

|                   |                                                                                                                        |                                                                                                                                                                               |
|-------------------|------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 6 : ALERTS        | 1 : MIN ALERT<br>2 : ROAM ALERT<br>3 : FADE ALERT<br>4 : LOW SIG ALERT<br>5 : CONNECT ALERT                            |                                                                                                                                                                               |
| 7 : DATA SERVICE  | 1 : RECEIVE MODE<br>2 : FLOW CONTROL<br>3 : CONNECT SPEED                                                              |                                                                                                                                                                               |
| 8 : CHANGE SYSTEM | 1 : PREF SYSTEM<br>2 : CHANGE NAM<br>3 : AUTO NAM<br>4 : PRL ID                                                        |                                                                                                                                                                               |
| 9 : MY NUMBER     |                                                                                                                        |                                                                                                                                                                               |
| 0 : SECURITY      | 1 : AUTO LOCK<br>2 : CHANGE CODE<br>3 : CHANGE BANNER<br>4 : RESTRICT<br><br>5 : RESET<br>6 : CLEAR<br><br>7 : VERSION | 1 : INCOMING<br>2 : OUTGOING<br>3 : MEMORY<br>4 : LONG DISTANCE<br><br>1 : CLR PHONEBOOK<br>2 : CLR SCHEDULE<br>3 : CLR CALL LOGS<br>4 : CLR HOME CALLS<br>5 : CLR ROAM CALLS |

## 2.4 BASIC FUNCTIONS

## 2.4.1 TO MAKE A CALL

- Enter a phone number.



**Note** : To modify the phone number you have entered :

- Press [ ] to erase the entire number and start over.



- Press [ ].

The indicator, [ ], appears on the display.



**Note** : • Press [ ] and [ ] to redial when “CALL FAILED” appears on the display or the line is busy.

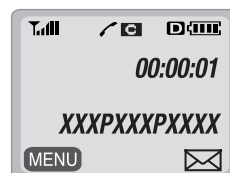
- If you activate the AUTO RETRY function, a call will be retried automatically the times you have selected. (refer to page 40)

- Press [ ] to end the call.

## 2.4.2 PAUSE FEATURE

You can dial or save a phone number with pauses for use in the automated systems where you need to enter a creditcard number, a social security number, and so on. This feature will be convenient when you are linked to ARS (Advanced Record System)

- Enter a phone number, then press [  ].



- Select one desired pause.

**In standby mode**

- 1 : STORE
- 2 : BY NUMBER
- 3 : HARD PAUSE
- 4 : ONE HYPHEN

**In receiving mode**

- 1 : SEND PHONE#
- 2 : SCRATCH PAD
- 3 : MUTE
- 4 : VIEW PHONE#
- 5 : VOICE PRIVACY

**Note** : Pause Definitions :

- To dial or save a phone number with pauses:  
When you select Hard Pause, the next numbers are sent by pressing [  ] key.
- Refer to “page 24” for more details.

- Press [  ] to dial or [  ] to store.



**Note** : Please refer to “page 28” for more details about storing a phone number.

## 2.4.3 TO ANSWER A CALL

- When the phone rings, press either send key, digit keys, or soft keys to answer the call.
- Press [  ] to end the call.



**Note** : A call is automatically answered after the preset number of ring tones, when Auto Answer is activated. (Please refer to page 40 for more details)

## 2.4.4 CALLER ID FUNCTION

This function allows you to know who is calling by displaying the caller's phone number with name, if available, in the phonebook.



**Note** : The caller ID is stored in the call log.

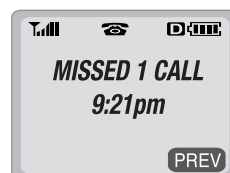
#### 2.4.5 CALL WAITING FUNCTION

This function notifies you of another incoming call when you are on a call by sounding a beep with the caller's phone number displayed on the screen.

- Press [  ] when you have another call, which puts the first caller on hold and answers the second call.
- Press [  ] again to switch back to the first caller.

