

Nortel Networks Communication Server 1000

# IP Phone 2004

User Guide



# **Revision history**

#### September 2004

Standard 4.00. This document is up-issued to support Nortel Networks Communication Server 1000 Release 4.0.

#### October 2003

Standard 3.00. This document is up-issued to support Succession 3.0 Software and the Net6 Transformation Gateway feature.

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Standard 1.00.

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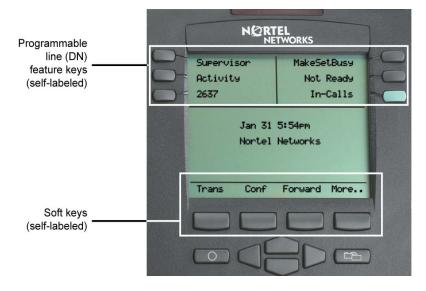
# About the IP Phone 2004

The IP Phone 2004 brings voice and data to the desktop by connecting directly to a Local Area Network (LAN) through an Ethernet connection.

**Note 1:** Not all features are available on all telephones. Consult your system administrator to verify which features are available for your use.

*Note 2:* In this guide, programmable line (DN)/feature key labels display beside the key, and soft key labels display directly above the key. Figure 1 shows key labels.

# Figure 1: Programmable line (DN)/feature key and soft key labels



## **Basic features**

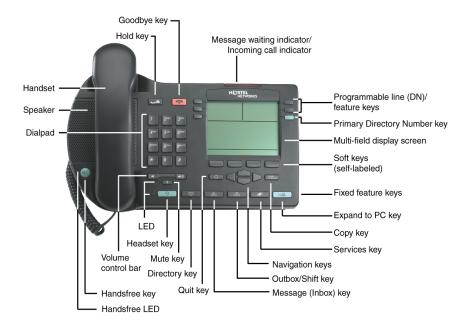
The IP Phone 2004 supports the following features:

- 12 programmable feature keys: six (physical) user-defined feature key labels and six lines/features accessed by pressing the Shift key
- four soft keys (self-labeled) providing access to a maximum of 10 features

*Note:* Your IP Phone 2004 may not be configured to support soft key functionality. Consult your system administrator.

- multi-field LCD display screen
- speaker for on-hook dialing or on-hook listening
- volume control bar for adjusting ringer, speaker, handset, and headset volume
- six specialized fixed keys:
  - Quit
  - Directory
  - Message (Inbox)
  - Outbox/Shift
  - Services
  - Expand to PC
- four call processing fixed keys:
  - Hold
  - Goodbye
  - Handsfree
  - Mute
- shared LAN access with a PC
- headset jack with On/Off key
- automatic network configuration
- hearing-aid compatibility

#### Figure 2: IP Phone 2004



## **Telephone controls**

*Note:* Your IP Phone 2004 may come with optional key caps. Text in parenthesis indicate labels appearing on the key caps. For example, (Services).



Use the Volume control bar to adjust the volume of the ringer, handset, headset, speaker, and the Handsfree feature. Press the right side of the rocker bar to increase volume, press the left side to decrease volume.

CallWait

Use the Primary Directory Number (DN) to access a single line and activate on-hook dialing.
 Programmable line (DN)/feature keys are extra DNs or feature keys used to access additional features.



A steady LCD light beside a line (DN) key indicates that the feature or line is active. A flashing LCD indicates the line is on hold or the feature is being programmed.



Use the **Goodbye** key to terminate an active call.



Press the **Hold** key to put an active call on hold. Press the line (DN) key beside the flashing LED indicator to return to the caller on hold.



Press the **Message (Inbox)** key to access your voice mailbox.



Use the **Navigation** keys to scroll through menus and lists appearing on the LCD display screen.



Press the **Services** key and use the navigation keys to access the following items:

- Telephone Options:
  - Volume adjustment
  - Contrast adjustment
  - Language
  - Date/Time
  - OnHook Default Path
  - Call Timer
  - Display diagnostics
  - Local DialPad Tone
  - Ring type
  - Change feature key label
  - Set Information
- Password Admin:
  - Station Control Password
- Display Network Diagnostics Utilities

*Note:* Only your system administrator or service provider can use Display Network Diagnostics Utilities to perform Internet diagnostics.

- Virtual Office Login and Virtual Office Logout (if Virtual Office is configured)
- Test Local Mode and Resume Local Mode (if Media Gateway 1000B is configured)

*Note 1:* Press the **Services** key to exit from any menu or menu item.

*Note 2:* The **Password Admin** menu many not be available on your IP Phone 2004. Consult your system administrator.



Press the **Headset** key to answer a call using the headset or to switch a call from the handset or handsfree to the headset.



Press the **Speaker** key to activate handsfree. The speaker LED indicator lights to indicate when handsfree is active.



Press the **Outbox/Shift** key to toggle between two feature key pages and to access an additional six lines/features and an additional 24 lines on the Nortel Networks IP Phone KEM.



Press the **Directory** key to access directory services.

စွဲ (Mute)	Press the <b>Mute</b> key to listen to the receiving party without transmitting. Press the <b>Mute</b> key again to return to two-way conversation. The <b>Mute</b> key applies to handsfree, handset, and headset microphones. The Mute LED indicator flashes when the Mute option is in use.
(Quit)	Press the <b>Quit</b> key to end an active application. Pressing the <b>Quit</b> key does not affect the status of calls currently on your telephone.
Fwd	<b>Soft keys</b> (self-labeled) are located below the LCD display screen. The LCD label above the key changes based on the active feature.
▶ Fwd	<i>Note:</i> When a triangle appears before a key label, the feature is active.
More	Press the More key to access the next layer of Soft keys (self-labeled).
	When a message is left for the user, the <b>Message waiting indicator</b> flashes. Also, this indicator flashes when the set ringer is ON.



The **Expand to PC** key to access external server applications such as Net6.



The **Copy** key is a fixed key that is reserved for future development.

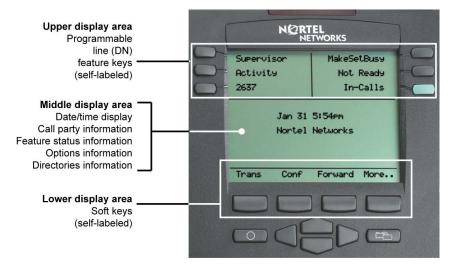
## Telephone display

The IP Phone 2004 has three display areas:

- The upper display area provides line and feature key status.
- The middle display area contains single-line information for items such as caller number, caller name, feature prompt strings, userentered digits, date and time information, and set information.
- The lower display area provides feature key label information.

Figure 3 shows an idle LCD display screen.

#### Figure 3: IP Phone 2004 LCD display screen



## **Call features and Flexible Feature Codes**

System administration is required for call features and Flexible Feature Codes (FFCs). Contact your system administrator to configure these features and codes on your telephone.

The Call features and FFCs must be assigned to your telephone and supported by system software.

# Security features

Your Station Control Password (SCPW) enables the following security features:

- Electronic Lock to prevent others from making calls from your telephone.
- Password-protected telephone features (for example, Personal Directory, Redial List, and Callers List).

Your initial SCPW is defined by your system administrator. Please contact your system administrator for detailed information.

#### To change your SCPW:



1. Press the Services key.



Select

- 2. Press the Up/Down keys to scroll and highlight Password Admin.
- 3. Press the Select key.



4. Use the dialpad to enter your password at the prompt.



 Press the Up/Down keys to scroll and highlight New Password.



6. Press the Select key.



7. Use the dialpad to enter the new password.



 Press Select to accept the new password.

*Note:* If you have been locked out of your IP Phone 2004, or have forgotten your SPCW, please contact your system administrator.

Note: The default setting for Password Protection is off.

#### To turn Password Protection On/Off:



1. Press the **Directory** key.



 Press the Up/Down navigation keys to scroll and highlight Change Protection Mode.

- 1 2\*\* 3\*\* Use the dialpad to enter your password 3. fre 5.0 fre (if Password Protection is enabled). Sun Sau Baar \* 0 0 Enter 4. Press the Enter key. Press the Up/Down navigation keys to 5. scroll and highlight one of the following: Enable Password Protection Disable Password Protection 6. Choose one of the following: Yes No Yes to accept the selection. or No to return to the Directory menu.
  - Done
- 7. Press the **Done** key.

# Enter and edit text

You can enter and edit text on your IP Phone 2004 using the following methods:

- · Enter and edit text using the telephone dialpad
- Edit text using the soft keys

# Enter text using the telephone dialpad

You can use the dialpad to enter text when you use features such as Personal Directory, Redial List and Callers List.

For example, if you want to enter the letter "A", press the number **2** key once. If you want to enter the letter "C", press the number **2** key three times.

*Note:* No letters are associated with the number 1 or the 0 keys.

# Edit text using the soft keys

You can use soft keys to edit text when you use features such as Personal Directory, Redial List, and Callers List.

To edit an entry in your Personal Directory, press the **Directory** key, and select the desired entry from your Personal Directory.

#### To edit text:

- 1. Press the Edit soft key.
- 2. Press the Left/Right navigation keys to move through the text.
- Select the appropriate editing soft key for the operation you want to perform.
- 4. If the key you want is not visible, press the **More..** soft key to access the next layer of soft keys.
- 5. Press the Up navigation key to access the symbols.

- 6. Press the Left/Right navigation keys to move to a specific symbol.
- 7. Press the **Choose** soft key to select a symbol.
- 8. Press the **Next** soft key to submit your changes.

Table 1 describes the soft key editing functions on the IP Phone 2004.

Table 1: Editing soft key description

Soft key	Description
Cancel	Action is cancelled.
Choose	Select a symbol.
Clear	Clear the input field.
Case	Switch the next character to either uppercase or lowercase.
Delete	Backspace one character.
Done/Select/Enter	Meaning depends on application.
More	Access additional soft keys.

# Connect the IP Phone 2004 components

## Before you begin



#### CAUTION Damage to Equipment

Do not plug the IP Phone 2004 into a regular telephone jack. This results in severe damage to the IP Phone. Consult your system administrator to ensure that you plug your set into a 10/100BaseT Ethernet jack.

## **Steps**

- 1. Connect one end of the handset cord to the handset jack (identified with a handset icon) on the back of the telephone. Connect the other end to the jack on the handset.
- Choose one of the following connections:
  - a. For a telephone not sharing LAN access with a PC, connect one end of the CAT5 line cable to the LAN ethernet port located on the back of the telephone (identified with a LAN icon). Plug the other end of the CAT5 line cable into the IP network.
  - b. For a telephone sharing LAN access with a PC, connect one end of the CAT5 line cable to the LAN ethernet port located on the back of the telephone (identified with a LAN icon) and the other end to the IP network. Insert a second CAT5 line cable into the PC ethernet port located on the back of the telephone (identified with a PC icon) and the other end into the computer's Ethernet port.
- Contact your installation technician for the proper power option. This telephone can be powered by an AC adapter or over a LAN.
- 4. Thread the cord around the strain relief, retaining hook, and channel provided for a secure power connection.

5. Secure the telephone footstand to the telephone base. Use the angle grip on the top back of the telephone to change position.

Figure 4 shows connections on the IP Phone 2004.

#### Figure 4: IP Phone connections



# Configure options on the IP Phone 2004

The IP Phone 2004 Services menu lists the following submenus:

- The Telephone Option menu enables you or your system administrator to configure telephone preferences.
- The **Password Admin** menu enables you or your system administrator to change the Station Control Password.
- The Virtual Office Login and Test Local Mode (for branch office) menus are listed when an IP Phone 2004 Class of Service is set for Virtual Office and branch office. (For more information, page 117).

