller. Used by DP752 for firewall or NAT penetration in different network environments. If symmetric NAT is detected, STUN will not work, and only outbound proxy can correct the problem. |  |
| Voice Mail Access<br>Number  | Defines the voice mail portal access number to allow users accessing their voice messages.   |  |
| Network Settings             |  |  |
| Layer 3 QoS Settings         |  |  |
| SIP Diff-Serv                | Defines SIP Diff-Serv value. Default is 24.  |  |
| RTP Diff-Serv                | Defines RTP Diff-Serv value. Default is <b>46</b> .  |  |
| DNS Settings                 |  |  |
| DNS Mode                     | Selects DNS mode to use for the client to look up server. Default is <b>A Record</b> .   |  |
|                              | A Record: resolves IP Address of target according to domain name.  |  |
|                              | SRV: DNS SRV resource records indicate how to find services for various protocols.   |  |
|                              | NAPTR/SRV: Naming Authority Pointer according to RFC 2915.   |  |
|                              | • Use Configured IP: If selected, please fill in Primary IP, Backup IP 1 and Backup IP 2 to be used for server look up.  |  |





| Primary IP              | Specifies primary IP address where the base sends DNS query to, when "Use Configured IP" is selected for DNS mode.  |  |
|-------------------------|---|--|
| Backup IP 1             | Specifies backup IP 1 address where the base sends DNS query to, when "Primary IP" is not responding.   |  |
| Backup IP 2             | Specifies backup IP 2 address where the base sends DNS query to, when "Backup IP 1" is not responding.  |  |
| NAT Settings            |   |  |
| NAT Traversal           | Enables/disables NAT traversal mechanism. If activated (by choosing "STUN") and a STUN server is also specified (Maintenance → Network Settings → STUN Settings); the base performs according to STUN client specification. Under this mode, embedded STUN client will detect if and what type of firewall/NAT is being used. If detected NAT is a Full Cone, Restricted Cone, or a Port-Restricted Cone, the base will use its mapped public IP address and port in all of its SIP and SDP messages. If NAT Traversal field is set to "Keep Alive", the base will periodically (every 20 seconds) send a blank UDP packet (with no payload data) to SIP proxy to keep the "ping hole" on the NAT open. |  |
| Use NAT IP              | Defines NAT IP address used in SIP/SDP messages. It should only be used if required by ITSP.  |  |
| Proxy-Require           | Determines a SIP Extension to notify the SIP server that the base is behind a NAT/Firewall.   |  |
| SIP Settings            |   |  |
| Basic Settings          |   |  |
| SIP Transport           | Selects transport protocol for SIP packets; UDP or TCP or TLS. Make sure your SIP server or network environment supports SIP over the selected transport method. Default is <b>UDP</b> .  |  |
| SIP Registration        | Controls whether to send SIP REGISTER messages to the proxy server. Device may not be able to make/receives calls if disabled. Default is <b>Yes</b> .  |  |
| Unregister on<br>Reboot | Controls whether to clear SIP user's information by sending un-register request to the proxy server. The un-registration is performed by sending a REGISTER message with "Contact" header set to * and Expires=0 parameters to the SIP server. This will unregister all SIP accounts under concerned Profile. Default is <b>Yes</b> .   |  |
| Add Auth Header         | Adds "Authentication" header with blank "nonce" attribute in the initial SIP  |  |





| Outgoing Calls<br>Without<br>Registration                            | Enables the ability to place outgoing calls even when not registered (if allowed by ITSP); device will not be able to receive incoming calls. Any HS member of a hunting group that is not registered with a SIP account, will be able to place outbound calls using the SIP credentials of the primary hunting group HS.  For example: HS 1, 3 and 5 are members of the same Hunting Group. HS 1 is registered with a SIP account. HS 3 and 5 are not registered. HS 3 and 5 will be able to place outbound calls using the SIP account of HS 1, even if <i>Outgoing Call without Registration</i> is set to No. Default is <b>Yes</b> . |
|--|---|
| Register Expiration  | Refreshes registration periodically with specified SIP proxy (in minutes). Maximum interval is 65535 minutes (about 45 days). Default is <b>60</b> minutes (or 1 hour).   |
| SIP Registration<br>Failure Retry Wait<br>Time                       | Sends re-register request after specific time (in seconds) when registration process fails. Maximum interval is 3600 seconds (1 hour). Default is <b>20</b> seconds.  |
| SIP Registration<br>Failure Retry Wait<br>Time upon 403<br>Forbidden | Sends re-register request after specific time (in seconds) when registration process fails due to "403 Forbidden". Valid range is 0 to 3600 in second. 0 second means stop retry registration. Default is <b>1200</b> seconds.  |
| Reregister Before Expiration   | Sends re-register request after specific time (in seconds) to renew registration before the previous registration session expires.  |
| Local SIP Port   | Defines local port to use by the base for listening and transmitting SIP packets. Default value for Profile 1 is 5060, 6060 for Profile 2, 7060 for Profile 3 and 8060 for Profile 4.   |
| Use Random SIP<br>Port   | Controls whether to use configured or random SIP ports. This is usually necessary when multiple base stations are behind the same NAT. Default is <b>No</b> .   |
| Local RTP Port   | Defines local RTP port used to listen and transmit RTP packets. Default is <b>5004</b> .  |
| Use Random RTP<br>Port   | Defines local port to use by the base for listening and transmitting RTP packets. Default value for Profile 1 is 5004, 6004 for Profile 2, 7004 for Profile 3 and 8004 for Profile 4.   |
| SIP T1 Timeout   | Defines T1 timeout value. It is an estimate of the round-trip time between the client and server transactions. For example, the base station will attempt to send a   |
|  | request to a SIP server. The time it takes between sending out the request to the point of getting a response is the SIP T1 timer. If no response is received the timeout is increased to (2*T1) and then (4*T1). Request re-transmit retries would continue until a maximum amount of time defined by T2. Default is <b>0.5</b> seconds.   |





| Alive Interval  1–64800. Default is 30.  OPTIONS Keep Alive Max Lost  Maximum number of lost packets for OPTIONS Keep Alive feature before the phone sends a re-registration. Range of values 3-10. Default is 3.  Remove OBP from Route  Removes outbound proxy information from "Route" header when sending SIP packets. Default is No.  Support SIP Adds "SIP Instance ID" attribute to "Contact" header in REGISTER request as defined in IETF SIP outbound draft. Default is Yes.  Hold Target Before Refer  Sends re-INVITE to hold transfer target before sending REFER message to transferee. Default is No.  Refer-To Use Target Contact  Includes target's "Contact" header information in "Refer-To" header when using attended transfer. Default is No.  SUBSCRIBE for MWI  Sends periodic "SUBSCRIBE" requests (depends on "Register Expiration" parameter) for message waiting indication service. Default is No.  Enable 100rel  Appends "100rel" attribute to the "required" header of the initial signaling messages. Default is No.   |               |   |
|---|---------------|---|
| Enable OPTIONS Keep Alive Default is No.  Default is No.  OPTIONS Keep Alive Interval  OPTIONS Keep Alive Max Lost  Maximum number of lost packets for OPTIONS Keep Alive feature before the phone sends a re-registration. Range of values 3-10.  Default is 3.  Remove OBP from Route  Removes outbound proxy information from "Route" header when sending SIP packets. Default is No.  Support SIP Adds "SIP Instance ID" attribute to "Contact" header in REGISTER request as defined in IETF SIP outbound draft. Default is Yes.  Sends re-INVITE to hold transfer target before sending REFER message to transferee. Default is No.  Refer-To Use Target Contact  Includes target's "Contact" header information in "Refer-To" header when using attended transfer. Default is No.  SUBSCRIBE for MWI  Sends periodic "SUBSCRIBE" requests (depends on "Register Expiration" parameter) for message waiting indication service. Default is No.  TEL URI  Indicates E.164 number in "From" header by adding "User=Phone" parameter or using "Tel;" in SIP packets, if the base has an assigned PSTN Number.  • Disabled: Will use "SIP User ID" information in the Request-Line and "From" header.  • User=Phone: "User=Phone" parameter will be attached to the Request-Line and "From" header in the SIP request to indicate the E.164 number. If set to "Enable".  • Enabled: "Tel;" will be used instead of "sip;" in the SIP request.  Please consult your carrier before changing this parameter. Default is Disabled.  Do Not Escape "#" Preparameter of the parameter of the parameter. Default is Disabled. |               |   |
| Default is No.  | SIP Timer D   | Configures SIP timer D defined in RFC3261. Range of values 0-64. Default is <b>0</b> .  |
| Alive Interval  1–64800. Default is 30.  Maximum number of lost packets for OPTIONS Keep Alive feature before the phone sends a re-registration. Range of values 3-10. Default is 3.  Remove OBP from Route  Remove OBP from Route  Adds "SIP Instance ID" attribute to "Contact" header in REGISTER request as defined in IETF SIP outbound draft. Default is Yes.  Hold Target Before Refer  Refer-To Use Target Contact  Contact  Includes target's "Contact" header in in "Refer-To" header when using attended transfer. Default is No.  SUBSCRIBE for MWI  Enable 100rel  Appends "100rel" attribute to the "required" header of the initial signaling messages. Default is No.  TEL URI  Indicates E.164 number in "From" header by adding "User=Phone" parameter or using "Tel:" in SIP packets, if the base has an assigned PSTN Number.  • Disabled: Will use "SIP User ID" information in the Request-Line and "From" header.  • User=Phone: "User=Phone" parameter will be attached to the Request-Line and "From" header.  • Enabled: "Tel:" will be used instead of "sip:" in the SIP request. Please consult your carrier before changing this parameter. Default is Disabled.  Do Not Escape "#"  Replaces "#" by "%23" when sending SIP packets. Default is No.  |               | ·   |
| Alive Max Lost  sends a re-registration. Range of values 3-10.  Default is 3.  Remove OBP from Route  Removes outbound proxy information from "Route" header when sending SIP packets. Default is No.  Support SIP Adds "SIP Instance ID" attribute to "Contact" header in REGISTER request as defined in IETF SIP outbound draft. Default is Yes.  Hold Target Before Refer  Refer-To Use Target Contact  Includes target's "Contact" header information in "Refer-To" header when using attended transfere. Default is No.  SUBSCRIBE for MWI  Sends periodic "SUBSCRIBE" requests (depends on "Register Expiration" parameter) for message waiting indication service. Default is No.  Enable 100rel  Appends "100rel" attribute to the "required" header of the initial signaling messages. Default is No.  TEL URI  Indicates E.164 number in "From" header by adding "User=Phone" parameter or using "Tel:" in SIP packets, if the base has an assigned PSTN Number.  • Disabled: Will use "SIP User ID" information in the Request-Line and "From" header.  • User=Phone: "User=Phone" parameter will be attached to the Request-Line and "From" header in the SIP request to indicate the E.164 number. If set to "Enable".  • Enabled: "Tel:" will be used instead of "sip:" in the SIP request. Please consult your carrier before changing this parameter. Default is Disabled.  Do Not Escape '#" Beplaces "#" by "%23" when sending SIP packets. Default is No.  | •             | Time interval for OPTIONS Keep Alive feature in seconds. Range of values is 1–64800. Default is <b>30</b> .   |
| Route packets. Default is No.  Support SIP Adds "SIP Instance ID" attribute to "Contact" header in REGISTER request as defined in IETF SIP outbound draft. Default is Yes.  Hold Target Before Refer Sends re-INVITE to hold transfer target before sending REFER message to transferee. Default is No.  Refer-To Use Target Includes target's "Contact" header information in "Refer-To" header when using attended transfer. Default is No.  SUBSCRIBE for Sends periodic "SUBSCRIBE" requests (depends on "Register Expiration" parameter) for message waiting indication service. Default is No.  Enable 100rel Appends "100rel" attribute to the "required" header of the initial signaling messages. Default is No.  TEL URI Indicates E.164 number in "From" header by adding "User=Phone" parameter or using "Tel:" in SIP packets, if the base has an assigned PSTN Number.  • Disabled: Will use "SIP User ID" information in the Request-Line and "From" header.  • User=Phone: "User=Phone" parameter will be attached to the Request-Line and "From" header.  • User=Phone: "User=Phone" parameter will be attached to the Request-Line and "From" header.  • Enabled: "Tel:" will be used instead of "sip:" in the SIP request. Please consult your carrier before changing this parameter. Default is Disabled.  Do Not Escape "#" Replaces "#" by "%23" when sending SIP packets. Default is No.  | -             | sends a re-registration. Range of values 3-10.  |
| Instance ID  defined in IETF SIP outbound draft. Default is Yes.  Sends re-INVITE to hold transfer target before sending REFER message to transferee. Default is No.  Refer-To Use Target Contact  Includes target's "Contact" header information in "Refer-To" header when using attended transfer. Default is No.  SUBSCRIBE for Sends periodic "SUBSCRIBE" requests (depends on "Register Expiration" parameter) for message waiting indication service. Default is No.  Enable 100rel  Appends "100rel" attribute to the "required" header of the initial signaling messages. Default is No.  TEL URI  Indicates E.164 number in "From" header by adding "User=Phone" parameter or using "Tel:" in SIP packets, if the base has an assigned PSTN Number.  • Disabled: Will use "SIP User ID" information in the Request-Line and "From" header.  • User=Phone: "User=Phone" parameter will be attached to the Request-Line and "From" header in the SIP request to indicate the E.164 number. If set to "Enable".  • Enabled: "Tel:" will be used instead of "sip:" in the SIP request. Please consult your carrier before changing this parameter. Default is Disabled.  Do Not Escape '#'  Replaces "#" by "%23" when sending SIP packets. Default is No.   |               | •   |
| Refer transferee. Default is No.  Refer-To Use Target Contact Includes target's "Contact" header information in "Refer-To" header when using attended transfer. Default is No.  SUBSCRIBE for MWI Sends periodic "SUBSCRIBE" requests (depends on "Register Expiration" parameter) for message waiting indication service. Default is No.  Enable 100rel Appends "100rel" attribute to the "required" header of the initial signaling messages. Default is No.  TEL URI Indicates E.164 number in "From" header by adding "User=Phone" parameter or using "Tel:" in SIP packets, if the base has an assigned PSTN Number.  • Disabled: Will use "SIP User ID" information in the Request-Line and "From" header.  • User=Phone: "User=Phone" parameter will be attached to the Request-Line and "From" header in the SIP request to indicate the E.164 number. If set to "Enable".  • Enabled: "Tel:" will be used instead of "sip:" in the SIP request. Please consult your carrier before changing this parameter. Default is Disabled.  Do Not Escape '#' Replaces "#" by "%23" when sending SIP packets. Default is No.   | • •           | ·   |
| SUBSCRIBE for Sends periodic "SUBSCRIBE" requests (depends on "Register Expiration" parameter) for message waiting indication service. Default is No.  Enable 100rel Appends "100rel" attribute to the "required" header of the initial signaling messages. Default is No.  TEL URI Indicates E.164 number in "From" header by adding "User=Phone" parameter or using "Tel:" in SIP packets, if the base has an assigned PSTN Number.  • Disabled: Will use "SIP User ID" information in the Request-Line and "From" header.  • User=Phone: "User=Phone" parameter will be attached to the Request-Line and "From" header in the SIP request to indicate the E.164 number. If set to "Enable".  • Enabled: "Tel:" will be used instead of "sip:" in the SIP request. Please consult your carrier before changing this parameter. Default is Disabled.  Do Not Escape '#'  Replaces "#" by "%23" when sending SIP packets. Default is No.  | _             | Sends re-INVITE to hold transfer target before sending REFER message to transferee. Default is ${f No}$ .   |
| MWI  parameter) for message waiting indication service. Default is No.  Appends "100rel" attribute to the "required" header of the initial signaling messages. Default is No.  TEL URI  Indicates E.164 number in "From" header by adding "User=Phone" parameter or using "Tel:" in SIP packets, if the base has an assigned PSTN Number.  • Disabled: Will use "SIP User ID" information in the Request-Line and "From" header.  • User=Phone: "User=Phone" parameter will be attached to the Request-Line and "From" header in the SIP request to indicate the E.164 number. If set to "Enable".  • Enabled: "Tel:" will be used instead of "sip:" in the SIP request. Please consult your carrier before changing this parameter. Default is Disabled.  Do Not Escape '#'  Replaces "#" by "%23" when sending SIP packets. Default is No.  | _             | -   |
| Default is No.  Indicates E.164 number in "From" header by adding "User=Phone" parameter or using "Tel:" in SIP packets, if the base has an assigned PSTN Number.  • Disabled: Will use "SIP User ID" information in the Request-Line and "From" header.  • User=Phone: "User=Phone" parameter will be attached to the Request-Line and "From" header in the SIP request to indicate the E.164 number. If set to "Enable".  • Enabled: "Tel:" will be used instead of "sip:" in the SIP request.  Please consult your carrier before changing this parameter. Default is Disabled.  Do Not Escape '#'  Replaces "#" by "%23" when sending SIP packets. Default is No.   |               | · · · · · · · · · · · · · · · · · · ·   |
| <ul> <li>using "Tel:" in SIP packets, if the base has an assigned PSTN Number.</li> <li>Disabled: Will use "SIP User ID" information in the Request-Line and "From" header.</li> <li>User=Phone: "User=Phone" parameter will be attached to the Request-Line and "From" header in the SIP request to indicate the E.164 number. If set to "Enable".</li> <li>Enabled: "Tel:" will be used instead of "sip:" in the SIP request.</li> <li>Please consult your carrier before changing this parameter. Default is Disabled.</li> <li>Do Not Escape "#" by "%23" when sending SIP packets. Default is No.</li> </ul>   | Enable 100rel |   |
| · · · · · · · · · · · · · · · · · · ·   | TEL URI       | <ul> <li>Disabled: Will use "SIP User ID" information in the Request-Line and "From" header.</li> <li>User=Phone: "User=Phone" parameter will be attached to the Request-Line and "From" header in the SIP request to indicate the E.164 number. If set to "Enable".</li> <li>Enabled: "Tel:" will be used instead of "sip:" in the SIP request.</li> </ul> |
|   | •             | Replaces "#" by "%23" when sending SIP packets. Default is <b>No</b> .  |