#### 2.4.6 MISSED CALL DISPLAY

- Displays the number of missed calls along with the time of last missed call.



**Note** : Press [  ] or [  ] to clear up the missed call display.

#### 2.4.7 TO ADJUST VOLUME

You can adjust volume in either way, through the menu entry or the navigation button.

- Below follows the volume control in each mode through the navigation buttons.



**Note** : • During a call : Earpiece volume.  
• When the phone rings : Ringer volume.

### 2.5 DURING A CALL

#### 2.5.1 SEND PHONE#

This function enables your phone number to be transmitted automatically to a pager during a call without entering the number.

It depends on a pager service available in your area.

- While connected to a pager and asked to enter your phone number, press [  ] [  ].

#### 2.5.2 SCRATCH PAD

This function allows you to store a new phone number during a call while keeping the calling party from hearing the keypad tone.

- While on a call, press [  ] [  ].
- Enter a phone number, press [  ], then save the phone number in the phonebook. (refer to page 28)

#### 2.5.3 MUTE

The caller cannot hear you and any noise on your side, while you still hear his or her voice.

- Press [  ] [  ].



**Note** : To unmute, press [  ]

#### 2.5.4 VIEW PHONE#

This function allows you to view your phone number during a call. In 5 minutes, it will automatically return to the receiving mode.

#### 2.5.5 VOICE PRIVACY

With this function on, you can enhance voice privacy during a call.

## 2.6 TO MAKE AN EMERGENCY CALL

This is the enhanced 911 feature that puts your phone on the Emergency Call Mode when you dial the preprogrammed emergency number, 911. This function is still enabled even in the lock mode and out of service area.

### 2.6.1 E911 IN LOCK MODE

The 911 call service is still available even in the lock mode.

- Enter "911" and press [  ].



- The call connects.
- The phone exits the Emergency Mode in 5 minutes.



**Note** : When the call ends, the phone returns to the Emergency Mode.

### 2.6.2 E911 USING ANY AVAILABLE SYSTEM

- Enter "911" and press [  ].
- The call connects.
- The phone exits the Emergency Mode in 5 minutes.



**Note** : • When the call ends, the phone returns to the emergency mode.  
• The phone continuously attempts to receive service from any available system.

## 3. MEMORY FUNCTION

The phone has a memory function that enables you to store a large number of phone numbers, e-mail addresses.

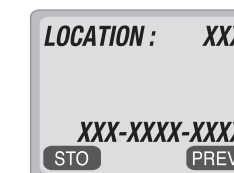
You can, under one name, save up to 3 different numbers, mobile/home/office, and make them secret for enhanced privacy.

In this chapter, you take a thorough lesson on ways to enter letters, numbers and symbols, which will make it convenient to use the memory function.

### 3.1 TO STORE A PHONE NUMBER

You can store up to 200 phone numbers in the phonebook.

- Enter a phone number (more than 3 digits) you want to store and press [  ] and [  ].



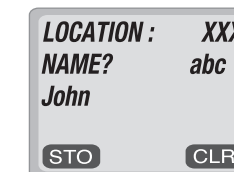
- The first available location number is displayed.

Press [  ] to store.



**Note** : • Enter the location number if you have a specific location number in mind or when you add another phone number to the location already put to use.  
• "XXX LOCATION IS USED" indicates that the location number already has a stored phone number.  
• Press [  ] to accept the existing name in the location number.

- Enter a name with digit keys (refer to page 30).



- Select one of the phone types; mobile/home/office and press [  ].



- Select "No" unless you want to make it secret and enter the lock code whenever you need to view the number and press [  ].

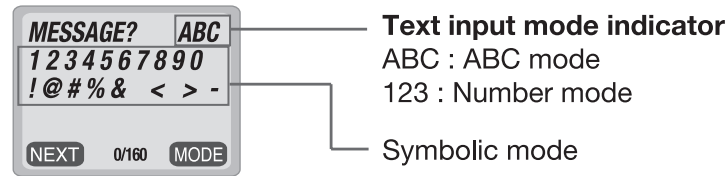


3.2 TO ENTER LETTERS, NUMBERS AND SYMBOLS

The input mode will be automatically activated when necessary to enter letters and numbers. As shown below, there are 4 available modes ; Standard input mode(abc), Numeric mode(123), and symbol mode.

