REVISED HISTORY

DATE	ISSUE	CONTENTS OF CHANGES	REMARK
2004/06	ISSUE1.0	Initial Release	
2004/08	ISSUE1.1	Cover Design Change	

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Highlights

Congratulations on your purchase of the LSP-345 Fixed Wireless Telephone. This telephone has been designed to operate on the latest digital mobile communications technology. This technology has greatly enhanced voice clarity and can provide various advanced features.

The telephone provides:

- CMX 16 Poly Ringer Type, Power on / off, SMS, Alarm Midi Sound
- 3-line LCD Display with status indicator
- A choice of 10 ring sounds
- A menu driven interface with prompts for easy operation
- Last Number Redial
- Speed Dialing with a 99-number memory
- Dial tone
- ROH (Receiver Off-Hook) tone
- Adjustable Ring Volume
- Internal Back-up Battery Pack
- AC Power Supply
- Dipole Antenna
- RJ-45 Data Port for service and repair
- Speaker phone

1 Important Information

Safety Information

Warning

To reduce the risk of fire or electric shock, do not expose this product to rain or moisture. Do not use this product near swimming pools or other water bodies.

IMPORTANT

Before installing or operating this product, please read this information.

Optimal Phone Performance

- Do not operate your product when holding the antenna, or when someone is within four inches (ten centimeters) of the antenna. Holding the antenna affects call quality and may cause the telephone to operate at a higher power level than needed.
- For the best call quality, keep the antenna free from obstructions and position the antenna straight up.
- Do not use the unit with a damaged antenna. Have your antenna replaced by a qualified technician immediately. Use only a manufacturer-approved antenna. Non-approved antennas, modifications, or attachments could impair call quality, damage the phone.
- RF energy may affect improperly installed or inadequately shielded personal medical devices such as pace markers, hospital monitors. Consult the manufacturer of any personal medical devices to determine if they are adequately shielded from external RF energy. Turn your terminal OFF in health care facilities when any regulations posted in the areas instruct you to do so. Hospitals or health care facilities may be using equipment that could be sensitive to external RF energy.
- 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 distance between the radio or television and the telephone.
  - Connect the equipment into an outlet on a circuit different from that to which the terminal is connected.
  - Consult you Authorized LGE Dealer of an experienced radio/TV technician for help.

- Use only the battery, antenna and AC power supply provided by LGE. Using any other type will invalidate the warranty.
- Only authorized personnel should service the phone and its accessories. Faulty installation or service can be dangerous and may invalidate the warranty.
- Do not use the unit in designated “no cellular phone use” area.
- Avoid exposure to high temperature or humidity.
- Avoid wetting the unit with any liquids. If the unit gets wet, turn the power off immediately and remove the backup battery and AC power supply. If the unit is inoperable, then return to the service agent for service.
- Avoid shock or impact.
- We recommend you to charge the backup battery before initial use. Backup battery may be discharged during delivery.

Care and Service

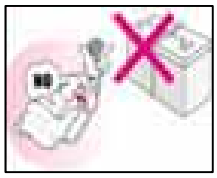
Unplug the telephone from the wall outlet and remove antenna (or disconnect antenna cable) before cleaning. Do not use liquid or aerosol cleaners. Use a damp cloth for cleaning.

If the unit fails for any reason, do not attempt to disassemble; contact the telephone service provider for assistance.

If any of the following conditions exist, unplug the unit at the wall plug, remove battery, and call the service provider.

- The power supply cord is damaged or frayed.
- Liquid has been spilled into the unit.
- The unit has been exposed to rain or water.
- The unit has been dropped or damaged.
- The unit does not work normally by following the operating instructions.

Safety Information



☐ Do not use with car battery. It may cause electric shock, fire, breakdown or transformation.

☐ For safety use, use only adapter approved by LG.
To all problems arising from not following this guide, LG does not bear responsibility.

WARNING

Ex) LSP-345
(LG Power Adapter Source : DC 9.6V / 1A)

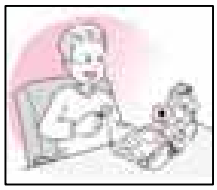
☐ Avoid exposure to high temperature or humidity. Avoid wetting the unit with any liquids. If the unit gets wet, turn the power off immediately and remove the backup battery and AC power supply.

☐ Keep it dry. Precipitation, humidity, and liquids contain minerals that may corrode electronic circuits.

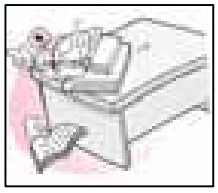
☐ Do not use or store it in dusty, dirty areas as this can damage its moving parts.

☐ Do not store it in hot areas. High temperatures can shorten the life of electronic devices, damage batteries, and warp or melt certain plastics.

☐ Do not store it in cold areas. When the phone warms up to its normal operating temperature, moisture can form inside the phone, which could damage the phone's electronic circuit boards.



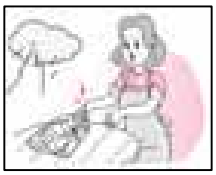
☐ Do not attempt to open it. Non-expert handling of the device could damage it. Consult your authorized LG dealer for help. It may cause fire, electric shock and breakdown.



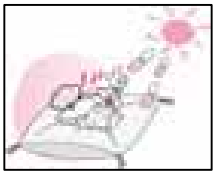
☐ Do not drop, knock or shake it. Rough handling can break internal circuit boards.

☐ Do not use harsh chemicals, cleaning solvents, or strong detergents to clean it. Wipe it with a soft cloth that has been slightly dampened in a mild soap-and water solution.

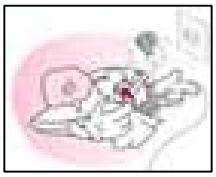
☐ Do not paint it. Paint can clog the device's moving parts and prevent proper operation.



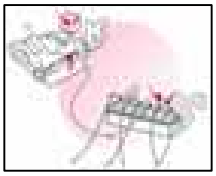
☐ During lightning, do not touch power plug or phone line. It may cause an electric shock or death.



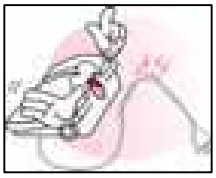
☐ Do not install under direct sunlight or on an uneven surface.



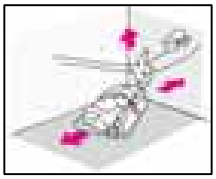
☐ Before using plug, check with available power voltage. Inaccurate power voltage may cause fire and damage.
Ex) LSP-345 Input Voltage : 100-250V.



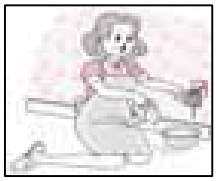
☐ Do not plug many power cords in outlet. It may cause fire or electric shock.



☐ Do not remodel the power cord or disassemble. If power cord or plug is impaired, do not use it. It may cause fire or electric shock.

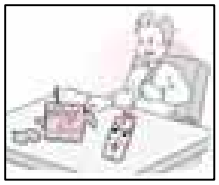


☐ Do not install in an ill-ventilated place. It may cause fire or breakdown.



☐ Do not touch the plug with wet hands. When disconnecting the power cord of any accessory, grasp and pull the plug, not the cord. It may cause fire or electric shock.

☐ Do not put heavy things on the power cord. Do not bend power cord too much. It may cause fire or electric shock.



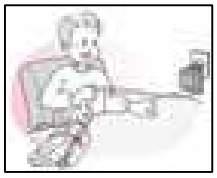
☐ Do not short-circuit. It may start a fire or may explode causing injury.

WARNING

☐ Do not throw and impact battery. Do not dispose of batteries by putting them in fire. It may explode or catch fire by electrolyte.

WARNING

☐ Use only LG-approved battery or adapter. If not, it may cause explosion or short. LG does not bear responsibility for the danger.



☐ When you disconnect the power cord of any accessory, grasp and pull the plug, not the cord. It may cause an adapter breakdown.

2 Introduction

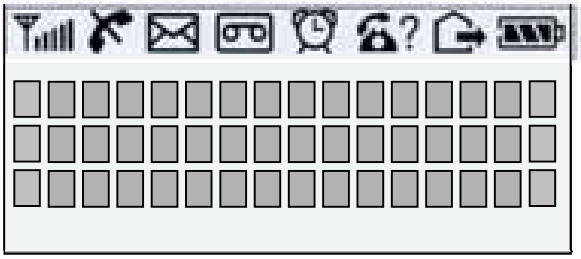
2.1 Front View of the Telephone

1) Menu / Softkey 1: Activate MENU state
2) Message : Activate SMS state
3) End : Deactivate a state – No store a value
4) Recall / Softkey 2 : Activate RECALL state / Choose next state
5) Clear(Cancel) : Delete the last digit/dial number(also exit without storing in the MENU state)
6) Redial /Flash : Flash function in the call state / Dial the last dialed number
7) Volume Left (◀): Volume－(also function as a cursor in the edit state)
8) Volume Right (▶): Volume＋(also function as a cursor in the edit state)
9) Speaker phone
10) Antenna

2.2 LCD Display

The LCD shows icons on the top of the LCD screen.

Different indicator appears based on the phone's operating mode.



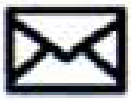
RSSI indicator : Indicates the signal strength in the service area.

No service : The phone is not receiving system signal.

In use : Displayed when call is in progress or the phone is in off-hook and dial tone heard.

: No service : In use

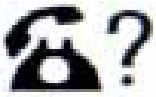
Text message : Displayed when a text message is received.



Voice message : Displayed when a voice message is received.

Alarm : Displayed when wake up alarm time was setting.

Caller ID : Displayed when caller ID is received.



Battery charge level : Indicates charged battery level.

2.3 Installation

You should follow each step carefully as shown below in order to guarantee proper operation of CDMA Fixed Wireless Telephone.