| Disable Multiple m<br>Line in SDP   | Sends only one m line in SDP, regardless of how many m fields are in the incoming SDP. Default is <b>No</b> .   |
|-------------------------------------|---|
| Use Privacy Header                  | Controls whether the Privacy Header will be present in SIP INVITE message. Default is <b>Default</b> .  |
| Use P-Preferred-<br>Identity Header | Controls whether PPI Header will be present in SIP INVITE message. Default is <b>Default</b> .  |
| Ignore Alert-Info<br>Header         | This option is used to configure default ringtone. If set to "Yes", configured default ringtone will be played. The default setting is <b>No</b> .  |
| Session Timer                       |   |
| Enable Session<br>Timer             | Enables/Disables the Session Timer Support. Default is <b>Yes</b> .   |
| Session Expiration                  | Enables periodic refresh of SIP session via a SIP request (UPDATE, or re-INVITE). When the session interval expires and there is no refresh via an UPDATE or re-INVITE message, the session will be terminated. Session Expiration is the time at which the session is considered timed out, if no successful session refresh transaction occurs beforehand. Default is <b>180</b> seconds. |
| Min-SE                              | Defines Minimum session expiration (in seconds).  Default is <b>90</b> seconds.   |
| Caller Request<br>Timer             | Uses session timer when making outbound calls if remote party supports it.  Default is <b>No</b> .  |
| Callee Request<br>Timer             | Uses session timer when receiving inbound calls with session timer request. Default is <b>No</b> .  |
| Force Timer                         | Uses session timer even if the remote party does not support this feature. Selecting "No" will enable session timer only when the remote party supports it.  Default is <b>No</b> .  To turn off Session Timer, select "No" for Caller Request Timer, Callee Request Timer, and Force Timer.  |
| UAC Specify<br>Refresher            | <ul> <li>Specifies which end will act as refresher for outgoing calls:</li> <li>UAC: The base station acts as the refresher.</li> <li>UAS: Callee or proxy server act as the refresher.</li> </ul> Default is Omit  |
| UAS Specify<br>Refresher            | Specifies which end will act as refresher for incoming calls:  • UAS: The base station acts as the refresher.   |





|   | UAC: Callee or proxy server act as the refresher.  Default is Omit   |
|---|--|
| Force INVITE                              | Uses INVITE message to refresh the session timer.  Default is <b>No</b> .  |
| Security Settings                         |  |
| Validate Incoming<br>Messages             | Defines whether incoming messages will be validated or not. Default is <b>No</b> .   |
| Check SIP User ID for Incoming INVITE     | Checks SIP User ID in the Request URI of incoming INVITE; if it doesn't match the base SIP User ID, the call will be rejected. Direct IP calling will also be disabled. Default is <b>No</b> .   |
| Accept Incoming SIP from Proxy Only       | Checks SIP address of the Request URI in the incoming SIP message; if it doesn't match SIP server address of the account, the call will be rejected. Default is <b>No</b> .                      |
| Authenticate<br>Incoming INVITE           | Challenges the incoming INVITE for authentication with SIP 401 Unauthorized message. Default is $\bf No$ .   |
| Authenticate Server<br>Certificate Domain | Checks server TLS certificate to ensure that common name matches the configured SIP server. Default is <b>No</b> .   |
| Authenticate Server<br>Certificate Chain  | Checks server TLS certificate to ensure that it is authorized by a known certificate authority. Default is <b>No</b> .   |
| Trusted CA<br>Certificate                 | Treats entered certificate as a valid CA for authenticating the server TLS certificate. Default is <b>No</b> .   |
| Audio Settings                            |  |
| DTMF Settings                             |  |
| Send DTMF                                 | Specifies the mechanism to transmit DTMF digits. There are 3 supported modes:  |
|   | • In audio: which means DTMF is combined in the audio signal (not very reliable with low-bit-rate codecs);   |
|   | <ul> <li>Via RTP (RFC2833): permits to specify DTMF with RTP packet. Users could<br/>know the packet is DTMF in the RTP header as well as the type of DTMF;</li> </ul>                           |
|   | SIP INFO: uses SIP INFO to carry DTMF. The defect of this mode is that it's easily to cause desynchronized of DTMF and media packet for the reason the SIP and RTP are transmitted respectively. |
|   | Default is via RTP (RFC2833)   |





| Disable DTMF Negotiation                      | Uses above DTMF order without negotiation. Default is <b>No</b> .   |
|---|---|
| DTMF Payload Type                             | Defines payload type for DTMF using RFC2833.  |
| Vocoder Settings                              |   |
| Preferred Vocoder                             | Configures vocoders in a preference list (up to 8 preferred vocoders) that will be included with same order in SDP message. Vocoder types are G.711 A-/U-law, G.722, G.726-32, G.723, G.729, iLBC and OPUS  |
| Voice Frames per<br>TX                        | Transmits a specific number of voice frames per packet. Default is <b>2</b> ; increases to 10/20/32/64 for G711/G726/G723/other codecs respectively.  |
| G723 Rate                                     | Operates at specified encoding rate for G.723 vocoder. Available encoding rates are 6.3kbps or 5.3kbps. Default is <b>6.3kbps</b> .   |
| G726-32 Packing<br>Mode                       | Defines G726-32 packing mode ("ITU" or "IETF"). Default is <b>ITU</b> .   |
| iLBC Frame Size                               | Specifies iLBC packet frame size (20ms or 30ms). Default is <b>20ms</b> .   |
| iLBC Payload type                             | Determines payload type for iLBC. The valid range is between 96 and 127. Default is <b>97</b> .   |
| Disable OPUS stereo in SDP                    | Disables OPUS stereo attribute in SDP header. Default is <b>No</b> .  |
| OPUS Payload Type                             | Determines OPUS payload type. The valid range is between 96 and 127. Default is <b>125</b> .  |
| Use First Matching<br>Vocoder in 200OK<br>SDP | Includes only the first matching vocoder in its 2000K response, otherwise it will include all matching vocoders in same order received in INVITE. Default is <b>No</b> .  |
| SRTP Mode                                     | Selects SRTP mode to use ("Disabled", "Enabled but not forced", or "Enabled and forced"). Default is <b>Disabled</b> .  It uses SDP security description to exchange key. Please refer to:  SDES: <a href="https://tools.ietf.org/html/rfc4568">https://tools.ietf.org/html/rfc4568</a> SRTP: <a href="https://tools.ietf.org/html/rfc3711">https://tools.ietf.org/html/rfc3711</a> |
| Crypto Life Time                              | Adds crypto life time header to SRTP packets. Default is <b>Yes</b> .   |
| Silence<br>Suppression (VAD)                  | Allows detecting the absence of audio and conserves bandwidth by preventing the transmission of "silent packets" over the network. Default is <b>No</b> .   |
| Jitter Buffer Type                            | Selects jitter buffer type (Fixed or Adaptive) based on network conditions.   |





| Jitter Buffer Length | <ul> <li>High (initial 200ms, min 40ms, max 600ms) Note: not all vocoders can meet the high requirement.</li> <li>Medium (initial 100ms, min 20ms, max 200ms).</li> <li>Low (initial 50ms, min 10ms, max 100ms).</li> </ul>   |
|----------------------|---|
| Voice Monitoring     |   |
| Enable RTCP          | Enables RTCP statistics and control information. Default settings is <b>RTCP</b> .  |
| Call Settings        |   |
| Early Dial           | Sends an early INVITE each time a key is pressed when a user dials a number. Otherwise, only one INVITE is sent after full number is dialed (user presses <b>Dial Key</b> or after "no key entry timeout" expires). This option should be used only if there is a SIP proxy configured and supporting "484 Incomplete Address" responses. Otherwise, the call will likely be rejected by the proxy (with a 404 Not Found error). Default is <b>No</b> .  This feature is NOT designed to work with and should NOT be enabled for direct IP-to-IP calling. |
| Dial Plan Prefix     | Adds specified prefix to dialed number.   |
| Dial Plan            | <ol> <li>Dial Plan Rules:         <ol> <li>Accept Digits: +,1,2,3,4,5,6,7,8,9,0, *, #, A,a,B,b,C,c,D,d;</li> <li>Grammar: x - any digit from 0-9;</li></ol></li></ol>   |





• Example 3: {1xxx[2-9]xxxxxx | <2=011>x+} -

Allow any length of number with leading digit 2 and 10 digitnumbers of leading digit 1 and leading exchange number between 2 and 9; If leading digit is 2, replace leading digit 2 with 011 before dialing.

3. Default: Outgoing – {x+}

Example of a simple dial plan used in a Home/Office in the US:

{ ^1900x. | <=1617>[2-9]xxxxxx | 1[2-9]xx[2-9]xxxxxx | 011[2-9]x. | [3469]11 | \+x+}

**Explanation** of example rule (reading from left to right):

- ^1900x. prevents dialing any number started with 1900
- -<=1617>[2-9]xxxxxx allows dialing to local area code (617) numbers by dialing 7 numbers and 1617 area code will be added automatically
- 1[2-9]xx[2-9]xxxxxx allows dialing to any US/Canada Number with 11 digits length
- 011[2-9]x. allows international calls starting with 011
- [3469]11 allow dialing special and emergency numbers 311, 411, 611 and 911
- \+x+ allow dialing any digit with leading + sign; example: +16175669300

**Note:** In some cases, user wishes to dial strings such as \*123 to activate voice mail or other application provided by service provider. In this case \* should be predefined inside dial plan feature. An example dial plan will be: { \*x+ } which allows the user to dial \* followed by any length of numbers.

#### Use # as Dial Key

Treats "#" as the "Send" (or "Dial") key. If set to "No", this "#" key can be included as part of the dialed number. Default is **Yes**.

# Match Incoming Caller ID

Specifies matching rules with number, pattern or Alert Info text. When the incoming caller ID or Alert Info matches the rule, the phone will ring with selected distinctive ringtone. Matching rules:

- Specific caller ID number. For example, 8321123;
- A defined pattern with certain length using x and + to specify, where x could be any digit from 0 to 9. Samples:
  - xx+: at least 2-digit number;
  - xx : only 2-digit number;
  - [345]xx: 3-digit number with the leading digit of 3, 4 or 5;
  - [6-9]xx: 3-digit number with the leading digit from 6 to 9.