The input mode indicator will appear on the upper right of the display when you need to enter letters and numbers.

Press [  ] to select the required input mode among the above 4 different modes, then enter letters and numbers you want.



The following table shows how you can utilize the available functions with each assigned key.

| KEY                                                                                                                                                                                    | FUNCTION                                                    |
|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------|
| <br>Mode                                                                                            | Press to change the modes.<br>[Abc][123][Symbol mode]       |
| Space                                                                                               | Press once to accept a word and add a space.                |
| Clear                                                                                               | Press once to delete a character to the left of the cursor. |
| Left, Right <br> | To move the cursor.                                         |

3.2.1 STANDARD INPUT MODE

The standard input mode allows you to enter letters, using a digit keys repeatedly.

- Input the letters you want to enter, using the keypad as follows.

| Keypad | 1 Repetitions | 2 Repetitions | 3 Repetitions | 4 Repetitions | 5 Repetitions |
|--------|---------------|---------------|---------------|---------------|---------------|
| 1      | 1             | .             | @             | -             |               |
| 2ABC   | A             | B             | C             | 2             | A             |
| 3DEF   | D             | E             | F             | 3             | D             |
| 4GHI   | G             | H             | I             | 4             | G             |
| :      | :             | :             | :             | :             | :             |
| 9WXYZ  | W             | X             | Y             | Z             | 9             |

You can change the input mode by pressing [  ].

- Press [  ] to add a blank.  
The cursor automatically moves to the next column in two seconds.
- Repeat until you enter all the letters you want.  
There is a 16-digit limit in the Name entry of the phonebook.
- Erasing letters.  
Press [  ] to delete one digit.  
Press and hold [  ] to delete the entire number.

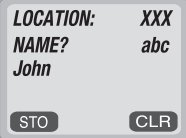
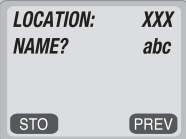


**Note** : Select Abc mode, by pressing [  ].

When you select this mode, the abc icon appears as a visual confirmation.

- “Find the key that corresponds to the letter you want to enter.”
- Press it as many times as needed for the letter to appear on the screen.
- To enter the name “John”:

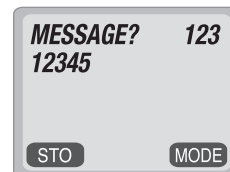
Press [  ] J  
Press [  ] [  ] [  ] o  
Press [  ] [  ] h  
Press [  ] [  ] n



### 3.2.2 NUMERIC MODE

This mode allows you to enter numbers.

- Press [  ] until a current input mode changes to the Numeric mode.



- Press a digit key to enter a number.

### 3.2.3 SYMBOL MODE

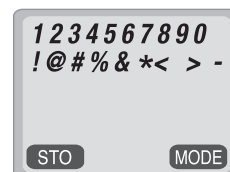
This mode allows you to enter symbols.

- Press the number above the symbol you want to enter.

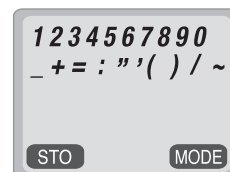


**Note** : Use the navigation key to view a different line of symbols.

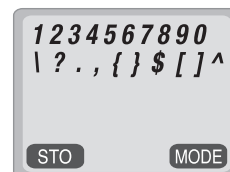
Press [  ],



Press [  ],



Press [  ],



## 3.3 TO MAKE A CALL THROUGH THE PHONEBOOK

### 3.3.1 ONE-TOUCH DIALING

The function allows you to dial a phone number (simply) by pressing its location number in the phonebook.

00~199 : Press and hold a location number of the phonebook number until a call is made successfully.