STEP I. Check Components

- Fixed Wireless Terminal is supplied with the following standard unit and accessories;
  1. LSP-345 Main Unit with Handset -1EA-
  2. Dipole Antenna -1EA-
  3. Backup Battery -1EA-
  4. User Guide -1EA-
  5. AC/DC Power Adapter -1EA-
  6. Power Cord(Only SMPS Adapter) -1EA-
- Please make sure that these components are present before you begin the unit installation. And then compare the following figures and components. If components are missing or damage is found, contact the store where you purchased the unit immediately.

STEP II. Place the Terminal

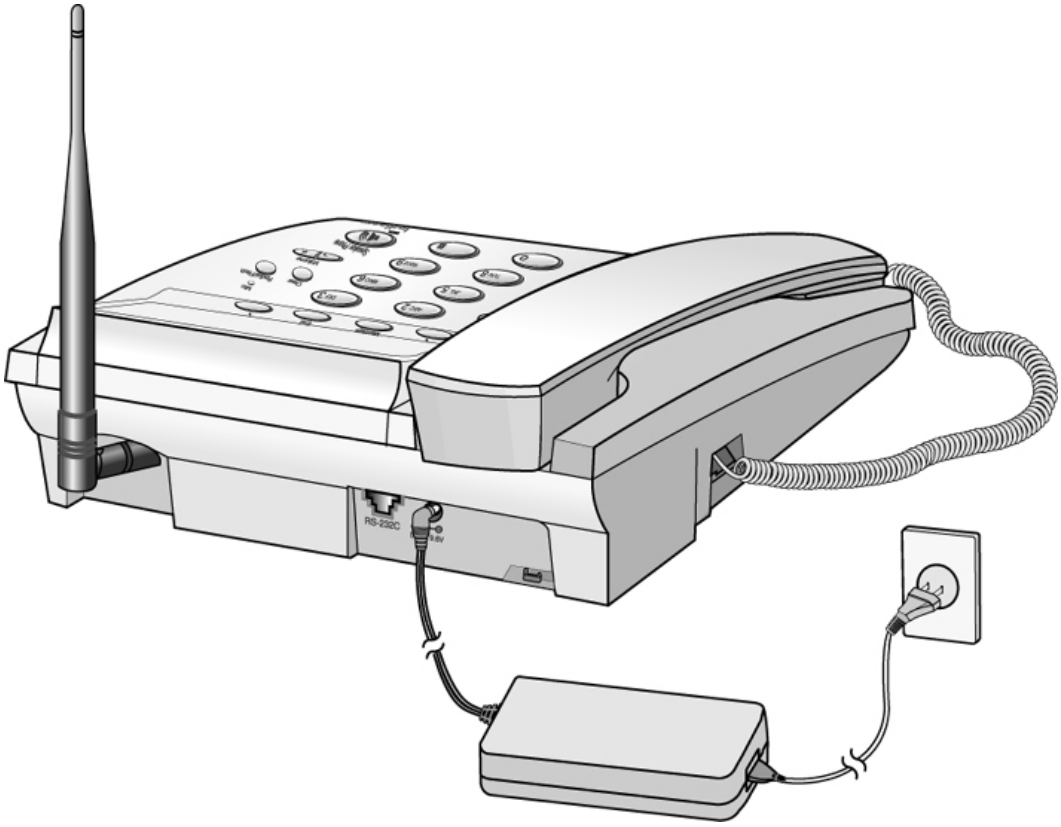
- Place the terminal on the stable flat secure surface area (desk, table, etc.). Serious damage may result if the unit falls. Do not place the unit on, or within 1 meter of heaters or radiators. This unit is designed for desktop usage. Avoid direct exposure to sunlight and damp areas.
- Read the SAFETY INFORMATION located at the first part of this document before you place the terminal.

STEP III. Connect Components (See the figures in "Installation Steps".)

- Connect the antenna to the TNC antenna connector located at the topside of the terminal. If you have placed the terminal on a flat surface, position the antenna up right.
- Connect curl cord of handset assembly to the RJ-11 port located at the left side of the terminal.
- Open the battery case, securely connect the battery cord, place the backup battery pack and close the case.
- Connect the AC/DC Adapter cable to the DC input port located at the topside of the terminal.

- If it is good, beep tone is heard.
- If it is not good(Booting fails or beep tone is not heard), you have to connect the adapter or backup battery, again.

- Please observe the following matters to get better voice quality;
  1. Keep away from electrical appliances such as TV, computer, radio and so on.
  2. Keep terminal in a high and central location with no obstructions.
  3. Raise the integral antenna of terminal to get maximum strength as shown figure.



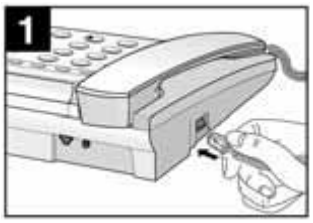
STEP IV. Check the LCD Display

- After you follow the installation instruction step I to step III, please check the LCD for normal operation.
- If you may not see status of service, please repeat the 5th instruction of step III. And confirm Fixed Wireless Telephone to get the proper signal strength from service operator system.

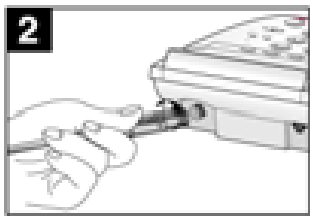
※ The adapter type(with power cord) may be different from country to country.

2.4 Installation Steps

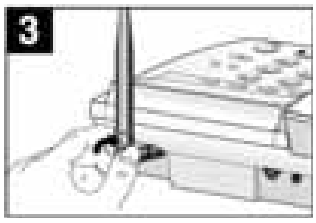
Please follow the below procedure to install the unit properly.



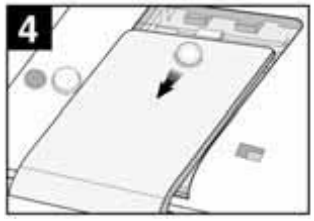
Connect Base-handset to the handset connector.



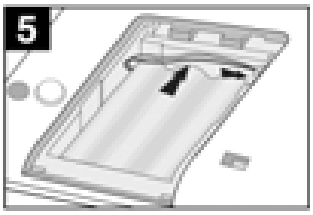
Connect the antenna to the TNC connector (Turn right).



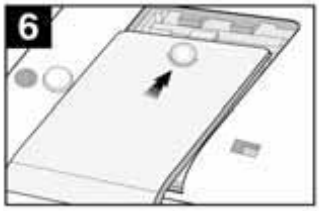
Bend the antenna up right.



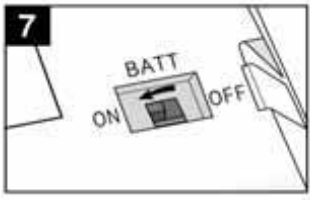
Open the battery cover at the bottom of the unit.



Insert back-up battery in the bottom of the unit. (Give care to polarity)



Replace the Battery cover



When you use terminal first, please Turn “on” the battery switch.

Connect the AC power supply.

Notice

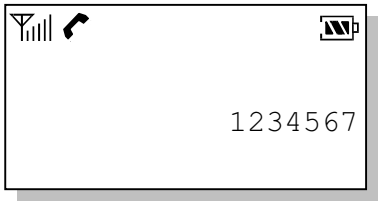
Before using the terminal, please check battery switch is on.
After switching on it, use the phone.
When charging the battery, check that battery switch is “on”.
Battery is charged only when battery switch is on.

3 Basic Operation

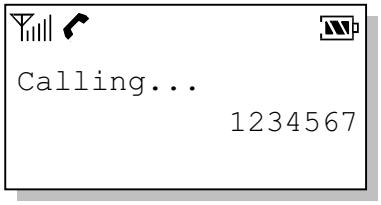
3.1 Making a Call

If user press ' ∗ ' button after dialing the number, the terminal make a call immediately.

1. Pick up the handset or press button.
2. Listen for dial tone.
3. Enter the phone number with area code if needed.



4. Wait for the Auto Time-out.



5. The call is connected and you can start conversation.
6. To disconnect the call, replace the handset or press button.

3.2 Redialing Last Outgoing Number

1. Pick up the handset or press button.
2. Listen for dial tone.
3. Press Redial button. The last number that you called will be re-dialed.

- **Correcting dialing mistakes**
  1. Press Clear button shortly to erase the most recent digit.
  2. Press and hold Clear button for at least one second.

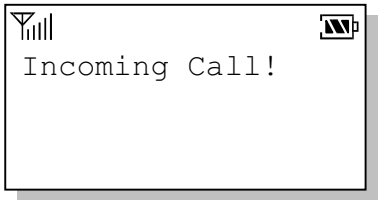
- If the phone is locked, enter the Lock Code
- If the call did not go through, press the hook switch and dial again.

- **Flashing / Hook Switch**
  1. While in the middle of a call, pressing the hook switch for less than 1 second will be treated as a flash. After 1 second, the call will be terminated.
  2. Very briefly pressing the hook switch will be ignored.

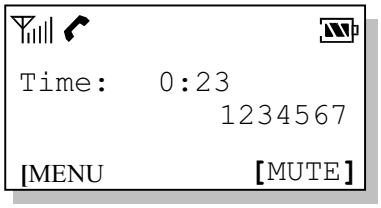
- Battery icon is displayed only when the terminal is operating by battery without AC power.

3.3 Receiving a Call

1. When bell rings, pick up the handset.



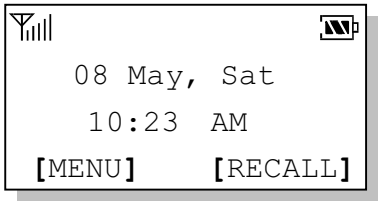
2. Start conversation.



