

DESCRIPTIONS

HANDSET CONTROLS:

CHN Button - Used to manually select one of the 60 operating channels when you experience interference on the handset.

Charge Contacts - Used for battery charging. We recommend that you clean these contacts periodically with an alcohol-dampened cloth or cotton swab.

FLASH Button - Momentarily hangs up the phone to access custom calling features such as Call Waiting or Three-Way Calling provided by your local phone company.

IN USE/ BATT LOW LED Indicator - (IN USE) Flashes rapidly while auto-scanning. Lights solid whenever the handset is in TALK mode. Turns off when the handset is not in use and out of the base unit. (BATT LOW) This LED flashes slowly if the handset battery needs charging.

MEMO Button - Used for storing/retrieving phone numbers to/from the 10 memory locations.

PAUSE Button - Allows you to insert a 4-second delay between dialed numbers in PABX systems or long distance services.

REDIAL - Automatically dials the last phone number dialed up to 64 digits.

STAND BY / SAVE-ON - For normal use, set on STAND BY. To save battery power and to turn off the handset ringer, set to the SAVE-ON position.

TALK Button - Press this button to place a call, answer a call, or end a call. Also flashes slowly when a paging signal was sent from the base.

TONE Button- Pressing the tone button temporarily changes the dialing mode from Pulse to Tone when dialing in the Pulse mode. Provides tone function to access special services such as phone banking services.

BASE UNIT CONTROLS:

Charge LED Indicator - Turns ON when the handset is charging on the base unit. Turns OFF when the handset is away from the base unit.

Charge Terminals - Used for battery charging. We recommend that you clean these contacts periodically with an alcohol-moistened cloth or cotton swab.

DC 9V jack - A jack located on the rear side of the base unit used for connecting the AC adaptor to the base unit.

IN USE LED Indicator - Flashes quickly whenever an incoming call is received. Lights steadily when the handset is in use or charging. Turns off when the handset is not in use and out of the base unit.

PAGE Button - Allows you to locate the handset when it is not on the base.

POWER LED Indicator - Lights solid when power is applied to the base unit.

TONE/PULSE Switch - A switch located on the rear side of the base unit, that allows you to set the dialing mode to either Tone dialing or Pulse (rotary) dialing.

PRE-INSTALLATION NOTES

- Ensure that the rechargeable Ni-Cad battery pack is installed inside the handset battery compartment.

Memory Dialing

You can store and recall up to 10 frequently called telephone numbers (up to 16 digits each) from the handset.

Storing Telephone Numbers into Memory

1. Ensure that the handset is in standby mode (IN USE / BATT. LOW LED is off).
2. Press the MEMO button on the handset.
3. Enter the phone number to be stored into memory.
4. Press the MEMO button again.
5. Press the desired one-digit memory location (from 0 to 9). A long confirmation beep will be heard.
5. To store more phone numbers or modify existing numbers in memory, repeat steps 1-5.

NOTES:

- The maximum number of digits that can be stored for each phone number is 16 digits both in pulse and tone mode.
- Pauses can be programmed into a memory dialing sequence. Each pause occupies one digit. If you are using a switchboard system to access an outside line, press the PAUSE button on the handset to store a pause.

Dialing a Number from Memory

1. Pick up the handset and press the TALK button. The handset will auto-scan for the best channel available. While the IN USE / BATT. LOW LED indicator flashes, a dial tone will be heard when the IN USE / BATT. LOW LED indicator lights solid.
2. Press the MEMO button.
3. Press the desired one-digit memory location (from 0 to 9).

NOTE: If you have difficulty storing or recalling numbers from memory, refer to the "Troubleshooting" chart of this user manual.

Changing Stored Phone Numbers

1. Follow the steps described in "Storing Telephone Numbers Into Memory."
2. The new phone number will automatically replace the previous one.

Base to Handset Page

This feature allows the person near the base unit to alert the handset user of an incoming call or to locate the handset when it is not on the base, should it be misplaced or lost.

1. Press the PAGE button on the base unit.
2. The IN USE / BATT LOW LED indicator (on the handset) will flash slowly while the handset starts beeping.

NOTE: Beeping can be stopped by pressing either the TALK button (on the handset) or the PAGE button (on the base).

Low Battery Warning

When the handset battery power is low, the IN USE / LOW BATT LED indicator of the handset will flash slowly during standby mode. Return the handset to its cradle on the base for charging.

OPERATING RANGE

The phone operates at the maximum radio frequency allowed by the Federal Communications Commission (FCC). Even so, the maximum operating range may be limited because of conditions like weather, construction of the building, and interference from other sources.

