

430HD and 440HD IP Phones

Version 2.2.16



Table of Contents

1	Introduction	9
1.1	About the 400HD IP Phones Series	9
1.2	Cutting Edge Voice Quality & HD VoIP	9
2	Setting up the Phone.....	11
2.1	Unpacking.....	11
2.2	Device Description	11
2.2.1	Front View.....	11
2.2.2	Rear View	14
2.3	Cabling.....	15
2.4	Mounting the Phone	16
2.4.1	Mounting the Phone on a Desk.....	16
2.4.1.1	Routing the Handset Cable.....	16
2.4.2	Mounting the Phone on a Wall.....	17
3	Getting Started.....	19
3.1	LCD in Idle State.....	19
3.2	LCD in Ongoing Call State	19
3.3	Default Softkeys.....	20
3.4	Accessing Menus.....	22
3.5	Entering Numbers, Alphabetical Letters and Symbols.....	23
3.6	Displayed Messages.....	25
4	Customizing Your Phone	27
4.1	Selecting Language	27
4.2	Selecting Ring Tone.....	28
4.3	Enabling Call Waiting.....	29
4.4	Setting Date and Time	30
4.5	Changing LCD Contrast Level.....	31
4.6	Changing BLF LCD Contrast.....	32
4.7	Setting the LCD Backlight Timeout.....	33
4.8	Changing the Default Answer Device.....	34
4.9	Restarting the Phone	35
4.10	Adjusting Volume	36
4.10.1	Adjusting Ring Volume	36
4.10.2	Adjusting Tones Volume.....	36
4.10.3	Adjusting Handset Volume	37
4.10.4	Adjusting Speaker Volume	37
4.10.5	Adjusting Headset Volume	37
4.11	Defining Call Forwarding.....	38
4.12	Managing Your Personal Directory.....	40
4.12.1	Accessing the Personal Directory	40
4.12.2	Adding a Contact to the Personal Directory.....	40
4.12.3	Editing Contact Information	41
4.12.4	Deleting a Contact.....	42
4.12.5	Searching for a Contact.....	42
4.13	Configuring a Function Key for Speed Dialing.....	43
4.13.1	430HD Phone.....	43
4.13.2	440HD Phone.....	43
4.13.2.1	Configuring More than 12 Function Keys	44
4.13.2.1.1	Determining BLF Indications	45
4.13.3	Configuring a Programmable Key	46

4.13.3.1	Configuring Programmable Key #6 as a VocaNOM Dial.....	47
4.13.3.2	Configuring a Programmable Key as a Key Event.....	48
4.13.4	Configuring a Navigation Key Position Function.....	49
4.13.4.1	Removing a Configured Navigation Key Position	50
4.13.5	Configuring a Speed Dial Key through the Personal Directory.....	50
4.13.6	Configuring a Speed Dial Key through a BLF Button.....	51
4.13.6.1	Editing a Speed Dial Key	51
4.13.6.2	Deleting a Speed Dial Key	52
4.13.7	Configuring Softkeys	52
4.13.7.1	Programmable SoftKeys (PSKs).....	53
5	Performing Basic Operations	55
5.1	Using Audio Devices.....	55
5.2	Making Calls	55
5.2.1	Dialing.....	56
5.2.2	Redialing.....	56
5.2.3	Dialing a Missed Call.....	57
5.3	Answering Calls	58
5.4	Rejecting Incoming Calls.....	59
5.5	Silencing Incoming Calls	59
5.6	Ending a Call	59
5.7	Viewing Missed, Received and Dialed Calls.....	60
6	Performing Advanced Operations	63
6.1	Answering Waiting Calls	63
6.2	Placing a Call on Hold.....	63
6.3	Calling a Contact Listed in the Directory.....	63
6.4	Enabling Auto Redial.....	63
6.5	Speed-Dialing	64
6.6	Transferring Calls.....	65
6.6.1	Performing an Attended Transfer.....	65
6.6.2	Performing a Semi-Attended Transfer.....	66
6.6.3	Performing a Blind Transfer.....	68
6.7	Hosting a 3-Way Conference Call	69
6.7.1	Leaving a 3-Way Conference You Set up without Disconnecting the Others	70
6.8	Muting Calls	70
6.9	Activating Do Not Disturb	70
6.10	Retrieving Voice Mail Messages	72
6.11	Using Multiple Lines.....	73
6.11.1	Choosing a Line	73
6.11.2	Making a Call on a Line	73
6.11.3	Making Two Calls on a Line.....	73
6.11.4	Making Multiple Line Calls.....	74
6.11.5	Toggling Between Multiple-Line Calls	74
6.11.6	Toggling Between Calls on the Same Line.....	74
6.11.7	Answering Calls	75
6.11.8	Ending Calls.....	75
6.12	Paging	75
6.12.1	Configuring Paging.....	75
6.12.2	Paging a Group	76
6.12.3	Receiving an Incoming Paging Call and Barge-in.....	77
6.13	Logging into a Remote HTTP/S Server	78
6.14	Using Shared Line Appearance (SLA)	79
7	Troubleshooting	81

A	Specific Third-Party Features.....	83
A.1	BroadSoft.....	83
A.1.1	Shared Call Appearance.....	83
A.1.1.1	Demonstrating the SCA Feature's Capabilities.....	84
A.1.2	Monitored Lines Based on BroadSoft's BroadWorks BLF Service.....	87
A.1.3	Using Xsi Interface Services.....	87
A.1.3.1	Call Center List.....	87
A.1.3.2	Contact Synchronization.....	88
A.1.3.3	Call Log Synchronization.....	88
A.1.4	Configuring the 'Forward No Reply' Timeout as Number of Rings.....	88
A.1.5	Automatically Receiving an External Line.....	88
A.1.6	Limiting Configuration of Function Keys as Line Keys.....	88
A.1.7	Viewing VOICEMAIL Indications Per Line.....	88
A.1.8	Listening in Capability for Call Center Supervisors.....	88
A.1.9	Recording an Agent's Welcome Greeting.....	89
A.2	Genesys' Contact Centers.....	90
A.2.1	Using the BroadSoft ACD.....	90
A.2.1.1	Setting Unavailability Status.....	90
A.2.1.2	Setting Availability Status.....	91
A.2.2	Presence Management.....	91
A.2.3	Logging In.....	91
A.2.4	Logging Out.....	92
A.2.5	Configuring Do Not Disturb (DnD).....	92
A.2.6	Configuring Automatic Forwarding.....	92
A.2.7	Listening in Capability for Call Center Supervisors.....	93
A.2.8	Setting up a Remote Conference.....	93
A.2.1	Recording an Agent's Welcome Greeting.....	95

List of Figures

Figure 2-1: Front View.....	12
Figure 2-2: Rear View.....	14
Figure 2-3: Cabling.....	15
Figure 3-1: LCD in Idle State.....	19
Figure 3-2: LCD in Ongoing Call State.....	19
Figure 3-3: Menus.....	22
Figure 3-4: Alphanumerical Selection.....	23
Figure 3-5: Selected Alphanumerical Mode (Abc).....	23
Figure 3-6: Entering a Symbol such as a Full Stop.....	24
Figure A-1: SCA.....	83
Figure A-2: Two 440HD Phones in the SCA Group.....	84
Figure A-3: Phones in the SCA Group Ring, Alerting to an Incoming Call.....	85
Figure A-4: Phone 1 after Answering the Incoming Call.....	85
Figure A-5: Phone 2 after Phone 1 Answers.....	86

List of Tables

Table 2-1: Font View Description.....	13
Table 2-2: Rear View Description.....	14
Table 3-1: LCD in Idle State.....	19
Table 3-2: LCD in Ongoing Call State.....	19
Table 3-3: Default Softkeys for all Menus.....	20
Table 3-4: Messages Displayed on LCD Indicating Processes In Progress.....	25
Table 4-1: BLF Indications.....	45
Table 7-1: Troubleshooting.....	81
Table A-1: LED Behaviors on an IP Phone in an SCA Group.....	84
Table A-2: Genesys Contact Center Phones' BroadSoft ACD.....	90

Notice

Information contained in this document is believed to be accurate and reliable at the time of printing. However, due to ongoing product improvements and revisions, AudioCodes cannot guarantee accuracy of printed material after the Date Published nor can it accept responsibility for errors or omissions. Updates to this document can be downloaded from <https://www.audiocodes.com/library/technical-documents>.

This document is subject to change without notice.
Date Published: Dec-23-2019

WEEE EU Directive

Pursuant to the WEEE EU Directive, electronic and electrical waste must not be disposed of with unsorted waste. Please contact your local recycling authority for disposal of this product.

Customer Support

Customer technical support and services are provided by AudioCodes or by an authorized AudioCodes Service Partner. For more information on how to buy technical support for AudioCodes products and for contact information, please visit our Web site at <https://www.audiocodes.com/services-support/maintenance-and-support>.

Abbreviations and Conventions

Each abbreviation, unless widely used, is spelled out in full when first used.

Related Documentation

Document Name
430HD and 440HD IP Phone Release Notes
420HD, 430HD and 440HD IP Phone Administrator's Manual
430HD IP Phone Quick Guide
440HD IP Phone Quick Guide

Documentation Feedback

AudioCodes continually strives to produce high quality documentation. If you have any comments (suggestions or errors) regarding this document, please fill out the Documentation Feedback form on our Web site at <https://online.audiocodes.com/documentation-feedback>.

Document Revision Record

LTRT	Description
11926	Version 2.2.2. May 2015.
11927	Version 2.2.4. August 2015.
11928	Version 2.2.8. February 2016.
12940	Version 2.2.12. September 2017.
12941	Version 2.2.14. January 2018.
12942	Version 2.2.16. June 2018.
12943	Version 2.2.16. Documentation fix. October 2018.
12944	Version 2.2.16.376 December 2019

1 Introduction

AudioCodes' 430HD and 440HD IP phones are based on AudioCodes High Definition voice technology, providing clarity and a rich audio experience in Voice-over-IP (VoIP) calls. The 430HD and 440HD are multiple-line (up to 6 lines), up to eight concurrent calls per line, premium model which includes a large monochrome multi-language graphic LCD display, 40 configurable softkeys and 12 programmable softkeys (PSKs).

The phones are fully-featured telephones that provide voice communication over an IP network, allowing you to place and receive phone calls, put calls on hold, transfer calls, make conference calls, etc.

Read this User's Manual carefully to learn how to operate this product and take advantage of its multiple features.

1.1 About the 400HD IP Phones Series

AudioCodes Series of High Definition IP Phones offers a new dimension of voice call quality and clarity for the IP Telephony market. This new series of IP Phones further expands AudioCodes' VoIP product offering for the service providers' hosted services, Enterprise IP telephony and Enterprise contact centers markets. As a natural addition to the AudioCodes Mobile Clients, Media Gateway, Media Server & Multi-Service Business Gateway products, the AudioCodes Series of High Definition IP Phones enable Systems Integrators and end-customers to build end-to-end solutions that rely on AudioCodes' technological advantage and proven track record in providing state-of-the-art products. The AudioCodes Series of High Definition IP Phones meet a growing demand for High Definition VoIP solutions in end-user phones and terminals, improving the productivity and efficiency of business communications with new quality standards set by the High Definition voice technology.

1.2 Cutting Edge Voice Quality & HD VoIP

Based on AudioCodes' advanced, robust and field-proven VoIPerfectHD™ software, AudioCodes' IP Phones are designed to utilize the most popular wideband coders. Each of these phones features enhanced proprietary capabilities, such as packet loss concealment, high quality wideband acoustic echo canceler, and low-delay adaptive jitter buffers to enrich the HD VoIP experience.

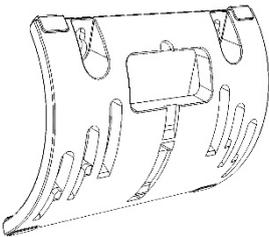
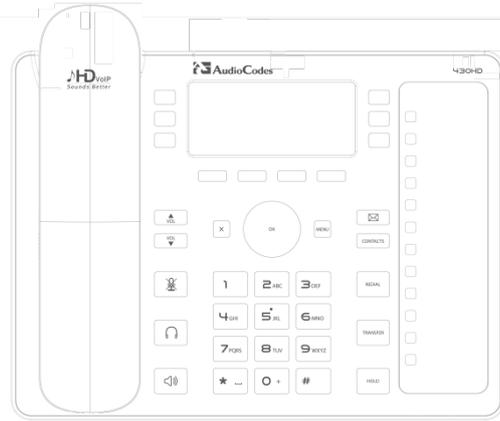
This page is intentionally left blank

2 Setting up the Phone

2.1 Unpacking

When unpacking, make sure that the following items are present and undamaged:

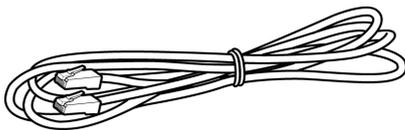
430HD and 440HD IP Phone / Stand



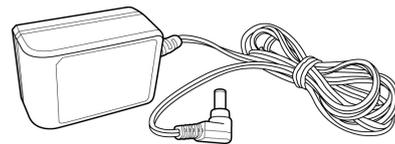
Handset / Cord



Cat 5e Ethernet Cable



AC Power Adapter (Optional)



If anything appears to be missing or broken, contact the distributor from whom you purchased the phone for assistance.

2.2 Device Description

Use the graphics below to identify and familiarize yourself with the device's hardware functions.

2.2.1 Front View

The front view of the phone is shown in [Figure 2-1](#) and described in [Table 2-1](#).