#### Alert Info text

Users could configure the matching rule as certain text (e.g., priority) and select the





|  | custom ring tone mapped to it. The custom ring tone will be used if the phone receives SIP INVITE with Alert-Info header in the following format:  Alert-Info: <a href="http://127.0.0.1">http://127.0.0.1</a> ; info=priority  Selects the distinctive ring tone for the matching rule. When the incoming caller ID or Alert Info matches the rule, the phone will ring with the selected ring. |
|--|--|
| Allow Auto Answer<br>by Call-info/Alert-<br>Info | If set to "Yes", the phone will automatically turn on the speaker phone to answer incoming calls, based on the SIP Call-Info/Alert-Info header sent from the server/proxy. The default setting is "No"   |
| Custom Alert-Info<br>for Auto Answer             | Used exclusively to match the contents of the info parameter in the Alert-Info header for auto answer.  The default auto answer headers will not be matched if this is defined.  |
| No Key Entry<br>Timeout                          | Initiates the call within this time interval if no additional key entry during dialing stage. Default is <b>4</b> seconds.   |
| Off-Hook Auto-Dial<br>Delay                      | Waits for specified time (in seconds) after off-hook before autodialing the preconfigured number. The range is 0 to 60 seconds.  |
| Enable Call<br>Features                          | Enables do not disturb, call forward and other call features via the local feature codes on the base. Otherwise, ITSP feature codes can be used. Default is <b>Yes</b> .   |
| Disable Call Waiting<br>Caller ID                | Disables displaying caller ID when receiving a second incoming call.  Default is <b>No</b> .   |
| Enable Call Waiting in Parallel Mode             | Enables call waiting for accounts using this profile which are set to Parallel ring mode. Default is <b>No</b> .   |
| Disable Visual MWI                               | Disables use of visual message waiting indicator when there is an unread voicemail message. Default is <b>No</b> .   |
| Transfer on Conference Hangup                    | Transfers the call to the other party if the conference initiator hangs up. Default is <b>No</b> .   |
| Ring Timeout                                     | Stops ringing when incoming call is not answered within a specific period of time. Default is <b>60</b> seconds.   |
| Hunting Group Ring<br>Timeout                    | Forwards incoming call to the next member of a hunt group if not answered within a specific period of time. Default is <b>20</b> seconds.  |
| Send Anonymous                                   | Sets "From", "Privacy" and "P_Asserted_Identity" headers in outgoing INVITE message to "anonymous", blocking caller ID. Default is <b>No</b> .   |





| Anonymous Call<br>Rejection | Rejects incoming calls with anonymous caller ID with "486 Busy here" message. Default is <b>No</b> .   |
|-----------------------------|--|
| Special Feature             | Selects Soft switch vendors' special mode. Example of vendors: Broadsoft, CBCOM, RNK, Huawei, ZTE IME, Phone Power, Metaswitch. Default is <b>Standard</b> . |
| Music On Hold URI           | Configure the music on hold URI to call when a call is on hold if server support it.   |
| Allow Unsolicited REFER     | Allow unsolicited REFER to accomplish an outgoing call.  |

## **DECT Page Definitions**

Table 17: DECT Page Definitions

| General Settings              |  |  |
|-------------------------------|--|--|
| Base Station Name             | Displays the name of the base station.  Default is DP752_[last 6 digits of MAC address].   |  |
| Admin PIN Code                | Configures admin PIN code for authentication. Default is <b>0000</b> .   |  |
| Enable Repeater<br>Mode       | Enables the base station repeater mode to associate with available repeaters. Once enabled the base station starts searching for nearby repeaters and open subscription to associate with the available repeaters. This option requires rebooting the base station to take effect. Default is <b>No</b> .  |  |
| Enable Repeater<br>Management | Enables base station network management of discovered and paired repeaters. Once enabled, users need first to reboot the base station to take effect, then login on the web UI and browser to Status page, a new tab "DECT Repeater Status" will be available to display discovered and paired devices and also allowing users to associate / dissociate repeaters and also access their web GUI. Default is <b>No</b> . |  |
| DECT PTT Silence<br>Timer     | This will determine for how long the PTT call will be closed after being in idle state. If set to 0, the timer will be disabled, and the PTT will be remaining forever until all party exit the PTT call.  |  |
| Clear Call Logs               | Deletes call history logs of all Handsets from base station.   |  |
| Handset Settings              |  |  |
| Handset                       | Displays list of Handsets' indexes, from HS 1 to HS 5.   |  |
| Handsets Name                 | Allows to customize Handsets name. Default is "HS1" to "HS5"   |  |





| Handsets<br>Phonebook | Assigns private phonebook to Handsets. Each Handsets has a private phonebook or can be disabled. A private phonebook can be shared between specific Handsets. <b>Example</b> : PB1 assigned to HS1 and HS2   |  |  |
|-----------------------|--|--|--|
| Off-hook Auto-dial    | Configures a number to auto dial when off-hook.  |  |  |
| SIP Account Settings  | s  |  |  |
| Account               | Displays list of accounts' indexes, from account 1 to account 10.  |  |  |
| SIP User ID           | Enters SIP user ID provided by VoIP service provider (ITSP). Usually in the form of digit similar to phone number or actually a phone number.  |  |  |
| Authenticate ID       | Enters account authenticate ID provided by VoIP service provider (ITSP). Can be identical to or different from "SIP user ID".  |  |  |
| Password              | Specifies account password provided by VoIP provider (ITSP) to register to SIP servers.  |  |  |
| Name                  | Chooses a name to be associated to user.   |  |  |
| Profile               | Selects the profile ID (1/2/3/4).  |  |  |
| HS Mode               | Determines HS modes; the base station supports 4 hunting group modes and 1 non-hunting group:  • Circular mode: all phones ring sequentially, starting with the phone after the one which rang last.  • Linear mode: all phones ring sequentially in the predetermined order,                                      |  |  |
|                       | <ul> <li>Parallel mode: all phones ring concurrently; after one phone answers, the remaining available phones can make new calls</li> <li>Non-Hunting Group: an account will be assigned to a single specific Handsets.</li> <li>For more details about Hunting Group, please refer to [Hunting Groups]</li> </ul> |  |  |
| Active                | Activates/deactivates the account.   |  |  |
|                       |  |  |  |

## **Handsets Line Settings**





| Handsets Line<br>Settings              | Configures Handsets line settings; the base station supports up to 10 SIP accounts, 5 Handsets; each Handsets can be configured with up to 10 accounts. Please be aware that the Handsets line settings will be affected by DID settings (hunting group settings) in "DECT → SIP Account Settings". For more details about Hunting Group, please refer to [Hunting Groups] |
|--|--|
| Handsets Settings (1                   | - 5)   |
| Disable Private<br>Phonebook           | Enables / disables private phonebook access on this Handsets. Default setting is ${\bf No.}$   |
| Enable Auto Answer                     | Enables / disables auto answer of incoming calls to Handsets. Default setting is <b>No.</b>  |
| Enable Offhook on Cradle Pickup        | Enables / disables off hook of Handsets when picked up from cradle. Default setting is ${\bf No.}$   |
| Enable Onhook on<br>Cradle Reposition  | Enables / disables on hook of Handsets when repositioned on cradle. Default setting is ${\bf No.}$   |
| Disable Conference                     | Enables / disables the conference option on this Handsets. Default setting is <b>No.</b>   |
| Disable Transfer                       | Enables / disables transfer option on this Handsets. Default setting is <b>No.</b>   |
| Disable Busy Tone on Remote Disconnect | Enables / disables the busy tone heard in the Handsets when call is disconnected remotely.   |
| Disable Call<br>Waiting Tone           | Disables playing call waiting tone during active call when receiving a second incoming call. The CWCID will still be displayed. Default is ${\bf No}$ .  |
| Custom Ringtone                        | Assigns custom ringtone to specific Handsets from the ringtones available on the base station. It takes up to 10 ringtone files which have be named as ring1.bin to ring10.bin, and you can assign one ringtone to each Handsets. Default is <b>Disabled</b> .   |
| Time Format                            | Set the displayed Time Format on Handsets to 12 hours or 24 hours. Default is  |

### **Settings Page Definitions**

**Date Format** 

**Table 18: Settings Page Definitions** 

Set the displayed date format on handsets.

## Network Settings – Basic Settings

12hr.





| IP Address Mode                      | Selects IP address mode (DHCP, Static IP or PPPoE) for DP752 Base Station.                                |   |
|--------------------------------------|---|---|
| Preferred DNS<br>Server              | Specifies preferred DNS server to use when DHCP, PPPoE or Static mode is set.                             |   |
| DHCP Settings                        | Host name (Option 12)   | Specifies the name of the client. The name may or may not be qualified with the local domain name. This field is optional but may be required by ISP.             |
|                                      | Vendor Class ID<br>(Option 60)  | Exchanges vendor class ID by clients and servers to convey particular configuration or other identification information about a client. Default is <b>DP7XX</b> . |
| PPPoE Settings                       | Configures PPPoE acco   | unt ID, password and service name.  |
| Static IP Settings                   | Sets IP address, subnet   | mask, gateway, DNS server 1, and DNS server 2.  |
| Network Settings – Advanced Settings |   |   |
| 802.1X Mode                          | Enables/Disables 802.1X mode. To enable this mode, you should select EAP-MD5. Default is <b>Disable</b> . |   |
| 802.1X Identity                      | Configures the identity for 802.1X mode.  |   |
| MD5 Password                         | Determines the MD5 password for 802.1X mode.  |   |
| 802.1X CA<br>Certificate             | Uploads / deletes the 802.1X CA certificates.   |   |
| 802.1X Client<br>Certificate         | Uploads / Deletes the 802.1X Client Certificates.   |   |
| Enable LLDP                          | Activates LLDP (Link Layer Discovery Protocol). Default is <b>No</b> .                                    |   |
| Layer 2 QoS<br>Settings              | Enable VLAN   | Enables / Disables the VLAN mode. Default is <b>Disabled</b> .  |
|                                      | Layer 2 QoS<br>802.1Q/VLAN Tag  | Sets layer 2 QoS 802.1Q/VLAN tag. Default is 0.   |
|                                      | Layer 2 QoS 802.1p<br>Priority Value for SIP<br>signaling   | Sets layer 2 QoS 802.1p priority value for SIP signaling. Default is <b>0</b> .   |
|                                      | Layer 2 QoS 802.1p<br>Priority Value for RTP<br>media   | Sets layer 2 QoS 802.1p priority value for RTP media. Default is <b>0</b> .   |





| STUN Settings   | Use STUN  | Enables STUN. Default is <b>No</b> .   |
|---|---|--|
|   | STUN server   | Configures IP address or domain name of STUN server. Only non-symmetric NAT routers work with STUN.  |
|   | Number of STUN<br>Response Misses<br>Allowed  | Specifies number of STUN response misses allowed before restarting DHCP service. The minimum is 3 misses.  |
|   | Keep-Alive Interval   | Sends periodically a blank UDP packet to SIP server to keep "ping hole" on the NAT router open. Default is <b>20</b> seconds.  |
| UPnP Discovery<br>Settings  | Enable UPnP discovery   | Enables/disables UPnP discovery feature. Default is <b>Yes.</b> After enabled, if you have a PC in the same network of DP752, you can browse it directly in your Network. Double click the device will open its web GUI in your default browser. |
|   | UPnP Discovery Notify Interval  | Specifies in seconds the interval to send out SSDP notifies. Default settings is <b>30</b> .   |
| Network → Open VPN® Settings  |   |  |
| Network → Open VP   | N® Settings   |  |
| Network → Open VP  OpenVPN® Enable  | Enables/Disables the O  | penVPN® feature.   |
|   | Enables/Disables the Operault settings is <b>No.</b>  | penVPN® feature.  of the OpenVPN® server.  |
| OpenVPN® Enable OpenVPN® Server   | Enables/Disables the O Default settings is <b>No.</b> Configures the address  |  |
| OpenVPN® Enable OpenVPN® Server Address   | Enables/Disables the O Default settings is <b>No.</b> Configures the address  Defines the port of the O   | of the OpenVPN® server.  |
| OpenVPN® Enable OpenVPN® Server Address OpenVPN® Port OpenVPN®  | Enables/Disables the O Default settings is <b>No.</b> Configures the address  Defines the port of the O   | of the OpenVPN® server.  OpenVPN® server. Default is <b>1194</b> .  tocol UDP or TCP used for OpenVPN®. Default is <b>UDP</b> .  |
| OpenVPN® Enable OpenVPN® Server Address OpenVPN® Port OpenVPN® Transport  | Enables/Disables the Operault settings is <b>No.</b> Configures the address  Defines the port of the Operault settings is <b>No.</b>  | of the OpenVPN® server.  OpenVPN® server. Default is <b>1194</b> .  Itocol UDP or TCP used for OpenVPN®. Default is <b>UDP</b> .   |
| OpenVPN® Enable OpenVPN® Server Address OpenVPN® Port OpenVPN® Transport OpenVPN® CA OpenVPN®                             | Enables/Disables the Operault settings is <b>No</b> .  Configures the address  Defines the port of the Operault settings is <b>No</b> .  Uploads the OpenVPN®   | of the OpenVPN® server.  OpenVPN® server. Default is 1194.  Itocol UDP or TCP used for OpenVPN®. Default is UDP.  O CA.  O Certificate.  |
| OpenVPN® Enable OpenVPN® Server Address OpenVPN® Port OpenVPN® Transport OpenVPN® CA OpenVPN® Certificate OpenVPN® Client | Enables/Disables the Operault settings is No.  Configures the address  Defines the port of the Operault settings is No.  Configures the address  Defines the port of the Operault settings is No.  Uploads the Operault settings is No. | of the OpenVPN® server.  OpenVPN® server. Default is <b>1194</b> .  tocol UDP or TCP used for OpenVPN®. Default is <b>UDP</b> .  O CA.  O Certificate.   |





| OpenVPN®<br>Password     | OpenVPN® authentication password (optional)  |  |
|--------------------------|--|--|
| Additional Options       | Additional options to be appended to the OpenVPN® config file, separated by semicolon. For example: comp-lzo no;auth SHA256  |  |
|                          | <b>Note:</b> Please use with caution. Make sure that the options are recognizable by OpenVPN® and do not unnecessarily override the other configurations above.  |  |
| External Service         |  |  |
| Order                    | Displays the order of the service. $(1 - 10)$  |  |
| Service Type             | Specifies the service's type. Two options are available: None or GDS.  Default setting is None. <b>Note:</b> The DP752 supports up 10 GDS items.  For more details, refer to Facility Access Systems   |  |
| Account                  | Specifies the account on which the service will be applied.  |  |
| System<br>Identification | Specifies the name to identify the service.  |  |
| System Number            | Specifies the system number, in case the service type option is set to GDS, the system number is the SIP user ID configured on GDS37xx, or the IP address of the GDS37xx itself if it's using IP call.   |  |
| Access Password          | Determines the access password, in case the service type option is set to GDS, the access password is the one configured on "Remote PIN to Open the Door" field on GDS37xx settings.   |  |
| Ring Tones               |  |  |
| System Ring Cadence      | Sets ring cadences for all incoming calls.   |  |
|                          | <b>Syntax:</b> c=on1/off1-on2/off2-on3/off3;) Default is set to c=2000/4000; (US standards) on1 is the period of ringing ("On time" in "ms") while off1 is the period of silence. Up to three cadences are supported.  |  |
| Call Progress Tones      | Configures tone frequencies according to user preference. By default, the tones are set to North American frequencies. Frequencies should be configured with known values to avoid uncomfortable high pitch sounds. ON is the period of ringing ("On time" in "ms") while OFF is the period of silence. In order to set a continuous ring, OFF should be zero. Otherwise it will ring ON ms and a pause of OFF ms and then repeats the pattern.  • "Dial tone" |  |





|                   | "Ring back tone"  |
|-------------------|---|
|                   | • "Busy tone"   |
|                   | "Call-Waiting tone"   |
|                   | Please refer to the document below to determine your local call progress tones: |
|                   | http://www.itu.int/ITU-T/inr/forms/files/tones-0203.pdf                         |
| System Features   |   |
| Disable Direct IP | Deactivates Direct IP-to-IP calling function. Default is <b>No</b> .            |
| User-Agent Prefix | This option allows to configure a customized User-Agent Prefix.                 |

