



9110 Telephone
Instruction Manual

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Notice

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Federal Communications Commission (FCC) Notice

Internal note: This statement only needed in Spanish, Portuguese, and Japanese.

This equipment has been tested and found to comply with the limits for a Class A digital device, pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference when the equipment is operated in a commercial environment. This equipment generates, uses, and can radiate radio-frequency energy and, if not installed and used in accordance with the instruction manual, may cause harmful interference to radio communications. Operation of this equipment in a residential area is likely to cause harmful interference, in which case the user will be required to correct the interference at his or her own expense.

Trademark Information

DEFINITY is a registered trademark of Lucent Technologies.
DIMENSION is a registered trademark of Lucent Technologies.
MERLIN is a registered trademark of Lucent Technologies.

Ordering Information

For more copies of this manual, call your local authorized Lucent Technologies distributor.

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FCC Regulations

Pertaining to this equipment

Interference Information (Part 15) Some telephone equipment generates and uses radio frequency energy, and if not installed and used properly, may cause interference to radio and television reception.

Your Lucent Technologies product has been tested and found to meet the standards for a Class B computing device, as specified in Subpart J of Part 15 of the FCC Rules. These specifications are designed to provide protection against such interference in a residential installation. However, there is no guarantee that interference will not occur in a particular installation.

If your Lucent Technologies product causes interference to radio or television reception when in use, you might correct the interference with any one or all of these measures:

- 1 Where it can be done safely, reorient the receiving television or radio antenna.
- 2 To the extent possible, relocate the television, radio, or other receiver with respect to the telephone equipment.
- 3 If your telephone product runs on AC power, plug your product into an AC outlet that's not on the same circuit as one used by your radio or television.

Registration Information (Part 68) The following information is applicable only to equipment connected directly to the telephone network and not to connection of stations behind terminal systems.

In compliance with the FCC Rules, you should be aware of the following:

- 1 Connection of this equipment to the telephone network must be through one of the standard network interface jacks. These jacks may be ordered from the local telephone company or through Lucent Technologies as your authorized agent.
- 2 Registered equipment may not be used with coin telephone lines or party lines.
- 3 Customers connecting equipment to the telephone network will, upon request of the local telephone company, provide the following information:

- The telephone number assigned to the line used with this telephone.
 - The Registration Number and the Ringer Equivalence Number (REN) from the Registration label on the bottom of the telephone. The REN is useful to determine how many devices you can connect to your telephone line and still have them ring when your telephone line is called. In most, but not all areas, the sum of all the RENs should be five or less. You may want to contact your local telephone company.
- 4 If trouble is experienced, the telephone set should be unplugged from the network interface to determine if the telephone set or the telephone line is the trouble source. If your telephone set is determined to be malfunctioning, it should not be reconnected until repairs are made.
 - 5 Repairs to this equipment, other than routine repairs, can be made only by Lucent Technologies or its authorized agents.
 - 6 If a telephone set causes harm to the telephone network, the local telephone company may temporarily discontinue your service and, if possible, notify you in advance. If advance notice is not practical, you will be notified as soon as possible. You will be given the opportunity to correct the problem and be informed of your right to file a complaint with the FCC.

The local telephone company may make changes in its facilities, equipment, operation, or procedures that could affect the proper functioning of your equipment. If they do, you will be given adequate notice in writing to allow you an opportunity to maintain uninterrupted telephone service.

IMPORTANT SAFETY WARNINGS

Only the most careful attention has been devoted to quality standards in the manufacture of your new telephone. Safety is a major factor in the design of every set. But, safety is YOUR responsibility, too.

Please read carefully the helpful tips listed below and on the next page. These suggestions will enable you to take full advantage of your new telephone. Then, retain these tips for later use.

Use

When using your telephone equipment, the following safety precautions should always be followed to reduce the risk of fire, electric shock, and injury to persons.

