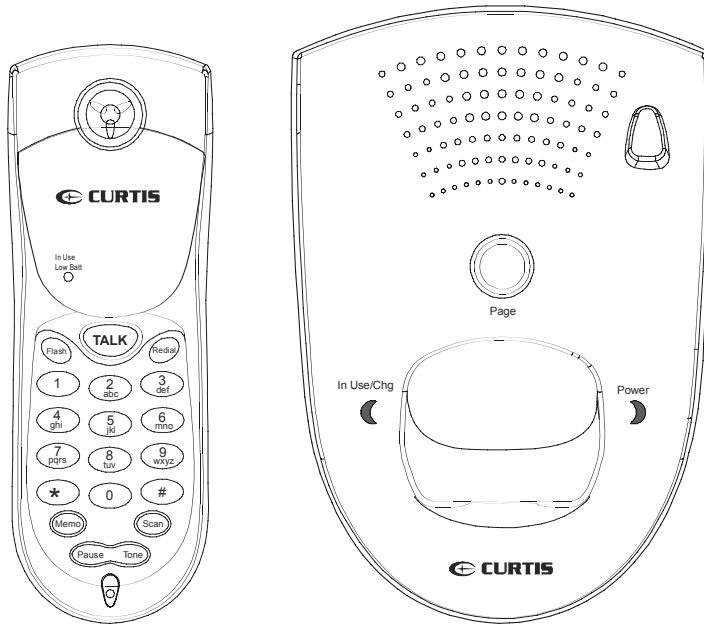


# **CURTIS**

## **OWNER'S MANUAL**

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2.4 GHz Cordless Telephone  
PLEASE READ BEFORE OPERATING THIS EQUIPMENT  
**Model : TC972**

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## Safety Instructions

### **IMPORTANT SAFETY INSTRUCTIONS**

**To reduce the risk of fire, electric shock and/or injury, always follow these basic safety precautions when using your cordless telephone equipment.**

1. Read and understand all instructions.
2. Follow all warnings and instructions marked on the telephone.
3. Do not use this telephone near a bathtub, wash bowl, kitchen sink, or laundry tub, in a wet basement, near a swimming pool, or anywhere else where there is water.
4. Avoid using a telephone (other than a cordless type) during an electrical storm. There may be a remote risk of electric shock from lightning.
5. Do not use the telephone to report a gas leak in the vicinity of the leak.
6. Use only the power cord and Battery Pack indicated in the Owner's Manual. Do not dispose of the Battery Pack in a fire. The Battery Pack may explode. Check with local codes for possible special disposal instructions.
7. Operate this telephone using the electrical voltage as stated on the Base Unit or in the Owner's Manual. If you are not sure of the voltage in your home, consult your dealer or local power company.
8. Unplug this telephone from the wall outlet before cleaning or replacing the Battery Pack. Do not use liquid cleaners or aerosol cleaners on the telephone. Use a damp cloth for cleaning.
9. Place this telephone on a stable surface. Serious damage and/or injury may result if the telephone falls.
10. Do not cover the slots and openings on this telephone. This telephone should never be placed near or over a radiator or heat register. This telephone should not be placed in a built-in installation unless proper ventilation is provided.
11. Do not place anything on the power cord. Install the telephone where no one will step or trip on the cord.
12. Do not overload wall outlets or extension cords as this can increase the risk of fire or electric shock.
13. Never push any objects through the slots in the telephone. They could touch dangerous voltage points or short out parts that could result in a risk of fire or electric shock. Never spill liquid of any kind on the telephone.
14. To reduce the risk of electric shock, do not take this telephone apart. If service or repair work is required on this telephone, take it to a qualified service representative. Opening or removing covers may expose you to dangerous voltage or other risks. Incorrect reassembly can cause electric shock when the appliance is subsequently used.
15. Unplug this telephone from the wall outlet and consult a qualified service representative in any of the following situations.
  - A. When the power supply cord is frayed or damaged.
  - B. If liquid has been spilled into the telephone.
  - C. If the telephone has been exposed to rain or water.

