

AudioCodes

300HD Series of High Definition IP Phones

HD VoIP

320HD IP Phone

User's Manual

320HD IP Phone

Version 1.6.0



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Notice

This document provides instructions on how to use your AudioCodes 320HD IP Phone.

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Date Published: January-29-2012

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Abbreviations and Terminology

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

Related Documentation

Document Name
300HD IP Phone Release Notes
320HD IP Phone Administrator's Manual
320HD IP Phone Quick Guide

1 Introduction

AudioCodes 320HD IP Phone is based on AudioCodes High Definition voice technology, providing clarity and a rich audio experience in Voice-over-IP (VoIP) calls. The 320HD is a 4-line, 2 concurrent calls per line premium model which includes a large monochrome multi-language graphic LCD display.

The 320HD IP Phone is a fully-featured telephone that provides voice communication over an IP network, allowing you to place and receive phone calls, put calls on hold, transfer calls, make conference calls, and so on.

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

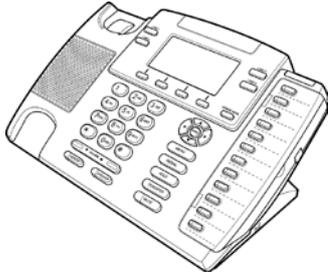
Reader's Notes

2 Hardware Setup

2.1 Unpacking the Package Contents

When unpacking the IP phone, ensure that the following items are present and undamaged:

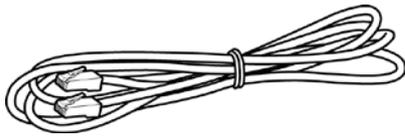
320HD IP Phone



Handset



Ethernet Cable



AC Power Adapter



Two Wall-Mounting Screws



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

2.2 Physical Description

You can use the graphics below to identify buttons and hardware on your phone. Use this section to familiarize yourself with the phones buttons functions.

2.2.1 Front View

The front view of the phone is shown below and described in Table 2-1.

Figure 2-1: Front View

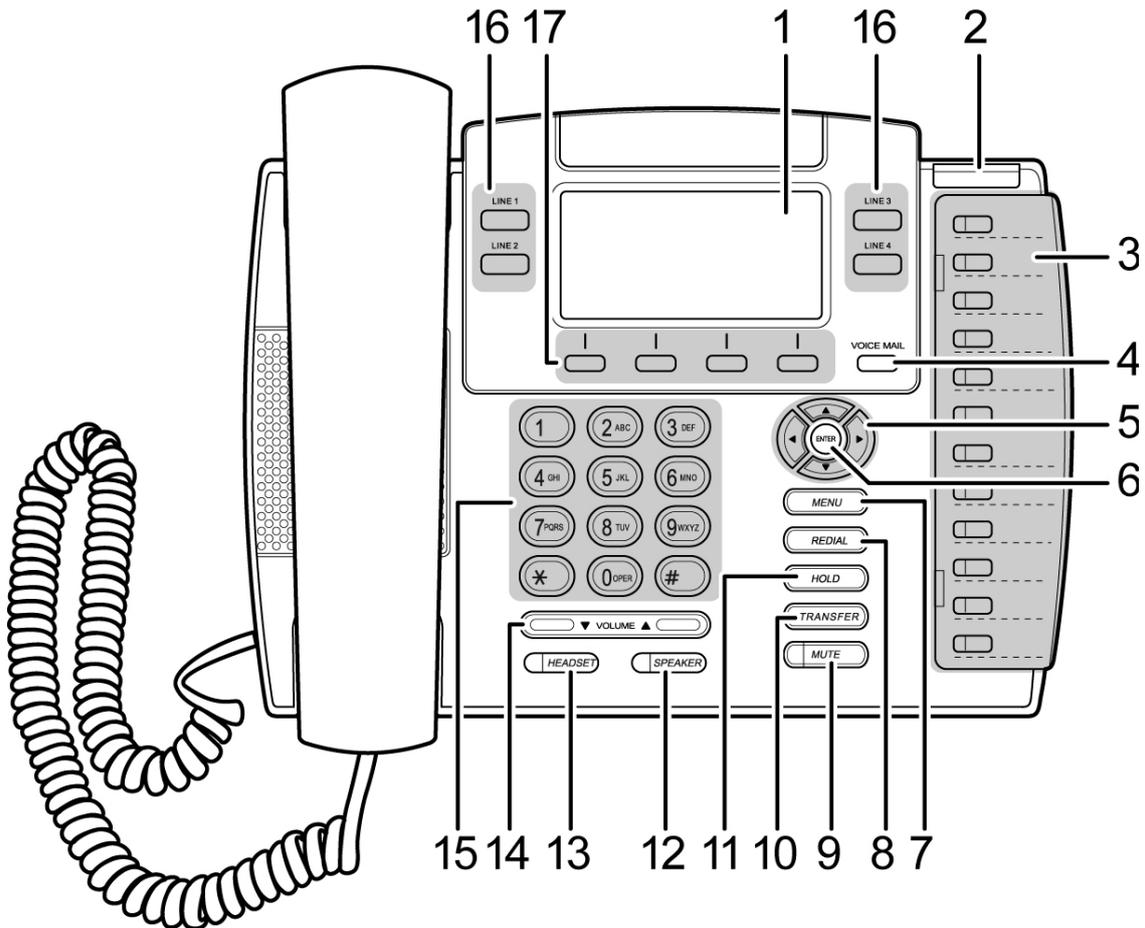


Table 2-1: Font View Description

Item #	Label/Name	Description
1	LCD Display Screen	Interactive LCD display screen, which displays various calling information and allows you to setup phone features.
2	Ring LED	Indicates when an incoming call is received (phone rings). The LED is lit red.
3	Speed Dial Keys/BLF	Speed Dial keys with busy lamp field/BLF LEDs (if enabled) which when pressed automatically dials a user-defined number.
4	VOICE MAIL	Retrieves voice mail messages. Steady red light indicates new voice messages (message waiting indication/MWI).
5	4-way Navigation	Allows you to scroll through lists and menus on the display.
6	ENTER	Selects menus, fields, and options.
7	MENU	Accesses the menu list or exits to idle mode.
8	REDIAL	Accesses a list of previously dialed numbers from where you can select a number and redial it.
9	MUTE	Mutes the call. The LED is lit red when a call is muted.
10	TRANSFER	Transfers a call.
11	HOLD	Places an active call on hold.
12	SPEAKER	Activates the speakerphone, allowing hands-free conversations.
13	HEADSET	Activates a call using an external headset.
14	VOLUME	Increases or decreases the volume of the handset, headset, speakerphone, ring tone, and call progress tones.
15	Alphanumeric Keypad	Keys for entering phone numbers, text, and symbols.
16	Line Keys (LINE 1, LINE 2, LINE 3, LINE 4)	LINE keys - up to four line extension numbers can be defined, where each line can handle up to two calls.
17	Softkeys	Softkeys. For a description of available softkey functions, see Section 3.2 on page 22.

2.2.2 Rear View

The rear view of the phone is shown in the figure below and described in Table 2-2.

Figure 2-2: Rear View

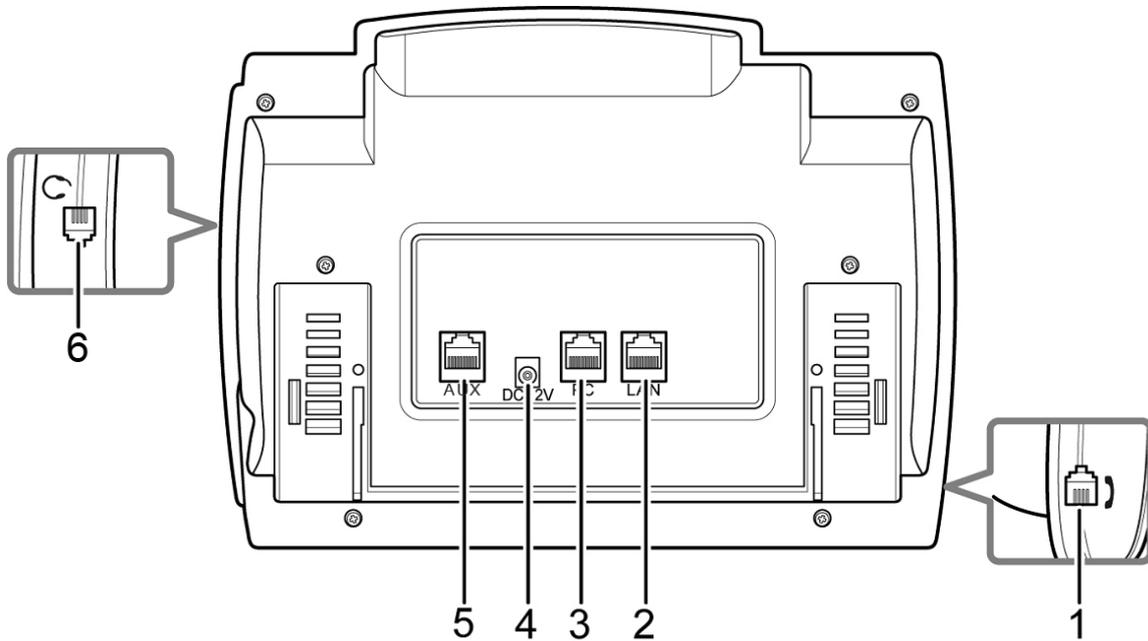


Table 2-2: Rear View Description

Item #	Label / Name	Description
1	Handset Jack	RJ-9 port for connecting the handset.
2	LAN	RJ-45 port for connecting to the Ethernet LAN cable for LAN (uplink - 10/100 Mbps) connection. If you are using Power over Ethernet (PoE), the power to the phone is supplied from the Ethernet cable (draws power from either a spare line or signal line).
3	PC	RJ-45 port for connecting the phone to a PC (10/100 Mbps downlink).
4	DC 12V	12V DC power jack that connects to the AC power adapter.
5	AUX	RJ-11 AUX port for connecting to an Electronic Hook Switch (EHS) for wireless headset functionality. In this setup, the headset port is also used.
6	Headset Jack	RJ-9 port that connects to an external headset.



Notes:

- The AUX port is provided only on the following models (Part Numbers and Hardware Revisions):
 - **IP320HDE/HDEPS (GGWV00417)**
 - **IP320HDPS (GGWV00421)**
- PoE is supported only on the following model (Part Number and Hardware Revision):
 - **IP320HDE/HDEPS (GGWV00417)**

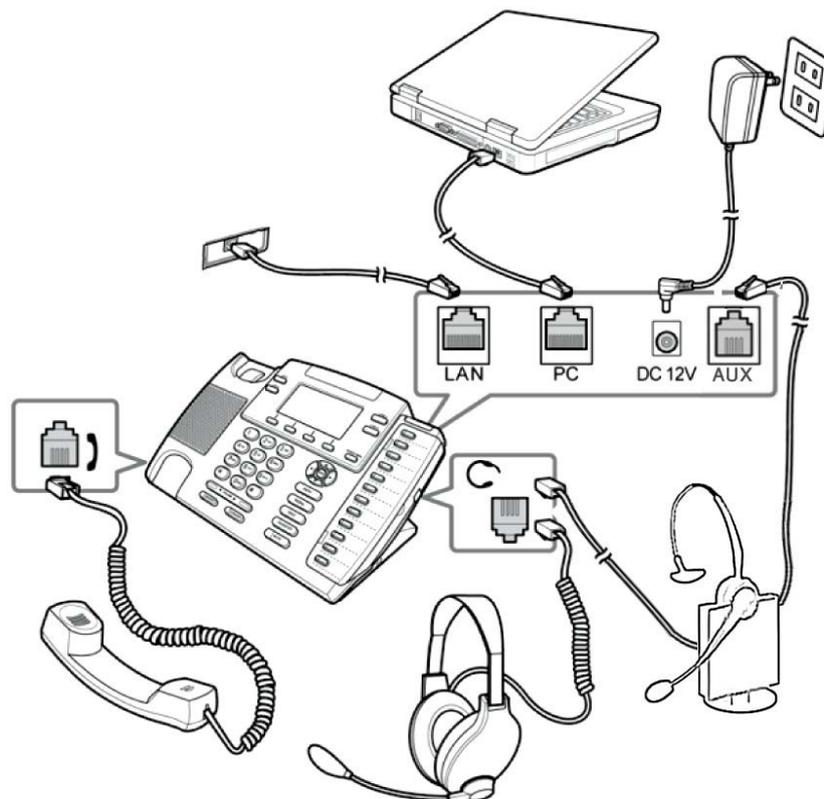
2.3 Cabling the Phone

The procedure below describes how to cable your phone. Some of the cabling steps are optional and depend on your requirements.

➤ **To cable the phone:**

1. Connect the RJ-9 handset jack to the handset.
2. (Optional) Connect the RJ-9 headset jack to a headset.
3. Connect the RJ-45 port labeled **LAN** to your LAN network (LAN port or LAN switch/router), using a CAT 5 Ethernet cable.
4. Connect the RJ-45 LAN port labeled **PC** to a computer, using a CAT 5 straight-through Ethernet cable.
5. (Optional) Connect the RJ-11 AUX port labeled **AUX** to an Electronic Hook Switch (EHS) for wireless headset functionality. In this setup, you also need to connect the headset port (see Step 2) to the EHS.
6. Connect the connector tip of the AC power adapter to the phone's power socket labeled **DC 12V**, and then connect the two-prong AC adapter on the other end of the cord directly to the electrical wall outlet. When the phone receives power, the LEDs on the phone light red for a few seconds.

Figure 2-3: Cabling the Phone



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. This is applicable only if your IP Phone model supports PoE (see Section 2.2.2).

2.4 Mounting the Phone

The phone can be mounted in one of the following ways:

- Desktop mounting (see Section 2.4.1 below)
- Wall mounting (see Section 2.4.2 on page 18)

2.4.1 Placing the Phone on a Desk

This section describes the procedures for placing the phone on a desk or flat surface. This includes adjusting the angle of the phone (see Section 2.4.1.1 below) and routing the phone's cables (see Section 2.4.1.2 on page 16).

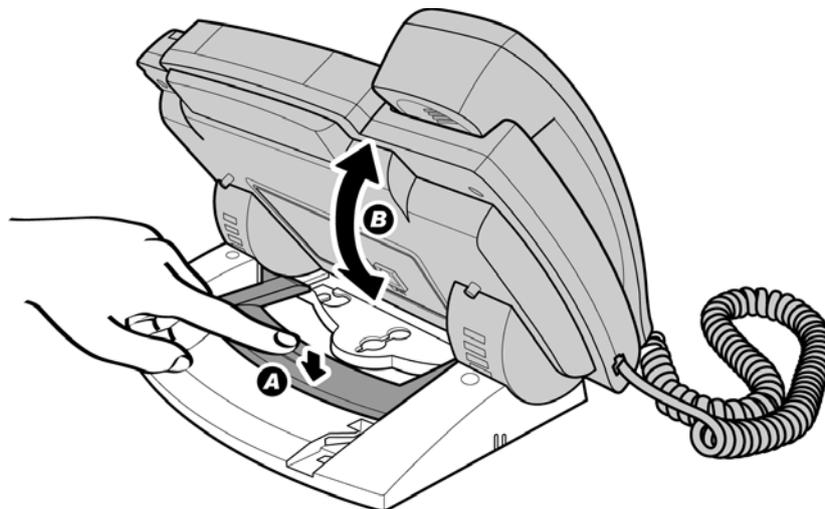
2.4.1.1 Adjusting Phone in Vertical Plane

You can adjust the angle of the phone in the vertical plane, using the phone's bracket.

