Nortel Networks Communication Server 1000

IP Phone 2001

User Guide
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About the IP Phone 2001

The IP Phone 2001 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, soft key labels display directly above the soft key.

**Basic features**

The IP Phone 2001 supports the following features:

- four soft keys (self-labeled) providing access to a maximum of ten features
  
  **Note:** Your IP Phone 2001 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, and handset volume
- two specialized fixed keys:
  - Services
  - Message (Inbox)
- three call processing fixed keys:
  - Line
  - Hold
  - Goodbye
- automatic network configuration
Figure 1 illustrates the IP Phone 2001.

**Figure 1: IP Phone 2001**

**Telephone controls**

*Note:* Your IP Phone 2001 may come with optional key caps. Text in parenthesis indicate labels appearing on the key caps. For example, (Goodbye).

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

Use the **Line** (DN) key to access the single line and activate on-hook dialing. No status icon or LED is provided.
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 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
  - Local DialPad Tone
  - Set Information
  - Ring type
- **Password Admin:**
  - Station Control Password
- **Virtual Office Login and Virtual Office Logout** (if Virtual Office is configured)
Note 1: Press the Services key to exit from any menu or menu item.

Note 2: The Password Admin menu may not be available on your IP Phone 2001. Consult your system administrator.

Soft keys (self-labeled) are located below the LCD screen display. The LCD screen display above the key changes, based on the active feature.

Note: When a triangle appears before a key label, the feature is active.

When a message has been left for the user, the Message waiting indicator flashes. Also, this indicator flashes when the set ringer is ON.
Telephone display

The IP Phone 2001 has two display areas:

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

Figure 2 shows the idle LCD screen display.

**Figure 2: IP Phone 2001 LCD screen display**
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.

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, Remote Call Forward).

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

To change your SCPW:

1. Press the Services key.
2. Press the Navigation keys to scroll and highlight Password Admin.
3. Press the Select key.
4. Use the keypad to enter your password at the prompt.

5. Press the Navigation keys to scroll and highlight New Password.

6. Press the Select key.

7. Use the keypad to enter the new password.

8. Press the Select key to accept the new password.

*Note:* If you have been locked out of your IP Phone 2001, or have forgotten your SCPW, contact your system administrator.
Connect the IP Phone 2001 components

Before you begin

**CAUTION**
Damage to equipment
Do not plug the IP Phone 2001 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.

2. Connect one end of the CAT-5 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 CAT-5 line cable into the IP network.

3. 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.
Figure 3: IP Phone 2001 connections

- LAN Ethernet port
- AC Adapter jack
- Handset jack
The IP Phone 2001 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 2001 Class of Service is set for Virtual Office and Branch Office. For more information, see page 67.

**Note:** The Password Admin, Virtual Office Login, and Test Local Mode menus may not be available on your IP Phone 2001. Consult your system administrator.

The Telephone Option menu offers the following options:

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<td>Ring type...</td>
</tr>
<tr>
<td>Date/Time...</td>
<td></td>
</tr>
</tbody>
</table>

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

To use the Telephone Option menu:

1. Press the **Services** key.

2. Press the **Navigation** keys to scroll and highlight **Telephone Option**.

3. Press the **Select** key.

4. Press the **Navigation** keys to scroll and highlight an option (for example, **Language...**).

5. Press the **Select** key. The display provides information required to adjust your selection.

6. Choose one of the following:
   - Press the **Select** key to save changes and return to the **Telephone Option** menu.
   - Press the **Cancel** key to keep existing settings.
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
- On-hook dialing/listen
- Buzzer

To adjust Ringer volume:

1. Press the Navigation keys to scroll and highlight Ringer.
2. Press the Select key.
3. To increase or decrease the Ringer volume, choose one of the following:
   - Press the Lower/Higher soft keys.
   - Press the Navigation keys.
Configure options on the IP Phone 2001

To adjust Handset listen volume:

1. Press the Navigation keys to scroll and highlight Handset listen.

2. Press the Select key.

3. To increase or decrease the Handset listen volume, choose one of the following:
   — Press the Lower/Higher soft keys.
   — Press the Navigation keys.

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

Select or Cancel

or

or

or
To adjust On-hook dialing/listen volume:

1. Press the Navigation keys to scroll and highlight **On-hook dialing/listen**.

2. Press the **Select** key.

3. To increase or decrease the **On-hook dialing/listen** volume, choose one of the following:
   — Press the **Lower/Higher** soft keys.
   — Press the **Navigation** keys.

