

 **TELSON**
www.telson.co.kr

TDG-320



User Manual

LIMITED WARRANTY STATEMENT

1. WHAT THIS WARRANTY COVERS :

Telson offers you a limited warranty that the enclosed subscriber unit and its enclosed accessories will be free from defects in material and workmanship, according to the following terms and conditions:

- (1) The limited warranty for the unit and enclosed accessories shall be for a period of one(1) year from the date of original purchase. The remaining warranty period for the unit being repaired or replaced shall be determined by presentation of the original sales receipt for the purchase of the unit.
- (2) The limited warranty extends only to the original purchaser of the product and is not assignable or transferable to any subsequent purchaser/end user.
- (3) The limited warranty is good only to the original purchaser of the product during the warranty period as long as it is in the United States of America and Mexico.
- (4) The external housing and cosmetic parts shall be free of major defects at the time of shipment and, therefore, shall not be covered under these limited warranty terms.
- (5) Upon request from Telson, the consumer must provide information satisfactory to Telson to prove the date of purchase or exchange.
- (6) The customer shall bear the cost of shipping the product to the Customer Service Department of Telson. Telson shall bear the cost of shipping the product back to the consumer after the completion of service under this limited warranty.

2. WHAT THIS WARRANTY DOES NOT COVER:

- (1) Defects or damage resulting from use of the product in other than its normal and customary manner.
- (2) Defect or damage from abnormal use, abnormal conditions, improper storage, exposure to moisture or dampness, unauthorized modifications, unauthorized connections, unauthorized repair, misuse, neglect, abuse, accident, alteration, improper installation, or other acts which are not the fault of Telson, including damage caused by shipping, blown fuses, or spills of food or liquid.
- (3) Breakage or damage to antennas unless caused directly by defects in material or workmanship.
- (4) Alleged defects or malfunctions of the product if the Customer Service Department at Telson was not notified by the consumer during the applicable limited warranty period.
- (5) Products, which have had the serial number, removed or made illegible.

- (6) This limited warranty is in lieu of all other warranties, express or implied either in fact or by operations of law, statutory or otherwise, including but not limited to any implied warranty of marketability merchantability or fitness for a particular use.
- (7) Damage resulting from use of non-Telson approved accessories.
- (8) All plastic surfaces and all other externally exposed parts that are scratched or damaged due to normal customer use.
- (9) Products operated outside published maximum ratings.
- (10) Products used or obtained in a rental program.
- (11) Consumables (such as fuses).

3. STATE LAW RIGHTS:

No other express warranty is applicable to this product. THE DURATION OF ANY IMPLIED WARRANTIES, INCLUDING THE IMPLIED WARRANTY OF MARKETABILITY OR MERCHANTABILITY, IS LIMITED TO THE DURATION OF THE EXPRESS WARRANTY HEREIN. TELSON SHALL NOT BE LIABLE FOR THE LOSS OF THE USE OF THE PRODUCT, INCONVENIENCE, LOSS OR ANY OTHER DAMAGES, DIRECT OR CONSEQUENTIAL, ARISING OUT OF THE USE OF, OR INABILITY TO USE, THIS PRODUCT OR FOR ANY BREACH OF ANY EXPRESS OR IMPLIED WARRANTY, INCLUDING THE IMPLIED WARRANTY OF MARKETABILITY OR MERCHANTABILITY APPLICABLE TO THIS PRODUCT.

Some states do not allow the exclusion or limitation of incidental or consequential damages or limitations on how long an implied warranty lasts; so these limitations or exclusions may not apply to you. This warranty gives you specific legal rights and you may also have other rights, which vary from state to state.

4. HOW TO GET WARRANTY SERVICE :

To obtain warranty service, please call the following telephone number from anywhere in Mexico:

HANCEL S.A DE C.V

AD : Minas Palacio No. 42, Bodega 8 Col. San Antonio Zomeyucan c.p. 53750

Naucalpan, Estado de Mexico, Mexico

TEL : (52)55 5301-3368, 5301-7515, 5301-8232

FAX : (52)55 5301-3581, 5301-3490

in America:

www.telsonusa.net

Tel. 1-866-483-5766

Please call or write for the location of the Telson authorized service center nearest you and the procedures for obtaining warranty claims.

