

**ATTACHMENT M – USER’S MANUAL**

---

# HWP-120 Fixed Access

User's

4.1 CDMA SYSTEM SELECTION
4.2 NAM SELECTION .....
4.3 SELF PHONE NUMBER CHECK
4.4 AUTO RETRY FUNCTION (A
4.5 KEY BEEP LENGTH ADJUS
4.6 ONE-TOUCH DIALING ON
4.7 WLL TERMINAL VERSION
4.8 LAST CALL TIME CHECK
4.9 TOTAL CALL TIME CHECK
4.10 CLEAR ALL CALLS FUNC
4.11 OUTGOING CALL RESTRI
4.12 LOCK NO. SET FUNCTION
4.13 DIAL LIST CLEAR FUNC
4.14 MEMORY CLEAR FUNC

## <Appendix>

1. TroubleShooting .....
2. FWT Technical Specification .....

Hyundai Electronics Industries

# Contents

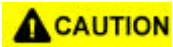
<b>1. INTRODUCTION .....</b>	<b>1</b>
1.1 CHECKING THE PACKAGE .....	1
1.2 NAME AND FUNCTION OF EACH PART .....	3
1.3 INSTALLING WLL TERMINAL .....	5
1.5 LCD DISPLAY .....	10
1.5.1 Display for Power On .....	10
1.5.2 Display for Call Attempt .....	10
1.5.3 Display for Incoming Call .....	10
1.5.4 Display for Battery Capacity (when the failure of main power supply occurs) .....	10
1.5.5 Display for Weak RSSI(Received Signal Strength Indicator) .....	10
<b>2. USING BASIC FUNCTIONS .....</b>	<b>11</b>
2.1 TO MAKE A PHONE CALL .....	11
2.1.1 In on-hook state, .....	11
2.1.2 In off-hook state, .....	11
2.2 TO RECEIVE AN INCOMING CALL .....	12
2.2.1 In on-hook state, .....	12
2.2.2 In off-hook state, .....	12
2.3 TO ADJUST VOLUME .....	13
2.3.1 To adjust the handset volume, .....	13
2.3.2 To adjust the ringer volume, .....	13
2.3.3 To adjust the key beep volume, .....	14
2.4 TO SELECT RING TYPE .....	14
<b>3. USING MEMORY FUNCTIONS .....</b>	<b>15</b>
3.1 TO STORE TELEPHONE NUMBERS .....	15
3.2 TO MAKE A PHONE CALL TO THE STORED TELEPHONE NUMBER .....	17
3.2.1 One-touch Dialing .....	17
3.2.2 Two-touch Dialing .....	17
3.3 TO SEARCH THE STORED TELEPHONE NUMBER .....	17
3.3.1 Calling by Memory Address .....	17
3.3.2 To Retrieve by Name or Telephone Number .....	20
3.3.3 List of Recent Calls .....	21
3.3.4 To Edit the Stored Telephone Number .....	22
3.3.5 To Erase the Stored Telephone Number .....	24
<b>4. USING MENU MODE .....</b>	<b>26</b>



## FCC RF EXPOSURE INFORMATION

***WARNING! Read this information before use***

In August 1996 the Federal Communications Commission (FCC) of the United States with its action in Report and Order FCC 96-326 adopted an updated safety standard for human exposure to radio frequency (RF) electromagnetic energy emitted by FCC regulated transmitters. Those guidelines are consistent with the safety standard previously set by both U.S. and international standards bodies. The design of this phone complies with the FCC guidelines and these international standards.



To comply with FCC RF exposure requirements, a minimum separation distance of 2.5 cm (1.0 inches) must be maintained between the user/bystander and the back of the unit, including the antenna.

*For more information about RF exposure, please visit the FCC website at [www.fcc.gov](http://www.fcc.gov)*

## 1. Introduction

This product is a WLL(Wireless Local Loop) terminal designed to be used with CDMA(Code Division Multiple Access) in order to sufficiently meet users' requirements for communication services. Before using this product, please read this chapter first.

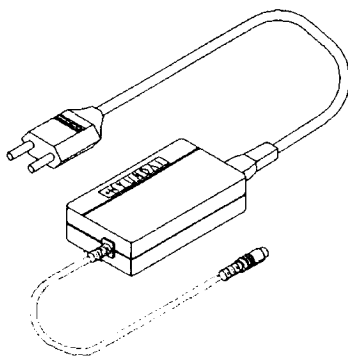
### 1.1 Checking the Package

Thank you for buying this product. Please check whether the product package contains the following items:

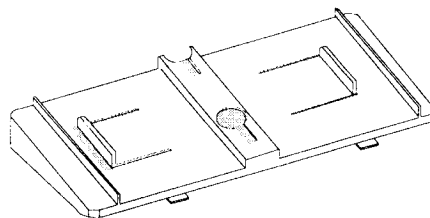
#### \* WLL Phone



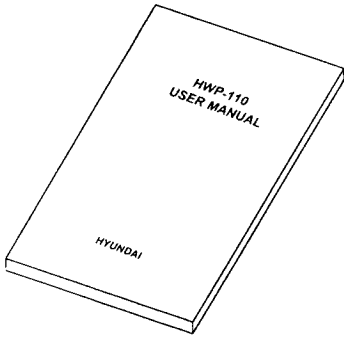
#### \* Accessory



- Power Supply Unit(SMPS) -




- Wall Bracket Kit -

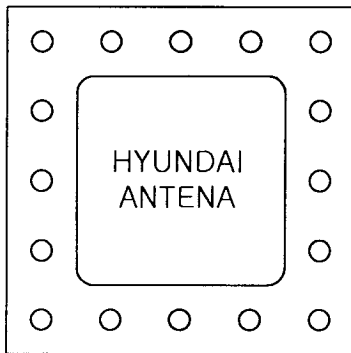


- User's Manual -

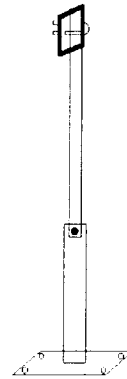


- Screw -

 **Optional Accessory**

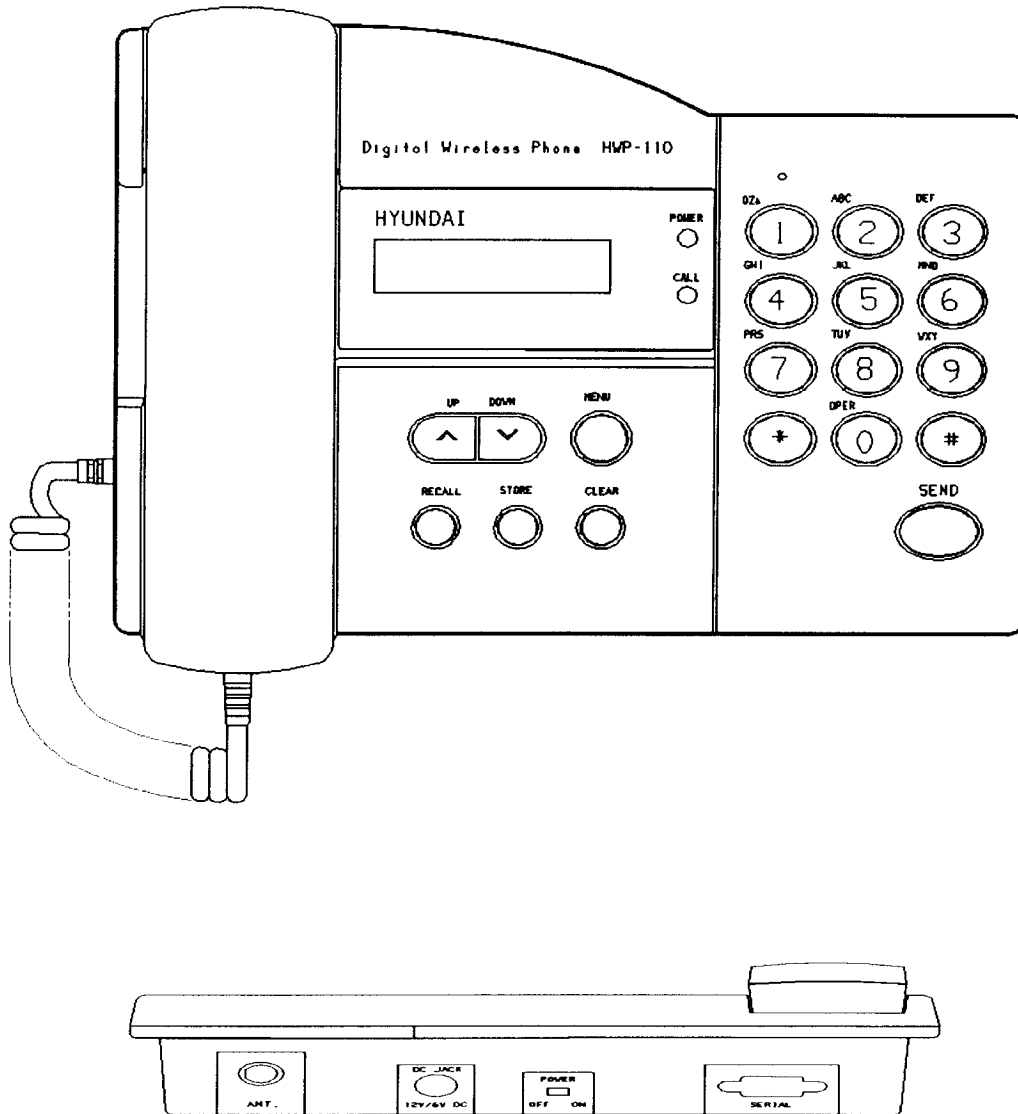


- External Antenna -



- Fastener -

## 1.2 Name and Function of Each Part



- CALL LED

Indicates the ring incoming state. Call LED indicates that an incoming call is present. This one flashes during incoming bell rings.

- POWER LED

Indicates the main power supply state. POWER LED indicates the status of externally supplied power. This LED keeps steady "ON" status while external power supplied. When the terminal operates on

internal back-up battery, the LED keeps steady "OFF".

- LCD Screen

Displays every sort of information (in 2 lines of 16 characters).

Specific description regarding user information will be provided in feature description in detail.

- Hook Switch

A switch to turn on/off a call, which initiates and completes the operation of WLL terminal.

- DC Jack

A part through which the power is supplied from SMPS for WLL terminal.

- Serial Port

A port through which new software loading or connection of Diagnostic Modem(DM) is possible.

- Power Switch

Turns on/off the power supply to WLL terminal.

- Functions of Buttons

DIAL Buttons: Used to input telephone numbers or characters(0-9, \*, #), and to choose menu items.

[UP]/[DOWN] Button : Used to retrieve stored telephone numbers, to adjust key beep volume, to adjust ringer volume while the phone is ringing, and to adjust handset volume during a call.

[MENU] Button : Used to choose a function menu.

[STORE] Button : Used to store the set value, and to check names and telephone number at the time of retrieving telephone numbers.

[RECALL] Button : Used to retrieve stored telephone numbers.

[CLEAR] Button : Used to edit the typed number, or to move to a previous mode at the time of specifying a mode.

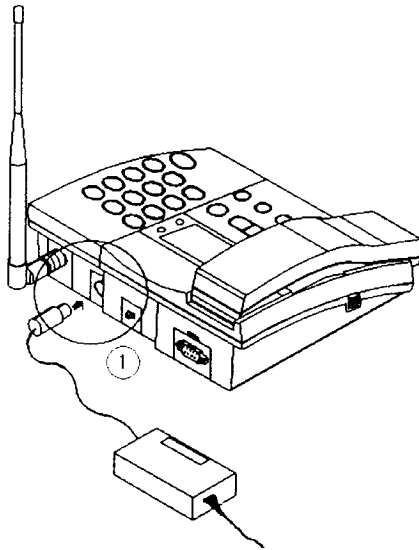
[SEND] Button : Used to attempt a call in off-hook state, or to make a call to the telephone number dialed last.



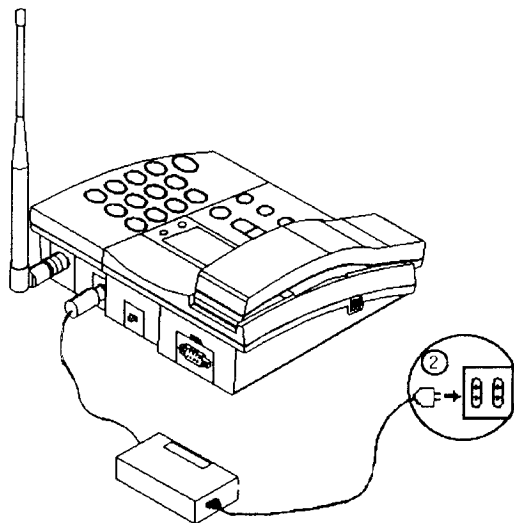
## 1.3 Installing WLL Terminal

### (General Installation)

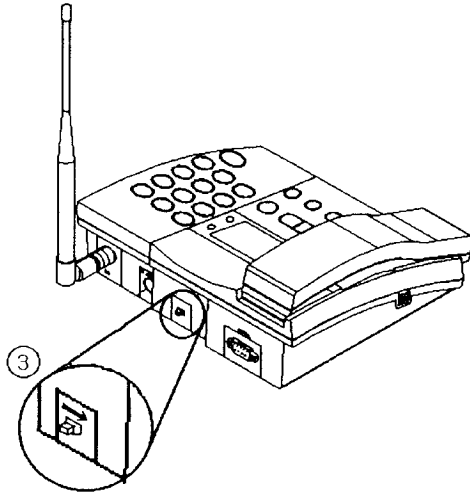
1) Connect DC jack as shown below.



2) Connect the plug to an outlet and to SMPS for WLL terminal



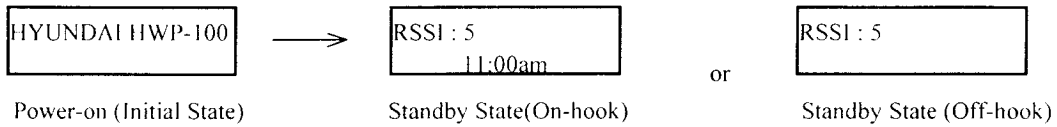
3) Turn on the power switch as following, and then the WLL terminal is initialized with power-on beep sound.



4) After initialization, it enters into standby state.

5) In standby state, adjust the antenna location until the largest RSSI value is displayed on LCD screen.

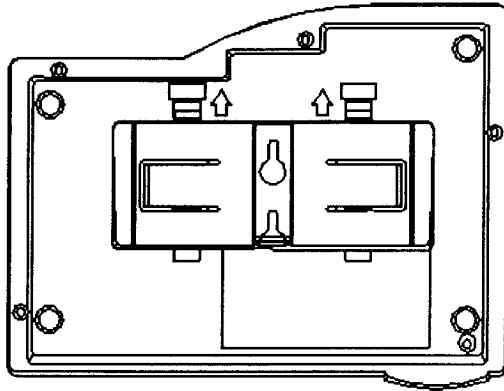
Note : RSSI(Received Signal Strength Indicator) refers to a parameter which indicates the strength of received radio frequency. The larger the value is, the better the speech quality is. (1 is the minimum value, and 5 is the maximum)



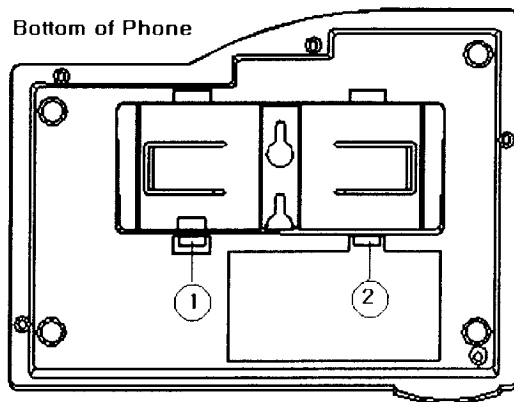
### (Installing Wall Bracket)

1) Fasten the wall bracket kit into grooves on the back of WLL terminal.