- Read and understand all instructions.
- Follow all warnings and instructions marked on the telephone.
- This telephone can be hazardous if immersed in water. To avoid the possibility of electric shock, do not use it while you are wet. If you accidentally drop the telephone into water, do not retrieve it until you have first unplugged the line cord from the modular jack. Do not plug the telephone back in until it has dried thoroughly.
- Avoid using the telephone during electrical storms in your immediate area. There is a risk of electric shock from lightning. Urgent calls should be brief. Even though protective measures may have been installed to limit electrical surges from entering your business, absolute protection from lightning is impossible.
- If you suspect a natural gas leak, report it immediately, but use a telephone away from the area in question. The telephone's electrical contacts could generate a tiny spark. While unlikely, it is possible that this spark could ignite heavy concentrations of gas.
- Never push objects of any kind into the equipment through housing slots since they may touch hazardous voltage points or short out parts that could result in a risk of electric shock. Never spill liquid of any kind on the telephone. If liquid is spilled, however, refer servicing to proper service personnel.
- To reduce the risk of electric shock, do not disassemble this telephone. There are no user serviceable parts. Opening or removing covers may expose you to hazardous voltages. Incorrect reassembly can cause electric shock when the

telephone is subsequently used. If your telephone does not work properly, refer to the information below which describes how to get service for your telephone.

Service

- 1 Before cleaning, unplug the telephone from the modular wall jack. Do not use liquid cleaners or aerosol cleaners. Use a damp cloth for cleaning. (See **General Care and Maintenance** later in this manual.)
- 2 Unplug the telephone from the modular wall jack. Be sure to refer servicing to qualified service personnel when these conditions exist:
 - If liquid has been spilled into the telephone.
 - If the telephone has been exposed to rain or water.
 - If the telephone does not operate normally by following the operating instructions, adjust only those controls described in these instructions. Do not attempt to adjust any other controls since doing so may result in damage to the telephone and will require extensive work by a qualified technician to restore the telephone to normal operation.
 - If the telephone has been dropped or the housing has been damaged.
 - If you note a distinct change in the performance of the telephone.

WARNING: When this product is located in a separate building from the telephone communications system, a line current protector **MUST** be installed at the entry/exit points of ALL buildings through which the line passes.

The following are the **ONLY** acceptable devices for use in this application:

- Lucent Technologies 4-type protectors, except the 4C3S-75 “Enhanced” Protector

SAVE THESE INSTRUCTIONS



When you see this warning symbol on the product, refer to the instructions booklet packed with the product for more information before proceeding.

Your 9110 Telephone

The Lucent Technologies 9110 telephone can be used at your place of business with any of the following communications systems: System 25, System 75, System 85, DEFINITY® Generic 1 or Generic 2, MERLIN®, or Dimension® Communications Systems. The Lucent Technologies 9110 has the following basic features:

- Convenient Pulse or pushbutton Tone dialing
- Desk or table-mounted
- Hands-free 2-way speakerphone (speak and listen) operation
- Ten memory-dialing buttons which can hold twenty memory-dialing numbers
- Flashing ringer light which indicates incoming call
- Flashing Message light
- Flash button, for using such features as Hold and Transfer
- Last Number Redial feature
- Save feature, which allows you to save a number in memory for a temporary period of time
- Mute function
- Speaker volume control
- User-selectable ringer volume and pitch control
- User-adjustable speakerphone volume control

Figure 1 shows you the top and bottom view of the Lucent Technologies 9110 telephone and its many features. Explanations of these features follow the figures.

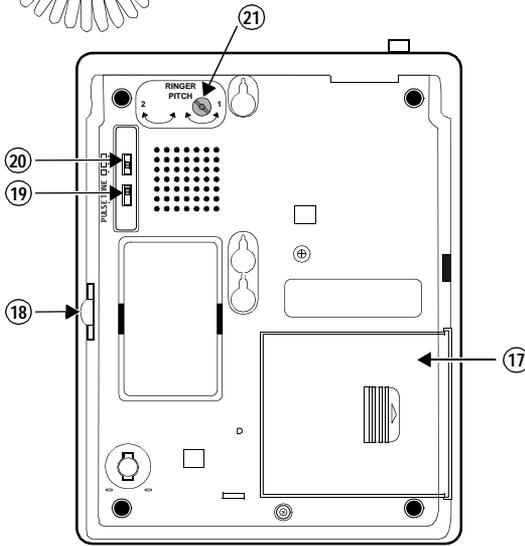
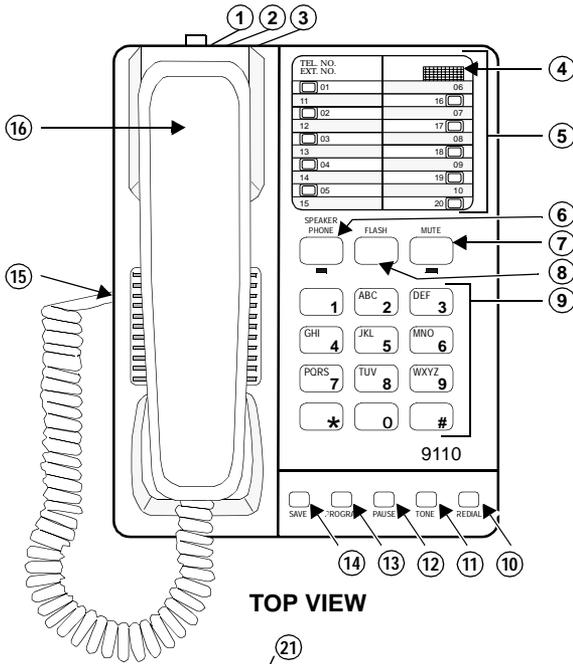