*Note:* The **Password Admin**, **Virtual Office Login**, and **Test Local Mode** menus may not be available on your IP Phone 2004. Consult your system administrator.

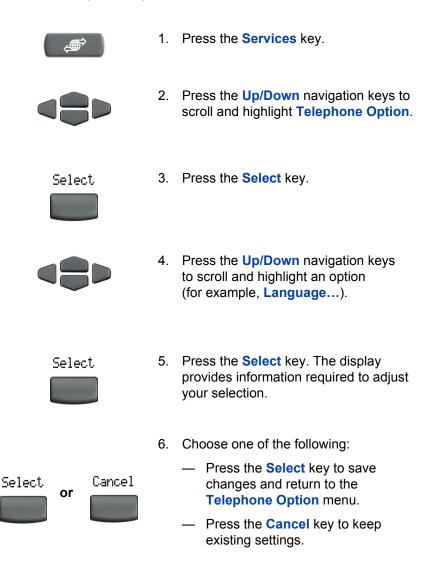
The Telephone Option menu offers the following options:

Volume adjustment...Display diagnosticsContrast adjustmentLocal DialPad ToneLanguage...Ring type...Date/Time format...Change feature key labelOnHook Default pathSet InfoCall TimerInfo

*Note:* When an option has a sublist, an ellipses (...) appears after the option.

# Use the Telephone Option menu

#### To use the Telephone Option menu:



# Adjust volume

To adjust the volume, press the **Services** key and select **Volume adjustment...** from the **Telephone Option** menu. Choose one of the following:

- Ringer
- Handset
- Handsfree
- Buzzer

#### To adjust Ringer volume:



Select

- Press the Up/Down navigation keys to scroll and highlight Ringer.
- 2. Press the Select key.



- 3. To increase or decrease the volume, choose one of the following:
  - Press the Lower/Higher soft keys.
  - Press the Up/Down navigation keys.

- 4. Choose one of the following:
  - Press the Select key to save the changes and return to the Telephone Option menu.
    - Press the Cancel key to keep existing settings.

#### To adjust Handset listen volume:

Cancel



or

Select

- 1. Press the **Up/Down** navigation keys to scroll and highlight **Handset listen**.
- Select
- 2. Press the Select key.

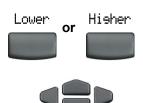
- Lower Hisher
- To increase or decrease the following, do one of the following:
  - Press Lower/Higher soft keys.
  - Press the **Up/Down** navigation keys.

- Select or Cancel
- 4. Choose one of the following:
  - Press the Select key to save the changes and return to the Telephone Option menu.
  - Press the Cancel key to keep existing settings.

#### To adjust the Handsfree listen volume:



- 1. Press the **Up/Down** navigation keys to scroll and highlight **Handsfree listen**.
- Select
- 2. Press the Select key.

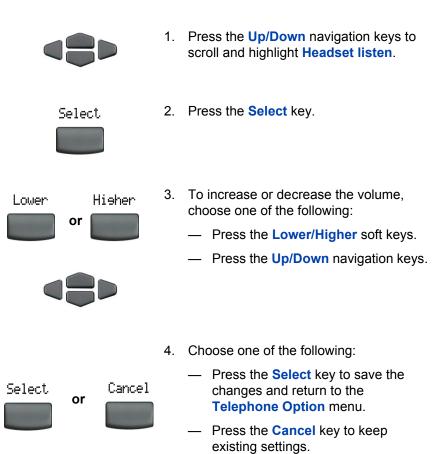


- 3. To increase or decrease the volume, choose one of the following:
  - Press the Lower/Higher soft keys.
  - Press the Up/Down navigation keys.



- 4. Choose one of the following:
  - Press the Select key to save the changes and return to the Telephone Option menu.
  - Press the Cancel key to keep existing settings.

#### To adjust the Headset listen volume:



#### To adjust the Buzzer volume:



- 1. Press the **Up/Down** navigation keys to scroll and highlight **Buzzer**.
- Select
- 2. Press the Select key.



- 3. To increase or decrease the volume, choose one of the following:
  - Press the Lower/Higher soft keys.
  - Press the **Up/Down** navigation keys.
- 4. Choose one of the following:



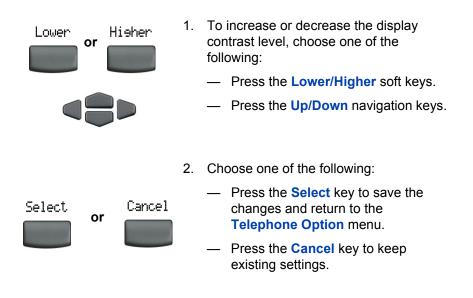
- Press the Select key to save the changes and return to the Telephone Option menu.
- Press the Cancel key to keep existing settings.

# Adjust display screen contrast

To adjust the LCD display screen contrast, press the **Services** key and select **Contrast adjustment** from the **Telephone Option** menu.

*Note:* If you have a Nortel Networks IP Phone KEM attached to your telephone, adjusting the telephone's LCD display screen contrast also adjusts the display screen contrast setting for the IP Phone KEM.

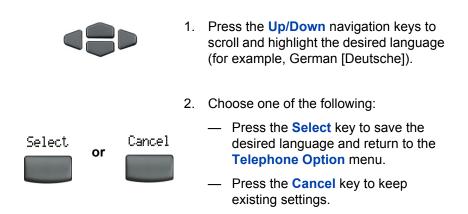
#### To adjust display screen contrast:



### Select a language

The display is available in multiple languages. To choose a language, press the **Services** key and select **Language...** from the **Telephone Option** menu.

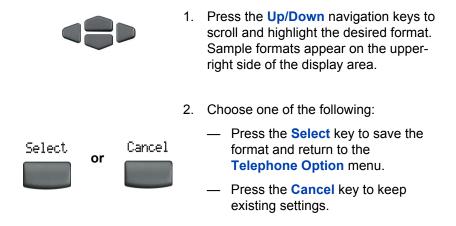
#### To select a language:



# Select Date/Time format

Several Date/Time formats are available. Formats are based on the 12-hour and 24-hour clocks. To select a date/time format, press the **Services** key and choose **Date/Time...** from the **Telephone Option** menu.

#### To select date and time:



# **Display diagnostics**

The Display diagnostics option tests the telephone's display screen and indicator lights. To access display diagnostics, press the **Services** key and select **Display Diagnostics** from the **Telephone Option** menu.

#### To select Display diagnostics:



- Press the Up/Down navigation keys to scroll through the list to view display capabilities.
- 2. Press the **Cancel** key to return to the **Telephone Option** menu.

### **Choose Local DialPad Tone**

The Local DialPad Tone option produces Dual-Tone Multi-Frequency (DTMF) sounds, a single tone, or no sound when you press a key on the dialpad. To choose a local dialpad tone, press the **Services** key and select **Local DialPad Tone** from the **Telephone Option** menu.

#### To choose a Local DialPad Tone:

			1.	Press the <b>Up/Down</b> navigation keys to scroll and highlight one of the following dialpad tones:
				<ul> <li>None to disable all tones.</li> </ul>
				<ul> <li>Short Click to enable a single tone for all keys.</li> </ul>
				<ul> <li>DTMF to turn on a separate DTMF tone for each key.</li> </ul>
	or	Cancel	2.	Choose one of the following:
Select				<ul> <li>Press the Select key to save the tone selection and return to the Telephone Option menu.</li> </ul>
				<ul> <li>Press the Cancel key to keep existing settings.</li> </ul>

### **Choose Ring type**

The Ring type... option sets the telephone's ring tone. To choose a ring type, press the **Services** key and select **Ring type...** from the **Telephone Option** menu.

#### To select a Ring type:

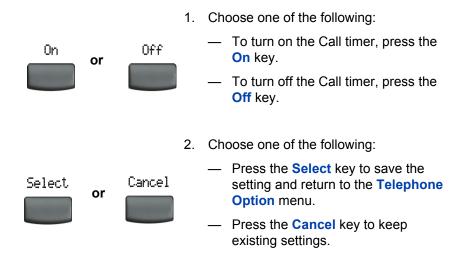


- Press the Up/Down navigation keys to scroll and highlight one of the ring types.
- 2. Press the **Play** key to sample the ring tone.
- 3. Choose one of the following:
  - Press the Select key to save the ring type and return to the Telephone Option menu.
  - Press the Stop key and use the Up/Down navigation keys to select a different ring type.
  - Press the Cancel key to keep existing settings.

### Enable call timer

The call timer measures how long you are on each call. To enable call timer, press the **Services** key and select **Call Timer** from the **Telephone Option** menu.

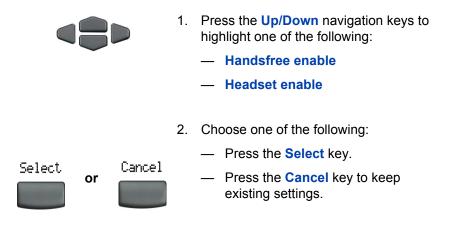
#### To enable Call Timer:



### **Enable OnHook Default Path**

The Onhook Default Path option allows you to use a headset or the Handsfree feature to operate your IP Phone while it is on-hook.To enable OnHook Default Path, press the **Services** key and select **OnHook Default Path** from the **Telephone Option** menu.

#### To enable OnHook Default Path:

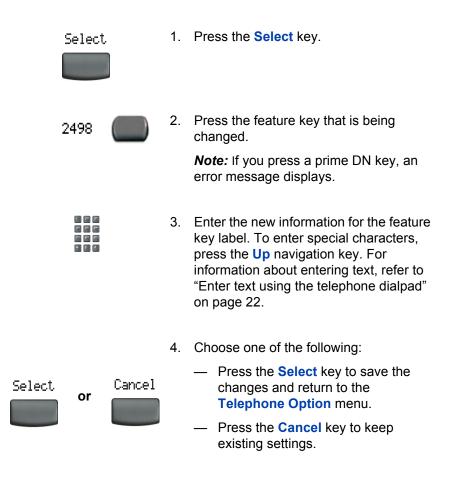


## Change feature key labels

The Change feature key label option renames the label displayed next to each feature key or restores the default labels to the keys (collectively or individually). To rename feature key labels, press the **Services** key and select **Change feature key labels** from the **Telephone Option** menu.

*Note:* If a feature key is configured as an autodial key, the label does not change if the autodial key configuration changes.

#### To rename the labels:



#### Restore the default labels:

To restore feature key labels, press the **Services** key and select **Change feature key labels** from the **Telephone Option** menu.



1. Press the **Select** key.



- 2. Use the **Up/Down** navigation keys to scroll and highlight one of the following:
  - a. Restore all key labels
  - Press Yes to change all feature keys to default values.
  - b. Restore one key label
  - Press the Select key.
  - Press the feature key.
  - Press Yes to change the selected feature key label to the default value.

*Note:* When labels are changed to default values, you cannot undo the change. The label settings must be re-entered.

## View set information

The set information option displays the following set-specific information:

- IP address
- Hardware ID of the IP Phone
- Current firmware version

To view set information, press the **Services** key and select **Set Info** from the **Telephone Option** menu.

#### To view set information:



Cancel

- Press the Up/Down navigation keys to scroll through the list to view set information.
- 2. Press the **Cancel** key to return to the **Telephone Option** menu.

# **Configure call log options**

Use the call log option to configure the following preferences:

- Callers List log
- New call indication
- Preferred Name Match
- Area code set-up

### **Configure the Callers List log**

You can configure the Callers List to log all incoming calls or only unanswered calls. The default setting is "Log all calls". To log only unanswered calls, press the **Services** key and select **Call Log Option** from the **Telephone Option** menu.