3. To disconnect the call, replace the handset.

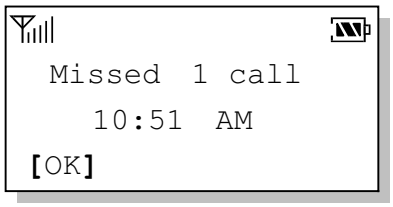
3.4 Signal Strength

The quality of calls depends on the signal strength in your area. The stronger the signal, the better the call quality. The signal strength icon indicates the current strength as a number of bars. You can see the antenna and bars according to the strength of received signal in the upper-left part.



3.5 Missed Call Message

If a call is received and not answered for user's absence, you are informed that you have missed a call. The latest missed call time and number of missed call is displayed. Press [OK] to erase "Missed call" message.



4 List of Menu State

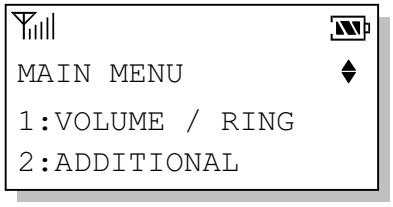
Main Menu	Sub-Menu	Setting Value		Default
1. Volume / Ring	1. Ring Volume	4 steps		
	2. Key Volume	4 steps +silent		
	3. Ear Volume	4 steps		
	4. Ring Type	10 types		
2. Additional	1. Wake-up	1. Time	Off / Once / Always	
		2. Ringer	ALARM1...ALARM5	
	2. Minute Alert	On/Off		
	3. Connect Alert	On/Off		
	4. Rx Call Mode	Voice / Fax for next / Always Fax Modem for next / Always modem		
	5. SIO Baud Rate	9,600/19,200/38,400/57,600 /115,200/230,400		
	6. Own Number	Display own number		
3. Dial features	1. Hot Line	Off/On		
	2. Hot Line Time	2-9 Sec.		
	3. Auto Time-out	2-9 Sec.		
	4. Speed Dialing	Enable/Disable		
	5. Key Tone Length	Normal/Long		
4. Security	1. Set Lock Mode	On/Off		
	2. Clear Calls	No/Yes		
	3. Clear Memory	No/Yes		
	4. Emergency Call	Local(3.ea)		
	5. Restriction Call Service			
	5.1 Restrict Set	No restriction/Restriction /Emergency Only		
	5.2 Permit Memory	Local(10.ea)		
	5.3 Deny Memory	Local(10.ea)		

4.1 Volume / Ring

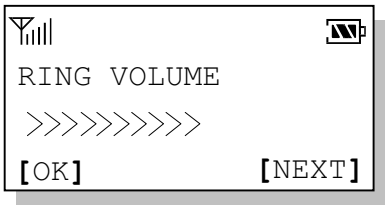
This menu allows you to adjust the various different volumes.

4.1.1 Ring Volume

The received tone when you receive a call can be adjusted.



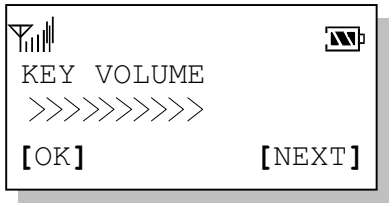
- From the MENU
  1. Press [MENU] + 1(VOLUME/RING)+ 1(Ring Volume) In on-hook state.
  2. Press Volume left/right button or [NEXT] to adjust ring volume.
  3. Press [OK].



- By the Volume left/right button
  1. Press Volume left/right button to adjust ring volume in on-hook state.

4.1.2 Key Volume

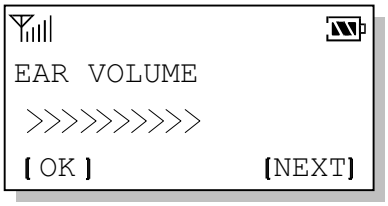
The tone when you press a key can be adjusted.



1. Press [MENU] + 1(VOLUME/RING) + 2(Key Volume) in on-hook state.
2. Press Volume left/right button or [NEXT] to adjust key volume.
3. Press [OK].

4.1.3 Ear Volume

The voice of the other party can be adjusted in on-hook state.



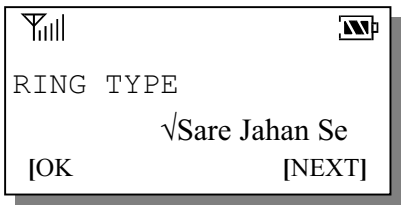
1. Press [MENU] + 1(VOLUME/RING) + 3(Ear Volume) in on-hook state.
2. Press Volume left/right button or [NEXT] to adjust ear piece volume.
3. Press [OK].

✓ Press Volume left/right button to adjust volume during conversation.

4.1.4 Ring Type

You can select the various ring types.

1. Press [MENU] + 1(VOLUME/RING) + 4(Ring Type) in on-hook state.
2. Select a desired ring type with Volume left/right button or [NEXT].
   - ✓ There are 10 different ring types.
3. Press [OK] to save and exit.



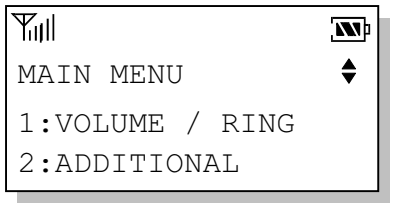
4.2 Additional Features

4.2.1 Wake-up

4.2.1.1 Time

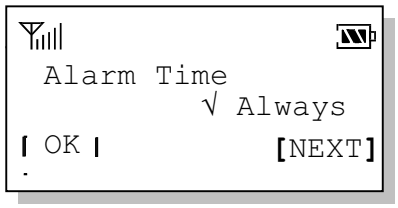
This function allows you to adjust Wake-up.

1. Press [MENU] + 2(ADDITIONAL) + 1(Wake-up) + 1 (Time) in the on - hook state.

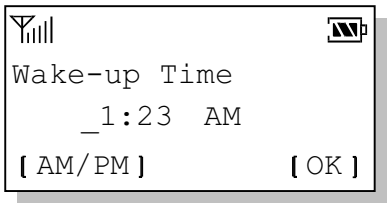


2. Select Off, Once or Always by [NEXT] and press [OK].

3. Press [EDIT] and set the time.
4. Select A.M. or P.M. by [AM/PM].
5. If you want to modify the wrong time, press Clear button and set again.



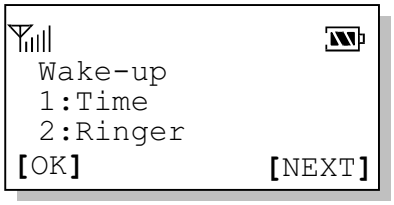
6. Press [OK] to save and exit.

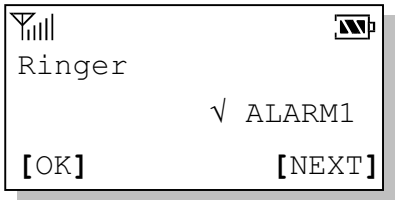


4.2.1.2 Ringer

You can select the various ring types.

1. Press [MENU] + 2(ADDITIONAL) + 1(Wake-up) + 2(Ringer) in the on - hook state.
2. Select a desired ring type with [OK] or [NEXT]
3. There are 5 different ring types. Those are ALARM1, ALARM2, ALARM3, ALARM4, ALARM5

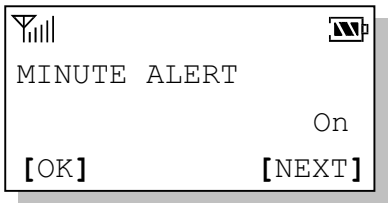




4.2.2 Minute Alert

Alerts you every minute during a call.

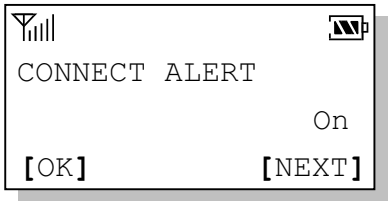
1. Press [MENU] + 2(ADDITIONAL) + 2(Minute Alert) in on – hook State.
2. Select On or Off by [NEXT] or Volume left/right button.
3. Press [OK] to save and exit.



4.2.3 Connect Alert

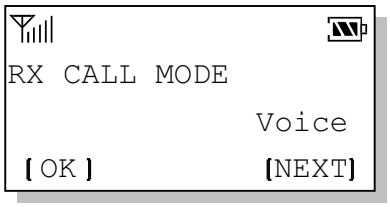
This function allows you to select the call connect tone.

1. Press [MENU] + 2(ADDITIONAL) + 3(Connect Alert) in on – hook State.
2. Select On or Off by [NEXT] or Volume left/right button.
3. Press [OK] to save and exit.



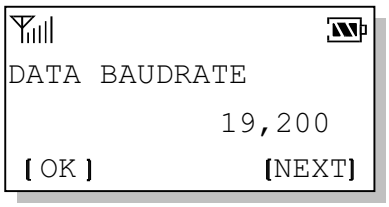
4.2.4 Rx Call Mode

1. Press [MENU] + 2(ADDITIONAL) + 4(RX Call Mode) in on – hook State.
2. Select Voice, Fax for next, Always Fax, Modem for next, always Modem by Volume or [NEXT] button.
3. Press [OK] to save and exit.



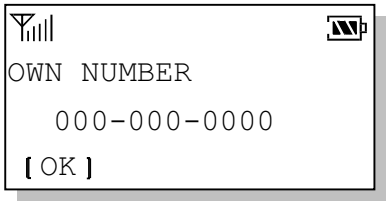
4.2.5 SIO Baud Rate

1. Press [MENU] + 2(ADDITIONAL) + 5(SIO Baud Rate) in on – hook State.
2. Select 9,600/19,200/ 38,400/ 57,600/ 115,200/ 230,400 by Volume or [NEXT] button.
3. Press [OK] to save and exit.



4.2.6 Own Number

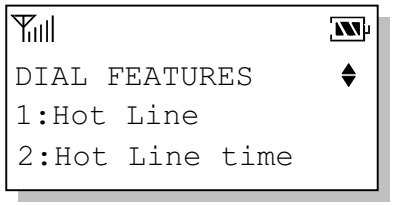
1. Press [MENU] + 2(ADDITIONAL) + 6(Own Number) in on – hook State.
2. Press [OK] to exit.