4. Choose one of the following:
   — Press the **Select** key to save the volume level and return to the **Telephone Option** menu.
   — Press the **Cancel** key to keep the existing settings.
To adjust the Buzzer volume:

1. Press the Navigation keys to scroll and highlight Buzzer.

2. Press the Select key.

3. To increase or decrease the buzzer volume, choose one of the following:
   — Press the Lower/Higher soft keys.
   — Press the Navigation keys.

4. Choose one of the following:
   — Press the Select key to save the volume level 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.

To adjust display screen contrast:

1. To increase or decrease the display contrast level, choose one of the following:
   — Press the Lower/Higher soft keys.
   — Press the Navigation keys.

2. Choose one of the following:
   — Press the Select key to save the contrast level and return to the Telephone Option menu.
   — Press the Cancel key to keep existing settings.
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:

1. Press the Navigation keys to scroll and highlight the desired language (for example, German [Deutsche]).

2. Choose one of the following:
   — Press the Select key to save the language and return to the Telephone Option menu.
   — Press the Cancel key to keep existing settings.
Select Date/Time format

There are several Date/Time formats. Formats are based on the 12-hour clock and the 24-hour clock. To select a date/time format, press the Services key and select Date/Time… from the Telephone Option menu.

To select a date/time format:

1. Press the Navigation keys to scroll and highlight the desired format. Sample formats appear in the upper right–side of the display area.

2. Choose one of the following:
   - Press the Select key to save the format and return to the Telephone Option menu.
   - Press the Cancel key to keep existing settings.
Select Local DialPad Tone

The Local DialPad Tone option enables a pressed telephone dial key to produce Dual Tone Multi-Frequency (DTMF) sounds, a single tone, or no sound. To choose a local dialpad tone, press the Services key and select Local DialPad Tone from the Telephone Option menu.

To select Local DialPad Tone:

1. Press the Navigation keys to scroll and highlight one of the following dialpad tones:
   - None to disable all tones.
   - Short Click to enable a single tone for all keys.
   - DTMF to turn on a separate DTMF tone for each key.

2. Choose one of the following:
   - Press the Select key to save the tone selection and return to the Telephone Option menu.
   - Press the Cancel key to keep existing settings.
Select 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 choose a ring type:

1. Press the 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 Navigation keys to select a different ring type.
   — Press the Cancel key to keep existing settings.
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:**

1. Press the **Navigation** keys to scroll through the list containing set information.
2. Press the **Cancel** key to return to the **Telephone Option** menu.
Make a call

This section describes features associated with making a call. There are several ways to make a call from an IP Phone 2001.

**Use Off-hook dialing**

1. Lift the handset.

2. Dial the number.

3. To terminate the call, choose one of the following:
   - 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.
3. Dial the number when the dial tone sounds.

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 Predial

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

To use Predial:

1. Without selecting the **Line (DN)** key, enter the number to be dialed.

2. Press the **Line (DN)** key to dial the number.

3. Lift the handset when the called party answers.

To edit a Predial number:

1. Without selecting the **Line (DN)** key, enter the number to be dialed.

2. Choose one of the following:
   - To erase all numbers, press the **Clear** key. Re-enter numbers to be dialed.
   - To change numbers one-at-a-time, press the **Delete** key to backspace. Re-enter a new number.
3. Press the **Line (DN)** key to dial the 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. Dial a number and receive a busy tone or no answer.

2. Choose one of the following:
   — Press the **Ring Again** key.
   — Enter the **Ring Again Activate** FFC.

To call a Ring Again party when you receive notification:

1. After receiving the notification tone, lift the handset.

2. Press the **Ring Again** key to automatically dial the number.
To deactivate Ring Again before notification:

Choose one of the following:

1. Before hearing the notification tone, press the **Ring Again** key a second time.
2. Enter the **Ring Again Deactivate FFC**.

**Redial 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
   - Lift the handset.
   - Press the **Line** (DN) key.

2. Without lifting the handset, press the **Line** (DN) key twice (the last number dialed is automatically redialed).
Use Speed Call

Use the Speed Call feature to place internal and external calls by dialing a one-, two-, or three-digit code.