Figure 2-1: Front View

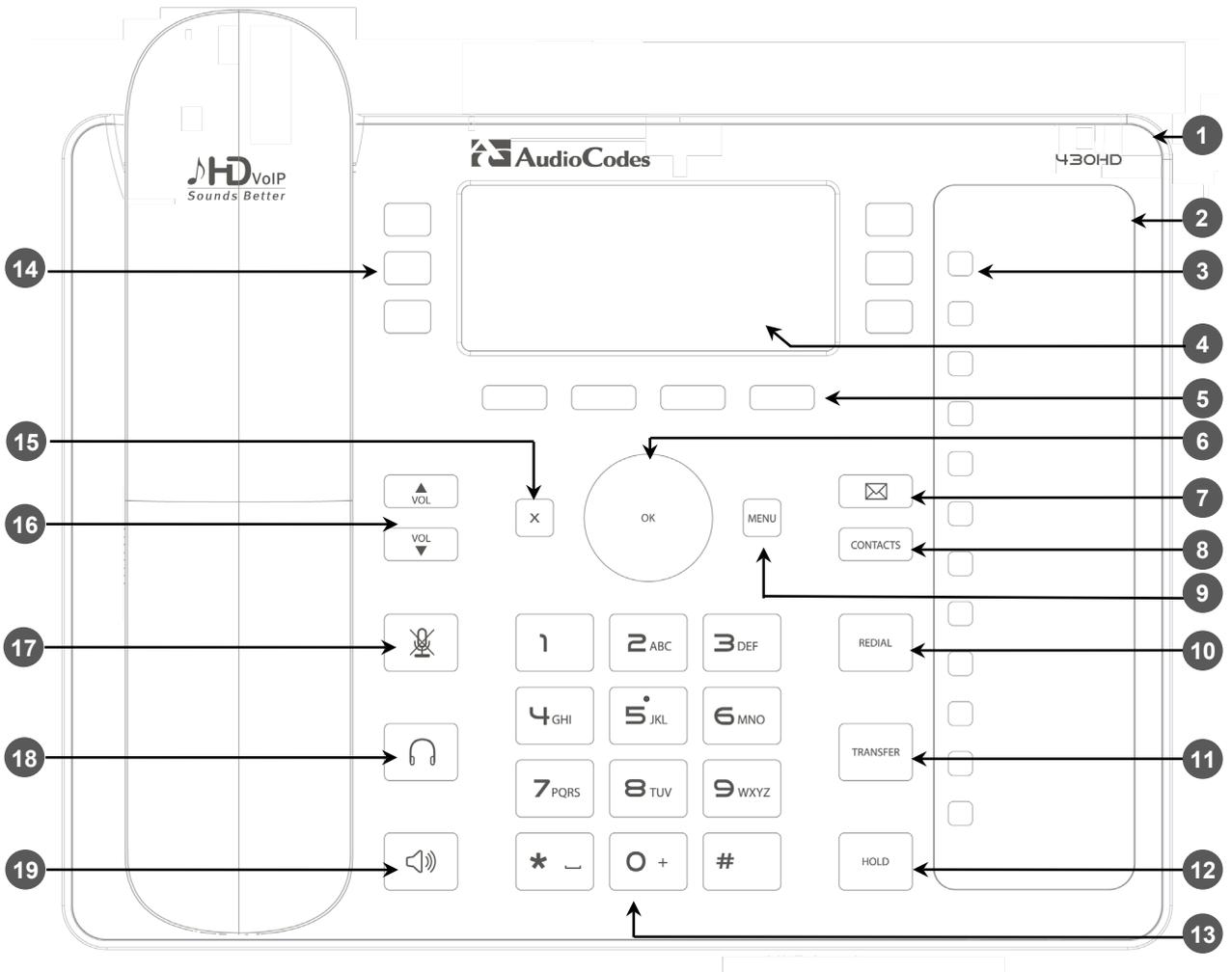


Table 2-1: Font View Description

Item #	Label/Name	Description
1	Ring LED	Flashing blue light visually indicates an incoming call.
2	Integrated Sidecar Contacts LCD	Liquid Crystal Display containing twelve Function Key buttons (see below).
3	Function Key Buttons for Speed Dial & BLF and Multicast Paging	Twelve Function Key buttons to quickly call the contact whose name is displayed adjacent to it or for multicasting paged messages to a Paging Group. You can configure these speed dial buttons with BLF functionality. On the 440HD phone, a dedicated electronic screen (BLF LCD) displays contacts' names. On the 430HD phone, you can attach to a paper strip handwritten contacts' names.
4	LCD	Liquid Crystal Display. Interactive screen displaying calling information, letting you to configure phone features.
5	Softkeys	See Section 3.3.
6	Navigation Control / OK	Press the upper rim to scroll up menus/items in the LCD display screen. Press its lower rim to scroll down. Press its left or right rim to move the cursor left or right (when editing a contact number for example). Press the OK button to select a menu/item/option.
7	VOICE MAIL	Retrieves voice mail messages.
8	CONTACTS	Press to directly access the directory menu.
9	MENU	Accesses menus (1) Call Log (2) Directory (3) Keys Configuration (4) Settings (5) Status (6) Administration.
10	REDIAL	Accesses a list of recently dialed numbers; one can be selected to redial.
11	TRANSFER	Transfers a call.
12	HOLD	Places an active call on hold.
13	Alphanumerical Keypad	Keys for entering numbers, alphabetical letters and symbols (e.g., colons)
14	---	Programmable keys, located on each side of the LCD, to which you can assign functions.
15	x	Cancel an action, such as dialing a number, after beginning it.
16	▲ VOL	Increases or decreases the volume of the handset, headset, speaker, ring tone and call progress tones.
	VOL ▼	
17	MUTE	Mutes a call.
18	HEADSET	Activates a call using an external headset.
19	SPEAKER	Activates the speaker, allowing a hands-free conversation.

2.2.2 Rear View

The rear view of the phone is shown in the figure below and described in the table below.

Figure 2-2: Rear View

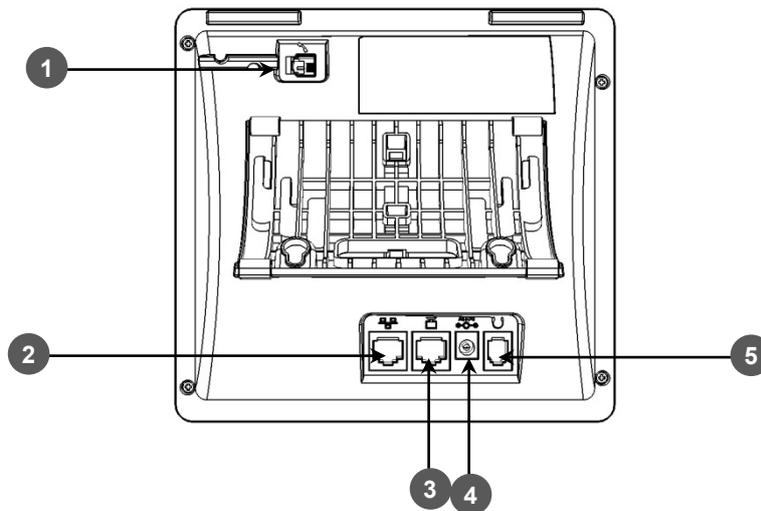


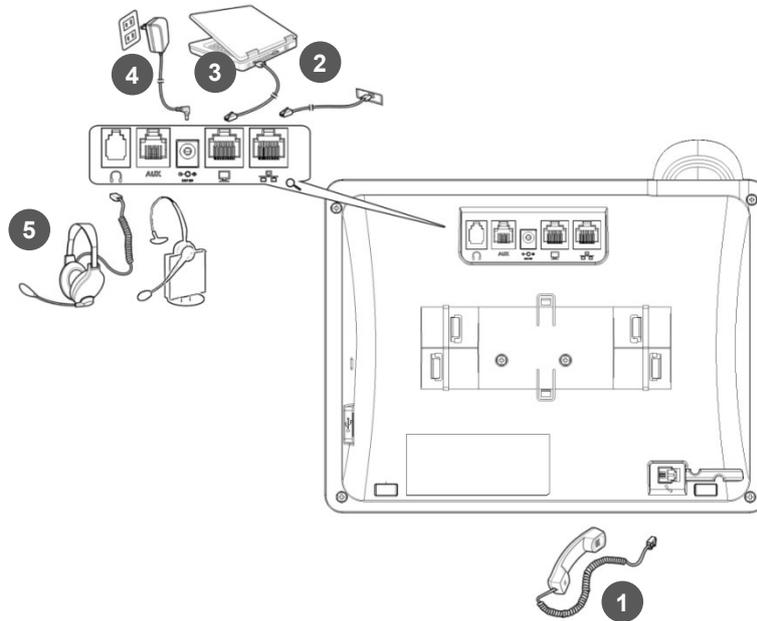
Table 2-2: Rear View Description

#	Label	Description
1		Handset jack, i.e., RJ-9 port, to connect the handset.
2		RJ-45 port to connect to the Ethernet LAN cable for the LAN connection (uplink - 10/100/1000 Mbps). If you're using Power over Ethernet (PoE), power to the phone is supplied from the Ethernet cable (draws power from either a spare line or signal line).
3		RJ-45 port for connecting the phone to a PC (10/100/1000 Mbps downlink).
4	 DC12V	12V DC power jack that connects to the AC power adapter.
5		Headset jack, i.e., RJ-9 port that connects to an external headset.

2.3 Cabling

This section shows how to cable your phone.

Figure 2-3: Cabling



Action	Description
1	Connect the <i>short, straight end of the cord</i> to the handset. Connect the <i>longer, straight end</i> to the jack (RJ-9 port, for the handset) on the phone.
2	Connect the RJ-45 LAN port to your LAN network (LAN port or LAN switch/router), using a CAT 5 / 5e Ethernet cable
3	Connect the RJ-45 PC port to a computer, using a CAT 5 / 5e straight-through Ethernet cable
4	Connect the connector tip of the AC power adapter to the phone's power socket (labelled DC 12V). Connect the two-prong AC adapter directly to the electrical wall outlet. When the phone powers up, all the LEDs momentarily light up
5	Connect the RJ-9 headset jack to a headset (optional)



Note: If the LAN to which the phone is connected supports Power over Ethernet (PoE), no AC adapter is required; the phone receives power from the Ethernet network.



Prior to connecting power, see the *Compliance and Regulatory Information* at www.audiocodes.com/library.

2.4 Mounting the Phone

The phone can be mounted on a:

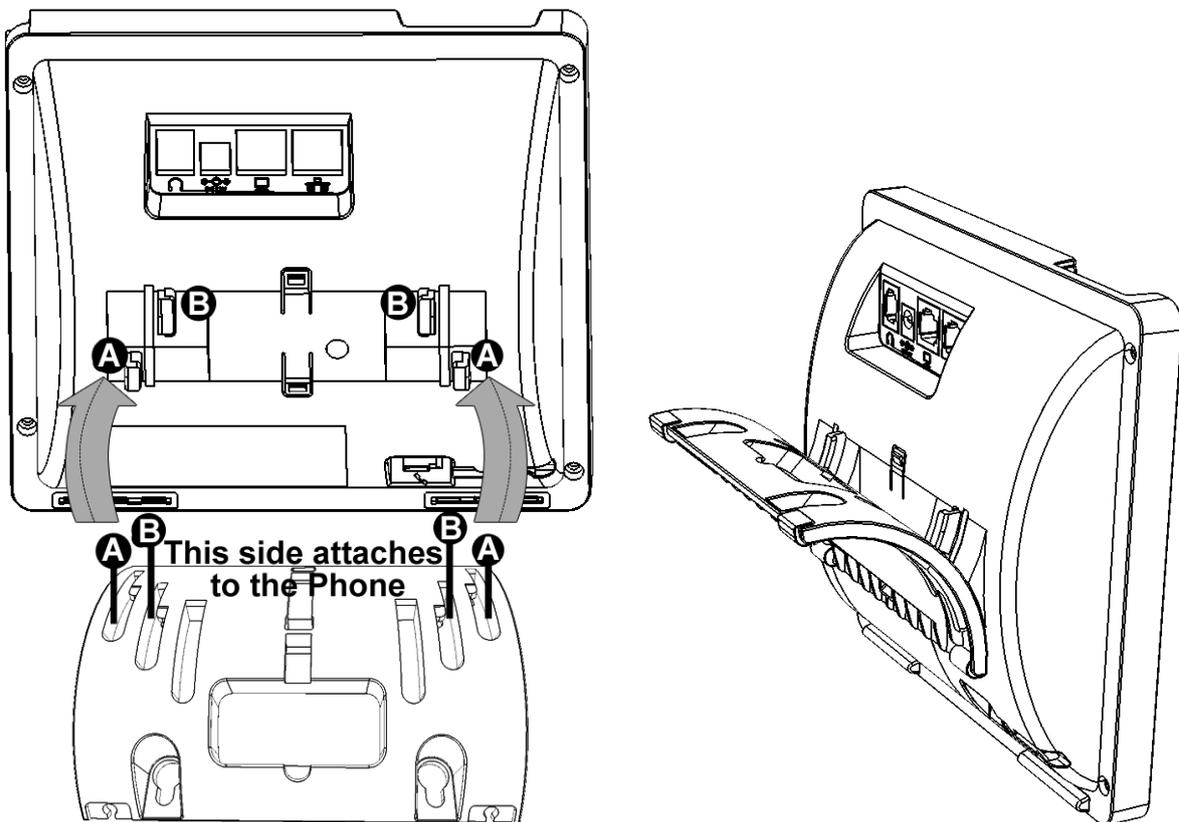
- Desk (see Section 2.4.1 below)
- Wall (see Section 02.4.2)

2.4.1 Mounting the Phone on a Desk

You can mount the phone on a desk or flat surface.

➤ **To mount the phone on a desk or flat surface:**

1. Off-hook the handset (if on-hook) and place the phone upside down, i.e., base-up, on your desktop.
2. On the phone's base, identify outer rails.
3. On the phone's stand, identify outer notches.
4. Invert the stand and align its outer notches with the base's outer rails.
5. Insert the stand's outer notches into the base's outer rails and slide the notches along the rails until the stand click-locks into the base.
6. Revert the phone and stand it on the desktop.



2.4.1.1 Routing the Handset Cable

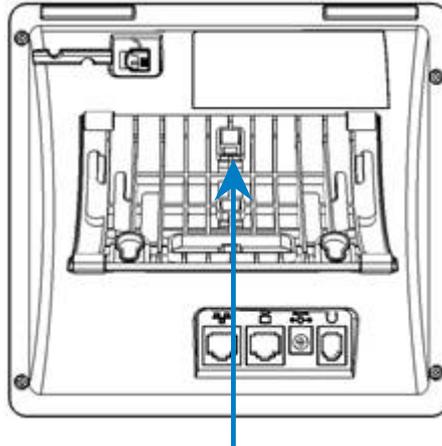
The phone features a groove for routing the handset cable.

2.4.2 Mounting the Phone on a Wall

You can mount the phone on a wall.

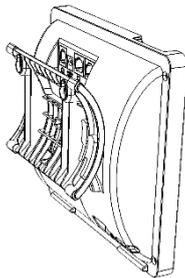
➤ **To mount the phone on a wall:**

1. Attach the stand of the phone for the purpose of a wall mounting:
 - a. Detach the base.



To detach the phone's stand, push this button

- b. Attach it again as you did for a desktop mounting (see Section 2.4.1 on page 16) only now make sure that it's flatly aligned to lie flush against the wall, i.e., slide the *middle rails* of the phone stand onto the phone base's inner notches.



2. Connect the AC power adapter, LAN and PC cords.
3. In the wall, drill two horizontal holes at a distance of 3 15/16 inches (100 mm) from one another, in line with the template.
4. Insert two masonry anchors into the holes if necessary.
5. Thread two screws (not supplied) into the two masonry anchors; make sure that the heads extend sufficiently (about 3/16 inch or 5 mm from the wall) for the phone stand's keyhole slots to hang on.
6. Hang the phone stand's keyhole slots on these screws.

This page is intentionally left blank.

3 Getting Started

The phone features an LCD, providing an intuitive, menu-driven user interface for configuring the phone and viewing call information.

This section shows how to use the phone's LCD.

3.1 LCD in Idle State

The figure below shows the phone's LCD in idle state. Use the table below as reference.

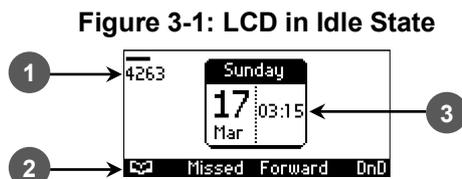
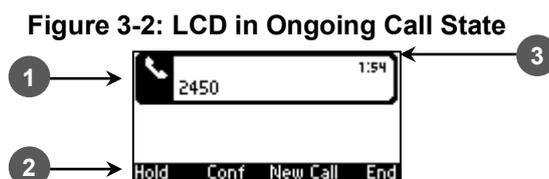


Table 3-1: LCD in Idle State

Reference	Description
1	Extension lines. An extension line will only be displayed after your system administrator configures it using the Web interface. See the <i>Administrator's Manual</i> for details on how to configure a line.
2	Softkeys (Directory, Missed, Forward and DnD ¹). To activate a softkey, press the key below it on the device.
3	Day, Date and Time.

3.2 LCD in Ongoing Call State

The figure below shows the phone's LCD in Ongoing call state.



Use the table below as a reference.

Table 3-2: LCD in Ongoing Call State

Reference	Description
1	Extension lines. An extension line will only be displayed after your system administrator configures it using the Web interface. See the <i>Administrator's Manual</i> for details on how to configure a line.
2	Softkeys (Hold, Conf, New Call and End ²). To activate a softkey, press the key below it on the device.
3	Day, Date and Time

¹ The default softkeys when the phone is in idle state (for more information, see Section 3.3).

² The default softkeys when the phone is in ongoing call state (for more information, see Section 3.3).

3.3 Default Softkeys

The table below describes softkeys displayed in the LCD according to *menu level* currently accessed. To activate a softkey, press the key on the phone keypad, located below the screen, corresponding to the softkey.



Note: Softkeys can also be customized by the administrator. For more information, see Section 4.13.7.

Table 3-3: Default Softkeys for all Menus

Softkey	Description
	Opens the phone's directory. Let's you select a contact in the Personal directory or Corporate directory . Displayed in idle state as well as (for example) after lifting the handset.
Missed	Displays missed calls.
Forward	Defines and activates call forwarding.
DnD	Displayed in idle state. Activates the Do not Disturb feature.
Select	Selects a menu or menu option. Identical to the OK key. Either can be used.
Back	Displayed for example after pressing the MENU key as well as after selecting any of the submenu's under it. Returns you to the previous screen state or menu level.
Dial	Displayed after a number is keyed, a directory contact is selected, or a logged call is selected. Dials the phone number / directory contact / logged call.
Save	Saves settings.
Detail	Displayed after a number is keyed, a directory contact is selected, or a logged call is selected. Dials the phone number / directory contact / logged call.
Clear	Displayed for example after pressing the first digit key of a phone number. Deletes from right to left each time the digit or character is pressed. To delete all digits/characters, keep pressed until all are deleted.
New Call	Displayed after you dial a number and the call is answered. Also shown after <i>you</i> answer a call. Opens the NEW CALL screen in which you can key a number or URL to include in the current call.
Conf	Displayed after you dial a number and the call is answered. Also shown after <i>you</i> answer a call. Opens the CONFERENCE WITH screen in which you can key a number or URL to include in the current call.
Hold	Let's you place the call on hold. Displayed when you are in an active call.
URL	Displayed after lifting the handset, after selecting New Call , Conf or Trans , and after keying the  key. Let's you call a URL.
	Opens the Call Log submenus. Let's you select All Calls , Missed Calls , Received Calls or Dialed Calls . Displayed after lifting the handset. Also displayed after New Call or Conf is selected.
A/a/l	Enables choosing letters or digits (123). The letters option can be all caps (ABC), all small letters (abc) or first letter capitalized (Abc).
Start	Displayed after pressing Forward > selecting an extension line > selecting when to forward. Activates call forwarding.
Cancel	Cancels the currently initiated call or configuration.