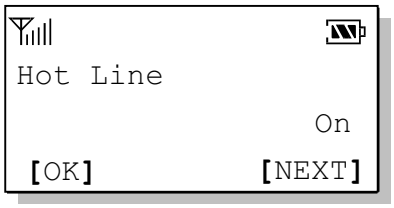
4.3 Dial Features

4.3.1 Hot Line

1. Press [MENU] + 3 (DIAL FEATURES) + 1(Hot Line) in on – hook state.



2. Select On or Off by [NEXT] or Volume left/right button and press [OK] to select.

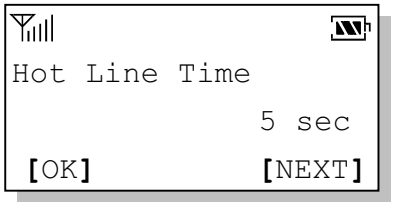


3. Press [EDIT] to input Hot Line phone number.

4. Enter the Hot Line phone number.
5. Press [OK] to save and exit.

4.3.2 Hot Line Time

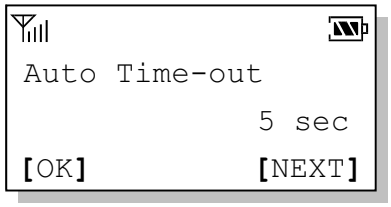
1. Press [MENU] + 3 (DIAL FEATURES) + 2(Hot Line time) in on – hook State.
2. Select hot line connection time(2~9 sec.) by [NEXT] or Volume left/right button.
3. Press [OK] to select.



4.3.3 Auto Time-out

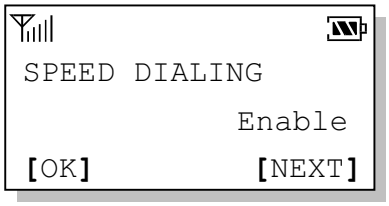
Setting the length of time the phone waits before automatically dialing a number. You can select this time between 2 and 9 second.

1. Press [MENU] + 3(DIAL FEATURES) + 3(Auto Timeout) in on – hook State.
2. Select Auto time-out second between 2 and 9 by [NEXT] or Volume left/right button.
3. Press [OK] to select.



4.3.4 Speed Dial (enable / disable)

1. Press [MENU] + 3 (DIAL FEATURES) + 4(Speed Dialing) in on – hook State.
2. Select Enable or Disable by [NEXT] or Volume left/right button and press [OK] to save and exit.



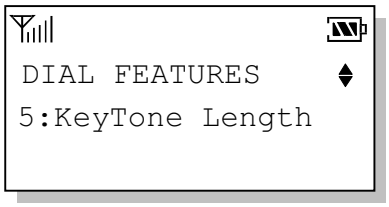
This function can be used when the Speed Dial is set to Yes.

- Speed Dial Function
  1. You can store phone numbers in memory locations (1~99) and place a call.
  2. Press the memory number (1 through 99) corresponding to the appropriate memory location, and hold for a few seconds.

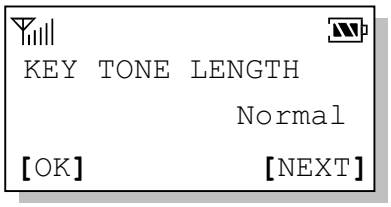
4.3.5 Key-tone Length

Setting key beep playback length. Possible settings are Normal and Long.

1. Press [MENU] + 3(DIAL FEATURES) + 5(KeyTone Length) in on – hook State.



2. Select Normal or Long by [NEXT] or Volume left/right button and press [OK] to select.

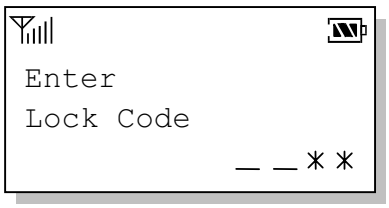


4.4 Security Features

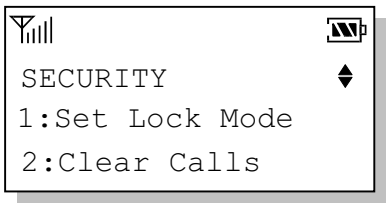
4.4.1 Set Lock Mode

This function prevents your phone from being used without permission. Possible settings are ON/OFF. The OFF means that the phone is not locked. ON sets the phone locked immediately. LOCK code will always be the last 4 digits of the phone number.

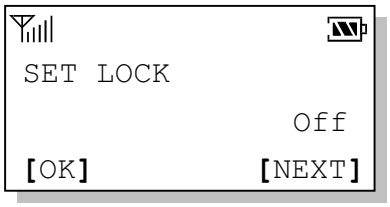
1. Press [MENU] + 4 (SECURITY).
2. Enter your own 4 digit lock code.



3. Press 1(Set Lock Mode)



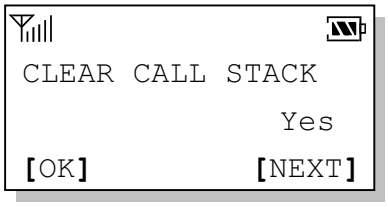
4. Select Off, On by [NEXT] or Volume left/right button.
5. Press [OK] to save and exit.



4.4.2 Clear Calls

When a previous outgoing or incoming call history is stored in a memory location, you can erase the all call history.

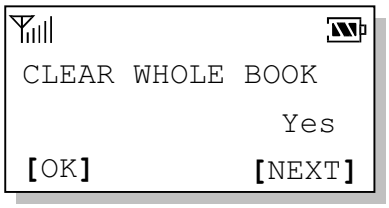
1. Do the above 1 and 2 steps of 4.4.1.
2. Press 2(Clear Calls).
3. Select “Yes” and press [OK] using [NEXT] or Volume left/right button.



4.4.3 Clear Memory

When you want to delete phonebook memory, you can erase all phonebook memory.

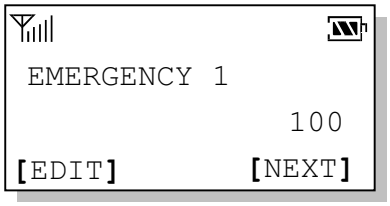
1. Do the above step1 and 2 of 4.4.1.
2. Press 3(Clear Memory).
3. Select "Yes" and press [OK] using [NEXT] or Volume left/right button.



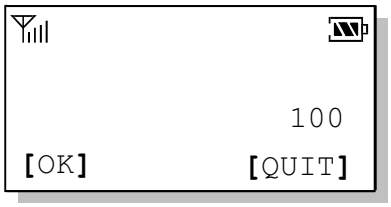
4.4.4 Emergency Call

Even if your phone is locked, you can make calls to 3 emergency numbers.

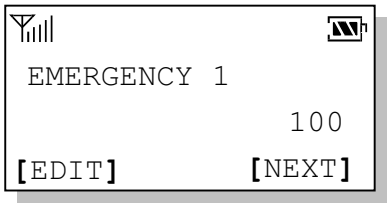
1. Do the above step1 and 2 of 4.4.1.
2. Press 4(Emergency Call)
3. Press [NEXT] or Volume left/right button to choose the number from 1 to 3.
4. Press [EDIT].



5. Enter the emergency phone number.
6. Press [OK] to save the number.



7. Press [NEXT] or Volume left/right button to edit others or Press End button to exit emergency call process.



4.4.5 Restriction Call Service

This function is a convenient feature which enables user to restrict using any phone number.

To forbid using any phone number, user must set the number in deny edit.

Can't use any phone number(max 32digits) started with the number saved in deny edit.

If user set the phone number in permit edit, can use any phone number (max 32digits) started with the number even if the phone number is set in deny edit.

Ex) example to restrict using the phone number started with "700" .

1. Set "Restriction" in Restrict set menu (Menu 4.5.1)
2. Set "700" in deny edit. (Menu 4.5.3)
3. Set "700-1234" in permit edit.(Menu 4.5.2)

Result : user can use the phone number started with "700-1234".

4.4.5.1 Restrict Set

- No restriction

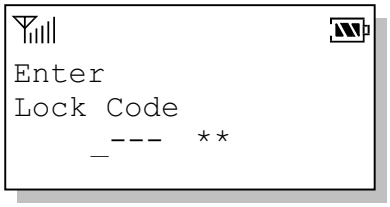
  This is a general function which has no any restrictions
- Restriction

  This is a function that you can set permitted phone number and denied phone number.
- Emergency only

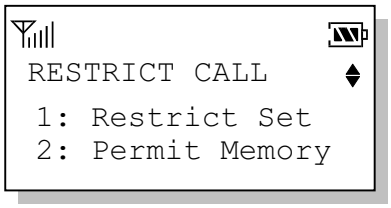
  This is a function which enable you to call only emergency numbers.

1. Press [MENU] and 4(SECURITY).

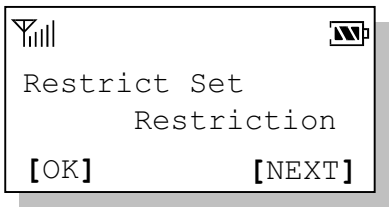
2. Enter a lock code using key pad.
   - ✓ LOCK code will always be the last 4 digits of the phone number.



3. Press 5(Restrict Call) and 1(Restrict Set).



4. Select "No restriction" ," Restriction" or "Emergency Only " using [NEXT] or Volume left/right button and press [OK].

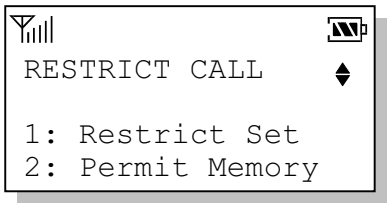


♦ Below 4.4.5.2 and 4.4.5.3 function can be used when the Restrict set is set to "Restriction".