#### To log only unanswered calls:



 Press the Up/Down navigation keys to scroll and highlight the Log Mode option.



2. Press the Select key.



- Press the Up/Down navigation keys to scroll and highlight Log unanswered calls.
- 4. Choose one of the following:



- Press the Select soft key to save the setting.
- Press the Cancel key to keep existing settings.

### **Configure New Call indication**

You can configure the IP Phone 2004 to display a message to indicate a new incoming call was received. The default setting is "On". To configure new call indication, press the **Services** key and select **Call Log Option** from the **Telephone Option** menu.

#### To configure New Call indication:



1. Press the Select key to select Incoming Calls.



2. Press the Select key.



 Press the Up/Down navigation keys to scroll and highlight New Call Indication.



4. Press the Select key.



- Press the Up/Down navigation keys to scroll and highlight one of the following:
  - New call indication off
  - New call indication on

6. Choose one of the following:



- Press the Select key to save the setting.
- Press the Cancel key to keep existing settings.

### **Configure Preferred Name Match**

You can configure the IP Phone 2004 to display the name of the caller as defined in your Personal Directory. The default setting is "Off". To configure Preferred Name Match, press the **Services** key and select **Call Log Option** from the **Telephone Option** menu.

#### To configure Preferred Name Match:



Select.

- Press the Up/Down navigation keys to scroll and highlight Preferred Name Match.
- 2. Press the **Select** soft key.



- Press the Up/Down navigation keys to scroll and highlight one of the following:
  - Preferred name match on
  - Preferred name match off

4. Choose one of the following:



- Press the Select soft key to save the setting.
- Press the Cancel key to keep existing settings.

### **Configure Area Code set-up**

The Area Code set-up menu enables a user to save up to 3 area codes. When an incoming call arrives with an area code that matches one of the 3 stored area codes, the incoming call number is re-ordered to display the telephone number followed by the area code (as opposed to the area code followed by the telephone number).

This re-ordering is also performed when a user scrolls through their Callers List. To configure the area code, press the **Services** key and select **Call Log Option** from the **Telephone Option** menu.

#### To configure default area codes (3 maximum):



1. Press the **Up/Down** navigation keys to scroll and highlight **Area Code Setup**.



2. Press the Select soft key.



- 3. Press the **Up/Down** navigation keys to scroll and highlight one of the following:
  - Area Code # 1
  - Area Code # 2
  - Area Code # 3

#### Configure options on the IP Phone 2004

5.

the prompt.

setting.



\$\*\* 5×\* 8\*\*\*

jene Ben Ben. A B B 4. Press the **Select** soft key.

6. Choose one of the following:

existing settings.

Select or Cancel

#### To edit area code display:



Select

1. Press the Up/Down navigation keys to scroll and highlight Area Code Setup.

Use the dialpad to enter the number at

Press the Select soft key to save the

Press the Cancel key to keep the

2. Press the **Select** soft key.



- Press the Up/Down navigation keys to scroll and highlight one of the following:
  - Area Code # 1
  - Area Code # 2
  - Area Code # 3



4. Press the **Select** soft key.



- 5. Use the dialpad to edit the number.
- 6. Choose one of the following:



- Press the Select soft key to save the setting.
- Press the Cancel key to keep existing settings.

### **Configure Name Display format**

You can configure the IP Phone 2004 to display the name of the incoming calling party in the following formats:

- first name/last name
- last name/first name

To configure name display format, press the **Services** key and select **Call Log Option** from the **Telephone Option** menu.

#### To configure name display format:



Select

- Press the Up/Down navigation keys to scroll and highlight Name display format.
- 2. Press the **Select** soft key.



or

Cancel

- Press the Up/Down navigation keys to scroll and highlight one of the following:
  - first name, last name
  - last name, first name
- 4. Choose one of the following:
  - Press the Select key to save the setting.
  - Press the Cancel key to keep existing settings.

Select

# Make a call

This section describes features associated with making a call. There are several ways to make a call from an IP Phone 2004.

# Use Off-hook dialing



1. Lift the handset.



2. Dial the number.

following:



(Goodbye)

- 3. To terminate the call, choose one of the
  - Replace the handset into the cradle.
  - Press the Goodbye key.

## **Use On-hook dialing**

1. Leave the handset in the cradle.





2. Press the line (DN) key.







sounds.

Dial the number when the dial tone

- 4. When the called party answers, lift the handset.
- 5. To terminate the call, choose one of the following:
  - Replace the handset into the cradle.
  - Press the Goodbye key.

## **Use Handsfree dialing**

Use Handsfree dialing to use a built-in microphone and speaker, or a headset, instead of the handset. While on an active call, you can switch between Handset and Handsfree mode.

3.



1. Press the Handsfree key.



- 2. If a headset is connected, press the **Headset** key.
- 1 241 244 14 241 244 14 241 244
- 3. Dial the number.

To discontinue a handsfree call:



Press the Goodbye key.

#### To mute a handsfree call:



1. Press the **Mute** key. The LED indicator flashes.



2. Press the **Mute** key again to return to a two-way handsfree conversation.

#### To switch from handsfree to Handset mode:



Lift the handset.

#### To switch from Handset mode to Handsfree mode:



1. Press the Handsfree key.



2. Replace the handset.

#### To use a headset:

1. Connect the **headset** to the headset jack or the handset jack.



2. Press the Headset key.

#### To switch from handsfree to headset:



3. Press the headset key.

## **Use the Directory applications**

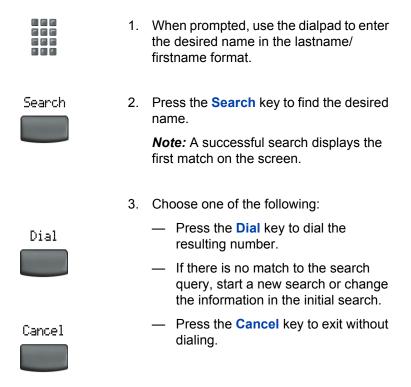
You can make calls using various Directory applications available on your IP Phone 2004. The applications include:

- Corporate Directory
- Personal Directory
- Callers List
- Redial List

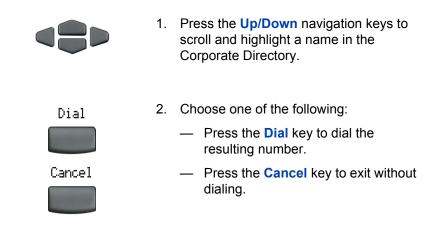
### Make a call using Corporate Directory

The Corporate Directory feature provides an alphabetical list of entries using last names. You can search by name, view additional information on each entry, and dial Corporate Directory numbers. To use Corporate Directory, press the **Directory** key and select **Corporate Directory**.

#### To search for a specific number:



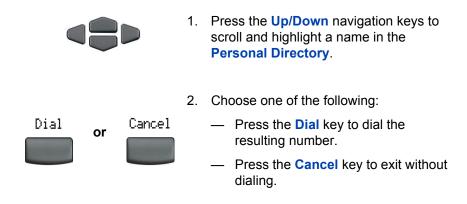
#### To scroll to a specific number:



### Make a call using Personal Directory

The Personal Directory feature allows you to store a maximum of 100 entries consisting of names and numbers. To use Personal Directory, press the **Directory** key and select **Personal Directory**. For more information on how to configure and use Personal Directory, refer to "Personal Directory" on page 109.

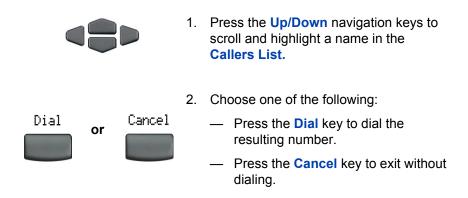
#### To use the Personal Directory:



### Make a call using the Callers List

The Callers List feature automatically stores up to a maximum of 100 callers. After 100 callers have been stored, each additional caller overwrites the oldest entry. To use Callers List, press the **Directory** key and select **Callers List**. For information on how to configure and use Callers list, refer to "Callers List" on page 112.

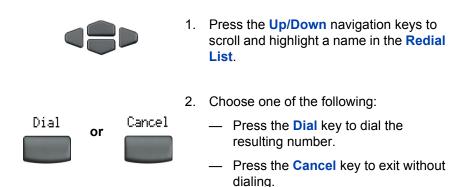
#### To use the Callers List:



### Make a call using Redial List

The Redial List feature automatically stores a maximum of 20 previously dialed telephone numbers. To use Redial List, press the **Directory** key and select **Redial List**. For information on how to configure and use Redial list, refer to "Redial List" on page 115.

#### To use the Redial List:



### **Use Predial**

Use the Predial feature to enter, preview, and edit numbers before dialing.

#### To use Predial:





- 1. Without selecting the line key, enter the number to be dialed.
- 2. Press a line key to dial the number.



 Lift the Handset when the called party answers or, if in Handsfree mode, begin to speak.

#### To edit a Predial number:

- 4 5 8 9 1
- 1. Use the dialpad to enter the number.
- 2. Choose one of the following:



- To erase all numbers, press the Clear key. Re-enter the numbers to be dialed.
  - To change numbers one-at-a-time, press the Delete key to backspace. Re-enter the number.



3. Press a line key to dial the number.

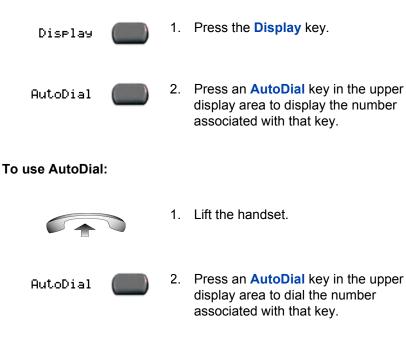
# **Use AutoDial**

Use the AutoDial feature to display, store, and automatically dial telephone numbers.

#### To store an AutoDial number:

AutoDial	1.	Without lifting the handset, press the appropriate <b>AutoDial</b> key. <b>Note:</b> The display screen displays the word "Autodial" next to the appropriate key.
	2.	Using the dialpad, dial the telephone number (including access code) to be stored on the selected <b>AutoDial</b> key.
AutoDial	3.	Press the <b>AutoDial</b> key a second time to store the number on the selected key.
		<i>Note:</i> Once a number has been stored, the word "Autodial" disappears, and the stored number displays.
	4.	Assign a label to the key.
		<i>Note:</i> After assigning the label, the number disappears and only the label appears on the screen next to the key.

#### To display an AutoDial number:



### **Activate Ring Again**

Use the Ring Again feature if you receive a busy tone, or if there is no answer. Your IP Phone rings when the person you called becomes available. Ring Again automatically redials the number.

#### To activate Ring Again:

1	244	3m
\$***	5**	5
7.00	E.c.	9***C
*	0	<u>•</u>

1. Dial a number and receive a busy tone or no answer.

RneAen

2. Choose one of the following:



- Press the Ring Again key.
- Enter the RingAgain Activate FFC.

#### To call a Ring Again party when you receive notification:



1. After receiving the notification ring, lift the handset, or if you are using the headset, go to Step 2.



Press the Ring Again key to automatically dial the number.

#### To deactivate Ring Again before notification:



Choose one of the following:

- Press the **RingAgain** key a second time.
- Press the **RingAgain Deactivate** FFC.

# Redial the last number called

Use the Last Number Redial feature to automatically redial the last dialed number.