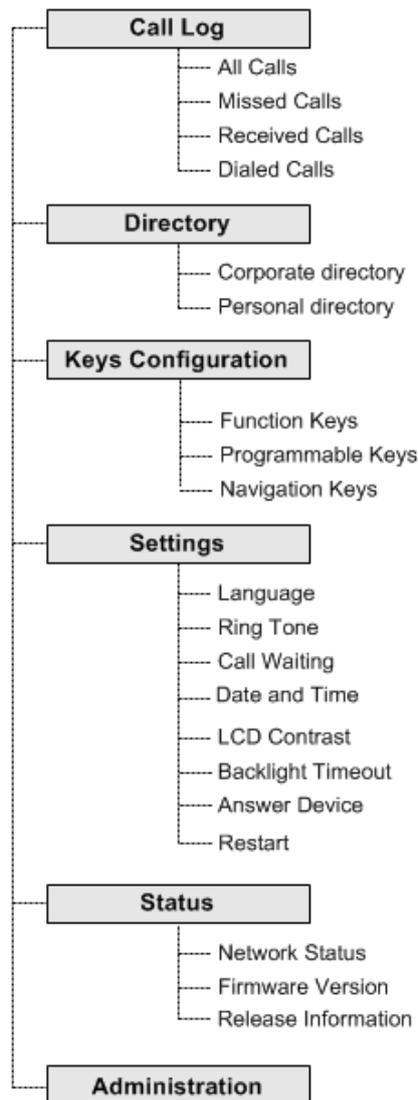
Softkey	Description
End	Displayed for example after pressing the Dial softkey and when the called party lifts the handset/accepts the call. Also displayed after accepting an incoming call or lifting the handset to answer. Ends the call.
Edit	Displayed after a menu/submenu item to be edited is selected. Enables editing the selected item.
Delete	Displayed you select the Detail softkey after selecting a call under a Call Log submenu (e.g., under Missed Calls). Before deleting the call, a warning prompt is displayed.

3.4 Accessing Menus

Menus are used to access information and to configure the phone. Example: Use **Personal directory** under **Directory** to add contacts; use **Missed Calls** under **Call Log** to view missed calls and reply to them; use **Network Status** under **Status** to view the phone's dynamic IP address.

The figure below shows the phone's menus and submenus.

Figure 3-3: Menus



Notes:



- The Administration menu is intended for system administrators only. It is password protected. See the *Administrator's Manual* for details.
- If you define a second extension line, the Call Log menu displays menu items per extension.

- **To access the menus:**
 - Press the **MENU** key located on the device.
- **To navigate to menus and items:**
 - Press the navigating control's upper and lower rim -OR- press the listed item's number on the keypad, e.g., press **3** to navigate to **Keys Configuration > Function Keys**.
- **To select a menu or menu item:**
 - Press the **Select** softkey or press the navigation control's **OK** button.
- **To cancel and move to a previous menu level:**
 - Press the **Back** softkey.

3.5 Entering Numbers, Alphabetical Letters and Symbols

The phone's alphanumerical keypad allows you to enter letters of the alphabet, numbers and symbols. To select either alphabet mode, number mode or symbol mode, press the **A/a/1** softkey successively or press the **#** pound key successively.

To define a contact name, select alphabet mode. To define an IP address, revert from number mode to symbol mode: and back to number, etc. To dial a number to make a new call, press it's key on the keypad when the LCD is in idle state.

- **To select a mode:**
 1. Successively press the **A/a/1** softkey or the **#** key on the keypad to navigate to and select the mode required:

Figure 3-4: Alphanumerical Selection



2. Choose either:
 - **abc** = lower case letters
 - **ABC** = upper-case letters
 - **Abc** = first-letter upper case, the rest lower case
 - **123** = numerical mode (i.e., numbers)

After selecting, the LCD displays your selection.

Figure 3-5: Selected Alphanumerical Mode (Abc)



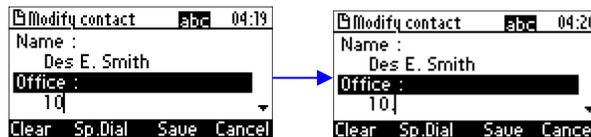
➤ **To enter a letter:**

- Press the letter's key on the keypad. Successively pressing the same key moves you to that key's next letter. Pressing another key enters the first letter indicated on it. Long-pressing a key when in alphabet mode enters the *numerical digit* corresponding to the pressed key.

➤ **To enter a symbol such as a period (full stop):**

1. (Mandatory) Select alphabet mode lower case letters, i.e., **abc**, as described above.
2. Press the 1 key on the keypad; a semi-colon is entered. Immediately press it again; a colon is entered. Immediately press **1** again; a period is entered.

Figure 3-6: Entering a Symbol such as a Full Stop



Pressing successively produces:

- ; (semi-colon)
- : (colon)
- . (period)
- @ (at)
- # (pound)
- \$ (dollar)
- % (percentage)
- ^ (caret)
- & (ampersand)
- + (plus)
- - (minus)
- _ (underscore)

Note that the asterisk (*) symbol is entered directly using the star key.

3.6 Displayed Messages

Messages indicating processes in progress, displayed in the LCD, include:

Table 3-4: Messages Displayed on LCD Indicating Processes In Progress

Message	Description
Initializing	Initializing
Discovering LLDP	Discovering Link Layer Discovery Protocol (LLDP) for initialization
Discovering CDP	Discovering Cisco Discovery Protocol (CDP) for initialization
Acquiring IP	Acquiring an IP address from a DHCP server
Initializing Network	Initializing the network
Registering	Registering to a SIP proxy server (at phone bootup)
Registration in Progress	SIP Registration in Progress
Registration Failure	SIP Registration failure
Downloading Firmware File	Downloading a firmware file
Upgrading Firmware	Upgrading the phone's firmware
Updating Configuration	Loading a configuration file
Generate Certificate	Generates the phone's security certificate
LAN link failure	<p>The phone is not physically connected to a network device because</p> <ul style="list-style-type: none"> ▪ the network cable is not plugged into the phone ▪ the network device / network cable is damaged and/or ▪ the network device is shut down
IP Duplication and Reboot	<p>The phone received an IP address already taken by another device.</p> <p>This may have been due to</p> <ul style="list-style-type: none"> ▪ a problem with the DHCP server -or- ▪ another device was given a static IP address within the range of the DHCP server



Note: The status of factory installed certificates is also displayed. The phone start up (boot) process now visually displays the following certificate status indications:

- Installed
- Self-Signed
- Not-Installed

This page is intentionally left blank.

4 Customizing Your Phone

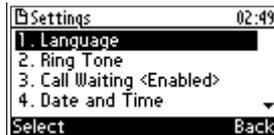
You can customize your phone for enhanced usability.

4.1 Selecting Language

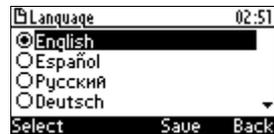
The LCD supports multiple languages. English is the default but you can change it to another.

➤ **To change the default language:**

1. Access the **Languages** screen (**MENU** key > **Settings** > **Language**).



2. Navigate to the language you require.



3. Press the **Select** softkey.
4. Press the **Save** softkey to apply the setting.

4.2 Selecting Ring Tone

The phone provides a selection of ring tones that you can choose from to indicate incoming calls. If line extensions are defined on your phone, you can assign a ring tone per line extension.

➤ **To select a ring tone:**

1. Access the **Ring Tone** screen (**MENU** key > **Settings** > **Ring Tone**).



2. In the **Ring Tone** screen select **All Extensions**, or select a specific extension (if extensions are configured) and then select a ring tone. A sample of each ring tone is played as you navigate through the list.
3. Press VOL  or VOL  on the keypad to set ring tone volume. You can also increase or decrease ring tone volume when the phone is in idle state or when a call is incoming (see Section 4.10.1).



A few seconds after adjusting the volume level the Ringer Volume indication is hidden.

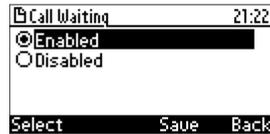
4. Press the **Select** softkey.
5. Press the **Save** softkey to apply your setting.

4.3 Enabling Call Waiting

You can enable or disable the call waiting feature.

➤ **To enable or disable call waiting:**

1. Access the **Call Waiting** screen (**MENU** key > **Settings** > **Call Waiting**).



2. Navigate to and select one of the following:
 - **Disabled** (disables call waiting)
 - **Enabled** (enables call waiting)
3. Press the **Save** softkey to apply your setting.

4.4 Setting Date and Time

You can manually set date and time displayed on your phone. If a Network Time Protocol (NTP) server is deployed and enabled by your administrator, however, then date and time are automatically retrieved over the Internet from the server and manually setting them will not be possible. You'll receive this message:



Note:

- It's recommended to implement an NTP server (system administrators can see the *Administrator's Manual* for detailed information).
- If date and time are manually set, the settings are not retained after rebooting the phone or powering off. You will need to manually reset date and time if you reboot or power off.

➤ **To set date and time:**

1. Access the **Date and Time** screen (**MENU** key > **Settings** > **Date and Time**).



2. Navigate down to the **Date format** option and set **European** or **American**.
3. Navigate to the **Date** option and use the **Clear** softkey to modify.
4. Navigate to the **Time** option. The time is in the format HH:MM. Modify using the **Clear** softkey.



5. Navigate to the **Time format** option.



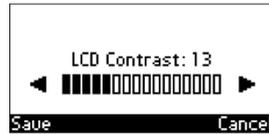
6. Press the navigation control's left rim to change the format from **24h** to **12h** if required.
7. Press the **Select** soft key.
8. Press the **Save** softkey to apply your setting.

4.5 Changing LCD Contrast Level

The LCD supports 0-35 contrast levels. You can select the level that suits you best.

➤ **To define the LCD's contrast level:**

1. Access the **LCD Contrast** submenu (**MENU** key > **Settings** > **LCD Contrast**).



2. Press the navigation control's left or right rim to navigate to the contrast level that suits you best.
3. Press the **Save** softkey to apply your setting.

4.6 Changing BLF LCD Contrast



Note: Applies only to the 440HD IP Phone.

The BLF LCD supports 0-39 contrast levels. You can select the level that suits you best.

➤ **To change the BLF LCD's contrast level:**

1. Access the **BLF LCD Contrast** submenu (**MENU** key > **Settings** > **BLF LCD Contr.**).



2. Press the navigation control's left or right rim to navigate to the contrast level that suits you best.
3. Press the **Save** softkey to apply your setting.

4.7 Setting the LCD Backlight Timeout

You can set for how long, in seconds, the phone's backlight will be lit after you've used the phone (idle). After the timeout expires, the backlight turns off. You can opt to have the backlight on all the time if you select **Always on**.

➤ **To set the LCD backlight timeout:**

1. Access the **Backlight Timeout** screen (**MENU** key > **Settings** > **Backlight Timeout**).



2. Navigate to **Always on**, **10 seconds** (default), **20 seconds**, **30 seconds**, **40 seconds**, **50 seconds** or **60 seconds**.
3. Press the **Select** softkey.
4. Press the **Save** softkey to apply your setting.

4.8 Changing the Default Answer Device

You can change the default answer device. The default answer device is the speaker.

➤ **To change the default to handset or headset:**

1. Access the **Answer Device** screen (**MENU** key > **Settings** > **Answer Device**).



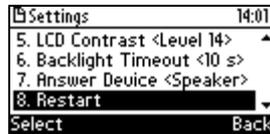
2. Select **Speaker** or **Headset**.
3. Press the **Save** softkey to apply your setting.

4.9 Restarting the Phone

You can restart the phone. You can use this feature to initially troubleshoot a phone issue (for example), as you do with a pc issue.

➤ **To restart the phone:**

1. Access the **Restart** screen (**MENU** key > **Settings** > **Restart**).



2. Select **Restart** and then in the warning prompt that is displayed, press the **Yes** softkey.

4.10 Adjusting Volume

You can adjust the volume of the:

- Ring
- Tones (e.g., dial tone)
- Handset
- Speaker
- Headset

4.10.1 Adjusting Ring Volume

You can adjust the volume of the ring indicating an incoming call.



Note: By default, you can adjust ringing volume in the phone's LCD. Your network administrator, however, can block this capability and provision ringing volume remotely. If this was done and you need to adjust the ringing volume, consult your network administrator.

➤ **To adjust ring volume:**

1. When the phone is in idle state (i.e., not in use), press VOL or VOL on the keypad; the Ringer Volume bar is displayed on the screen:



2. Press VOL or VOL on the keypad to adjust the volume. After adjusting, the Ringer Volume level disappears from the screen.

4.10.2 Adjusting Tones Volume

You can adjust the phone tones, including dial tone, ring-back tone and all other call progress tones.

➤ **To adjust tones volume:**

1. Off-hook the phone (using handset, speaker or headset).
2. Press VOL or VOL on the keypad; the Tones Volume bar displays on the screen:



3. Press VOL or VOL on the keypad to adjust the volume. After adjusting, the Tones Volume bar disappears from the screen.

4.10.3 Adjusting Handset Volume

You can adjust the volume of the handset during a call or when making a call. After changing the volume, the newly adjusted level applies to all subsequent handset use.

➤ **To adjust handset volume:**

1. Off-hook the handset and make a call. During the call, press VOL  or VOL  on the keypad:



2. After adjusting the volume, the Handset Volume bar disappears from the screen.

4.10.4 Adjusting Speaker Volume

You can adjust the volume of the speaker during a call. After changing the volume, it applies to all subsequent speaker use.

➤ **To adjust the speaker volume:**

1. Press the **SPEAKER** key and make a call. During the call, press VOL  or VOL  on the keypad:



2. After adjusting the volume; the Speaker Volume bar disappears from the screen.

4.10.5 Adjusting Headset Volume

You can adjust the volume of the headset only during a call. After changing, the volume applies to all subsequent headset use.

➤ **To adjust the headset volume:**

1. During a call, press the **HEADSET** key.
2. Press VOL  or VOL  on the keypad:



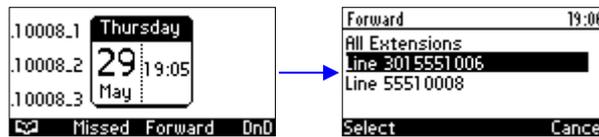
After adjusting the volume, the Headset Volume bar disappears from the screen.

4.11 Defining Call Forwarding

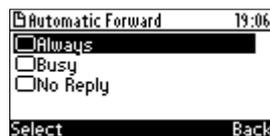
This feature allows an incoming call be automatically redirected to another phone number if a user-defined condition is met, e.g., if the line is busy. You can define call forwarding per extension or for all extensions - if you've defined extensions.

➤ **To define call forwarding:**

1. When the LCD is in idle state press the **Forward** softkey:



2. In the Forward screen, navigate to a line or to **All Extensions** and press the **Select** softkey.



3. In the Automatic Forward screen, navigate to a forwarding condition:

- **Always:** The call is always forwarded.
- **Busy:** The call is forwarded when the line is busy.
- **No Reply:** The call is forwarded if the incoming call is not answered after a user-defined time in seconds. To select the time (1-99 seconds), press the navigation control's left or right rim.

4. Press the **Select** softkey and define the destination to where you want the call forwarded:



- **Number To Forward:** enter the number to which to forward the call.
- **Select from Directory:** navigate to and select this option and then select an existing contact to whom to forward the call.
- Scroll down to select a destination from the history of numbers previously forwarded to

5. Press the **Start** softkey to activate call forwarding; an → icon appears adjacent to the extension/s on the idle screen indicating that call forwarding is active:



➤ **To deactivate call forwarding:**

- When the phone is on-hook, press the **Forward** softkey; in the Automatic Forward screen, press the **Disable** softkey to disable forwarding conditions; the → icon disappears from the extension/s on the idle screen.



Note: If your enterprise deployed BroadSoft's BroadWorks server, your network administrator can control the Call Forwarding feature on the phone from the server. For more information, see the *Administrator's Manual*.