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A certain product may not be offered for sale depending on a region. Please inquire about it at the nearest Telson Electronics Co., LTD. branch or shop.

Menu map

NOTE: Numbers in parenthesis next to each item are the locations of the items in the menu structure. Numbers less than 10 can be used as "short cut numbers". Short cuts can be used to access menus quickly by pressing the numeric keys on the keypad after entering Menu Mode.



CALL INFO (1)

- All Calls (1-1)
- Missed Calls (1-2)
- Received Calls (1-3)
- Dialled numbers (1-4)
- Clear Logs (1-5)
- Call Timers (1-6)
- GPRS Info (1-7)



SONND(2)

- Bell/Melody(2-1)
- RingerVib(2-2)
- Effect Sound(2-3)
- Bell Volume(2-4)
- Effect Volume(2-5)
- Audio Profiles(2-6)



PDA (3)

- | | |
|-----------------|------------------|
| Schedule(3-1) | Find Schedule |
| MEMO(3-2) | Reservation Call |
| Alarm(3-3) | Anniversary |
| World Time(3-4) | |
| Calculator(3-5) | |



Settings (4)

Phone Setting(4-1)	Display
Call Setting(4-2)	Clock Setting
Divert(4-3)	Backlight
Network Setting(4-4)	Language
Security(4-5)	Software Version
Reset Settings(4-6)	Select Network
	SIM Password
	Handset Lock
	Handset Call Barring
	Network Call Barring



SMS (5)

Message Inbox(5-1)	Message Center
Message Outbox(5-2)	Message Lifetime
Send Message(5-3)	Message Format
Message Box(5-4)	Storage Status
Setting(5-5)	
Voice Mail(5-6)	Get Voice Mail Setting
Broadcast Message(5-7)	Read New Setting



PhoneBook(6)

View All(6-1)

Search(6-2)

Add Entry(6-3)

Add Speed Dial(6-4)

Copy All(6-5)

Delete All(6-6)

Settings(6-7)

Phone Memory(6-8)

My Phone Number(6-9)

Edit Groups(6-7-1)

Save nos. to(6-7-2)

GAME (7)

Cusion Tank(7-1)

Browser (8)

Home(8-1)

Resume(8-2)

BookMarks(8-3)

Setting(8-4)

Empty Cache(8-5)

Version Info(8-6)

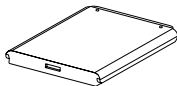
WAP Profile(8-4-1)

Cache Mide(8-4-2)

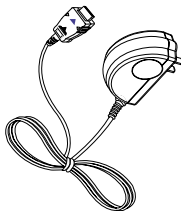
Package contents



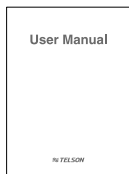
TDG-320 Phone



Lithium Ion Battery



Travel Charger



User Manual

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Specifications

SAFETY INFORMATION

Please read and observe the following information for the safe and proper use of your phone and to prevent any unanticipated damage. Also, keep the user manual in an accessible place at all the times after reading it.

Explosion, Shock, and Fire Hazards

- Unplug the power cord and charger during lightning storms to avoid electric shock or fire.
- Do not use your phone in high explosive areas as the phone may generate sparks.
- Do not put your phone in a place subject to excessive dust and keep the minimum required distance between the power cord and heat sources.
- Unplug the power cord prior to cleaning your phone, and clean the power plug pin when it is dirty.
- Do not damage the power cord by bending, twisting, pulling, or heating. Do not use the plug if it is loose as it may cause fire or electric shock.
- When using the power plug, ensure that it is firmly connected. If it is not, it may cause excessive heat or fire.
- Do not place any heavy items on the power cord. Do not allow the power cord to be crimped as it may cause fire or electric shock.
- Do not disassemble the phone.
- Do not place or answer calls while charging the phone as it may short-circuit the phone and/or cause electric shock or fire.
- If you put your phone in a pocket or bag without covering the receptacle of the phone (power plug pin), metallic articles (such as a coin, paperclip or pen) may short-circuit the phone. Always cover the receptacle when not in use.
- Do not short-circuit the battery. Metallic articles such as a coin, paperclip or pen in your pocket or bag may short-circuit the + and – terminals of the battery (metal strips on the battery) upon moving. Short-circuits of the terminal may damage the battery and cause an explosion.
- Do not disassemble the battery as it may cause electric shock, short-circuit, or fire.
- Do not expose the phone to excessive vibration or a sharp impact.
- Never place your phone in a microwave oven as it will cause the battery to explode.