- Set the bracket as shown below and push the bracket into the phone



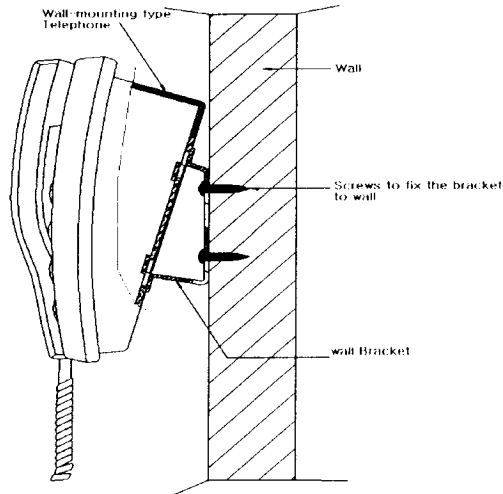
- Push the number 1 and 2, and then insert the edge of bracket into each crack.



- 2) Fix screws to the wall in line with the bracket groove spacing.
- 3) Screw on the bracket grooves of the WLL terminal.
- 4) For further installation procedure, follow the Steps 1) to 5) in General Installation.

Note : If you want a clearer speech quality, you can install and use an external panel antenna. (For inquiry about the panel antenna, contact the agency where you bought the product.)

Note : WLL terminal is equipped with a backup battery which allows terminal operation without external power supply.



If the commercial power, which is used as input to power supply unit(SMPS) for WLL terminal fails, the WLL terminal operates with this backup battery for about 24 hours in standby state and 2 hours in call state.

RSSI : 5	BATT : 5
10:00am	

Standby State in Battery Power Supply

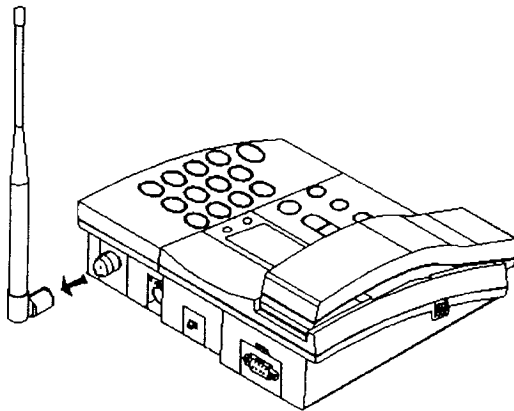
RSSI : 5	BATT : 1
10:00am	

Standby State in Low Battery State  
(Number 1 is blinking in BATT.)

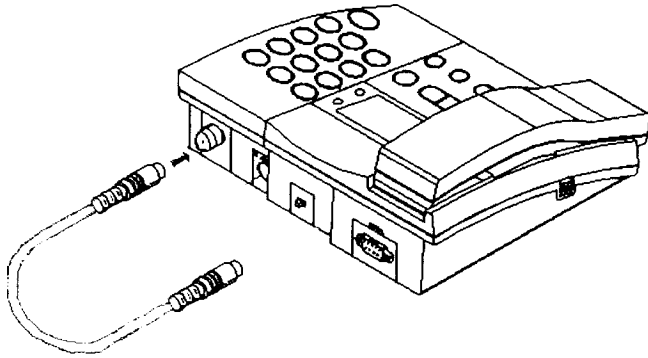
'BATT'(Battery) indicates the current capacity of the battery. (1 is the minimum value, and 5 is the maximum.)

( Installing optional external Antena )

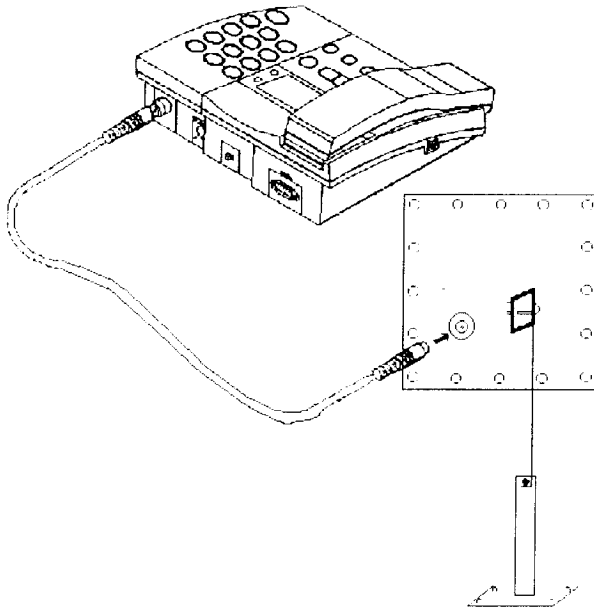
- 1) Separate antenna from phone



2) Connect external antenna cable to the same place as shown below.



3) Connect opposite of the cable to panel antenna as described below.



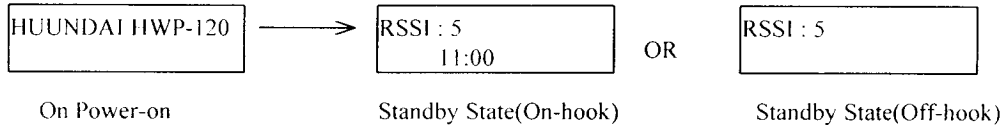
## 1.4 Notices for Using

- Do not disassemble or remodel WLL terminal at your own discretion.
- Do not hold the antenna or contact with it during a call.
- Avoid hot and moist places. Be careful not to wet the terminal or to spill any liquid on it, because it may cause a case impossible to repair.
- Avoid vibration or impact, and store the terminal in a place free of damage.
- Do not use it under an explosive environment or in a place where combustible liquid is used.

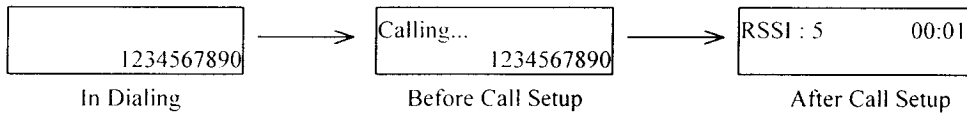
- Do not wipe the WLL terminal with a chemical solution like solvent or thinner.
- Remove the SMPS and switch off the WLL terminal when you do not use the terminal.

## 1.5 LCD Display

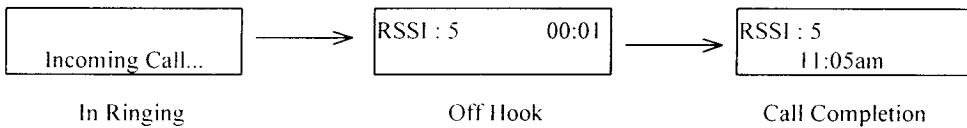
### 1.5.1 Display for Power On



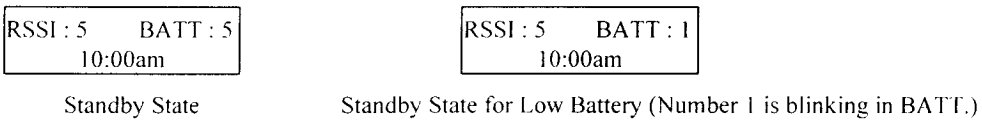
### 1.5.2 Display for Call Attempt



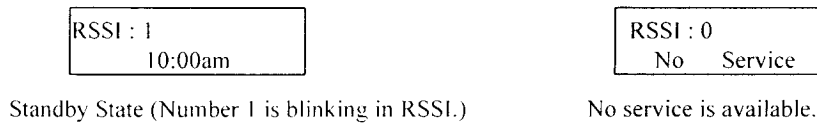
### 1.5.3 Display for Incoming Call



### 1.5.4 Display for Battery Capacity (when the failure of main power supply occurs)



### 1.5.5 Display for Weak RSSI(Received Signal Strength Indicator)



## 2. Using Basic Functions

### 2.1 To Make a Phone Call

#### 2.1.1 In on-hook state,

- Press [RECALL] Button to search the desired telephone number and hook off the handset to make a phone call.
- Press the telephone number in on-hook state and then hook off the handset to make a phone call.  
(But, in on-hook state, [SEND] Button is not recognized.)
- Speak over the telephone.
- Hook on the handset to finish the call.