4.12 Managing Your Personal Directory

You can add contacts to the Personal Directory and edit and delete them if necessary. After adding a contact, you can call the contact directly from the directory (see Section 6.3 on page 63). If you receive an incoming call from a contact listed in the directory, the LCD displays the name listed. If you assign a speed dial key to the contact, you can press it to call them.



Note:

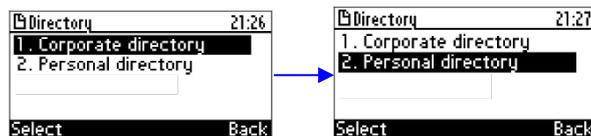
- You can add a maximum of 700 contacts to your Personal Directory.
- Your phone also features a Corporate Directory, set up by your system administrator by loading a file or using the LDAP (Lightweight Directory Access Protocol) server (see the *Administrator's Manual*).
- Corporate Directory contacts cannot be edited or deleted.

4.12.1 Accessing the Personal Directory

It's necessary to access the Personal directory in order to perform the management operations subsequently described.

➤ **To access the Personal directory:**

1. Press the **CONTACTS** key on the phone -OR- when the LCD is in idle state, press the  softkey -OR- press the **MENU** key and navigate to and select **Directory > Personal directory**.



2. Press the **Select** softkey to add a contact to the directory, edit or modify contact information, delete a contact, or search for a contact:



4.12.2 Adding a Contact to the Personal Directory

You can add a contact to the Personal Directory. You can enter the contact's:

- Name
- Office number
- Home number -and/or- mobile number

You can also define a Speed Dial key to quickly dial that contact.

➤ **To add a contact to the Personal directory:**

1. Access the **Personal directory**.
2. Select **+ New contact:**



3. In the 'Modify contact' screen, key in the 'Name' of the new contact (see Section 3.5 on page 23 for details).
4. Navigate down and key in the new contact's 'Office' number (see Section 3.5 on page 23 for details). Optionally, navigate down and key in the new contact's 'Home' and 'Mobile' numbers as well.
5. To define a Speed Dial, see under Section 4.13 on page 43.
6. To manage Speed Dials, see under Section 4.13 on page 43.

4.12.3 Editing Contact Information

You can edit contact information.

➤ **To edit contact information:**

1. Access the **Personal directory**, navigate to the contact to edit and press the **Detail** softkey:



2. Press the **Edit** softkey:



3. Navigate to the contact's details and modify using the **Clear** softkey:



4. Press the **Save** softkey:



Note: Corporate directory contacts cannot be modified.

4.12.4 Deleting a Contact

You can delete a contact from the directory.

➤ **To delete a contact:**

1. Access the **Personal directory** and navigate to the contact to delete:
2. Press the **Detail** softkey; the contact details are shown.
3. Press the **Delete** softkey; a 'Delete current contact?' warning message appears:



4. Press the **Yes** softkey to remove the contact from the phone directory or **No** if you want to keep the contact in the directory; the contact is removed from the directory.



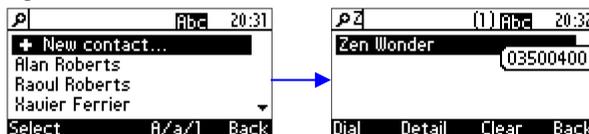
Note: Corporate directory contacts cannot be deleted.

4.12.5 Searching for a Contact

You can quickly and easily locate a contact in the directory. This is especially useful if you have a long list of contacts.

➤ **To search for a contact:**

- Access the phone directory.
 - Navigate to the contact in the list -OR-
 - Key the first letter in the contact's name using the keypad. As you press the key, the directory locates contacts whose names begin with that letter. For example, to search for the contact Zen, as you press the 'Z' key the directory locates contacts whose names begin with 'Z'.



- If multiple names begin with 'Z', type in the next letter, i.e., 'E'; contacts whose names begin with 'Ze' appear, etc.

4.13 Configuring a Function Key for Speed Dialing

Up to 17 keys can be configured for speed dialing.

- 12 Function Keys (1-12) (this section shows how)
- Five Programmable Keys (1-6) (see Section 4.13.3)

After configuring a key for speed dialing, you can press it to directly dial the configured phone number, saving you the task of keying in the digits every time you call that destination.



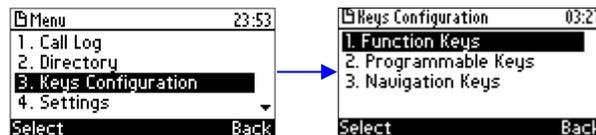
Note: Function Keys can also be configured for Paging (see Section 6.12).

4.13.1 430HD Phone

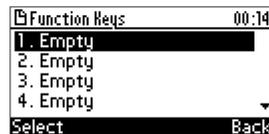
Up to 12 Function Keys can be configured as Speed Dials/Speed Dials+BLFs.

➤ **To configure a Function Key as Speed Dial / Speed Dial+BLF:**

1. Access the Function Keys screen (**MENU** key > **Keys Configuration** > **Function Keys**). You can also access the Function Keys screen by long-pressing a BLF button.



2. In the Function Keys screen, select one of 12 Empty Function Keys.



Note: **1 Empty** corresponds to the uppermost BLF button on the sidecar, **12 Empty** to the lowermost BLF button.

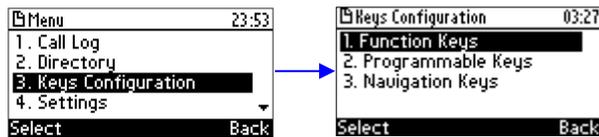
3. In the Function Key # screen that opens, configure the phone number.
4. Press the **Save** softkey; you can now press the BLF button to speed-dial the number.

4.13.2 440HD Phone

Up to 33 Function Keys can be configured as Speed Dials and up to 12 Function Keys as Speed Dials+BLFs. More than 12 Speed Dials+BLFs are not supported by any application server besides BroadSoft. When phones are deployed in a BroadSoft environment, a total of 33 Speed Dials+BLFs can be configured. They can be configured on pages 2 and 3, in addition to on page 1, of the phone's BLF sidecar. After the 12th Function Key is configured as a Speed Dial in the sidecar, a **Next** key is displayed to configure the 13th Function Key on page 2.

➤ **To configure a Function Key as a Speed Dial+BLF:**

1. Access the **Function Keys** screen (**MENU** key > **Keys Configuration** > **Function Keys**). You can also access the Function Keys screen by long-pressing a BLF button.



- In the Function Keys screen, select an Empty Function Key:



- In the Function Key #n screen that opens, configure the phone number.



- Navigate to 'Key label' and enter a label to be displayed in the sidecar adjacent to the BLF.



- Press the **Save** softkey; the label is displayed in the sidecar adjacent to the BLF.

Note:



- If the 'Key Label' field is not configured and LDAP is *enabled*, the label is taken from the name in the Active Directory.
- If the 'Key Label' field is not configured and LDAP is *disabled*, the phone number is displayed.

4.13.2.1 Configuring More than 12 Function Keys

This section describes the Function Key configuration when you configure more than 12 Function Keys. In this case, the Function Key LCD display can scroll to up to two more additional pages.



Note: Applies only to the 440HD phone.

You can configure up to 12 Function Keys as Speed Dials+BLFs. If you configure more than 12:

- The second and third pages of Function Keys can be configured as Speed Dials, Paging keys and BLF keys, unless the application server is BroadSoft's, in which case the second and third pages of Function Keys can be configured as Speed Dials+BLFs.
- If the application server is not BroadSoft's, only the 12 Function Keys on the first page can be Speed Dials+BLFs.
- When you configure the 13th Function Key, the 12th Function Key you previously configured on page 1 is relocated to page 2, where it 'loses' its BLF capability. After it's relocated to page 2, its label on page 1 is replaced by **Next Page**.
- In any page displaying empty labels, you can configure a new Function Key by long-pressing its BLF button. Once any page is full, you must configure the next Function Key from **MENU** key > **Keys Configuration** > **Function Keys**.

- Each page displays a **Next Page** label. Pressing the **Next Page** button at the bottom of the first page pages you to the second; pressing it in the second page pages you to the third; pressing it in the third returns you to the *first* page.
- **To configure additional Function Keys:**
 1. Configure 12 Speed Dials as shown in the previous section.
 2. Open Function Key #13 screen from **MENU** key > **Keys Configuration** > **Function Keys** and define a Speed Dial. The result is:
 - Speed Dial #12 is relocated to the top of the next page.
 - Eleven SDs+BLFs are displayed in the first page.
 - The lowermost label in the first page displays **Next Page**.
 - Speed Dial #13 is displayed under Speed Dial #12 at the top of the second page.

4.13.2.1.1 Determining BLF Indications

BLFs indicate the status of contacts for whom Speed Dials+BLFs are configured.



Note: Applies only to the 440HD phone. Applies only to Speed Dials+BLFs configured on page 1, for the first 12 contacts. Pages 2 and 3 can only be Speed Dials, without BLFs, unless the application server is BroadSoft.

Table 4-1: BLF Indications

BLF	Indication
Flashing green light	Indicates an incoming call. The phone also rings.
Green light	Indicates the phone is ready (available) to take a call.
Red light	Indicates the phone is busy, in a call.

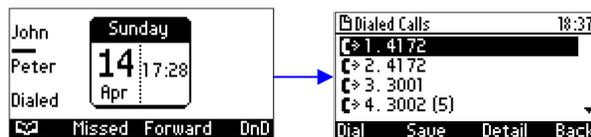
4.13.3 Configuring a Programmable Key

Three Programmable Keys are located on each side of the phone's LCD, making six in total.



Note: When the phone is operating in single-line mode, the two left uppermost keys of the LCD are dedicated to the single line (active and held call) and cannot be configured.

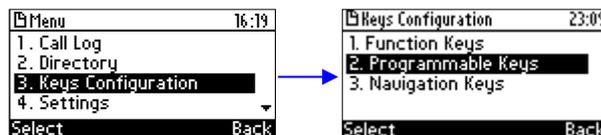
The figure below left shows a Programmable Key configured as a Key Event labeled 'Dialed'. Pressing it opens the Dialed Calls screen. See also Section 4.13.3.1.



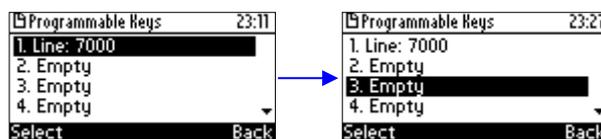
The section below shows how to configure Programmable Keys.

➤ **To configure a Programmable Key:**

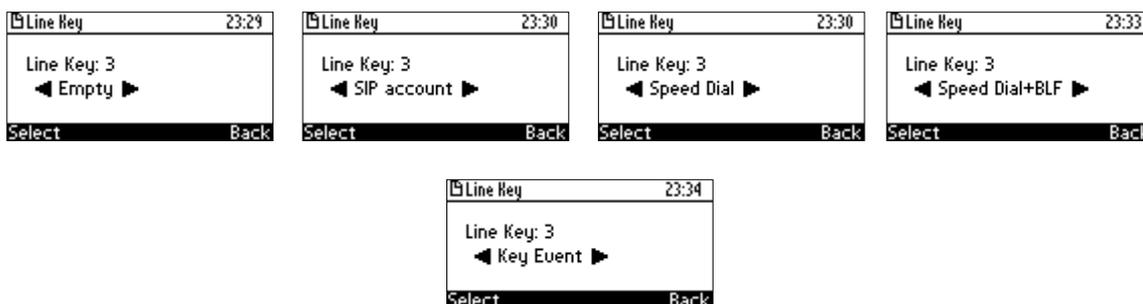
1. Access the Programmable Keys screen (**MENU** key > **Keys Configuration** > **Programmable Keys**):



2. Navigate to and select an Empty key:



3. Navigate to and select **SIP account**, **Speed Dial**, **Speed Dial+BLF** or **Key Event**:



Note:

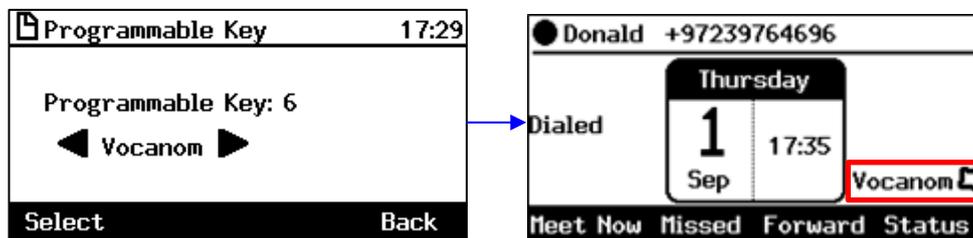
- You can configure a Programmable Key as a **SIP account**, a **Speed Dial**, a **Speed Dial+BLF** (440HD phone only) or as a **Key Event** (see Section 4.13.3.1).
- If you select **SIP account**, the system administrator must first configure the SIP account in the Web interface. See the *Administrator's Guide*.
- If you select **Speed Dial / Speed Dial+BLF**, you can configure the Programmable Key as a Speed Dial as you configured a Function Key for speed dialing.

4.13.3.1 Configuring Programmable Key #6 as a VocaNOM Dial

The phone is directly integrated with AudioCodes' VocaNOM services to allow voice dialing to any other user in same corporate directory. VocaNOM allows voice-dialing colleagues by pressing the VocaNOM key in the phone's idle screen. A beep is played and then a voice prompt requests first and last name or department. The caller articulates the first and last name and then at the prompt, articulates "Office" or "Mobile". The VocaNOM service then directly dials the requested party according to the instructions articulated by the user. When the service identifies the requested party, the phone dials their number just as it does in a regular call. Later, the user can press the REDIAL hard key on the phone and view the call logged in the phone's 'Dialed Calls' just like with any other call. The feature increases day-to-day work productivity.

➤ **To configure VocaNOM Programmable Key #6:**

1. Long-press the sixth Programmable Key located to the right of the screen below the fifth and fourth keys.
2. Navigate to and select the Key Event **VocaNOM**.



4.13.3.2 Configuring a Programmable Key as a Key Event

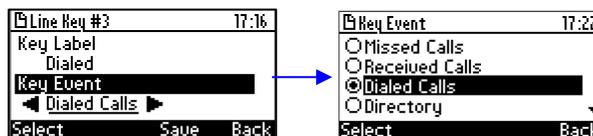
A Programmable Key can be configured as a Key Event.

➤ **To configure a Programmable Key as a Key Event:**

1. Access the Line Key screen (**MENU** key > **Keys Configuration** > **Programmable Keys**).
2. Select **<Empty>**, and then navigate to and select **Key Event**; the screen below is displayed. In the 'Key Label' field, type a name for the key (e.g., Dialed) so you'll identify it in the LCD:



3. Navigate down to the 'Key Event' field and then navigate to and select the Key Event you want to define, e.g., Dialed Calls:



Other Key Events you can select are:

- Missed Calls
- Received Calls
- Directory
- DnD All
- Forward All

The Programmable Keys screen now lists the newly configured key:



4. Press the **Back** softkey to return to the LCD in idle mode. You'll see the Key Event named 'Dialed' that you defined:



The first and second keys above 'Dialed' are line extension keys.

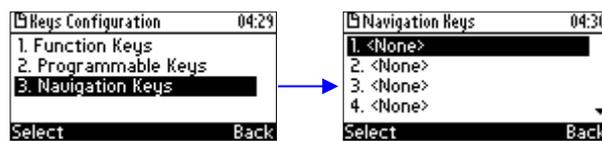
4.13.4 Configuring a Navigation Key Position Function

Each of the four positions of the navigation control button on the phone, i.e., Control Up, Control Down, Control Left, and Control Right, can be configured to perform one of the following five functions:

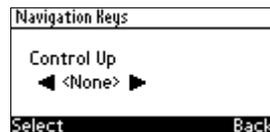
- None (default)
- Missed Calls
- Received Calls
- Dialed Calls
- All Calls
- Directory

➤ **To configure a navigation key position to perform a function:**

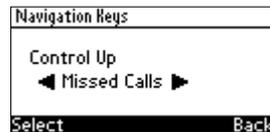
1. Access the Navigation Keys screen (**MENU** key > **Keys Configuration** > **Navigation Keys**):



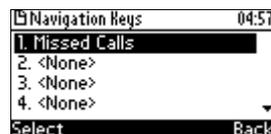
2. Press the **Select** softkey; the navigation key's Control Up position is displayed.



3. Navigate to and select the function you want to configure, e.g., **Missed Calls**. You can choose either **None** (default), **Missed Calls**, **Received Calls**, **Dialed Calls**, **All Calls**, or **Directory**.