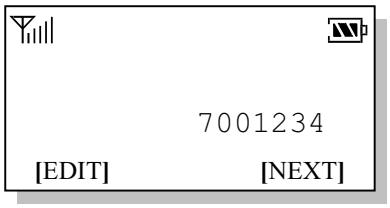
4.4.5.2 Permit Memory

You can call it if the phone numbers saved in permit edit though they were saved in deny edit. You can save 10 permit phone numbers.

1. Do the above step 1~2 of 4.4.5.1.
2. Press 5(Restrict Call) and 2(Permit Memory).



3. Press [EDIT] to edit permit phone number.
4. Enter the permit phone number.
5. Press [OK] to save and exit.

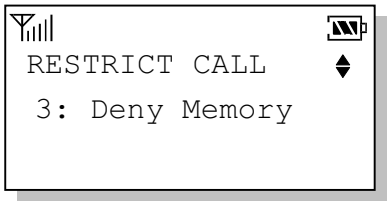


4.4.5.3 Deny Memory

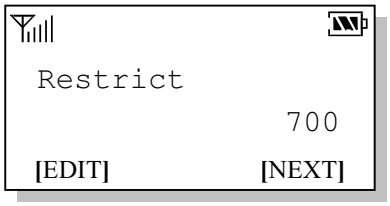
You couldn't call any phone numbers saved in deny edit.

You can save 10 deny phone numbers.

1. Do the above step 1~2 of 4.4.5.1.
2. Press 5(Restrict Call) and 3(Deny Memory).



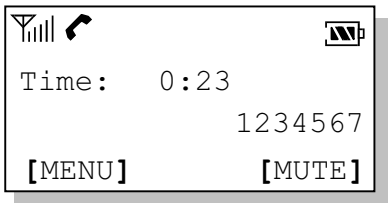
3. Press [EDIT] to edit deny number.
4. Enter the deny phone number.
5. Press [OK] to save and exit.



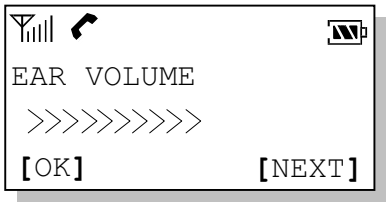
5 Functions while in a call

5.1 Ear Volume

You may adjust ear volume while you are in a call.



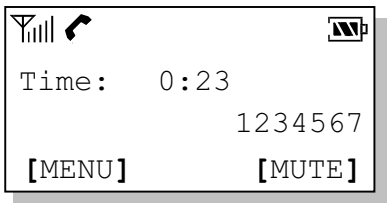
The Volume left/right button on the right side of the phone can be used to adjust ear volume.



5.2 Mute

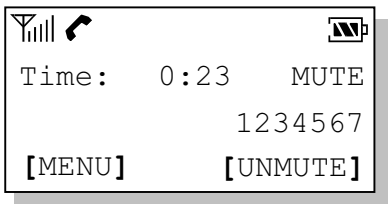
This function prevents your voice from being transmitted but you can call still hear other side.

1. Press [MUTE] button while in a call.



2. You could see “MUTE” message blinking on the right side of the LCD.

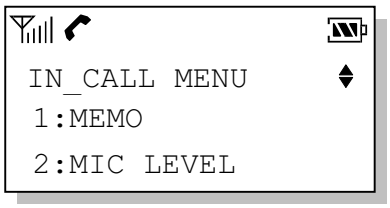
3. To release Mute, Press [UNMUTE] button.



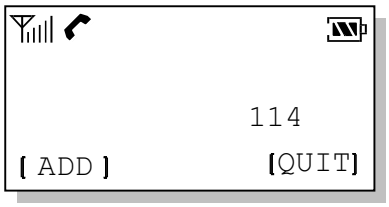
5.3 Memo

You can save numbers while in a call.

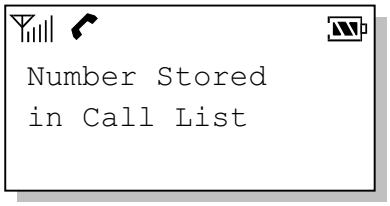
1. Press [MENU] and 1(MEMO) while in a call.



2. Enter a number using keypad.



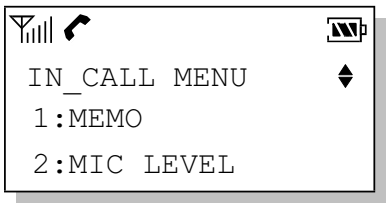
3. Press [ADD] to save and exit. Or press [QUIT] to exit.



5.4 MIC Volume

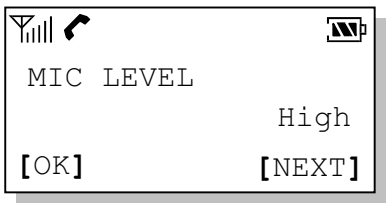
Adjusting MIC volume while in a call.

1. Press [MENU] and 2(MIC LEVEL) while in a call.



2. Select Low or High by [NEXT] or Volume left/right button.

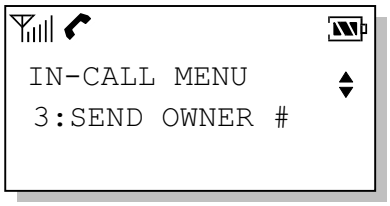
3. Press [OK] to save and exit.



5.5 Transmitting your own number

This function is a convenient feature which enables you to transmit your own phone number while in a call through press one key. (For example, sending your phone number when you pages.)

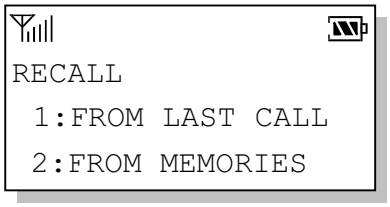
1. Press [MENU] and 3(SEND OWNER #) button while in a call.



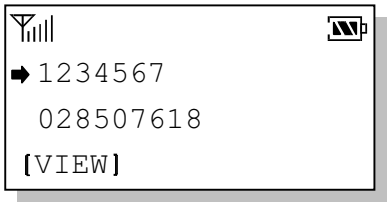
6 Searching, Editing & Dialing

6.1 Retrieving Last Call History

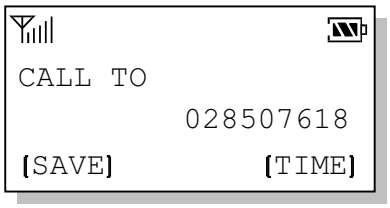
1. Press [RECALL] and 1(FROM LAST CALL).



2. Select a number or a name in the last call list by Volume left/right button and press [VIEW].

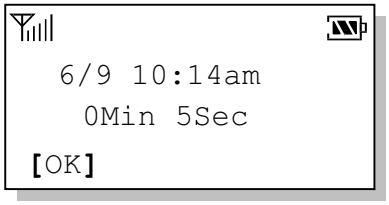


3. To see more information, press [TIME] and press [SAVE] to save a number in the memory.



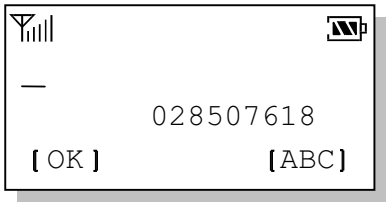
   ✓ Pick up the handset or Press button to make a call with the displayed number.

- By pressing [TIME]



   ✓ Press [OK] to exit.

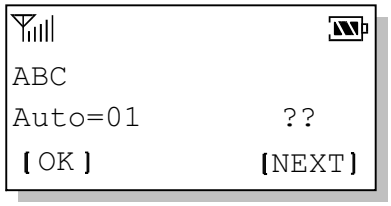
- To save a number



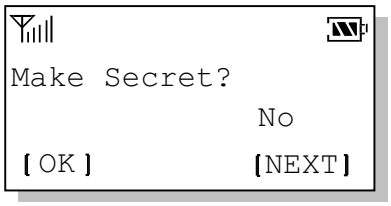
   ✓ Press [SAVE] in step 3.
   ✓ Enter the name in text mode and press [OK] to save. Press [ABC] to change upper or lower case character.
      ➢ To store without name, just press [OK].
      ➢ Refer to “To enter a character”.

✓ Enter a desired memory location (01~99: 2 digits) or press [NEXT] to choose a desired memory location and press [OK].

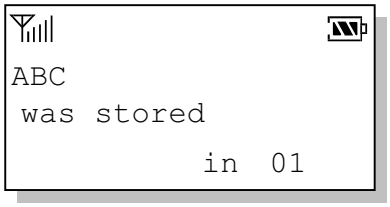
- The phone number is stored in the displayed memory location.



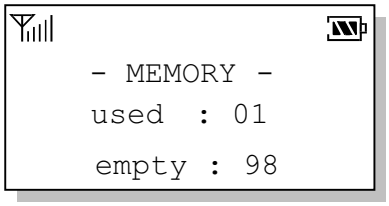
✓ The phone will display a message asking to keep your number as secret or not. Select “No” or “Yes” using [NEXT]. Then press [OK].



- You can see a confirming message.

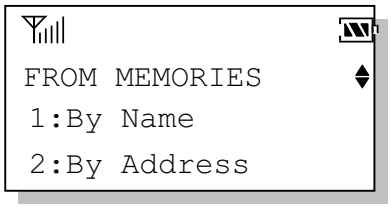


- Also you can see a condition of used memory.