Figure 1: Lucent Technologies 9110 Telephone, Top and Bottom Views

The **TOP VIEW** includes the following:

1) 9-volt Adapter jack (on top/rear side of telephone)

This round jack, located on the top/rear of the set and labeled **DC 9V**, is used to connect a 9-volt adapter to the telephone. This adapter can be used for improving the performance of the built-in speakerphone on long loops in which there is limited power available from the line.

2) LINE jack (on top/rear side of telephone)

This jack, located on the top/rear of the set, is used to connect the telephone and the modular wall jack. Use the 7-foot cord that comes with the set.

3) DATA jack (on top/rear side of telephone)

This jack, located on the top/rear of the set, is used to connect a device such as a modem to the telephone.

4) Ringer indicator/Message light

This indicator flashes when the telephone rings with an incoming call. The light also flashes when you have a message.

5) Ten Memory-Dialing buttons

These 10 buttons, located at the top of the dial pad, provide easy dialing of 20 frequently-dialed numbers. Each memory button can store two separate numbers of up to 24 digits. (A pause or flash counts as two digits.) In order to dial the number programmed on the upper portion of each button (numbered 01 through 10), press the button once; to dial the number programmed on the lower half of each button (numbered 11 through 20), press the button twice.

6) SPEAKERPHONE button

Use the 2-way speakerphone for hands-free call-handling. When the speakerphone is activated, the red light next to the button goes on.

7) MUTE button

When you press the MUTE button while speaking on the handset, the handset's microphone is turned off. Use the Mute feature when you want to confer with someone in the room with you, but you do not want the other party on the call to hear your conversation. When the Mute feature is activated, the red light next to the button goes on.

8) FLASH button

This button is used with PBX systems to activate special PBX facilities such as Hold or Transfer which may be available in your PBX.

9) Dial pad

The standard dial pad can be used for normal dialing.

10) REDIAL button

With this feature, you can redial the last number dialed from the dial pad. Merely lift the handset, and when you hear dial tone, press the REDIAL button. The last number that you dialed is redialed automatically. This number can be up to 32 digits.

11) TONE button

This button is used for converting from Pulse to Tone during dialing. For example, your telephone line may require the Tone/Pulse switch to be set to the Pulse position for normal dialing, but certain long-distance services to which you subscribe, such as telephone answering/messaging systems or electronic banking-by-phone, may require dialed command digits using Tone format following the access telephone number for that service. The Tone command can be used manually and is storable in memory.

12) PAUSE button

With this feature, you can insert a 3.6-second pause into the dialing sequence. A pause in a dialing sequence may be needed if your telephone is connected to a certain type of PBX or to any network where a pause is required. For example, you may need a pause between an outside line access number (usually "9") and the telephone number.

13) PROGRAM button

This button is used to enter numbers or extensions onto any of the 10 memory buttons.

14) SAVE button

On this button you can save one number in the redial memory for future use.

15) Handset cord jack

This jack, located on the left side of the set, is used for connecting the handset with the telephone.

16) Handset

The handset is used for placing and receiving calls.

The **BOTTOM VIEW** includes the following:

17) Battery compartment

You may place two 1.5-Volt AA batteries in this compartment in case of power outage.

18) Speakerphone volume slide control

This control is used to adjust the volume of the speakerphone. It is set to midway for normal listening level.