## **Maintenance Page Definitions**

**Table 19: Maintenance Page Definitions** 

| Firmware Upgrade  |   |  |
|---|---|--|
| Base Firmware   |   |  |
| Firmware Upgrade  | <ul> <li>Selects how firmware upgrade request will be sent:</li> <li>Always Check for New Firmware</li> <li>Check New Firmware only when F/W pre/suffix changes</li> <li>Always Skip the Firmware Check.</li> </ul>               |  |
| HTTP/HTTPS User<br>Name                                 | Enters user name to authenticate with HTTP/HTTPS server.  |  |
| HTTP/HTTPS<br>Password                                  | Enters password to authenticate with HTTP/HTTPS server.   |  |
| Always send HTTP<br>Basic Authentication<br>Information | Includes configured user name and password in HTTP request before receiving authentication challenge from the server. Default is <b>No</b> .  |  |
| Verify host when using HTTPS                            | Verifies host name in server certificate when using HTTPS. Default is <b>Yes</b> .  |  |
| Upgrade via   | Selects firmware upgrade method: TFTP, HTTP or HTTPS.   |  |
| Firmware Server Path                                    | Sets IP address or domain name of firmware server. The URL of the server that hosts the firmware release. Default is <b>fm.grandstream.com/gs</b> .  Note: Make sure to not prepend address with "http://" or any other protocol. |  |





| Firmware File<br>Prefix                               | Checks if firmware file is with matching prefix before downloading it. This field enables user to store different versions of firmware files in one directory on the firmware server.  |  |  |
|---|--|--|--|
| Firmware File<br>Postfix                              | Checks if firmware file is with matching postfix before downloading it. This field enables user to store different versions of firmware files in one directory on the firmware server.   |  |  |
| Allow DHCP Option 43 and Option 66 to Override Server | Obtains configuration and upgrade server's information from DHCP server using options 66 and 43.  Note: If DHCP Option 66 is enabled, the base will attempt downloading the  |  |  |
|   | firmware file  | e from the server URL provided by DHCP, even though <b>Firmware</b> is left blank.               |  |
| Automatic<br>Upgrade                                  | <ul> <li>No: Base station will only do upgrade once at boot up.</li> <li>Yes, check for upgrade at random every X day(s): Specify a period in days.</li> <li>Check for upgrade every X minute(s): Specify a period in minutes.</li> <li>Check for upgrade every day: Specify "Hour of the day (0-23)".</li> <li>Check for upgrade every week: Specify "Hour of the day (0-23)" and "Day of the week (0-6)". Note: Day of week is starting from Sunday.</li> </ul> Default is No. |  |  |
| Random Interval<br>Start Time                         | Starting time for random interval in hours (0-23): minutes (0-59).   |  |  |
| Random Interval<br>Stop Time                          | Stopping time for random interval in hours (0-23): minutes (0-59).   |  |  |
| Hour of the Day<br>(0-23)                             | Defines the hour of the day to check the HTTP/TFTP server for firmware upgrades.   |  |  |
| Day of the Week<br>(0-6)                              | Defines the day of the week to check HTTP/TFTP server for firmware upgrades.   |  |  |
| Firmware Key  | Decrypts the firmware file using specified key (32-digit in Hexadecimal) when encrypted.   |  |  |
| Handset Firmware                                      |  |  |  |
| Handset<br>Firmware                                   | Upload   | Uploads Handsets firmware.  Reboot the device after uploading to apply and use the new firmware. |  |
|   | Delete   | Deletes previously uploaded Handsets firmware.   |  |





| Automatic<br>Upgrade                                    | Enables automatic upgrade when the Handsets detects the new firmware.  |
|---|--|
| Provisioning  |  |
| XML Config File Password                                | Decrypts XML configuration file when encrypted.  The password used for encrypting the XML configuration file is using OpenSSL.   |
| HTTP/HTTPS User<br>Name                                 | Enters user name to authenticate with HTTP/HTTPS server.   |
| HTTP/HTTPS Password                                     | Enters password to authenticate with HTTP/HTTPS server.  |
| Always send HTTP<br>Basic Authentication<br>Information | Includes configured user name and password in HTTP request before receiving authentication challenge from the server. Default is <b>No</b> .   |
| Verify host when using HTTPS                            | Verifies host name in server certificate when using HTTPS.  Default is <b>Yes</b> .  |
| Provisioning via  | Choose the method that the base station uses to request Handsets ipei config file. Can use TFTP, HTTP or HTTPS.  |
| Config Server Path                                      | Sets IP address or domain name of configuration server. The server hosts a copy of the configuration file to be installed on the DP752.  Default is <b>fm.grandstream.com/gs</b> .  Note: Make sure to not prepend address with "http://" or any other protocol. |
| Config File Prefix                                      | Checks if configuration files are with matching prefix before downloading them. This field enables user to store different configuration files in one directory on the provisioning server.  |
| Config File Postfix                                     | Checks if configuration files are with matching postfix before downloading them. This field enables user to store different configuration files in one directory on the provisioning server.   |
| Enable Handset Config Upgrade                           | Checks to allow Handsets config upgrade for Handsets related settings.  Default is <b>No</b> .   |
| Handset Config<br>File Prefix                           | If configured, only the Handsets configuration file with the matching encrypted prefix will be downloaded and flashed into the device. Default prefix is <b>ipei_</b>  |
| Handset Config File Postfix                             | If configured, only the Handsets configuration file with the matching encrypted postfix will be downloaded and flashed into the device.  |





| Allow DHCP Option 43 and Option 66 to Override Server | Obtains configuration and upgrade server's information from DHCP server using options 66 and 43.  Note: If DHCP Option 66 is enabled, the DP752 will attempt downloading the firmware file from the server URL provided by DHCP, even though <b>Config Server Path</b> is left blank.  |  |  |  |
|---|--|--|--|--|
| Allow DHCP Option 120 to Override SIP Server          | Obtains configuration and update SIP server information from DHCP server using options 120.  Note: If DHCP option 120 is enabled, the sip server setting can be changed for profile 1.   |  |  |  |
| 3CX Auto Provision                                    | Sends multicast "SUBSCRIBE" message for provisioning at booting stage, used for PnP (Plug-and-Play) configuration. Default is <b>Yes</b> .   |  |  |  |
| Automatic<br>Provisioning                             | <ul> <li>Specifies when provisioning process will be initiated:</li> <li>No: Base station will only request configuration files once at boot up.</li> <li>Yes, check for provisioning at random every X day(s): Specify a period in days.</li> <li>Check for provisioning every X minute(s): Specify a period in minutes.</li> <li>Check for provisioning every day: Specify "Hour of the day (0-23)".</li> <li>Check for provisioning every week: Specify "Hour of the day (0-23)" and "Day of the week (0-6)". Note: Day of week is starting from Sunday.</li> </ul> |  |  |  |
| Random Interval<br>Start Time                         | Starting time for random interval in hours (0-23): minutes (0-59).   |  |  |  |
| Random Interval<br>Stop Time                          | Stopping time for random interval in hours (0-23): minutes (0-59).   |  |  |  |
| Hour of the Day (0-23)                                | Defines the hour of the day to check the HTTP/TFTP server for configuration for changes. Default is 1.   |  |  |  |
| Day of the Week (0-6)                                 | Defines the day of the week to check HTTP/TFTP server for configuration file changes. Default is 1.  |  |  |  |
| Authenticate Conf<br>File                             | Authenticates configuration file before being accepted. This protects the device configuration from unauthorized modifications. Default is ${\bf No}$ .  |  |  |  |
| Download and Process ALL Available Config Files       | By default, device will provision the first available config in the order of cfgMA cfgMAC.xml, cfgMODEL.xml, and cfg.xml (corresponding to device specific model specific, and global configs). If set to Yes, device will download and approverwrite) all available configs in the same order.  |  |  |  |





| Upload Device Configuration |  |  |  |  |
|-----------------------------|--|--|--|--|
| Upload Device<br>Config     | Uploads manually device configuration (XML and TXT formats are supported) to base station.   |  |  |  |
| Download Device Co          | Download Device Configuration  |  |  |  |
| Device Config<br>(TXT)      | Downloads actual device configuration file in .txt format.   |  |  |  |
| Device Config<br>(XML)      | Downloads default device configuration file in .xml format.  |  |  |  |
| Backup Configuration        | n  |  |  |  |
| Backup<br>Configuration     | Generates an XML config file storing all current configuration after pressing <b>Backup Settings</b> and display list of backup files available (users need to wait a few seconds and refresh the provisioning page to display the backup files). Maximum of 10 backup files are supported and when it reaches 10 entries, this feature will be disabled. <b>Note:</b> Click on <b>Download</b> to download the specific backup or <b>Delete</b> to remove a the backup files. |  |  |  |
| Web/SSH Access              |  |  |  |  |
| User Password               |  |  |  |  |
| New Password                | Configures user level password. Case sensitive and max. Length of 30 characters.   |  |  |  |
| Confirm Password            | Configures the new user password again to confirm the new password.  |  |  |  |
| Admin Password              |  |  |  |  |
| Admin Password              | Configures admin level password. Case sensitive and max length is 30 characters.   |  |  |  |
| Confirm Password            | Configures the new user password again to confirm the new password.  |  |  |  |
| Access Control Lists        |  |  |  |  |
| White list for WAN side     | If white list exists, then only these IP addresses are allowed to web and SSF access.  |  |  |  |
| Black list for WAN side     | If black list exists and white list is empty, then only these IP addresses are no allowed to web and SSH access  |  |  |  |
| TR-069                      |  |  |  |  |





| Enable TR-069                   | Enables / Disables TR-069 service. Default is <b>No</b> .   |  |  |  |
|---------------------------------|---|--|--|--|
| ACS URL                         | Specifies URL of TR-069 Auto Configuration Server. (e.g., http://acs.mycompany.com), or IP address.                             |  |  |  |
| ACS Username                    | Enters username to authenticate to ACS.   |  |  |  |
| ACS Password                    | Enters password to authenticate to ACS.   |  |  |  |
| Periodic Inform<br>Enable       | Sends periodic inform packets to ACS. Default is <b>No</b>  |  |  |  |
| Periodic Inform<br>Interval     | Configures to sends periodic "Inform" packets to ACS based on specified interval  |  |  |  |
| Connection Request<br>Username  | Enters username for ACS to connect to the base station.   |  |  |  |
| Connection Request Password     | Enters password for ACS to connect to the base station.   |  |  |  |
| Security Settings               |   |  |  |  |
| Web/SSH                         |   |  |  |  |
| HTTP Web Port                   | Customizes HTTP port used to access base station web UI. Default is 80.   |  |  |  |
| HTTPS Web Port                  | Customizes HTTPS port used to access base station web UI. Default is 443.   |  |  |  |
| Web Access Mode                 | Determines the protocol to be user for the web interface access. Default is HTTP  |  |  |  |
| Disable SSH                     | Disables SSH access. Default is <b>No</b> .   |  |  |  |
| SSH Port                        | Customizes SSH access port. Default is 22.  |  |  |  |
| SIP TLS                         |   |  |  |  |
| SIP TLS Certificate             | Specifies SSL certificate used for SIP over TLS in X.509 format. Base station has built-in private key and SSL certificate.     |  |  |  |
| SIP TLS Private Key             | Specifies SSL certificate key used for SIP over TLS in X.509 format. Base station has built-in private key and SSL certificate. |  |  |  |
| SIP TLS Private Key<br>Password | Specifies SSL certificate key password used for SIP over TLS in X.509 format.   |  |  |  |
| RADIUS                          |   |  |  |  |





| Primary RADIUS<br>Server             | Defines the primary RADIUS server (Remote Authentication Dial-In User Service to authenticate dial-in users and authorize their access to requested system               |  |  |  |
|--------------------------------------|--|--|--|--|
|                                      | service.   |  |  |  |
| Primary RADIUS Authentication Port   | Uses specified port for authentication with the primary RADIUS server.  Default is <b>1812</b> .   |  |  |  |
| Primary RADIUS<br>Account Port       | Specifies port to be used for the primary RADIUS account. Default is <b>1813</b> .   |  |  |  |
| Primary RADIUS<br>Server Secret      | Enters secret string to be used to authenticate the RADIUS connection to the primary server. It should match RADIUS configuration.                                       |  |  |  |
| Secondary RADIUS<br>Server           | Sets IP or FQDN of the secondary RADIUS server. In case primary radius server becomes unusable, the secondary will take role and manage credit resources in the network. |  |  |  |
| Secondary RADIUS Authentication Port | Uses specified port for authentication with the secondary RADIUS authentication. Default is <b>1812</b> .  |  |  |  |
| Secondary RADIUS Account Port        | Specifies port to be used for the secondary RADIUS account.  Default is <b>1813</b> .  |  |  |  |
| Secondary RADIUS Sever Secret        | Enters secret string to be used to authenticate the RADIUS connection to the secondary server. It should match RADIUS configuration.                                     |  |  |  |
| RADIUS Timeout                       | Specifies period of time before request is cancelled if no response. Default is 2.   |  |  |  |
| RADIUS Retry                         | Specifies amount of retry attempts if RADIUS communication failure.  Default is <b>3</b> .   |  |  |  |
| <b>Device Custom Certif</b>          | ficate   |  |  |  |
| Device Custom Certificate            | Configures the certificate used by device during provisioning and web access.  |  |  |  |
| Device Custom Private Key            | Configures the private key used by device during provisioning and web access   |  |  |  |
| Enable Device<br>Custom Certificate  | When enables the device will use the custom certificate, otherwise it will use the default certificates. Default is <b>No</b> .  |  |  |  |
| Security                             |  |  |  |  |
| Validate Server<br>Certificates      | Validate server certificates with our trusted list for TLS connections. If set to "No device will bypass certificate validation (not recommended).                       |  |  |  |
| Date and Time                        |  |  |  |  |