## **Safety Instruction**

- D. If the telephone does not operate normally by following the operating instructions. Adjust only those controls that are covered by the operating instructions. Improper adjustment may require extensive work by a qualified technician to restore the telephone to normal operation.
- E. If the telephone has been dropped or the case has been damaged.
- F. If the telephone exhibits a distinct change in performance.
- 16. Never install telephone wiring during a lightning storm.
- 17. Never install telephone jacks in wet locations unless the jack is specifically designed for wet locations.
- 18. Never touch uninsulated telephone wires or terminals unless the telephone line has been disconnected at the network interface.
- 19. Use caution when installing or modifying telephone lines.

### **Battery Safety**

#### **CAUTION:**

***Risk of explosion if Battery Pack is replaced by an incorrect type. Replace only with the same or equivalent type. Dispose of used batteries according to the instructions. To reduce the risk of fire or personal injury, read and follow this instructions.***

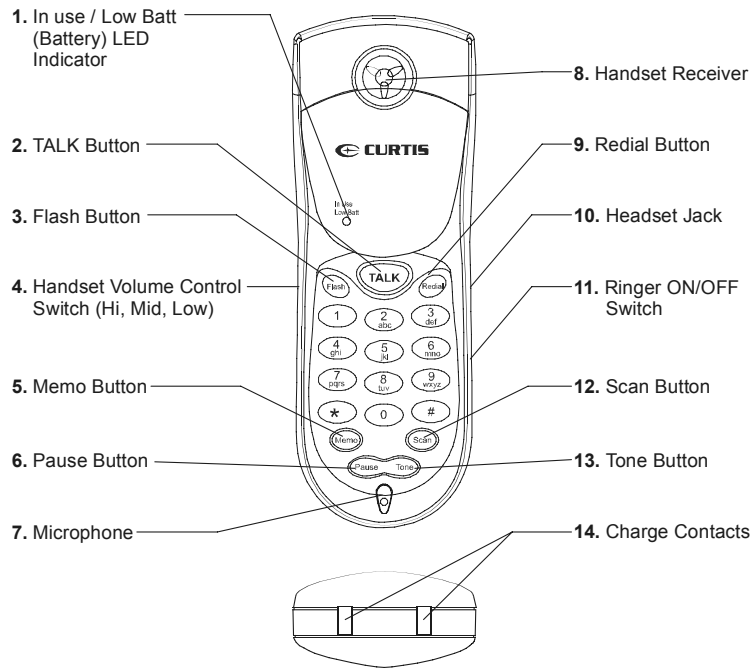
1. Use only the following type and size of Battery Pack:  
3.6V, 600mAh Nickel Metal Hydride Ni-MH Battery Pack
2. Do not dispose of the Battery Pack in a fire. It may explode. Check with local codes for possible special disposal instructions.
3. Do not open or mutilate the Battery Pack. Released electrolyte from a Battery Pack is corrosive and may cause damage to the eyes or skin. Electrolyte may be toxic if swallowed.
4. Exercise care in handling the Battery Pack to prevent shorting the Battery Pack with conductive materials such as rings, bracelets, and keys. The Battery Pack or conductor may overheat and cause burns.
5. Charge the Battery Pack provided with (or identified for use with) this telephone only in accordance with the instructions and limitations specified in this manual.
6. Observe proper polarity orientation between the Battery Pack and Battery Charger.

### **SAVE THESE INSTRUCTIONS**

#### **ATTENTION:**

The telephone that you have purchased contains a rechargeable Battery Pack. The Battery Pack is recyclable. At the end of its useful life, under various state and local laws, it may be illegal to dispose of this Battery Pack into the municipal waste stream. Check with your local solid waste officials for details in your area for recycling options or proper disposal.