#### To use Last Number Redial:

Choose one of the following:



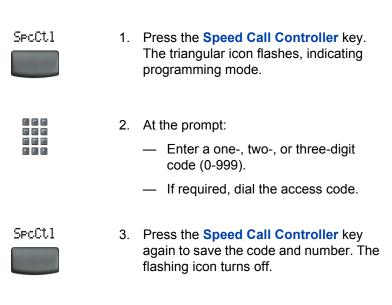
- 1. To redial using the handset:
  - a. Lift the handset.
  - b. Press the line (DN) key.
- To redial without lifting the handset, press the line (DN) key twice (the last number dialed is automatically redialed).

# **Use Speed Call**

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Use the Speed Call feature to place internal and external calls by dialing a one- two- or three-digit code to store, edit, and automatically dial frequently called telephone numbers.

#### To store a Speed Call number:



#### To make a Speed Call:



- 1. Lift the handset.
- SpcCtl





- 2. Press the **Speed Call Controller** key.
- Dial the Speed Call code to automatically dial the number.

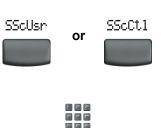
# Make a System Speed Call

Use the System Speed Call feature to dial Speed Call codes that override dialing restrictions placed on your telephone.

#### To make a System Speed Call:



- 1. Lift the handset.
- 2. Choose one of the following:



- Press the System Speed Call key.
- Press the System Speed Call Controller (SScCtl) key.
- Dial the Speed Call code to automatically dial the number.

# Make a call using Hot Line

Use the Hot Line feature to automatically dial a specific number.

#### To use Hot Line:





Press Hot Line to automatically dial the number.

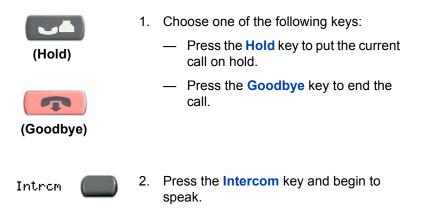
### Make an Intercom call

Use the Intercom feature to call a member of your intercom group by pressing the code assigned to each member.

#### To make an Intercom call:



To answer an Intercom call while on a line other than your Intercom group line:



# Answer a call

Each incoming call causes the telephone to ring, the LCD indicator T to flash, and the Message Indicator lamp to flash.

#### To answer a call:

Choose one of the following:





Lift the handset.





- Press the Handsfree button located on the left side of the handset.
- Press the line (DN) key beside the LCD indicator as it flashes.
- Press the **Headset** key if a headset is connected to your telephone.

# While on an active call

This section describes features available during an active call.

# Place a call on hold

Use the Hold feature when talking on one line and another call arrives on a second line. Retain the original call by putting it on hold and then answer the second call.

#### To place a call on hold:



Press the **Hold** key. The LCD indicator flashes beside the line on hold.

*Note:* If Automatic Hold is enabled, the active call is automatically put on hold when you answer the second call.

To retrieve a call on hold:

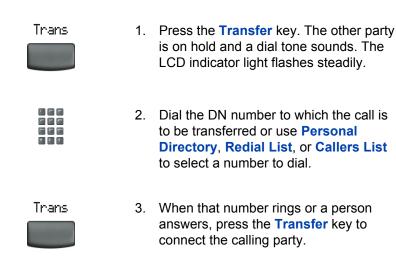


Press the line (DN) key beside the flashing LCD indicator.

## Transfer a call

Use the Transfer feature to redirect a call to the appropriate person.

#### To use the Transfer feature to direct a call to a third party:



#### To return to the original call if the transfer is incomplete:



If the person called is not available, press the line (DN) key (next to the LCD indicator) to reconnect to the original call.

### **Use Timed Reminder Recall**

Use the Timed Reminder Recall feature to receive a reminder tone when a transferred call is not answered.

#### To use Timed Reminder Recall:



1. Press the **Transfer** key. The call is put on hold.



- 2. Dial the number to which the call is being transferred.
- 3. Choose one of the following to start the call timer:
  - Press the Transfer key.
  - Replace the handset before the extension answers.

*Note:* If the transfer is complete, the recall timer stops.







#### If the transferred call is not answered, your telephone rings:



- 1. Lift the handset to reconnect to the original caller.
- 2. Choose one of the following:
  - Press the Transfer key and repeat the transfer.
  - If the transfer is picked up while you are on the line, press the Goodbye key to complete the transfer.





### **Use Attendant Recall**

Use the Attendant Recall feature to contact an attendant during a call and to connect the call to the attendant.

#### To contact the attendant while on a call:



 Press the Attendant Recall key and stay on the line until the attendant answers.



Press the Goodbye key. The caller remains connected to the attendant.

### **Use Call Park**

Use the Call Park feature to hold temporarily (park) and retrieve a call from any telephone. Using Call Park does not tie up a line. When configured network-wide, Call Park can be used across networks. A System Park Extension can be set to automatically park most calls.

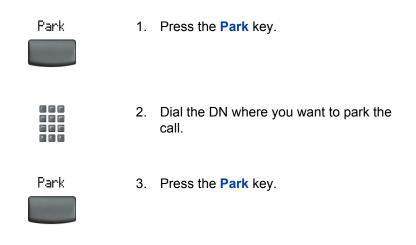
#### To park a call on the System Park DN or your own DN:



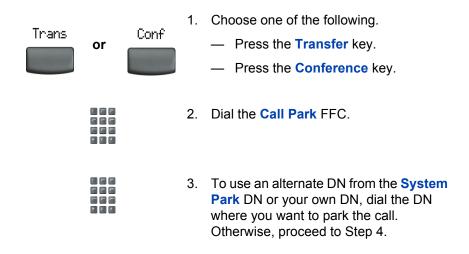
During an active call, press the **Park** key twice.

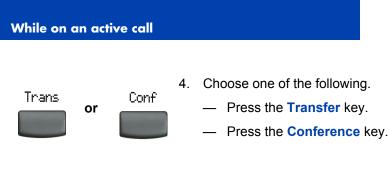
**Note:** By default, the call is parked on your DN unless a **System Park** is enabled to automatically park calls on the system.

# To park a call on a DN other than the System Park DN or your own DN:



#### To park a call using the SPRE code or FFC:





#### To retrieve a parked call:



1. Lift the handset.



2. Press the Park key.

- 1 242 244 844 344 844 244 844 844 844 844 844 844 8
- 3. Dial the DN where you parked the call.

*Note:* If a parked call is not retrieved within a specified period of time, it rings back to your telephone or to the attendant.

# Record a Calling Party Number

Use the Calling Party Number feature to record a caller's number, or to charge a call to an account number, during an established call.

#### To record a caller's number for accounting purposes:



1. Press the **Call Party** key. The caller is placed on hold.

- 1 240 gan 410 54 gan 710 gan gan 4 0 g
- 2. Dial a charge account number or the caller's number.

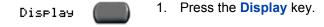
*Note:* For information on using the **Charge** key, see "Charge a call or charge a forced call" on page 97.

- CParty
- 3. Press the **Call Party** key to return to the call.

# **Display incoming calls**

Use the Display feature to display a second incoming caller's number and name (if available) during an active call, without interfering with the call in progress.

To view the information on an incoming call while on a call in progress:





2. Press the flashing line (DN) key. The call waiting information displays.

**Note:** When used with other feature keys, the **Display** key displays information associated with those feature keys.

# Trace a Malicious call

Use the Malicious Call Trace feature to trace nuisance calls within your system.

*Note:* This is not a default feature. Contact your system administrator to configure this feature on your telephone.

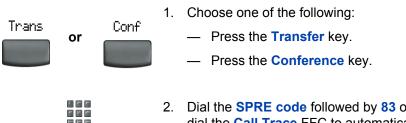
#### To use Call Trace while on a call:



\* 0 0

Press the Call Trace key.

To use Call Trace without a Call Trace key:



 Dial the SPRE code followed by 83 or dial the Call Trace FFC to automatically reconnect.

# **Incoming calls**

This section describes features that are used with incoming calls.

# Activate Automatic Answerback

When the Automatic Answerback feature is active, your set automatically answers in Handsfree mode after one ring; however, calls are *not* forwarded to the voice message service.

#### To activate Automatic Answerback:





Press the Automatic Answerback key.

#### To deactivate Automatic Answerback:



Press the **Automatic Answerback** key again.

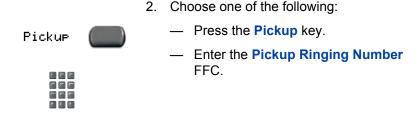
# Activate Call Pickup

Use the Call Pickup feature to pick up calls from any telephone in the same pickup group or another pickup group.

#### To answer a call in your own call pickup group:



1. Lift the handset.



#### To answer an incoming call in another call pickup group:



1. Lift the handset.



 Press the Group Pickup key or enter the Pickup Group FFC.



3. Dial the pickup group number of the ringing telephone.

#### To answer a call at a specific extension in any pickup group:



1. Lift the handset.



- 2. Choose one of the following:
  - Press the DN Pickup key.
  - Enter the Pickup Directory Number FFC.



3. Dial the DN of the telephone that is ringing (in your call pickup group). If the pickup DN or group number is invalid (an overflow burst tone sounds and the screen displays *Goodbye and try again*), press the **Goodbye** key.

### **Use Call Waiting**

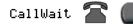
The Call Waiting feature alerts you to an incoming call by producing a tone. It also puts the current call on hold while you answer the new call.

To answer an incoming call while on another call:

(Hold)	

 When the incoming call tone sounds, press the Hold key to put a current call on hold.

*Note:* If Automatic Hold is enabled, it is not necessary to press the Hold key.

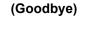


2. Press the Call Waiting key.

#### To return to the first telephone call:



- 1. Choose one of the following:
  - Press the Hold key to put the second call on hold.
  - Press the Goodbye key to end the second call.



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2. Press the line (DN) key associated with the first call.

If you do not have a Call Waiting key:



1. Press the **Goodbye** key to end the current call.



2. Press the line (DN) key beside the flashing status icon to answer the incoming call.

# While away from your desk

This section describes features to use when you are away from your desk.

# **Use Call Forward**

Use the Call Forward feature to direct incoming calls to ring on another line (DN). If the telephone is in the process of ringing, the call cannot be forwarded.

To forward your calls or change the forward number:





- 1. Choose one of the following:
  - Press the Forward key.
  - Lift the handset and enter the Call Forward All Calls Activate FFC.



2. Dial the DN where you want to forward your calls.



3. Press the Forward key.

#### To quit Call Forward:



Choose one of the following:

- Press the Forward key.
- Lift the handset and enter the Call Forward All Calls Deactivate FFC

#### To reinstate Call Forward to the same number:



Press the Forward key twice.

### **Use Internal Call Forward**

Use Internal Call Forward to accept only calls originating at internal DNs to ring at another DN. Calls originating outside your telephone system still ring at your telephone. Current incoming calls cannot be forwarded.

#### To forward internal calls:

IntForward

IntForward

- 1. Choose one of the following:
  - Press the Internal Call Forward key.
  - Lift the handset and enter the Internal Call Forward Activate FFC.
- 2. Dial the DN to which your internal calls will be forwarded.
- 3. Press the Internal Call Forward key.

#### To deactivate Internal Call Forward:

Choose one of the following:

- IntForward 🖀 🛑
- Press the Internal Call Forward key.
- Lift the handset and enter the Internal Call Forward Deactivate FFC.

To reinstate Call Forward to the same number:

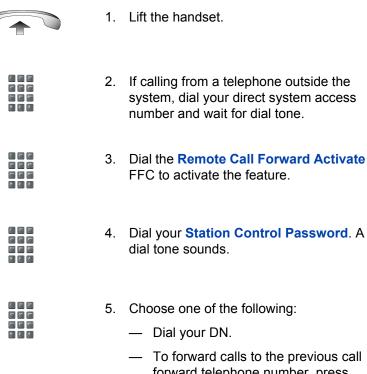
IntForward

Press the Internal Call Forward key twice.

