



CHERISH

LONGREACH DEVICE

Digital Spread Spectrum Technology 900 MHz

Model : CR-256

USER GUIDE

Important:

- Cordless phones such as this one require AC power to operate. When AC power is off, you cannot dial out or receive incoming calls using your phone. To be safe, you should also have a phone that does not require AC power to operate (not a cordless phone), so you can still make and receive calls if there is an AC power failure.
- Some cordless phones operate at frequencies that might cause interference to nearby TVs and VCRs. To minimize or prevent such interference, the base of the cordless phone should not be placed near or on top of a TV or VCR.

READ THIS BEFORE INSTALLATION

Your telephone conforms to federal regulations, and you can connect it to most telephone lines. However, each device you connect to the phone line draws power from the phone line. We refer

to this power draw as the device's ringer equivalence number, or REN. The REN is on the bottom of the base.

If you are using more than one phone or other device on the line, add up all the RENs. If the total is more than five (three in rural areas), your phone might not ring. If ringer operation is impaired, remove a device from the line.



FCC STATEMENT

This telephone complies with Part 68 of FCC Rules. You must, upon request, provide the FCC Registration Number and the REN to your phone company. These numbers are on the label on the bottom of the base.

You must not connect your phone to:

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

WARNING: To reduce the risk of 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.

© 2000 Tandy Corporation.
All Rights Reserved.

RadioShack and RadioShack.com are trademarks used by Tandy Corporation.

□ Features

Your 900 MHz Digital Spread Spectrum Cordless Phone uses advanced digital cordless technology to give you superior sound quality. It uses the 900 MHz band, which means less interference and clearer sound, and greater range than 46/49 MHz cordless telephones.

Its cordless operation lets you make or answer calls just about anywhere in your home or office. An optional headset jack lets you connect a headset to the handset for hands-free conversation.

Its features include:

900 MHz Operation — provides better sound and less interference than many other cordless phones.

Compact-Sized Design — small and easy to hold in your palm.

Digital Spread Spectrum — provides the longest range and the utmost in security. Frequencies are constantly changing across the entire 900 MHz band, making it difficult for anyone to monitor your calls using scanners.

3.5-Hour Talk or 7-Day Standby Time — lets you talk for 3.5 hours or keep the phone off the base for 7 days without recharging (with a fully charged battery pack).

Digitally Encoded Signal — prevents other people from picking up your phone's signal and listening to your conversations.

Page — lets you send a paging signal from the base to the handset to page someone or locate the handset when it is away from the base.

20-Number Memory Dialing — lets you store up to 16 digits in each of 20 memory locations for easy dialing.

Handset Volume Control — let you adjust the volume you hear through the handset.

Out-of-Range Signal — the handset beeps three times to let you know when you move out of the base's operating range.

Security Access-Protection Code — changes each time you place the handset on the base, to minimize the chances of other

cordless phones using your phone line.

20 Channels — scans the 20 frequency pairs used between the base and the handset and automatically selects a clear channel each time you make or receive a call.

Any-Key Answer — lets you press any key on the handset to answer an incoming call.

Programmable Ringers — let you select from four ringer types.

Mute — prevents the person on the other end of the phone line from hearing your conversation with someone in the room.

Flash — sends an electronic switchhook signal for use with

special phone services such as Call Waiting.

Redial — lets you quickly dial the last number dialed.

Upright Cradle — lets you place the handset upright on the base.

Tone/Pulse Dialing — lets you use your phone with tone or pulse service.

Headset Jack — lets you connect an optional headset for hands-free convenience while you use the phone.

Hearing Aid Compatible — lets you use this telephone with hearing aids that have a T (telephone) switch.

This phone is ETL listed to UL standards and meets all applicable FCC standards.

□ Preparation

SELECTING A LOCATION

Select a flat surface that is:

- away from electrical machinery, electrical appliances, metal walls or filing cabinets,

wireless intercoms, alarms, room monitors, and away from other cordless phones

- near an AC outlet near a telephone line jack

The base's location affects the phone's range. If you have a choice of several locations, try each to see which provides the best performance.

Notes:

- Your telephone connects directly to a modular telephone line jack. If your phone line jack is not a modular jack, you can update the wiring yourself, using jacks and adapters available at your local RadioShack store. Or, you can let the phone company update the wiring for you.
- The USOC number of the jack to be installed is RJ11C.
- Power the phone using the supplied 120V AC/9V DC AC adapter.