## Handset Controls

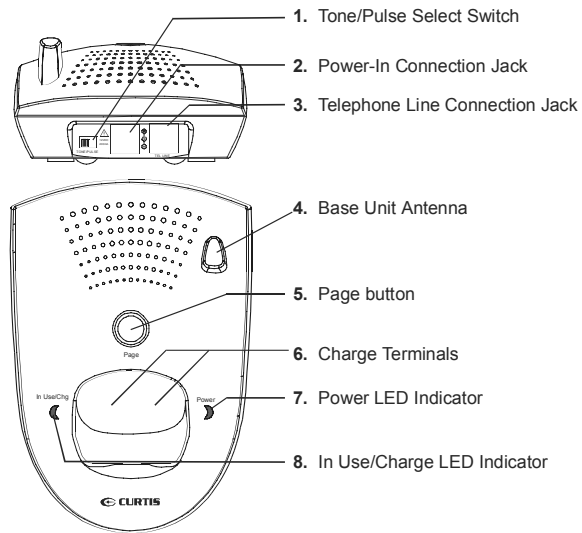


**1. In use /Low Batt (Battery) LED Indicator** - Lights up when the Hadset is in TALK mode. Blinks when the battery charge is low.

## ***Handset Controls***

2. **Talk button** - Press to answer an incoming call or to place a call. Press to end the call.
3. **Flash button** - Press to answer an incoming call if you have Call Waiting.
4. **Handset Volume Control (LOW, MID, HI) switch** - Select the receiver volume level.
5. **Memo button** - Press to store phone numbers in memory or to call a number you have previously stored.
6. **Pause button** - Press to insert a Pause while dialing. (You will need the Pause button to dial numbers which use an alternative Long Distance Access Code.)
7. **Microphone**
8. **Handset Receiver**
9. **Redial button** - Press to Redial the last number you called.
10. **Headset Jack** - For connecting your headset plug to enjoy hands-free communication. (See page 12 for detail).
11. **Ringer ON/OFF switch** - Switch to ON to engage the ringer on the Handset. Set switch to OFF to disengage the ringer on the Handset. Remember to return to "ON" position when you are ready to receive calls.
12. **Scan button** - Press to change the operating channel when you hear interference.
13. **Tone button** - Press to change the dialing mode from PULSE to TONE.
14. **Charge Contacts** - For charging the Battery Pack inside the Handset. We recommend cleaning the Charge Contacts periodically with a damp cloth.

## Base Unit Controls

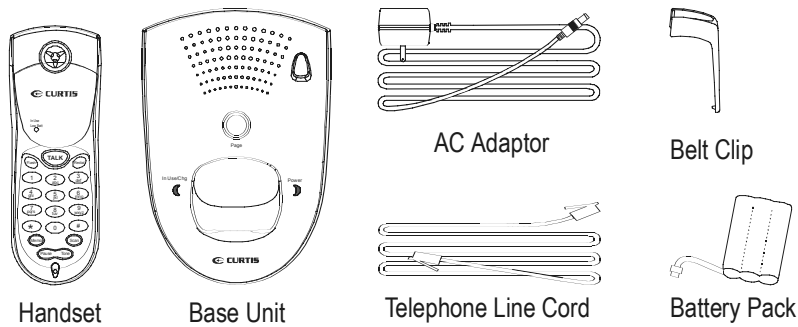


1. **Tone/Pulse Select Switch**
2. **Power-In Connection Jack**
3. **Telephone Line Connection Jack**
4. **Base Unit Antenna**
5. **Page button** - Press to page the Handset
6. **Charge Terminals** - For charging the Handset battery pack. For best performance, clean the Charge terminals periodically with a damp cloth.
7. **Power LED Indicator** - Lights up when power is connected to the Base Unit.
8. **In Use/Charge LED Indicator** - (IN USE) Lights up to indicate that the Handset is in TALK mode. (CHARGE) Lights up when the Handset is placed on the Base Unit for charging.

## Getting Started

Carefully remove your cordless telephone from its shipping carton. If there is any visible damage, do not attempt to operate this equipment. Return it to the place of purchase.