19) Tone/Pulse switch

This switch is used to select the dialing mode, either TONE (DTMF) or PULSE (Decadic). The correct mode depends on the telephone network.

20) Ringer Volume switch

The settings on this switch affects the ringer volume during an incoming call. There are three available ringer volume positions: Low, Medium, and High.

21) Ringer pitch control

The pitch of the ringing sound can be changed by rotating this control on the bottom of the telephone.

Installation

Use the following procedures for installing your 9110 telephone.

Contents of the 9110 Package

The following items come in the box with the 9110 telephone:

- A 7-foot line cord
- A 9-foot handset cord

Installing the Batteries

This telephone requires two 1.5-volt AA batteries (provided with the set) to retain the numbers stored in memory in the event the telephone is disconnected from the line.

- 1 If the telephone is already connected, disconnect the telephone from the modular jack *before* you install the batteries.
- 2 Locate the battery compartment on the right side on the bottom of the telephone. See **Figure 1** for its location.
- 3 Insert a small pointed tool or a small screwdriver in the “D”-shaped hole to the left of the compartment.
- 4 Press down and slide the cover to the right to open it.
- 5 Insert two AA batteries in the battery compartment. The “-” (negative) end of the battery should be placed against the springs.
- 6 Replace the battery compartment cover and, if applicable, plug the line cord into the modular jack again. If you have not installed the telephone yet, go on to **Desk/Table Installation** on the next page.

Note: After you replace the batteries, it will be necessary to re-program your memory-dialing buttons.

Desk/Table Installation

For desk or table installation, use the 7-foot straight line cord that came with your telephone to connect the telephone to a modular jack.

WARNING: Do not plug the handset cord into the line jack on the bottom of your telephone since it could damage your handset and the telephone.

- 1 Plug one end of the line cord into the line jack on the top/rear of the telephone. See **Figure 1** for the location of the line jack.
- 2 Plug one end of the coiled handset cord into the handset jack on the side of the telephone. See **Figure 1**.
- 3 Plug the other end of the handset cord into the handset.
- 4 Hang up the handset.
- 5 Plug the free end of the line cord into a modular jack.
- 6 Lift the handset and listen for dial tone.

Note: When you have installed the telephone, you can set the ringer volume and ringer pitch as desired. (See **Figure 1** for the location of the Ringer volume switch and the Ringer pitch control.)

Using the Features

Answering and Placing a Call

To answer a call

- 1 Lift the handset.
- 2 Speak with the other party.

To place a call

- 1 Lift the handset or press the SPEAKERPHONE button.
 - When you press the SPEAKERPHONE button, the light next to the button goes on.
- 2 Dial the desired number.

Note: You can also dial a number with one of the memory-dialing buttons. For more information, see “The Memory-Dialing Feature” later in this section.

- 3 When you have finished the call, hang up the handset or press the SPEAKERPHONE button again.
- 4 The light next to the SPEAKERPHONE button goes off.

To use the TONE button to change from Pulse to Touch-Tone

Use this feature if your telephone is set for the Pulse feature, but you need to use Touch-Tones in order to dial the number or use a particular banking or long-distance service.

- 1 Lift the handset or press the SPEAKERPHONE button.
 - When you press the SPEAKERPHONE button, the light next to the button goes on.
- 2 Dial the portion of the number required in Pulse format (that is, when the Tone/Pulse button is set to Pulse).
- 3 Press the TONE button (a 3.6-second pause is automatically inserted).
- 4 Dial the service's command digits (in Tone mode) as required.

Note: The telephone returns to Pulse mode when the call is completed.

To turn off (mute) the microphone on the handset or the speakerphone so the other person on the call cannot hear you

- 1 While on a call, press the MUTE button.
 - The light next to the MUTE button goes on.
 - The microphone associated with the handset or the speakerphone, whichever you are using, is turned off.
- 2 When you are ready to speak with the other person again, press the MUTE button again.
 - The light next to the MUTE button goes off.

To change from the handset to the speakerphone during a call

- 1 While on a call using the handset, press the SPEAKERPHONE button.
 - The light next to the SPEAKERPHONE button goes on.
- 2 Hang up the handset and continue the conversation on the speakerphone.

To change from the speakerphone to the handset during a call

- 1 While on a call using the speakerphone, lift the handset.
 - The light next to the SPEAKERPHONE button goes off.