#### 2.1.2 In off-hook state,

- Hook off the handset and dial tone is supplied. (In No Service state, however, warning tone is supplied at the interval of 0.5 second.)
- In No Service state, no call can be allowed.
- Hold the handset and press [SEND] Button before pressing any other button, and a call is made to the number that was dialed lastly.
- Press the telephone number and press [SEND] Button and a call is made.
- If [SEND] Button is not pressed after dialing telephone number, the call is made automatically after 8 seconds later.
- Speak over the telephone.
- Hook on the handset to finish the call.

Note : You can adjust the handset volume using [UP]/[DOWN] Button during a call.

Note : In off-hook state, all Buttons except [MENU] Button are available.

LCD Display for Standby State

(On-hook State)

RSSI : 5  
10:14 am

(Off-hook State)

RSSI : 5

LCD Display before a call is connected

Calling...  
0336396980

LCD Display for Dialing

0336396980

LCD Display after a call is connected

RSSI : 5 00:01

Note : If you make a phone call in Outgoing Lock state, the following message is displayed on LCD screen and the LCD enters into standby state.

Phone restricted

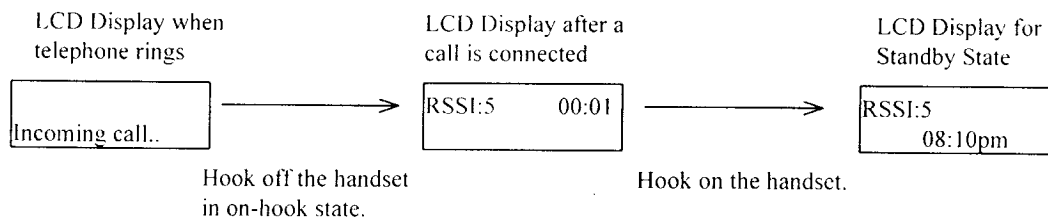
## 2.2 To Receive an Incoming Call

### 2.2.1 In on-hook state,

- Telephone rings with CALL LED blinking (If the ringer is set as SILENT, only the LED blinks).
- Hook off the handset.
- Speak over the telephone.
- Hook on the handset to finish the call.

### 2.2.2 In off-hook state,

- If telephone rings before you press [SEND] Button during dialing, the ringer works and the LCD screen displays an incoming call.
- Press [SEND] Button to speak over the telephone (or click Hook Switch).
- Speak over the telephone.
- Hook on the handset to finish the call.



Press [SEND] Button or click Hook Switch in off-hook state.

Note

- 1) If the ringer works during [MENU] or [RECALL] operation in on-hook state, the ringer operation has priority over the others.
- 2) If the ringer works in off-hook state, you can speak over the telephone by pressing [SEND] Button or clicking Hook Switch.
- 3) During a call, you can adjust the handset volume using [UP]/[DOWN] Button.

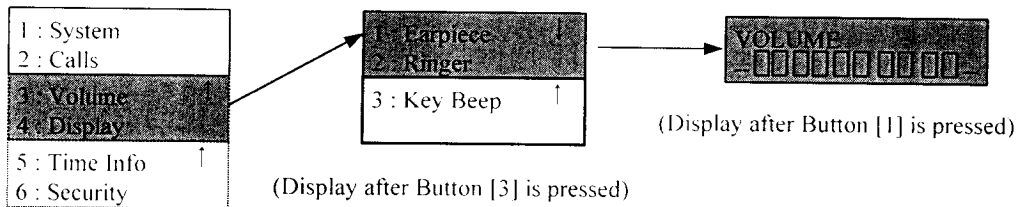


## 2.3 To Adjust Volume

### 2.3.1 To adjust the handset volume,

You can adjust the receiver speech volume in two ways.

- Method 1) . Press the following buttons in turn in on-hook standby state : [MENU] Button → Button [3] → Button [1].  
 . Set the volume using [UP]/[DOWN] Button and press [STORE] Button to store the setting.  
 . Press [MENU] Button to return to standby state.



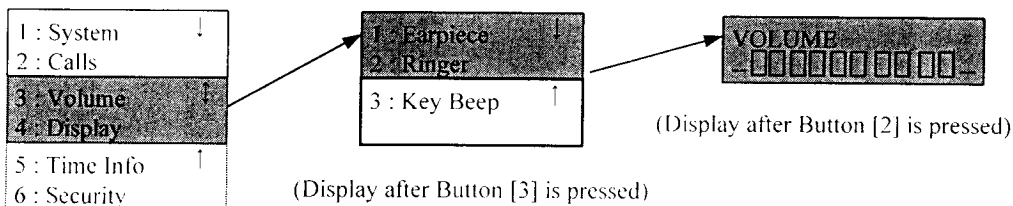
(Display after [MENU] Button is pressed)

- Method 2) . Adjust the volume using [UP]/[DOWN] Button during a call.

### 2.3.2 To adjust the ringer volume,

You can adjust the ringer volume in two ways.

- Method 1) . Press the following buttons in turn in on-hook standby state : [MENU] Button --> Button [3] --> Button [2].  
 . Set the volume using [UP]/[DOWN] Button and press [STORE] Button to store the setting.  
 . Press [MENU] Button to return to standby state.



(Display after [MENU] Button is pressed)

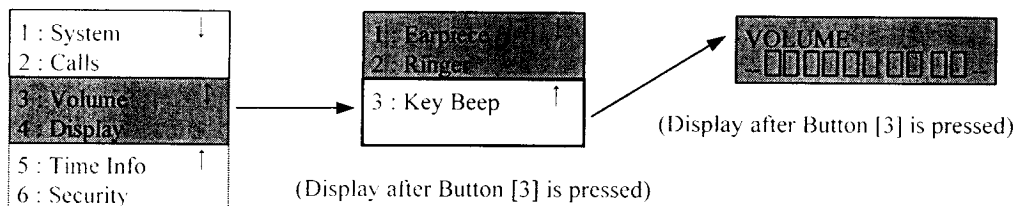
- Method 2) Adjust the volume using [UP]/[DOWN] Button while the ringer works.

### 2.3.3 To adjust the key beep volume,

Method 1) . Press the following buttons in turn in on-hook standby state : [MENU] Button --> Button [3] --> Button [3].

. Set the volume using [UP]/[DOWN] Button and press [STORE] Button to store the setting.

. Press [MENU] Button to return to standby state.



(Display after [MENU] Button is pressed)

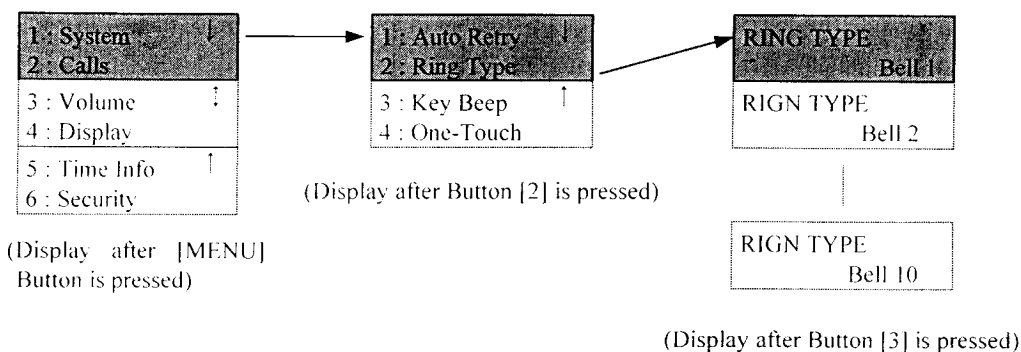
Method 2) Adjust the volume using [UP]/[DOWN] Button in on-hook standby state.

### 2.4 To Select Ring Type

You can select any of following 10 ring types to inform incoming calls.

- 1) Press the following buttons in turn in standby state : [MENU] Button --> Button [2] --> Button [2].
- 2) Select a ring type using [UP]/[DOWN] Button, listening to the ring sound. Then, press [STORE] Button to store the selected ring type.
- 3) Press [MENU] Button to return to standby state.

There are 10 types of rings. (Ring Type 1 ~ Ring Type 10)



(Display after [MENU] Button is pressed)

## 2.5 To Last Number Redial (Last Number Redial)

- Redial function is used to make a phone call to the telephone number dialed last.
  - 1) Hook off the handset and press [SEND] Button.
  - 2) When a call is connected to the opposite party, you can speak over the telephone.
  - 3) When the call is finished, hook on the handset.