➤ **To adjust the tilt of the phone:**

1. Press tab (A) to loosen the bracket lock.
2. As you press the tab, move (B) up or down a slot to adjust tilt.
3. Release tab (A) to lock the bracket to a desired slot.

Figure 2-4: Adjusting the Phone in Vertical Plane



2.4.1.2 Routing the Phone's Cables

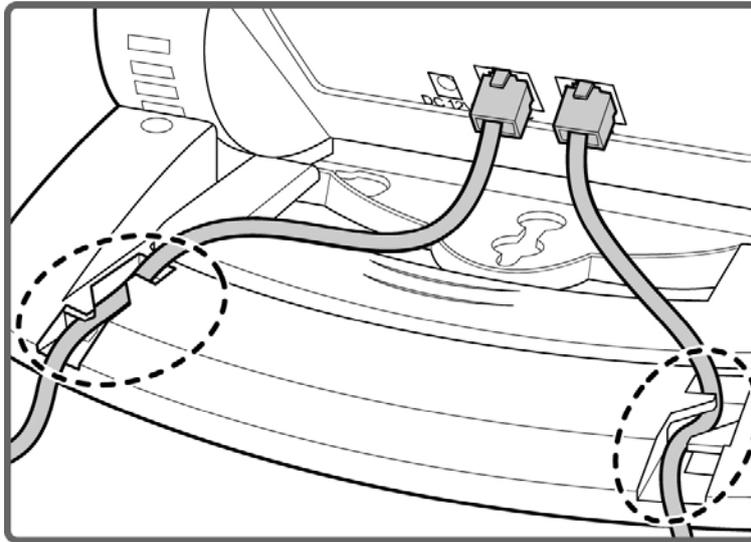
The phone provides grooves for routing the LAN, PC, and AC power cables to ensure uninterrupted connections.

➤ **To route the phone's LAN and PC cables:**

1. Plug the PC cable in the PC port.
2. Insert the PC cable in the allotted slot on the left side of the bracket.

3. Plug the LAN cable in the LAN port.
4. Insert the LAN cord in the allotted slot on the right side of the bracket.

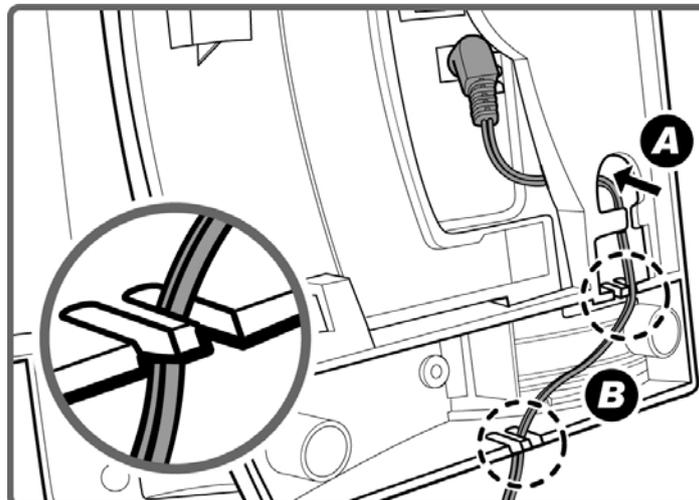
Figure 2-5: Routing the LAN and PC Cables



➤ **To route the phone's power adapter cord:**

1. Insert the AC power adapter cord through the bracket hole (A).
2. Plug the adapter into the power jack.
3. Insert the power cord in the allotted slots of the bracket (B).
4. Plug the AC power adapter into the power outlet.

Figure 2-6: Routing the Phone's AC Power Cord



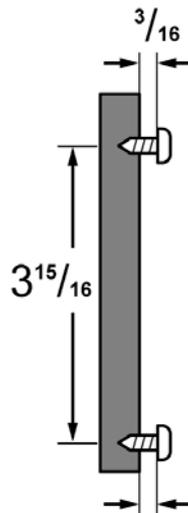
2.4.2 Wall-Mounting the Phone

You can mount the phone on a wall or wall plate. You need two screws (not supplied) to fit the keyhole slots.

➤ **To wall mount the phone:**

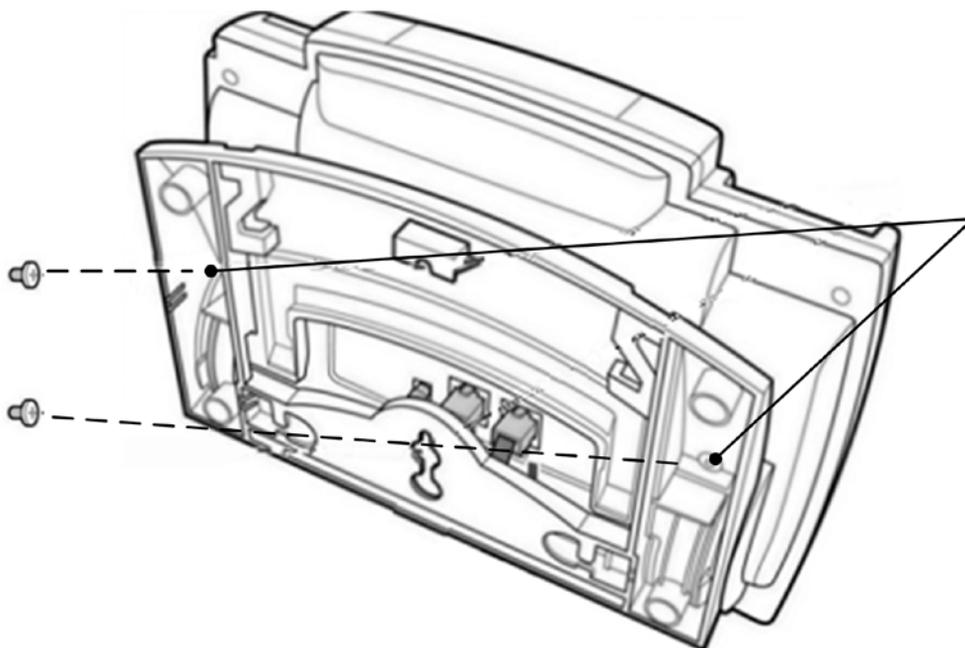
1. On the wall or a wall plate, drill two holes with a distance of $3 \frac{15}{16}$ inches (100 mm) apart.
2. Thread a screw into each hole with each head extending about $\frac{3}{16}$ inch (5 mm) from the wall or wall plate.

Figure 2-7: Wall-Mounting Dimensions



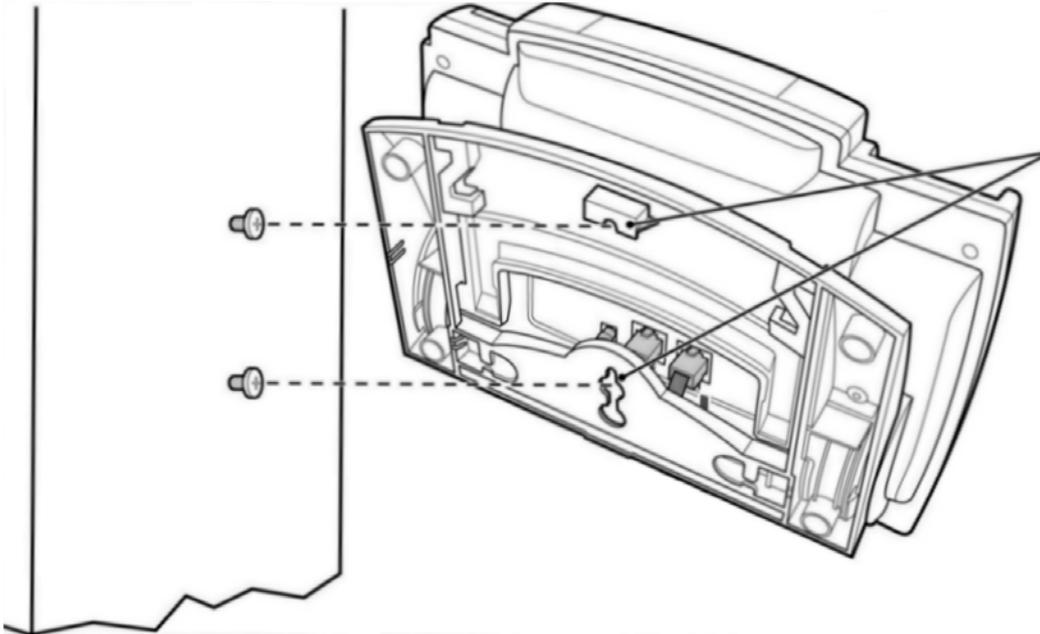
3. Connect the AC power adapter, LAN and PC cords and route them to go under the bracket.
4. Adjust the phone bracket so that it lays flat on the back of the phone (as described in Section 2.4.1.1 on page 16), and then secure it in position using the supplied screws.

Figure 2-8: Securing Phone Bracket to Base of Phone



5. Align the phone's keyhole slots with the screws and slide the phone downward to secure it.

Figure 2-9: Wall-Mounting the Phone



Reader's Notes

3 Getting Started with Phone User Interface

The phone provides an LCD-based user interface screen, providing an intuitive, menu-driven user interface for configuring the phone and viewing various call information. This section provides an overview on using the phone's screen.

3.1 Areas of the LCD Screen

The main areas of the phone's LCD screen (in idle display) are shown in the figure below and described in the subsequent table.

Figure 3-1: Areas of LCD Screen



Table 3-1: Main Areas of LCD Display

Item #	Description
1	Phone's line extension number
2	Current date
3	Softkeys - activated by pressing one of the corresponding keys located below the displayed softkey
4	Current time

3.2 Working with Softkeys

Softkeys are activated by pressing one of the four corresponding phone keys located directly below the softkey displayed on the LCD screen. The displayed softkeys depend on the menu level currently accessed. The phone provides the following softkeys:

Table 3-2: Softkey Description

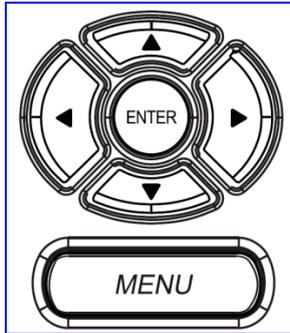
	Description
	Opens the phone directory.
Missed	Displays missed calls.
Forward	Defines and activates call forwarding.
DnD	Activates the Do not Disturb feature.
Conf	Initiates a conference call.
Trans	Transfers a call.
Dial	Dials the number of the currently dialed number, selected directory contact, or logged call.
Hold	Places the current call on hold.
Mute/Unmute	Mutes/un-mutes the current call.
Detail	Displays settings of the selected option.
End	Ends the current call.
Select	Selects an item or option.
Back	Returns you to the previous screen state or menu level.
Start	Activates call forwarding.
Edit	Edits the selected item.
Clear	Deletes digits or characters from right to left, each time it is pressed. To delete all digits/characters, keep the softkey pressed until all characters are deleted.
Cancel	Cancels the currently initiated call or configuration.
Save	Saves the new settings.
Delete	Deletes one digit from the dialing string.

3.3 Accessing Menus

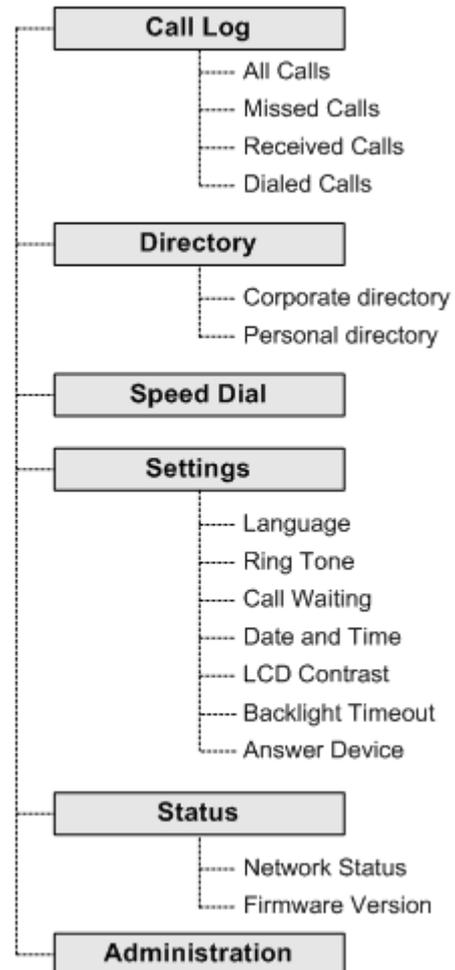
The phone's menus are used for configuring the phone (e.g., adding contacts to the phone directory) and obtaining various information (e.g., missed calls and network status). The phone's main menu is accessed using the MENU key. Drilling down to submenus is done by using the Navigation keys to select the required menu, and then pressing ENTER or the **Select** softkey.

Figure 3-2: Accessing Menus on LCD Screen

MENU Key and Navigation Keys



Hierarchical Structure of Menu List



Note: The **Administration** menu is intended for system administrators only and is password protected. For information regarding this menu, refer to the *Administrator's Manual*.

➤ To access menus:

1. Press the MENU key.
2. Navigate to the required menu, by performing one of the following:
 - Using the  and  Navigation keys.
 - On the keypad, press the number that corresponds to the number at which the menu appears in the list. For example, to choose Speed Dial, press 3 on the keypad.

3. Select the menu, by performing one of the following:
 - Press the ENTER key.
 - Press the **Select** softkey.
4. Repeat steps 2 through 3 to select the next menu levels.
5. To cancel your selection and move to the previous menu level, press the **Back** softkey.

3.4 Entering Numbers, Letters and Symbols

The phone's alphanumerical keypad allows you to enter numbers, letters, and symbols. The **A/a/1** softkey (or pound key) allows you to select the mode (e.g., numbers or letters). You need to enter characters when defining, for example, IP addresses and contact names. Some keys allow you to enter numbers and symbols while other keys allow you to enter numbers and letters. When dialing numbers directly from the keypad, only numbers (as printed on the keys) are activated.

➤ **To enter numbers and alphabetical characters:**

1. Select the alphanumerical selection softkey **A/a/1** (or press the pound # key).

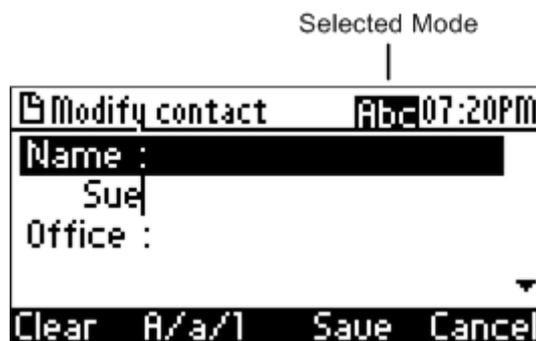
Figure 3-3: Alphanumerical Selection List



2. Press the **A/a/1** softkey (or # key) again until the required option is selected:
 - **abc**: lower case letters
 - **ABC**: upper-case letters
 - **Abc**: first-letter upper case, the rest lower case
 - **123**: numerical mode (i.e., numbers)

The selected mode is displayed on the top of the LCD screen, as shown below:

Figure 3-4: Selected Alphanumerical Mode (e.g. Abc)

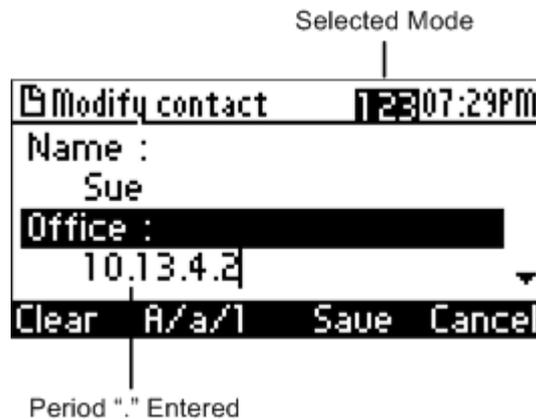


3. For selecting the letter, on the keypad, press the required alphanumerical key to enter the letter. Successive presses move you to the next letter pertaining to the key.