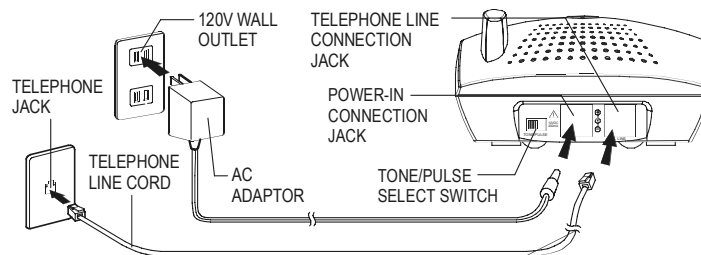
Check to be sure you have all items that come with this cordless telephone system. You should have a Handset, Base Unit, AC Adaptor, Battery Pack, Telephone Line Cord, Belt Clip, and Owner's Manual.



### Connecting your Phone

This section is a reference guide to the basic functions and operations of your cordless telephone. For more detailed descriptions of the operations and features of this telephone, refer to the Contents on page 1.

1. Insert the small plug on the end of the AC Adaptor into the Power-In Connection Jack at the back of the Base Unit.
2. Plug the AC Adaptor into a 120V wall outlet Use only **Class 2 power source 12V DC, 200mA**.





## Getting Started

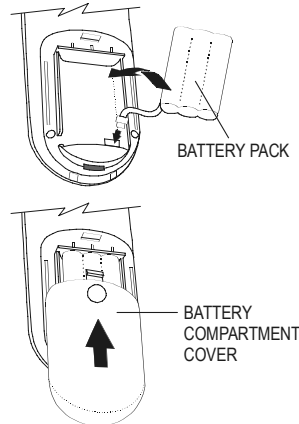
3. Insert one plug of the Telephone Line Cord into the house Telephone Jack and the other end into the Telephone Line Connection Jack at the back of the Base Unit. ( If you have an older 4-prong Telephone Jack, you will need an RJ-11C Telephone Jack Adaptor. This Adaptor is available at the same place you purchased your telephone.

**CAUTION:** The cordless telephone operates at a frequency that causes interference to nearby TVs and VCRs; the base phone should not be placed near, or on top of a TV or VCR. If interference is experienced, moving the cordless telephone farther away from the TV or VCR will often reduce or eliminate the interference.

### Battery Installation

To install the 3.6V 600mAh cordless Handset battery pack:

1. Install the Handset Battery Pack by plugging it into the Battery connector inside the Battery compartment. Place the Battery Pack inside the Battery Compartment.
2. Slide the Handset Battery compartment cover firmly into place in its closed position.
3. Once you have installed the Battery Pack and placed the Handset on the cradle you will hear a tone indicating the Handset has connected with the charging contacts and will successfully charge.
4. **IMPORTANT: Before initial use, charge the Handset for 12 hours.**



### Battery Duration

A fully charged battery lasts for approximately:

- 4 hours when you use the Handset continuously (talk time).
- 5 days when the Handset is not in use (standby).

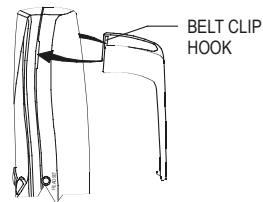
## Getting Started

### **TONE/PULSE Select Switch:**

- A. If your home is equipped with a tone dialing system, set the TONE/PULSE Select Switch to the TONE position.
- B. If you have a rotary dialing system, set the TONE/PULSE Select Switch to the PULSE position.
- C. If you are not sure which system you have, set the TONE/PULSE Select Switch to the TONE position. Press the **TALK** button on the Handset and make a call. If the call connects, leave the switch as is; otherwise set to the PULSE position.

### **Belt Clip Installation**

With the back of the Handset facing up, insert one side of the Belt Clip Hook into the matching slot at the top side of the Handset. Press down on the opposite side of the Belt Clip until the other hook locks into the slot on the side of the Handset.



## Cordless Telephone Operation

### Preparing for Use

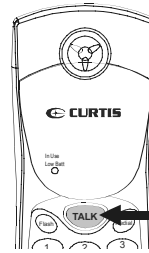
Before you can use your cordless telephone, you must charge the Handset for 12 hours. Failure to do so will require recharging of the Battery Pack more often.