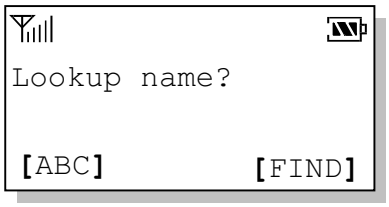
6.2 Retrieving Phone Number by Name

1. Press [RECALL] and 2(From Memories).
2. Press 1 button to retrieve phone number by name.

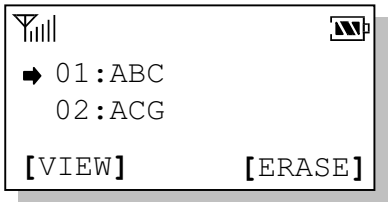


3. Enter the name that you want to look for and press [FIND].

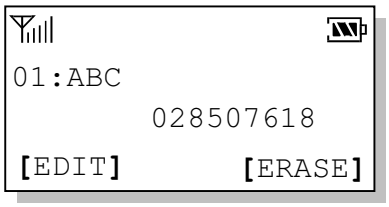
   ✓ At least two letters are recommended for quick search.



   ✓ Press [NEXT] or Volume left/right button to scroll through the list of matches.

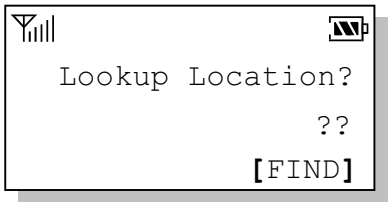


4. Press [VIEW] to see information in that location.
   ✓ Pick up handset to make a call.
   ✓ You can edit the phone number by pressing [EDIT] button.

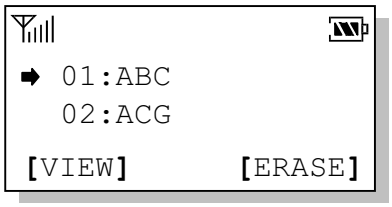


6.3 Retrieving Phone Number by Address

1. Press [RECALL] and 2(FROM MEMORIES)
2. Press 2 button to retrieve a phone number by address.
3. Enter a memory address to retrieve phone number.
   (ex: If you enter a memory address, 01.)



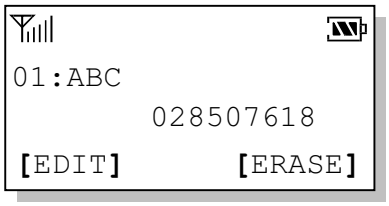
- ✓ If there is no stored phone number in the memory location, “Empty Location” is displayed.
- ✓ If you press [FIND] button without entering number you see the whole phone number list in the memory location and you can find the number by scrolling the list.



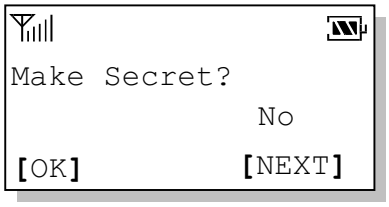
4. Pick up the handset or press button to call to displayed number, press [EDIT] to edit stored information or press [ERASE] to delete displayed information.

- Edit process

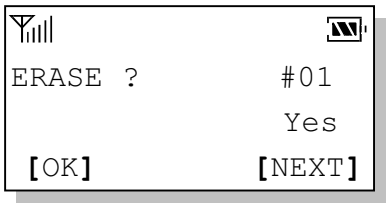
- ✓ Modify the phone number by Clear button and keypad. And Press [OK] to edit a related name.



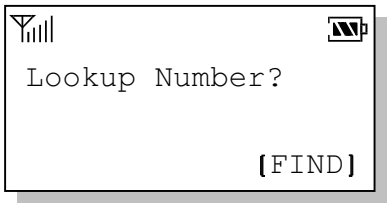
  ① Delete the phone number by Clear button.
  ② Enter the modified phone number.
  ③ Press [OK].
  ④ To move cursor, use Volume left/right button.
  ⑤ Enter the name.
  ⑥ Press [OK].
- ✓ Enter a new memory address to store new information or choose the new memory address by [NEXT] and press [OK].
- ✓ Press [OK] to no secret.



- Erasing process
  - ✓ You might press [ERASE] at the above step 3.
  - ✓ Select “Yes” using [NEXT] or Volume key.
  - ✓ Press [OK] to delete.

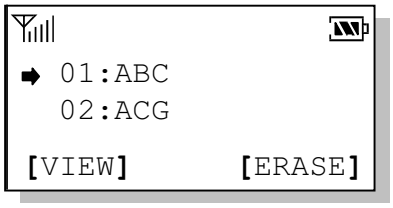


6.4 Retrieving Phone Number by Number



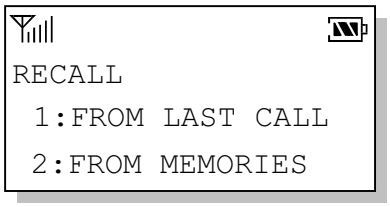
1. Press [RECALL] and 2(FROM MEMORIES).
2. Press 3 button to retrieve a phone number by number.
3. Enter the phone number that you want to find and press [FIND] button.
   - ✓ If there is no stored phone number in the memory location, “No number matches” is displayed.
4. Pick up the handset or press button to call to displayed number, press [EDIT] to edit stored information or press [ERASE] to delete displayed information.

- Edit process.
- Erasing process
  - ✓ Do the above step of 6.2

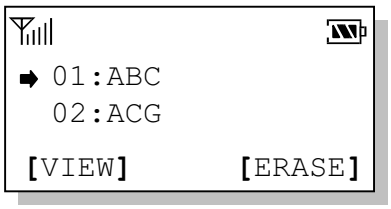


6.5 Fast Searching

1. Press [RECALL] button.



2. Press [RECALL] button again.



✓ You see the whole phone number list in the memory location and you can find the number by scrolling the list.

7 SMS (Short Message Service)

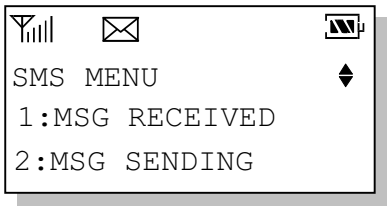
Messaging, Paging, and Voice mail features are available when your phone is turned on. Using Message button allows you to access messages for viewing on the LCD screen or to send a message. While viewing a message, you can call back to the number displayed in the message by picking up handset.

Check with your WLL service provider regarding the availability of this feature. The information in a message depends on the mode the WLL is operating in and the service's capabilities.

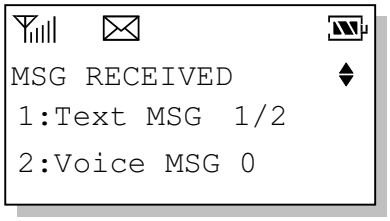
7.1 Checking & Deleting Received Message

7.1.1 Text Message

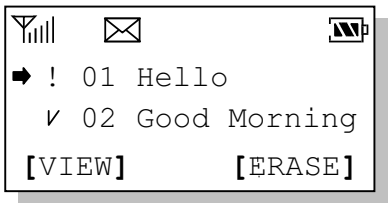
1. Press MESSAGE button and 1(MSG RECEIVED).



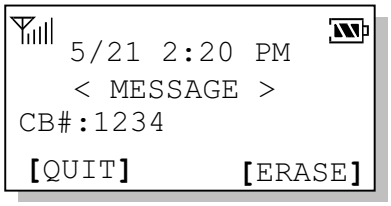
2. Press 1(Text MSG) to see a received text message list.
   - ✓ Locate ➡ to the desired message in the list.
   - ✓ Mark "∨ "means already a checked message.



3. Press [VIEW] to see the content of desired message.



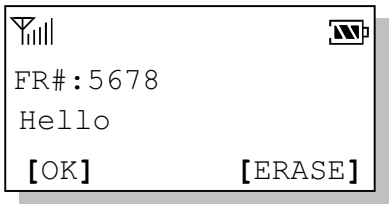
   - ✓ You can see the message with received time and caller's phone number.
   - ✓ You can read all messages.



   Note) CB#(Call Back Number) is the call back number.
   FR#(FROM) is the origination number.

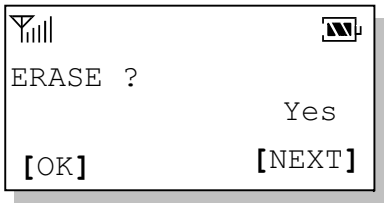
* According to the system, from number may not be available.

4. Press [ERASE] to erase a message.



   ✓ Press [OK] to complete erasing process.

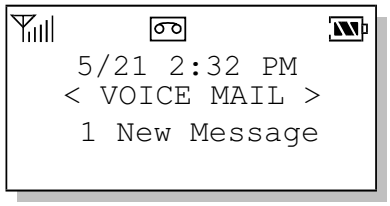
   - When you scroll received MSGs, you can use Volume left/right key.
     In other words, if you push Volume left key, the arrow will be placed upward.



7.1.2 Voice Message

Voice mail notifications indicate the number of new voice mail message in your mailbox. Only the most recent voice mail notification will be stored in the WLL phone; previous messages will be overwritten. When a voice mail messages left for you, the WLL phone will alert and display “Voice Mail “. You must call your voice mail service to retrieve these messages.

1. Press MESSAGE button and 1(Received MSG) in idle state.
2. Press 2(Voice MSG) to check the voice message.
   ✓ If there is no voice message, “No Voice Mail was received” is displayed.
   ✓ Press [ERASE] to delete the voice message.

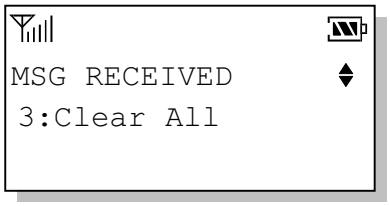


* According to the system, right LCD contents may be different.

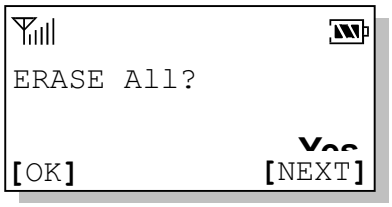
3. Pick up the phone to make a call-to-call back your voice mailbox if the number of the voice mailbox is provided by system.
   - When you scroll received MSGs, you can use Volume left/right button. In other words, if you push Volume left button, the arrow will be placed upward.