Cautions:



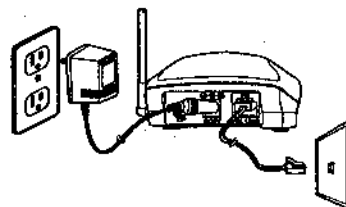
You must use a Class 2 power source that supplies 9V DC and delivers at least 300 mA. Its center tip must be set to positive and its plug must fit the phone's DC9V jack. The supplied adapter meets these specifications. Using an adapter that does

not meet these specifications could damage the phone or the adapter.

- Always connect the AC adapter to the phone before you connect it to AC power. When you finish, disconnect the adapter from AC power before you disconnect it from the phone.

PLACING THE BASE ON A DESK TOP

1. Plug one end of the supplied long modular cord into the **TEL LINE** jack on the back of the phone, then plug the cord's other end into a modular phone line jack.



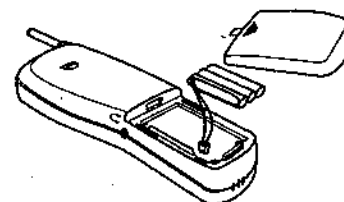
2. Insert the supplied AC adapter's barrel plug into the **DC9V** jack on the back of the base. Then plug the other end into a standard AC outlet.
3. Raise the base's antenna to a vertical position for the best reception.

CONNECTING AND CHARGING THE BATTERY PACK

The phone comes with a rechargeable nickel-metal hydride battery pack in the handset, but not connected. Before using your phone, you must connect the battery pack, then charge it for about 12 hours.

Follow these steps to connect and charge the battery pack.

1. Slide off the handset's battery compartment cover.
2. Plug the battery pack's connector into the socket in the compartment. The connector fits only one way.



3. Replace the cover.
4. To charge the battery pack, place the handset on the base. The **IN USE** indicator on the base and **IN USE/LOW BATT** indicator on the handset flash for 1 second, and

the **CHARGE** indicator on the base lights.

5. Recharge the battery pack when the **IN USE/LOW BATT** indicator on the handset flashes.

Notes:

- When you first use your phone after charging or recharging the battery pack, the handset might not work or it might sound an error tone when you press **TALK**. If this happens, place the handset on the base for about 10 seconds. This resets the security access-protection code.
- If the **CHARGE** indicator does not light when you place the handset on the cradle, be sure the battery pack and AC adapter are correctly and securely connected.

Also, check the charging contacts on both the handset and base. If the contacts are dirty or tarnished, clean them with a pencil eraser.

If the battery and AC connections are correct and secure and the charging contacts are clean, the battery might be

fully charged. This is not a malfunction.

- If the phone stops operating properly, check the base's phone line cord and AC adapter connections. If the connections are secure but the phone still does not work, unplug the base's AC adapter from the AC outlet and disconnect the handset's battery pack. Wait 3 minutes, then reconnect the battery pack and plug the AC adapter back into the AC outlet. The phone should operate properly.
- If the battery pack becomes weak, the handset sounds a short beep every 4 seconds when the handset is not in use and the IN USE/LOW BATT indicator flashes every 2 seconds.
- If the battery pack loses its charge completely or the base's AC power is disconnected while the handset is away from it, the security access protection code must be reset. To reset the security code, place the handset on the base. If it was the handset that lost power, leave the

handset on the base to charge the battery pack.

- About once a month, fully discharge the battery pack by keeping the handset off the base until the IN USE/LOW BATT indicator flashes. Otherwise, it loses its ability to fully recharge, and you might have to recharge and replace it more often.
- Even when no battery pack is connected inside the handset, if you place the handset on the base, the CHARGE indicator still lights, the IN USE indicator on the base continuously flashes, and the IN USE/LOW BATT indicator on the handset lights every 8 seconds. This is not a malfunction.

SETTING THE DIALING MODE

Set T/P (Tone/Pulse) for the type of service you have. If you are not sure which type you have, do this test after the battery pack is fully charged.

1. Set T/P on the back of base to T.

2. Press TALK on the handset and listen for a dial tone.

3. Press any number other than 0.

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

If the dial tone stops, you have touch-tone service. Leave T/P set to T.

If the tone continues, you have pulse (rotary) service. Set T/P to P.