| NTP Server                                | Defines URL or IP address of the NTP (Network Time Protocol) server.  Used by the base to synchronize the date and time. A list of public NTP servers can be found at <a href="mailto:pool.ntp.org">pool.ntp.org</a> .  |  |  |  |  |
|---|---|--|--|--|--|
| NTP Update Interval                       | Contacts NTP server at specified period of time (in minutes) to obtain the date and time. Default is <b>60</b> minutes.   |  |  |  |  |
| Allow DHCP Option<br>42 to NTP Server     | Obtains NTP server address from a DHCP server using DHCP Option 42; it will override configured NTP Server.  If set to "No", the base will use configured NTP server to synchronize time and date even if a NTP server is provided by DHCP server. Default is <b>No</b> .   |  |  |  |  |
| Time Zone                                 | Selects time zone to define date/time on the base.  |  |  |  |  |
| Self-Defined Time<br>Zone                 | Allows users to define their own time zone.   |  |  |  |  |
| Allow DHCP Option 2 to override time zone | Obtains time zone setting (offset) from a DHCP server using DHCP Option 2; it will override selected time zone. If set to "No", the base station will use selected time zone even if provided by DHCP server. Default is <b>No</b> .  |  |  |  |  |
| Manual Time Settings                      |   |  |  |  |  |
| Manual Time                               | Disables/Enables manual time settings. Default is Disabled.   |  |  |  |  |
| Year / Month / Day                        | Set the Year (2016-2037), Month (1-12) and Day (1-31) manually.   |  |  |  |  |
| Hour : Minute                             | Enter hour (0-23), Minute (0-59) manually.  |  |  |  |  |
| Syslog                                    |   |  |  |  |  |
| Syslog Protocol                           | Default UDP. While SSH/TLS allows sending syslog through secured TLS protocol to syslog server. <b>Note:</b> CA verification is required  |  |  |  |  |
| Syslog Server                             | Sets IP address or URL of system log server. The server collects system log information from the base station.  User may configure the Syslog port by adding it after the Syslog Server address. When configured, the Syslog messages will be sent to this port instead of the default syslog port. Default is <b>514</b> . |  |  |  |  |
| Syslog Level                              | Selects log level; the level is one of DEBUG, INFO, WARNING, ERROR, EXTRA DEBUG (default is <b>NONE</b> ). Syslog messages are sent based on the following events:  1. product model/version on boot up (INFO level)  2. NAT related info (INFO level)  |  |  |  |  |





|                             | <ol> <li>sent or received SIP message (DEBUG level)</li> <li>SIP message summary (INFO level)</li> <li>inbound and outbound calls (INFO level)</li> <li>registration status change (INFO level)</li> <li>negotiated codec (INFO level)</li> <li>Ethernet link up (INFO level)</li> <li>SLIC chip exception (WARNING and ERROR levels)</li> <li>memory exception (ERROR level)</li> </ol> |  |  |
|-----------------------------|--|--|--|
|                             | The Syslog uses USER facility. In addition to standard Syslog payload, it contains the following components: GS_LOG: [device MAC address] [error code] error message. <i>Example</i> : May 19 02:40:38 192.168.1.14 GS_LOG: [00:0b:82:00:a1:be][000] Ethernet link is up   |  |  |
| Syslog Keyword<br>Filtering | Syslog will be filtered based on keywords provided. If you enter multiple keywords, it should be separated by ','. Please Note: no spaces allowed.   |  |  |
| Print SIP in Syslog         | Includes full SIP messages in syslog.  |  |  |
| Packet Capture              |  |  |  |
| Status                      | Displays packet capture status. When user starts to capture trace file, it will show "RUNNING" status, otherwise, it will show "STOPPED".  |  |  |
| With RTP Packets            | Defines whether packet capture file contains RTP or not.  Default setting is <b>No</b> .   |  |  |
| Factory Reset               |  |  |  |
| Force Reboot                | Kills active processes and forces the reboot of DP752 base station.  |  |  |
| Configure Web UI Bu         | tton   |  |  |
| Reset Type                  | Specifies the type of reset to perform via the Web UI reset button: There are 3 reset type for Web UI button:  1. Full Factory Reset: Reset all the settings.  |  |  |
|                             | 2. NVRAM Settings Only: Reset all the settings except subscription information, so the Handsets will stay in subscribed after reset, but all the other settings like account info, call settings, audio settings, etc., will be reset.   |  |  |
|                             | 3. <b>DECT Settings Only:</b> Reset only the subscription (wipe out all the subscription information), but keep all the other settings like account, SIP settings.   |  |  |





| Perform Selected<br>Reset                  | Press Reset button to reset settings based on the reset type selected.  |   |  |
|--|---|---|--|
| Support                                    |   |   |  |
| Support Documentation                      | ion   |   |  |
| Online Support                             | Redirects users to tools page and DP7xx product pages available on Grandstream official website.  |   |  |
| Offline Support                            | Allows users to download the drilling templates.  |   |  |
| Support                                    |   |   |  |
| Configuration Support                      |   |   |  |
| Download Default Device Configuration      | Downloads the default device configuration file in .txt and .XML formats.   |   |  |
| Support                                    |   |   |  |
| Debug Tools                                |   |   |  |
| Remote Log Submission - Terms & Conditions | Agree to terms?   | By clicking the submit button, you agree to terms and conditions for submitting debug logs and allow the device to send these files to Grandstream to be used for troubleshooting purposes.  Note: Grandstream will not collect any information without customers acknowledged and permissions. |  |
|  | Email<br>Address  | Configures email field for core collection tools. Users can leave a contact email to get feedbacks.   |  |
|  | Comments  | Includes a comment with information regarding the use of the device when the problem occurred. As an alternative to the device submitting the files, you may download the files below and submit them to Grandstream manually.  |  |
| Debug Log Files                            | Kills phone control process on base station and generates core file and other debug information and also it allows users to delete the generated log files. Reboot required to restart process. |   |  |
| Handsets<br>Notification                   | Notifies Handsets when a debug file is available after recovery. Default is <b>No.</b>  |   |  |





# **Phonebook Page Definitions**

Table 20: Phonebook Page Definitions

| Global Phonebook XML Settings                 |  |  |  |  |
|---|--|--|--|--|
| Global Phonebook<br>Type                      | <ul> <li>Selects type of global phonebook to use.</li> <li>If set to XML, DP752 will use the configuration in Global Phonebook XML Settings page.</li> <li>If set to LDAP, DP752 will use configuration in Global Phonebook LDAP Settings page.</li> </ul> |  |  |  |
| Automatic XML Phor                            | nebook Download  |  |  |  |
| Enable Automatic<br>XML Phonebook<br>Download | Sends periodic requests to download XML Phonebook via HTTP, HTTPS, or TFTP.  |  |  |  |
| HTTP/HTTPS User<br>Name                       | Enters user name to authenticate with HTTP/HTTPS server.   |  |  |  |
| HTTP/HTTPS<br>Password                        | Enters password to authenticate with HTTP/HTTPS server.  |  |  |  |
| Phonebook XML<br>Server Path                  | Indicates server path to download XML phonebook file. This field could be IP address or URL, with up to 256 characters.  |  |  |  |
| Phonebook<br>Download Interval                | Sets interval to send XML phonebook download requests (in minutes). If set to 0, automatic download is disabled. Valid range is 5 to 720. Default is <b>5</b> minutes.   |  |  |  |
| Manual XML Phonebook Management               |  |  |  |  |
| Import XML<br>Phonebook                       | <b>Upload:</b> Uploads manually global XML phonebook file to the base station. <b>Delete:</b> Clears global XML phonebook file in the base station.  |  |  |  |
| Export XML<br>Phonebook                       | Downloads global XML phonebook from the base station in .xml format.   |  |  |  |
| Global Phonebook L                            | DAP Settings   |  |  |  |
| Global Phonebook<br>Type                      | Selects type of global phonebook to use.  If set to XML, DP752 will use the configuration in Global Phonebook XML Settings page. If set to LDAP, DP752 will use configuration in Global Phonebook LDAP Settings page.                                      |  |  |  |





| LDAP Phonebook Settings  |   |  |  |  |
|--------------------------|---|--|--|--|
| LDAP protocol            | Chooses LDAP or LDAPS (LDAP over TLS) protocol. Default is <b>LDAP</b> .  |  |  |  |
| Server Address           | Configures IP address or domain name of the LDAP server.  |  |  |  |
| Port                     | Determines LDAP server port. Default is <b>389</b> .  |  |  |  |
| Base                     | Indicates the location in the directory where the search is requested to begin.  Example: dc=grandstream, dc=com ou=Boston, dc=grandstream, dc=com  |  |  |  |
| User Name                | Binds "Username" for querying LDAP servers. Some LDAP servers allow anonymous binds in which case the setting can be left blank.  |  |  |  |
| Password                 | Binds "Password" for querying LDAP servers. The field can be left blank if the LDAP server allows anonymous binds.  |  |  |  |
| LDAP Filter              | LDAP filter to limit which contacts are fetched from the server. LDAP statement to limit which contacts are fetched from the server. Statement must be in parenthesis.                                |  |  |  |
| LDAP Version             | Selects LDAP protocol version to send bind requests. Default is <b>Version 3</b> .  |  |  |  |
| First Name<br>Attribute  | Defines first name attributes of each record to be returned in the LDAP search result.  This field allows users to configure multiple space separated name attributes.  Example: gn cn sn description |  |  |  |
| Last Name Attribute      | Defines last name attributes of each record to be returned in the LDAP search result.  This field allows users to configure multiple space separated name attributes.  Example: gn cn sn description  |  |  |  |
| Work Number<br>Attribute | Specifies which LDAP attribute represent the contact's work number. Must be in number attributes on LDAP server.  |  |  |  |
| Home Number<br>Attribute | Specifies which LDAP attribute represent the contact's home number. Must be in number attributes on LDAP server.  |  |  |  |
| Mobile Number            | Specifies which LDAP attribute represent the contact's mobile number. Must be in  |  |  |  |





| Attribute                          | number attributes on LDAP server.  |  |  |  |  |
|------------------------------------|--|--|--|--|--|
| Max. Hits                          | Specifies maximum number of results to be returned by LDAP server. If set to 0 server will return all search results. Valid range is 1 to 3000.  Default is <b>500</b> . |  |  |  |  |
| Search Timeout                     | Sets interval (in seconds) for the server to process the request and return search results to the client. Default is <b>30</b> seconds.                                  |  |  |  |  |
|                                    |  |  |  |  |  |
| Private Phonebook S                | Settings   |  |  |  |  |
| Private Phonebook S Phonebook Name | Settings  Defines private phonebook name.  |  |  |  |  |
|                                    |  |  |  |  |  |

# **Change Base Station Admin PIN code**

**Phonebook** 

For security reasons, advanced settings in DP752 base station cannot be accessed from DP730/DP722 Handsets except if Admin PIN code is provided. By default, Admin PIN code is 0000. We strongly recommend changing your Admin PIN code following below steps:

- 1. Access the Web GUI of your DP752 using the admin's username and password.
- 2. Press Login to access your settings.
- 3. Go to **DECT** → **General Settings** tab.
- 4. Enter your new Admin PIN Code (only digits accepted) in appropriate field.
- 5. Press Save and Apply to save your settings.





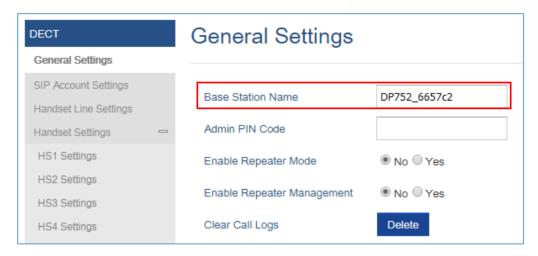


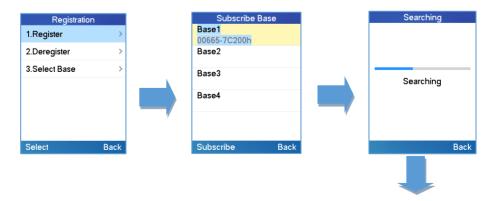
Figure 18: Admin PIN Code

# Register DP730/DP722 Handsets to DP752 Base Station

- On DP752 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
  - ((1)) to Open Subscription.
- On DP730/DP722, press "Subscribe" softkey if available on the main screen or access Menu →
  Registration → Register while the DP752 Radio icon is blinking.

**Note**: "Subscribe" softkey appears only if DP730/DP722 is not registered to any DP752 base station.

- 3. Select **BaseX** (X=1-4) corresponding to the desired base station DP752, 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 DP752.
- 5. Press **Subscribe** to pair with the displayed DP752.
- 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.







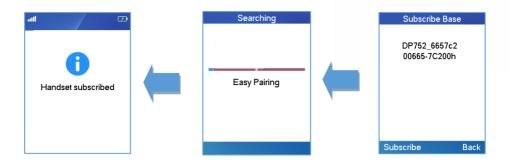


Figure 19: Registration Process

# Using DP730/DP722 with Multiple DP752 Base Stations

DP730/DP722 is able to be registered to up four different DP752 base stations.

### Registering DP730/DP722 to an additional DP752 base station

Considering DP730/DP722 is previously registered to an initial base station, please follow below steps to register a Handsets 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.
- 3. Select Register.
- 4. Navigate to an unsubscribed base using arrow keys, and click on **Subscribe**.
- 5. Make sure that the subscription is opened on the new base station.

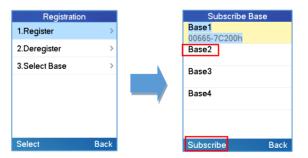


Figure 20: Multiple Base Stations Registration

# **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**.





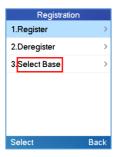


Figure 21: Switching Between Base Stations

# **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 DP752 Base Station UI:

- 1. Access DP752 Web Interface.
- 2. Go to Status → DECT Base Status.
- 3. Locate the Handsets to unregister and press "Unsubscribe" button.





