
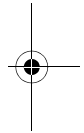
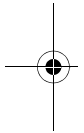


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OWNER'S MANUAL

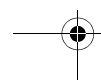
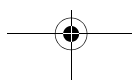
Please read before using this equipment.

System 411

**4-Line Telephone
with Intercom**



RadioShack®



FEATURES

Your RadioShack System 411 4-Line Telephone combines advanced telephone technology with a complete four-line telephone system.

You can connect up to twelve System 411s, with each serving as an extension on which you can make and receive outside as well as internal calls.

Your System 411 has these features:

Four-Line Telephone System — connects to up to four telephone lines within your home or office.

Intercom with Paging — lets you call individual System 411 stations or page all stations at the same time.

Redial — lets you quickly redial the last number dialed.

Flash — sends an electronic switch-hook signal for use with special phone services such as Call Waiting.

Touch-Tone or Pulse Dialing — lets you use either type of service, and you can easily switch from pulse to tone dialing for special services such as bank-by-phone.

Line Mode Switches — let you disable or enable the line-status indicator and ringer for each individual line.

Hold — lets you put one or more calls on hold.



DND (Do Not Disturb) — blocks incoming pages and turns off the ringers when you need to be free from interruptions.

Hearing-Aid Compatibility — lets you use the System 411 with hearing aids that have a T (telephone) switch.

Note: Your System 411 offers many advanced features. We recommend you use only System 411 telephones in your system. You can use other telephones on the same telephone lines, but they cannot take advantage of the System 411's features.

Your local telephone company might offer a special telephone service commonly called Roll-over or Hunt. This service allows you to have incoming calls to a line that someone is using automatically switched to the next available telephone line. Contact your local telephone company for more information regarding this service.

Warning: To prevent fire or shock hazard, do not expose this product to rain or moisture.

	CAUTION RISK OF ELECTRIC SHOCK. DO NOT OPEN.	
CAUTION: TO REDUCE THE RISK OF ELECTRIC SHOCK, DO NOT REMOVE COVER OR BACK. NO USER-SERVICEABLE PARTS INSIDE. REFER SERVICING TO QUALIFIED PERSONNEL.		



This symbol is intended to alert you to the presence of uninsulated dangerous voltage within the product's enclosure that might be of sufficient magnitude to constitute a risk of electric shock. Do not open the product's case.



This symbol is intended to inform you that important operating and maintenance instructions are included in the literature accompanying this product.

READ THIS BEFORE INSTALLATION

We have designed your System 411 to conform to federal regulations, and you can connect it to most telephone lines. However, each telephone (and each device, such as an answering machine) that you connect to the telephone line draws power from the telephone line. We refer to this power draw as the device's *ringer equivalence number*, or REN. The REN is on the bottom of your System 411.

If you use more than one telephone or other device on the line, add up all of the RENs. If the total is more than five, your telephones might not ring. In rural areas, a total REN of three might impair ringer operation. If ringer operation is impaired, remove a device from the line.

FCC STATEMENT

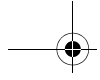
Your System 411 complies with Part 68 of *FCC Rules*. You must, upon request, provide the FCC (Federal Communication Commission) registration number and the REN to your telephone company. These numbers are located on the bottom of the telephone's base.

Note: You must not connect your telephone to:

- coin-operated systems
- party-line systems
- most electronic key telephone systems

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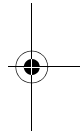
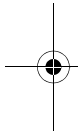
A QUICK LOOK AT YOUR TELEPHONE

I

Illustration

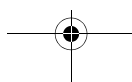


Illustration



Illustration

Illustration



INSTALLATION

Installing your System 411 is easy, but it is important that you follow the instructions in the sequence that they appear in this manual for the telephone to work properly.

You can place your System 411 on a desk, or mount it on a standard wall plate or directly on a wall (see "Mounting Your Telephone on a Wall" on Page 9). Select a location that is near a modular telephone line jack and an AC outlet.

1. Insert the AC adapter's barrel plug into the **DC 9V** jack on the back of the telephone, then plug the adapter into a standard AC outlet.