To hang up, either place the handset on the base or press TALK so the IN USE indicator on the base and IN USE/LOW BATT indicator on the handset turn off.

CHECKING/SETTING THE RINGER TONE

You can set the phone's handset to sound any of four ringer types. The handset is preset to use ringer tone 1. To change or hear the different tones, press FLASH then 1, 2, 3, or 4 when the phone is not in use. (The tone you hear corresponds to the last number button pressed.)

SETTING THE HANDSET'S RINGER VOLUME

To adjust the ringer's volume when the phone is not in use, press VOLUME ▲ or ▼ on the handset.

Operation

MAKING/ANSWERING CALLS

To make a call, lift the handset and press TALK. When you hear the dial tone, dial the number.

To answer a call when the handset is on the base, lift the handset and begin your conversation.

To answer a call when the handset is not on the base, press any key on the handset before speaking.

Note: You can answer a call while the handset is on the base by pressing any key. However, the call might disconnect while the handset is on the base.

Both the IN USE/LOW BATT indicator on the handset and the IN USE indicator on the base flash when you receive a call, then the IN USE/LOW BATT indicator lights steadily while the handset is in use.

To end a call, place the handset on the base or press **TALK** so the IN USE/LOW BATT indicator on the handset turns off.

Important: If you move the handset outside the base's range, it beeps three times and the handset will not operate properly and a call in progress might be disconnected (see "Troubleshooting" on Page 14).

ADJUSTING THE VOLUME

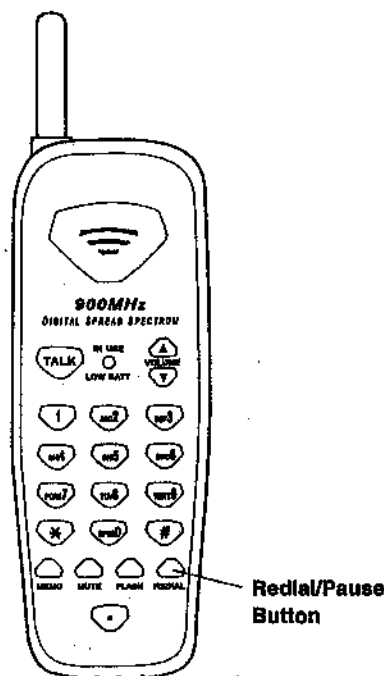
The handset's **VOLUME** control lets you set the volume you hear through the handset to one of four levels.

To turn the volume up or down during a call, repeatedly press **VOLUME** ▲ or ▼ on the handset.

The phone beeps once each time you press **VOLUME** ▲ or ▼. When you reach the highest or lowest volume level, the phone beeps three times.

USING REDIAL

You can quickly redial the last number dialed. Lift the handset and press **TALK**. When you hear the dial tone, press **REDIAL**.



Notes:

- The redial memory holds up to 32 digits, so you can redial long-distance as well as local numbers.
- We recommend you not use **REDIAL** to dial numbers that include a tone entry. This could result in a wrong number being dialed (see "Using Tone Services on a Pulse Line").
- The redial memory does not store a flash entry but stores any digits entered after you press **FLASH** (see "Using Flash").

USING MUTE

MUTE on the handset lets you talk to someone else in the room without the person on the other end of the phone line hearing your conversation. To mute your conversation, press **MUTE** during the call. Press **MUTE** again to resume your phone conversation.

USING FLASH

You can use **FLASH** on the handset to produce a switchhook signal for special phone services, such as Call Waiting. If you have

Call Waiting, press **FLASH** to take an incoming call without disconnecting the current call. Press **FLASH** again to return to the first call.

Note: If you do not have any special phone services, pressing **FLASH** might disconnect the current call.

USING TONE SERVICES ON A PULSE LINE

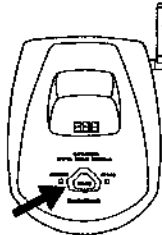
Some special services, such as bank-by-phone, require tone signals. If you have pulse service, you can still use these special tone services by following these steps.

1. Be sure **T/P** is set to **P**.
2. Lift the handset and press **TALK**.
3. Dial the service's main number.
4. When the service answers, press *. Any additional numbers you dial are sent as tone signals.
5. After you complete the call, return the handset to the base or press **TALK** on the

handset. The phone automatically resets to pulse dialing.