➤ **To enter symbols:**

1. Where you want to enter the symbol, select the alphanumerical selection softkey **A/a/1** (or press the pound # key), and then choose the ABC mode.

Figure 3-5: LCD Screen in Alphabetical Mode for Symbols



2. On the keypad, press the 1 key to enter a symbol. Each successive press of the key enters a different symbol. The 1 key provides the following symbols:

- ; (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.

3.5 Displayed Messages

The phone's LCD screen displays messages to indicate certain process currently in progress. These messages include the following:

Table 3-3: In-Progress Operational Messages Displayed on LCD Screen

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

4 Customizing Your Phone

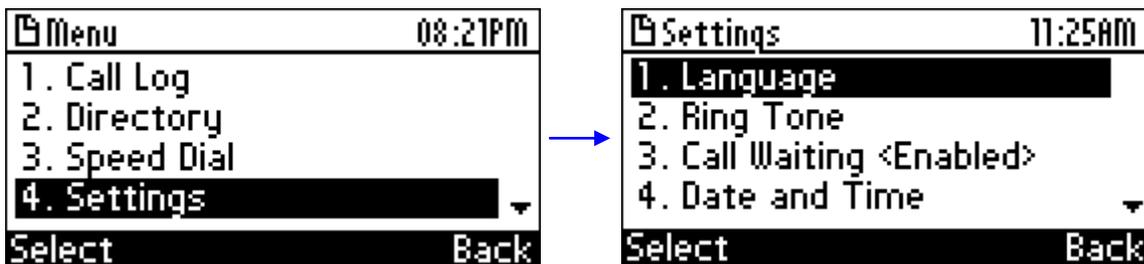
This chapter provides step-by-step procedures on customizing your phone.

4.1 Changing the LCD Screen Language

The phone's LCD screen supports numerous languages. By default, the phone's user interface is English, but you can change this to another language, as described in the procedure below.

➤ **To define the display language of the LCD screen:**

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



2. Choose the required language (using the ▲ and ▼ Navigation keys).



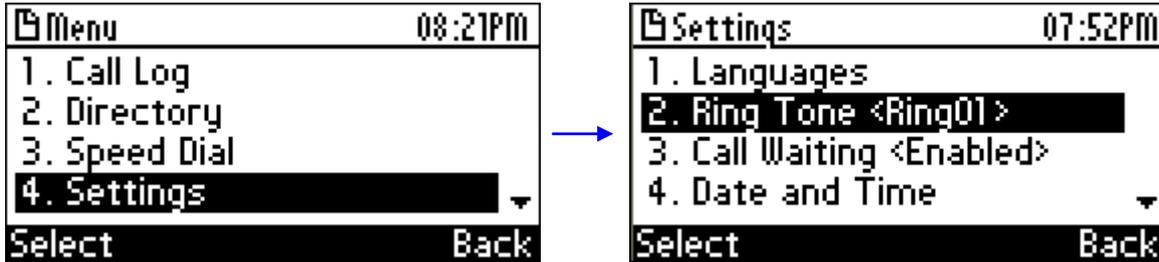
3. Press the **Select** softkey to apply your settings.
4. Press the **Save** softkey to save your settings.

4.2 Selecting Ring Tone

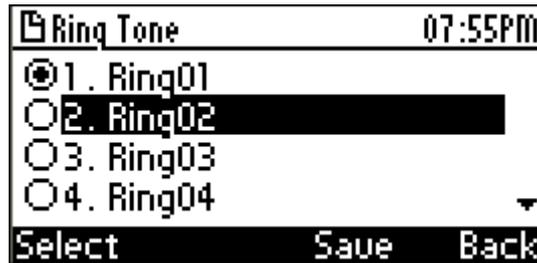
The phone provides you a list of ring tones from which you can choose for indicating incoming calls. If your phone is defined with line extensions, you can also assign a ring tone per extension.

➤ **To select a ring tone:**

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



2. If the phone has line extensions, then select the desired extension or select **All Extensions** for assigning the ring tone to all extensions.
3. Choose the desired ring tone (using the ▲ and ▼ Navigation keys). A sample of the ring tone is played when you navigate through the list.



4. Set the ringing tone volume, by pressing the ▲ and ▼ VOLUME keys; the following is displayed:



Once you have completed adjusting the volume level, the Ringer Volume indication is hidden after a few seconds.

5. Press the **Select** softkey to apply your settings.
6. Press the **Save** softkey to save your settings.

4.3 Defining Date and Time

You can manually change the displayed date and time if Network Time Protocol (NTP) is not used (see note below).

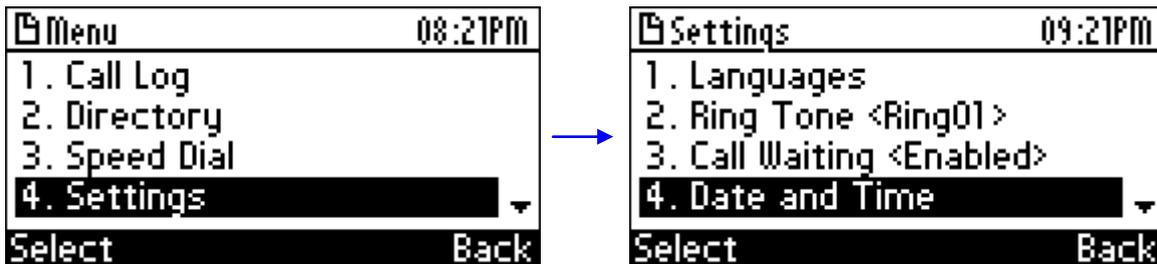


Notes:

- Typically, the phone retrieves the date and time from a Network Time Protocol (NTP) server over the Internet. This is the recommended setting and is configured by your system administrator (see the *Administrator's Manual*). If NTP is configured, then manual setting of the data and time is not possible.
- For manual configuration of date and time, the settings are not retained after a phone reboot. Thus, after a phone reboot, you need to re-configure the date and time.

➤ To define the date and time:

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

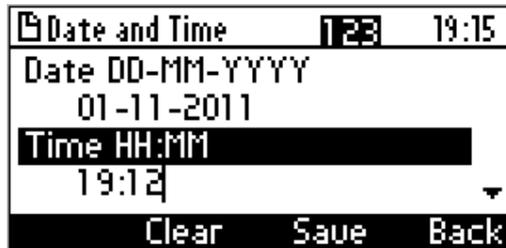


2. Select the **Date** option, and then modify the date using the **Clear** softkey. The date is in the format MMDDYYYY.

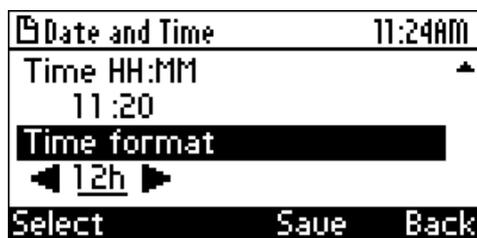


3. Set the time:

- a. Select the **Time** option, and then modify the time using the **Clear** softkey. The time is in the format HH:MM. To add the colon (:), press the # key to choose the **ABC** mode, and then choose the colon by pressing the 1 key. For more information on entering symbols, see Section 3.4 on page 24.



- b. Select the **Time format** option, and then using the  and  Navigation keys, choose either the 12-hour or 24-hour format.



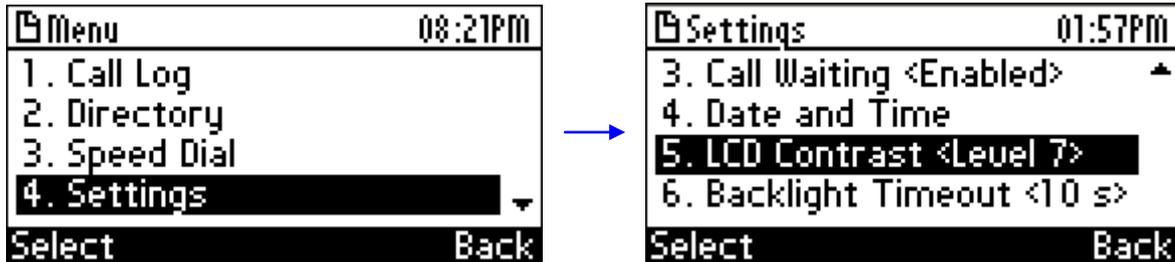
- 4. Press the **Save** softkey to save your settings.

4.4 Changing LCD Screen Contrast Level

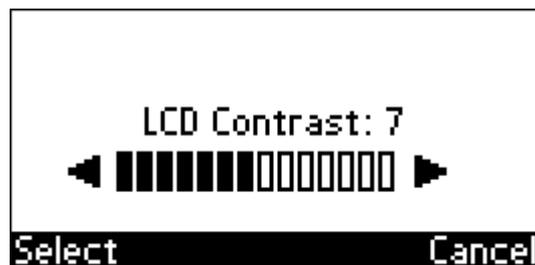
The phone's LCD screen supports 15 different contrast levels.

➤ **To define the contrast level of the LCD screen:**

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



2. Choose the required contrast level (0 to 14, where 0 is the lowest contrast level and 14 the highest) using the ◀ and ▶ Navigation keys.



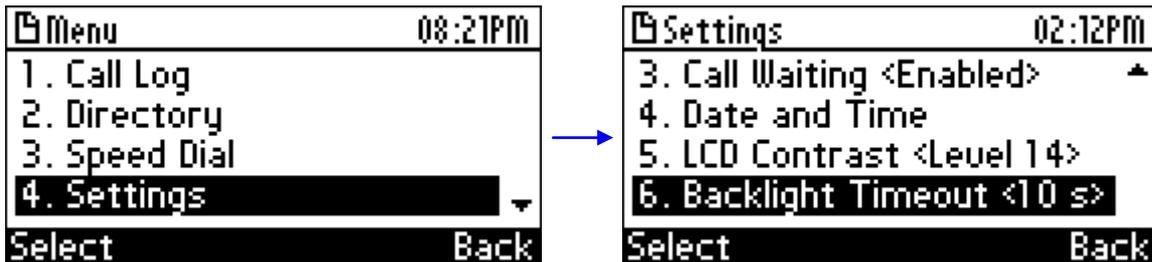
3. Press the **Select** softkey to apply your settings.

4.5 Changing LCD Screen Backlight Timeout

You can define the duration (in seconds) for which the phone's backlight is lit when the phone is not being used (idle). After this duration expires, the backlight turns off. You can also decide to have the backlight on all the time, by selecting the **Always on** option.

➤ **To define the LCD screen's backlight timeout:**

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



2. Choose the backlight timeout (10 to 60 seconds), using the ▲ and ▼ Navigation keys.



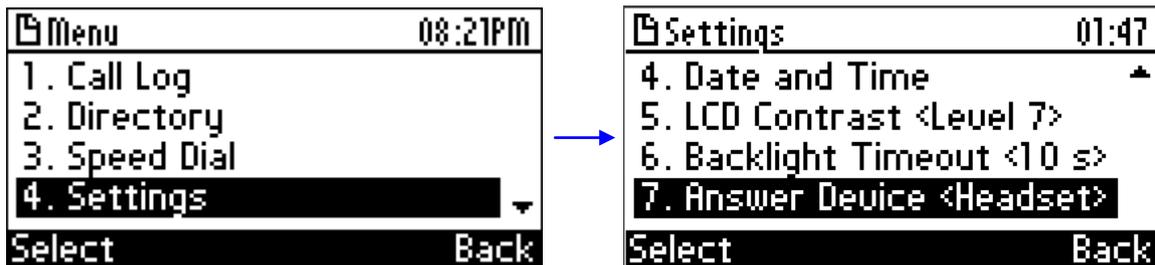
3. Press the **Select** softkey to apply your settings.
4. Press the **Save** softkey to save your settings.

4.6 Changing Audio Device

You can select the type of audio device—speaker or headset—that is activated when pressing a LINE key or the **Accept** softkey to answer calls, or the LINE key or dial pad when dialing calls. By default, the speaker is used.

➤ **To change the audio device:**

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



2. Choose the audio device (Speaker or Headset), using the ▲ and ▼ Navigation keys.



3. Press the **Select** softkey to apply your settings.
4. Press the **Save** softkey to save your settings.

4.7 Adjusting Phone Volume

The volume of the following phone entities can be adjusted:

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

4.7.1 Adjusting Ring Volume

The volume of the ring, which indicates an incoming call, can be adjusted as described below:

➤ **To adjust the ringing volume:**

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



2. Adjust the volume using the  and  VOLUME keys. After you have completed adjusting the volume, the Ringer Volume level bar no longer appears on the screen.

4.7.2 Adjusting Tone Volume

The phone tones include dial tone, ring-back tone and all other call progress tones.

➤ **To adjust the tone volume:**

1. Off-hook the phone (using handset, speaker, or headset).
2. Press the VOLUME key; the Tones Volume level bar is displayed on the screen:



3. Adjust the volume using the ▲ and ▼ VOLUME keys. After you have completed adjusting the volume, the Tones Volume level bar no longer appears on the screen.

4.7.3 Adjusting Handset Volume

The volume of the handset can only be adjusted during a call or when making a call. Once you have changed the volume level, the volume applies to all subsequent handset use.

➤ **To adjust the handset volume:**

1. During a call or when making call, ensure that the handset is off the cradle.
2. Press the VOLUME key; the Handset Volume level bar is displayed on the screen.



3. Adjust the volume using the ▲ and ▼ VOLUME keys. After you have completed adjusting the volume, the Handset Volume level bar no longer appears on the screen.

4.7.4 Adjusting Speakerphone Volume

The volume of the speakerphone can only be adjusted during a call. Once you have changed the volume level, the volume applies to all subsequent speakerphone use.

➤ **To adjust the speakerphone volume:**

1. During a call, press the SPEAKER key.
2. Press the VOLUME key; the Speaker Volume level bar is displayed on the screen.



3. Adjust the volume using the ▲ and ▼ VOLUME keys. After you have completed adjusting the volume, the Speaker Volume level bar no longer appears on the screen.

4.7.5 Adjusting Headset Volume

The volume of the headset can only be adjusted during a call. Once you have changed the volume level, the volume applies to all subsequent headset use.

➤ **To adjust the headset volume:**

1. During a call, press the HEADSET key.
2. Press the VOLUME key; the Headset Volume level bar is displayed on the screen.



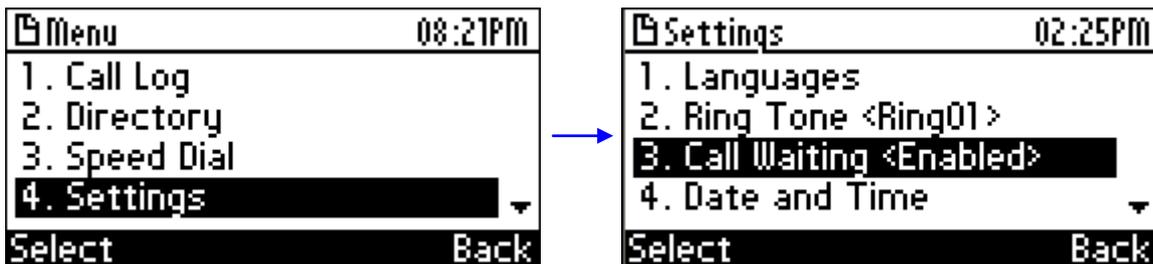
3. Adjust the volume using the ▲ and ▼ VOLUME keys. After you have completed adjusting the volume, the Headset Volume level bar no longer appears on the screen.