Illustration

CONNECTING THE AC ADAPTER

Connect the supplied AC adapter before making any other connections or installing a battery. This is necessary to properly initialize the telephone.

2. Route the adapter's cord through the strain relief slot.

Illustration

Cautions:

- The supplied AC adapter supplies at least 9 volts and delivers at least 300 mA. Its center tip is set to negative and its plug fits the System 411's **DC 9V** jack. Using an adapter that does not meet these specifications could damage the telephone or the adapter.
- To prevent damage to the telephone or the adapter, plug the adapter into the telephone before plugging the adapter into an AC outlet.

INSTALLING A BATTERY

After you have connected the AC adapter to your System 411, install a 9-volt battery. For the best performance and longest life, we recommend you use a RadioShack alkaline battery. This battery provides backup power for a few hours if AC power fails, but it does not power the line-status indicators and the intercom.

Cautions:

- Use only a fresh battery of the required size and recommended type.
 - Before replacing the battery, disconnect all telephone lines from your System 411.
1. Use a Phillips screwdriver to loosen the battery compartment cover's screw, then open the cover.

Illustration

2. Snap the battery's contacts firmly on to the battery connector and put the battery into the compartment.

Illustration

3. Close the cover and secure it with the screw.

Illustration

Checking the Battery

To check the condition of the battery, press **BATTERY TEST** on the rear of the telephone. If the BATTERY TEST indicator on the front of the telephone does not light, replace the battery.

Illustration

Warning: Dispose of old batteries promptly and properly. Do not burn or bury them.

Caution: Always remove old or weak batteries. Batteries can leak chemicals that can destroy electronic parts.

CONNECTING TO THE TELEPHONE LINES

To take full advantage of many of the System 411's features, you must have four telephone lines with separate phone numbers.

You can connect the System 411 to two-line modular telephone line jacks, or you can connect it to single-line jacks. If you use single line jacks, you must also use an optional two-line coupler (available at your local RadioShack store).

*Illustration
(showing use of coupler)*

To connect your System 411, plug one end of one of the supplied 2-line modular telephone line cords into the **LINE 1/2** jack on the back of the telephone. Plug the other end of the cord into a two-line phone jack or a coupler that is connected to two single-line phone jacks.

Plug the other cord into the **LINE 3/4** jack on the back of the telephone and the other two-line jack or coupler.

MOUNTING YOUR TELEPHONE ON A WALL

Notes:

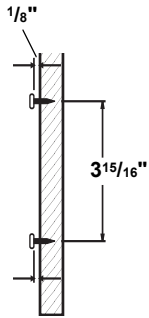
- Your System 411 connects directly to a modular telephone line jack. If your telephone wiring does not have a modular jack, you can update it yourself using jacks and adapters available at your local RadioShack store, or have the telephone company update the wiring for you.
- The line that connects the telephone jacks to the telephone company's wiring must be twisted-pair cable. Otherwise, you might experience interference (crosstalk) between telephone lines.
- The USOC number of the two-line jack to be installed is RJ14C (or RJ14W for a wall plate jack). The USOC number of single-line jack to be installed is RJ11C (or RJ11W for a wall plate).

Follow these steps to mount your System 411 on a telephone wall plate or directly on the wall using two screws (not supplied) with heads that fit the keyhole slots on the phone's mounting bracket.

1. Remove the mounting bracket from the bottom of the telephone, then insert the bracket into the wall-mount socket and push it upward to latch it.

Illustration

2. If you are mounting the telephone directly on the wall, drill two holes $3\frac{15}{16}$ inches apart. Thread two screws into the wall, letting the heads extend about $\frac{1}{8}$ inch.



Illustration

3. If you are mounting the telephone on a wall plate, plug the modular telephone line cord into the wall plate's jack before mounting the telephone.

5. Lift and rotate the handset guide as shown.

Illustration

Illustration

4. Hang the telephone on the wall plate studs (or screws) using the two keyhole slots on the back of the telephone, then press the telephone downward to secure it.

Note: There is also a handset holder above the regular handset hook that you can use to hang the handset without disconnecting a call.