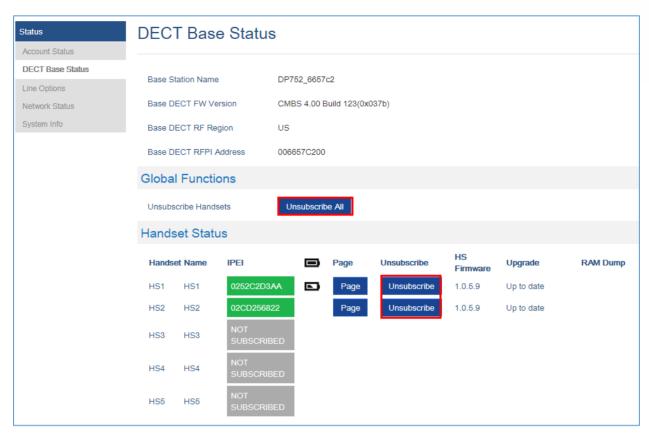


Figure 22: Unregister DP730/DP722 from DP752 web UI

# Locating DP730/DP722 Handsets from DP752 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 DP752 base station using below steps:

#### Locate via DP752 Web UI

- 1. Access the Web GUI of your DP752 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 to end paging call.





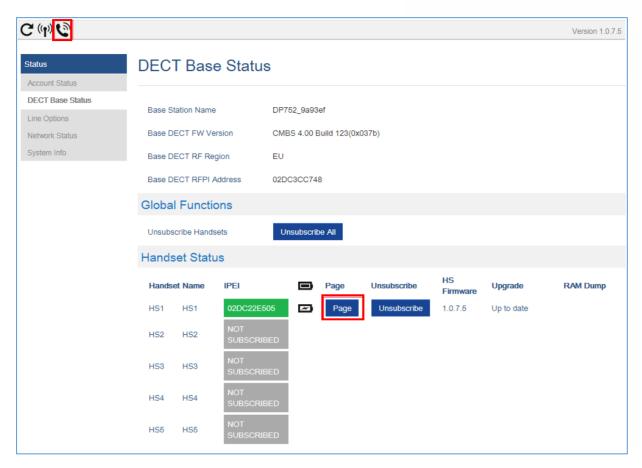


Figure 23: Locate Handsets via Web UI

### Locate via DP752 Base station

- 1. On DP752 Base station front side, press Radio/Page bu
- 2. All registered Handsets will receive Paging call.
- Once located, you can end the paging calling by pressing any key on the Handsets or by pressing again Radio/Page button.

# **Register a SIP Account**

DP752 supports up to 10 SIP accounts, 5 Handsets. Each Handsets can be configured up to 10 accounts. Please be aware that line settings will be affected by DID settings (hunting group settings) in "DECT  $\rightarrow$  SIP Account Settings".





# **Register Account via Web User Interface**

- 1. Access the Web GUI of your DP752 using the admin's username and password.
- 2. Press Login to access your settings and navigate to Profiles tab and select a profile to use.

DP752 supports up to 4 profiles. A profile is a set of settings including general settings, network settings, SIP setting, audio setting, call settings and ring tones, etc.

A profile can be used with different SIP accounts.

- 3. In General Settings, set the following:
  - a. Profile Active to Yes.
  - b. SIP Server field with your SIP server IP address or FQDN.
  - c. **Failover SIP Server** with your Failover SIP Server IP address or FQDN. Leave empty if not available.
  - d. **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.
  - e. **Outbound Proxy** with your Outbound Proxy IP Address or FQDN. Leave empty if not available.

For more information, related to above options please refer to [Profiles Page Definitions].

4. Press Save and Apply to save your configuration.

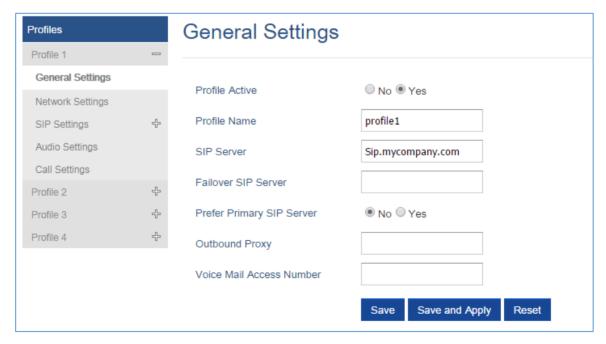


Figure 24: SIP Settings





- 5. Go to **DECT** → SIP Account Settings
- 6. Configure your SIP details in desired account:
  - a. Account: Select Account row to configure (Account 1 Account 10).
  - b. **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.
  - c. **Authenticate ID**: SIP service subscriber's Authenticate ID used for authentication. Can be identical to or different from SIP User ID.
  - d. 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.
  - e. Name: Any name to identify this specific user.
  - f. **Profile**: Select the corresponding Profile ID (1/2/3/4).
  - g. HS Mode: Assign the account to specific Handsets (HS1, HS2...) or hunting group mode.
  - h. Active: Set to Yes. If set to No, account is disabled and will not register.
- 7. Press Save and Apply to save your configuration.

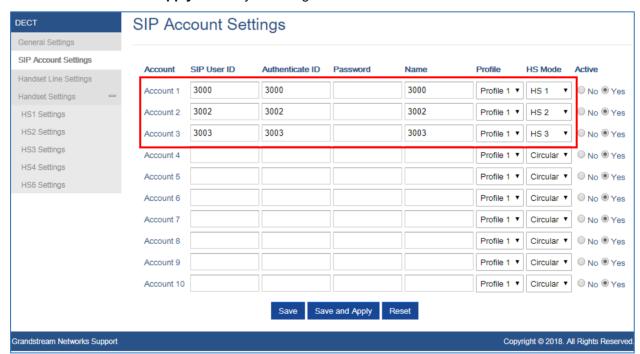


Figure 25: SIP Accounts Settings

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 DP752 web interface under **Status**  $\rightarrow$  **Account Status** (a green background with Yes under SIP Registration column for corresponding account indicates the account(s) has been successfully registered).







Figure 26: Account Status

# **Multiple Lines and Hunting Groups**

The DP752 Base Station has the ability to assign 10 lines to each registered DP730/DP722 Handsets (Up to 5 Handsets) to receive/make calls.

When a Handsets has many lines configured, users can select specific line for outgoing calls using **Outgoing Default Line** feature.

For incoming calls, users can choose either to redirect them to a specific Handsets or to many using Hunting Group feature so to have the same phone number and incoming calls will be distributed in a Linear, Circular or Parallel manner among the Handsets active in that Hunting Group. The number of hunting groups is limited by the number of SIP accounts registered to the base station (up to 10 accounts).

Hunting group feature is mainly used in office, warehouse and call center environments to distribute incoming calls in the best way depending on the type of hunt group.

In order to configure hunting groups for DP730/DP722 Handsets registered to the Base, users need first to register SIP accounts on DP752 Base Station **SIP Account Settings** and then assign accounts accordingly as lines for DP730/DP722 **Handset Line Settings**.





# **Handsets Line Settings**

This section will describe how to assign lines for each DP730/DP722 Handsets for making calls.

- 1. Access the Web GUI of your DP752 using the admin's username and password.
- 2. Press Login to access your settings.
- Go to DECT → Handsets Line Settings and assign to Handsets the SIP accounts already configured. Each Handsets can be configured to use up to 10 SIP accounts.



Figure 27: Handsets Line Settings

After applying your configuration, **Account Status** page will display the status of Handsets along with accounts status. Each column shows one HS; each row shows if the account is assigned to a HS.

**For example:** If the account 2, 4 and 6 are assigned to the HS2, the column of HS2 will have cells 2, 4 and 6 in green background, and account 1, 3, 5, 7, 8, 9 and 10 are in gray background. If a line is being used it will be blinking in a green / white background.





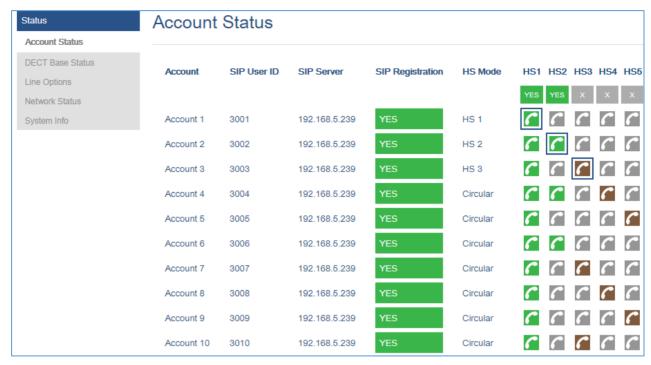


Figure 28: Account Status - Line Status

# **Outgoing Default Line**

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

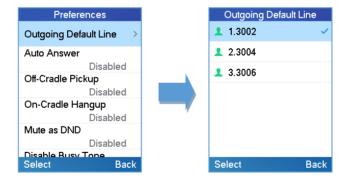


Figure 29: Outgoing Default Line

### **Hunting Groups**

DP752 supports 3 types of hunting groups as described below:

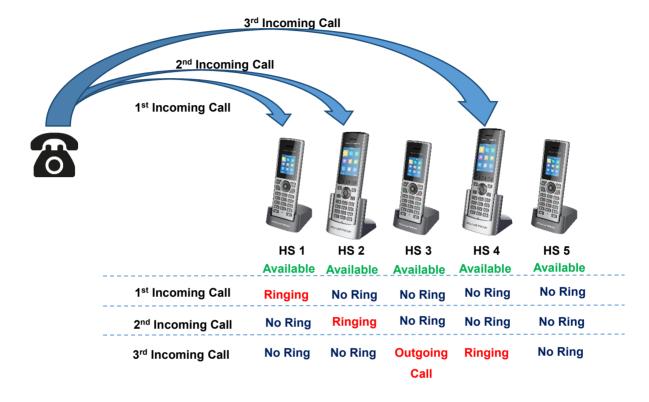
In the examples below, we consider that all Handsets are in same hunting group and only the type of hunting group differs.

• **Circular:** The base station will note which Handsets answered the last call, and forward the call to the next available Handsets in round-robin fashion.





In the example below; the 1<sup>st</sup> incoming call was sent to HS1 since all Handsets were available; 2<sup>nd</sup> incoming call will be sent to HS2 since previous call was answered by HS1 and HS2 is the next available Handsets in the list; 3<sup>rd</sup> will be sent to HS4 since HS2 was the last one answering the call and HS3 is busy making an outgoing call (if HS3 was available, the call will be sent to HS3).



• Linear: The base station will distribute calls in predefined order from the lowest-numbered available Handsets, if no answer within ring timeout, the call will be sent to next available Handsets in sequence. This mode is also called "serial hunting".

In the example below; all Handsets are available, the incoming call will be sent to HS1 since it's the lowest-numbered available Handsets, if no answer within ring timeout, the call will be sent to HS2 since it's the next available lowest-numbered Handsets, and same applies for HS3 and etc.







• **Parallel:** In this mode, all phones ring concurrently. If one phone answers, the remaining available phones can make new outgoing calls.



This section will describe how to configure hunting groups for incoming calls: Below steps are considering that SIP accounts were previously registered.

- 1. Access the Web GUI of your DP752 using the admin's username and password.
- 2. Press Login to access your settings.
- 3. Go to **DECT** → **SIP Account Settings**.
- 4. Set **HS Mode** depending on your needs to configure your hunting groups.
- 5. Press Save and Apply to save your settings.

# Example:

In the example below Account 2 (3003) is assigned to HS1 and HS2, and the hunting group (**HS Mode**) is set to **Linear**, so incoming calls to that account will make HS1 ringing first then if no answer within ring timeout the HS2 will start ringing.





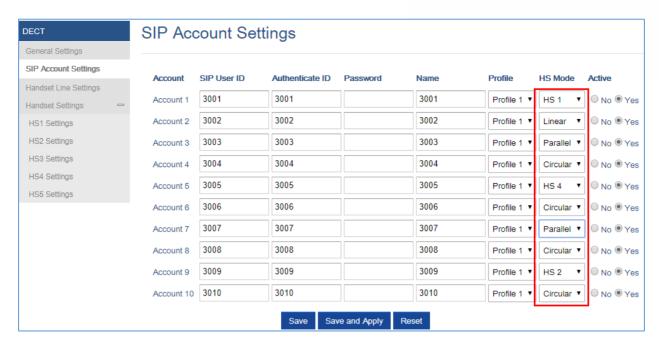


Figure 30: Hunting Group configuration

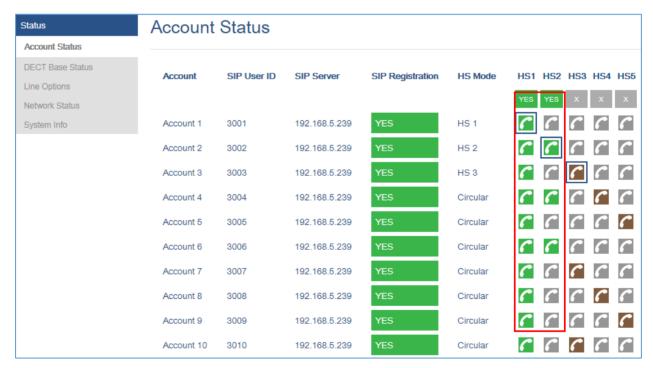


Figure 31: Hunting Group Status





# **Configuration via Keypad**

To configure the LCD menu using DP730/DP722's keypad, follow the instructions below:

- Register the DP730/DP722 to DP752. Please see <u>Register DP730/DP722 Handsets to DP752 Base</u>
   Station;
- Enter/Confirm/ selection: Press the left softkey, right softkey, on-hook key or OK/Select key to enter the selected option, back to last layer or exit;
- Exit: Press "right softkey" to exit to the previous menu;
- Return to Home page: Press "On-hook" key to exit to the main menu.
- The DP730/DP722 automatically exits to main mode with an incoming call, when the phone is off hook or left idle for more than 20 seconds.
- When the phone is in idle, pressing the DOWN navigation key can enter the Outgoing call log.

Please refer to DP730/DP722 Handsets Menu Structure for more details.

### **Call Features**

The DP752/DP730/DP722 supports traditional and advanced telephony features including call forward and etc.

Table 21: Call Features

| *72 | <ul> <li>Unconditional Call Forward. To set up unconditional call forward:</li> <li>Off hook the phone;</li> <li>Dial *72 and then enter the number to forward the call;</li> <li>Press OK softkey or SEND key.</li> </ul> |
|-----|--|
| *73 | <ul> <li>Cancel Unconditional Call Forward. To cancel the unconditional call forward:</li> <li>Off hook the phone;</li> <li>Dial *73;</li> </ul>   |
| *90 | <ul> <li>Busy Call Forward. To set up busy call forward:</li> <li>Off hook the phone;</li> <li>Dial *90 and then enter the number to forward the call;</li> <li>Press OK softkey or SEND key.</li> </ul>                   |





| *91 | <ul> <li>Cancel Busy Call Forward. To cancel the busy call forward:</li> <li>Off hook the phone;</li> <li>Dial *91;</li> </ul>   |
|-----|--|
| *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> </ul>   |

# **DP752 Phonebook Management**

DP752/DP730/DP722 support Private and Global Phonebooks; both phonebook types can be used at same time:

### **Private Phonebook**

Private phonebook allows you to manage your contacts on each registered Handsets; each Handsets can have his own private phonebook with his own contacts. DP752 supports up to 5 private phonebooks. A private phonebook can be assigned to one or more Handsets registered to the base.