# **Use Remote Call Forward**

Use the Remote Call Forward feature to forward calls (from any telephone other than your own) to any telephone.

#### To activate Remote Call Forward:



 To forward calls to the previous call forward telephone number, press the # key. (Do not perform steps 6 and 7).

1	24	24
\$**	5**	S.
7.00	g	9***C
*	P	٩

#

- Dial the number to which calls are being forwarded. If calls are forwarded to an invalid number, a fast busy signal sounds.
- Press the # key.

#### To deactivate Remote Call Forward:



1 2m 3m

\$100 5.00 8000

)met gen gant \* 0 8

1 2<sup>nc</sup> 3<sup>nr</sup>

\$<sup>36</sup> 5\* 8\*\*\*

Jours Sea Searc

1 24 24

8-11 5-11 8-11 7-11 8-11 9-11 4- 8 8

- 1. Lift the handset.
- 2. If calling from a telephone outside the system, dial the **direct system access** number and wait for the dial tone.
- Dial the Remote Call Forward Deactivate FFC.
- 4. Dial your Station Control Password.



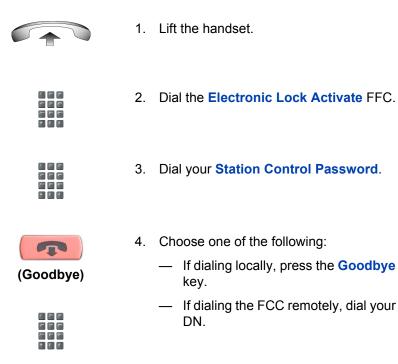
- 5. After hearing the dial tone, dial your DN.
- 6. Press the **#** key.

#

### Secure your telephone

Use the Electronic Lock feature to prevent others from making calls from your telephone. The Electronic Lock feature is controlled using your Station Control Password (SCPW). To change your Station Control Password, refer to "Security features" on page 19.

#### To lock your telephone:



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#### To unlock your telephone:



1. Lift the handset.

- 1 34 94 44 54 94 74 80 94 74 9
- 2. Dial the Electronic Lock Deactivate FFC.



3. Dial your Station Control Password.





- 4. Choose one of the following:
  - If dialing locally, press the Goodbye key.
  - If dialing the FCC remotely, dial your DN.

# Talk with more than one person

This section describes features that enable conversations between more than two people.

# Use the Call Join feature

Use the Call Join feature to connect a call to a current active call. This creates a conference between the two callers and yourself.

#### To connect a call on hold (on a different line) to your current call:

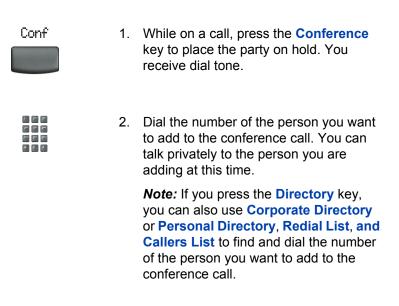


- 1. Press the Conference key.
- 2. Press the line key that has the number of the caller you want to connect to your current call.
- Press the Conference key to join the person on hold to your conversation.

# Set up a Conference call

Use the Conference feature to set up a conference call for three or six people including yourself. The number of people the conference feature supports depends on your telephone's configuration.

#### To set up a conference call:



 Press the Conference key a second time to conference all parties together.

#### If the person you attempt to add to the conference is unavailable:



1. Press the Goodbye key.



2. Press the line (DN) key with the flashing status icon to return to your original call.



Conf

# Use the Conferee Selectable Display and Disconnect feature

Use the Conferee Selectable Display feature to list active conferees and disconnect a conferee from the conference call.

#### To view active conferees:

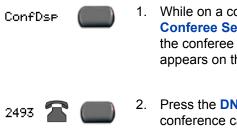
- ConfDsp
- While on a conference call, press the Conferee Selectable Display key to turn on the LCD indicator. Each key press changes the screen to show a different active conferee.

*Note:* This action has no effect on the display of other telephones involved in the conference.



 Press the Goodbye key. If configured, the Conference Count Display returns an updated total count of conferees. The LCD indicator turns off.

#### To disconnect a conferee:



- . While on a conference call, press the Conferee Selectable Display key until the conferee you want to disconnect appears on the screen.
- 2. Press the **DN** key on which the conference call is established.



- 3. Choose one of the following:
  - For a single conferee, press the Goodbye key. If configured, the Conference Count Display returns an updated total count of conferees. The LCD indicator turns off.
  - For multiple conferees, repeat steps 1 and 2 until all conferees are disconnected. Then press the Goodbye key.

# Use Group Call

Use the Group Call feature to automatically call members of a predefined group, one at a time, until they all answer.

#### To call group members:



1. Lift the handset.



- 2. Press the Group Call key or enter the Group Call FFC.
  - The feature automatically calls all group members. The icon flashes until all members answer.
  - The telephone numbers of the group members appear on the display as they answer. When the last person answers, the Group Call indicator lights steadily.

- When a person in your group is on a conference call or another group call, they are not connected to your group call.
- After everyone in the group has answered, only the person who made the group call can put the call on hold.

#### To answer a Group Call:



- 1. Lift the handset. Note the following about Notification Tones:
  - If you are on a call and receive three 10-second tones, this is the notification of a group call on your current extension.
  - If you are on a call on another line when a group call is made, you receive a long tone through the handset or speaker.
  - If you are already on a conference call or another group call, you do not receive notification of a group call.

#### To end a Group Call:



#### Press the Goodbye key.

*Note:* When the person who made the group call disconnects, the call terminates for all members of the group. However, the members of the group call can disconnect from the call and not affect other members on the call.

# Work without interruption

This section describes features that provide uninterrupted work time.



Use the Make Set Busy feature to make your telephone appear busy to all callers.

To activate Make Set Busy:

MakeSetBsy



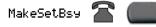
Choose one of the following:

Press the Make Set Busy key.



 Lift the handset and enter the Make Set Busy Activate FFC.

#### To deactivate Make Set Busy:





Choose one of the following:

- Press the Make Set Busy key a second time to deactivate the feature.
- Lift the handset and enter the Make Set Busy Deactivate FFC.

# Additional call features

Contact your system administrator to determine if the following call features are available on your telephone.

# **Use AutoDial Transfer**

Use the AutoDial Transfer feature to transmit digits through your AutoDial key to the Central Office after a Trunk Switchhook Flash. You must be on a Central Office/Exchange (CO) trunk call from or to a Central Office (CO) that offers Centrex or exchange line-type features.

#### To use AutoDial Transfer when picking up an incoming trunk call:

CentrexSHF		1.	Press the <b>Centrex Switchhook Line</b> <b>Flash</b> key and wait for interrupted dial tone.
AutoDial		2.	Press the <b>AutoDial</b> key to call the number desired.
(Goodby	/e)	3.	Press the Goodbye key to end the call.

### Use the Buzz signal

Use the Buzz feature to notify another person of a call, a visitor, or a request. Two telephones that are linked together enable one person to signal the other. The person signaled hears a buzz.

#### To buzz the telephone linked to your telephone:



Press the **Buzz** key. The telephone linked to your telephone buzzes as long as you press the key.

# Use Call Page Connect to make an announcement

Use the Call Page Connect feature to make an announcement over a paging system.

*Note:* A **Page** key on an attendant console overrides and disconnects the telephones. The telephones must re-access the page trunk.

#### To connect to Call Page:



1. Lift the handset.

1	244	2°*
¢	5**	5
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۴	Ø	٩

- Dial the Page Trunk Access Code to complete the connection to the page system.
- 3. Make your announcement.



4. Press the Goodbye key.

## Use Centrex/Exchange Line Switchhook Flash

Use the Centrex/Exchange Line Switchhook Flash feature during an established call to use a Centrex service, such as Call Transfer or Three-Way Calling.

#### To use Centrex/Exchange Line Switchhook Flash:



- While on a call, press the Centrex Line Switchhook Flash key. A special dial tone sounds.
- 2. Dial the codes for your custom **Centrex** feature.
- 3. Press the Goodbye key to end the call.

# Charge a call or charge a forced call

Use the Call Charge feature to charge a call to a specific account. The Forced Charge feature charges long-distance calls from a telephone restricted to local calls.

To charge a local or long-distance call to an account before you dial:



1. Lift the handset.



1 Sec. Sec.

Jan Bau Bau, Am Pan Bau,

f 2<sup>nd</sup> 3<sup>nd</sup>

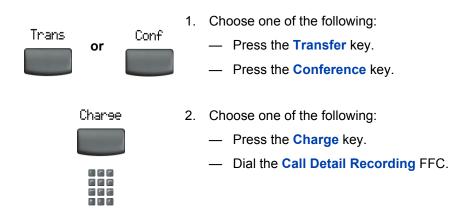
\$\*\* 5\*\* 8**\*\***\*

\* 0 \*

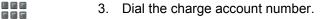


- 3. Dial the charge account number.
- 4. When the dial tone sounds, dial the number.

#### To charge a call in progress:





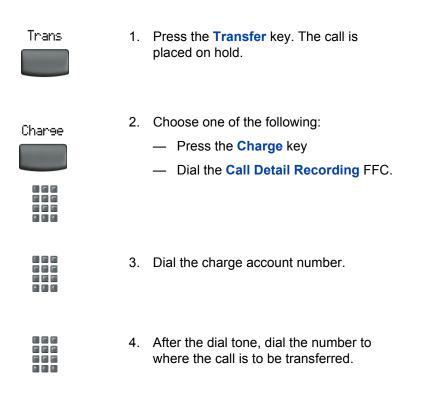


4. Press the line (DN) key to return to the call.

#### To charge a call to an account when you transfer a call:

Feet Base A. D. G.

2498





5. Press the **Transfer** key when you hear the telephone ring.

*Note:* You can talk privately to the person at the transfer number before you press the Transfer key.

# To charge a call to an account when you add someone to a conference call:



 Press the Conference key. The call is placed on hold.

Charse





1 2\* 2\*

411 541 8444 7444 841 941 44 0 8

- 2. Choose one of the following:
  - Press the Charge key.
  - Dial the Call Detail Recording FFC.
- 3. Dial the charge account number.



- 4. Dial the number of the person you want to add to the conference.
- Conf
- 5. Press the Conference key.



### **Use Enhanced Override**

Use the Enhanced Override feature to override an active call after you attempt a Forced Camp-on. Use Enhanced Override to make a simple call or a consultation call, such as placing a call on hold and calling another party.

#### To use Enhanced Override:

		u receive a busy signal after dialing a phone number.
EnhOvr	1.	<ul> <li>Choose one of the following:</li> <li>Press the Override key.</li> <li>Enter the Override FFC to initiate a Forced Camp-on.</li> <li>If either person on the call disconnects at this time, you receive an overflow (fast busy/engaged) signal.</li> </ul>
EnhOvr	2.	<ul> <li>Choose one of the following:</li> <li>Press the Override key again.</li> <li>Enter the Override FFC again.</li> </ul> The other two persons on the call receive an override tone and a conference call is established between the three of you. If anyone disconnects,

the other two persons remain connected.



3. To terminate the call, press the **Goodbye** key.

### **Use Forced Camp-on feature**

Use the Forced Camp-on feature to automatically ring another telephone (internal or external) immediately after that telephone disconnects from its current call.

#### To use Forced Camp-on:

1	24	2**
***	5**	5
Pear	E.c.	9***C
*	P	*

You are receiving a busy signal after dialing a telephone number.