USING PAGE

To page the person with the handset or to find the handset, press **PAGE** on the base. The handset beeps twice for about 15 seconds. The **IN USE/LOW BATT** indicator on the handset and **IN USE** indicator on the base flash.



To stop the handset from beeping before it automatically stops, press **TALK** twice or press **PAGE**.

Note: Paging does not work during a call.

MEMORY DIALING

You can store up to 20 phone numbers in memory, then dial a stored number by pressing a two-digit memory location number.

Each stored number can be up to 16 digits long, including tone and pause entries.

Storing a Number in Memory

Notes:

- Each tone or pause entry uses one digit of memory.
- If you wait more than 30 seconds to press a key or enter more than 16 digits, the phone sounds one beep and both the **IN USE** indicator on the base and **IN USE/LOW BATT** indicator turn off. Start over at Step 1.
- To keep your accounts secure, we recommend you do not store your personal access code for services such as bank-by-phone in a memory location.

Follow these steps to store a number in memory.

1. Press **MEMO** (memory) on the handset. The **IN USE/LOW BATT** indicator on the handset and **IN USE** indicator on the base flash.
2. Enter the number and any tone or pause entries (see "Using Tone Services on a Pulse Line" on Page 11 and "Entering a Pause" on Page 13).

3. Press **MEMO**, then enter a memory location number (01–20). Two beeps sound to indicate that the number is stored.

To replace a stored number, store a new one in its place.

To clear a memory location, press **MEMO** twice, then press the memory location number you want to clear (01–20). Two beeps sound to indicate that the number is cleared.

Entering a Pause

In some telephone systems, you must dial an access code (9, for example) and wait for a second dial tone before you can dial an outside number. You can store the access code with the phone number. However, you should also store a pause after the access code to allow the outside line time to connect. To do so, press **REDIAL** to enter a 2-second pause after entering the access code. For a longer pause, press **REDIAL** again.

Dialing a Stored Number

To dial a stored number, lift the handset and press **TALK**. When you hear the dial tone, press

MEMO, then the desired memory location number (01–20) for the stored number.

Chain Dialing Service Numbers

You can make a call using more than one of the phone's memory locations. This is called chain dialing and is useful for dialing special services such as alternate long distance or bank-by-phone.

When calling special services, dial the service's main number first. Then, at the appropriate place in the call, press **MEMO**, then enter the memory location number for the additional stored numbers.


Testing Stored Emergency Numbers

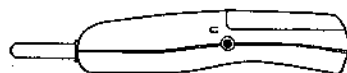
If you store an emergency service's number (police department, fire department, ambulance) and you want to test the stored number, make the test call during the late evening or early morning hours to avoid peak demand periods. Also, remain on the line to explain the reason for your call.

USING AN OPTIONAL HEADSET

Your phone's handset is equipped with a headset jack on the side of the handset. This jack allows you to connect a headset (not supplied) for hands-free conversation. A variety of headsets are available at your local RadioShack store.

Follow these steps to use a headset.

1. Insert the headset's $\frac{3}{32}$ -inch (2.5 mm) plug into the  jack on the side of the handset.



2. Place the headset on your head with the earpiece over either ear and adjust the microphone boom until it is about even with your chin.

3. Use the handset to make or receive calls.

Notes:

- Connecting a headset disconnects the handset's earpiece and microphone.
- If you place the handset on the base to recharge it while the headset is connected, be sure the handset seats properly.

❑ Troubleshooting

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

Problem	Suggestion
Low volume or unusual sounds.	Someone has picked up another phone on the same line. Hang up the other phone.
	Press VOLUME ▲ or ▼ on the handset to adjust the handset's volume.

Problem	Suggestion
Noise interference.	Return the handset to the cradle for a few seconds to reset the security access-protection code, then try again.
	You might be moving out of range (see "Out-of-Range Indications" on Page 17). Move the handset closer to the base or relocate the base.
	Keep the handset away from computers, remote-controlled toys, wireless microphones, alarm systems, intercoms, room monitors, fluorescent lights, and electrical appliances.
	Move to another location or turn off the source of interference.
The phone cannot be operated at a useful distance from the base because the signal becomes weak or noisy (the handset's range has decreased).	Adjust the base's antenna so it stands straight up.
	Be sure neither antenna is touching a metal surface.
	Return the handset to the cradle and recharge the battery pack.
The phone does not work or works poorly.	Be sure the base's phone line cord and AC adapter are correctly and securely connected. If that does not help, unplug the base's AC adapter from the AC outlet and disconnect the handset's battery pack. Wait 3 minutes, then reconnect the battery pack, plug the AC adapter into the base's DC9V jack and plug the AC adapter back into the AC outlet.