4.8 Enabling Call Waiting

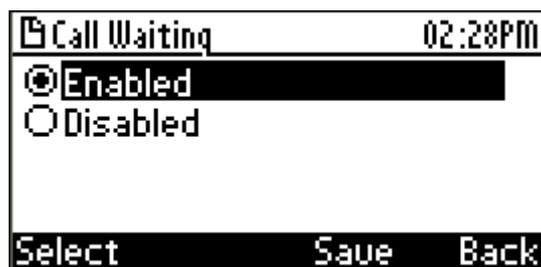
You can enable or disable the phone's call waiting feature. When this feature is enabled and you receive another call while you are currently in call with another party, the LED of the available LINE key flashes red.

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

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



2. Choose one of the following options (using the ▲ and ▼ Navigation keys):
 - **Disable:** disables call waiting
 - **Enable:** enables call waiting



3. Press the **Select** softkey to apply your settings.
4. Press the **Save** softkey to save your settings.

4.9 Defining Call Forwarding

The Call Forward feature allows you to automatically redirect an incoming call to another phone number, upon a user-defined condition (e.g., when the line is busy). If the phone has line extensions, you can also define a specific call forwarding rule per line (or for all extensions).

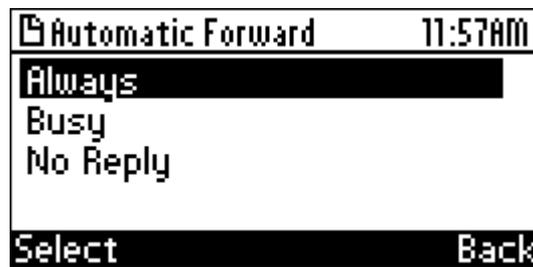
➤ **To define call forwarding:**

1. Access the Automatic Forward screen, by pressing the **Forward** softkey in the main screen, as shown below:



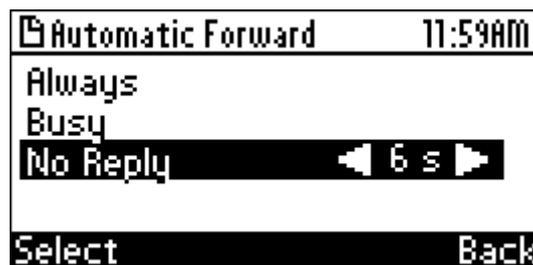
2. If the phone has line extensions, then select the desired extension or select **All Extensions** for defining call forwarding for all extensions.

The Automatic Forward screen is shown below:



3. Choose (using the ▲ and ▼ Navigation keys) one of the following conditions upon which the call is forwarded:

- **Always:** The call is always forwarded.
- **Busy:** The call is forwarded when the line is busy.
- **No Reply:** The call is forwarded when the incoming call is not answered after a user-defined time. If you choose this option, then using the ◀ and ▶ Navigation keys, select the interval (in seconds) after which the call is forwarded if there is no answer, as shown below:



4. Press the **Select** softkey, and then define the destination to where you want the call forwarded:
 - **Number To Forward:** enter the number to where you want the call forwarded.
 - **Select from Directory:** choose this option and then select an existing contact in your phone directory to where you want the call forwarded.



5. Press the **Start** softkey to activate call forwarding; the **Call Forward**  icon appears on the main screen, indicating that call forwarding is active:



➤ **To deactivate call forwarding:**

- When the phone is in on-hook state, press the **Forward** softkey; the **Call Forward**  icon no longer appears on the screen.

4.10 Managing Your Personal Phone Directory

The phone directory feature enables you to add contacts to your phone's local directory, and then edit and delete them if required. Once you have added a contact, you can easily call the contact directly from the directory (see Section 6.2 on page 64). In addition, if the contact is assigned a speed dial key, you can call the contact by pressing the relevant speed dial key. If you receive an incoming call from someone who is listed in the directory, the phone's screen displays the name of the caller.



Notes:

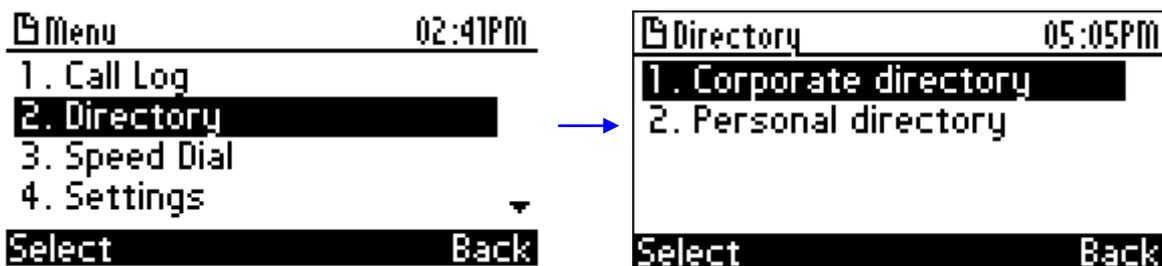
- The maximum number of contacts that you can add to the directory is 1,000.
- Your phone's directory includes a Corporate Directory, which is implemented by manually loading a file to your phone or using the Lightweight Directory Access Protocol (LDAP) protocol.
- LDAP-based directory is connected to the corporate directory (LDAP server). This is set up by your system administrator (refer to the *Administrator's Manual*). If you do have a Corporate Directory, its contacts cannot be edited or deleted on your phone.

4.10.1 Accessing the Phone Directory

The following procedure describes how to access the phone directory. This is required for the various management operations required for the phone directory, as described in subsequent sections.

➤ **To access the phone directory:**

1. On the main screen press the directory  icon softkey, or press the MENU key, choose the **Directory** submenu, and then press the **Select** softkey.



2. Choose the desired directory, using the  and  Navigation keys. For adding, editing or modifying your personal directory, access the personal directory, by choosing the **Personal directory** option; the following is displayed:



4.10.2 Adding Contacts to the Personal Directory

The procedure below describes how to add contacts to the phone directory. For each contact, you can enter a phone number for different locations (e.g., home, office, and mobile phone). You can also assign a ring tone to the contact, which plays when a call is received from the contact. In addition, you can assign unique speed dial keys (Keys 1 to 12) to up to 12 contacts.

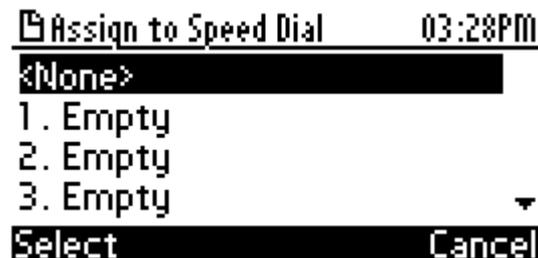
The contact names and phone numbers are entered using the phone's keypad keys. For a description of entering names and numbers (including symbols), see Section 3.4 on page 24.

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

1. Access the personal directory.
2. Choose the **+ New contact** option, and then press the **Select** softkey; the Modify contact screen appears:



3. Select the 'Name' field (using the **▲** and **▼** Navigation keys), and then enter the name of the new contact.
4. Enter the phone number of the contact. You can enter multiple phone numbers for the contact, by adding a number for each category – 'Office', 'Home', 'Mobile'.
5. To assign a speed dial key to the contact:
 - a. Press the **Sp. Dial** softkey; the following screen appears:



- b. Choose the desired Speed Dial key (using the **▲** and **▼** Navigation keys), and then press the **Select** softkey.
6. Press the **Save** softkey to save the new contact; the "Contact Saved" message appears notifying you that the contact has been saved successfully.

4.10.3 Editing Contacts in the Personal Directory

You can modify contacts in the phone directory, as described in the procedure below.

➤ **To edit a contact:**

1. In the phone directory, choose the contact to edit, as shown below:



2. Press the **Detail** softkey; the contact's details are displayed.
3. Press the **Edit** softkey to enter edit mode:



4. Modify the contact's details as required, and then press the **Save** softkey to save your settings.



Note: You cannot modify contacts belonging to the Corporate directory.

4.10.4 Deleting Contacts from the Personal Directory

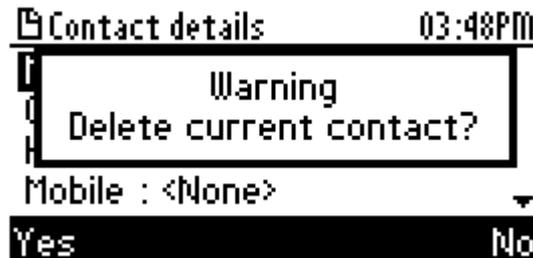
You can remove contacts from the phone directory, as described in the procedure below.

➤ **To delete a contact:**

1. In the phone directory, choose the contact you want to delete, as shown below:



2. Press the **Detail** softkey; the contact's details are displayed.
3. Press the **Delete** softkey; the "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: You cannot delete contacts belonging to the Corporate directory.

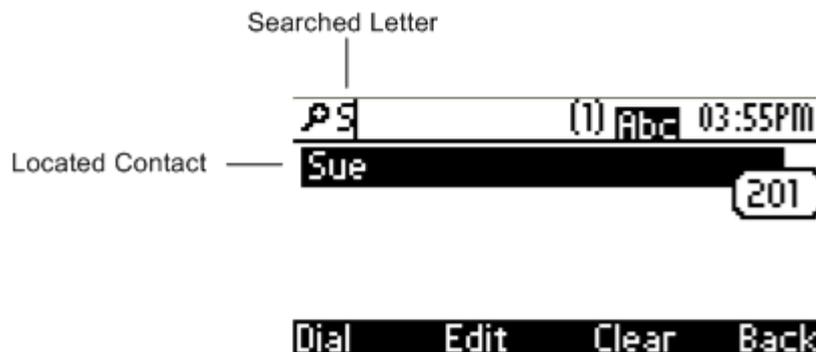
4.10.5 Searching Contacts

You can use the phone's search feature to quickly and easily locate a contact in the phone directory. The search feature is especially useful if you have a long list of contacts.

➤ **To search the directory for a contact:**

1. Access the phone directory.
2. Search a contact, by performing one of the following:
 - **Navigation keys:** Scroll through the list of contacts using the ▲ and ▼ Navigation keys.
 - **Search feature:** Using the keypad, enter the name of the contact. As you enter letters, the directory locates contacts that match the entered letters. The searched keys are displayed on the top of the screen, as shown below.

For example, if you want to search for the contact "Sue", as you press the key for the es letter ("s"), the directory locates contacts whose names begin with this letter. As you enter the next letter (i.e., "u"), so the contacts whose names begin with "su" appear, and so on.



4.11 Defining Speed Dialing

Speed dialing allows you to quickly place a call by simply pressing a Speed Dial key that has been assigned with a phone number. You can assign up to 12 speed dial numbers. You can assign a contact in your directory to a Speed Dial key or manually assign a phone number to a Speed Dial key.

4.11.1 Assigning Speed Dial Keys

The procedure below describes how to assign a phone number to a Speed Dial key.

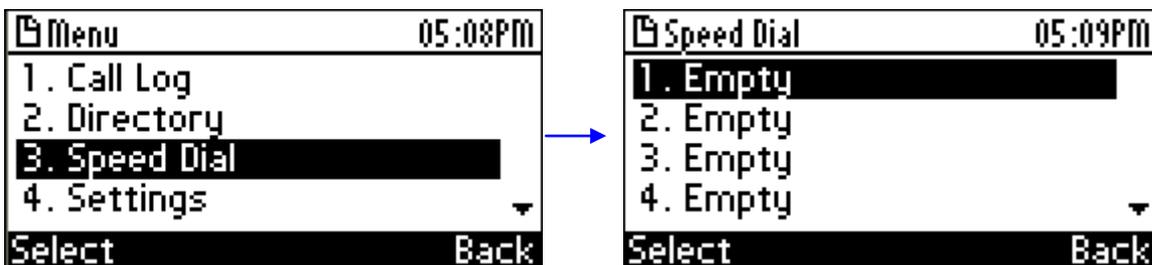


Note: Speed Dial keys are typically defined by directly accessing the **Speed Dial** screen, as described in this section. However, your phone offers you the following alternative methods:

- If you want to assign a Speed Dial key to a contact that is listed in your phone directory, you can do this in the phone directory itself (see Section 4.10.2 on page 41).
- You can press a Speed Dial key not yet assigned. Once pressed, the Speed Dial screen is accessed and you can continue from Step 3 in the procedure below to assign the key a phone number.

➤ **To assign a speed dial key:**

1. Access the **Speed Dial** screen (MENU key > **Speed Dial** menu).



2. Choose a Speed Dial key (using the ▲ and ▼ Navigation keys) to which you want to assign a speed dial number, and then press the **Select** softkey; the selected Speed Dial key is displayed on the top of the screen, as shown below:





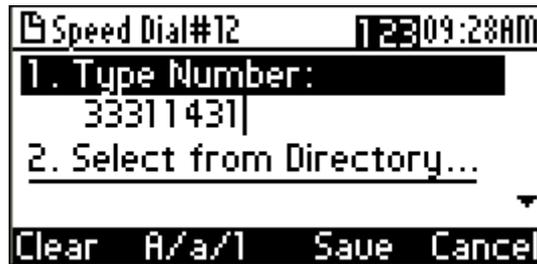
Notes:

- Speed dial Index 1 represents the top-most Speed Dial key on your phone; speed dial Index 12 represents the bottom-most Speed Dial key.
- Instead of performing steps 1 and 2, you can simply press one of the phone's Speed Dial keys, and then continuing with Step 3.

3. Assign a phone number to the Speed Dial key entry, by performing one of the following:

- **Manually defining a phone number:**

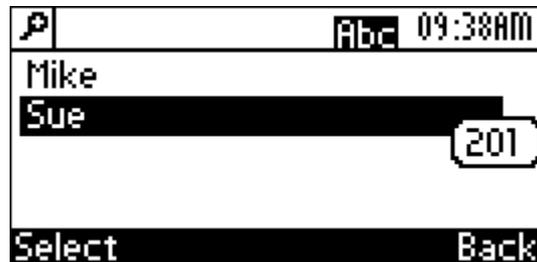
- a. In the 'Type Number' field, enter the phone number that you want to assign to the Speed Dial key, as shown below. For a description on entering characters, see Section 3.4 on page 24.



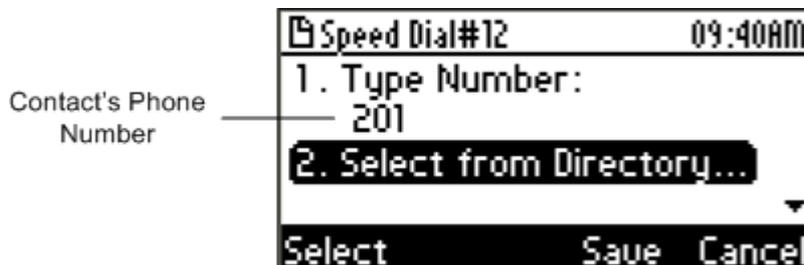
- b. Continue with Step 4.