CONNECTING THE HANDSET

Plug one end of the supplied coiled cord into the jack on the telephone's handset. Plug the other end into the jack on the left side of the telephone's base.

Illustration

Note: Your local RadioShack store sells a variety of longer coiled handset cords which are especially useful if you mount the telephone on a wall.

PREPARATION

SETTING THE DIALING MODE

Set **MODE** to the type of service you have. If you are not sure which type of service you have, do this simple test.

1. Set **MODE** to **TONE**.
2. Lift the handset, press **LINE 1**, and listen for the dial tone.
3. Press any number key other than **0**.

Note: If your phone system requires that you dial an access number (9 for example) before you dial an outside number, do not press that number either.

If the dial tone stops, you have touch-tone service. If the dial tone continues, you have pulse service.

4. Repeat Steps 2 and 3 for each line you have connected.
5. If *all* connected lines have tone service, leave **MODE** set to **TONE**.

If *any* of the lines has pulse service, set **MODE** to **PULSE**.

SETTING THE LINE MODE SWITCHES

There are four **LINE MODE** switches on the right side of your telephone. Each three-position (**A**, **B**, **C**) switch controls how the ringer and line-status indicators operate for the marked line.

Illustration

LINE MODE Position	Effect
A	Ringer off Line-status indicator off
B	Ringer off Line-status indicator on
C	Ringer on Line-status indicator on

Set **LINE MODE** to **C** to use the line normally.

Set **LINE MODE** to **A** if you did not connect the line or if you do not intend to use the line.

Set **LINE MODE** to **B** if you do not want the telephone to ring, but you want to see the line status indicators.

SETTING THE RINGER VOLUME

RINGER controls the ringer volume for all connected lines. Set it to **HI** for a regular ring volume, or **LO** for a quieter ring.

Notes:

- The ringer automatically drops to a lower volume if a line rings while you are using another line.
- You will hear a line ring only if its **LINE MODE** switch is set to **C** (see "Setting the Line Mode Switches" on Page 12).

Under normal conditions, set **RF CARRIER** to **LINE 1**. If you have problems such as noise on the line, set the switch to **LINE 3**.

Notes:

- Be sure to select an active telephone line to carry the intercom signal. You cannot use the intercom on an unconnected line.
- If you are using more than one System 411, set every telephone's **RF CARRIER** switch to the same line, and connect that line to the same telephone number at every phone.

Adjusting the Handset Volume

Set the handset volume switch in the center of the handset to the desired level (**LO**, **MED**, or **HI**).

SETTING THE RF CARRIER SWITCH

The System 411 uses Line 1 or 3 to carry intercom signals. The **RF CARRIER** switch on the back of the telephone lets you choose which line to use.

Illustration

READING AND ADJUSTING THE LINE-STATUS INDICATORS

You can check the status of each line by glancing at the line-status indicators.

Line-Status Indicator	Line Status
Not lighted	Not in use
Lighted	In use
Blinking rapidly	Ringing
Blinking slowly	On hold

When you first install the System 411, or if you move it to a new location, the line-status indicators might not work properly. Follow these steps to adjust the line-status indicators.

1. If you mounted your System 411 on a wall or wall plate, slide it up and off the screws/studs.
2. Be sure **MODE** is set correctly (see "Setting the Dialing Mode" on Page 12).
3. Be sure **LINE MODE** is set to **B** or **C** on every active line (see "Setting the Line Mode Switches" on Page 12).
4. Lift the handset and press the **LINE** button for the line you want to check.

Illustration

- If the line-status indicator blinks slowly, the indicator is properly set.
- If the indicator lights steadily or does not light, use the supplied screwdriver (located under the wall mount bracket) to turn **LINE ADJUST** on the bottom of the telephone until the indicator blinks slowly and steadily.

Illustration

6. Hang up, then repeat Steps 4–6 for the remaining line-status indicators.

When you finish, put the screwdriver back in the wall-mount bracket in case you need to make adjustments later.

Illustration

5. Place a call to a one-way (recorded) service, such as time or temperature, then place the call on hold by pressing **HOLD**.

Illustration

CHECKING THE LINE NUMBERS

After connecting your System 411 and adjusting the line-status indicators, follow these steps to determine which telephone number is connected to each line number.