7.1.3 Erasing all Received Message

1. Press MESSAGE button and 1(MSG RECEIVED).
2. Press 3(Clear All).

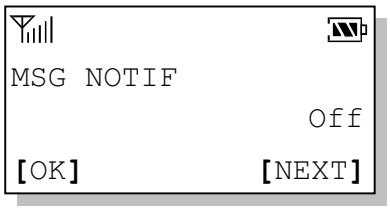


3. Select “No” or “Yes” using [NEXT] or Volume key.
   Press [OK] to delete.



7.2 MSG Notification Type Select

1. Press Message button and 3(MSG NOTIF).
2. Select Off, Once, Every 2 Min by pressing [NEXT] or Volume left/right button.
3. Press [OK] to save and exit.

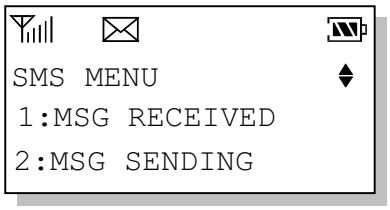


7.3 Message Sending

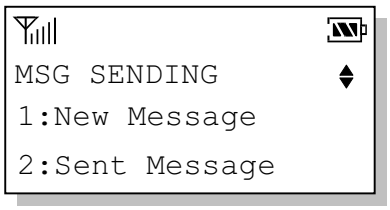
When sending message, you can select set priority among Normal, Emergency and Urgent.

7.3.1 Sending a New Message

1. Press MESSAGE button and 2(MSG SENDING).

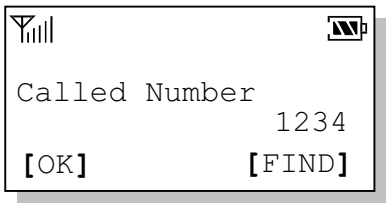


2. Press 1(New Message) to send a new message.



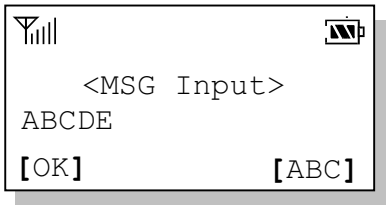
3. Enter the called number and press [OK].

   ✓ You can find the called number in the memory by [FIND] button.



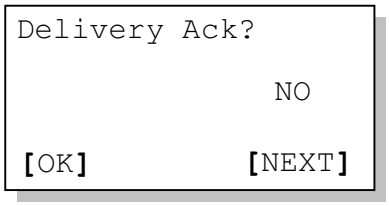
4. Input a message and press [OK] to send.

   Press [ABC] to change upper or lower case character.

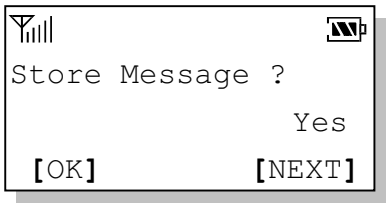


5. Select Yes/No the Set Delivery Ack.

   Press [OK] to send.

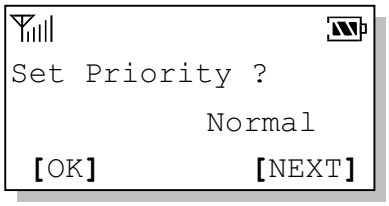


6. Select Yes/No to store the message. Press [OK].



7. Select type for setting priority among Normal/Emergency /Urgent.

   Set the priority. Press [OK] to send the message.

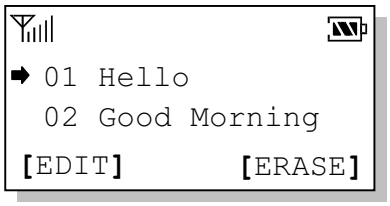


7.3.2 Sending the sent Message or Message after editing the Sent Message

1. Press MESSAGE button and 2(MSG SENDING)

2. Press 2(Sent Message) to see a sent text message list.

   ✓ Locate ➡ to the desired message in the list.

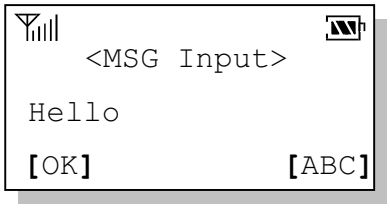


3. Press [EDIT] to edit the content of the selected message.

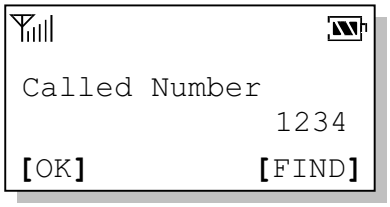
   ✓ You can see the selected sent message.

   ✓ Edit the message. Press [ABC] to change upper or lower case character.

4. Press [OK] Button.

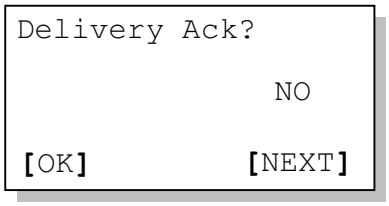


5. Enter the called Number and press [OK].

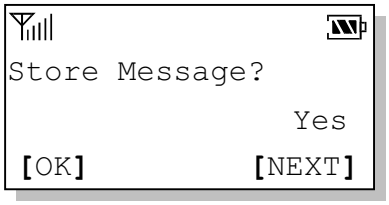


6. Select Yes/No the Set Delivery Ack.

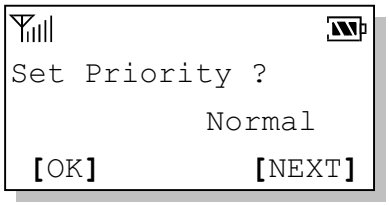
   Press [OK] to send.



7. Select Yes/No to store Message. Press [OK].

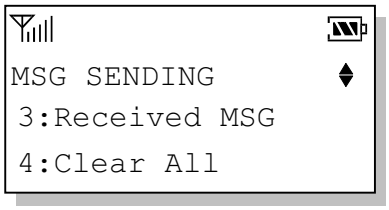


8. Select type for setting priority among Normal / Emergency /Urgent.
   Set the priority. Press [OK] to send the message.



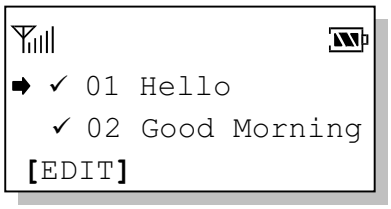
7.3.3 Sending the Received Message or Message after editing the Received Message

1. Press MESSAGE button and 2(MSG SENDING).

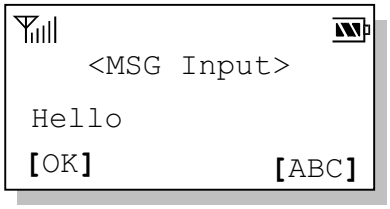


2. Press 3(Received MSG) to see a received text message list.
   - ✓ Locate ➡ to the desired message in the list.

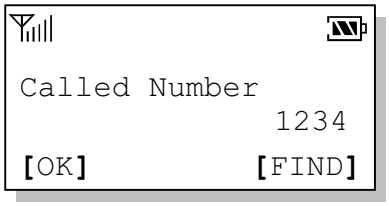
3. Press [EDIT] to edit the content of the selected message.
   - ✓ You can see the selected received message.
   - ✓ Edit the message. Press [ABC] to change upper or lower case character.



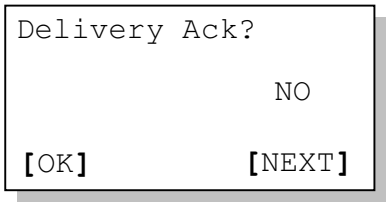
4. Press [OK] Button.



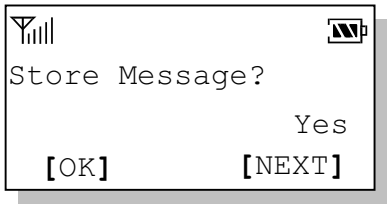
5. Enter the called Number and press [OK].



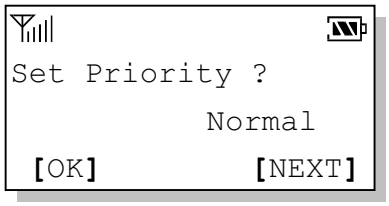
6. Select Yes/No the Set Delivery Ack.
   Press [OK] to send.



7. Select Yes/No to store Message. Press [OK].



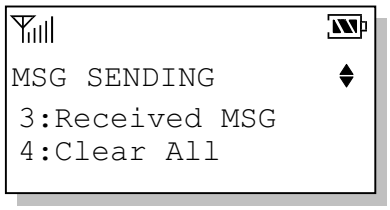
8. Select type for setting priority among Normal/Emergency Urgent.
   Set the priority. Press [OK] to send the message.



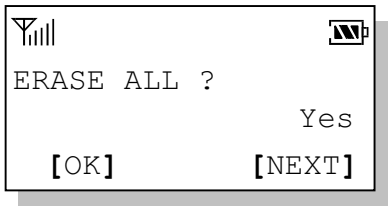
7.3.4 Erasing a Sent Message

1. Press MESSAGE button and 2(MSG SENDING).

2. Press 4(Clear All) to clear text message list.

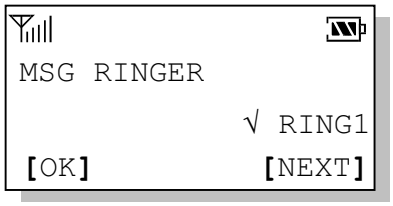


3. Select “No” or “Yes” using [NEXT] or Volume button.
   Press [OK] to erase a message.



7.4 MSG Ringer

You can select the various ring types.



1. Press [Message] + 4(MSG RINGER) in the idle state.

   Select a desired ring type with [NEXT] or Volume button.