The following steps explain how upload your private phonebook and assign it to a specific Handsets:

- 1. Access the Web GUI of your DP752 using the admin's username and password.
- 2. Press Login to access your settings and go to Phonebook → Private Phonebook Settings.





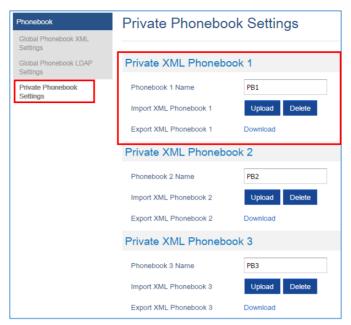


Figure 32: Private Phonebook Settings

- 3. In **Private XML Phonebook X** section (X from 1 to 5):
  - a. Enter **Phonebook X Name** (default value is PB1 for first Handset, PB2 for second Handset, etc.).
  - b. Press Upload button to Import XML Phonebook X.
  - c. Browse your computer files and select your desired **phonebook.xml** file.
  - d. Press Save and Apply to save your settings.
- 4. Go to **DECT** → **General Settings** tab.
- 5. In **Handsets Settings** section, select your **Handsets Phonebook** to assign it to a specific Handsets as shown below where **PB1** is assigned to **HS1**, **PB2** is assigned to **HS2**...

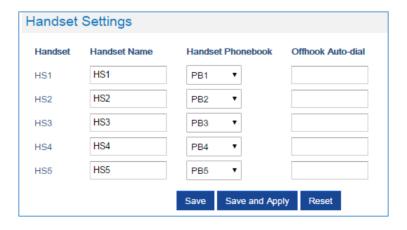


Figure 33: Handset Phonebook Settings





You can assign same Private Phonebook to more than one Handsets.

For example, we can assign Handsets Phonebook named PB1 to HS1 and HS2.

Any change in PB1 contacts will be applied to both HS1 and HS2 private phonebooks.

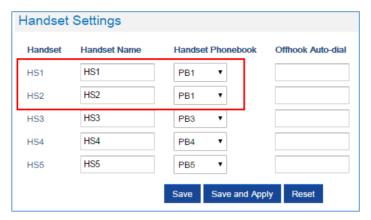


Figure 34: Handsets Phonebook Selection

6. Press Save and Apply to save your configuration.

After applying your configuration, your DP730/DP722 Handsets will display uploaded phonebook contacts. You can access your private phonebook by pressing **Contacts** on your DP730/DP722 Handsets. You can press Option Softkey in order to view, Create New Contact or Edit Dial if adding changes on a contact number is required before dialing.

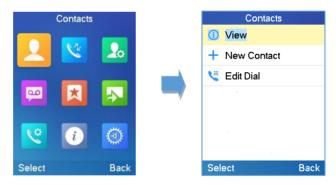


Figure 35: Contacts

### **Global Phonebook**

Global phonebook allows to manage contacts and use them in all registered Handsets. The contacts can be imported either via XML or via LDAP. Follow steps below to upload your shared phonebook:

#### Global Phonebook via XML

- 1. Access the Web GUI of your DP752 using the admin's username and password.
- 2. Press Login to access your settings.





- 3. Go to Phonebook → Global Phonebook XML Settings tab.
- 4. Set Global Phonebook Type to XML (in this case, LDAP phonebook will not be available).



Figure 36: Global Phonebook XML Settings

- 5. There are two methods to import/download your XML Phonebook:
  - a. Automatic XML Phonebook Download

For this method, you need to use a TFTP or HTTP or HTTPS server and make your *phonebook.xml* file is available in your preferred server.

- Set Enable Automatic XML Phonebook Download to Enabled, use TFTP/HTTP or HTTPS depending on your server.
- ii. If using HTTP or HTTPS server and User Name and Password are required to connect to the server, set HTTP/HTTPS User Name and HTTP/HTTPS Password fields with appropriate values.
- iii. Configure Phonebook XML Server Path field. This field could be IP address or URL, with up to 256 characters. The phone will request file named phonebook.xml from provided directory. Example: server\_URL/directory
- iv. Configure the **Phonebook Download Interval** (in minutes) to periodically contact your server to download new phonebook file version if available. If set to 0, automatic download will be disabled. Valid range is 5 to 720.

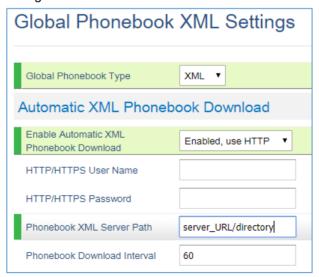


Figure 37: Automatic XML Phonebook Download





### b. Manual XML Phonebook Management

- i. Press Upload in Import XML Phonebook.
- ii. Browse your files and select your phonebook.xml file.

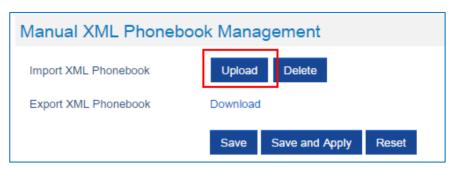


Figure 38: Manual XML Phonebook Management

# XML Phonebook file format

```
<?xml version="1.0" encoding="UTF-8"?>
<AddressBook>
   <Contact>
      <FirstName>First name
      <LastName>Last name
      <Ringtone>Ringtone ID (default 0)
      <Phone type="Home">
         <phonenumber>Home phone number</phonenumber>
      </Phone>
      <Phone type="Work">
         <phonenumber>Work phone number</phonenumber>
      </Phone>
      <Phone type="Mobile">
         <phonenumber>Mobile phone number</phonenumber>
      </Phone>
   </Contact>
</AddressBook>
```

| Object      | Position      | Туре                 | Values | Comments                                    |
|-------------|---------------|----------------------|--------|---|
| AddressBook | Root element  | Mandatory            | -      | Root element of the XML document            |
| Contact     | Child element | Mandatory            | -      | Each contact is an entry                    |
| LastName    | Child element | At least one         | String | Last name of the contact                    |
| FirstName   | Child element | of them present      | String | First name of the contact                   |
| Phone       | Child element | Mandatory            | -      | Phone number                                |
| PhoneNumber | Child element | At least one present | Int    | Type="Home" or Type="Work" or Type="Mobile" |





#### XML Phonebook Example:

```
<?xml version="1.0" encoding="UTF-8"?>
<AddressBook>
   <Contact>
      <FirstName>John</FirstName>
      <LastName>Doe</LastName>
      <Ringtone>0</Ringtone>
      <Phone type="Home">
          <phonenumber>1000</phonenumber>
      </Phone>
      <Phone type="Work">
          <phonenumber>1001</phonenumber>
      </Phone>
      <Phone type="Mobile">
          <phonenumber>1002</phonenumber>
      </Phone>
   </Contact>
   <Contact>
      <FirstName>Alice</FirstName>
      <LastName>Beck</LastName>
      <Ringtone>0</Ringtone>
      <Phone type="Home">
          <phonenumber>2000</phonenumber>
      </Phone>
      <Phone type="Work">
          <phonenumber>2001</phonenumber>
      </Phone>
      <Phone type="Mobile">
          <phonenumber>2002</phonenumber>
      </Phone>
   </Contact>
</AddressBook>
```





#### Global Phonebook via LDAP

- 1. Access the Web GUI of your DP752 using the admin's username and password.
- 2. Press Login to access your settings.
- 3. Go to Phonebook → Global Phonebook LDAP Settings tab.
- 4. Set Global Phonebook Type to LDAP (in this case, XML phonebook will not be available).



Figure 39: Global Phonebook LDAP Settings

- 5. Under **LDAP Phonebook Settings**, set your LDAP parameters to connect to your LDAP server. Refer to [Phonebook Page Definitions] for parameters explanation.
  - 6. Press Save and Apply to save your configuration.
- Example of configuration:

LDAP protocol: LDAP

Server Address: 192.168.1.100

Port: 389

Base: dc=pbx,dc=com

User Name: Password:

LDAP Filter: (mobile=%)(sn=%)

LDAP Version: Version 3
First Name Attribute: sn
Last Name Attribute: cn
Work Name Attribute:
Home Name Attribute:

Mobile Number Attribute: mobile

Max. Hits: 500

Search Timeout: 30

After applying your configuration, your global phonebook will be synchronized with all registered Handsets and contacts will be displayed on your DP730/DP722 Handsets screens.





# DP752 ASSOCIATION WITH DP760 DECT REPEATER

# **Important Notes:**

- DP760 can relay up to 2 concurrent calls.
- After pressing Page/Reset button for more than 2 seconds on the DP760, it will enter AUTO region mode, in this mode, the three LEDs of right side keep quick blinking, then the DP760 will search the base signal in the current environment to auto associate with it and then auto switch to the same region (EU, US or BR) of the base station.
- If you have a DP760 that has FW before 1.0.3.34, you will need upgrade it to 1.0.3.34 first, then do a factory reset. After that, the unit will support Auto-Region feature and it will enter Auto Region mode.

# **Enabling Repeater Mode on DP752**

Before associating the DP760 DECT Repeater to your DP752 Base Station, you should firstly enable the repeater mode on your base station. Please refer following steps to enable the repeater mode on the DP752 base station:

- 1. Access the Web GUI of your DP752 using the admin's username and password.
- 2. Navigate to **DECT** → **General Settings** and set **Enable Repeater Mode** to **Yes**.

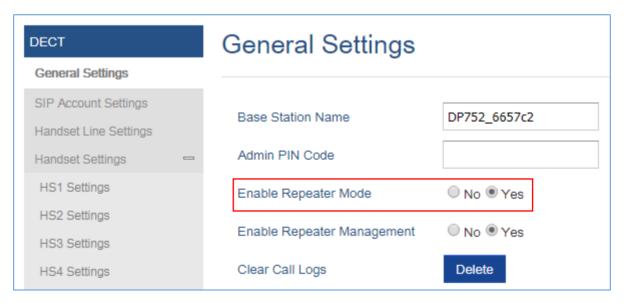


Figure 40: Enable Repeater Mode

3. Press Save and Apply, then Reboot the base to apply the new settings.





# **DP760 DECT Repeater Association**

After enabling the repeater mode on DP752 Base Station, you can easily associate it with your DP760 DECT Repeater using one of the following methods:

- Auto Association
- Manual Association
- Use DP752 Repeater Management to associate DP760

#### **Auto Association**

To auto associate your DP760 DECT Repeater with DP752 Base Station:

- 1. Power on the DP760 DECT Repeater.
- 2. After the DP760 finish booting, the association LED will be blinking to indicate that the repeater is searching for nearby base stations.

**Note:** If all the LEDs remain on, it indicates that the DP760 Repeater has successfully associated with a DP752 Base and ready for use. You may need to dissociate it before continuing (Please refer to [DP760 DECT REPEATER DISSOCIATION]).

- 3. Open subscription on your DP752 Base Station using one of following methods:
  - Rebooting the Base station.
  - Long press on page/subscribe button on DP752 for 4 seconds.
  - Access DP752 Web GUI and press subscribe button (1).
- 4. The DP760 DECT Repeater will automatically pair to DP752. Upon successful association with the DP752 Base station all LEDs will turn ON and the repeater status will be updated as following.





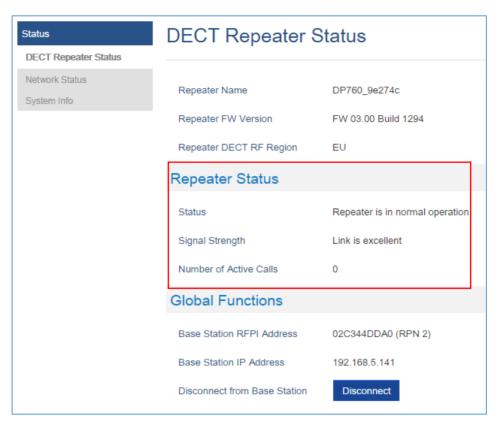


Figure 41: Repeater Status - Associated (Auto Association)

#### Notes:

- For auto association, the option **Use manually configured RFPI** under DP760 Web GUI should be disabled (by default disabled).
- The RF auto association requires the repeater to be close to the base during the pairing process to work properly (this is a standard DECT repeater pairing limitation).

#### **Manual Association**

To manually associate your DP760 DECT Repeater to your DP752 Base Station:

- 1. Access the Web GUI of your DP760 using the admin's username and password.
- 2. Navigate to **DECT** → **General Settings** and set **Use Manually Configured RFPI** to **Yes**.
- 3. On Manually Configured Base RFPI field, configure your DP752 Base Station RFPI address.

Note: The RFPI Address of your DP752 Base Station is available under the Web GUI → Status → DECT Status → Base DECT RFPI Address.

- 4. Click Save and Apply to confirm the new settings.
- 5. Open subscription on your DP752 Base Station using one of following methods:
  - Rebooting the Base station





- Long press on page/subscribe button of DP752 for 7 seconds
- Access DP752 Web GUI and press subscribe button (1).
- 6. The DP760 DECT Repeater will automatically pair to DP752. If the association is correctly associated, all the LEDs will remain solid on and the repeater status will be updated as following.

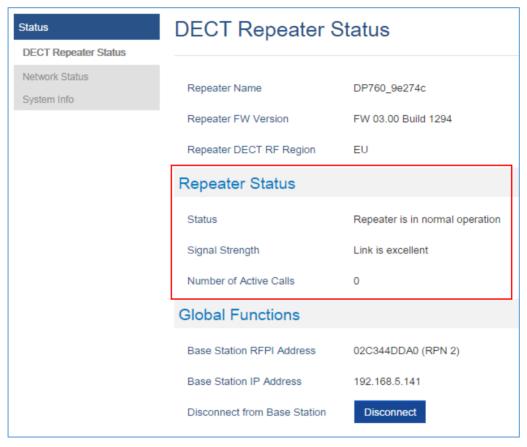


Figure 42: Repeater Status – Associated (Manual Association)

**Note:** Make sure that **Repeater Mode** is enabled on your DP752 Base Station.

# **Use DP752 Repeater Management to Associate DP760**

Enabling Repeater Management Mode

The following steps illustrate how to enable and use the Repeater Management mode on DP752:

- 1. Access the Web GUI of your DP752 using the admin's username and password.
- 2. Navigate to **DECT** → **General Settings** and set **Enable Repeater Management** to **Yes**.
- 3. Press **Save and Apply**, then reboot the unit to apply the new settings.