- **Assigning a contact from the phone directory:**

- a. Choose the 'Select from directory' field, and then press the **Select** softkey; the phone directory is displayed, listing all your contacts:

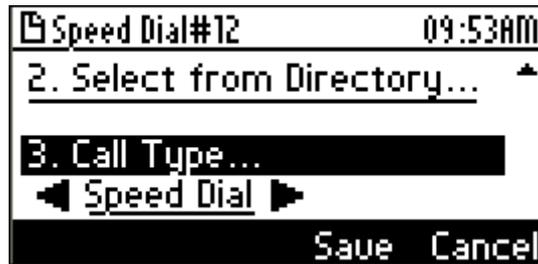


- b. Choose the contact you want to assign to the Speed Dial key, and then press the **Select** softkey; the contact's phone number appears in the 'Type Number' field:



- c. Continue with Step 4.

4. To enable the busy lamp field (BLF) feature for the Speed Dial key, perform the following:
 - a. Choose the 'Call Type' field.



- b. Choose one of the following options (using the  and  Navigation keys):
 - ◆ **Speed Dial:** no BLF is defined for the Speed Dial key.
 - ◆ **Speed Dial+BLF:** BLF functionality is defined.



Note: To implement the BLF feature, the following requirements must be met:

- BLF must be enabled on the phone by your Administrator.
- BLF functionality must be provided in your network (e.g., by softswitch/IP PBX).

5. Press the **Save** softkey to save your settings.

4.11.2 Editing Speed Dials

You can edit a speed dial assignment, as described below.

➤ To edit a speed dial:

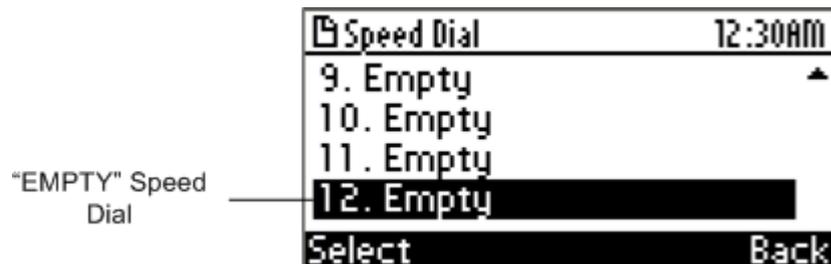
1. Access the **Speed Dial** screen (MENU key > **Speed Dial** menu).
2. Choose a Speed Dial key (using the  and  Navigation keys) that you want to edit, and then press the **Select** softkey.
3. Modify the fields as required.
4. Press the **Save** softkey to save your settings.

4.11.3 Deleting Speed Dials

You can delete a speed dial assignment, as described below.

➤ **To delete a speed dial:**

1. Access the **Speed Dial** screen (MENU key > **Speed Dial** menu).
2. Choose a Speed Dial key (using the  and  Navigation keys) that you want to delete, and then press the **Select** softkey.
3. In the 'Type Number' field, delete the entire number, using the **Clear** softkey.
4. Press the **Save** softkey; the Speed Dial is listed as "Empty", as shown below:



4.11.4 Using the Busy Lamp Field (BLF) for Speed Dialing

The busy lamp field (BLF) feature provides you visual call and presence status of remote users whose phone numbers are assigned to your phone's Speed Dial keys. This is the status of the remote user's phone with some other call party. This status is provided by the BLF LEDs on the Speed Dial keys, as described in the table below:

Table 4-1: BLF LED Description

LED Color	Status	Description
Green	On	Remote contact is in idle state and available for receiving calls
	Blinking	Remote contact's phone is ringing
Red	On	Remote contact is currently in a call or initiating a call

The BLF functionality is assigned per Speed Dial key in the Speed Dial screen (see Section 4.11.1 on page 45).



Note: To implement the BLF feature, the following requirements must be met:

- BLF must be enabled on the phone by your system administrator.
- BLF functionality must be provided in your network (e.g., by softswitch/IP PBX).

4.12 Locking and Unlocking the Phone

If your phone is deployed with AudioCodes solution for Microsoft® Lync™ Server 2010, you can lock your phone to prevent anyone from using it (such as making and receiving calls). To unlock your phone, you need to enter a password.



Notes:

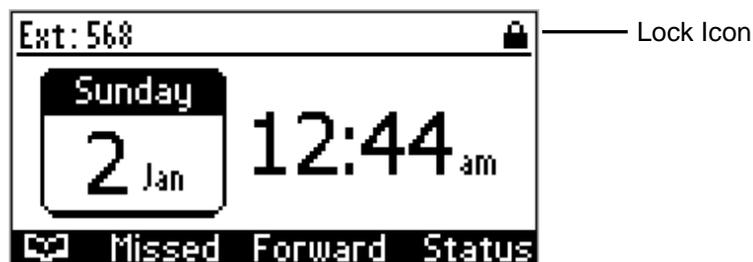
- This feature is applicable only when your phone is deployed with AudioCodes solution for Microsoft Lync and is enabled by your system administrator. For more information, refer to the *Administrator's Manual*.
- To obtain the unlocking password, contact your system administrator.
- When the phone is locked, the emergency number as defined by your system administrator can be dialed.

4.12.1 Single-Line Mode

The procedures below describe how to lock and then unlock your phone.

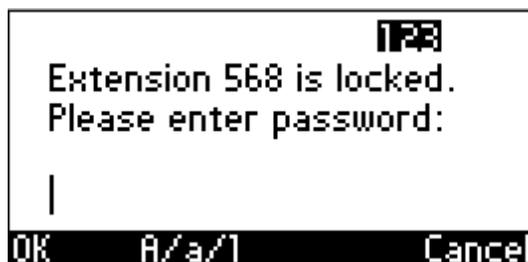
➤ To lock your phone:

- Press the star (*) key for a few seconds (about 3 seconds); the phone locks and the **lock** icon is displayed on the screen, as shown below:



➤ To unlock your phone:

1. Press the star key until you are prompted for the unlock password:



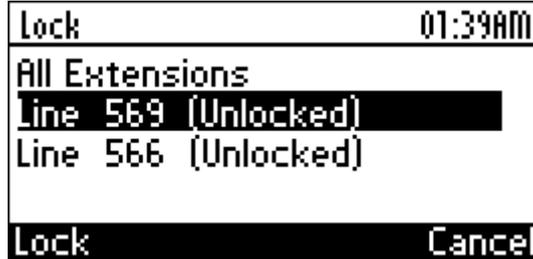
2. Enter the password, and then press the **OK** softkey; the phone is unlocked and the **lock** icon no longer appears on the screen.

4.12.2 Locking / Unlocking in Multi-Line Mode

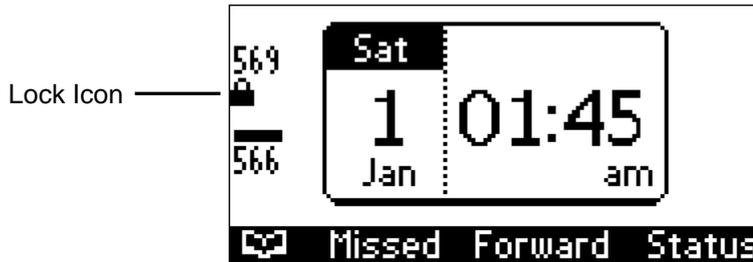
When your phone is configured with multiple lines (extensions), you can perform a lock per extension or for all extensions, as described in the procedure below.

➤ **To lock your phone:**

1. Press the star key until the Lock screen is displayed:



2. Choose an extension (or **All Extensions** to lock all extensions) that you want to lock, using the ▲ and ▼ Navigation keys, and then press the **Lock** softkey; the extension is locked and the lock icon is displayed with the extension number in the idle screen, as shown below:



➤ **To unlock your phone:**

1. Press the star key until the Lock screen is displayed:



2. Choose an extension (or **All Extensions** to unlock all extensions) that you want to unlock, using the ▲ and ▼ Navigation keys, and then press the **Unlock** softkey; you are prompted to enter the unlock password, as shown below:



3. Enter the password for unlocking the phone, and then press the **OK** softkey; the extension(s) is unlocked and the **lock** icon no longer appears on the screen.

4.13 Changing your Presence Status

If your phone is deployed with AudioCodes solution for Microsoft Lync Server 2010, you can assign a presence status to control how or whether you want people to contact you. By default, your status is based on your Lync client. You can set your phone to one of the following presence status:

- **Available:** You are online and available to be contacted.
- **Busy:** You are not to be interrupted. Busy or in a phone call or meeting.
- **Do not disturb:** You do not want to be disturbed.
- **Away:** You want to hide your status (appear to others that you are currently away).
- **Be right back:** You are away briefly and will return shortly.

Table 4-2: BLF General LED Description for Presence Status

LED Color	LED Description
Green	User is available
Orange	User is away
Red	User is busy (e.g., in a call)

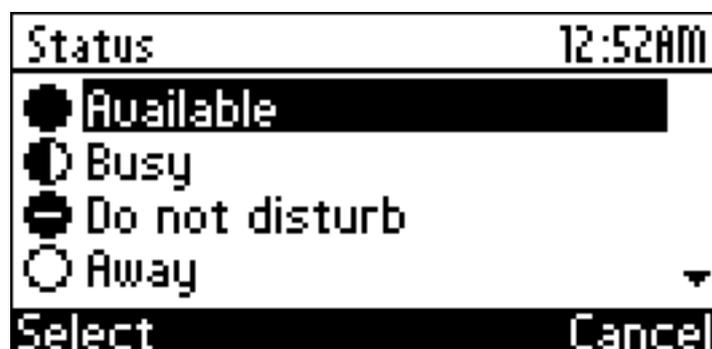


Notes:

- This feature is applicable only when the phone is deployed with AudioCodes solution for Microsoft Lync Server 2010. For more information, refer to the *Administrator's Manual*.
- The presence status can also be changed by the Lync client running on a computer. This status is reflected on the LCD of the phone.
- The phone's Busy Lamp Field (BLF) LEDs also reflect the presence status of contacts listed in your directory that are assigned to the Speed Dial keys.

➤ **To change your presence status:**

1. In idle mode, press the **Status** softkey; the phone is locked and the **lock** icon is displayed on the screen, as shown below:



2. Choose a presence status using the  and  Navigation keys, and then press the **Select** softkey; the status is displayed on the screen in idle mode.

Reader's Notes

5 Basic Phone Operations

This section discusses basic phone operations.

5.1 Using the Phone's Audio Devices

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

- **Handset:** Simply lift the handset off the cradle to answer or make a call.
- **Hands-free modes:**
 - **Speakerphone:** The speakerphone can be activated during a call and when making a call, by one of the following:
 - ◆ **SPEAKER key:** Press the SPEAKER key. To terminate the call, press the SPEAKER key again.
 - ◆ **LINE key:** When the phone's handset is on-hook, press any one of the LINE keys. Once the LINE key is pressed, a dial tone is heard in hands-free mode and the pressed LINE is now active.
 - ◆ **Keypad digits:** When the phone's handset is on-hook and you want to dial a number, press the required digits.
 - **Headset:** While talking on the phone, you can relay audio to a connected headset. Press the HEADSET key to enable the headset function. To terminate the call, press the HEADSET key again.

During a call, you can easily change the currently used audio device:

- **Changing from speakerphone/headset to handset:** Simply pick up the handset. The speakerphone/headset is automatically disabled and its LED turns off.
- **Changing from handset to speakerphone/headset:** While the handset is off-hook, press the SPEAKER/HEADSET key, and then return the handset to the cradle. The speakerphone/headset is activate and its LED lights green.

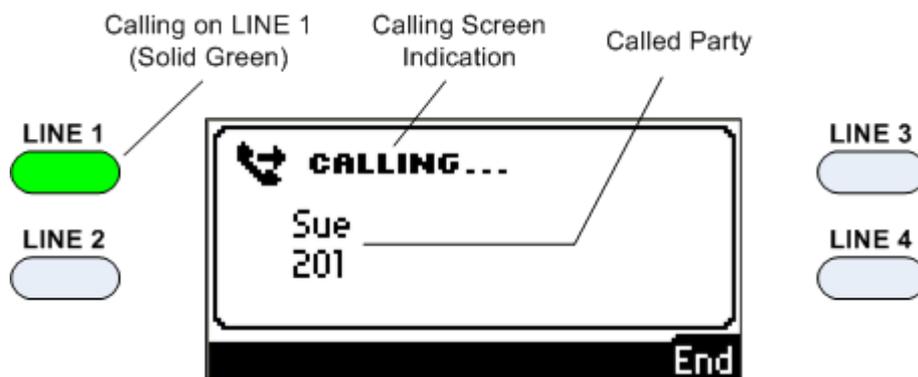
5.2 Making Calls

The phone offers a variety of ways that you can make a call, discussed later in this section.

When you dial a number and the phone calls the party, the following indications are provided by the phone:

- LCD screen displays the  icon and “CALLING” indication, together with the called party’s phone number (or contact name if listed in the phone directory).
- Ring-back tone is heard.
- LINE key (on which the call is made) is lit solid green.

The above indications are shown in the figure below:



➤ **To end dialing of a call (before the call is answered):**

- Press the **End** softkey or the SPEAKER key.



Note: For advanced dialing using the phone directory, speed dials, and multiple lines, see Section 4.10 on page 40, Section 4.11 on page 45, and Section 6.11 on page 74 respectively.

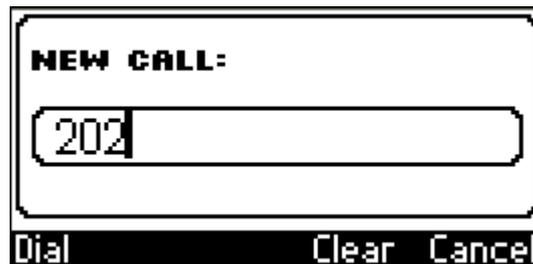
5.2.1 Dialing from the Keypad

You can make calls by dialing the number directly from the phone's keypad. If before dialing, you press the SPEAKER key or lift up the handset, you can also dial a destination based on a URL address (e.g., with a host and domain name, or IP address) or alphabetical letters (e.g., "tvservice").

➤ **To make a call using the keypad:**

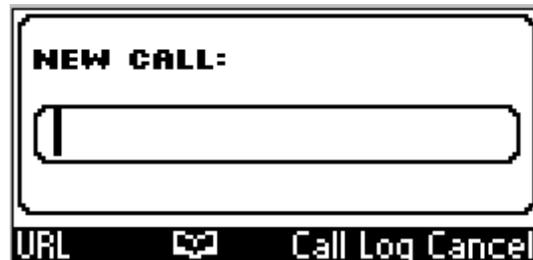
1. Destination number type:

- **Regular digit number:** Enter the telephone number using the alphanumeric keypad; the following is displayed on the LCD screen.

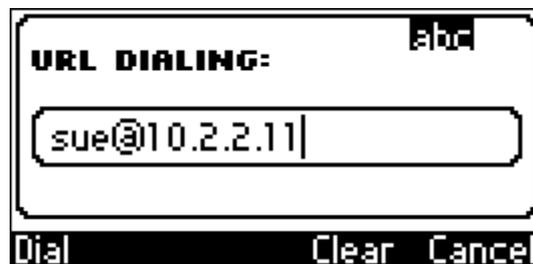


- **URL or alphabetical destination:**

- d. Press the SPEAKER key or lift up the handset; the following is displayed with the URL softkey:



- e. Press the URL softkey, and then enter the destination address using the symbols and characters mode accessed by pressing the # key (for more information, see Section 3.4 on page 24).