## 3. Using Memory Functions

### 3.1 To Store Telephone Numbers

- You can store up to 99 telephone numbers which you frequently use to 2-digit addresses(01~99).  
The stored telephone numbers allow you to make a phone call simply by calling those addresses.
  - 1) Press the telephone number you want to store and then press [STORE] Button in standby state.
    - Note : To return to the initial state while inputting telephone number, press and hold [CLEAR] Button, or click Hook Switch.
  - 2) When '-' is displayed on the LCD screen, type the name with Dial Button and then press [STORE] Button.



- How to type a character (to type 'H')
  - 1) Select H by pressing Dial Button [GHI4] on which characters GHI are marked.  
Each time you press the Button, the display changes from G → H → I → 4.
  - 2) After selecting H, press [DOWN] Button to type next character. Or, the cursor moves automatically to the next cell 2 seconds after a character is selected.
- How to modify characters
  - 1) Clear character by character, by pressing [CLEAR] Button (Characters are cleared from the one lastly typed).
  - 2) Clear the entire characters, by pressing and holding [CLEAR] Button.
  - 3) To move the cursor on the LCD screen, press [DOWN] Button to move to the right and [UP] Button to move to the left.
  - 4) Use Dial Button to continue typing other characters.

Note : If you do not want to store the name, press [STORE] Button twice immediately after typing the telephone number.

Note : To move to standby state in the middle of typing any character, press and hold [CLEAR] Button twice, or click Hook Switch.

- To store the telephone number to the address displayed on the LCD screen (e.g. Address 01), press [STORE] Button directly.

LOCATION ??  
auto --01

- If you want to store it to any other address, press the address by two digits (01~99). (e.g.: 11)

LOCATION 11  
auto =10

- If "OVERWRITE" is displayed on the LCD screen when you type the desired address. it means that another telephone number is already stored to the address.

Overwrite ?    11  
[1]YES    [2]NO

- If you want to clear the previous number and store the newly typed telephone number, press Button [1].
- If you leave the previous number as it is, press Button [2] or [CLEAR] Button to return to the previous step, store the telephone number to the other address, and then press [STORE] Button.

The LCD screen displays the following and the telephone number is stored.

NAME  
STORED IN #01

10 USED  
89 EMPTY

Note : In Case All Memories are Used

If the LCD screen displays "No additional memory available", it is impossible to store any additional telephone number because 99 memories are all used.

(You can store additional telephone numbers after clearing unnecessary telephone numbers.)

No additional  
memory available

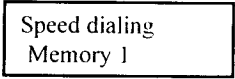
## 3.2 To Make a Phone Call to the Stored Telephone Number

### 3.2.1 One-touch Dialing

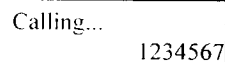
This function allows you to directly make a phone call to 9 telephone numbers stored in Addresses 01 through 09.

Press and hold the last digit of telephone number stored in any of Address 01 through 09 in off-hook state.

- Press the last digit number in on-hook state and then hook off the handset.
- The telephone number is displayed on the LCD screen and automatically dialed.



Speed dialing  
Memory 1



Calling...  
1234567

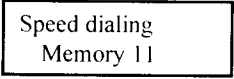
### 3.2.2 Two-touch Dialing

This function allows you to directly make a phone call to the telephone numbers stored in Addresses 10 through 99.

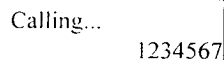
- Press the first digit number and press and hold the last digit of telephone number stored in any of Address 10 through 99 in off-hook state.

Press the two digit number in on-hook state and then hook off.

- The telephone number is displayed on the LCD screen and the telephone number is automatically dialed.



Speed dialing  
Memory 11



Calling...  
1234567

Note : If no telephone number is stored in the specified address, "Empty Location" is displayed on the LCD screen.



Empty Location

## 3.3 To Search the Stored Telephone Number

If the stored telephone number is confirmed, that is, if you specify any telephone number, address or name, retrieve the content registered at the corresponding memory, and confirm that the specified telephone is stored in the designated address, you can make a phone call to the telephone number.

### 3.3.1 Calling by Memory Address

(Retrieval Method 1)

- Press [RECALL] Button.
- Following Recall Menu is displayed on the LCD screen.

[1] LOCATION  
[2]NAME [3]CALLS

Note : Press [UP]/[DOWN] Button in Recall Menu state and you can see the contents stored in the memory in due order. If you press [RECALL] Button and if there is no key-in for the prescribed time (about 2 minutes), the LCD screen returns to standby state.

- Press Button [1] to select Location and the LCD screen displays the following:

LOCATION ??

- Press any expected address(01-99) by two digits (e.g., press 01).

01 : ABC - Stored address and name  
0336396980 - Stored telephone number

Note : If the selected address is empty, the LCD screen displays "Empty Location" and then returns to Recall Menu.

Empty Location

Note : Press [CLEAR] Button in the above state where the telephone number is displayed, the LCD screen returns to Recall Menu state.

- Press [UP]/[DOWN] Button while the telephone number is displayed, and you can take a view of the contents of memory in due sequence.

>01 : ABC  
02 : ABD

- Hook off the handset to make a phone call to the telephone number you sought.  
The telephone number displayed on the LCD screen is dialed.

Calling...  
0336396980

- LCD Display for Number Engaged

RSSI : 05 00:01

(Retrieval Method 2)

- Press one digit or two digit number in the memory address (e.g., press 01).
- Press [RECALL] Button.

01 : ABC 0336396980
------------------------

- Note : If the specified address is empty, "Empty Location" is displayed on the LCD screen.

Empty Location
----------------

- Press [UP]/[DOWN] Button while the telephone number is displayed, and you can take a view of the contents of memory in due sequence.

>01 : ABC 02 : ABD
-----------------------

- Hook off the handset to make a phone call to the sought telephone number.  
The telephone number displayed on the LCD screen is dialed.

Calling... 0336396980
--------------------------

- LCD Display when the selected number is engaged

RSSI : 05    00:01
--------------------

### 3.3.2 To Retrieve by Name or Telephone Number

(Retrieval by Name)

- Press [RECALL] Button.
- Following Recall Menu is displayed on the LCD screen:

```
[1]LOCATION
[2]NAME [3]CALLS
```

- Note : Press [UP]/[DOWN] Button in Recall Menu state and you can take a view of the contents of memory in due sequence. If you press [RECALL] Button again or if there is no key-in for the prescribed time (about 2 minutes), the LCD screen returns to standby state.

- Press Button [2].

Cursor is blinking. →

```
RECALL NAME?
--
```

- Type more than one character of the expected name and press [STORE] Button (e.g., type AB).

```
>01:ABC
02:ABD
```

- Names including the typed characters (i.e., AB) are displayed in due sequence.
- Search the desired name using [UP]/[DOWN] Button.

```
01:ABC
>02:ABD
```

- Note : Move to the desired location using [UP]/[DOWN] Button and press [STORE] Button on that location, and you can check the telephone number.

- Hook off the handset to make a phone call to the telephone number you sought.
- The telephone number displayed on the LCD screen is dialed.

```
Calling...
0336396980
```



(Retrieval by Telephone Number)

- Press a part of consecutive telephone number by more than 3 digits (e.g., 033XXXXXXX).
- Press [RECALL] Button.
- Telephone numbers or names starting with 033 are displayed on the LCD screen.

>01:ABC  
09:0336398075

If there are similar telephone numbers starting with 033.

Memory Empty

If there is no telephone number starting with 033.

- You can search the next telephone number using [UP]/[DOWN] Button.

>01:ABC  
09:0336398075

Note : Move to the desired location using [UP]/[DOWN] Button and press [STORE] Button on that location, and you can check the telephone number.

- Hook off the handset to make a phone call to the telephone number you sought.
- The telephone number displayed on the LCD screen is dialed.

Calling...  
0336396980

### 3.3.3 List of Recent Calls

Up to 10 telephone numbers recently dialed are stored, and you can make a phone call using any of these.

- Press [RECALL] Button.

Following Recall Menu is displayed on the LCD screen.

