

PRE-INSTALLATION NOTES

- Ensure that the rechargeable Ni-MH battery is installed inside the handset battery compartment. Make sure the polarity is correct.
- Set the RINGER ON/OFF switch on the handset to the ON position for normal use.
- It is strongly recommended that the Rechargeable battery be fully charged for at least 12 hours before initial use.

INSTALLATION

CAUTION: USE ONLY THE Ni-MH BATTERY TYPE INCLUDED WITH THIS UNIT, USE OF OTHER BATTERY TYPES MAY CAUSE INJURIES OR DAMAGE.

BATTERY INSTALLATION (HANDSET)

1. Remove the battery compartment cover of the handset by pressing the top of the cover and sliding it down.
2. Connect the rechargeable battery as shown below.

Battery Compartment

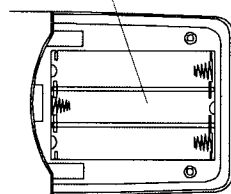


Figure 1

3. Replace the battery compartment cover.

NOTE: Use the type and size of Ni-MH battery pack, 3x1.2V AAA, 500mAh. It is recommended that the Ni-MH batteries should be fully charged overnight prior to initial use.

BELT CLIP INSTALLATION

With the back of handset facing up, insert one side of the belt clip hook into the matching slots at the top side of the handset as shown in figure 2. Slide the other hook until it locks into place from the opposite side of the handset.

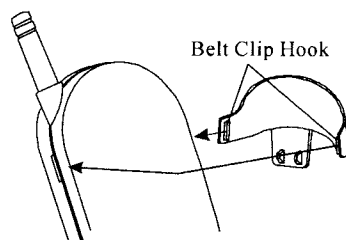


Figure 2

Desktop Connection

Your TC960 is equipped with a Mounting Bracket which can hold your phone at an angle of 30° when desk mounting.

30° Position (See figure 3)

With the back of the base unit facing up, insert the hooks of the mounting bracket (marked "30° DESK MOUNT") into the matching slots of the base unit. Then slide the mounting bracket into place as indicated by the arrow.

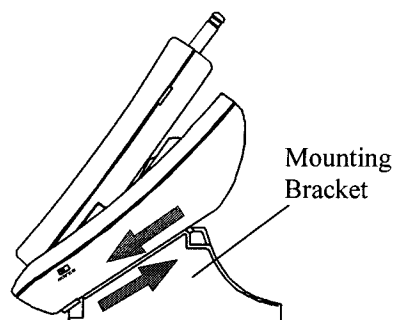


Figure 3

Wall Mounting

You may choose to install the TC960 base unit onto a wall.

Wall Mounting (Standard Wall Jack--not included)

1. Connect the short telephone line cord to the telephone line jack on the rear of the base unit. Insert the other end through the hole of the wall mount bracket.
2. Insert the hooks of the wall mount bracket into the matching slots at the bottom of the base unit then slide them upwards until they lock into place. Plug the free end of the short telephone line cord into the modular wall jack.
3. Mount the base unit to the modular wall jack by hooking the studs of the wall plate into the keyhole slots of the wall mount bracket. Pull the base unit down until it is securely seated as shown in figure 4.

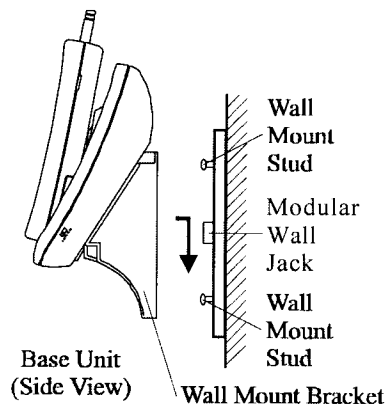
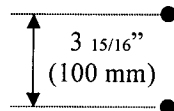


Figure 4

Wall Mounting (No Standard Wall Jack)

1. Drill two holes with a vertical distance between the two marked positions of $3 \frac{15}{16}$ " (100 mm) as shown.



2. Drive a screw into each of the holes. Tighten them to the end of the screw lines, only leaving the smooth part of the screw head outside the wall.
3. Insert the hooks of the wall mount bracket into the matching slots at the bottom of the base unit then slide them upwards until they lock into place.
4. Hang the base unit by hooking the screws into the keyhole slots of the wall mount bracket. Pull the base unit down until it is securely seated as shown in figure 5.