1. Lift the handset and press **LINE 1**.
2. Try to place a call to each of your four telephone numbers.
 - If a line-status indicator other than **LINE 1** blinks rapidly, the number you dialed is connected to that line.
 - If you hear a busy signal, the number is connected to Line 1.

As you identify each line, write the phone number on the number plate. Use a paper clip or other pointed object to lift the plastic cover off the plate, then write the number for each line in the space provided. (Use a pencil, in case a number changes.) Replace the cover.

USING THE AUXILIARY JACK

You can use accessories such as a phone dialer, answering machine, or speakerphone by simply inserting the accessory's modular plug into the **AUX** jack on the back of the telephone.

Notes:

- Be sure to check the ringer equivalence number (REN) of any telephone device connected to the **AUX** jack and add that number to the total ringer equivalence number on the line. If the total REN is more than five, your phones might not ring (see "FCC Statement" on Page 3).
- Any accessory connected to the **AUX** jack always works with the last line selected. For example, an answering machine answers the line for the last line button selected.

OPERATION

PLACING A CALL

1. Check the line-status indicators to find a line that is not in use. Lift the handset.

Illustration

2. Press the appropriate **LINE** button. The corresponding line-status indicator lights.

Illustration

3. Dial the number you want to call.

ANSWERING A CALL

1. Lift the handset.
2. Press the **LINE** button with the rapidly blinking line-status indicator, then begin your conversation.
3. Hang up the handset when you finish your conversation.

USING HOLD

To place a call on hold, press **HOLD**. The line-status indicator for that line blinks slowly, indicating that the call is on hold. While that line is on hold, you can press another **LINE** button to make or receive calls on another line.

Illustration

Note: Be sure to put the first call on hold before you press another **LINE** button. Otherwise, the first call is disconnected.

If necessary, you can also put another call on hold by pressing **HOLD** again.

To release a call from hold, press that call's **LINE** button. Any other on-hold calls remain on hold.

To hang up the line you are currently using and leave another line on hold, place the handset on the base without pressing **HOLD**.

Note: If you have Call Waiting, a call placed on hold might disconnect when a Call Waiting signal comes in.

USING REDIAL

You can quickly redial the last number dialed. Simply lift the handset and select a line, and when you hear the dial tone, press **REDIAL**.

Notes:

- The redial memory holds up to 31 digits, so you can redial long-distance as well as local numbers.
- When the System 411 redials, it uses the dialing mode (tone/pulse) in which the number was dialed, regardless of the current dialing mode setting.

USING FLASH

FLASH performs the electronic equivalent of a switchhook operation for special services, such as Call Waiting.

For example, if you have Call Waiting, press **FLASH** to answer an incoming call without disconnecting the current call.

Notes:

- You must use **FLASH** for special services because pressing the switchhook disconnects the call.
- If you do have any special phone services, pressing **FLASH** might disconnect the current call.

USING TONE SERVICES WITH A PULSE LINE

If you have pulse service, you can still use special services that require tone signals, such as bank-by-phone, by following these steps:

1. Dial the service's number.
2. When the service answers, set **MODE** to **TONE**. Any additional numbers you dial are sent as tone signals.
3. After you finish the call, set **MODE** back to **PULSE**.

USING THE INTERCOM

If you have installed more than one System 411, you can use your telephone to page all the extensions and talk to someone at another extension.

Paging with the Intercom

1. Check the INTERCOM indicator. If it is on, the intercom is currently in use. If it is off, you can place an intercom page.

2. Pick up the handset and press **INTERCOM**. The INTERCOM indicator lights.

Illustration

3. Speak your message into the handset. Your voice is heard on all of the extension phone speakers. When the person you are paging answers, the INTERCOM indicators on all extensions light, indicating the intercom is in use.
4. To end an intercom conversation, hang up. Once the other person hangs up, the INTERCOM indicator turns off.

Answering a Page

To answer a page, pick up the handset and press **INTERCOM**. The INTERCOM indicators on all of the extensions light. When you finish your conversation, hang up.

Note: When one extension answers a page, no other extension can join the intercom conversation.