4. Press the **Select** softkey; the key position is now configured:

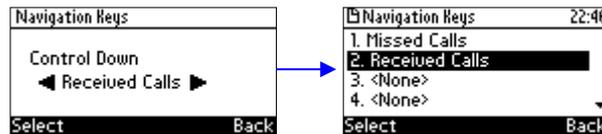


The user will be able to press the upper rim of the navigation control button on their phone in order to display Missed Calls on the phone's LCD screen.

5. To configure another navigation control button position as a function, navigate down to the next **<None>**, and then press the **Select** softkey; the Control Down navigation control button position opens:



6. Navigate to and select the next function you want to configure, e.g., **Received Calls**.



The user will be able to press the lower rim of the navigation control button on their phone in order to display Received Calls on the phone's LCD screen.

4.13.4.1 Removing a Configured Navigation Key Position

- **To remove a configured navigation control position:**

1. Navigate to and select the configured navigation control position function you want to delete (**Missed Calls, Received Calls, Dialed Calls, All Calls, or Directory**).
2. Navigate to and select **<None>**; the function is removed.

You can configure Speed Dial keys through the

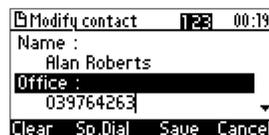
- Personal directory (see Section 4.13.5)
- Function Keys (see Section 4.13)
- BLF buttons (see Section 4.13.6)

4.13.5 Configuring a Speed Dial Key through the Personal Directory

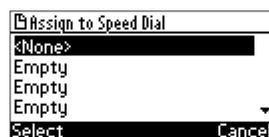
You can configure a Speed Dial key through the Personal directory.

- **To configure a Speed Dial key through the Personal directory:**

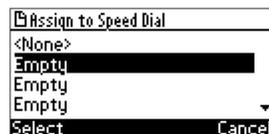
1. Open a contact's 'Modify contact' screen (**MENU** key > **Directory** > **Personal directory**), press the **Detail** softkey and then press the **Edit** softkey.



2. Navigate to the phone number for which to define a speed dial and press the **Sp. Dial** softkey.



3. Navigate to an 'Empty' or to a previously defined speed dial number. In the latter case, the previously defined speed dial number will be overwritten.



4. Press the **Select** softkey, a Speed Dial is assigned to the contact
5. Press the **Save** softkey; the Speed Dial is displayed in the BLF.

4.13.6 Configuring a Speed Dial Key through a BLF Button

You can configure a Speed Dial key through a BLF button (1-12).



Note: Applies only to the 440HD IP Phone.

➤ **To configure a Speed Dial key through a BLF button:**

1. Long-press a BLF button whose label is empty. The figure below shows the screen that opens if you press the second button from the top:



2. Configure the phone number of the contact to assign the Speed Dial key to.
3. Label the contact.
4. Press the **Save** softkey; the BLF label displays the name of the contact to whom you assigned the Speed Dial.

4.13.6.1 Editing a Speed Dial Key

You can edit a Speed Dial Key.

➤ **To edit a Speed Dial key:**

1. Access the Function Keys screen (**MENU** key > **Keys Configuration** > **Function Keys**):



2. Select the Speed Dial key to edit:



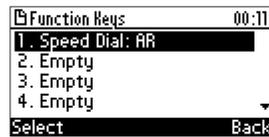
3. Navigate down to the number. Use the **Clear** softkey to delete digits. Do the same with the Label if necessary.

4.13.6.2 Deleting a Speed Dial Key

You can delete a Speed Dial key.

➤ **To delete a Speed Dial key:**

1. Access the Function Keys screen (**MENU** key > **Keys Configuration** > **Function Keys**):



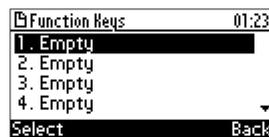
2. Navigate to the Speed Dial to delete and press the **Select** softkey:



3. In the 'Number' field, delete the entire number using the **Clear** softkey.



4. Press the **Save** softkey; the Speed Dial is now listed as 'Empty':



4.13.7 Configuring Softkeys

Located under your phone's LCD are four configurable softkeys. The idle screen by default displays (from left to right)  (Directory), Missed, Forward, and DnD softkeys:



Note: Softkeys can only be configured by the administrator (see the *Administrator's Guide*).

These four softkeys may be customized by the administrator with different key events. The administrator can add additional softkeys. When additional softkeys (more than three) are added, the rightmost softkey is set to **More**. If you press it, you're scrolled to the next page of the Softkey LED display.



Note: You can scroll up to seven pages according to the supported number of configured softkeys (see the *Administrator's Guide*).

4.13.7.1 Programmable SoftKeys (PSKs)



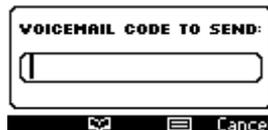
Note: PSKs can only be configured by the administrator. For more information, see the *Administrator's Manual*.

When a Programmable softkey (PSK) is configured by the administrator, for example, connecting to a Voicemail server or accessing an intercom, you can be prompted to enter a personal code.

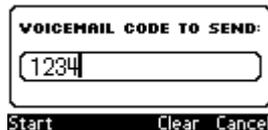
The example below shows a softkey that has been assigned as a PSK to connect to a Voicemail server.



When you press the Voicemail softkey, you are prompted to enter a voicemail code:



When you enter the voicemail code, you can press **Start** to dial to the Voicemail server, **Clear** to clear the entry or **Cancel**.



This page is intentionally left blank.

5 Performing Basic Operations

This section shows basic phone operations.

5.1 Using Audio Devices

You can use one of the following audio devices on the phone for speaking and listening:

- **Handset:** To make a call or answer a call, lift the handset off the cradle.
- **Speaker** (hands-free mode). To activate it, press the speaker key during a call or when making a call. To deactivate it, press the speaker key again.
- **Headset** (hands-free mode). When talking on the phone, you can relay audio to a connected headset. To enable it, press the headset key. To disable it, press it again.

You can easily change audio device during a call.

- **To change from speaker/headset to handset:** Activate speaker/headset and pick up the handset; the speaker/headset is automatically disabled.
- **To change from handset to speaker/headset:** Off-hook the handset and press the speaker/headset key to activate the speaker/headset. Return the handset to the cradle; the speaker/headset remains activated.

5.2 Making Calls

The phone lets you make calls in different ways.



Note:

- To dial, see the next section.
- To dial using the phone directory, see Section 4.12 on page 40.
- To define a Speed Dial, see Section 4.13 on page 43.
- To use multiple lines, see Section 6.11 on page 73.

After dialing a number:

- LCD displays  and the called party's number or name if it's in the phone directory
- LCD displays the line extension number on which the called party is dialed
- The phone plays a ring-back tone

LCD indications:



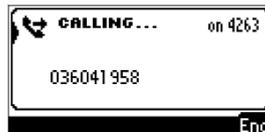
- **To end dialing a call before it's answered:**
- Press the **End** softkey or the speaker key.

5.2.1 Dialing

To dial, either (1) key-in the number on the keypad (2) press the speaker key and enter the number (3) press the speaker key or lift the handset and enter a URL address (e.g., host and domain name, or IP address) or alphabetical letters (e.g., tvservice).

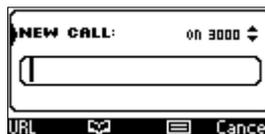
➤ **To dial a regular-digits phone number:**

1. On the keypad, press the first digit key of a regular phone number; the LCD displays the digit in the NEW CALL field; press the remaining digit keys. To delete (from right to left), press the **Clear** softkey. To cancel the call, press the **Cancel** softkey.
2. Press the **Dial** softkey (if you don't, dialing is automatically performed after a few seconds) or press the # (pound) key.

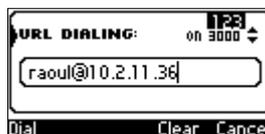


➤ **To dial a URL:**

1. Press the speaker key or lift the handset; the LCD displays the NEW CALL field and the **URL** softkey:



2. Press the **URL** softkey and enter a URL address, pressing the # key to toggle alphabetical letters and numerals (see Section 3.5 on page 23). To delete (from right to left) entered letters/numerals, press the **Clear** softkey. To cancel the call, press the **Cancel** softkey.



3. Press the **Dial** softkey.

5.2.2 Redialing

You can redial a number previously dialed.

➤ **To redial:**

1. Press the **REDIAL** key; the Dialed Calls screen is displayed, listing in chronological order, recently dialed numbers:



2. Navigate down to the number to redial.
3. Press the **Dial** softkey or press the **OK** key.

5.2.3 Dialing a Missed Call

The phone logs all missed calls. The LCD in idle state displays the number of missed calls (if any):



➤ **To dial a missed call:**

1. Press the **Missed** softkey; the Missed Calls screen is displayed:



2. Navigate to the missed call to dial if there is more than one.
3. Press the **Dial** softkey or press the **OK** key.

5.3 Answering Calls

The phone indicates an incoming call as follows:

- LCD displays  together with the caller's phone number (or contact name if listed in the phone directory):



- Phone rings.
- Ring LED flashes blue.
- **To answer:**
 - Pick up the handset -or-
 - Press the headset key (make sure that the headset is connected to the phone) -or-
 - Press the speaker key -or-
 - Press the **Accept** softkey (the speaker is automatically activated)

When you answer, the LCD displays this:



Note: HD indicates a high-definition call (using a wideband voice coder).

5.4 Rejecting Incoming Calls

You can reject an incoming call. If you do, the caller will hear a busy tone from your phone.

➤ **To reject an incoming call:**

- Press the **Reject** softkey; the idle screen is displayed.

5.5 Silencing Incoming Calls

You can silence an incoming call's ring. When you do, the caller hears normal ringing but no answer.

➤ **To silence the ringing of an incoming call:**

- Press the **Silence** softkey. You can answer a silenced call by pressing the **Accept** softkey or picking up the handset.

5.6 Ending a Call

You can end a call.

➤ **To end a call:**

- Return the handset to the phone cradle if it was used to take the call
-OR-
- Press the headset key if it was used to take the call
-OR-
- Press the speaker key if it was used to take the call
-OR-
- Press the **End** softkey

5.7 Viewing Missed, Received and Dialed Calls

Your phone logs missed, received and dialed calls. In idle state, the LCD displays 'Missed Calls' and the number (if any).



- **To view missed calls:**
 - Press the **Missed** softkey.



Note: After viewing, the indication disappears from the screen. The next time a call is missed, the indication will reappear.

- **To view call history:**
 1. Access the **Call Log** screen (**MENU** key > **Call Log**).



2. Select **All Extensions** or select a specific extension; this screen opens:



All Calls = calls that were missed, received and dialed

Missed Calls = calls that were not answered

Received Calls = the most recently answered numbers

Dialed Calls = the most recently dialed numbers

3. Navigate to the option you want and press the **Select** softkey; a list of the logged calls is displayed, for example, Missed Calls:



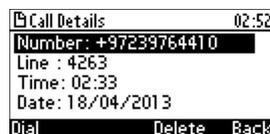
If multiple missed calls were from the same caller, the count is shown in parenthesis adjacent to the caller's name. In the above example, (8) missed calls were from Mike Dubb.

4. Press the softkey you need:

Dial = dials the number of the selected logged entry.

Save = saves the related information about the call entry in the personal directory (to add a contact to the directory, see Section 4.12 on page 40).

Detail = accesses the Call Details screen, which displays details of the call entry:



The Call Details screen displays the following logged call information:

Number = phone number logged

Line = the line to which the call was made

Time = the time the call was logged

Date = the date on which the call was logged



Notes:

- The call history lists are stored from the newest to oldest entries. The maximum number of entries for each call history type is 200. Once this maximum is attained, the oldest entry is deleted and replaced with the new entry.
- The call history lists are saved on a daily basis. In the case of a power outage, some of the received information may be lost.
- If you view missed calls by pressing the **Missed** softkey, the missed calls notification no longer appears on the screen and reappears the next missed call.

This page is intentionally left blank.

6 Performing Advanced Operations

This section shows how to perform advanced operations.

6.1 Answering Waiting Calls

You can accept a second call (waiting call) while there is already a call active.

➤ **To answer a waiting call:**

1. Press the **Accept** softkey; the active call is put on hold and the waiting call is answered.
2. To resume conversation with the previously active call which is now on hold, navigate to it and press the **Resume** softkey.



Note: To enable / disable the call waiting feature, see Section 4.3 on page 29.

6.2 Placing a Call on Hold

You can place a call on hold in order to answer a second incoming call (see above) or to make another call.

➤ **To place a call on hold:**

- Press the **HOLD** key; the call is put on hold.

➤ **To retrieve a call on hold:**

- Press the **HOLD** key again -OR- press the **Resume** softkey.

6.3 Calling a Contact Listed in the Directory

You can call a contact listed in your directory.

➤ **To call a contact listed in the directory:**

1. Press the **CONTACTS** key and then select the directory.
2. Navigate to the contact to call (see Section 4.12.5 on page 42).
3. Press the **Dial** softkey or the **OK** key.

6.4 Enabling Auto Redial

If a called party is unavailable because, for example, they're busy, the caller's phone's LCD prompts **Extension Busy. Activate auto redial on busy?**



If the caller presses the **Yes** softkey to the prompt, the busy extension is automatically redialed every *n* seconds (configurable by the caller). The caller can stop the redialing at any time.



Note: Contact your network administrator to enable the feature if it is disabled (default).

When activated, **Dialing <ext> within <x>s** is indicated in the LCD (remote extension and timer). If activated in Multiple Line mode, **(Line <n>)** (line number) is also indicated in the LCD.



Pressing the **Dial** softkey redials the extension. Pressing the **Cancel** softkey deactivates auto-redial.

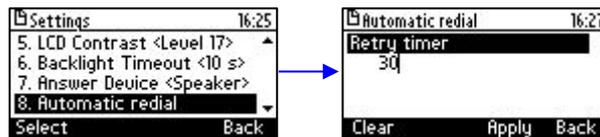


Note:

- Calls can be made and received while auto-redial is activated.
- If auto-redial is activated while another extension is called - which is also unavailable - the caller is prompted to activate auto-redial on the new (busy) extension; the previous auto-redial is then deactivated.
- If auto-redial is activated on an unavailable extension and on that same extension an incoming call is answered, the feature is deactivated.

➤ **To change the redial interval:**

1. Open the 'Automatic redial' screen in the phone LCD (**MENU > Settings > Automatic Redial**).



2. Enter the interval you require and then press the **Apply** softkey.

6.5 Speed-Dialing

You can press a Speed Dial button to directly call a contact.

To define a BLF LCD button (1-12) as a Speed Dial, see Section 4.13.6 on page 51).

To define a softkey as a Speed Dial, see on page 46)



Note:

- If you press a BLF LCD button for which a Speed Dial has not been defined, the BLF LCD displays a Function Key # screen letting you define one.
- If you press a Programmable Key for which a Speed Dial has not been defined, the LCD displays a Line Key screen letting you define one.

➤ **To speed-dial using a BLF LCD button:**

- Press the BLF LCD button for which a Speed Dial was defined; the phone automatically directly dials and calls the contact/number displayed in the BLF LCD.

➤ **To speed-dial using a Programmable Key:**

- Press the Programmable Key for which a Speed Dial was defined; the phone automatically directly dials and calls the contact/number defined.

6.6 Transferring Calls

You can connect a party with whom you're in a call, to another party. This is called transferring a call. Call transfers can be attended, semi-attended, or blind.

Transfer Method	When
Attended	A transfers caller B to C after caller C answers agrees to take the call from A.
Semi-attended transfer	A transfers caller B to C before caller C answers the phone.
Blind Transfer	A sends a signal to B to refer the call to C.

6.6.1 Performing an Attended Transfer

You can perform an attended transfer using the **Trans.** softkey or the TRANSFER key.



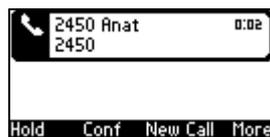
Note: The **Trans.** softkey is not available by default on the phone and must be configured in the configuration file. For more information, see the *Administrator's Manual*.

➤ **To perform an attended transfer:**

1. A call is received from extension 2450:



2. The call from '2450' is answered:



3. The operator uses one of the following methods to transfer the call to a third-party destination:

- Selects the **Trans.** softkey (use the **More** button to navigate to it if required)

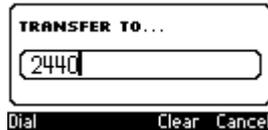
OR

- Presses the TRANSFER key on the phone.

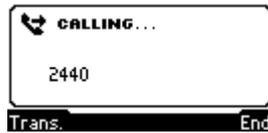
Music on Hold is played on '2450' (the calling party's phone).