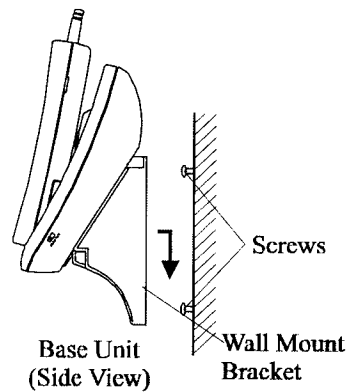


Figure 5

POWER CONNECTION

▲ CAUTION: Use only a Class II AC Adaptor with a rating of AC 120V input, DC 9V, 300mA 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 unit as shown in figure 6.

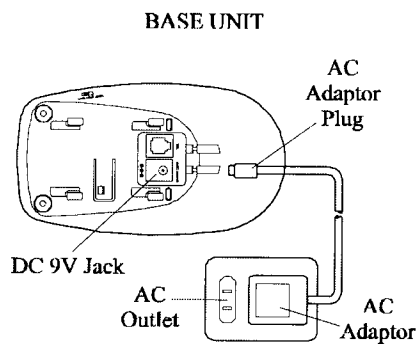


Figure 6

HEADSET CONNECTION

One of the special features of your phone is that your handset (not included) can utilize a headset for hands-free communication. Insert the small plug at the end of your headset cord to the headset jack at the side of the handset as show in figure 7. Follow the procedures discussed in "Placing a Call" and "Receiving a Call" how to place and receive a call.

NOTE: The headset jack of your TC960 is compatible with 2.5 mm headset plug only. When you plug the headset into the headset jack, it will automatically mute the microphone and speaker of the handset. Unplug the headset to return the handset to normal use.

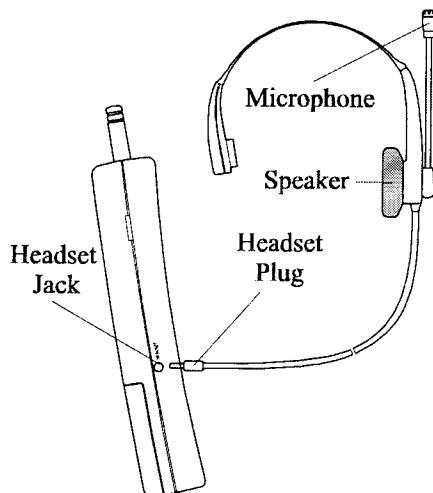


Figure 7

TELEPHONE OPERATION

PULSE/TONE Dialing

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

Mixed Mode (Temporary Tone) Dialing

If you only have pulse (rotary dialing) service in your area and want to access Tone dialing services, set the base unit's PULSE/TONE switch to the PULSE position. Dial the desired number and press the Temporary Tone (*) button once when tone signal is required. 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 TC960 will automatically scan for the best channel available, as indicated by the flashing IN USE/ LOW BATT LED indicator.
2. Once it finds a clear channel, the IN USE/ LOW BATT LED indicator will light solid and a dial tone will 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 TC960 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 after it has found one.

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/ LOW BATT LED indicator will flash rapidly (to indicate that it is auto-scanning). After it has found a clear channel, the IN USE/ LOW BATT LED indicator will light solid. You can then start conversation with the calling party.

Channel Selection (40 Channels)

Channel Scan (Auto-Scan)

- When you initiate or receive a call, the TC960 auto-scans for the best channel available.

Channel Scan (Manual Scan)

- If the existing channel becomes noisy or starts having radio interference, press the CH 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 its cradle on the base unit to re-establish the security link.