To create a Speed Call number:

1. Press the Speed Call Controller key. The triangular icon flashes, indicating programming mode.

2. At the prompt:
   - Enter a one-, two-, or three-digit code (0-999).
   - If required, enter the access code (for example, “9”).
   - Enter the telephone number (internal, external, or long-distance number).

3. Press the Speed Call Controller key again to save the code and number. The flashing icons turn off.

To make a Speed Call:

1. Lift the handset.

2. Press the Speed Call Controller key.
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.

3. Dial the Speed Call code to automatically dial the number.
Answer a call

Each incoming call causes the telephone to ring and the Message Indicator lamp to flash.

To answer a call:

Lift the handset.

*Note:* Do not use the Line (DN) key to answer a call.
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.

(Hold)

**To retrieve a call on hold:**

Press the **Line** (DN) key.

(Line)

**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:**

1. Press the **Transfer** key. The other party is on hold and a dial tone sounds.
While on an active call

2. Dial the DN number to which the call is transferred.

3. When that number rings or a person answers, press the Transfer key to connect the calling party.

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

If the person called is not available, press the Line (DN) key 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 activate 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 recall timer:
   - Press the Transfer key again.
While on an active call

or

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 (to a different DN).
   - If the transfer is picked up while you are on the line, press the Goodbye key to complete the transfer.
Use Call Park

Use the Call Park feature to hold temporarily (parked) and retrieve a call from any telephone. Using Call Park does not tie up a line and, when configured network-wide, 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:

1. Press the **Park** key.
2. Dial the DN where you want to park the call.
3. Press the **Park** key.

**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:

1. Press the **Park** key twice.

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 retrieve a parked call:

1. Lift the handset.

2. Press the Park key.

3. Dial the DN where you parked the call.

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

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 58.

3. Press the **Call Party** key to return to the call.
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 activate Call Trace:

1. Press the **Transfer** key or the **Conference** key.

2. Dial the **SPRE code** followed by **83** or enter the **Call Trace** FFC to automatically reconnect.

*Note:* Contact your system administrator for the Call Trace feature SPRE code.
While away from your desk

This section describes features that are used 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, that call cannot be forwarded.

To forward your calls or change the forward number:

1. Press the **Forward** key.
2. Dial the DN where you want to forward your calls.
3. Press the **Forward** key.

To deactivate Call Forward:

Press the **Forward** key.
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 activate Internal Call Forward:**

1. Lift the handset and enter the Internal Call Forward Activate FFC.
2. Dial the DN to which your internal calls will be forwarded.
3. Hang-up.

**To deactivate Internal Call Forward:**

Lift the handset and enter the Internal Call Forward Deactivate FFC.
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:

1. Lift the handset.
2. If calling from a telephone outside the system, dial your direct system access number and wait for dial tone.
3. Dial the Remote Call Forward Activate FFC to activate the feature.
4. Dial your Station Control Password. A dial tone sounds.
5. Choose one of the following:
   — Dial your DN.
   — To forward calls to the previous call forward telephone number, press the # key. (Do not perform steps 6 and 7).
6. Dial the number to which calls are being forwarded. If calls are forwarded to an invalid number, a fast busy signal sounds.
To deactivate Remote Call Forward:

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.

3. 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

The Electronic Lock feature is controlled using your Station Control Password. To change your Station Control Password, please refer to “Security features” on page 14.

To lock your telephone:

1. Lift the handset.

2. Dial the Electronic Lock Activate FFC.

3. Dial your Station Control Password.

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

To unlock your telephone:

1. Lift the handset.

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 FFC remotely, dial your **DN**.
Talk with more than one person

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

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 configuration.

To set up a conference call:

1. While on a call, press the Conference key to place the party on hold. You receive dial tone.
2. Dial the number of the person you want to add to the conference call. You can talk privately to the person you are adding at this time.
3. Press the Conference key a second time to conference all parties together.
Talk with more than one person

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

1. Press the **Goodbye** key.

2. Press the **Line** (DN) key to return to your original call.
Talk with more than one person

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. Enter the Group Call FFC.
   - The feature automatically calls all group members.
   - The telephone numbers of the group members display as they answer.
   - 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:

Lift the handset.