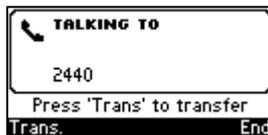
4. The requested third-party destination extension 2440 to transfer the call is entered:



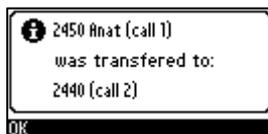
5. The operator presses the **Dial** softkey to dial the extension 2440:



The call is connected to 2440:



6. After consulting with 2440, the operator presses the **Trans** softkey or TRANSFER:
The call from 2450 is transferred to '2400':



7. The operator presses **OK** and hangs up the phone.

6.6.2 Performing a Semi-Attended Transfer

You can perform a semi-attended transfer using the **Trans.** softkey or the TRANSFER key on the phone.



Note: The **Trans.** softkey is not available by default on the phone and must be configured in the configuration file. For more information, see the *Administrator's Manual*.

- **To perform a semi-attended transfer:**

1. A call is made to from extension 2450:



2. The call from 2450 is answered:

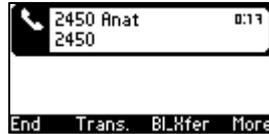


- The operator uses one of the following methods to transfer the call to a third-party destination:

- Selects the **Trans** softkey (use the **More** button to navigate to it if required)

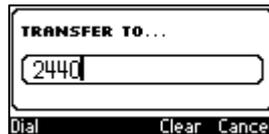
OR

- Presses the TRANSFER key on the phone.

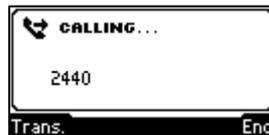


Music on Hold is played on 2450 (the calling party's phone).

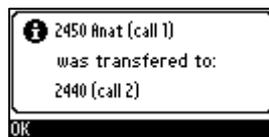
- The requested extension 2440 to which to transfer the call is entered (fix screen):



- The operator presses the **Dial** softkey to dial the extension 2440.



- The operator waits for a dial tone and then presses the **Trans.** softkey or TRANSFER. The call from 2450 is transferred to 2440:



- The operator presses **OK** and hangs up the phone before 2440 answers.

6.6.3 Performing a Blind Transfer

This section describes how to perform a blind transfer.



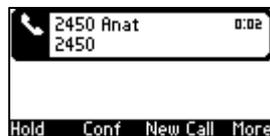
Note: The **BLXfer** softkey is not available by default on the phone and must be configured in the configuration file. For more information, see the *Administrator's Manual*.

➤ **To perform a blind transfer:**

1. A call is made to from extension 2450:



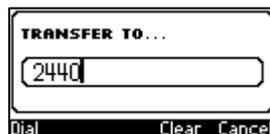
2. The call from 2450 is answered:



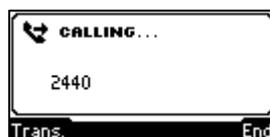
3. The operator transfers the call by selecting the **Blind Transfer (BLXfer)** softkey (use the **More** button to navigate to it if required):



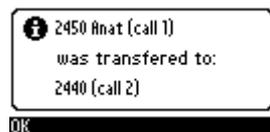
4. The requested extension 2440 to which to transfer the call is entered:



5. The operator presses the **Dial** softkey.
The extension 2440 is dialed:



6. The operator presses the **Trans.** softkey and hangs up the phone without waiting for a dial tone.



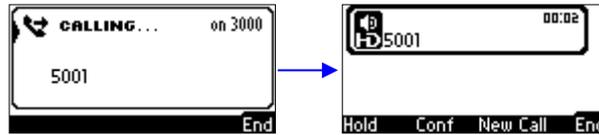
The call from 2450 is transferred to 2440 and 2450 (original calling party) hears the requested transfer destination party 2440 ringing.

6.7 Hosting a 3-Way Conference Call

You can make a 3-way conference call with two other parties.

➤ **To make a 3-way conference call:**

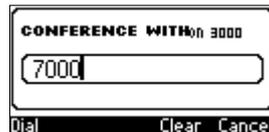
1. Call first participant **5001** and wait for them to answer.



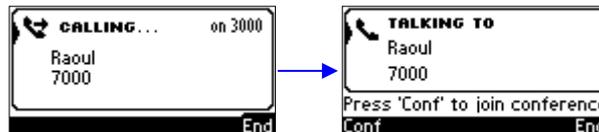
2. Press the **Conf** softkey:



3. Enter the number of the second participant to conference with (**7000**):



4. Press the **Dial** softkey and wait for **7000** to answer:



5. Press the **Conf** softkey; a 3-way conference call is established and the names/numbers of participants are displayed:



6. To end the conference, hang up the phone or press the **End** softkey.

6.7.1 Leaving a 3-Way Conference You Set up without Disconnecting the Others

A caller who sets up a three-way conference call with two other parties can leave it without disconnecting the two other parties. The two others continue uninterrupted. The 'Drop from Conference' feature supports this capability.

- **To leave a conference you set up, without disconnecting the other parties:**
 - Press the **Transfer** softkey; you're disconnected from the conference; the two remaining parties continue unaffected.



Note: The initiator of a call conference can also drop out of the conference by on-hooking the phone, without disrupting parties B and C. In a conference call initiated by user A with participants B and C, user A can on-hook to drop out, and B and C can continue talking uninterrupted. Previously, only a softkey option was available for dropping out. A new enable parameter commands the new SIP behavior (a 'Refer' is sent when user A on-hooks)..

6.8 Muting Calls

You can mute the microphone of the handset, headset, or speakerphone during a call so that the other party cannot hear you. While the call is muted you can still hear the other party. Muting calls can also be used during conference calls.

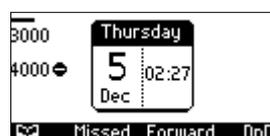
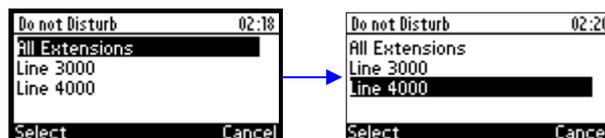
- **To mute/unmute a call:**
 1. During a call, press the **MUTE** key.
 2. To unmute, press the **MUTE** key again and resume the conversation.

6.9 Activating Do Not Disturb

The Do Not Disturb (DnD) feature stops the phone from ringing if anyone calls. If DnD is activated and someone calls:

- The caller hears a tone indicating that your phone is busy.
- The call is blocked and the idle screen indicates 'Missed Calls'.

- **To activate DnD:**
 1. Make sure your phone is in idle state and that the idle screen is displayed, i.e., that you're not in an active call or dialing a number.
 2. Press the **DnD** softkey and select **All Extensions** or a specific line on which to activate DnD, and press the **Select** softkey; the screen displays an icon \ominus adjacent to the extension line/s indicating that incoming calls are blocked:



➤ **To deactivate DnD:**

1. Make sure that the phone is in idle state and that the idle screen is displayed, i.e., that you're not in a call or dialing a number.
2. Press the **DnD** softkey and select All Extensions or the specific line to deactivate, and press the **Select** softkey; the Θ icon is no longer displayed on the screen and your phone will now ring for incoming calls.



Note: If your enterprise deployed a BroadSoft server, your network administrator can control the DnD on the phone from the BroadSoft server.

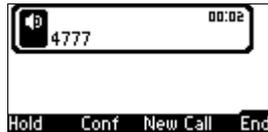
6.10 Retrieving Voice Mail Messages

You can determine if new messages are in your Voice Mail if:

- The Ring LED on the front of the phone is permanently lit blue (see [Figure 2-1](#), label 1).
- A stutter dial tone is heard when you pick up the handset.
- The Voice Mail key  is lit red.

➤ **To listen to voice mail messages:**

- Press the  key on the phone; the phone dials your enterprise's voice mail box.



- Follow the instructions of your voice mail provider as required.



Note: If your network administrator has not configured the voice mail server number, then after pressing the  key, enter the number and press the **Save** softkey. Press the  key again.

6.11 Using Multiple Lines

Your phone supports up to six lines. Each is configured with its own extension number. The figure below displays the idle screen of a phone set up with two lines whose extensions are 'John' and 'Peter'.



Note: Only your phone/network administrator can configure lines. See the *Administrator's Manual* for detailed information.

6.11.1 Choosing a Line

You can select a line to use. The screen displays a bar above the extension number of the line currently being used. Until you change this line, all new calls are made on it.

➤ **To change lines:**

1. Make sure that the LCD is in idle state and that no calls are established. View the two configured lines displayed in the screen. View the bar above the currently used line.
2. Navigate to and select the other line; the bar moves above it; all new calls will now be made on it.

6.11.2 Making a Call on a Line

➤ **To make a call on a line:**

1. When the screen is in idle state, raise the handset or press the key of the first digit of the number to call; the NEW CALL screen is displayed.
2. Enter the number of the person to call or press the  softkey to select a contact from the Directory and press the **Dial** softkey; the dialed number is called and the line on which the call is made is indicated in the screen.

6.11.3 Making Two Calls on a Line

➤ **To make two calls on a line:**

1. On line 1 call **A**. After establishing this call, press the **New Call** softkey; the call with **A** is automatically put on hold and the NEW CALL screen is displayed.
2. Enter **B**'s phone number or press the  softkey to select their entry in the directory, and press the **Dial** softkey. **B** answers.
3. To toggle between **A** (on hold) and **B**, press the navigation control's upper and lower rim (see Section 6.11.6 on page 74).

6.11.4 Making Multiple Line Calls

Your phone supports multiple line calls. Calls can run simultaneously on each line. You can therefore have up to 12 calls running simultaneously, where one is active and 11 are on hold.

Example scenario:

1. Line 'John' calls **A**
2. Line 'Peter' calls **B**

➤ **To make a multiple line call:**

1. When the screen is in idle state, navigate to and select the extension line.
2. Lift the handset; in the NEW CALL screen displayed, enter the phone number or press the  softkey to select a contact from your directory.
3. Press the **Dial** softkey. The called party answers.
4. Press the **New Call** softkey; the called party is automatically put on hold and you're prompted to enter a phone number or select a contact.
5. Press the navigation control's left or right rim to navigate to another extension line.
6. Make another call exactly like you made the first (on hold) but on the other extension line: Enter a phone number or select a contact and press the **Dial** softkey.
7. To toggle between the first called party who's on hold and the active called party, press the navigation control's upper and lower rim (see below).

6.11.5 Toggling Between Multiple-Line Calls

After making calls on two different lines, you can toggle between them. When using two lines, one line is active while the other is on hold. Toggling between lines therefore involves putting the currently active call on hold and resuming the previously held call.



Indicates an active line.

A call on hold is indicated like this:



➤ **To toggle between multiple-line calls:**

- Navigate to and select the conversation to resume and press the **Resume** softkey.

6.11.6 Toggling Between Calls on the Same Line

You can toggle between calls on the same line. How you toggle depends on whether the first-placed call is active or the second-placed call is active.

➤ **To switch from the first-placed call to the second-placed call:**

- Navigate to and select the second-placed call and then press the **Resume** softkey; the first-placed call is automatically put on hold.

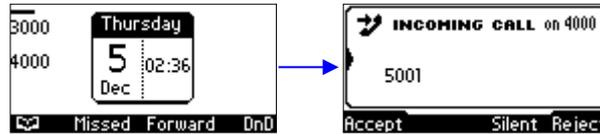
➤ **To switch from the second-placed call to the first-placed call:**

- Navigate to and select the first-placed call and then press the **Resume** softkey; the second-placed call is automatically put on hold.

6.11.7 Answering Calls

➤ To answer a call:

1. Determine on which line the call is coming in. You'll see an arrow in the LCD pointing to it. The figure below shows a call coming in from 5001 on Line 2 configured as 4000.



2. Press the Line key.

6.11.8 Ending Calls

You can only end calls that are active, i.e., not on hold.

➤ To end a call:

1. Make sure that the call is active and not on hold.
2. Press the **End** softkey or the **SPEAKER** key.

6.12 Paging

Live announcements can be made (paged) from a phone to a group of phones, to notify a team (for example) that a meeting is about to commence. The paged announcement is multicast via a designated group IP address, in real time, on all idle phones in the group, without requiring listeners to pick up their receivers. The name of the group is displayed on phone screens when the paging call comes in.



Note: The feature must be enabled in the Web interface by the network administrator before a Functional Key can be configured for paging. See the *Administrator's Manual* for more information.

6.12.1 Configuring Paging

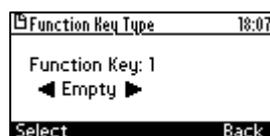
Up to 12 Function Keys (on the phone's sidecar) and up to five Programmable Keys (on either side of the phone's screen) can be configured for paging. In total, up to 17 keys on the phone can be configured for paging.



Note: For the feature to function, it must first be enabled using the Web interface or Configuration File. For more information, see the *Administrator's Manual*.

➤ To configure a key for paging:

1. Long-press the Function Key or Programmable Key that you want to configure as a paging dial, or press the **MENU** key > **Keys Configuration** > **Function Keys | Programmable Keys**).



2. Navigate to and select **Paging**.



3. Enter a name for the paging group (enter a new name if this phone is the first in the group you're configuring, or enter an existing name if you've already configured phones in the group).
4. In the 'Key Label' field, configure a name. The name will be displayed in other phone screens or (440HD) sidecar BLFs when paging them from this phone. On the 430HD phone, this field is displayed only when configuring Programmable Keys. On the 440HD phone, the field is displayed when configuring both Function Keys *and* Programmable Keys. Users with 430HD phones can write the name of the group by hand on the label next to the sidecar BLF.
5. In the 'Multicast Address' field, enter the paging group's multicast IP address. Default: 224.0.1.0. For phones to be in a group, all *must* be configured with the identical multicast address.
6. In the 'Multicast Port' field, enter the group's port. Default: 8888. For phones to be in a group, all must be configured with the same port.
7. Press the **Save** softkey. The figure below shows the name of a paging group 'Cosmetics' displayed in the idle screen.



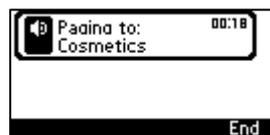
Pressing the Programmable Key named 'Cosmetics' pages all the phones in the group.

6.12.2 Paging a Group

Any phone configured in a paging group can be used to page all the other phones configured in the group.

➤ **To page a group of phones:**

1. Press the key that you configured for paging the group.



If the phone's handset is onhooked, the phone speaker is activated and its LED button is lighted green.

2. Speak into the speaker and announce your message to the group.
3. Press the **End** softkey when you finish making the announcement.

If the phone's handset is onhooked when you press **End**, the phone speaker is activated and its LED button is switched off.

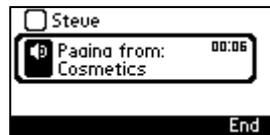
6.12.3 Receiving an Incoming Paging Call and Barge-in

If a key on your phone is configured for paging and you receive a paged call from another phone in the group, here's the screen you'll see:



How the paged call performs depends on whether your administrator has enabled the barge-in feature or not (see the *Administrator's Manual*).

- **Barge-in feature enabled:** If you're in a regular call (with Steve, in the example below) when the paged call comes in (from Cosmetics, in the example below), the paged call is heard and the regular call is placed on hold.

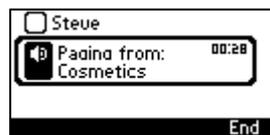


To revert to the regular call and ignore the paged call, press the **End** softkey and then the **Resume** softkey that's displayed.

- **Barge-in feature disabled:** If you're in a regular call (with Steve, in the example below) when the paged call comes in (from Cosmetics, in the example below), you're prompted whether to accept or reject the paged call.



- If you press the **Accept** softkey: The regular call (with Steve) is placed on hold while the paged call (from Cosmetics) is heard.



To return to the regular call, press the **End** softkey and then the **Resume** softkey.

- If you press the **Reject** softkey: The paged call is not heard and the regular call (with Steve) continues.



Note: The barge-in feature is only relevant if the paged user is in a regular call. If they're not in a regular call, then the paged call is heard irrespective of whether the barge-in feature is enabled or disabled.

6.13 Logging into a Remote HTTP/S Server

When you attempt to download a new configuration file from the Provisioning server, you can optionally be prompted to enter the Provisioning server login credentials (username and password). This feature is useful when, for example, you are provisioning, and attempt to download a configuration file from a Provisioning server. In which case, the server's authentication process recognizes that an HTTP username and/or password have not been specified or that these credentials are incorrect. In this case, when this feature is enabled, the 'Prov. Credentials' screen pops up, prompting you to enter or reenter these login credentials.



Note: This feature is only available after your administrator enables the configuration file parameter 'ui_interaction_enabled'. For more information, see the *Administrator's Manual*. When this parameter is not enabled, then the 'Prov Credentials' option does not appear in the Settings menu on the phone.