Combination Security Coding

The Excursion[®] has a digital coding security system to prevent unauthorized use of your telephone line by other cordless phones nearby. The

Excursion has possible security code combinations. Each combination of the code is randomly generated every time the handset is picked up.

Resetting Security Code and Channel Information

Communication between the handset and the base unit may not be possible in any of the following situations:

1. After a power failure.
2. After relocating the base unit by disconnecting the AC adaptor.
3. After replacing the handset battery.
4. The handset goes out of range from the base unit.

To reset, place the handset on the cradle of the base unit for five seconds.

Out of Range Detection

The Excursion is equipped with an Out-of-Range detection system. If you have the handset too far away from the base unit during a call, the handset may lose its link with the base unit. When this happens, the handset will beep during TALK mode.

- If you hear this warning signal, you should come closer to the base unit.
- If the warning signal persists for more than 15 seconds, the base unit will return to standby mode and the handset will turn off. This will return the handset to standby mode.
- If the Excursion returns to standby mode after beeping for 15 seconds, return the handset to its cradle on the base unit for 5 seconds to reset the unit.

TECHNICAL INFORMATION

This cordless phone uses radio frequencies to allow mobility. There are certain difficulties in using radio frequencies with a cordless telephone. While these are normal, the following could affect the operation of your system.

Noise: Electric pulse noise is present in most homes at one time or another. This noise is most intense during electrical storms. Certain kinds of electric equipment such as light dimmers, fluorescent bulbs, motors, and fans also generate noise pulses. Because radio frequencies are susceptible to these noise pulses, you may occasionally hear them in your handset. Generally they are a minor annoyance and should not be interpreted as a defect in your system.

Range: Because radio frequencies are used, location of the base unit can affect operating range. Try several locations in your home or business and pick the one that gives you the clearest signal.

Interference: Some electronic devices operate in and/or generate interference near the operating frequencies of your cordless telephone. While several protection circuits are used to prevent unwanted signals, there may be periods when these unwanted signals cause interference. If interference occurs frequently, it can be minimized or eliminated by lowering the height of your base antenna or by relocating the base unit. You can check for interference before selecting the final base unit location by plugging in the phone.

Improving Cordless Reception

Follow these guidelines to improve cordless sound quality:

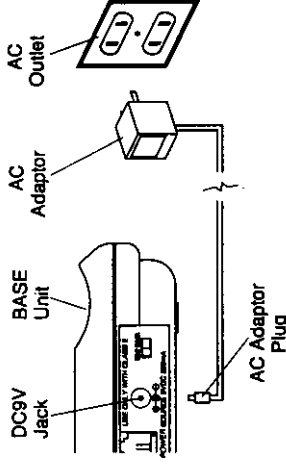
- Select an area to install the Excursion where it is closest to the center of your home or office. This will improve the operating range of the unit.
- Keep the Excursion base unit away from electrical equipment. Radio Frequency Interference (RFI) is sometimes generated by these appliances, which can cause a degradation in cordless reception.
- Keep the handset batteries charged as much as possible. Weak handset

- 3. Connect the opposite end of telephone line cord to the telephone modular wall jack.

POWER CONNECTION

CAUTION: Use only a Class II AC Adaptor with a rating of AC 120V input, DC 9V, 300 mA output with a center tip that is positive. The adaptor plug should correctly fit the base unit's DC 9V jack.

1. Plug the AC adaptor into a standard AC outlet.
2. Connect the small adaptor plug into the DC 9V jack on the rear of the base, as shown below.

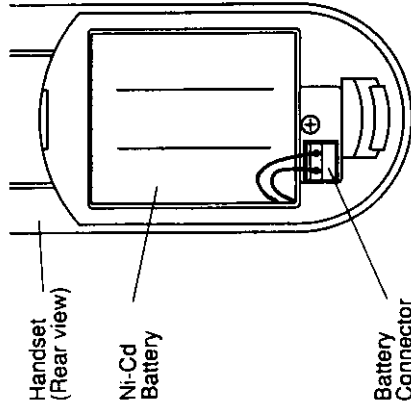


- Set the STAND BY / SAVE ON switch on the handset to the STAND BY position for normal use.
- It is strongly recommended that the Ni-Cad battery be fully charged for at least 12 hours before initial use.
- Raise the base unit antenna to the upright position to maximize cordless phone operating range and sound quality.

INSTALLATION

Battery Installation (Handset)

1. Remove the battery compartment cover of the handset.
2. Connect the rechargeable Ni-Cad battery as shown below.



3. Insert the Ni-Cad battery into the battery compartment of the handset.
4. Replace the battery compartment cover.

NOTE: It is recommended that the Ni-Cad battery should be fully charged overnight prior to initial use.