EnhOvr (



- 1. Choose one of the following:
  - Press the Override key.
  - Enter the Override FFC, to initiate a Forced Camp-on.

*Note:* The person you called receives a tone. You receive a ring/ringback or a busy/engaged signal, depending on the options chosen. You are now camped-on to the number you dialed.

- 2. Hang-up the telephone.
- When the person you called finishes their call, your telephone automatically dials the number and both telephones ring.

#### Answering a call camped-on to your extension:



When your telephone rings, lift the handset.

*Note:* You can program your telephone for either Camp-on or Call Waiting, but not both.

## Override a busy signal

Use the Override feature to override a busy signal and interrupt another call.

#### To override a busy/engaged signal:

1	244	2**
s	5**	5***
7.00	g	9****
*	P	٩

1. Dial a telephone number and receive a busy signal.





- 2. Choose one of the following:
  - Press the **Override** key.
  - Enter the Override FFC. The people in the targeted call receive a tone for approximately one second. After Override feature joins you to their call, a short tone repeats every 16 seconds.



3. To terminate the call, press the **Goodbye** key.

## **Use Privacy Release**

Use the Privacy Release feature to enable one or more people who share your DN to join a call.

#### To use Privacy Release in an established state:



Press the **Privacy Release** key during a call. A person joins the call by pressing the shared number (DN) key on their telephone (Multiple Appearance DN feature).

# **Use Radio Page**

Use the Radio Page feature to page a person and stay on the line until they answer. The paged person answers the call after entering a special Page Meet-me code from any telephone.

#### To use Automatic Preselection (Meet-me page):



1	244	200
\$°	5**	5
7.00	g	9***C
*		

- 1. Lift the handset.
- 2. Dial the **Radio Paging Access** FFC. The paging tone sounds (two beeps followed by a dial tone).
- Dial the number of the party you want to page. After dialing, the ringback tone sounds.

*Note:* The paged person can use any telephone to enter a **Radio Paging Answer** FFC, plus their own DN number.



4. If your call goes unanswered for a preset time period and a 15-second highpitched tone sounds followed by silence, press the **Goodbye** key or replace the handset.

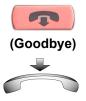
#### To use Automatic Post selection:

The called party is either busy on the telephone or away from their desk. To page the called party, there is no need to redial the number of the called party.



- 1. Press the **Radio Page** key. A special dial tone sounds.
- 2. Dial the **Radio Paging Access** FFC. The ringback tone sounds.

*Note:* The paged person can use any telephone to enter a **Radio Paging Answer** FFC, plus their own DN number.



 If your call goes unanswered for a preset time period and a 15-second highpitched tone sounds followed by silence, press the Goodbye key or replace the handset.

#### To answer a Radio Page:

If you carry a Radio Pager, a page indicates that someone dialed your DN. If the Radio Page system is set up to function in Meet-me mode, you can answer the page call from any telephone.

1.	Lift the handset.
2.	Dial the <b>Radio Page Answer</b> FFC. The paging tone sounds.
3.	Dial your own DN to connect to the paging caller. If the caller has hung up, a steady high-pitched (Number Unavailable) tone sounds.

# **Use Voice Call**

Use the Voice Call feature to page another person or make an announcement through someone else's telephone speaker.

#### To make a voice call:



1. Lift the handset.





2. Press the Voice Call key and make the announcement.



3. Press the **Goodbye** key.

To respond to a voice call:



Your telephone rings once and the caller's voice transmits through your speaker. Lift the handset.

# **Additional features**

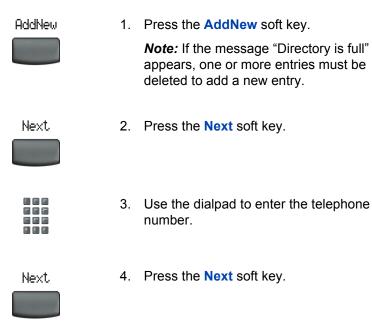
# **Personal Directory**

Use the Personal Directory feature to create and store up to 100 directory entries. A Personal Directory entry can contain:

- last name (up to 24 characters)
- first name (up to 24 characters)
- telephone numbers (up to 31 characters)

To use Personal Directory, press the **Directory** key and select **Personal Directory**.

#### To add an entry:





- 5. Use the dialpad to enter the name.
- 6. Do one of the following:
- Done or Cancel
- Do one of the following.
   Press the Done key to save the new
  - entry.
  - Press the Cancel key to return to the Add screen.

#### To edit an entry:



- 1. Press the **Up/Down** navigation keys to scroll and highlight the desired entry.
- Edit 2
- 2. Press the Edit soft key and perform your edits.

Done	or	Cancel

- 3. Choose one of the following:
  - Press the Done key to save the changes.
    - Press the Cancel key.

#### To delete an entry:



1. Press the Up/Down navigation keys to scroll and highlight the desired entry.

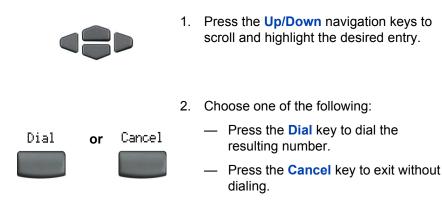


- 2. Press the **Delete** soft key.
- 3. Choose one of the following:



— Press the Cancel key.

#### To search for an entry:



# **Callers List**

The Callers List feature logs all incoming calls. Callers List can store up to 100 entries in the list. When the list is full, the system over-writes the oldest entry. Use the Callers List feature to review missed calls and to dial calls. The Callers List contains:

- the caller's last and first name (if available)
- the DN of the caller
- the time/date of the call
- the number of times the caller calls

Entries in Callers List are sorted by the time the call was received.

**Note:** Calling Party Name Display (CPND) is affected depending on the preferred name match option. If preferred name match is on, the CPND appears according to your settings. If the preferred name match option is off, the CPND appears according to the system settings.

To access the Callers List, press the Directory key and select Callers List.

*Note:* If password control has been enabled, enter your SCPW at the prompt.

#### To dial an entry:



Dial

- 1. Press the **Up/Down** navigation keys to scroll and highlight the desired entry.
- 2. Press the **Dial** key.

#### To delete an entry:



1. Press the **Up/Down** navigation keys to scroll and highlight the desired entry.

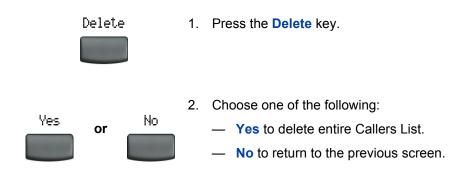


2. Press the **Delete** key.



- 3. Choose one of the following:
  - Press the **Confirm** key.
    - Press the Cancel key.

#### To delete the entire Callers List:



# **Redial List**

The Redial List feature logs all outgoing calls. Redial List can stored up to 20 entries in the list. When the list is full, the system over-writes the oldest entry, Use the Redial List feature to review calls made, and to redial previously dialed calls. The Redial List contains:

- the last and first names of the dialed party (if available)
- the DN of the dialed party
- the time/date of the last dialed occurrence

Entries in the Redial List are sorted by the time the call was received.

**Note:** Calling Party Name Display (CPND) is affected depending on the preferred name match option. If preferred name match is on, the CPND appears according to your settings. If the preferred name match option is off, the CPND appears according to the system settings.

To access Redial List, press the Directory key and select Redial List.

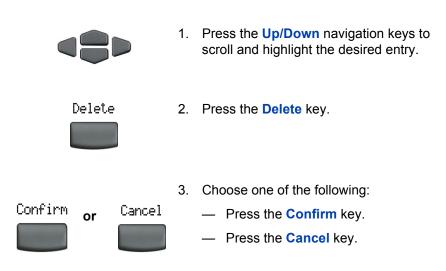
*Note:* If password control has been enabled, enter your SCPW at the prompt.

#### To dial an entry:



- 1. Press the **Up/Down** navigation keys to scroll and highlight the desired entry.
- Dial
- 2. Press the Dial key.

#### To delete an entry:



#### To delete the entire Redial List:



1. Press the **Delete** key.



- 2. Choose one of the following:
  - Yes to delete entire Redial List.
  - No to return to the previous screen.

# **Virtual Office**

When you are away from your office telephone, use the Virtual Office feature to transfer calls, and all of your office telephone's features, to a remote telephone.

*Note 1:* Consult your system administrator to verify if the Virtual Office feature is available for your use.

*Note 2:* When designated as the office telephone, the IP Phone 2004 can be activated for Virtual Office by an IP Phone 2002, IP Phone, IP Softphone 2050, or another IP Phone 2004.

*Note 3:* When logged into an IP Phone 2004 or an IP Softphone 2050 using Virtual Office, feature keys 4, 5, and the Shift key are not available to the IP Phone 2002.

*Note 4:* A Virtual Office login from an IP Phone 2004 to an IP Phone 2002 or IP Softphone 2050 might be blocked in certain situations. Consult your system administrator.

## Virtual Office login

To activate Virtual Office on your Office telephone from your Remote telephone:



1. Press the Services key.



 Press the Up/Down navigation keys to scroll and highlight Virtual Office Login.



1 2\* 7

41 51 91 711 81 91 711 81 91



4. At the prompt, enter your User ID.







- 5. Press the **Select** key.
- 6. At the prompt, enter the home **Station Control Password (SCPW)**.

*Note 1:* If the User ID is not found locally, the message "Locating Remote Server" displays.

*Note 2:* After three failed login attempts, wait one hour before attempting to login again, or contact your system administrator to reset your password. For more information, see "Security features" on page 19.

A successful login transfers all the features, time, date, and tones to your remote telephone from your office telephone.

### Virtual Office on your Remote telephone

The following figures show various IP Phones logged on to an IP Phone 2004 using Virtual Office.

	N Q RT	<b>EL</b> TWORKS		
42888		Au	toDial	-0
34567		Au	toDial	
42744			41055	-
		Nov 08 1 Networks 41055	and the second	
Trans	Conf	Forward	Mone	
				)

#### Figure 5: Logged on to an IP Phone 2004

# Figure 6: Logged on to an IP Phone 2004 using an IP Phone 2002

		N@RT	EL TWORKS		
00	47678 42888		A	utoDial 45645	20
	User	:45645	The second		
	Trans	Conf	Forward	More	
1					
-		1	1		~
-	5- 0	-1			-

# Figure 7: Logged on to an IP Phone 2004 using an IP Softphone 2050

1	2^BC	30EF	42888	AutoDial	CS 1000	Nov 8, 1:42 P
4 <sup>GHI</sup> 7PORS	5-m	6 <sup>мно</sup> gwxyz	34567	AutoDial	User: 45645	
*	0	#	42744	41055		
					Trans Conf	Fwd More

A User information line appears on all displays listing the number of your office telephone.

## Virtual Office on your Office telephone



When activated for Virtual Office by a remote telephone, your office telephone is *logged out* and no longer operational.

A Logged Out message displays on your telephone alerting you that it is being used for Virtual Office.

#### To regain operation of a telephone being used for Virtual Office:

Choose one of the following:

- 1. To completely disconnect your office telephone from the remote telephone:
  - a. Press the Home key.
  - b. Enter your User ID and password (this logs the office telephone back on to your office network).



Home

1 2\*\* 3\*\*

2. To use your office telephone as the remote telephone for Virtual Office, press the Virtual key to log in to another IP Phone.

### **Virtual Office logout**



1. Press the Services key.



- Press the Up/Down navigation keys to scroll and highlight Virtual Office Logout.
- Select
- 3. Press the Select key.

#### **Troubleshoot Virtual Office**

When you use Virtual Office, error messages may display on-screen. Table 2 lists error messages and actions to correct the causes.