1. Place the Handset on the Base Unit for 12 hours.
2. After 12 hours, remove the Handset from the Base Unit.

**NOTE:** Depending on the frequency of use, once the Handset is fully charged, it remains functional for approximately 6 hours of continuous use and approximately 6 days when the Handset is off the Base Unit in standby mode.

### Placing Calls

1. Press the **TALK** button. The Handset IN USE LED indicator and the Base Unit IN USE/CHARGE LED indicator will light up.
2. Listen for a dial tone.
3. Dial the phone number.
4. When you have finished your call, either press the **TALK** button or place the Handset on the Base Unit. The Handset IN USE LED indicator will turn off and the Base Unit IN USE/CHARGE LED will light up to indicate that the Handset is charging.



### NOTES:

1. The Base Unit does not have a ringer and does not ring when receiving an incoming call.
2. If you are too far away from the Base Unit, the Handset emits "beep" sounds to warn you that the background noise level is too high for proper communication between the Handset and the Base Unit. When you hear this sound, you should move closer to the Base Unit to reduce the noise level. Otherwise, the call will automatically cut off.

### Receiving Calls with the Handset off the Base Unit

1. When the phone rings, press the **TALK** button. The IN USE LED indicator will light up.
2. Start your conversation.
3. To end your conversation, either press the **TALK** button or place the Handset on the Base Unit. If you place the Handset on the Base Unit CHARGE CRADLE, you activate the automatic standby feature.

## Getting Started

### Receiving Calls with the Handset on the Base Unit

1. When the phone rings, lift the Handset.  
The IN USE LED indicator will light up.  
**NOTE:** The Handset RINGER ON/OFF switch must be in the "ON" position for ringer to operate.
2. Start your conversation.
3. To end your conversation, either press the **TALK** button or place the Handset on the Base Unit. If you place the Handset on the Base Unit CHARGE CRADLE, you activate the automatic standby feature.

### Storing Numbers

1. Be sure the Base Unit IN USE LED indicator is off and the Handset is in standby mode.
2. Press the **MEMO** button.
3. Dial the number you want to store.
4. Press the **MEMO** button again.
5. Dial the Keypad **0~9** button where you want to store that number. You will hear one confirmation "beep."
6. Repeat steps 1 through 5 to store other telephone numbers.

**EXAMPLE :** To store the number 115-1968 under the Keypad **1** button:

- 1 - Press the **MEMO** button.
- 2 - Dial 115-1968.
- 3 - Press the **MEMO** button again.
- 4 - Press the keypad **1** button.
- 5 - You have stored 115-1968 under keypad **1** button.

A total of 10 telephone numbers can be programmed in memory.

**IMPORTANT:** The maximum number of digits that can be stored for any phone number is 16 in PULSE or TONE mode. The maximum number of digits for mixed (TONE and PULSE in combination) dialing is 15. If you are using a switchboard system to access an outside line (such as an 8 or 9), press the **PAUSE** button to store a Pause.

## Getting Started

### Recalling Stored Numbers from Memory

1. Press the **TALK** button.
2. Press the **MEMO** button.
3. Press the keypad button for the number you have stored. The stored number will be dialed automatically.

**EXAMPLE:** To recall number 115-1968 stored under the keypad **1** button:

- 1 - Press the **TALK** button.
- 2 - Press the **MEMO** button.
- 3 - Press the keypad **1** button.

### Redial Feature

1. If you get a busy tone, press the **TALK** button to hang up.
2. Later, press the **TALK** button again.
3. Listen for a dial tone.
4. Press the **REDIAL** button. This will automatically redial the last telephone number you called.

### Mixed Mode (Temporary Tone) Dialing

If you only have Pulse (rotary dialing) service in your area set the TONE/PULSE select switch at the rear of the Base Unit to PULSE position. If you want to access tone dialing mode, press the TONE button on the Handset and dial the desired number, subsequent digits will be dialed into Tone mode. Pulse mode will reset after the Handset is returned on-hook.