   Press [OK] button.

2. There are 5 different ring types.

   Those are RING1, RING2, RING3, RING4 and RING5.

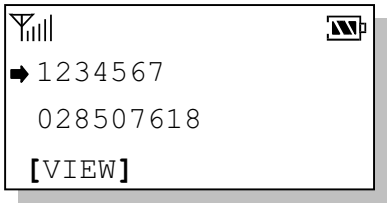
8 Other Functions

8.1 Redial

Pick up the handset or press button and Redial button to redial last outgoing number.

8.2 Finding Last Call History

Press Redial button in on-hook state to see your last telephone numbers.



8.3 Hook Switch

1. While in the middle of a call, pressing the hook switch for a while (100~600ms) will be treated as a flash. After that, the call will be terminated.
2. Very briefly pressing the hook switch will be ignored.

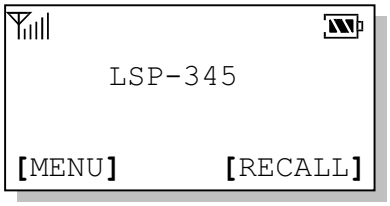
8.4 Flash Key

✓ During a call, flash key is used for call transfer, 3-way conference calls and call waiting.(As a system function, it may not be available according to the system.)

8.5 Safe Mode

Even if you misplaced the handset for a long time, the phone returns to the normal state.

After the ROH tone, the phone returns to the IDLE state as the picture and the phone is able to receive a call.



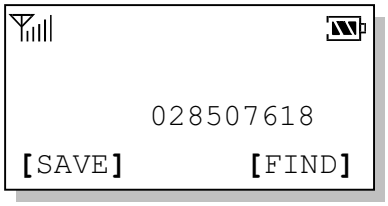
9 Storing Phone Number

9.1 Storing/Editing Phone Numbers

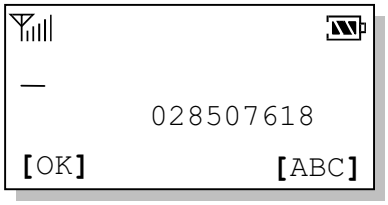
9.1.1 Storing Phone Numbers

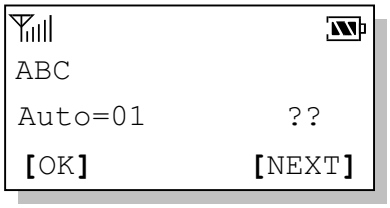
Frequently used phone numbers can be stored on the memory locations (01~99: 2 digits) and you can make a call by pressing memory location number in off-hook state.

1. Enter the area code and phone number in on-hook state (Max. 32 digits)
2. Press [SAVE].

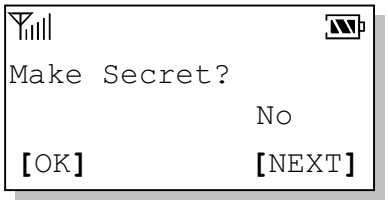


3. Enter the name in text mode and press [OK] to save.
   Press [ABC] to change upper or lower case characters.
   - ✓ To store without name, just press [OK].
   - ✓ Refer to “To enter a character”.
4. Enter the desired memory location.
   - ✓ The phone number is stored in the displayed memory location.

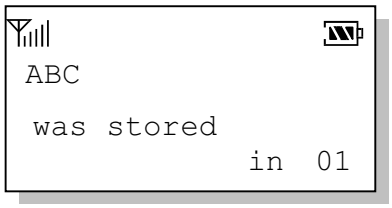




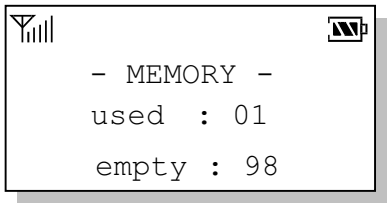
5. The phone will display a message asking to keep your number as secret or not. Select “No” or “Yes” using [NEXT] or Volume button. Then press [OK].



✓ You can see a confirming message.



✓ Also you can see a condition of used memory.



- To enter a character

  You can enter English character in editing mode.

  You can enter English character as default, and press Message to select specific character.

- To enter English character

  Press once a keypad to enter the first letter labeled in the keypad, twice to enter the second letter and 3 times to enter the third letter.

  EX) To enter “L”,

  Press dial button 5 labeled “JKL” 3 times to enter “L”.

  ✓ After 2 seconds entering a character, the cursor is moved to the next position automatically.

  ✓ Press Volume left/right button to move the cursor.

  ✓ Press Clear button to erase or correct entered character.

- To enter specific character,

  Press the key next to the End key to view a desired character while you are entering a character.

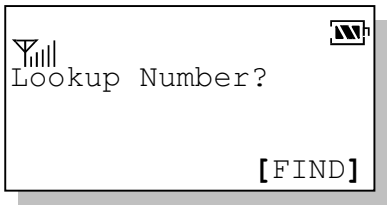
  ✓ Special characters includes , . ‘ “ ! ? : @ _ + - % / \ < > ( ) =

  ✓ Press the number next to the character you want to insert.

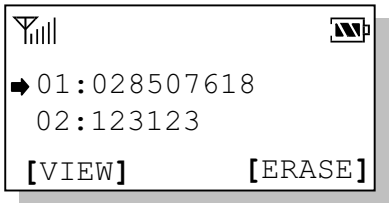
9.1.2 Erasing Stored Phone Numbers

When a phone number is stored in a memory location, you can erase the stored phone number.

1. Press [RECALL] + 2(FROM MEMORIES) + 3 (By Number) and enter a number of the desired memory location to erase.



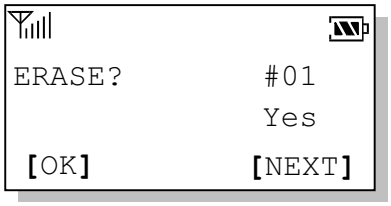
✓ If there is no stored phone number in the memory location, “No number matches” is displayed.



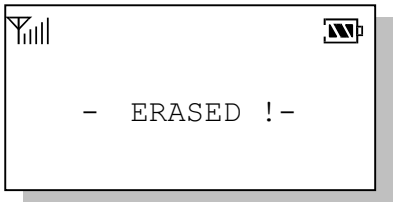
✓ If you do not remember the memory location to erase, press [FIND] to search phone number by memory location.

2. Erasing process

✓ Select “No” or “Yes” using [NEXT] or Volume key.



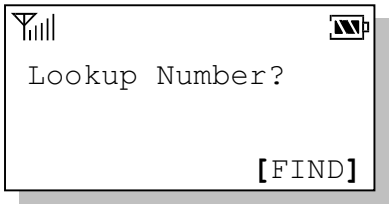
✓ Press [OK] to complete erasing process.



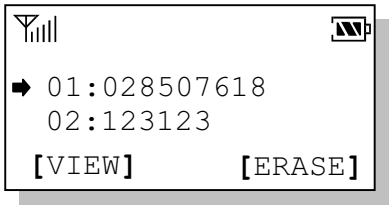
9.2 Finding Stored Phone Numbers

You can see all the list of stored phone numbers in memory list and if you forgot the memory location, can find it in sequence. And You can place a call with the phone number.

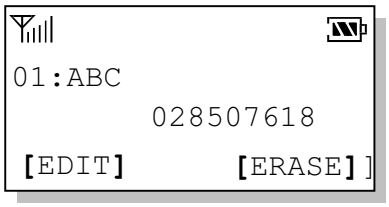
1. Press [RECALL] + 2(FROM MEMORIES) +3(By Number) in on-hook state.



2. Press [FIND] button to find the desired phone number.
   - ✓ Locate ➡ in the desired name or address to find.
   - ✓ If not entered any name, phone number is displayed.



3. Press [VIEW] to see the stored number.
4. To make a call with the phone number in the state of step 2 or step 3, pick up the handset or press button and wait for Auto Time-out.



10 Speaker Phone

This function is a convenient feature which enables you to call using speaker phone button in on-hook state.

11 General Information

- Main Unit

Item	LSP-345
Tx Frequency	Digital : 824 ~ 849 MHz
Rx Frequency	Digital : 869 ~ 894 MHz
Channel Bandwidth	1.25 MHz
Tx Power	Digital : LOWER: 0.2W ~UPPER:1W
Rx Sensitivity	-104 ~ -25dBm
Size(mm)	160 X 215 X 76 (L X W X H)
Weight(g)	Below 833(with battery, Ni-MH)
	Below 749 (without battery)
Operating Temperature	0 ~ 55℃

- AC/DC Adapter

Item	SMPS Type Description
Input Voltage	AC 100 ~ 250V
Input Frequency	50 / 60Hz
Output Voltage	9.6V(DC), 1A

- Battery

Item	Description
Capacity	3.6V Ni-MH
Talk duration time	2 Hours
Standby duration time	24 Hours
Charging duration time	Trickle, 24 Hours

FCC RF Exposure Information

Finding Stored Phone Numbers

WARNING!

The antenna used for this transmitter must not exceed 2.5dBi and must be installed to provide a minimum separation distance of 20 cm from all persons.

CAUTION

Use only the supplied and approved antenna. Use of unauthorized antennas or modifications could impair call quality, damage the phone, void your warranty and/or result in violation of FCC regulations.

Do not use the phone with a damaged antenna. If a damaged antenna comes into contact with skin, a minor burn may result. Contact your local dealer for a replacement of antenna.

FCC Part 15 Class B Compliance

This device and its accessories comply with part 15 of FCC rules.

Operation is subject to the following two conditions:

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

"Changes or Modifications that are not expressly approved by the manufacturer could void the user's authority to operate the equipment."

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.

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U.S, Patent No. 4,901,307 U.S, Patent No. 5,056,109 U.S, Patent No. 5,099,204

U.S, Patent No. 5,101,501 U.S, Patent No. 5,103,459 U.S, Patent No. 5,107,225