Note: When you answer a Group Call, three 10-second tones notify you that there is a group call on your extension.
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 Make Set Busy**

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

**To activate Make Set Busy:**

1. Lift the handset.
2. Enter the **Make Set Busy Activate** FFC.

**To deactivate Make Set Busy:**

1. Lift the handset.
2. 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 Call Page Connect to make an announcement

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

To use Call Page:

1. Lift the handset.

2. Dial the **Page Trunk Access Code** to complete the connection to the page system.

3. Make your announcement.

4. Press the **Goodbye** key.
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.
2. Press the Charge key or dial the Call Detail Recording FFC.
3. Dial the charge account number.
4. When the dial tone sounds, dial the number.

To charge a call in progress:

1. Choose one of the following:
   — Press the Transfer key.
   — Press the Conference key.
2. Press the Charge key or dial the Call Detail Recording FFC.
Additional call features

3. Dial the charge account number.

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

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

1. Press the Transfer key. The call is placed on hold.

2. Dial the Call Detail Recording FFC.

3. Dial the charge account number.

4. After the dial tone, dial the number to where the call is to be transferred.

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:

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

2. 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.

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:

You receive a busy signal after dialing a telephone number:

1. Enter the **Override** FFC to initiate a Forced Camp-on.
   - If either person on the call disconnects at this time, you receive an overflow (fast busy/engaged) signal.

2. Enter the **Override** FFC again.
   - 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.

To disconnect Enhanced Override:

Press the **Goodbye** key.

(Goodbye)
Use Forced Camp-on

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:

You receive a busy signal after dialing a telephone number.

1. Enter the **Override** FFC to initiate a Forced Camp-on.

   **Note:** The person you called receives a tone. You receive a ring/ringback signal 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.

3. When the person you called finishes their call, your telephone automatically dials the number. Both telephones ring.

To answer a call camped-on to your extension:

When the 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:**

You dial a telephone number and receive a busy signal.

Enter the **Override** FFC.

The people in the targeted call receive a tone for approximately one second. After the Override feature joins you to their call, a short tone repeats every 16 seconds.

**To end the connection:**

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 on an established call:**

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. Lift the handset.

2. Dial the **Radio Paging Access** FFC. The paging tone sounds (two beeps followed by a dial tone).

3. 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 high pitched 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 the desk. To page the called party, there is no need to redial the number of the called party.


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.

3. If your call goes unanswered for a preset time period and a 15-second high-pitched 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 line (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 Radio Page Answer 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.
Additional features

Virtual Office

When you are away from your office telephone, use the Virtual Office feature to transfer calls and all of your 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 2001 can be activated for Virtual Office by the IP Phone 2002, IP Phone 2004, IP Softphone 2050, or another IP Phone 2001.

**Note 3:** When used as the remote telephone, the IP Phone 2001 can activate *only an IP Phone 2001* for Virtual Office.

Virtual Office login

To activate Virtual Office on your office telephone from your remote telephone:

1. Press the **Services** key.

2. Press the **Navigation** keys to scroll and highlight **Virtual Office Login**.

3. Press the **Select** key.
4. Enter your User ID (for example, your DN including the access code) at the prompt.
   
   **Note:** This must be an ESN number.

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 log in again.

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

Figures 4 to 7 illustrate IP Phones logged on to an IP Phone 2001 using Virtual Office.

**Figure 4: Logged on to an IP Phone 2001 using an IP Phone 2001**

![Figure 4: Logged on to an IP Phone 2001 using an IP Phone 2001](image1)

**Figure 5: Logged on to an IP Phone 2001 using an IP Phone 2002**

![Figure 5: Logged on to an IP Phone 2001 using an IP Phone 2002](image2)
On the displays of IP Phone 2002 and 2004, and IP Softphone 2050, the feature keys remain empty (except for the appearance of your DN) as your IP Phone 2001 does not support feature keys.

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 is no longer operational.

A Logged Out message displays on your telephone alerting you that your office telephone 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).

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**

To log out from a remote telephone:

1. Press the **Services** key.

2. Press the **Navigation** keys to scroll and highlight **Virtual Office Logout**.

3. Press the **Select** key.
Troubleshoot Virtual Office
When you use Virtual Office, error messages may display on-screen. The following table lists error messages and actions to correct the causes.