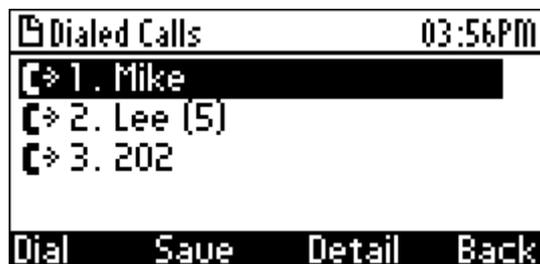
2. To delete (from right to left) entered digits, press the **Clear** softkey. To cancel the call, press the **Cancel** softkey.
3. Once you have completed entering the number, you can then dial the number by performing one of the following:
 - Pressing the # (pound) key (applicable only for regular digit number dialling).
 - Pressing the **Dial** softkey.
 - Waiting a few seconds (without pressing anything) - the phone dials the number automatically.

5.2.2 Redialing a Number

You can redial a number that was previously dialled.

➤ **To redial a number:**

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



2. Select the number that you want to dial (using the  and  Navigation keys).
3. Press the **Dial** softkey or ENTER key to make the call.

5.2.3 Dialing a Missed Call

The phone logs all missed calls. You can easily dial a missed call, as described in the procedure below.

➤ **To dial a missed call:**

1. Access the Missed Calls screen, by pressing the **Missed** softkey (in the idle display), as shown below:



The Missed Calls screen is shown below:



2. Choose (using the ▲ and ▼ Navigation keys) the missed call that you want to dial.
3. Press the **Dial** softkey or ENTER key to make the call.

5.2.4 Viewing Call Charge

If your system administrator has implemented billing (referred to as *Advice of Charge*) in the enterprise's phone system, the charge of an ongoing call is displayed on your LCD screen, as shown below (in US dollars for this example):



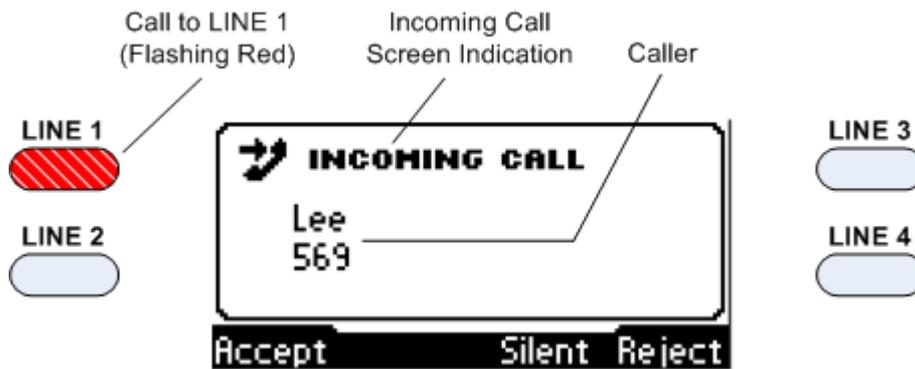
Note: Advice of Charge can be configured only by the system administrator. For more information, refer to the *Administrator's Manual*.

5.3 Answering Calls

The phone provides the following indications for an incoming call:

- LCD screen displays the  icon and "INCOMING CALL" indication, together with the caller's phone number (or contact name if listed in the phone directory).
- Phone rings.
- Available LINE key LED (on which the call is received) flashes red.
- Ring LED flashes red.

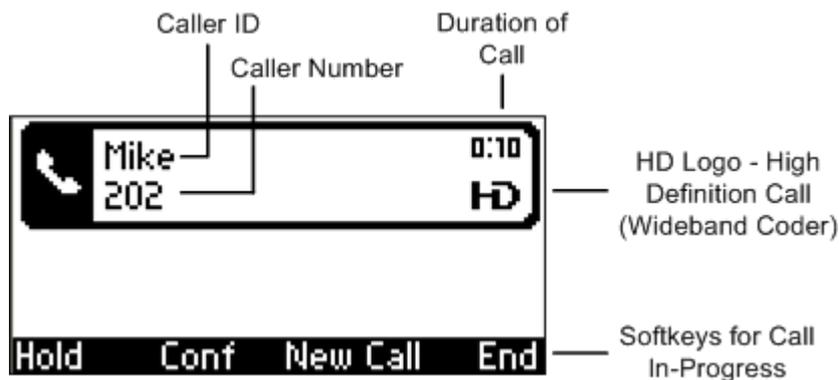
The above indications are shown in the figure below:



➤ **To answer an incoming call:**

- **Handset:** Pick up the handset.
- **Headset:** Press the HEADSET key. Note: Ensure that your headset is connected to the phone.
- **Speakers:** Press the SPEAKER key.
- **Softkey:** Press the **Accept** softkey. The speakerphone is automatically activated.
- **LINE key:** Press the flashing LINE key.

When you answer the call, the LCD screen displays the  icon, and the caller's details and call duration as shown below:



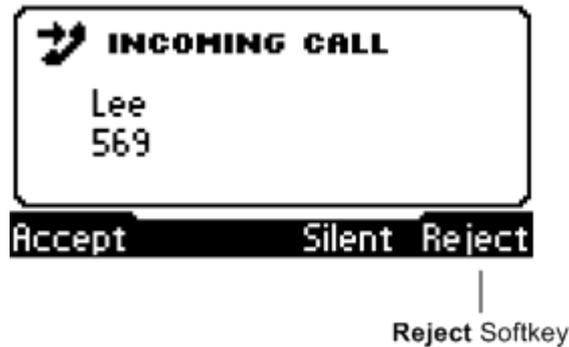
Note: An HD logo displayed in the LCD screen (see figure above) indicates a high-definition call (which uses a wideband voice coder).

5.4 Rejecting Incoming Calls

You can manually reject an incoming call. When you do this, the caller hears a busy tone from your phone.

➤ **To reject an incoming call:**

- Press the **Reject** softkey.

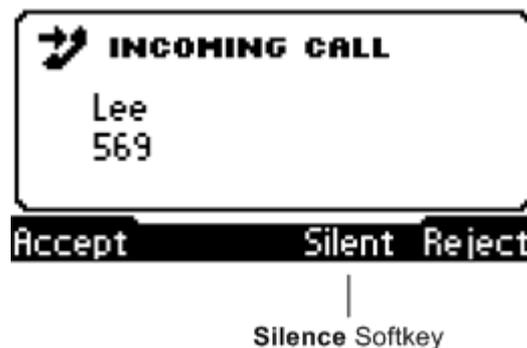


5.5 Silencing Incoming Calls

You can manually silence the ringing of an incoming call. When you do this, 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 by performing any of the normal procedures for answering calls, for example, pressing the LINE key or picking up the handset.

5.6 Ending Established Calls

You can end an established call as described in the procedure below.

➤ **To end a call:**

- **Handset:** Return the handset to the phone cradle (if the handset was used to take the call).
- **Headset:** Press the HEADSET key.
- **Speakers:** Press the SPEAKER key.
- **Softkey:** Press the **End** softkey.

5.7 Viewing Logged Missed, Received and Dialed Calls

Your phone stores information of missed, received, and dialed calls.

In idle display, the phone indicates missed calls by displaying “Missed Calls” with the number of missed calls.



➤ To easily view missed calls from the idle display:

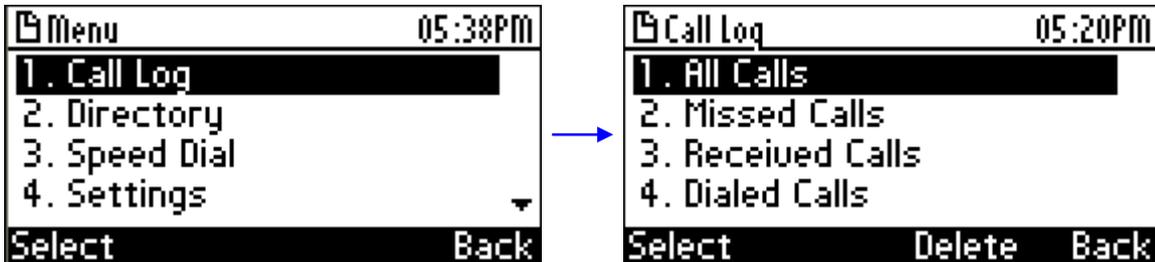
- Press the **Missed** softkey. For a description of handling missed calls, see the procedure below for viewing all types of logged calls.



Note: If you view missed calls by pressing the **Missed** softkey, the missed calls notification no longer appears on the screen and appears again at another missed call event.

➤ To view call history:

1. Access the **Call Log** screen (MENU key > **Call Log** menu).



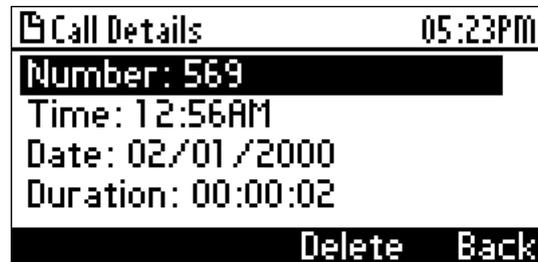
2. Choose the required menu option (using the ▲ and ▼ Navigation keys):
 - **All Calls:** displays calls that were missed, received and dialed
 - **Missed Calls:** displays a lists of calls that were not answered
 - **Received Calls:** displays a list of the most recently answered numbers
 - **Dialed Calls:** displays a list of the most recently dialed numbers

3. Press the **Select** softkey; a list of the logged calls is displayed (for example, missed calls as shown below):



4. Press the required softkey:

- **Dial:** dials the number of the selected logged entry.
- **Save:** saves the related information about the call entry in the personal directory (for adding a contact in the directory, see Section 4.10 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
- ◆ **Time:** time the call was logged
- ◆ **Date:** date the call was logged
- ◆ **Duration:** duration of the call



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 base. In 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 appears again at another missed call event.

Reader's Notes

6 Advanced Phone Operations

This chapter describes advanced phone operations.

6.1 Answering Waiting Calls

You can accept another incoming call on an extension (or LINE) that is already in an active call. The procedure below describes how to answer a waiting call and is based on the following example scenario:

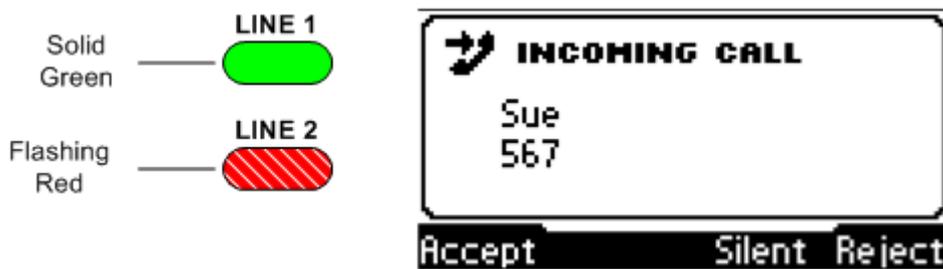
a. Call in progress with “Mike” on LINE 1:

- LINE 1 LED is lit green
-  icon displayed on the LCD screen



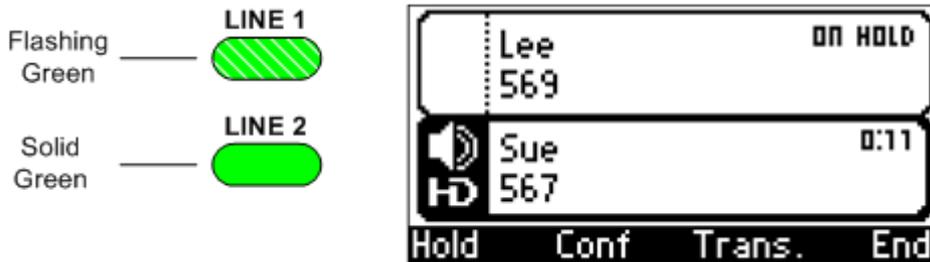
b. Incoming waiting call from “Sue”:

- LINE 2 LED flashes red
- “INCOMING CALL” displayed on the LCD screen



➤ **To answer a waiting call:**

1. Press the LINE key that is flashing red to answer the waiting call (e.g., LINE 2 to answer a call from “Sue”); the following occurs:
 - The pressed LINE key (e.g., LINE 2) LED changes to solid green and the  icon is displayed in the LCD screen for the answered waiting call (e.g., for “Sue” on LINE 2).
 - The previous call (e.g., “Mike”) is put on hold (“ON HOLD” is displayed), its LINE key LED (e.g., LINE 1) flashes green, and the  icon no longer appears.



2. To toggle between the calls, press their respective LINE keys.



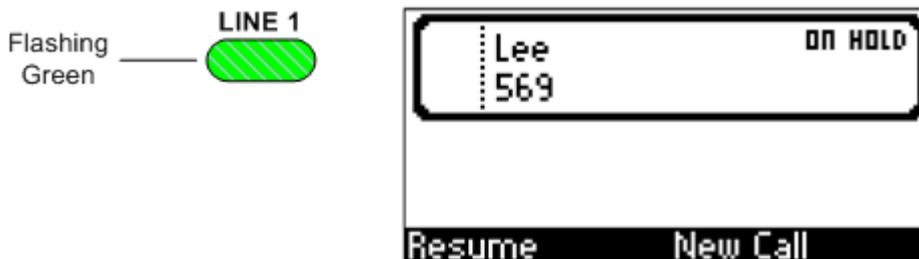
Note: To enable call waiting on your phone, see Section 4.8 on page 37.

6.2 Placing Calls On Hold

You can place a call on hold. This is typically used to answer a second incoming call (see Section 6.1 on page 63) or make another call.

➤ **To place a call on hold:**

- Press the HOLD key (or the **Hold** softkey); the call is put on hold and the following indications occur:
 - Corresponding LINE key flashes green.
 - LCD screen displays “ON HOLD”.
 -  icon no longer appears on the screen.



➤ **To retrieve a call on hold:**

- Press the HOLD key again.
- Press the **Resume** softkey.
- Press the corresponding LINE key (flashing green).

6.3 Placing Calls to Phone Directory Contacts

The procedure below describes how to make calls to contacts that are listed in your phone directory. For managing your phone directory, see Section 4.10 on page 40.

➤ **To make a call using the phone directory:**

1. Access the phone directory, (see Section 4.10.1 on page 40).
2. Scroll through the list (using the ▲ and ▼ Navigation keys) to select the contact that you want to call.



3. Press the **Dial** softkey (or the ENTER key) to make the call.

6.4 Making Calls using Speed Dialing

You can use the Speed Dial keys (located on the right side of the phone) to quickly dial a configured speed dial number. For assigning phone numbers to speed dial keys, see Section 4.11 on page 45.

➤ **To make a call using the Speed Dial key:**

- Press the required Speed Dial key (1-12) that has been assigned a phone number; the phone automatically dials and calls the number.



Note: If you press a Speed Dial key that has not been assigned a phone number, the LCD screen displays a screen allowing you to assign a number to the pressed Speed Dial key.

6.5 Making Multiple Calls with LINE Keys (Single-Line Mode)

You can make up to two calls on the same line (i.e., extension number), using LINE keys 1 and 2. This is applicable when the phone is in single-line mode (i.e., when only one line extension number is defined for the phone).



Note: For making multiple calls on multiple lines, see Section 6.11 on page 74.