Desktop Connection

1. Set the unit on the selected desktop and connect the telephone line cord to the TEL. line jack on the rear of the base unit.

interference, press the CHN button repeatedly until a clear channel is found.

NOTE: When there is excessive static and causes the handset to lose link with the base, return the handset to the cradle to re-establish the security link.

Ending a Call

Upon completion of a call, you can hang up the Excursion[®] by returning the handset back into its cradle on the base unit (this feature is also called Auto-Standby), or by pressing the TALK button on the handset.

Last Number Redial

The last number redial feature may be used to dial the last number called (up to 32 digits).

1. Pick up the handset and press the TALK button.
2. Listen for a dial tone.
3. Press the REDIAL button. The last phone number dialed will be dialed out automatically.

Flash

Pressing the FLASH button (while the phone line is in use) momentarily hangs up the phone to access custom calling features such as Call Waiting or Three-Way Calling provided by your local phone company. For other Custom Calling features, refer to the instructions provided by your local phone company.

Pause

In some cases, such as PABX or long distance service, a pause may be needed in the dialing sequence. Pressing the PAUSE button inserts a 4 second delay between dialed numbers.

Pauses may be programmed into the memory. Each 4 second pause occupies one digit of the available 16 digits per memory location.

when tone signals are required press the TONE button once. Subsequent digits will be dialed in tone mode. Dialing will be reset to Pulse mode when handset is returned on-hook.

Placing a Call

1. Pick up the handset and press the TALK button. The Excursion[®] will automatically scan for the best channel available, as indicated by the flashing IN USE/BATT LOW LED indicator.
2. Once it finds a clear channel, the IN USE/BATT LOW LED indicator will light solid and a dial tone can be heard. You can then dial the desired phone number on the handset keypad.

Receiving a Call

If the handset is on the base:

- Since the Excursion[®] features "Auto Answer" simply pick up the handset from the base cradle. The unit will scan for a clear channel, then you can talk to the calling party (Auto-Answer).

If the handset is out of the base:

- Press the TALK button on the handset. The unit will scan for a clear channel.
- The IN USE/BATT LOW LED indicator will flash rapidly (to indicate that it is auto-scanning). After it has found a clear channel. The IN USE/BATT LOW LED indicator will light solid. You can then start conversation with the calling party.

Channel Selection (60 Channels)

Channel Scan (Auto-Scan)

- When you initiate or receive a call, the Excursion auto-scans for the best channel available.

Channel Scan (Manual Scan)

- If the existing channel becomes noisy or starts having radio

TELEPHONE OPERATION

TONE / PULSE Dialing

- If your home is equipped with tone dialing service, set the TONE/PULSE switch to TONE position.
- If you have a pulse (rotary) dialing service, set the TONE / PULSE switch to PULSE position.

PULSE to TONE (Mixed Mode)

Dialing

If you only have pulse (rotary dialing) service in your area and want to access Tone dialing services, set the base unit's TONE/PULSE switch to the PULSE position. Dial the desired number and

MAINTENANCE

Your phone should be situated away from heat sources such as radiators, stoves or any other appliance that produces heat.

Cleaning the Unit

Use a slightly damp cloth to clean the plastic cabinet. Never use polish, solvents, abrasives or strong detergents since these can damage the finish.

Maximizing Ni-Cad Battery Life

Repeated use or recharge of Ni-Cad batteries without periodic full discharge results in reduced useable charge time. When you notice the useable charge duration decreasing, fully discharge the Ni-Cad battery and recharge as described below:

Recharging

Unplug the telephone line cord from the Excursion. Make sure that the AC Adaptor is connected.

Handset (TALK LED indicator should light).

4. Place the handset *out* of the base cradle to start discharging.
5. Once the BATT LO indicator lights, it means that the battery level is low. Let it fully discharge for 12 hours. Once the Ni-Cad battery is fully discharged, you may now charge the battery to its full capacity.

Charging

1. Make sure the AC adaptor and telephone line cord is connected to the Excursion.
2. Place the handset on the base cradle. The IN USE/CHARGE LED indicator will steadily light up on the base.
3. Leave the handset charging on the base for 12 hours continuously to get a maximum charge.
4. The Excursion is now ready for regular use. Discharge and charge the Ni-Cad battery again once you notice a decrease in the useable charge time.