Table 2: Troubleshoo	t Virtual Office	(Part 1 of 3)
----------------------	------------------	---------------

Displayed Message	Probable Cause	Actions
Busy, try again	Remote IP Phone is active (not idle).	Wait for remote IP Phone to become idle and try again.
	ACD is logged in.	Log out of ACD IP Phone before initiating Virtual Office from another IP Phone.
	Make-Set-Busy is inactive on ACD IP Phone.	Set Make-Set-Busy active on ACD IP Phone.

### Table 2: Troubleshoot Virtual Office (Part 2 of 3)

Displayed Message	Probable Cause	Actions
Invalid ID (1)	Incorrect User ID entered.	Enter correct User ID.
	User ID is not in Gatekeeper database.	Notify system administrator.
Invalid ID (2)	Incorrect User ID entered.	Enter correct User ID.
Invalid ID (3)	Incorrect User ID entered.	Enter correct User ID.
	User ID in Gatekeeper database points to originating Call Server.	Notify system administrator.
Locked from Login	Three failed attempts to enter the correct Station Control Password.	Wait one hour for the lock to clear automatically, or notify system administrator to clear lock.
Permission Denied (1)	Remote telephone has no Station Control Password.	Notify system administrator.
Permission Denied (3)	Incorrect User ID entered.	Enter correct User ID.
	Remote telephone has no Station Control Password.	Notify system administrator.

### Table 2: Troubleshoot Virtual Office (Part 3 of 3)

Displayed Message	Probable Cause	Actions
Permission Denied (4)	Incorrect User ID entered.	Enter correct User ID.
	Attempt to log in to a remote IP Phone 2002 or IP Softphone 2050 from an IP Phone 2004 (some restrictions apply).	Go to an IP Phone 2002 or IP Softphone 2050 and try again, or consult your local system administrator.
Permission Denied (5)	Incorrect User ID entered.	Enter correct User ID.
	Remote telephone does not have VOUA Class of Service.	Notify system administrator.
Permission Denied (6)	Incorrect User ID entered.	Enter correct User ID.
	Incorrect Station Control Password entered.	Select Retry, and try again with the correct Station Control Password.
Server Unreachable (1)	Network problem.	Notify system administrator, if problem persists.
Server Unreachable (2)	Network problem.	Notify system administrator, if problem persists.

# Media Gateway 1000B

The Media Gateway 1000B (MG 1000B) telephone can operate in Normal or Local mode.

#### Normal Mode

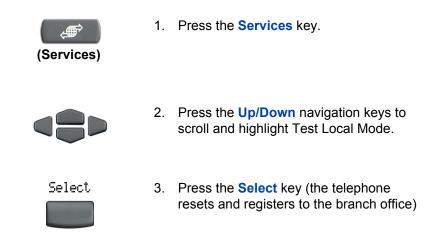
The telephone registers with the Main Office and receives telephone services from the Main Office. At any time during Normal Mode, you can check local mode functionality (make and receive calls) by enabling Local Mode and returning to Normal Mode. After testing, you can return to Normal Mode by using the *Resume Normal Mode* command or by waiting for ten minutes.

#### Local Mode

If the WAN connection goes down, the IP Phone loses communication with the Main Office TPS. It then registers with the MG 1000B and receives telephone services from the MG 1000B. Features such as Personal Directory, Redial List, and Callers List are not available when operating in Local Mode. When in Local Mode, the telephone displays "LOCAL MODE".

### **Test Local Mode**

Use Test Local Mode to check local mode functionality (make and receive telephone calls). This is useful when provisioning has changed for an IP Phone on an MG 1000B Controller.



### **Resume Normal Mode**

Use the Resume Normal Mode command to return to Normal Mode after testing survival functionality.

*Note:* If the Resume Normal Mode command is not performed after testing, the telephone automatically returns to Normal Mode in ten minutes.



1. Press the Services key.



 Press the Up/Down navigation keys to scroll and highlight Resume Normal Mode.



3. Press the **Select** key (the telephone registers back to the Main Office).

## Troubleshoot MG 1000B

When using MG 1000B, error messages may display on your screen. Table 3 lists error messages and actions to correct the causes.

Table 3: Troubleshoot MG 1000B

Display Message	Probable Cause	Actions
Local Mode	Test Local mode.	Press the <b>Services</b> key, and then select Resume Normal Mode.
	Network problem.	Contact system administrator if problem persists.
Local Mode Invalid ID (1)	Gatekeeper unable to find end point from Branch User ID.	Notify system administrator.
Local Mode Invalid ID (2)	Branch User ID not found in any equipped Terminal Number (TN).	Notify system administrator.

# **Hospitality features**

Hospitality features are intended for hotel operations.

# Set Automatic Wake-Up

Use the Automatic Wake-Up feature to receive a timed reminder call. From your telephone, you can program the system to automatically place a call to yourself at a predetermined time. When you answer the call, recorded music plays for up to 30 seconds, followed by a prerecorded announcement or the attendant.

#### To enter the time for an Automatic Wake-Up call:



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you gen gere

4°\* 5\* 8\*\*

- 1. Lift the handset.
- 2. Dial the Automatic Wake-Up Request FFC.
- Dial the Automatic Wake-Up time in a 24-hour time format (hhmm). A tone sounds to confirm your entered time.

*Note:* In a 24-hour time format, 7:30 a.m. is entered as 0730; 9:45 p.m. is entered as 2145.



4. Press the Goodbye key.

To quit an Automatic Wake-Up call:



1. Lift the handset.



2. Dial the Automatic Wake-Up Quit FFC.



3. Press the Goodbye key.

To verify the time for the Automatic Wake-Up call:



1. Lift the handset.

1	24	300
4°*	5*	ý**
y	gen.	gero)
*	0	8

\* 0 \*

- 2. Dial the Automatic Wake-Up Verify FFC.
- 3. Dial the **Automatic Wake-Up** time in a 24-hour time format (hhmm). If your query matches the preset time, a confirmation tone sounds.

*Note:* In a 24-hour time format, 7:30 a.m. is entered as 0730; 9:45 p.m. is 2145.



4. Press the Goodbye key.

## **Activate Message Registration**

Use the Message Registration feature to read, change, or reset meters that log your hotel telephone calls.

#### To read meters:



MRK

1. Press the Message Registration key.

- 1 24 94 44 54 94 34 84 94 46 9 8
- 2. Dial the room DN number.





3. Dial the correct meter count.



- 4. Press the \* key.
- 5. Press the Message Registration key.

#### To reset a meter to zero:

**MRK** 



- 1. Press the Message Registration key.
- 2. Dial the room Directory Number (DN).



- 3. Press the \* key.
- MRK
- 4. Press the Message Registration key.

## **Use Maid Identification**

Use the Maid Identification feature to track the cleaning status of rooms. The maid enters the information from the telephone in each room.

#### To enter cleaning status:

R	Μ	K	

3 2<sup>46</sup> 3<sup>40</sup>

for 5+ 8\*\*\*

)na ga gar \* 0 g

3 2m 3m

200 54 500 200 800 900

- 1. Press the Room Status key.
- Dial the Directory Number (DN) for the room for which the cleaning status is being changed.
- 3. Dial one of the following cleaning status codes:
  - 1 = Cleaning requested
  - 2 = Cleaning in progress
  - 3 = Room cleaned
  - 4 = Room passed inspection
  - 5 = Room failed inspection
  - 6 = Cleaning skipped
  - 7 = Not for sale

The interrupted dial tone sounds.



4. Press the \* key.

 Dial the Maid ID. If you dial the wrong Maid ID, press the \* key and redial the ID. RMK

6. Press the Room Status key.

# **Display Room Status**

Use the Room Status feature to print the status of a room using the Display Module.

#### To read the status of a room:

RMK

J.	24	3**
4°*	5*	6~~
por	8°*	gerc.
¥	0	

- 1. Press the Room Status key.
- Dial the Directory Number (DN) for the room. The DN displays followed by a two-digit code.

The first digit indicates the occupancy status:

- 0 = Room vacant
- 1 = Room occupied

The second digit indicates the cleaning status of the room:

- 1 = Cleaning requested
- 2 = Cleaning in progress
- 3 = Room cleaned
- 4 = Room passed inspection
- 5 = Room failed inspection
- 6 = Cleaning skipped
- 7 = Not for sale

RMK

3. Press the Room Status key.

#### Changing the status of a room:

RMK

1. Press the Room Status key.

- Dial the Directory Number (DN) for the room. The DN displays followed by a two-digit code.

The first digit indicates the occupancy status:

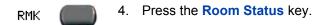
- 0 = Room vacant
- 1 = Room occupied

The second digit indicates the cleaning status of the room:

- 1 = Cleaning requested
- 2 = Cleaning in progress
- 3 = Room cleaned
- 4 = Room passed inspection
- 5 = Room failed inspection
- 6 = Cleaning skipped
- 7 = Not for sale

1	24	34
4°**	5*	<b>~~</b>
por	<b>8</b>	3erc
*	0	*

 Dial the status code for the room. A three-digit code appears. The first digit indicates the occupancy status, the second is the old cleaning status, and the third is the new status.



# **External server applications**

Use external server applications, such as Net6, to access a variety of applications directly from your IP Phone 2004.

## **Use Net6 Transformation Gateway**

Use the Net6 Transformation Gateway (TG) feature to access a variety of applications.

The default applications are:

- News Browse and read a variety of news sources and topics.
- Finance Obtain market indices and stock quotations.
- White Pages Search for people (by first name and last name), for a business (by name and ZIP code/postal code), or for either by phone number.
- Yellow Pages Search for businesses by name and ZIP code/postal code.
- Sports Get the latest sports news.
- Travel Find out how to access flight information through FlightArrivals.com.
- Weather Check the weather based on ZIP code or postal code.

Because your system's applications can be customized, you may not have each of the Net6 applications listed above. Contact your system administrator with any questions you have regarding the default applications available on your IP Phone 2004.

The application information displays on the LCD display screen of your IP Phone 2004. Only one application can be active at a time. While browsing applications, you can still make or receive telephone calls. You can use the **Expand to PC** feature key to toggle between the IP Phone 2004 and Net6 applications.

*Note:* Net6 applications are not supported on the IP Phone KEM.

#### To establish a Net6 session:

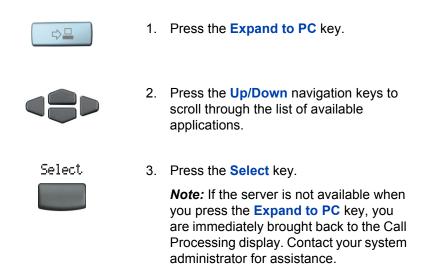


Figure 8 shows an example of the display screen during a Net6 session. The ScreenTop menu displays a list of applications available during a Net6 session.

#### Figure 8: The ScreenTop menu



Use the following procedure to access the News application.

#### To access the News application:



 Press the Select softkey to choose the News application. The Loading... message displays.



 Press the Up/Down navigation keys to scroll and highlight an available headline.



 Press the Select soft key. The Loading... message displays.



 Press the Next and Prev soft keys to scroll through the text of the News story. Select

5. Press the **Select** soft key to return to the list of news headlines when you reach the end of the news story.

Use the following procedure to access the Finance application.

#### To access the Finance Application:



 Press the Select soft key to choose the Finance application. The Loading...message displays.