**Note** : • “Empty Location” will be displayed when there is no available phone number in the location.

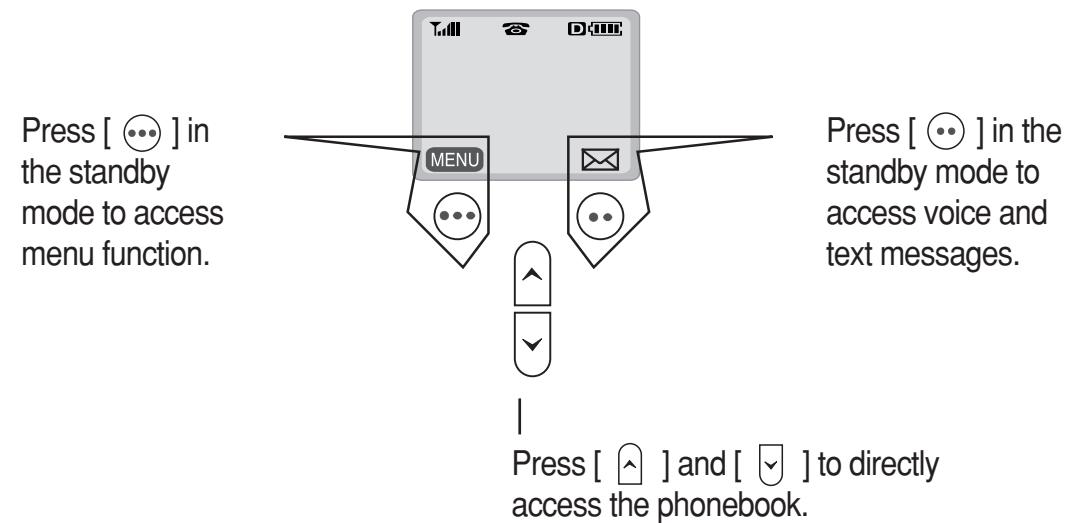
- The phone number won't be displayed when it is made secret.
- You can also make a call by pressing a location number and [  ].

## 4. MENU FUNCTION

In this chapter you will learn how to access the menu and enable each function and feature to customize your phone. Each function will be accessed through the menu and described in easy-to-follow instructions. This chapter will guide you to better understanding of upgraded functions and features, which will maximize the effective use of the state-of-the-art technologies. Hopefully it will make you feel much closer to this model.

### 4.1 PHONEBOOK

You can access the menu via [ ] in the standby mode. Once you entered the menu, both [ ] and [ ] function as shown in the bottom line of the display.



#### 4.1.1 CALL LOGS

The function allows you to review information of the 10 recently missed, answered, and dialed numbers and place a call simply by pressing [ ].

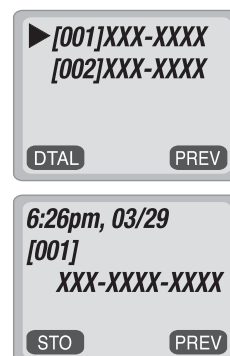
##### 4.1.1.1. MISSED CALLS

· Press [ ] [ ] [ ] [ ].

· Press [ ] to view the detail of a missed call when its number is highlighted.



**Note** : The detail includes date, time, and phone number of missed calls.



· Use the navigation key to scroll through the 10 missed calls.

· Press [ ] to dial the phone number of the missed call when selected.

#### 4.1.1.2. ANSWERED CALLS

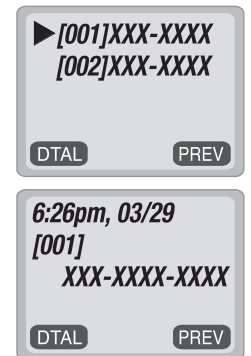
· Press [ ] [ ] [ ] [ ].

· Press [ ] to view the digital of an answered call when it's number is highlighted.

· Press [ ] to dial the phone number of the answered call when selected.



**Note** : The detail includes date, time, and phone number of answered calls.



#### 4.1.1.3. DIALED CALLS

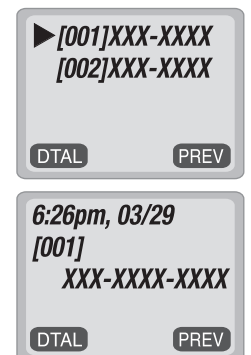
· Press [ ] [ ] [ ] [ ].