The call status is indicated by the LINE LED, as described in the table below:

Table 6-1: LINE LED Description for Single Lines

Color	State	Description
Green	On	Active call
Red	Flashing	Incoming call
Green	Flashing	Call is on hold
-	Off	Line is not in use

➤ **To make multiple calls on a line:**

1. Make the first call:

- a. Press the LINE 1 key; the LINE 1 key LED is lit green and the following appears on the screen:



- b. Enter the phone number that you want to call, and then press the **Dial** softkey; the phone calls the number:



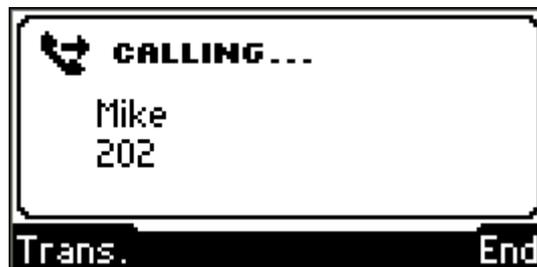
When the called party answers the phone, the following is displayed:



2. Make the second call:
 - a. Press the LINE 2 key; LINE 1 is put on hold and its LED flashes green, and LINE 2 key LED is lit green and the screen prompts you to enter the phone number of the second call:



- b. Enter the phone number that you want to call, and then press the **Dial** softkey; the phone calls the number:



When the called party answers the phone, the following is displayed:



You can toggle between the calls, as described in the procedure below:

- **To toggle between calls:**
 - Press the LINE key (flashing green) of the call that is on hold.
 - or-
 - Using the ▲ and ▼ Navigation keys, select the call that is on hold, and then press the **Resume** softkey or the ENTER key.

6.6 Transferring Calls

You can transfer a call to another party. This includes transferring a single, established call or transferring a second concurrent call.

The transfer of the call can be done using one of the following methods:

- **Attended Transfer:** If you have an established call, you can put the call on hold and establish a second call, and then transfer the first call party to the second call party. This method is supported only when you have a single established call.
- **Semi-attended Transfer:** If you have an established call, you can put the call on hold, dial a second destination, and then while the call is ringing you can transfer the call to the second destination. In other words, this is similar to Attended Transfer, except that the call is transferred before the second party answers.
- **Blind Transfer:** If you have an established call and then receive an incoming call, you can immediately transfer the incoming call to another call party without speaking to these two call parties. During this time, your initial call is put on hold. For example, if you have an established call with B and you notice an incoming call from C, without answering C you can transfer the call to a new destination D.

6.6.1 Call Transfer with Single Established Call

The procedure below describes how to transfer a call when you have only a single established call.

➤ **To transfer a call with only a single established call:**

1. While the call is in progress, press the TRANSFER key; the call is put on hold and the following is displayed:



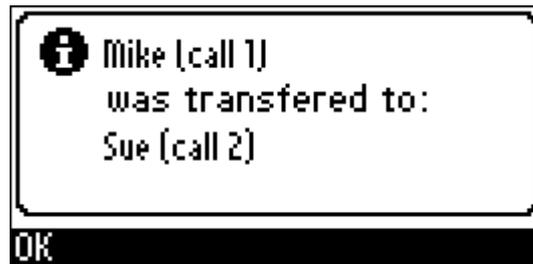
2. Enter the number to where you want to transfer the call, and then press the **Dial** softkey; the phone calls the number, as displayed below:



- To transfer the call immediately before the party answers (i.e., semi-attended transfer), press the **Trans** softkey; otherwise, wait until the called party answers the call, as shown below:



- To transfer the call, press the **Trans** softkey; the call is transferred:



6.6.2 Call Transfer with Two Concurrent Calls

The procedure below describes how to transfer one of two established, concurrent calls. In this scenario, the call is transferred using the semi-attended transfer method.

➤ **To transfer a call with two established calls:**

- Place the call that you want to retain on-hold; the second call that you want to transfer becomes the active call.
- Press the **Trans** softkey (or the TRANSFER key); the call you want to transfer is put on hold as well and the following is displayed:



- Enter the number to where you want to transfer the call, and then press the **Trans** softkey; the phone calls the number and transfers the call immediately, keeping the first call on hold:



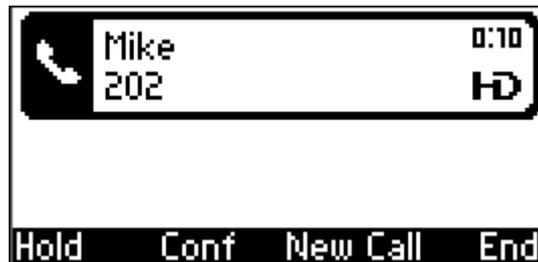
- To resume the held call, press the **Resume** softkey.

6.7 Hosting Three-Way Conference Calls

You can make a three-way conference call between your phone and two other called parties.

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

1. Call the first participant; the call is established:



2. Press the **Conf** softkey (or place the first participant on hold); the following is displayed:



3. Enter the number of the second participant, and then press the **Dial** softkey; the phone calls the second party:



When the party answers, a call is established between you and the second participant, as displayed below:



4. Press the **Conf** softkey to include all participants in the call; the conference call is established and the screen lists all the participants in your conference call, as shown below:



5. To end the conference call, you can either hang up the phone or press the **End** softkey.

6.8 Muting Calls

The phone allows you to mute the microphone (of the handset, headset, or speakerphone) during a call so that the other party cannot hear you. You can still hear the other party while the call is muted. Muting calls can also be used during conference calls.

➤ **To mute/unmute a call:**

1. During a call, press the MUTE key; the LED of the MUTE key is lit red.
2. To resume the conversation, press the MUTE key again to unmute the call.

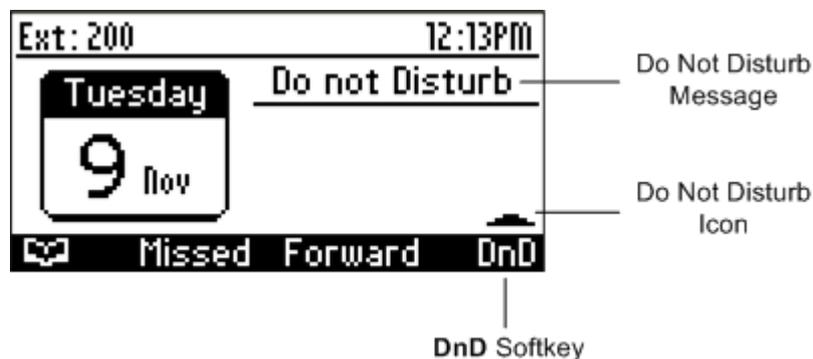
6.9 Activating Do Not Disturb

The Do Not Disturb feature allows you to prevent the phone ringing for and receipt of incoming calls. When Do Not Disturb is activated and someone calls your phone, the following occurs:

- The caller hears a tone indicating that your phone is busy.
- The call is blocked and the phone's main screen displays the "Missed Calls" notification.

➤ **To activate Do Not Disturb:**

1. Ensure that the phone is in idle state (i.e., you are currently not in any active call or dialing a number) and that the main screen is displayed.
2. Press the **DnD** softkey; incoming calls are blocked and the Do not Disturb notification and icon appear on the screen, as shown below:



➤ **To deactivate Do Not Disturb:**

1. Ensure that the phone is in idle state (i.e., you are currently not in any active call or dialing a number) and that the main screen is displayed.
2. Press the **DnD** softkey; the **Do Not Disturb** icon no longer appears on the screen and your phone now rings for incoming calls.

6.10 Retrieving Voice Mail Messages

When you have at least one new message in your voice mail box, the VOICE MAIL LED key is lit red. This is typically referred to as message waiting indication (MWI).

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

- Press the VOICE MAIL key; the phone dials your voice mail box. Follow the instructions of your voice mail provider as required.

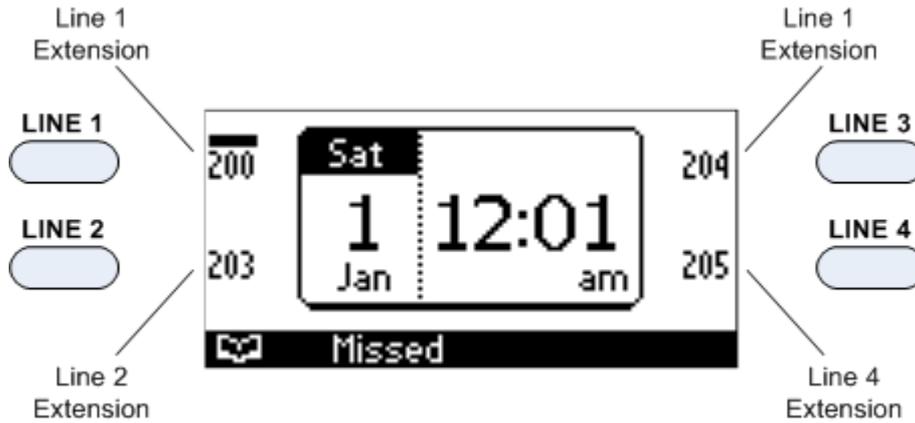


Note: If the voice mail box phone number has not been configured by your system administrator, then after pressing the VOICE MAIL key, enter the mail box phone number and then press the **Save** softkey. Press the VOICE MAIL key again to listen to voice messages.

6.11 Using Multiple Lines

Your phone can support up to four lines. Each line is configured per LINE key with its own extension number.

The figure below displays the main screen when the phone is setup with multiple lines. The extension number of each line is displayed alongside its corresponding LINE key.



The LINE keys include LEDs that display the status of the line, as described in the table below:

Table 6-2: LINE LED Description for Multiple Lines

Color	State	Description
Green	On	Line is in use – active call
	Blinking	Line is on hold
Red	Blinking	Incoming call indication
-	Off	Line is not used



Notes:

- Multiple lines can be configured only by your phone/network Administrator.
- The following call features are currently not available for multiple lines: Do Not Disturb, Call Forwarding, Call Transfer, and Three-Way Conferencing.

6.11.1 Choosing the “Default” Line

You can select the line that you want as your “default” line. The default line is the line on which all new calls are made, without having to select the line by pressing its LINE key. The “default” line is indicated in the screen by a bar above its extension number, as shown below:



➤ **To change the “default” line:**

1. Ensure that you are in the main screen and the phone is in idle state (i.e., no calls).
2. Choose the default line using one of the following methods:
 - Press the LINE key corresponding to the line extension that you want set as default
 - Press the Navigation keys.
 All new calls are now made from this line.

6.11.2 Making a Call on a Specific Line

The procedure below describes how to make a call on a specific line.

➤ **To make a call on a specific line:**

1. If the call is to be made on a line other than the default line (see the previous section), then select the required line using one of the following methods:
 - Press the LINE key of the required line; the LINE key LED is lit green and the NEW CALL screen prompts you to enter the phone number:



- Using the Navigation keys, move the “default” line bar to the required line phone extension (see previous section).
- When entering the phone number, change the current line by using the ▲ and ▼ Navigation keys. The line number is displayed on the screen, as shown below:



2. Enter the phone number or select the contact from the phone directory, and then press the **Dial** softkey; the phone calls the dialed number and the line on which the call is made is indicated in the screen, as shown below:



When the called party answers, the following screen appears:



If you want to make another call, you can put this call on hold and make another call on the same line or a different line, as described in the following section.

6.11.3 Making Multiple Line Calls

Your phone can sustain multiple calls at the same time. This can be achieved by making calls on different lines and putting them on hold. In addition, as each line can support up to two calls, you can therefore have up to eight calls running on your phone simultaneously, where one call is active and the rest are on hold.

The procedure below describes how to make multiple line calls and is based on the following example scenario:

- LINE 1 (ext. 200) calls "Sue" (phone number 201)
- LINE 2 (ext. 203) calls "Mike" (phone number 202)
- LINE 3 (ext. 204) calls "Lee" (phone number 206)
- LINE 3 (ext. 204) makes another call to "Aniesta" (phone number 207)

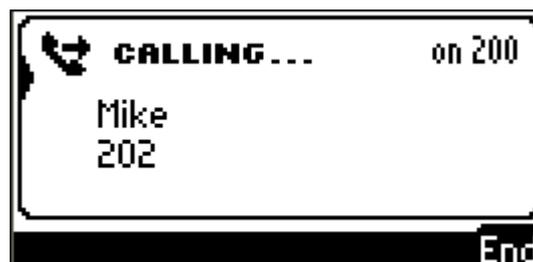
➤ **To make multiple line calls:**

1. Make a call on a line extension:

- a. Press the required LINE key (e.g., LINE 1, extension 200); the NEW CALL screen appears:



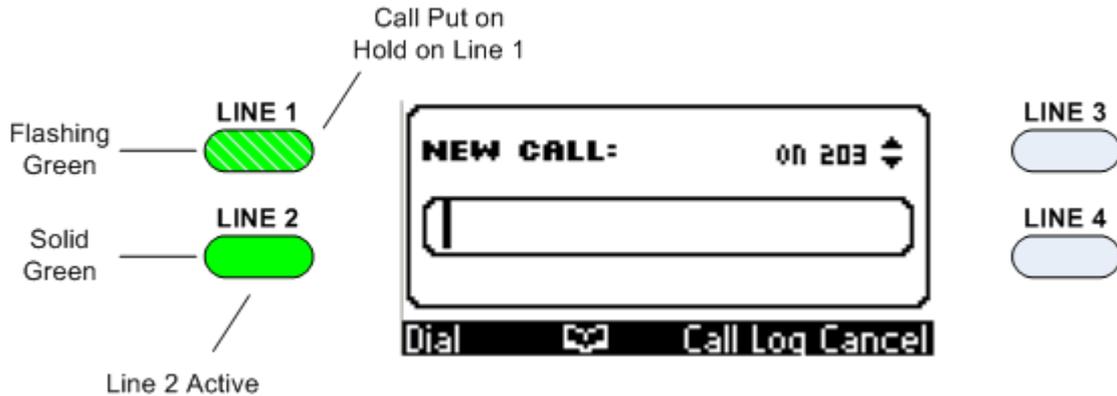
- b. Enter the phone number or select a contact from your directory (e.g., "Mike"), and then press the **Dial** softkey; the phone calls the phone number on Line 1:



When the called party answers, the following screen appears:



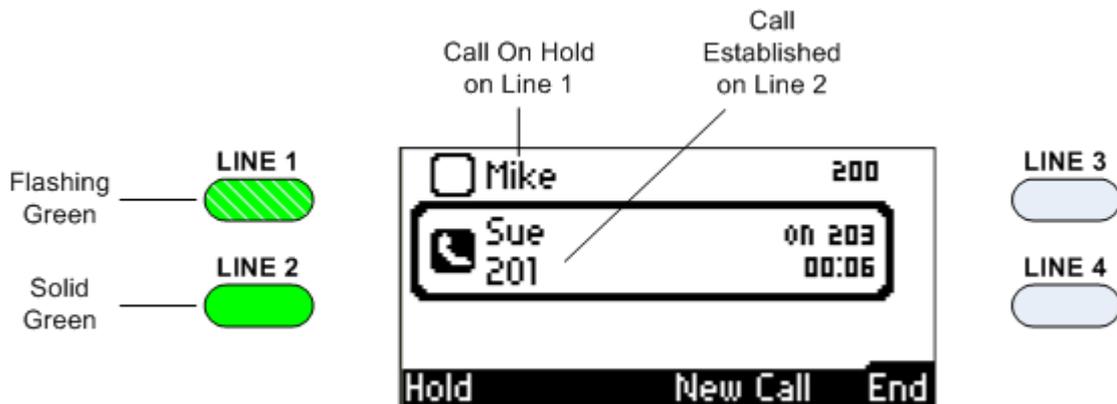
2. Make a second call on a different line extension:
 - a. Press the required LINE key (e.g., LINE 2, extension 204); the currently active call on the other line extension (e.g., LINE 1) is automatically put on hold and you are prompted to enter the phone number for calling on Line 2.