Problem	Suggestion
The handset battery pack does not charge.	Check the charging contacts on the handset and base. If they are dirty, clean them with a pencil eraser.
	Replace the battery pack (see "Replacing the Battery Pack" on Page 18).
The handset does not ring or receive a page.	Adjust the base's antenna to an upright position.
	Move closer to the base.
	Move the base away from noise sources.
	The battery pack might be weak. Charge the battery pack by placing the handset on the base for 12 hours.
	Return the handset to the base to reset the security access protection code.
The handset stops working or works poorly during a call.	Move the handset closer to the base.
	Adjust the base's antenna to an upright position.
	Be sure the handset's battery pack is charged. (If the battery power is too low, it does not have enough power to light the IN USE/LOW BATT indicator.)

If you still have problems, disconnect the phone. If other phones on the same line work properly, the fault is in this phone or its installation. If you cannot find the problem, take the phone to your local store for assistance.

OUT-OF-RANGE INDICATIONS

If you move the phone's handset out of the base's range, the handset will not operate properly.

Whether or not the handset is in use, if you move the handset out of the base's range for 25 seconds or longer, three beeps sound through the handset's speaker every 3-4 seconds and the IN USE/LOW BATT indicator flashes. If the handset is in use when out of the base's range, the

call is disconnected and the other indicator's continue until the handset is within the base's range.

If you move the handset out of the base's range while a call is in progress, you and the other party cannot hear each other while a call is in progress.

If you move the handset back within the base's range within 25 seconds, the out-of-range indications stop, and you can resume your phone conversation.

Care

To enjoy your 900 MHz Digital Spread Spectrum Cordless Phone for a long time:

- Keep the phone dry. If it gets wet, wipe it dry immediately.
- Use and store the phone only in normal temperature environments.
- Handle the phone gently and carefully. Do not drop it.
- Keep the phone away from dust and dirt.

- Wipe the phone with a damp cloth occasionally to keep it looking new.

Modifying or tampering with the phone's internal components can cause a malfunction and might invalidate its warranty and void your FCC authorization to operate it. If your phone 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 phone until you have resolved the problem.

REPLACING THE BATTERY PACK

If you follow the instructions in "Connecting and Charging the Battery Pack" on Page 7, the battery pack should last about one year. If the battery pack will not hold a charge for more than 2 hours after an overnight charge, replace it with a new 3.6V, 500 mAh battery pack with a connector that fits the socket in the battery compartment. You can order a replacement battery pack through your local store.

Follow these steps to install the battery pack, then charge the battery pack for 12 hours.

Note: To avoid losing phone numbers stored in memory, try to install and begin charging the new battery pack within 2 minutes.

1. Slide off the handset's battery compartment cover.
2. Gently pull on the battery pack connector to disconnect it, then remove the battery pack.
3. Plug the new battery pack's connector into the socket and

place the battery pack into the compartment.

4. Replace the cover.

Cautions:

- Use only a replacement battery pack of the required type (3.6V, 500 mAh rechargeable battery pack).
- Be careful not to short the battery pack with conducting materials, such as rings, bracelets, and keys. The battery pack or conductor might overheat and burn.

If you have trouble replacing the battery pack, take the phone to your local store for assistance.

Warnings:

- Dispose of the old battery pack promptly and properly. Do not burn or bury it.
- Do not open or mutilate the battery pack. Swallowing battery parts can be fatal.

THE FCC WANTS YOU TO KNOW

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

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

This equipment complies with the limits for a Class B digital device as specified in Part 15 of *FCC Rules*. These limits provide reasonable protection against radio and TV interference in a residential area. However, your equipment might cause TV or radio interference even when it is operating properly.

To eliminate interference, you can try one or more of the following corrective measures:

- Reorient or relocate the receiving antenna.
- Increase the distance between the equipment and the radio or TV.
- Use outlets on different electrical circuits for the equipment and the radio or TV.

Consult your local store if the problem still exists.

LIGHTNING

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

Lightning damage is not common. Nevertheless, if you live in an area which has severe electrical storms, we suggest that you unplug your phone when storms approach to reduce the possibility of damage.