You can also manually set the remote server login credentials.

➤ **To manually set remote server login credentials:**

1. In the Prov. Credentials screen (**MENU** key > **Settings** > **Prov. Credentials**):



- At the prompt, enter the HTTP/S username.
- At the prompt, enter the HTTP/S password.
- Press the **OK** softkey to confirm, press the **Clear** softkey to clear the entered characters or press the **Skip** softkey to return to the previous menu.

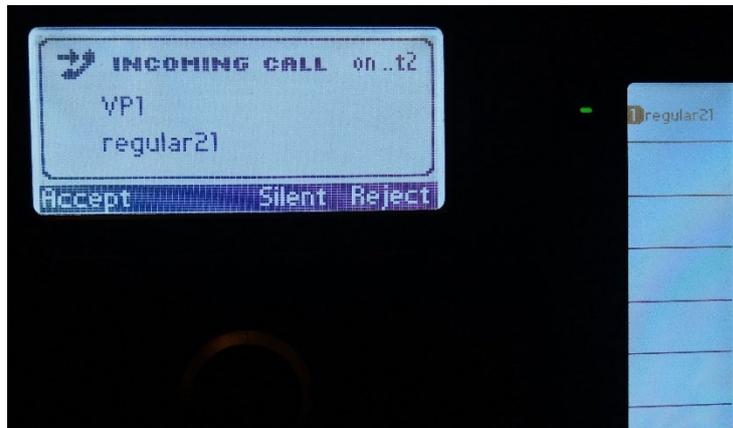
6.14 Using Shared Line Appearance (SLA)



Note: Applies only to phones in a Genband environment. This feature becomes available only after the network administrator configures it on the Genband Application Server (SLA Type Genaband_sca). For more information, see the *Administrator's Manual*.

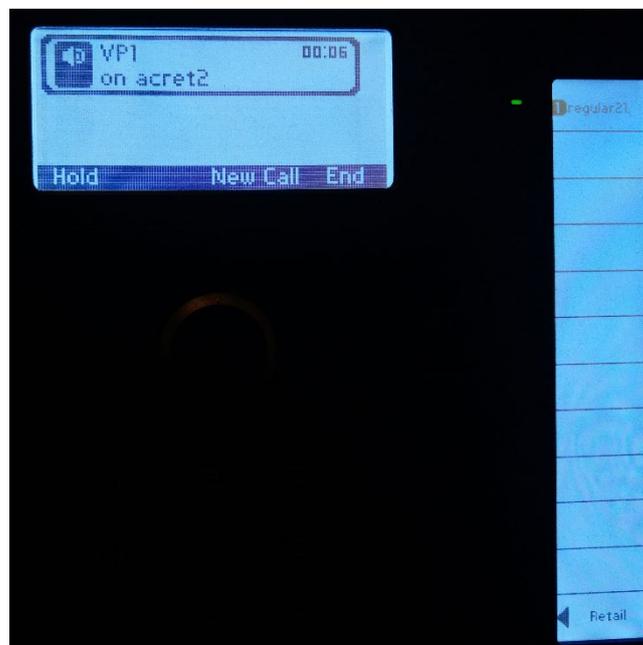
This feature enables multiple phones configured in an SLA group to share a line. An incoming call to that line can then be answered by any phone in the group. The call can be put on hold and picked up by another user - or by the same user. Any user in the group can barge in on the call. The feature is typically used in supermarkets, department stores, restaurants, warehouses, etc. Read the example shown below to deduct the principle of how the feature works.

- All phones in the group ring when a call comes in on a shared line



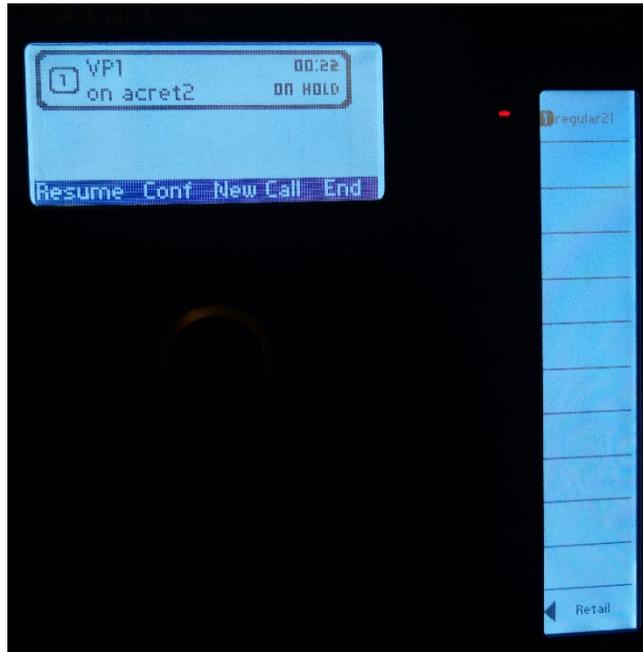
- On all phones, the LED next to the line's BLF on the sidecar flashes green

- A user in the group answers



- On all phones, the LED next to the line's BLF on the sidecar shines steady green
- All users in the group can see there's an active call on the line
- No other user can initiate a call on the line

- The user puts the call on hold



- Other users in the group can see the call is on hold – the BLF LED flashes red
- The caller who made the call to the enterprise hears music on hold (MoH)
- Any other user in the group – or the same user - can retrieve (pick up) the held call

7 Troubleshooting

Read this if a problem with your phone occurs. If this does not facilitate resolving the issue, contact your system administrator.

Table 7-1: Troubleshooting

Symptom	Problem	Corrective Procedure
Phone is off (no LCD displays and LEDs)	Phone is not receiving power	<ul style="list-style-type: none"> ▪ Verify that the AC/DC power adapter is attached firmly to the DC input on the rear of the phone. ▪ Verify that the AC/DC power adapter is plugged into the electrical outlet. ▪ Verify that the electrical outlet is functional. ▪ If using Power over Ethernet (PoE), contact your system administrator to check that the switch is supplying power to the phone.
'LAN Link Failure' message displayed on LCD	No LAN connection	<ul style="list-style-type: none"> ▪ Verify that the LAN cable is connected securely to the LAN port on the rear of the phone. ▪ Verify that the other end of the LAN cable is connected to the network (switch). If it's not, inform your system administrator.
Phone is not ringing	Ring volume is set too low	<ul style="list-style-type: none"> ▪ Increase the volume (see Section 4.10.1)
'Registration...' message displayed on LCD and calls cannot be made or received	Line not registered to network	If your phone has multiple lines and an 'X' is displayed on the LCD for a line, this indicates that the line has not been successfully registered. For assistance, contact your system administrator.
LCD display is poor	LCD settings	<ul style="list-style-type: none"> ▪ Adjust the phone's screen contrast level (see Section 4.5) ▪ Adjust the screen's backlight timeout (see Section 4.6)
Headset has no audio	Headset not connected properly	<ul style="list-style-type: none"> ▪ Verify that your headset is securely plugged into the headset port located on the side of the phone. ▪ Verify that the headset volume level is adjusted adequately (see Section 4.10.5).
IP Duplication	Duplicate IP address conflict can occur on a DHCP network if you defined a static IP address for a network device	<ul style="list-style-type: none"> ▪ Convert the network device with the static IP address to a DHCP client -OR- ▪ Exclude the static IP address from the DHCP scope on the DHCP server

This page is intentionally left blank.

A Specific Third-Party Features

This appendix describes phone features that are only applicable to specific third parties.

A.1 BroadSoft

A.1.1 Shared Call Appearance

The SCA feature enables multiple phones to be associated in an SCA group so that calls can be made or received on any phone in the group. The 440HD phone fully supports the feature. The 405 / 405G / 420HD / 430HD phones support the feature as *participant only*.



Note:

- For detailed information on how to configure the SCA feature, see the *Administrator's Manual*.
- Icons in the phone's screen indicate if line keys are configured in an SCA group, or as private lines.
 - ✓ A hollow icon ☐ indicates a phone configured in an SCA group.
 - ✓ A solid icon ■ indicates a phone configured as private.

If a call comes in to a phone in the SCA group, all phones in the group ring simultaneously. The first to answer is connected to the caller. All other phones then stop ringing. The recipient can then opt to put the call on hold. All calls put on hold and all active calls are displayed in all phones' sidecars. An SCA group user can pick up a call by pressing their sidecar BLF LED.

Figure A-1: SCA



To make a call, answer a call, put a call on hold, forward a call, etc., is the same as for private phones, but LEDs indicate that a phone is in an SCA group. The table below shows LED behaviors on the phones in an SCA group.

Table A-1: LED Behaviors on an IP Phone in an SCA Group

State	Phone	LED Behavior
When the phone is in idle state	No LED indications on any phones	No behavior
When a phone is seized (off hooked)	Off hooked phone	Solid green (for a 15 second default timeout)
	Other phones in the group	Solid red (for a 15 second default timeout)
When an outgoing call is progressing	Calling phone	Solid green
	Other phones in the group	Solid red
When a call comes in	All phones	Fast flashing green
When a phone is busy (active)	Active phone	Solid green
	Other phones in the group	Solid red
When a phone is put on hold	Phone on hold	Slow flashing green
	Other phones in the group	Slow flashing red

A.1.1.1 Demonstrating the SCA Feature's Capabilities

This section demonstrates the SCA feature's capabilities.

Figure A-2 below shows two 440HD phones in an SCA group, whose numbers end in suffixes 1 and 2.

Figure A-2: Two 440HD Phones in the SCA Group

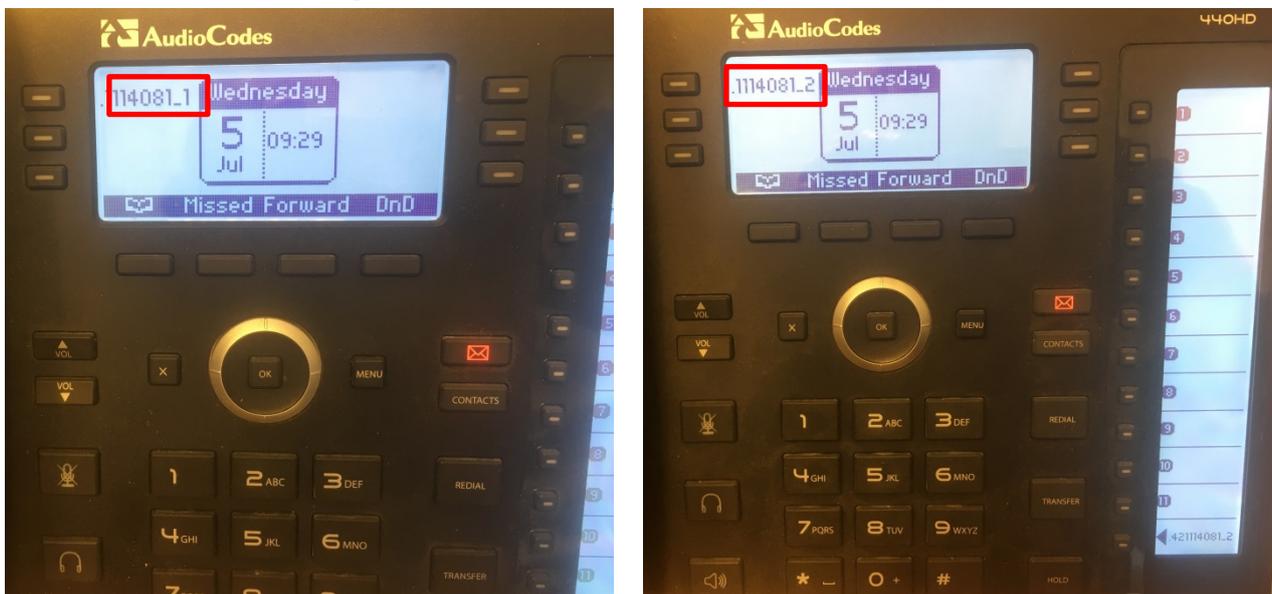
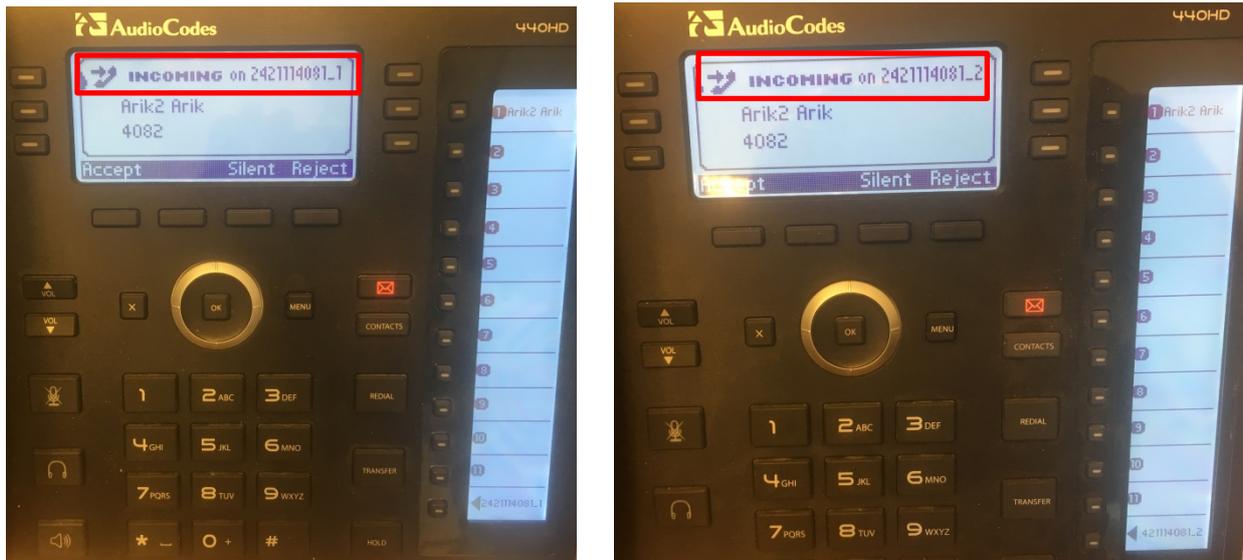


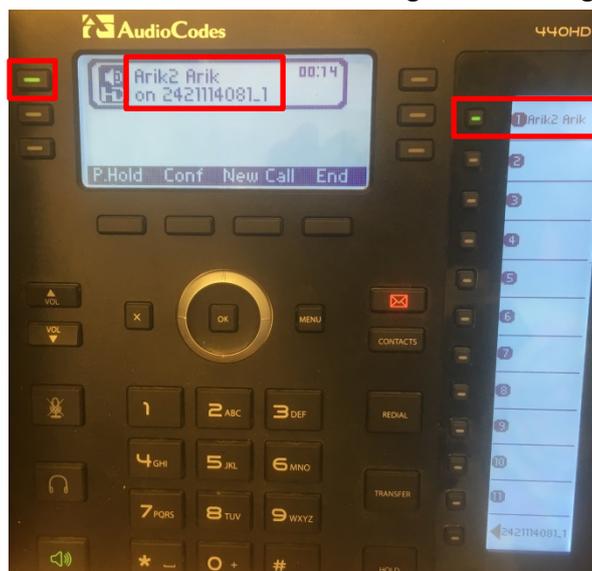
Figure A-3 below shows an incoming call from Arik. Both phones in the SCA group ring in order to alert group members to the call.

Figure A-3: Phones in the SCA Group Ring, Alerting to an Incoming Call



Phone 1 answers:

Figure A-4: Phone 1 after Answering the Incoming Call



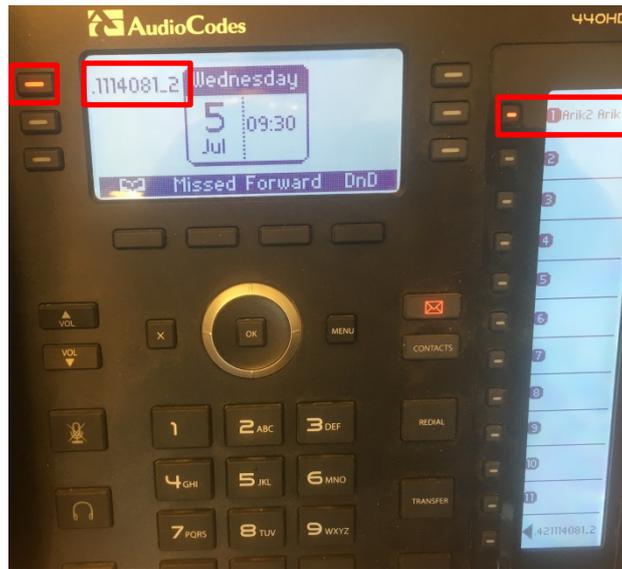
Note: In the figure above:



- Phone 1's line key LED is illuminated *steady green*.
- Phone 1's sidecar displays the call from Arik - the adjacent BLF LED is illuminated *steady green*.
- The sidecar displays all active calls in the SCA group.
- If phone 1 puts the call from Arik *on hold*, the line key LED and the sidecar's BLF LED *flash green*.