**Table 1: Troubleshoot Virtual Office (Part 1 of 3)**

<table>
<thead>
<tr>
<th>Displayed Message</th>
<th>Probable Cause</th>
<th>Action</th>
</tr>
</thead>
<tbody>
<tr>
<td>Busy, try again</td>
<td>Remote IP Phone is active (not idle).</td>
<td>Wait for remote telephone to become idle and try again.</td>
</tr>
<tr>
<td></td>
<td>ACD IP Phone is logged in.</td>
<td>Log out of ACD IP Phone before initiating Virtual Office from another IP Phone.</td>
</tr>
<tr>
<td></td>
<td>Make-Set-Busy is inactive on ACD IP Phone.</td>
<td>Set Make-Set-Busy active on ACD IP Phone.</td>
</tr>
<tr>
<td>Invalid ID (1)</td>
<td>Incorrect User ID entered.</td>
<td>Enter correct User ID.</td>
</tr>
<tr>
<td></td>
<td>User ID is not in Gatekeeper database.</td>
<td>Notify system administrator.</td>
</tr>
<tr>
<td>Invalid ID (2)</td>
<td>Incorrect User ID entered.</td>
<td>Enter correct User ID.</td>
</tr>
<tr>
<td>Invalid ID (3)</td>
<td>Incorrect User ID entered.</td>
<td>Enter correct User ID.</td>
</tr>
<tr>
<td></td>
<td>User ID in Gatekeeper database points to originating Call Server.</td>
<td>Notify system administrator.</td>
</tr>
</tbody>
</table>
### Table 1: Troubleshoot Virtual Office (Part 2 of 3)

<table>
<thead>
<tr>
<th>Displayed Message</th>
<th>Probable Cause</th>
<th>Action</th>
</tr>
</thead>
<tbody>
<tr>
<td>Locked from Login</td>
<td>Three failed attempts to enter the correct Station Control Password.</td>
<td>Wait one hour for the lock to clear automatically, or notify system administrator to clear lock.</td>
</tr>
<tr>
<td>Permission Denied (1)</td>
<td>Remote telephone has no Station Control Password.</td>
<td>Notify system administrator.</td>
</tr>
<tr>
<td>Permission Denied (3)</td>
<td>Incorrect User ID entered.</td>
<td>Enter correct User ID.</td>
</tr>
<tr>
<td></td>
<td>Remote telephone has no Station Control Password.</td>
<td>Notify system administrator.</td>
</tr>
<tr>
<td>Permission Denied (4)</td>
<td>Incorrect User ID entered.</td>
<td>Enter correct User ID.</td>
</tr>
<tr>
<td></td>
<td>Attempt to log in to a remote IP Phone 2002, IP Phone 2004, or IP Softphone 2050 from an IP Phone 2001 (some restrictions apply).</td>
<td>Go to an IP Phone 2002, IP Phone 2004, or IP Softphone 2050 and try to log in again, or consult your system administrator.</td>
</tr>
<tr>
<td>Permission Denied (5)</td>
<td>Incorrect User ID entered.</td>
<td>Enter correct User ID.</td>
</tr>
<tr>
<td></td>
<td>Remote telephone does not have VOUA Class of Service.</td>
<td>Notify system administrator.</td>
</tr>
</tbody>
</table>
### Table 1: Troubleshoot Virtual Office (Part 3 of 3)

<table>
<thead>
<tr>
<th>Displayed Message</th>
<th>Probable Cause</th>
<th>Action</th>
</tr>
</thead>
<tbody>
<tr>
<td>Permission Denied (6)</td>
<td>Incorrect User ID entered.</td>
<td>Enter correct User ID.</td>
</tr>
<tr>
<td></td>
<td>Incorrect Station Control Password entered.</td>
<td>Select Retry, and try again with the correct Station Control Password.</td>
</tr>
</tbody>
</table>
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 telephone loses communication with the Main Office TPS. It then registers with the MG 1000B and receives telephone services from the branch office. 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.

1. Press the Services key.
2. Press the Navigation keys to scroll and highlight Test Local Mode.
3. Press the Select key (the telephone resets and registers to the MG 1000B).
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 to access the Services menu.


3. Press the Select key (the telephone registers back to the Main Office).
### Troubleshoot MG 1000B

When you use MG 1000B, error messages may display on-screen. The following table lists error messages and actions to correct the causes.