· Press [ ] to view the digital of a dialed call.

· Press [ ] to dial the phone number of the dialed call when selected.



**Note** : The detail includes date, time, and phone numbers of dialed calls.



#### 4.1.2 RECALLING BY LOCATION

This function allows you to recall a number from the phonebook by pressing its location number.

· Press [  ] [  ] [  ].

· Enter a location number.



**Note** : Use the navigation key instead of entering a location number to search through, and press [  ] to view the detail.

· Search a phone number with the navigation key.



**Note** : • [   ] scrolls through the phonebook.  
• [  ] edits the phone#.  
• [  ] returns to the previous page.  
• [  ] erases the number.

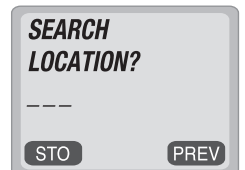
· Press [  ] to dial the phone number when selected.

#### 4.1.3 RECALLING BY NAME (ALPHA)

The function allows you to retrieve the phonebook by name or its character string and simply make a call by pressing [  ].

· Press [  ] [  ] [  ].

· Enter a name or its character string and press [  ] to sort out and display the searched names in an alphabetical order regardless of letter case.



**Note** : Use the navigation key instead of entering a location number to search through, and press [  ] to view the detail.

· Search the name you want to make a call to and locate a phone number using the navigation key.



**Note** : • [   ] scrolls through the phonebook.  
• [  ] edits the phone#.  
• [  ] returns to the previous page.  
• [  ] erases the number.

· Press [  ] to dial the number you search.

## 4.2 SETTING

### 4.2.1 AUTO RETRY

With this function on, a call is automatically retried either once, 3, or 5 times after a set time period.

#### 4.2.1.1. INTERVAL

· Press [ ] [ ] [ ] [ ].

· Select one of the options (Off, 10, 7, 5, 3 seconds) with the navigation key.  
And press [ ] to save it.

#### 4.2.1.2. REPEAT

· Press [ ] [ ] [ ] [ ].

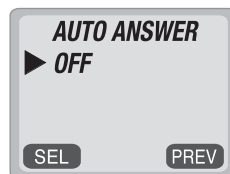
· Select one of the options (1 time, 3 times, 5 times) with the navigation key.  
And press [ ] to save it.

### 4.2.2 AUTO ANSWER

A call is automatically answered after the certain number of rings you set. It will be convenient when you have your phone in the hands-free car kit.

· Press [ ] [ ] [ ].

· Select one from Off/ 1 ring/ 3 rings with the navigation key.  
Press [ ] to save it.



**Note** : This function won't be activated when you select Slide bell or Silent as a ring mode.

### 4.2.3 ONE-TOUCH DIALING

This function allows you to dial a phone number with one touch pressing its location number.

· Press [ ] [ ] [ ].

· Select "Yes" or "No" with the navigation key.  
Press [ ] to save it.

### 4.2.4 VOICE PRIVACY

This function allows you to enhance voice privacy and keep from tapping during a call.

· Press [ ] [ ] [ ].

· Select either "Standard mode" or "Enhanced mode", if available.  
Press [ ] to save it.

### 4.2.5 BACKLIGHT

The display and the keypad can be back lighted for you to view the screen and recognize the keypad arrangement more easily even in a dark place.

· Press [ ] [ ] [ ].

· Select one of the following options ; Off, 10 sec, 20 sec, 30 sec, Off in day.  
Press [ ] to save it.



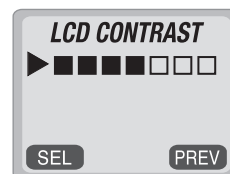
**Note** : • Off : Turn the backlight off.  
• 10 sec, 20 sec, 30 sec : Backlight on for 10, 20, or 30 seconds respectively after a touch on the keypad.  
• Off in day : Always off in a daytime.