SOLUTION


SYMPTOM

<p>No dial tone</p> <ul style="list-style-type: none"> • Check to see if the handset battery is connected inside the handset battery compartment. • Make sure that the adaptor plug is connected to the base unit. • Check for the telephone line cord connections. Ensure that both connectors are plugged securely on the jacks. • Ensure that no other telephone sharing the same line as the handset is off-hook. • Test the phone at a different telephone wall jack and listen for a dial tone. • Test a different phone in the wall jack and listen for a dial tone. 	<ul style="list-style-type: none"> • Check to see if the handset battery is connected inside the handset battery compartment. • Make sure that the adaptor plug is connected to the base unit. • Check for the telephone line cord connections. Ensure that both connectors are plugged securely on the jacks. • Ensure that no other telephone sharing the same line as the handset is off-hook. • Test the phone at a different telephone wall jack and listen for a dial tone. • Test a different phone in the wall jack and listen for a dial tone.
<p>Will not ring</p>	<ul style="list-style-type: none"> • Check the handset STAND BY / SAVE ON switch. For normal use, set on STAND BY. The handset will not ring in SAVE ON mode. • The phone or another phone connected to the same line may be in the off-hook (in-use) position. • Try a different phone; if the problem still exists, the fault is not with the unit. • Look for the Ringer Equivalence Number (REN) number printed underneath your phone(s). Sum up the total REN numbers for all the phones or answering machines connected to your telephone line. Your phone(s) may not ring if the REN total exceeds five (5). Please call your local company to determine the maximum REN for your calling area.
<p>Static</p>	<ul style="list-style-type: none"> • The Ni-Cad battery might be weak. Allow the Ni-Cad battery to charge fully before using. • Try a different phone; if the problem still exists, the fault is not with the unit. • Some atmospheric conditions such as very low humidity can cause static build-up.
<p>Cannot dial out</p>	<ul style="list-style-type: none"> • Press the TALK button on the handset and listen for a dial tone before dialing out. • Are you in a rotary only area? Move the TONE / PULSE switch to PULSE. • Try a different phone in the jack. If the problem persists, the fault is not in the CT-900 / • Is the phone connected to an answering machine? Disconnect the answering machine and try to have the phone plugged into the jack alone. If it works alone, there is a compatibility problem. Purchase a 2 for 1 adaptor at any phone or electrical supply store. Plug the 2 for 1 adaptor into the modular wall jack, then plug the phone into one side and the answering

NOTES:

<p>memory feature not work</p>	<p>machine on the other side of the adaptor.</p> <ul style="list-style-type: none"> • Make sure that the unit is in the standby mode (hung up) mode before storing a phone number. • The maximum number of digits that you can store for each memory location is 16 digits. See the "Memory Dialing" section for more details.
<p>link between base and handset.</p>	<ul style="list-style-type: none"> • You may have taken the handset at a distance away from the base that is beyond its normal operating range. Refer to the section of "Operating Range" in the manual for more details.
<p>unit locks up becomes inoperable</p>	<ul style="list-style-type: none"> • In the unlikely event that the unit locks up and becomes inoperable, you can reset the system by momentarily disconnecting and reconnecting the handset battery. Afterwards, return the handset to its cradle on the base unit to reset the security code before using the unit. • Should a power outage occur while the handset is away from the base unit, the handset must be returned to its cradle on the base unit to reset the security code when power is resumed.

AC ADAPTOR:
 USE ONLY WITH CLASS 2 TRANSFORMER, RATED OUTPUT 9VDC, 300mA



THIS SYMBOL IS INTENDED TO ALERT THE USER OF THE PRESENCE OF IMPORTANT OPERATING AND MAINTENANCE (SERVICING) INSTRUCTIONS IN THE OWNER'S MANUAL.

INFORMATION TO THE USER

This device complies with part 15 of the FCC Rules. Operation is subject to the following two conditions:

- (1) This device may not cause harmful interference, and
- (2) This device must accept any interference received, including interference that may cause undesired operation.

NOTE: This equipment has been tested and found to comply with the limits for a Class B digital device. Pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on the user is encouraged to try to correct the interference by one or more of the following measures:

- Reorient or relocate the receiving antenna.
- Increase the separation between the equipment and receiver.
- Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
- Consult the dealer or an experienced radio/TV technician for help.

This booklet is available from the US government Printing Office
Washington, DC 20402, Stock NO. 004-000-00345-4.

CAUTION: Any changes of modifications not expressly approved by the grantee of this device could void the users authority to operate the equipment.

Cordless telephones operate at frequencies that may cause interference to nearby TVs and VCRs; to minimize or prevent such interference, the base of the cordless telephone should not be placed near of a TV or VCR; and, if interference is experienced, moving the cordless telephone farther away from the TV or VCR will often reduce or eliminate the interference.

EXHIBIT D

Circuit Diagram