Ending a Call

Upon completion of a call, you can hang up the TC960 by returning the handset back to 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 TC960 will automatically redial the last phone number you called.

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 Function

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.

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 base unit IN-USE LED indicator is off and the handset is in standby mode.
2. Press the MEMO button on the handset.
3. Dial the phone number you want to store.
4. Press the MEMO button again.
5. Press a memory location where you want to store the phone number (from 0 to 9). You will hear one confirmation beep.
6. 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.
- Pause 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 IN USE/ LOW BATT LED indicator flashes while auto scanning for the best channel available. A dial tone will be heard when the IN USE/ LOW BATT LED indicator lights solid.
2. Press the MEMO button.
3. Press the memory location (0-9) on the keypad for the number you have stored. The stored number will be dialed automatically.

NOTE: If you have difficulty storing or recalling numbers from memory, refer to the "Troubleshooting" chart of this user manual on page 15.

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.

PAGE Function

To alert the handset user or to locate the misplaced handset, press the PAGE button on the base unit. Each press of this button will activate the handset to sound 3 short beeps, provided that the handset is located within transmitting range.

NOTE: The base unit can page the handset regardless if the handset ringer is set either to ON or OFF.

RINGER ON/OFF CONTROL

You can set the handset to the following settings:

For normal use, set to ON. To save battery power and to turn off the handset ringer by

- **ON** - The handset rings when receiving incoming calls. For normal use, always set the switch to this position by pressing the **Ring** button one time, make sure you hear the continuous tone.
- **OFF** - Turns off the handset ringer. However, please note that you will not be able to or receive calls in this mode. Press the Ring button one time, make sure you hear one beep tone and the red LED blinks.

NOTE: The handset will not ring when the RINGER ON/OFF button is set to OFF.

Low Battery Warning

When the handset battery voltage level is low, the IN USE/ LOW BATT LED indicator on the handset will start to blink. Return the handset to its cradle on the base unit for charging.

65,536 Combination Security Coding

The TC960 has a digital coding security system to prevent unauthorized use of your telephone line by other cordless phones nearby. The TC960 has 65,536 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 TC960 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 emits a beeping sound every second 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 be automatically cut off.

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.

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 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 frequencies are used, location of the base unit can affect operating range. Try several locations in

your home or office 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 TC960 where it is closest to the center of your home or office. This will improve the operating range of the unit.
- Keep the TC960 base unit away from electrical equipment. Radio Frequency Interference (RFI) is sometimes generated by these appliances, which can cause degradation in cordless reception.
- Keep the handset battery pack charged as much as possible. Weak handset battery pack can limit the range of cordless operation.

MAINTENANCE

Your phone should be situated away from heat sources such as radiators, heaters, 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 surface finish.

Charging

1. Make sure the AC adaptor and telephone line cord is connected to the TC960.
2. Place the handset on the base cradle. The IN USE/CHARGE LED indicator will steadily light up on the base unit.
3. Leave the handset charging on the base for 12 hours continuously to get a fully charge. The TC960 is now ready for regular use.

TROUBLESHOOTING

SYMPTOM	SOLUTION
No dial tone	• Check to see if the handset battery pack 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 is sharing the same line as the TC960 when 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.
Will not ring	• Check the handset RINGER mode. For normal use, set to ON. The handset will not ring in OFF 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.
Static	• The rechargeable battery pack might be weak. Allow the rechargeable 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.
Cannot dial out	• Press the TALK button on the handset and listen for a dial tone before dialing out. • Are you in a rotary only area? Set the PULSE /TONE switch to PULSE. • Try a different phone in the jack. If the problem persists, the fault is not in the TC960. • 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, and then plug the phone into one side and the answering machine on the other side of the adaptor.
Memory feature does not work	• Make sure that the unit is in the standby 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.
No link between the base and handset	• 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.

SYMPTOM	SOLUTION
The unit locks up and becomes inoperable	• 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 pack. 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 POWER SOURCE, 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.