[1] LOCATION  
[2] NAME [3]CALLS

- Press Button [3].

>01:033639680  
02:0336396970

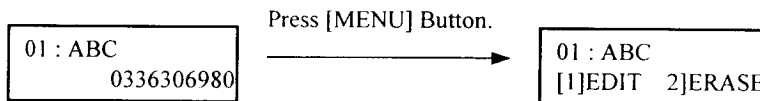
- Stored telephone numbers are listed.
- Move the cursor marked with ">" to the desired telephone number in the list and hook off the handset to make a phone call to that telephone number.
- The telephone number displayed on the LCD screen is dialed.

Calling...  
0336396980

### 3.3.4 To Edit the Stored Telephone Number

3.3.4.1 To edit the stored telephone number when you select it directly with [1]LOCATION,

- 1) Press [MENU] Button and EDIT/ERASE Select No. is displayed.



- 2) Press Button [1]. (EDIT Mode is selected.)

0336396980

- 3) Telephone Number Edit Mode

Edit the telephone number by using [CLEAR] Button and Buttons [0] ~ [9] and then press [STORE] Button.

0336308075

Note - Press [CLEAR] Button to clear the telephone number from the last digit.

- Press and hold [CLEAR] Button (for more than 1 second) and the entire number is cleared.
- Edit the telephone number using Dial Buttons [0] ~ [9].
- When you finish editing, press [STORE] Button.

- 4) Name Edit Mode

Edit the name by using [UP]/[DOWN] Button and Buttons [0] ~ [9] and then press [STORE] Button.

ABC  
0336308075

Note - In the initial LCD screen for Name Edit Mode, the first character of the name is blinking.

- Press [CLEAR] Button before Name Edit Mode and the LCD screen returns to Telephone Number Edit Mode.
- Move the blinking cursor on to the location to be edited, using [UP]/[DOWN] Button, and edit the name using Buttons [0] ~ [9].
- To insert space in the middle of the name. press [CLEAR] Button on a character, or press [DOWN] Button at the end of the name,
- When you finish editing the name, press [STORE] Button.
- Store the edited telephone number in the same way as mentioned in "To Store the Telephone Number".

3.3.4.2 To edit the stored telephone number when you select it using [2] Name of [UP]/[DOWN] Button,

- 1) Move the cursor marked with ">" to the address to be edited using [UP]/[DOWN] Button.

```
01:ABC
>02:ABD
```

- 2) Press [STORE] Button to check the stored telephone number.

```
02:ABD
0336308075
```

- 3) Press [MENU] Button and the following is displayed.

```
02:ABD
[1]EDIT [2]ERASE
```

- 4) Press Button [1]. (EDIT Mode is selected.)

```
0336308075
```

- 5) Telephone Number Edit Mode

Edit the telephone number using [CLEAR] Button and Buttons [0] ~ [9] and then press [STORE] Button.

```
0336308752
```

Note - Press [CLEAR] Button to clear the telephone number from the last digit.

- Press and hold [CLEAR] Button (for more than 1 second) and the entire number is cleared.
- Edit the telephone number using Dial Buttons [0] ~ [9].
- When you finish editing, press [STORE] Button.

- 6) Name Edit Mode

Edit the name using [UP]/[DOWN] Button and Buttons [0] ~ [9] and then press [STORE] Button.

```
ABD
0336308752
```

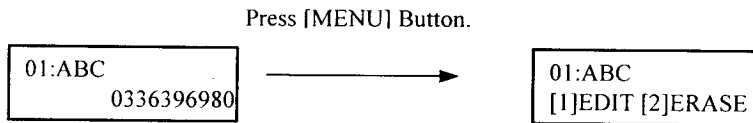
Note - In the initial LCD screen for Name Edit Mode, the first character of the name is blinking.

- Press [CLEAR] Button before Name Edit Mode and the LCD screen returns to Telephone Number Edit Mode.
- Move the blinking cursor to the location to be edited, using [UP]/[DOWN] Button, and edit the name using Buttons [0] ~ [9].
- To insert space in the middle of the name, press [CLEAR] Button on a character, or press [DOWN] Button at the end of the name.
- When you finish editing the name, press [STORE] Button.
- Store the edited telephone number in the same way as mentioned in "To Store the Telephone Number".

### 3.3.5 To Erase the Stored Telephone Number

3.3.5.1 To erase the telephone number when you select it directly with [1]LOCATION,

1) Press [MENU] Button and the following is displayed.



2) Press Button [2]. (ERASE Mode is selected.)

ERASE #01?  
 [1]YES [2]NO

- Press Button [1] and the telephone number on the designated location is cleared.

- Press Button [2], and the LCD screen moves to Step 1) and the selected telephone number is displayed.

3) Press Button [1].

Clear Memory  
 Waiting...

- The telephone number on the designated location is cleared.

3.3.5.2 To erase the telephone number when you select it with its name or [UP]/[DOWN] Button,

1) Move the cursor marked with ">" to the address to be erased, using [UP]/[DOWN] Button.

>01:ABC  
 02:ABD

2) Press [STORE] Button to check the stored telephone number.

01:ABC  
 0336306980

3) Press [MENU] Button and selectable EDIT/ERASE No. is displayed.

01:ABC  
 [1]EDIT [2]ERASE

4) Press Button [2]. (ERASE Mode is selected.)

ERASE #01  
 [1]YES [2]NO

- Press Button [1] and the telephone number on the designated location is cleared.

Clear  
 Memory Waiting...

- Press Button [2], and the LCD screen moves to Step 1) and the selected telephone number is displayed.

Note : To check the stored telephone number.

- Telephone numbers can be stored to each address up to 32 digits, and names up to 16 characters.
- Press [RECALL] Button first, and press [1]LOCATION or [2]NAME to select the telephone number you want to check.
- When you check the telephone number by selecting [1]LOCATION, the corresponding address, name and telephone number are displayed.

But, if the telephone number is stored in excess of 16 digits, you can check it by pressing [NAME] Button and selecting [1]EDIT.

- When you check the telephone number by selecting [2]NAME, only the corresponding address and name are displayed.

At this time, you can check the telephone number by pressing [STORE] Button.

But, if the telephone number is stored in excess of 16 digits, you can check it by pressing [NAME] Button and selecting [1]EDIT.

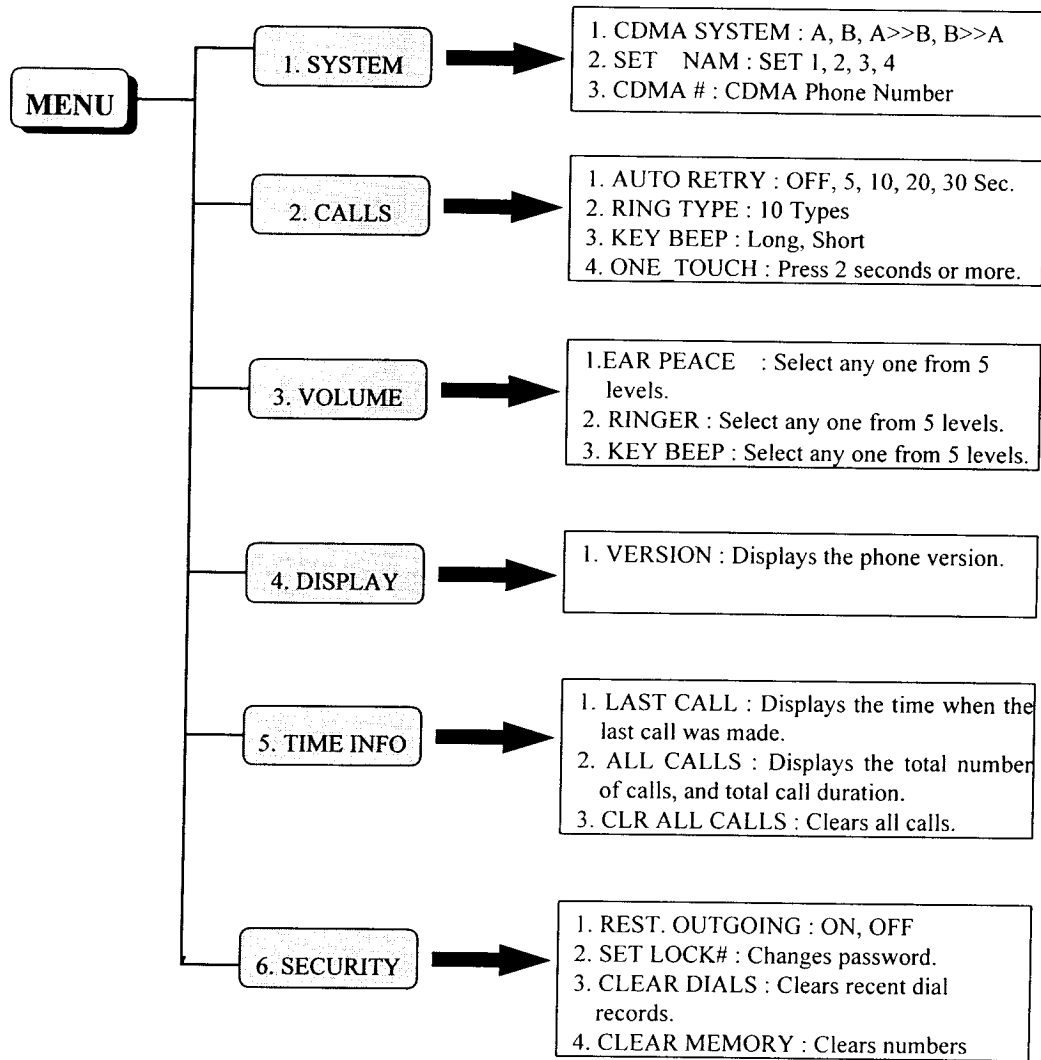
- If you only check the telephone number by selecting [1]EDIT, click Hook Switch to exit to standby state.
- When you want to check the name additionally, you can specify it up to 16 characters but can check only 13 characters.