### Using the Headset Feature

Your telephone can utilize a headset (included) to be connected to your Handset for you to enjoy hands-free communication.

Insert the small plug on the end of the headset into the Headset Jack at the right side of the Handset. Follow the procedures discussed in "Receiving Calls" and "Placing Calls" to receive and place a call.

**NOTE:** When you plug the headset plug into the Headset Jack it automatically mutes the Microphone and Speaker of the Handset. Unplug the headset to return the Handset to normal use.

The Headset Jack is compatible with 2.5 mm headset plugs only.

## Security

Your cordless telephone uses a digital coding security system to prevent unauthorized use of your telephone line by another nearby cordless telephone. The system has its own identifying signal created by microcomputers in both the Base Unit and the Handset.

### **Security Code**

This telephone has an internal security code with 65,536 possible combinations.

### **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 Pack.

To reset, place the Handset on the Base Unit for 2 to 5 seconds.

### **Multi-Channel Access**

Your cordless telephone lets you select a channel from the 50 frequencies available to transmit signals between the Base Unit and the Handset. When you notice interference from other cordless telephones, change to another channel by pressing the **SCAN** button on the Handset.

## ***Recharging the Battery Pack***

The nickel metal hydride (Ni-MH) Battery Pack in the Handset can be recharged many times using the built-in charger in the Base Unit.

When the BATT LOW LED indicator starts to blink rapidly, a "beep" sound will be heard every 12 seconds. This indicates that the Battery Pack needs to be recharged.

Charge the Battery Pack at least once every 90 days of non-use to avoid battery failure. When the Battery Pack can no longer be charged, replacement of the Battery Pack will be necessary.

### **NOTES:**

1. During a power interruption, the Base Unit does not operate, and a phone conversation cannot be made on the Handset.
2. To ensure your phone charges properly, make sure that the CHARGE LED indicator on the **BASE UNIT** lights up and a "beep" confirmation tone is heard.

## ***Changing the Battery Pack***

The Battery Pack provides power for the Handset of your cordless telephone.

### **To Replace the Battery Pack**

1. Remove the Handset Battery Compartment Cover by sliding it down.
2. Pull out the Battery Pack PLUG and remove the Battery Pack. See "Battery Installation" Pack on page 8.

### **ATTENTION:**

The telephone that you have purchased contains a rechargeable Battery Pack. The Battery Pack is recyclable. At the end of its useful life, under various state and local laws, it may be illegal to dispose of this Battery Pack into the municipal waste stream. Check with your local solid waste officials for details in your area for recycling options or proper disposal.

## **Problem Solving**

*For your assistance, we have listed below a few common problems.*

### **Phone does not work, check the following:**

1. Base Unit is plugged into a power source.
2. Handset is charged.
3. TONE/PULSE Select Switch is in the right position.
4. Telephone Line Cord is plugged into the Telephone Jack.

### **Range of phone limited, check the following:**

1. Base Unit is centrally located in your residence.
2. Base Unit is not located near appliances.

### **No dial tone, check the following:**

1. TELEPHONE LINE CORD plugs are connected to the Telephone Jack and Telephone Line Connection Jack.
2. Base Unit is plugged into a power source.
3. If you had a power failure or had unplugged the Base Unit, replace the Handset on the Base Unit for 2 to 5 seconds to reset the system.

### **Received signal flutters or fades, check the following:**

1. Battery Pack in the Handset is fully charged.
2. Handset is not too far from the Base Unit.

### **Excess static, check the following:**

1. Check to see that the Antenna is not touching another metal object.

### **Interference on reception, check the following:**

1. Noise may be picked up from electrical products in the home or electrical storms. Generally, this noise is a minor annoyance and should not be interpreted as a defect in your system. (See Technical Information on page 16).
2. Choose an alternate channel using the **SCAN** button on the Handset.
3. Do not use this telephone within 20 ft. of a microwave oven while it is working, as you may experience interference. This is a normal occurrence with 2.4 GHz phones and should not be interpreted as a defect in the product.