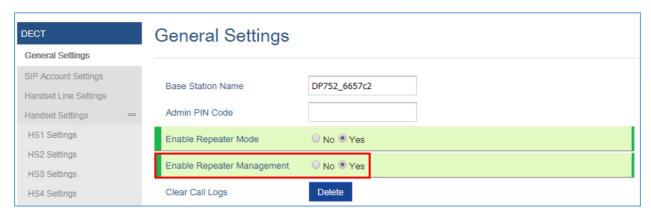


Figure 43: Repeater Associated Status

# Associating DP760 using Repeater Management Mode on DP752

The repeater management mode displays discovered and paired devices using their name, IP and Mac addresses and also gives the possibility of associating the DP752 Base Station with DP760 DECT Repeater.

Please refer to following steps in order to associate DP760 with DP752 using repeater management mode:

- 1. Access the Web GUI of your DP752 using the admin's username and password.
- 2. Navigate to Status → DECT Repeater Status and select the repeater station from Discovered Devices.
- 3. Clink **Link** button to associate the base and repeater stations.

**Note:** The DP760 Repeater stations associated with DP752 Base Station are displayed and available under **Status** → **DECT Repeater Status** → **Paired Devices** with their status, signal strength, number of active calls and possibility to disconnect them from the paired base station.

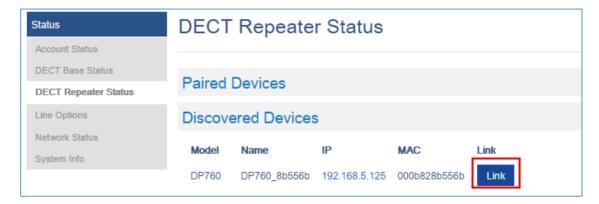


Figure 44: DECT Repeater Status on DP752





# **DP760 DECT REPEATER DISSOCIATION FROM DP752**

To disconnect DP760 DECT Repeater from the Base Station DP752, please refer to following options:

# **Using DP760 Web GUI**

To disconnect your DP760 DECT Repeater via Web GUI, please refer to following steps:

- 1. Access the Web GUI of your DP760 using the admin's username and password.
- 2. Enter the administrator's username and password to access the Web Configuration Menu.
- 3. Navigate to Status → DECT Status → Global Functions and press Disconnect.
- 4. The DP760 DECT Repeater will be automatically disconnected from the DP752 and it will start again scanning for available RFPs.

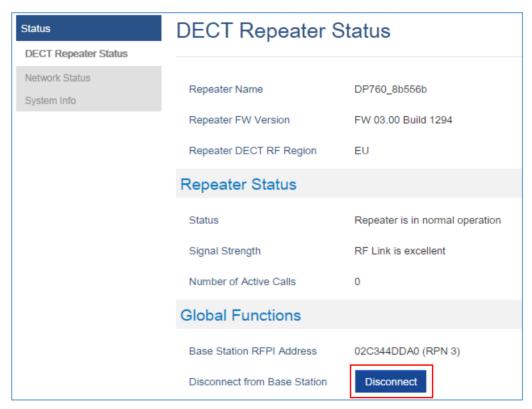


Figure 45: DECT Repeater Status on DP752

# **Using Page Button**

Long press on page button on the back panel of DP760 for 7 seconds, it will remove the association values of the previous base station.





# **Using Repeater Management Mode on DP752**

To disconnect your DP760 DECT Repeater using the repeater management mode on DP752:

- 1. Access the Web GUI of your DP752 using the admin's username and password.
- 2. Navigate to Status → DECT Repeater Status.
- 3. Select the repeater station from **Discovered Devices**.
- 4. Clink **Unlink** button to dissociate the repeater from the base station.



Figure 46: DECT Repeater Status on DP752





# **UPGRADING AND PROVISIONING**

The DP752 can be upgraded via TFTP/HTTPS by configuring the URL/IP Address for the TFTP/HTTPS server and selecting a download method. Configure a valid URL for TFTP or HTTP/HTTPS; the server name can be FQDN or IP address.

#### **Examples of valid URLs:**

firmware.grandstream.com fw.ipvideotalk.com/gs

# **DP752 Firmware Upgrade Procedure**

Please follow below steps in order to upgrade the firmware version of your DP752 base station:

- 1. Access DP752 Web GUI.
- 2. Press Login to access your settings.
- Go to Maintenance → Firmware Upgrade page, enter the IP address or the FQDN for the upgrade server in "Firmware Server Path" field and choose to upgrade via TFTP or HTTP/HTTPS.
- 4. Make sure to configure Firmware Upgrade and Provisioning to Always Check for New Firmware.
- 5. Update the change by clicking the "Save and Apply" button. Then "Reboot" or power cycle the base station to update the new firmware.





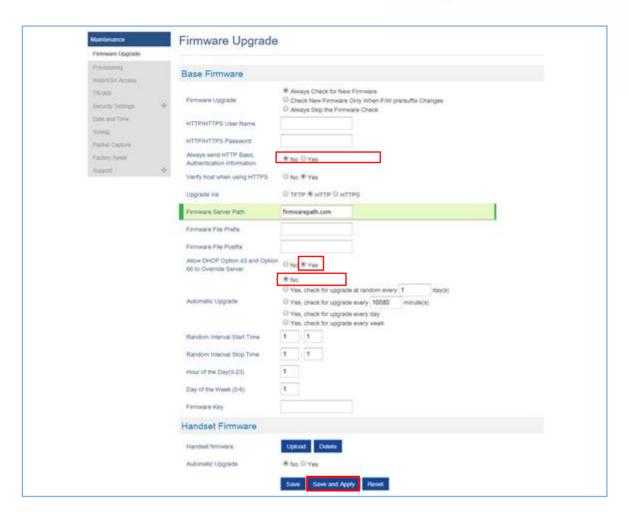


Figure 47: Firmware Upgrade Page

### **Upgrading via Local TFTP/HTTP Servers**

For users that would like to use remote upgrading without a local TFTP/HTTP server, Grandstream offers a NAT-friendly HTTP server. This enables users to download the latest software upgrades for their devices via this server. Please refer to the webpage: <a href="http://www.grandstream.com/support/firmware">http://www.grandstream.com/support/firmware</a>

Alternatively, users can download a free TFTP or HTTP server and conduct a local firmware upgrade. A free windows version TFTP server is available for download from:

http://www.solarwinds.com/products/freetools/free tftp server.aspx http://tftpd32.jounin.net/.

#### Instructions for local firmware upgrade via TFTP:

- 1. Unzip the firmware files and put all of them in the root directory of the TFTP server.
- 2. Connect the PC running the TFTP server and the phone to the same LAN segment.
- Launch the TFTP server and go to the File menu→Configure→Security to change the TFTP server's default setting from "Receive Only" to "Transmit Only" for the firmware upgrade.





- 4. Start the TFTP server and configure the TFTP server in the phone's web configuration interface.
- 5. Configure the Firmware Server Path to the IP address of the PC.
- 6. Save and Apply the changes and reboot the base station.

End users can also choose to download a free HTTP server from <a href="http://httpd.apache.org/">http://httpd.apache.org/</a> or use Microsoft IIS web server.

# **Upgrading DP730/DP722 Handsets**

User could upgrade their Handsets either using the LCD menu or via the Web GUI

# Using the LCD menu

- 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 **Settings** and then press "Select".
- 3. Navigate to **Firmware Upgrade** and press "Select" (left softkey), the Handsets will upgrade the firmware available on the base station.

# **Using the Web GUI**

- 1. Access DP752 Web GUI.
- 2. Press **Login** to access your settings.
- Go to Maintenance → Firmware Upgrade page, and enable the Automatic Upgrade option so
  the Handsets will upgrade the firmware automatically once it detects the new firmware.

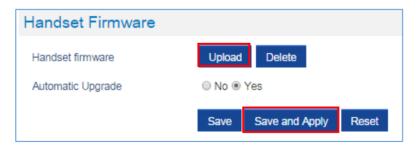


Figure 48: Handset Firmware Upgrade

4. Update the change by clicking the "Save and Apply" button.

#### Notes:

 The DP730/DP722 Handsets detects automatically if the base station is upgraded with a new firmware and display on the LCD a prompt message inviting the user to initiate the upgrade, more





over under the Web GUI of the base station DP752 → Status → DECT Status → Handsets Status, appears an **Upgrade All** button once the base detect that several registered Handsets are using an old firmware version so the user could upgrade all Handsets by pressing **Upgrade All** button.

 After downloading firmware, DP730/DP722 screen will be black and red LED will be blinking showing that firmware upgrade process is ongoing.

# DP752/DP730/DP722 Provisioning

# **Configuration File Download**

Grandstream SIP Devices can be configured via the Web Interface as well as via a Configuration File (binary or XML) through TFTP or HTTP/HTTPS. The **Config Server Path** is the TFTP or HTTP/HTTPS server path for the configuration file. It needs to be set to a valid URL, either in FQDN or IP address format. The **Config Server Path** can be the same or different from the **Firmware Server Path**.

A configuration parameter is associated with each particular field in the web configuration page. A parameter consists of a Capital letter P and 2 to 3 (Could be extended to 4 in the future) digit numeric numbers. i.e., P2 is associated with the "New Password" in the Web GUI->Maintenance->Web/SSH Access page->Admin Password. For a detailed parameter list, please refer to the corresponding firmware release configuration template.

The downloaded config file now will display the P value in new format, that has more meaningful name of the parameter being configured. Below is an example of how new P values looks like, please note that the old numeric P values will still be working, for example, in a single config file, the user can choose to use P values in the format of P9 or Pnetworks.static.address.ip.octet.1, or mixed format for different settings, the device will takes all of them. We are still improving the downloaded config file by adding the help text and re-ordering the settings to match the web.





```
<!--****************
    <!--## P values ##-->
    <!--# Name: 9-->
    <!--# Alias: network.static.address.ip.octet.1, NETWORK_STATIC_ADDRESS_OCTET1 # Help: IP Address octet 1. Ignore if DHCP or PPPoE is</p>
    used.-
    <!--# Attributes: Category=NUMBER Mandatory=1 Base=10 Range=[0-255] -->
<!--# Default Value: 192-->
        <Pnetwork.static.address.ip.octet.1>50</Pnetwork.static.address.ip.octet.1>
    <!--# Aldia: network.static.address.jp.octet.2, NETWORK STATIC ADDRESS OCTET2 # Help: IP Address octet 2. Ignore if DHCP or PPPOE is</p>
     <!--# Attributes: Category=NUMBER Mandatory=1 Base=10 Range=[0-255] -->
    <!-- # Default Value: 168--
        <Pnetwork.static.address.ip.octet.2>84</Pnetwork.static.address.ip.octet.2>
32
33
34
    <!--# Alias: network.static.address.ip.octet.3,NETWORK STATIC ADDRESS OCTET3 # Help: IP Address octet 3. Ignore if DHCP or PPPoE is</p>
    <!--# Attributes: Category=NUMBER Mandatory=1 Base=10 Range=[0-255] -->
<!--# Default Value: 0-->
        <Pnetwork.static.address.ip.octet.3>167</Pnetwork.static.address.ip.octet.3>
```

Figure 49: New P values format

For more details on XML provisioning, please refer to:

http://www.grandstream.com/sites/default/files/Resources/gs\_provisioning\_guide.pdf

# **Handsets Provisioning**

To configure the Handsets provisioning, please browse the base station Web GUI at Maintenance  $\rightarrow$  Provisioning. This is the same page used for base station provisioning. Handsets shares the settings of base station provisioning in the field in the red rectangle, and has its own settings in the blue rectangle. After enabled Handsets Config Upgrade, need reboot the DP752 to take effect.





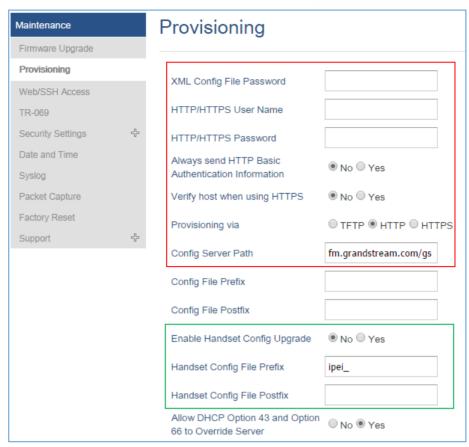


Figure 50: Provisioning Feature

- **Provisioning via:** Choose the method that the base station uses to request Handsets ipei config file. Can use TFTP, HTTP or HTTPS.
- **Config Server Path:** Defines the server path for provisioning. Do not prepend address with "http://" or any other protocol.
- **Handset Config File Prefix:** If configured, only the Handsets configuration file with the matching encrypted prefix will be downloaded and flashed into the device.
- Handset Config File Postfix: If configured, only the Handsets configuration file with the matching encrypted postfix will be downloaded and flashed into the device

When a DP730/DP722 registers to a DP752 for the first time or an already registered Handsets boots up, the DP752 will send a provisioning request for a file on the configured provisioning server, with location "Config\_Server\_Path/[Prefix][HS IPEI].xml[Postfix]". For example, if Handsets's IPEI number is 02c332b510, prefix is "ipei\_", postfix is null, and config server path is "fw.grandstream.com/gs", the request URL is "fw.grandstream.com/gs/ipei\_02c332b510.xml.

For more detailed information, please refer to <u>Handsets Provisioning Guide</u>.





# RESTORE FACTORY DEFAULT SETTINGS

# **Marning:**

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.

# **Resetting the DP752 Base Station**

- 1. Access DP752 Web GUI.
- 2. Navigate to Maintenance → Factory Reset.
- 3. Select the **Reset Type** from the reset drop down list.
- 4. Press Reset button and the unit will prompt a confirmation message, press OK to reset, then the unit restart automatically with parameters restored to default values or press Cancel to annul the reset.

# Resetting the DP730/DP722 Handsets

Please follow the instructions below to reset the DP730/DP722 Handsets:

- 1. Press "Menu" (left softkey or the selection key) to bring up operation menu.
- 2. Press arrow keys to move the cursor to **Settings** and then press "Select".
- 3. Navigate to System Settings → Factory Reset, a warning window will pop out to make sure a reset is requested and confirmed;
- 4. Press "Yes" (left softkey) to confirm and the phone will reboot.

To cancel the Reset, press "No" (right softkey) instead.

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

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

- 1. Connect the USB cable and power off DP730/DP722.
- 2. Power on DP730/DP722 and wait for Green LED.





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





# EXPERIENCING DP752/730/722

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

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

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

Thank you again for purchasing Grandstream DECT IP phone, it will be sure to bring convenience to both your business and personal life.