But, when you check the telephone number by selecting [1]EDIT and then press [STORE] Button, the LCD screen changes to Name Edit Mode. Then, you can check up to 16 characters of the name.

If you exit the Edit Mode without editing, click Hook Switch. Alternatively, press [STORE] Button twice and press [1]YES Button to exit to standby state.

## 4. Using Menu Mode

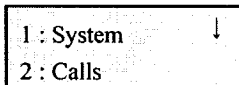
### ● Flow-Chart of Menu Mode Operation



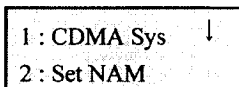
## 4.1 CDMA SYSTEM Selection

(This function allows you to receive roaming services.)

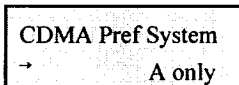
- Press [MENU] Button. Then, the LCD screen displays the following:



- Press Button [1] to choose SYSTEM Item. Then, the LCD screen displays the following:



- Press Button [1] to choose CDMA System Item. Then, the LCD screen displays the following:



- Search an item to select using [UP]/[DOWN] Button, and press [STORE] Button to store the item.

Note : SYS A ONLY : Available only in System A.

SYS B ONLY : Available only in System B.

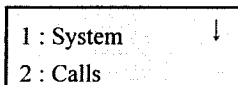
SYS A >> B : Basically uses System A, and can use System B if the System A is not connected.

SYS B >> A : Basically uses System B and you can use System A if the System B is not connected.

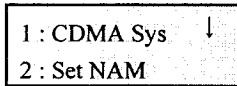
## 4.2 NAM Selection

(This function allows that the user who subscribes to 2 or more systems can select any one from the telephone number list he subscribes to.)

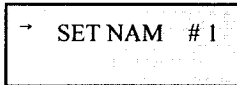
- Press [MENU] Button. Then, the LCD screen displays the following:



- Press Button [1] to choose System Item. Then, the LCD screen displays the following:



- Press Button [2] to choose SET NAM Item. Then, the LCD screen displays the following:

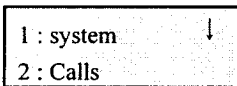


- Search an item to select using [UP]/[DOWN] Button, and press [STORE] Button to store the item.

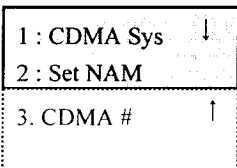
### 4.3 Self Phone Number Check Function

(This function allows the user to check telephone number of the WLL terminal being used.)

- Press [MENU] Button. Then, the LCD screen displays the following:



- Press Button [1] to choose SYSTEM Item. Then, the LCD screen displays the following:



- Press Button [3] to choose CDMA# Item. Then, the LCD screen displays the following:



- If you press [MENU] Button or when about 10 seconds pass after you checked the content, the LCD screen returns to standby state.

\* Note : Telephone number of the WLL terminal being used is displayed on the LCD screen.



#### 4.4 AUTO RETRY Function (AUTO RETRY)

(This function automatically retries a call within the time specified by the user, if the call is not connected due to traffic congestion of the service system.)

- Press [MENU] Button. Then, the LCD screen displays the following:

1 : System	↓
2 : Calls	

- Press Button [2] to choose CALLS Item. Then, the LCD screen displays the following:

1 : Auto Retry	↓
2 : Ring Type	

- Press Button [1] to choose AUTO RETRY Item. Then, the LCD screen displays the following:

AUTO RETRY every	
→	off

- Search an item for selecting by using [UP]/[DOWN] Button, and press [STORE] Button to store the item.
- Press [CLEAR] Button to return to the previous step and press [MENU] Button to return to standby state.

- Note : SET 5 SEC : Retries a call automatically after 5 seconds later if the call is not connected.  
 SET 10 SEC : Retries a call automatically after 10 seconds later if the call is not connected.  
 SET 20 SEC : Retries a call automatically after 20 seconds later if the call is not connected.  
 SET 30 SEC : Retries a call automatically after 30 seconds later if the call is not connected.  
 SET OFF : Does not retry a call even if the call is not connected.

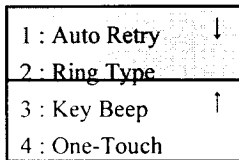
#### 4.5 KEY BEEP LENGTH ADJUST Function (KEY BEEP)

(This function allows you to change the duration of dial to keep beeping in WLL terminal.)

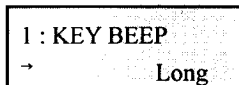
- Press [MENU] Button. Then, the LCD screen displays the following:

1 : System	↓
2 : Calls	

- Press Button [2] to select CALLS Item. Then, the LCD screen displays the following:



- Press Button [3] to select KEY BEEP Item. Then, the LCD screen displays the following:



- Search an item for selection using [UP]/[DOWN] Button, and press [STORE] Button to store the item.
- Press [MENU] Button to return to standby state.

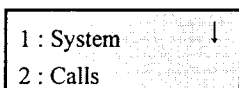
※ Note : SHORT : KEY TONE sound is transmitted for a short time.

LONG : KEY TONE sound is transmitted while the key is pressed.

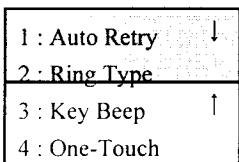
#### 4.6 ONE-TOUCH DIALING ON/OFF Function (ONE TOUCH)

(This function is used for turning on/off the function to make a call to the stored telephone number by one-touch. For example, if the telephone number 0123456789 is stored in Address 2, you can make a call by pressing Button [2] for 1 second or more in off-hook state.)

- Press [MENU] Button. Then, the LCD screen displays the following:



- Press Button [2] to select CALLS Item. Then, the LCD screen displays the following:



- Press Button [4] to select ONE-TOUCH Item. Then, the LCD screen displays the following:



- Search an item for selection by using [UP]/[DOWN] Button, and press [STORE] Button to store the item.
- If you do not want to select any item or want to return to standby state, press [MENU] Button.

☞ Note : ONE-TOUCH ENABLE : One-touch function is used.

ONE-TOUCH DISABLE : One-touch function is not used.

#### 4.7 WLL TERMINAL VERSION CHECK Function (VERSION)

(This function allows you to check software version of the WLL terminal being used.)