The Memory-Dialing Feature

You may store any combination of numeric entries, including a pause or flash, a *, and a #, in Tone mode. Use the following procedures.

To store a number on any of the 10 memory-dialing buttons

Note: Two separate telephone numbers can be stored on each memory-dialing button, one on the upper half of the button (numbered 01 through 10) and one telephone number on the lower half of the button (numbered 11 through 20).

- 1 Lift the handset or press the SPEAKERPHONE button.
 - When you press the SPEAKERPHONE button, the light next to the button goes on.
- 2 Press the PROGRAM button.
- 3 Dial the telephone number you want to store.

Note: You can use the PAUSE button to program a 3.6-second pause between a dialing access number (usually "9") and the telephone number and for certain banking and long-distance services.

- 4 Press the memory-dialing button on which the number is to be stored. Press the button once to store the number on the upper half of the button. Press the button twice to store the number on the lower half of the button.
- 5 Hang up the handset or press the SPEAKERPHONE button.
 - The light next to the SPEAKERPHONE button goes off.

Note: Be sure to write the stored telephone numbers in the appropriate space on the button designation card on the front of the telephone.

To dial a telephone number stored on a memory-dialing button

- 1 Lift the handset or press the SPEAKERPHONE button.
 - When you press the SPEAKERPHONE button, the light next to the button goes on.
- 2 Press the memory-dialing button on which the telephone number is stored. Press the button once to dial the telephone number stored on the upper half of the button. Press the button twice to dial the telephone number stored on the lower half of the button.
 - The number is automatically dialed.

Redialing a Number (with the SAVE Button or the REDIAL Button)

Note: You can use the REDIAL button or the SAVE button to redial numbers. Your telephone redials up to 32 digits.

- The REDIAL button redials the last number you dialed.
- The SAVE button redials a specific number you have dialed before and have stored on the SAVE button for future use.

To store a number on the SAVE button

- 1 When you want to save a number you have just dialed, press the SAVE button.
 - The number is stored on the SAVE button.

To call a number stored on the SAVE button

- 1 Lift the handset or press the SPEAKERPHONE button.
 - When you press the SPEAKERPHONE button, the light next to the button goes on.
- 2 When you hear dial tone, press the SAVE button (to redial a specific number you have saved).
 - The number is automatically dialed.

To use the REDIAL button to redial a number you just dialed

- 1 Lift the handset or press the SPEAKERPHONE button.
 - When you press the SPEAKERPHONE button, the light next to the button goes on.
- 2 When you hear dial tone, press the REDIAL button (to redial the last number that you dialed).
 - The number is automatically dialed.

Hold

To put a call on hold

- 1 While on a call, press the FLASH button.

To return to the held call

- 1 Press the FLASH button twice.
 - You are connected to the held call.

Conference

To add a third party to a call

- 1 While on a call, press the FLASH button.
 - The present call is put on hold.
- 2 Dial the number of the third party.

Note: You can privately discuss the call with the third party at this time; if there is no answer or busy, press the FLASH button twice to return to the original party.

- 3 Press the FLASH button.
 - All parties are now connected.

Transfer

To send a present call to another extension or to an outside number

- 1** Press the FLASH button.
 - The present call is put on hold.
- 2** Dial the number to which the call is to be transferred.
 - Remain on the line and announce the call; if the dialed number is busy or not answered, press the FLASH button twice to return to the held call.
- 3** Hang up.
 - Transfer is completed.

General Care and Maintenance

This telephone is a precision electronic instrument. While in use or storage, care should be taken to avoid rough handling, extreme temperatures, and damp or dirty environments.

Cleaning

NEVER use aerosol sprays or other chemical agents or substances which leave a residue (furniture polish, for example).

Use a mild detergent and a damp clean cloth when cleaning. Do not allow moisture to enter the telephone's interior. Damage may result.

Failure to Operate and Service Difficulties

If telephone service problems occur at any time, it is recommended that the installation procedure described in this manual be rechecked.

- If a fault occurs, try to determine if the fault is with the telephone, or with the network or system to which the telephone is connected:
- Disconnect the faulty telephone, and test the line with a substitute telephone. If the substitute telephone operates satisfactorily, the problem is in the faulty telephone.

Test the faulty telephone on a good line. If the problem still occurs, the fault is in the telephone.

If necessary, consult your Lucent Technologies distributor for further advice.