Answering a Page While Talking on Another Line

You can hear an intercom page even during a regular phone call. Follow these steps to answer a page during a telephone conversation.

1. Press **HOLD** to place your call on hold.
2. Press **INTERCOM** to answer the page.
3. After talking to the person who paged you, press the original call's **LINE** button to go back to that call.

USING DND (DO NOT DISTURB)

To stop incoming calls and pages, press **DND**. The DND indicator lights, and your telephone does not ring for incoming calls. Also, you do not hear paging announcements. You can still place outgoing calls, answer calls, or make intercom pages from your telephone.

To resume taking calls and pages, press **DND** again.

TROUBLESHOOTING

We do not expect you to have any problems with your phone, but if you do, these suggestions might help.

Problem	Suggestion
No dial tone on any line, and line-status indicators do not work.	Check the AC adapter connection. If there has been a power failure, and the backup battery is weak or not installed, it might be necessary to re-initialize the telephone. Disconnect the telephone lines and the AC adapter then reconnect the AC adapter (see "Connecting the AC Adapter" on Page 7) and the telephone lines (see "Connecting to the Telephone Lines" on Page 8).
No dial tone on any line, but line-status indicators work.	Check the phone line connections.
No dial tone on line 2 or 4.	Check that phone line jacks are the correct type (RJ14) and correctly wired.
Line-status indicators do not work.	Be sure the LINE MODE switches are set to B or C . Adjust the line-status indicators (see "Reading and Adjusting the Line-Status Indicators" on Page 13).
Line-status indicators do not work properly.	Adjust the line-status indicators.
Telephone receives calls but cannot dial out.	Check that MODE is set correctly to TONE or PULSE . If fewer than four telephone lines are connected, check that active telephone lines are correctly assigned to line numbers.
Telephone does not ring for incoming calls.	Be sure the LINE MODE switches are set to B or C . Check that the REN total does not exceed 5 (see "Read This Before Installation" on Page 3).

Problem	Suggestion
Paging and intercom do not work.	Check that RF CARRIER is set to an active telephone line.
	Check that all connected telephones' RF CARRIER switches are set to the same line.
	Be sure that each telephone number is connected to the same line number at each phone.
You hear static or interference during a call.	Hang up and redial the number.
Volume drops or you hear strange sounds.	Another telephone has been picked up on the same line. Hang up the other telephone.
You hear other conversations (crosstalk) during a call.	Normal on some telephone networks. For frequent or severe crosstalk, check that the phone line jacks are connected to the telephone lines with twisted-pair telephone cable.

If you still have problems, disconnect the telephone. If other telephones on the same lines work properly, the fault is in this telephone or its installation. If you cannot locate the problem, take your System 411 to your local RadioShack store for assistance.

CARE AND MAINTENANCE

Your System 411 4-Line Telephone is an example of superior design and craftsmanship. The following suggestions will help you care for your System 411 so you can enjoy it for years.



Keep the System 411 dry. If it gets wet, wipe it dry immediately. Liquids might contain minerals that can corrode the electronic circuits.



Use and store the System 411 only in normal temperature environments. Temperature extremes can shorten the life of electronic devices, damage batteries, and distort or melt plastic parts.



Keep the System 411 away from dust and dirt, which can cause premature wear of parts.



Handle the System 411 gently and carefully. Dropping it can damage circuit boards and cases and can cause it to work improperly.



Use only a fresh battery of the required size and recommended type. Batteries can leak chemicals that damage your System 411's electronic parts.



Wipe the System 411 with a damp cloth occasionally to keep it looking new. Do not use harsh chemicals, cleaning solvents, or strong detergents to clean the System 411.

Modifying or tampering with the System 411's internal components can cause a malfunction and might invalidate its warranty and void your FCC authorization to operate it. If your System 411 is not performing as it should, take it to your local RadioShack store for assistance. If the trouble is affecting the telephone lines, the phone company can ask you to disconnect your telephone until you have resolved the problem.