- Press [MENU] Button.
- Press Button [4] to select DISPLAY Item.
- Press Button [1] to select VERSION Item. Then, the LCD screen displays the following:

VERSION HWP-120.001
------------------------

- If you press [MENU] or [STORE] Button, or when about 10 seconds pass, after you checked the software version, the LCD screen returns to standby state.

#### 4.8 LAST CALL TIME CHECK Function (LAST CALL)

(This function displays the time when the last call was made.)

- Press [MENU] Button.
- Press Button [5] to select TIME INFO Item.
- Press Button [1] to select LAST CALL Item. Then, the LCD screen displays the following:

LAST CALL TIME 00 : 00 : 00
--------------------------------

- After checking the last call, If you press [MENU] or [STORE] Button, or when it passed about 10 seconds, the LCD screen returns to standby state.

#### 4.9 TOTAL CALL TIME CHECK Function (ALL CALLS)

This function allows you to check the total call duration and total number of outgoing calls.)

- Press [MENU] Button.
- Press Button [5] to select TIME INFO Item.
- Press Button [2] to select ALL CALLS Item. Then, the LCD screen displays the following:

0 Calls
TIME 00 : 00 : 00

- After checking the software version, If you press [MENU] or [STORE] Button, or when it passed about 10 seconds , the LCD screen returns to standby state.

Note : ALL CALLS : Displays the total call duration and total number of outgoing calls.

The call duration and the number of calls for ALL CALLS are counted from the last CLR ALL CALLS operation.

#### 4.10 CLEAR ALL CALLS Function (CLR ALL CALLS)

(This function allows you to clear the total call duration and total number of outgoing calls, to start counting anew.)

- Press [MENU] Button.
- Press Button [5] to select TIME INFO Item.
- Press Button [3] to select CLR ALL CALLS Item. Then, the LCD screen displays the following:

Clear All Calls ?
[1] YES [2] NO

- Press Button [1] to clear the total call duration and total number of calls, or press Button [2] not to clear them.

#### 4.11 OUTGOING CALL RESTRICT Function (RESTRICT. OUTGOING)

(This function allows you to restrict or not to restrict outgoing calls.)

- Press [MENU] Button.
- Press Button [6] to select SECURITY Item. Then, the LCD screen displays the following:

ENTER LOCK CODE ?  
- - - -

- Enter 4 digits of LOCK CODE. Then, the LCD screen displays the following:

1 : Rest. Outgoing ↓  
2 : Set Lock #

- Press Button [1] to select REST. OUTGOING Item. Then the LCD screen displays the following:

Outgoing Call ?  
→ Allow

- Choose Allow/Restrict for "Outgoing Calls?" using [UP]/[DOWN] Button, and then store it using [STORE] Button.

#### 4.12 LOCK NO. SET Function (SET LOCK#)

(This function is used to change the password.)

- Press [MENU] Button.
- Press Button [6] to choose SECURITY Item. Then, the LCD screen displays the following:

ENTER LOCK CODE ?  
- - - -

- Enter 4 digits of LOCK CODE. Then, the LCD screen displays the following:

1 : Rest. Outgoing ↓  
2 : Set Lock #

- Press Button [2] to select SET LOCK# Item. Then, the LCD screen displays the following:

ENTER NEW CODE  
- - - -

- Enter a new LOCK CODE.
- Press [STORE] Button to store the new LOCK CODE. Then, the LCD screen displays the following:

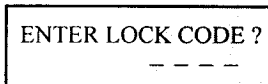
REENTER NEW CODE  
- - - -

- After checking the LINE CODE, press [STORE] Button to exit.

### 4.13 DIAL LIST CLEAR Function (CLEAR DIALS)

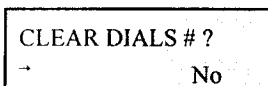
(This function is used for clearing the list of dials which have been made up to now.)

- Press [MENU] Button.
- Press Button [6] to choose SECURITY Item. Then, the LCD screen displays the following:



ENTER LOCK CODE ?  
- - - -

- Enter 4 digits of LOCK CODE.
- Press Button [3] to select CLEAR DIALS Item. Then, the LCD screen displays the following:



CLEAR DIALS # ?  
→ No

- Select YES or NO using [UP]/[DOWN] Button, and store it using [STORE] Button.

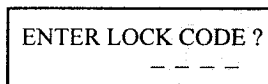
<sup>\*)</sup> Note : CLEAR DIALS YES : Clears the list of dials.

CLEAR DIALS NO : Does not clear the list of dials.

### 4.14 MEMORY CLEAR Function (CLEAR MEMORY)

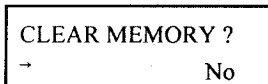
(This function is used for clearing the information stored in memory.)

- Press [MENU] Button.
- Press Button [6] to choose SECURITY Item. Then, the LCD screen displays the following:



ENTER LOCK CODE ?  
- - - -

- Enter 4 digits of LOCK CODE.
- Press Button [4] to select CLEAR MEMORY Item. Then, the LCD screen displays the following:



CLEAR MEMORY ?  
→ No

- Select YES or NO using [UP]/[DOWN] Button, and store it using [STORE] Button.

<sup>\*)</sup> Note : CLEAR MEMORY YES : Clears all the information stored in memory.

CLEAR MEMORY NO : Does not clear the information stored in memory.

## <Appendix>

### 1. Troubleshooting

Problem	What To Do
<ul style="list-style-type: none"> <li>• There is no indication on the LCD screen</li> </ul>	<ul style="list-style-type: none"> <li>• Make sure the terminal is turned on. If the switch is on, turn off the terminal and then turn it on again.</li> </ul>
<ul style="list-style-type: none"> <li>• “No Service” message is displayed on the LCD screen.</li> </ul>	<ul style="list-style-type: none"> <li>• The WLL terminal must be placed in the location where service coverage is available. If necessary, move the terminal to the serviced location.</li> </ul>
<ul style="list-style-type: none"> <li>• Your terminal beeps or you can hear nothing in the handset.</li> </ul>	<ul style="list-style-type: none"> <li>• Your handset is not properly placed. Place the handset normally.</li> </ul>
<ul style="list-style-type: none"> <li>• Battery indication is blinking “1”, and the terminal beeps periodically.</li> </ul>	<ul style="list-style-type: none"> <li>• The backup battery is discharged. Switch to the external power supply..</li> </ul>
<ul style="list-style-type: none"> <li>• There is no ring when a call comes.</li> </ul>	<ul style="list-style-type: none"> <li>• The ringer is switched off. Press [UP] button several times to adjust the ringer volume</li> </ul>

In case that simple remedy steps does not help, contact the local agency from where you have purchased the product, a service center or a qualified technician to solve the trouble.

## 2. FWT Technical Specifications

Classification		HWP-120	HWP-220
Air interface	Common air interface standard	IS-95B(IS-95A, TSB-74)	IS-95B(IS-95A, J-STD-008)
	Frequency	TX: 824 ~ 849MHz RX: 869 ~ 894MHz	TX: 1850 ~ 1910MHz RX: 1930 ~ 1990MHz
	Frequency accuracy	Fo <sup>±</sup> 300Hz	Fo <sup>±</sup> 150Hz
	TX output power	200mW	
	RX sensitivity	- 104dBm	
	Vocoder	8K/13K QCELP 8K EVRC	
	Channel bandwidth	CDMA 1.25Mhz	
	MOD/DEMOD	O QPSK/QPSK	
Battery backup	Type	Ni-Cd	
	Capacity	8.4V @ 2A	
	Conversation time	2 ~ 3 hours	
	Standby time	100 hours	
	Serial port	<ul style="list-style-type: none"> <li>· Data service purpose (Internet, Modem , PC fax)</li> <li>· Maintenance purpose</li> </ul>	
Physical	Dimension (D×W×H)	181×232×66(mm)	
	Weight (including backup battery)	986g	
Environmental	Operating temperature	-10 °C ~ +50 °C	
Power supply	Input power	110 ~ 240V(±20V), 50/60Hz	
	Output power	DC 12V @ 2A	
Etc	Accessories	<ul style="list-style-type: none"> <li>· Internal antenna: Dipole antenna</li> <li>· Power supply (SMPS)</li> <li>· External antenna (optional): 10dbi gain directional panel antenna</li> <li>· External Battery(optional): 9.6V @ 7A</li> </ul>	