2. Press the Next soft key.

#### **External server applications**





- 3. Choose one of the following:
  - a. Market Indices
  - The Loading...message displays. A list of major stock markets is shown.
  - Press the Next and Prev soft keys to scroll through the list of markets.
     When you reach the end of the market listings, press the Top soft key to return to the ScreenTop display.
  - b. Stock Quotes
  - The Loading...message displays.
  - Use the telephone dialpad to enter the symbol for the stock for which you want a quotation.
  - Press the Get soft key to retrieve the results. The Loading... message displays.
  - Press the Next and Prev soft keys to scroll through the information. When you reach the end of the information, the Home message displays.
  - Press the Select soft key.
  - Press the **Top** soft key to return to the ScreenTop menu.

Use the following procedure to access the Find a person application.

### To access the White Pages "Find a Person" application:



- 1. Press the **Select** key to choose the White Pages application.

Select

- Press the Up/Down navigation keys to scroll and highlight Find a Person application.
- 3. Press the **Select** key.



4. At the prompt, use the telephone dialpad to enter the first name (for example, john). Press the OK soft key.

*Note:* If you make a mistake, press the BkSpace soft key to correct your entry.



5. At the prompt, use the telephone dialpad to enter the last name (for example, smith). Press the OK soft key.

*Note:* If you make a mistake, press the BkSpace soft key to correct your entry.



- At the prompt, use the telephone dialpad and enter the five-digit postal code (for example, 90210).
- 7. Press the Search softkey.

If your search is successful, the person's name and telephone number display on the telephone.

*Note:* In certain environments, you must enter a digit before the telephone number to access an external line. If this is necessary, your system administrator can configure this to occur automatically.



- 8. Choose one of the following:
  - Press the Call soft key to automatically place a call.
  - Press the Next soft key to search for another person.
  - Press the **Top** key to return to the ScreenTop menu.

*Note:* If the search is unsuccessful, the response "Your search has returned no results" displays.

### **Call Interactions**

Use the following procedure to answer a telephone call while in a Net6 session.

To answer a phone call while in a Net6 session:



- 1. When you hear the ringing of the incoming call, lift the handset.
- 2. Replace the handset to end the call.



 Press the Expand to PC feature key to return to your Net6 session. You are returned to the same place from which you left your Net6 session.

Use the following procedure to place a telephone call while in a Net6 session.

To place a phone call while in a Net6 session:



1. Lift the handset. The Net6 display is replaced with the call processing display.



2. Dial the number.



3. Replace the handset to end the call.



4. Press the **Expand to PC** feature key to return to your Net6 session. You are returned to the same place from which you left your Net6 session.

Use the following procedure to exit a Net6 session.

## To exit a Net6 session:



To exit a Net6 session, choose one of the following:

- Press the Expand to PC feature key.
- Lift the handset.
- Press the Quit key.

You receive a message indicating "Lost connection. Returning to main server."

# **Feature interactions**

Table 4 shows how Net6 interacts with IP Phone 2004 call features.

## Table 4: IP Phone 2004 (Part 1 of 2)

IP Phone 2004 feature	Net6 result
Auto Answerback, Dial Intercom, any other voice call	Any call processing or voice- based activity takes precedence over Net6 application access.
Boss Secretarial Filtering	A boss cannot screen incoming calls while engaged in an application session. This feature can be accessed during an incoming call while in a Net6 session by pressing the <b>Expand</b> <b>to PC</b> feature key to return to the call processing display.
Call Party Name Display	The Call Party Name Display information for incoming calls is not displayed while in a Net6 session. This feature can be accessed during an incoming call while on a Net6 session by pressing the <b>Expand to PC</b> feature key to return to the call processing display.
Call Pickup	If Call Pickup is configured on one of the soft keys, then it is not available while in a Net6 session. This feature can be accessed during an incoming call while in a Net6 session by pressing the <b>Expand to PC</b> feature key to return to the call processing display.

# Table 4: IP Phone 2004 (Part 2 of 2)

IP Phone 2004 feature	Net6 result
Handsfree	When Net6 attempts to originate a call using the <b>Handsfree</b> key on a telephone that has HFD Class of Service, the microphone does not work. If the set has HFA Class of Service, the microphone does work.
MGB 1000	The Net6 session is lost when switching between the main office and branch office.
Virtual office	Only one Net6 server is supported. Even if you have logged into a remote switch using Virtual Office, you are connected to the local Net6 server configured in the phone when you press the <b>Expand to PC</b> feature key.
Emergency Services Access	When you are in a Net6 session, you can press the Handsfree key, the Headset key, or lift the handset to immediately access call processing services. You are presented with dial tone immediately and your screen is refreshed to show the call processing display.

# Flexible Feature Codes (FFCs)

Use Table 5 to track the FFCs assigned by your system administrator.

## **Table 5: Flexible Feature Codes**

FFC	Feature	FFC	Feature
	Automatic Wake-Up Activate		Make Set Busy Activate
	Automatic Wake-Up Deactivate		Make Set Busy Deactivate
	Automatic Wake-Up Verify		Malicious Call Trace
	Call Detail Recording Charge Account		Override
	Call Forward All Calls Activate		Pickup Ringing Number
	Call Forward All Calls Deactivate		Pickup Directory Number
	Call Park		Pickup Group
	Electronic Lock Activate		Radio Paging Access
	Electronic Lock Deactivate		Radio Paging Answer
	Group Call		Remote Call Forward Activate
	Internal Call Forward Activate		Remote Call Forward Deactivate
	Internal Call Forward Deactivate		RingAgain Activate
	RingAgain Deactivate		Virtual Office Terminal Log Off
	Station Control Password Change		Virtual Office Terminal Log On

# Accessories

# **IP Phone Key Expansion Module (KEM)**

The Nortel Networks IP Phone Key Expansion Module (KEM) is an optional hardware module that provides additional line appearances and feature keys on your IP Phone 2004. You can connect up to two KEMs to your IP Phone 2004, providing a total of 48 additional keys.

For more information about the IP Phone Key Expansion Module, consult the *"Nortel Networks IP Phone Key Expansion Module (KEM) User Guide"*.

# Terms you should know

#### Attendant

A telephone operator in your organization.

## **AutoDial**

A telephone number programmed on the **AutoDial** key for one-touch dialing.

#### **Callers** List

A list of all incoming calls (maximum 100 entries).

#### Calling Party Name Display (CPND)

Information appearing on the LCD display screen such as the caller's name and telephone number. The system must have CPND enabled.

#### Category 5 (Cat 5)

Balanced 100 Ohm cable and associated connecting hardware whose transmission characteristics are specified up to 100 MHz. It is used by 10Base-T, 100Base-T4, and 100Base-TX installations. The cable normally has four pairs of copper wire. Category 5 is the most popular cable used in new installations today.

#### **Communication Server 1000**

An office communication system.

## Copy key

A fixed key reserved for future feature development.

#### Date/Time display

The current date and time when the telephone is in an idle state.

#### Directory key

Enables access to Corporate Directory, Personal Directory, Redial List, and Callers List.

### Directory Number (DN)

A number consisting of one to seven digits for a telephone. Also known as an *extension number*.

## Expand to PC

A fixed key on your telephone used to access external server applications such as Net6.

### Fastbusy

A signal given when all outgoing lines are busy.

#### Feature display

An area that shows status information about the feature in use. It also displays the name and status of the active session.

## Fixed key

The hard-labeled keys on your telephone.

#### Handsfree

A method of conversing with the party on the other end of the line without lifting your handset.

#### Flexible Feature Codes (FFCs)

Specialized codes entered using the dialpad that enable features, (for example Automatic Wake-Up call).

#### Goodbye key

A fixed key used to end an active call.

## Handsfree

A method of conversing with the party on the other end of the line without lifting your handset.

## Headset key

A fixed key used to answer a call using the headset.

#### Hold key

A fixed key used to place an active call on hold.

#### Information display

Any display of call activity, lists, prompts, and status of calls. On the IP Phone 2002, the information area is a 1-line by 24-character display. If the text message exceeds this area, a scroll arrow icon indicates that you must use the scroll keys to view the remaining text.

#### Information line

A 1-line by 24-character area that displays date and time or application information.

#### Interrupted dial tone

A broken or pulsed dial tone, heard when you access some features on your telephone.

#### IP Phone Key Expansion Module (KEM)

An optional hardware module which provides additional line appearances and feature keys to your IP Phone. Up to two KEMs can be attached to your IP Phone 2004, providing a total of 48 keys.

## Message (Inbox)

A fixed key which connects to your voice messaging system when the key is pressed.

#### Message waiting indicator/Incoming call indicator

An LCD or an LED that indicates the status of a feature by the flash, wink, steady on, or off.

#### Meridian 1

An office communication system.

#### More..

An option allowing access to the multiple layers of the soft keys. Soft keys are the four keys located directly below the display area.

### Mute key

A fixed key used to listen to the caller without transmitting.

#### Navigation keys

Up/Down and Left/Right keys used to scroll through menus and lists appearing on the LCD display screen.

## Off-hook

Any line selected to make a call or receive an incoming call. The term *off-hook* is applied whether (a) the end-user lifts up the handset, (b) the end-user presses a line key, (c) the call is automatically answered at the set, or (d) a line is automatically selected for an outgoing call.

#### **Outbox/Shift**

A fixed key used to switch between two feature key pages to provide access to an additional six lines/features and an additional 24 lines on the IP Phone KEM.

#### Paging tone

A special tone heard when using the Radio Paging feature. You hear two beeps followed by dial tone.

## **Password Admin**

A menu used by you and the system administrator to change your Station Control Password (SCPW).

## **Personal Directory**

A list of user-defined names and numbers (maximum of 100 entries).

#### Primary directory number

The main extension number on your telephone.

#### **Private line**

A feature that can be assigned to your telephone. With this line, you can reach an outside number without dialing a code to access an outside line. Internal extensions cannot be dialed from a private line.

#### Programmable line (DN)/feature keys (self-labeled)

The six keys located at the sides of the upper area of the display.

## Quit key

A fixed key on your telephone that is used to exit applications.

## **Redial list**

A list of previously dialed telephone numbers (maximum 20 entries).

#### Ringback/ring tone

A sound indicating that a call you have made is ringing at its destination.

#### Secondary Directory Number

A second incoming/outgoing line for your telephone.

#### Services key

A fixed key used to access options such as Telephone Options, Password Admin, Display Network Diagnostics Utilities, Virtual Office Login, Virtual Office Logout, Test Local Mode, and Resume Normal Mode.

#### Shared Directory Number

A DN (extension) that is shared by two or more persons.

#### Soft keys (self-labeled)

A set of keys programmed by your system administrator. These four keys located directly below the display area have four programmable layers. The layers are accessed through the **More..** key. These keys are also used to configure parameters in the **Telephone Option** menu.

#### Speaker key

A fixed key used to activate Handsfree.

#### Special dial tone

The three consecutive tones followed by dial tone that you hear when accessing telephone features.

## Station Control Password (SCPW)

Enables security features on your phone to prevent others from making calls from your telephone and to access to your Personal Directory, Redial List, and Callers List.

#### Status messages

A message displayed to inform the user of important information. A right arrow appears if more than one Status Message is present. Examples of Status Messages include: Message Waiting, All Lines Forwarded to: 6453, Do Not Disturb On, Ring Again active, Ringer is OFF, and Line x Unavailable.

#### System or Switch

Your office communication system.

## Switchhook

A button that the handset presses down, disconnecting your call when you replace the handset. The handset (when lifted) releases the switchhook and you either answer an incoming call or you receive a dial tone to make a call.

#### User Interface

Screen displays that interact with the end-user as a result of an action or event.

#### Volume control bar

A rocker bar you press to increase or decrease the volume of the ringer, handset, headset, speaker and the Handsfree feature.

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# IP Phone 2004 User Guide

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