### **If after pressing the TALK button, you receive three "beeps" and no dial tone, check the following:**

1. Base Unit is plugged into a power source.
2. If you had a power failure or had unplugged the Base Unit, replace the Handset on the Base Unit for 2 to 5 seconds to reset the system.

**NOTE:** If none of the telephones in the house are working, disconnect one set at a time to verify that none of the telephones are causing the problem. If you still have a problem after doing this, and your telephone still does not work, please contact your local phone company.



## **Technical Information**

This cordless telephone 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**

Electrical pulse noise is present in most homes at one time or another. This noise is most intense during electrical storms. Certain kinds of electrical 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 frequency is used, the location of the Base Unit can affect the operating range. Try several locations in your home or office and pick the one that gives you the clearest signal to the Handset.

### **Interference**

Electronic circuits activate a relay to connect the cordless telephone to your telephone line. These electronic circuits operate in the radio frequency spectrum. While several protection circuits are used to prevent unwanted signals, there may be periods when these unwanted signals enter the Base Unit. You may hear clicks or hear the relay activate while you are not using the Handset. If the interference occurs frequently, it can be minimized or eliminated by relocating the Base Unit. You can check for interference before selecting the final Base Unit location by plugging in the telephone.

### **NOTICE:**

This cordless telephone uses radio communication between the Handset and the Base Unit and may not ensure privacy of communication. Other devices, including other cordless telephones, may interfere with the operation of this cordless telephone or cause noise during operation. Units not containing coded access may be accessed by other radio communication systems. Cordless telephones must not cause interference to any licensed radio service.

## **FCC Information**

### **FCC NOTICE**

The FCC requires that you be advised of certain requirements involving the use of this telephone.

1. This telephone is hearing aid compatible.
2. This equipment complies with Part 68 of the FCC Rules. A label on the Base Unit of this equipment contains, among other information, the ACTA Product Number and the Ringer Equivalence Number (REN) for this equipment. You must, upon request, provide this information to your telephone company.
3. The REN is also useful in determining the quantity of devices that you may connect to your telephone line and still allow these devices to ring when your telephone number is called. In most areas, but not all, the sum of the RENs for all devices connected to one line should not exceed five (5.0). To be certain of the number of devices that you may connect to your line, you should contact your local telephone company.
4. If your telephone causes harm to the telephone network, the telephone company may temporarily disconnect your service. If possible, they will notify you in advance that temporary discontinuance of service may be required. However, when advanced written notice is not possible, the telephone company may temporarily discontinue service without notice if such action is necessary under the circumstances.
5. The telephone company may make changes in its communication facilities, equipment, operations, or procedures that could affect the proper operation of your equipment. If they do, you will be provided with advance notice as to give you an opportunity to maintain uninterrupted service.
6. This equipment may not be used on coin service provided by the telephone company. Connection to party lines is subject to state tariffs. (Contact your state public Utility Commission or Corporation Commission for information.)
7. An FCC compliant telephone cord and modular plug is provided with this equipment. This equipment is designed to be connected to the telephone network or premises wiring using a compatible modular jack which is Part 68 compliant. See Installation Instructions for details.
8. Please follow instructions for repairing, if repairing any (e.g. battery replacement section), otherwise do not alter or repair any parts or device except specified.
9. The USOC number of the registration jack for this equipment is RJ11C.

## ***FCC Information***

### ***RINGER EQUIVALENCE NUMBER***

**NOTICE:** The Ringer Equivalence Number (REN) assigned to each terminal device provides an indication of the maximum number of terminals allowed to be connected to a telephone interface. The termination on an interface may consist of any combination of devices subject only to the requirement that the sum of the ringer equivalence numbers of all devices does not exceed 5.

### **CAUTION:**

Users should not attempt to make such connections themselves, but should contact the appropriate electric inspection authority, or electrician, as appropriate.