#### 4.2.6 LCD CONTRAST

The LCD display contrast can be controlled in 7 levels.

· Press [  ] [  ] [  ].

· Adjust the LCD contrast for your better view and press [  ] to save it.



#### 4.2.7 LANGUAGE

This function permits you to select a language in which a letter is displayed on the screen.

· Press [  ] [  ] [  ].

· Select either “English” or “Spanish” and then, press [  ] to save it.



### 4.3 TONE

#### 4.3.1 RING MODE

This function alerts you of an incoming call in various modes as follows.

· Press [  ] [  ] [  ].

· Select one of the following options with the navigation key.



**Note** : • Ringer  
• Silent

· Press [  ].

#### 4.3.2 RING TYPE

You are to choose a ring type to inform yourself of an incoming call.

· Press [  ] [  ] [  ].

· Select one ring type that best fits your favor.

There are 13 different types available.



**Note** : • Different tones (1-6).  
• Different melodies (7-13).

· Press [  ].

#### 4.3.3 KEYPAD

This function enables you to control the keypad tone.

· Press [  ] [  ] [  ] to adjust the keypad volume.



**Note** : The keypad tone won't be heard when you have an alert for low battery.

· Adjust the keypad tone through the navigation key.

· Press [  ].



The FCC has granted an Equipment Authorization for this model phone with all reported SAR levels evaluated as in compliance with the FCC RF exposure guidelines. SAR information on this model phone is on file with the FCC and can be found under the Display Grant section of <http://www.fcc.gov/oet/fccid> after searching on FCC ID PP4HWP-2150.

Additional information on Specific Absorption Rates (SAR) can be found on the Cellular Telecommunications & Internet Association (CTIA) web-site at <http://phonefacts.net>. \*In the United States and Canada, the SAR limit for mobile phones used by the public is 1.6 watts/kg (W/kg) averaged over one gram of tissue. The standard incorporates a substantial margin of safety to give additional protection for the public and to account for any variations in measurements.



## <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.<br/>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 WLL.</li></ul>              | <ul style="list-style-type: none"><li>Your WLL is not properly placed. Place the WLL normally.</li></ul>                                                                                       |
| <ul style="list-style-type: none"><li>Battery indication is blinking, 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-2160                                                                   |
|----------------|-----------------------------------|----------------------------------------------------------------------------|
| Air interface  | Common air interface standard     | IS-2000 (IS-95B, TSB-74)                                                   |
|                | Frequency                         | TX: 824 ~ 849MHz                                                           |
|                |                                   | RX: 869 ~ 894MHz                                                           |
|                | Frequency accuracy                | Fo ± 300Hz                                                                 |
|                | TX output power                   | Typical 24dBm (23~25dBm)                                                   |
|                | RX sensitivity                    | - 104dBm below (at FER = 0.5%), Typical -106dBm                            |
|                | Vocoder                           | 8K/13K QCELP                                                               |
|                |                                   | 8K EVRC                                                                    |
|                | Channel bandwidth                 | CDMA 1.25Mhz                                                               |
|                | MOD/DEMODO                        | O QPSK/QPSK                                                                |
| Battery backup | Type                              | Ni-MH                                                                      |
|                | Capacity                          | 3.6V @ 1.4A                                                                |
|                | Conversation time                 | Minimum 2.5 hours                                                          |
|                | Standby time                      | Minimum 140 hours                                                          |
|                | Serial port                       | · Data service purpose (Internet, Modem , PC fax)<br>· Maintenance purpose |
| Physical       | Dimension (D × W × H)             | 197 × 172 × 62.5(mm)                                                       |
|                | Weight (including backup battery) | 792g                                                                       |
| Environmental  | Operating temperature             | -10 °C ~ +50 °C                                                            |
| Power supply   | Input power                       | 100~240V ±10%, 48~62Hz                                                     |
|                | Output power                      | 5.5V 1.2A                                                                  |
| Etc            | Accessories                       | · Internal antenna : Dipole antenna<br>· Power supply (SMPS)               |