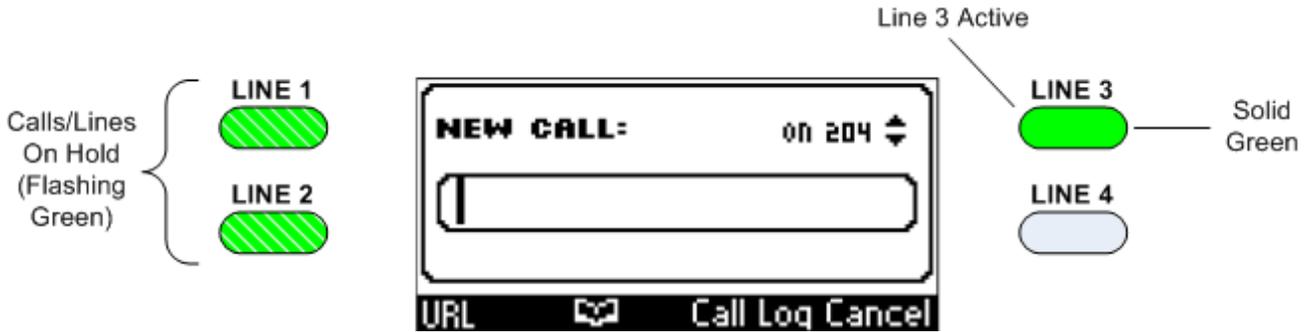
- b. Enter the phone number or select a contact from your directory (e.g., "Sue"), and then press the **Dial** softkey; the phone calls the phone number.



When the called party answers, the following screen appears:



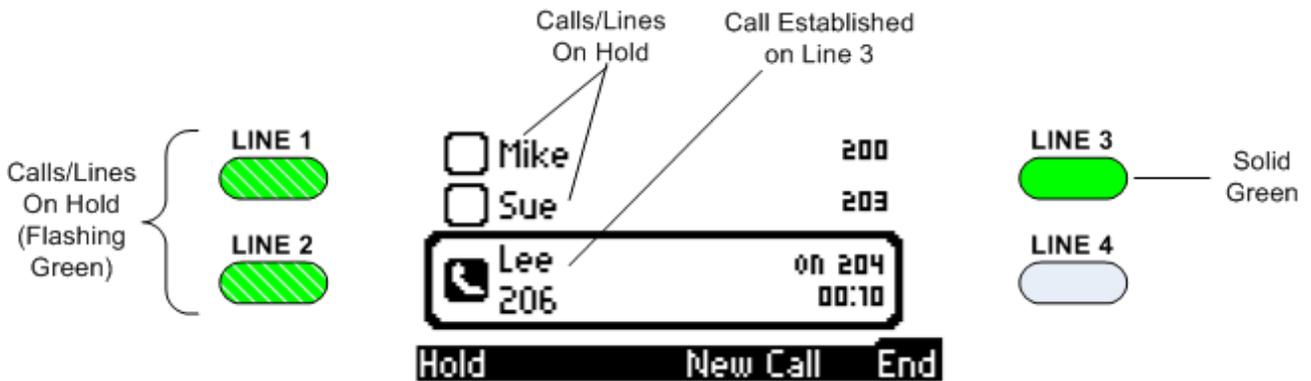
3. Make a third call on a different line extension:
 - a. Press the required LINE key (e.g., LINE 3, extension 204); the currently active call on the other line extension (e.g., LINE 2, "Sue") is automatically put on hold and you are prompted to enter the phone number for calling on Line 3.



- b. Enter the phone number or select a contact from your directory (e.g., "Lee"), and then press the **Dial** softkey; the phone calls the phone number on Line 204.



When the called party answers, the following screen appears:



4. Make a fourth call on the same line (e.g., LINE 1):
 - a. Put the current call (e.g., Mike) on hold, by pressing the Hold key.
 - b. Press the **New Call** softkey, enter the phone number, and then press **Dial** softkey.

6.11.4 Toggling Between Multiple-Line Calls

Once you have established calls on different lines, you can easily toggle between the calls. In multiple lines, only one line is active and the rest are on hold. Therefore, switching between lines simply means placing the currently active call on hold and then resuming a previously held call.

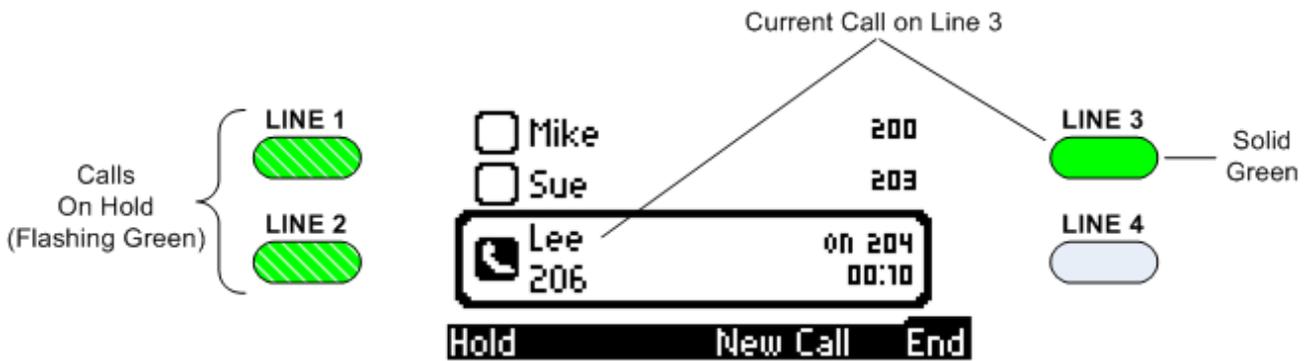
The LCD screen indicates an active line by the  icon. When the call is put on hold, this icon is replaced by the empty square  icon.

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

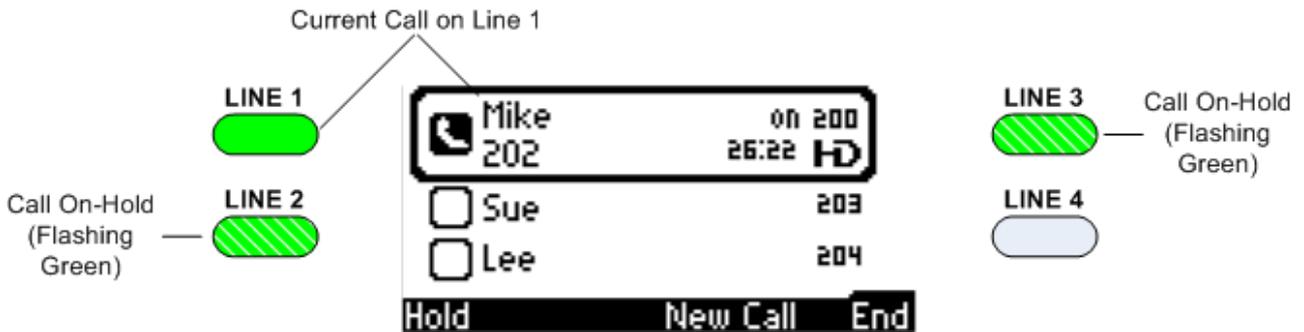
- Perform one of the following methods to switch calls:
 - **Using the LINE key:** Press the LINE key corresponding to the call on-hold of which you want to resume the conversation.
 - **Using Navigation keys and softkey:** With the  and  Navigation keys, select the call that you want to resume the conversation, and then press the **Resume** softkey.

The figures below display an example of switching from Line 3 (“Lee”) to Line 1 (“Mike”):

- **Initial state:** Line 3 active; remaining lines on hold



- **Switched line:** Line 1 active; remaining lines on hold:

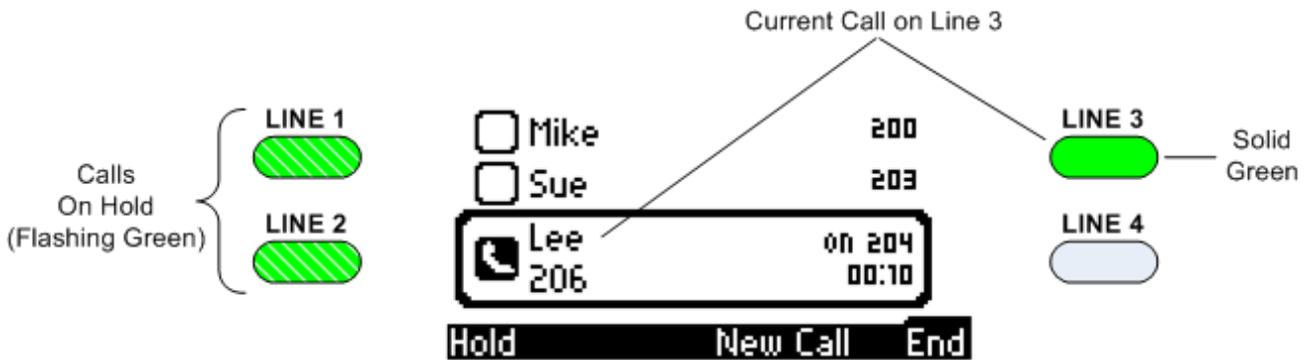


6.11.5 Making Two Calls on a Line

In addition to making calls on multiple lines, you can also make a second call on each line.

The procedure below describes how to make a second call on a line and is based on the following example scenario:

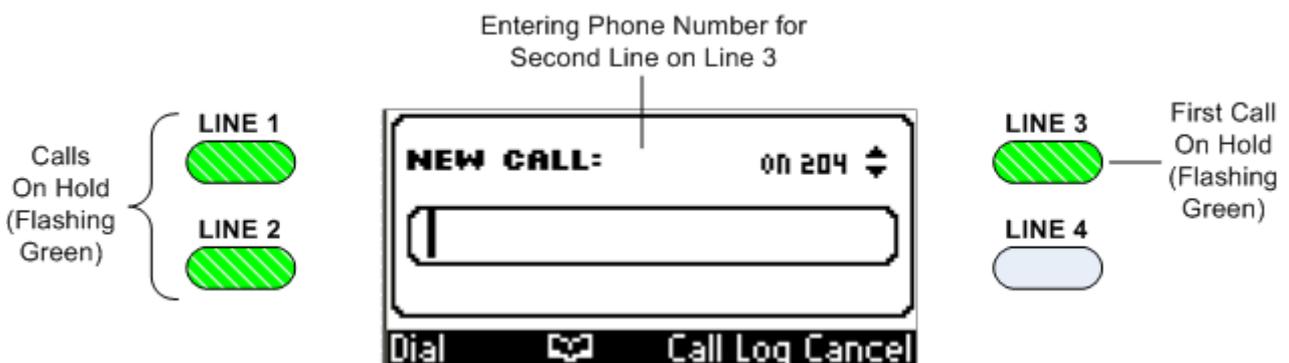
- LINE 1, LINE 2, and LINE 3 each have an established call
- LINE 3 (ext. 204) is currently active and the rest of the lines are on hold



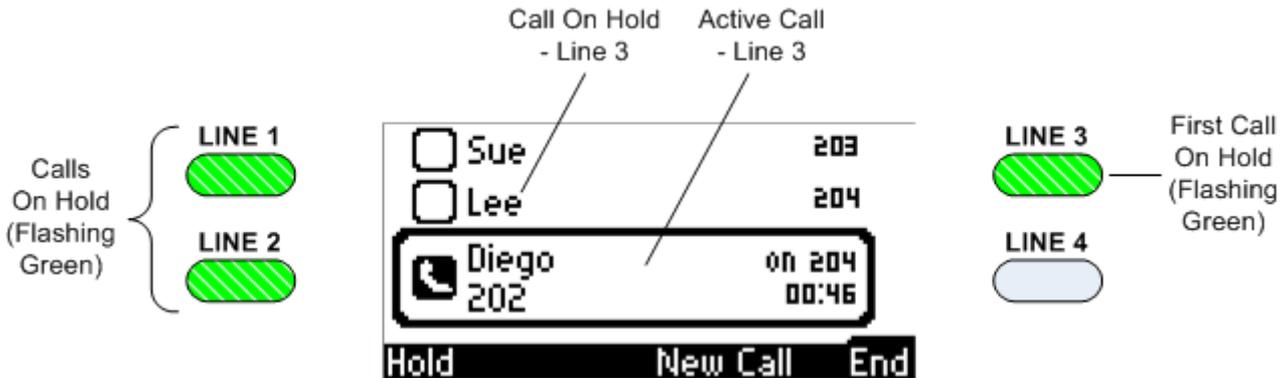
- LINE 3, currently conversing with “Lee”, wants to make a second call (to “Diego”, phone number 207)

➤ **To make a second call on a line:**

1. Select the line (e.g., LINE 3) on which you want to make a second call. This depends on whether the line is currently active or on hold:
 - **On-Hold Line:** If the line on which you want to make a second call is not currently active, then select the line using the and Navigation keys.
 - **Currently Active Line:** Press the **Hold** softkey.
2. Press the **New Call** softkey; call on LINE 3 is now also put on hold indicated by its LED flashing green, as shown below:



3. Enter the required number (or press  and select a contact from the directory), and then press the **Dial** softkey; the phone calls the number. When the called party answers, the following is displayed:



6.11.6 Toggling Between Calls on the Same Line

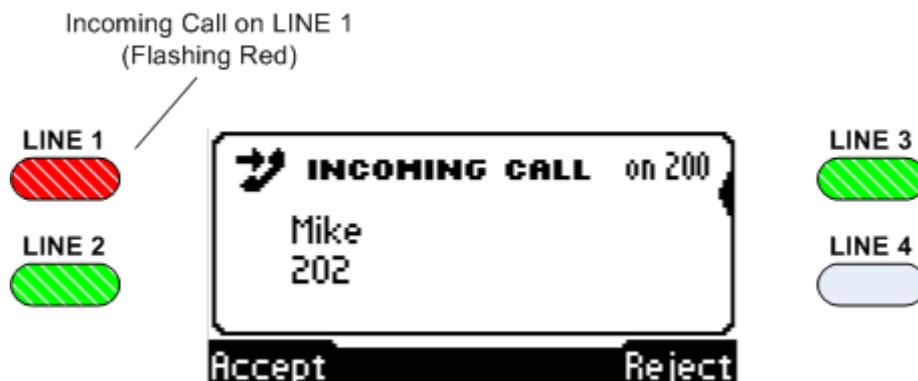
The procedure below describes how to toggle between two calls on a specific line. The method depends on whether the first-placed call is active or the second-placed call is active.

- **To switch from the first-placed call to the second-placed call:**
 - Using the  and  Navigation keys, 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:**
 - Press the LINE key to which the calls belong,
 - or-
 - Using the  and  Navigation keys, 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

An incoming call on a specific line is indicated by the LINE LED flashing red.

- **To answer a call:**
 - Press the LINE key (flashing red) on which the call is received or press the **Accept** softkey; the call is answered and all other calls are put on hold.



6.11.8 Ending Calls

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

➤ **To end a call:**

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

Reader's Notes

7 Troubleshooting

This chapter provides troubleshooting for solving any problems that may arise with your phone. If these troubleshooting measures do not resolve the problem, please 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 screen	No LAN network 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 not, then contact your system administrator.
Phone is not ringing	Ring volume is set too low	<ul style="list-style-type: none"> ▪ Increase the volume (as described in Section 4.7.1)
"Registration..." message displayed on LCD screen 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 screen for a line, this indicates that the line has not been successfully registered. For assistance, contact your system administrator.
LCD screen display is poor	LCD screen settings	<ul style="list-style-type: none"> ▪ Adjust the phone's screen contrast level (see Section 4.4) ▪ Adjust the screen's backlight timeout (see Section 4.5)
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 4.7.5).

User's Manual

320HD IP Phone

Version 1.6.0



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