**Table 2: Troubleshoot MG 1000B**

<table>
<thead>
<tr>
<th>Display Message</th>
<th>Probable Cause</th>
<th>Action</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Local Mode</strong></td>
<td>Test Local mode.</td>
<td>Press the <strong>Services</strong> key, and then select <strong>Resume Normal Mode</strong>.</td>
</tr>
<tr>
<td></td>
<td>Network problem.</td>
<td>Contact system administrator if problem persists.</td>
</tr>
<tr>
<td><strong>Local Mode</strong></td>
<td>Gatekeeper unable to find endpoint from Branch User ID.</td>
<td>Notify system administrator.</td>
</tr>
<tr>
<td><strong>Invalid ID (1)</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Local Mode</strong></td>
<td>Branch User ID not found in any equipped Terminal Number (TN).</td>
<td>Notify system administrator.</td>
</tr>
<tr>
<td><strong>Invalid ID (2)</strong></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
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:

1. Lift the handset.

2. Dial the Automatic Wake-Up Request FFC.

3. Dial the Automatic Wake-Up time in a 24-hour time format (hhmm). A tone sounds to confirm the 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.

   (Goodbye)

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

1. Lift the handset.

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 entered as 2145.

4. Press the **Goodbye** key.

   (Goodbye)
## Flexible Feature Codes (FFCs)

Use this table to keep track of the FFCs assigned by your system administrator.

<table>
<thead>
<tr>
<th>FFC</th>
<th>Feature</th>
<th>FFC</th>
<th>Feature</th>
</tr>
</thead>
<tbody>
<tr>
<td>Automatic Wake-Up</td>
<td>Activate</td>
<td>Malicious Call Trace</td>
<td></td>
</tr>
<tr>
<td>Deactivate</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Automatic Wake-Up</td>
<td>Verify</td>
<td>Remote Call Forward</td>
<td></td>
</tr>
<tr>
<td>Verify</td>
<td>Activate</td>
<td>Activate</td>
<td></td>
</tr>
<tr>
<td>Call Detail</td>
<td>Recording</td>
<td>Remote Call Forward</td>
<td></td>
</tr>
<tr>
<td>Charge Account</td>
<td></td>
<td>Deactivate</td>
<td></td>
</tr>
<tr>
<td>Electronic Lock</td>
<td>Activate</td>
<td>Radio Paging Access</td>
<td></td>
</tr>
<tr>
<td>Deactivate</td>
<td></td>
<td>Radio Paging Answer</td>
<td></td>
</tr>
<tr>
<td>Group Call</td>
<td></td>
<td>Station Control</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>Password Change</td>
<td></td>
</tr>
<tr>
<td>Internal Call Forward</td>
<td>Activate</td>
<td>Virtual Office</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>Terminal Log On</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Deactivate</td>
<td>Log Off</td>
<td></td>
</tr>
</tbody>
</table>
Terms you should know

Attendant
A telephone operator in your organization.

Calling Party Name Display
Information appearing on the LCD display screen such as the caller’s name and telephone number. The system must have CPND enabled.

Category 5 (Cat5)
Balanced 100 Ohm cable and associated connecting hardware whose transmission characteristics are specified up to 100 MHz. It is used by 10BaseT, 100BaseT4, and 100BaseTX 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
Your office communication system.

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

Directory Number (DN)
A number consisting of one to seven digits for a telephone. Also known as an extension number.

Fastbusy
A signal given to indicate that all outgoing lines are busy or an error condition exists (for example, a misdialed number).

Feature display
An area that shows status information about the feature in use. It also displays the name and status of the active session.
Terms you should know

**Fixed key**

The hard-labeled keys on your telephone.

**Flexible Feature Codes (FFCs)**

Specialized codes entered using the dial pad that enable features (for example, Ring Again).

**Goodbye key**

A fixed key used to end an active call.

**Indicator**

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

**Information display**

Any display of call activity, lists, prompts, and status of calls. On the IP Phone 2001 this information area is a one-line by 24-characters. 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 one-line by 24-character area which 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.

**Message (Inbox)**

A fixed key on the IP Phone 2001 that 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.

Navigation keys
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.

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

Ringback/ring tone
A sound indicating that a call you have made is ringing at its destination.

Services key
A fixed key used to access options such as Telephone Options, Password Admin, 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.

Special Prefix code (SPRE)
Special codes entered using the dial pad, followed by a two-digit access code, that enable features (for example, Call Forward All Calls requires entry of SPRE code + 74).
**Terms you should know**

**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. These keys are also used to configure parameters in the *Telephone Option* menu.

**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 prevent access to protected features (for example, Remote Call Forward).

**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, and Ringer is OFF.

**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, and the speaker.
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