THE FCC WANTS YOU TO KNOW

In the unlikely event that your telephone causes problems on the telephone line, the telephone company can disconnect your service. The telephone company attempts to notify you in advance. If advance notice is not practical, the telephone company notifies you as soon as possible and advises you of your right to file a complaint with the FCC.

Also, the telephone company can make changes to its lines, equipment, operations, or procedures that could affect the operation of this telephone. The telephone company notifies you of these changes in advance, so that you can take the necessary steps to prevent interruption of your telephone service.

The Service Order Code (SOC) is 9.0F. The Facility Interface Code (FIC) is 02LS2.

This equipment is capable of providing users access to interstate providers of operator services through the use of access codes. Modification of this equipment by call aggregators to block access dialing codes is a violation of the *Telephone Operator Consumers Act of 1990*.

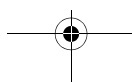
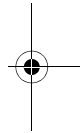
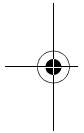
LIGHTNING

Your telephone has built-in protection circuits to reduce the risk of damage from surges in telephone and power line current. These protection circuits meet or exceed the FCC requirements. However, lightning striking the telephone or power lines can damage your telephone.

Lightning damage is not common. Nevertheless, if you live in an area that has frequent electrical storms, we suggest that you unplug your telephone during storms to reduce the possibility of damage.



NOTES



Limited One-Year Warranty

This product is warranted by RadioShack against manufacturing defects in material and workmanship under normal use for one (1) year from the date of purchase from RadioShack company-owned stores and authorized RadioShack franchisees and dealers. EXCEPT AS PROVIDED HEREIN, RadioShack MAKES NO EXPRESS WARRANTIES AND ANY IMPLIED WARRANTIES, INCLUDING THOSE OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE, ARE LIMITED IN DURATION TO THE DURATION OF THE WRITTEN LIMITED WARRANTIES CONTAINED HEREIN. EXCEPT AS PROVIDED HEREIN, RadioShack SHALL HAVE NO LIABILITY OR RESPONSIBILITY TO CUSTOMER OR ANY OTHER PERSON OR ENTITY WITH RESPECT TO ANY LIABILITY, LOSS OR DAMAGE CAUSED DIRECTLY OR INDIRECTLY BY USE OR PERFORMANCE OF THE PRODUCT OR ARISING OUT OF ANY BREACH OF THIS WARRANTY, INCLUDING, BUT NOT LIMITED TO, ANY DAMAGES RESULTING FROM INCONVENIENCE, LOSS OF TIME, DATA, PROPERTY, REVENUE, OR PROFIT OR ANY INDIRECT, SPECIAL, INCIDENTAL, OR CONSEQUENTIAL DAMAGES, EVEN IF RadioShack HAS BEEN ADVISED OF THE POSSIBILITY OF SUCH DAMAGES.

Some states do not allow the limitations on how long an implied warranty lasts or the exclusion of incidental or consequential damages, so the above limitations or exclusions may not apply to you.

In the event of a product defect during the warranty period, take the product and the RadioShack sales receipt as proof of purchase date to any RadioShack store. RadioShack will, at its option, unless otherwise provided by law: (a) correct the defect by product repair without charge for parts and labor; (b) replace the product with one of the same or similar design; or (c) refund the purchase price. All replaced parts and products, and products on which a refund is made, become the property of RadioShack. New or reconditioned parts and products may be used in the performance of warranty service. Repaired or replaced parts and products are warranted for the remainder of the original warranty period. You will be charged for repair or replacement of the product made after the expiration of the warranty period.

This warranty does not cover: (a) damage or failure caused by or attributable to acts of God, abuse, accident, misuse, improper or abnormal usage, failure to follow instructions, improper installation or maintenance, alteration, lightning or other incidence of excess voltage or current; (b) any repairs other than those provided by a RadioShack Authorized Service Facility; (c) consumables such as fuses or batteries; (d) cosmetic damage; (e) transportation, shipping or insurance costs; or (f) costs of product removal, installation, set-up service adjustment or reinstallation.

This warranty gives you specific legal rights, and you may also have other rights which vary from state to state.

RadioShack Customer Relations, 200 Taylor Street, 6th Floor, Fort Worth, TX 76102

We Service What We Sell

04/99

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