Figure A-5 below shows phone 2 after phone 1 answers.

Figure A-5: Phone 2 after Phone 1 Answers



Note: In the figure above:

- Phone 2's line key LED is illuminated *steady red*.
 - Phone 2's sidecar displays the call from Arik that was answered by phone 1. The adjacent BLF LED is also illuminated *steady red*.
 - All active calls in the group are displayed in the sidecar.
- Phone 2 can *barge in* on the call by pressing the sidecar BLF LED illuminated *steady red*.
 - If phone 1 puts the call from Arik on hold, the line key LED and the sidecar's BLF LED on phone 2 *flash red*.
 - Phone 2 can then press the sidecar's BLF LED flashing red, and pick up the call.

A.1.2 Monitored Lines Based on BroadSoft's BroadWorks BLF Service

This section shows how to configure Monitored Lines based on the BroadWorks BLF service, typically used by executive assistants or front desk operators to monitor lines in the network.



Notes:

- The feature can also be configured by the network administrator from the Web interface. See the *Administrator's Guide* for detailed information.
- Before configuring monitored lines, your network administrator must enable the BLF service feature in BroadSoft's BroadWorks server. See the *Administrator's Guide* for detailed information.

➤ To configure a monitored line:

1. On the device, long-press a Programmable Key or a Function Key, and in the Line Key / Function Key screen that opens (respectively), navigate to and select **Speed Dial + BLF**; the Line Key or Function Key screen (respectively) opens.



Note: Up to six Programmable Keys and up to 12 Function Keys can be configured as Speed Dial + BLF.

2. Enter the telephone number to assign the speed dial to. For Function Keys you can select the number from the Directory.
3. Navigate to enter a label (Programmable Key only), and then press the **Save** softkey.
4. View the line number displayed in the LCD's idle screen / BLF (440HD only).

A.1.3 Using Xsi Interface Services

If phones are configured to access BroadSoft's BroadWorks server's Xsi interface using HTTP/S authentication, BroadSoft environment users can enter their BroadWorks user credentials for Xsi access and then benefit from the following three supported Xsi services:

A.1.3.1 Call Center List

Your network administrator can assign you up to three call centers that will be displayed on the right side of your phone screen.



The screen above displays three call centers: Dept. B, Dept. C and Dept. A, configured on programmable keys 4-6. You can enable | disable each by pressing its programmable key.

The feature allows enterprise front desk personnel to indicate their availability status (available or unavailable), in each call center, to the BroadWorks server. The server then efficiently distributes incoming calls to front desk personnel, saving callers from the inconvenience of unanswered referrals or disconnections.

A.1.3.2 Contact Synchronization

Contact directories are pulled directly from the BroadWorks server. Case-insensitive Abc name search is performed instantly. Supported directories are Group Directory, Enterprise Directory, Group Common, Enterprise Common and Personal Directory. The feature cannot coexist with contacts saved locally on the phone.

A.1.3.3 Call Log Synchronization

Call Logs are pulled directly from the BroadWorks server. The phone displays the following Call Logs: All Calls, Missed Calls, Received Calls and Dialed Calls.

A.1.4 Configuring the 'Forward No Reply' Timeout as Number of Rings

The 'Forward No Reply' timeout can be configured as 'number of rings' rather than as 'seconds'. Consult with your network administrator to enable this feature (see the *Administrator's Manual* for details). For example, the phone can be configured to ring 2r (2 rings), or 4r (4 rings), for example, before calls are forwarded. The setting can be changed according to user preference.

A.1.5 Automatically Receiving an External Line

The phone by default features *automatic switching*. Users do not need to press the **9** key, for example, in order to receive an external line; they can directly dial the number of the party they want. To configure *manual switching*, consult the network administrator (see the *Administrator's Manual*). When configured, users must press the **9** key, for example, to get a line to outside the enterprise; after pressing the key, they hear a secondary tone. They only then can dial the number of the party they need.

A.1.6 Limiting Configuration of Function Keys as Line Keys

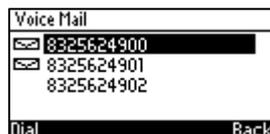
Users cannot configure all six Function Keys as Line Keys.

A.1.7 Viewing VOICEMAIL Indications Per Line

When a phone is in a Multi Line configuration, VOICEMAIL is indicated *per line*. The screenshot below shows multiple lines configured.



The shot below shows the screen displayed when you press the VOICEMAIL key on the phone.



A.1.8 Listening in Capability for Call Center Supervisors

Call center supervisors can pick up an operator's phone and listen in on the conversation that the operator is conducting on headphones with the customer, without the customer at the other end sensing that the supervisor is listening in (because the supervisor is in effect muted).

A.1.9 Recording an Agent's Welcome Greeting

Agents in a call center can record personal voice greetings which play automatically when calls come in.

An agent's recorded voice greeting welcomes callers to the service they're seeking. For example:
Thanks for contacting Julie at Southern California Edison, how can I assist you?



Note: Before using this feature, your network administrator must enable it. For more information, see the *Administrator's Manual*.

The feature

- Allows agents to record greetings directly on the phones
- Replaces cumbersome management from a media server
- Replaces ad-libbed amateurish greetings
- Gives callers a good first impression of the call center
- Professionalizes customer care
- Improves agent productivity
- Makes customers feel welcome when they consistently hear a cheerful and polite greeting.

➤ **To record a welcome greeting:**

1. Open the Greeting Message screen (**MENU** key > **Settings** > **Greeting Message**).



Note: While the Greeting menu is open no calls can come in.

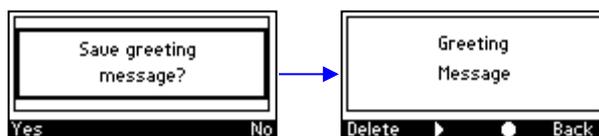
2. Press the recording softkey and record your welcome greeting (max length: 10 seconds)



3. When you finish recording, press the stop softkey .



4. Press the softkey to play back your recording.
5. Press the **Save** softkey to save the recording. To delete the message select the **Delete** softkey.



A.2 Genesys' Contact Centers

This section shows how to use AudioCodes IP phones in Genesys contact centers.



Note: The section is intended mainly for agents / hotline operators.

A.2.1 Using the BroadSoft ACD

Genesys Contact Center phones support the BroadSoft ACD. The table below shows how to use the functionalities.

Table A-2: Genesys Contact Center Phones' BroadSoft ACD

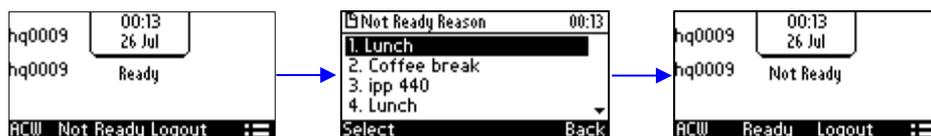
State		Softkeys Displayed	Command Menu Options
Idle	Ready		<ul style="list-style-type: none"> Missed Calls Forward DnD
	Not Ready		<ul style="list-style-type: none"> Missed Calls Forward DnD
Idle	ACW		<ul style="list-style-type: none"> Missed Calls Forward DnD

A.2.1.1 Setting Unavailability Status

In the course of a shift, you may need to leave your desk for a break or to attend to other issues. Before leaving your desk, change your status to 'Not Ready' (unavailable) so that incoming calls to the Contact Center will not be sent to you.

➤ **To change your status to 'Not Ready':**

- In the idle screen, press the **Not Ready** softkey and select the reason for not being ready to take a call. For example, you'll be at lunch or on a coffee break; the 'Ready' indication changes to 'Not Ready':



- If you have just finished a session with a customer and wish to carry out administrative tasks related to the call, then press the ACW (After Call Work). The 'After Call' status is displayed on the phone's LCD.



A.2.1.2 Setting Availability Status

When you return to your desk after taking a break or after attending to an external issue, it's important to restore your status to 'Ready' and resume work.

➤ **To restore your status to 'Ready':**

- In the idle screen, press the **Ready** softkey; the 'Not Ready' indication changes to 'Ready'.



A.2.2 Presence Management

This section describes how to login to and logout from the Call Center SIP server and to update your presence status when the ACD (Automatic Call Distribution) feature is enabled.



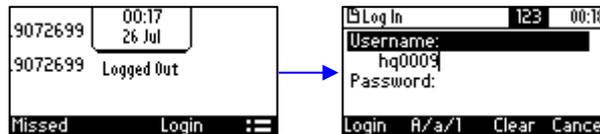
Note: When the ACD feature is enabled, whenever you login or logout or change your presence status, these updates are sent to the Call Center SIP server. This server then can automatically distribute incoming calls to different agents' phones based on their relative availability. For more information, see the *Administrator's Manual*.

A.2.3 Logging In

This section shows you how to log in to the Genesys Call Center SIP server. Log in immediately after starting a shift.

➤ **To log in to the phone:**

1. When the phone's LCD is in idle mode (Logged Out), press the **Login** softkey; the Log In screen is displayed:



2. Enter your Username. Obtain it from your system administrator. Press the **A/a/1** softkey successively to navigate to and select the alphanumeric mode you require (**abc**, **ABC**, or **Abc**).
3. Scroll down and enter your Password.
4. Press the **Login** softkey; the Ready idle screen is displayed.



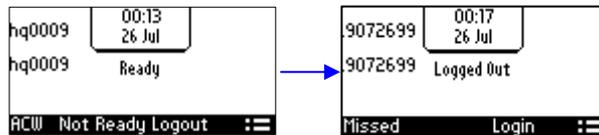
You're now available to take incoming calls. Incoming calls from now on will be directed to your phone.

A.2.4 Logging Out

At the end of your shift, log out of the phone.

➤ **To log out of the phone:**

- In the idle screen, press the **Logout** softkey; the Logged Out indication is displayed:

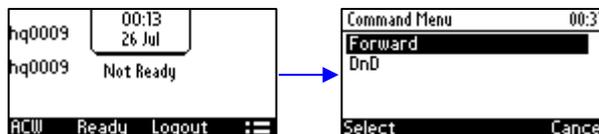


A.2.5 Configuring Do Not Disturb (DnD)

You can configure the phone so that no incoming calls will disturb you.

➤ **To configure DnD:**

1. In the idle screen, press the **≡** softkey; the Command Menu opens.



2. Scroll down and select the **DnD** option.
3. In the idle screen to which you're returned, view the DnD indication.

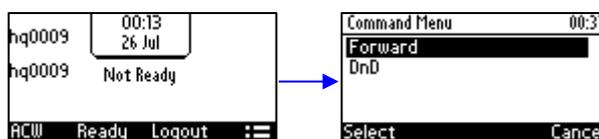


A.2.6 Configuring Automatic Forwarding

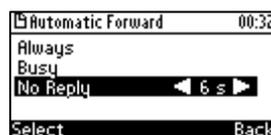
When you leave your workstation you can configure the phone so that any incoming calls will be forwarded.

➤ **To configure automatic forwarding:**

1. In the idle screen, press the **≡** softkey; the Command Menu opens.



2. Select the **Forward** option; the Automatic Forward screen opens.



3. Select the **Always** option or scroll down and select the **Busy** or **No Reply** option.
4. Enter the **Number to Forward to**, or scroll down and select **Select from Directory** in which you can choose a contact number to which to forward calls.



- In the idle screen to which you're returned, view the 'Forward' indication.



A.2.7 Listening in Capability for Call Center Supervisors

Call center supervisors can pick up an operator's phone and listen in on the conversation that the operator is conducting on headphones with the customer, without the customer at the other end sensing that the supervisor is listening in (because the supervisor is in effect muted).

A.2.8 Setting up a Remote Conference

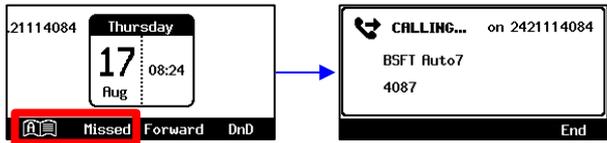
This section shows how to set up a remote conference to which *more than* three participants can be added. A 'local' conference only supports a *maximum of three* participants (see Section 6.7 for information about a 'local' conference).



Note: Only after the enterprise's network administrator enables the feature, you can establish a remote conference.

- **To establish a remote conference | add participants:**

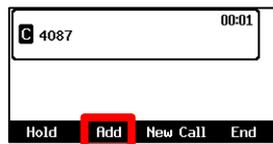
- From the idle screen, call participant 1 either from a directory or from a call log.



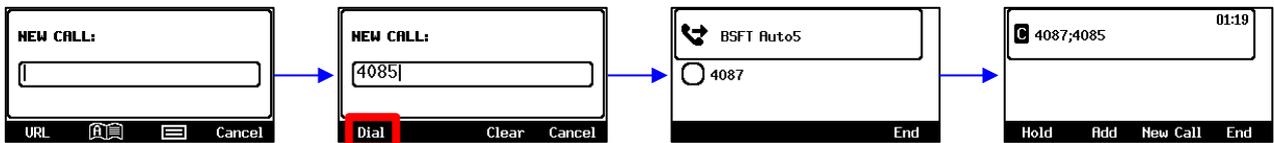
- Participant 1 answers and the call is established.



- Press the **Conf** softkey.



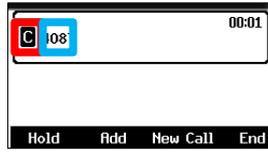
- Add participant 2: Press the **Add** softkey, enter their number and press the **Dial** softkey.



- Add participant 3 in the same way.



Note: After adding the first participant by selecting the **Conf** softkey, the letter **C** is displayed in the phone screen indicating that this is a conference call.



Note also that the names of all participants participating in the conference are typically displayed here. Names will scroll horizontally if they're longer than the box.

A.2.1 Recording an Agent's Welcome Greeting

Agents in a call center can record personal voice greetings which play automatically when calls come in.

An agent's recorded voice greeting welcomes callers to the service they're seeking. For example:
Thanks for contacting Julie at Southern California Edison, how can I assist you?



Note: Before using this feature, your network administrator must enable it. For more information, see the *Administrator's Manual*.

The feature

- Allows agents to record greetings directly on the phones
- Replaces cumbersome management from a media server
- Replaces ad-libbed amateurish greetings
- Gives callers a good first impression of the call center
- Professionalizes customer care
- Improves agent productivity
- Makes customers feel welcome when they consistently hear a cheerful and polite greeting.

➤ **To record a welcome greeting:**

1. Open the Greeting Message screen (**MENU** key > **Settings** > **Greeting Message**).



Note: While the Greeting menu is open no calls can come in.

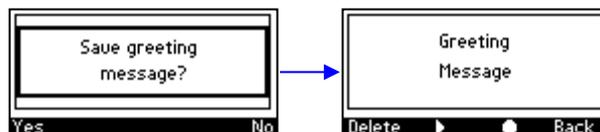
2. Press the recording softkey and record your welcome greeting (max length: 10 seconds)



3. When you finish recording, press the stop softkey .



4. Press the softkey to play back your recording.
5. Press the **Save** softkey to save the recording. To delete the message select the **Delete** softkey.



International Headquarters

1 Hayarden Street,
Airport City
Lod 7019900, Israel
Tel: +972-3-976-4000
Fax: +972-3-976-4040

AudioCodes Inc.

27 World's Fair Drive,
Somerset, NJ 08873
Tel: +1-732-469-0880
Fax: +1-732-469-2298

Contact us: <https://www.audiocodes.com/corporate/offices-worldwide>

Website: <https://www.audiocodes.com/>

©2019 AudioCodes Ltd. All rights reserved. AudioCodes, AC, HD VoIP, HD VoIP Sounds Better, IPmedia, Mediant, MediaPack, What's Inside Matters, OSN, SmartTAP, User Management Pack, VMAS, VolPerfect, VolPerfectHD, Your Gateway To VoIP, 3GX, VocaNom, AudioCodes One Voice and CloudBond are trademarks or registered trademarks of AudioCodes Limited. All other products or trademarks are property of their respective owners. Product specifications are subject to change without notice.

Document #: LTRT-12944