General Warnings and Cautions

- Store the battery in a place out of reach of children.
- Using a damaged battery or placing a battery in your mouth may cause serious injury.
- Do not place items containing magnetic components such as a credit card, phone card, bank book or a subway ticket near your phone. The magnetism of the phone may damage the data stored in the magnetic strip.
- Do not hold or let the antenna come in contact with your body during a call.
- Talking on your phone for a long period of time may reduce the call quality due to heat generated during use.
- When the phone is not used for a long period of time, store it in a safe place with the power cord unplugged.
- Only use the batteries, antennas, and chargers provided by Telson. The warranty will not be applied to products provided by other suppliers.
- Using the phone in proximity to receiving equipment (i.e., TV or radio) may cause interference in the phone.
- Only authorized personnel should service the phone and its accessories. Faulty installation or service may result in accidents and consequently invalidate the warranty.
- Use only the antenna provided or approved by Telson. Unauthorized antennas, modifications or attachments may affect the quality of phone calls, damage the phone or result in a violation of FCC regulations.
- Do not use the phone if the antenna is damaged. If the damaged antenna gets in contact with the skin, it may cause a slight burn. Please contact Telson Authorized Service Center to replace the damaged antenna.
- Do not use the phone in areas where its use is prohibited. (For example: aircraft).
- Do not expose the phone to high temperatures or high humidity.
- Do not immerse your phone in water. If this happens, turn it off immediately and remove the battery. If the phone does not work, take it to a Telson Authorized Service Center.

GENERAL INFORMATION

Security code

To prevent unauthorized use of your phone and/or altering of settings, some of the functions are designed to operate only by entering the security code. The factory set default security code is last 4 digits of your phone number. To avoid unauthorized use of your phone, change the code in the SETTING menu. Keep the new code secret and in a safe place which is separate from your phone.

Battery

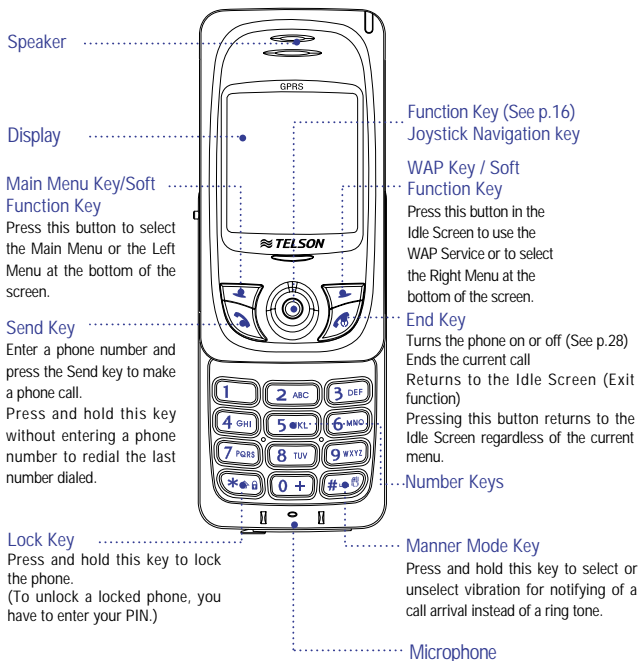
Li-Ion battery LBTC8100ME/LBEC8100ME is the re-chargeable battery available for your phone.

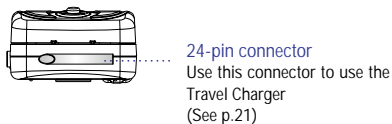
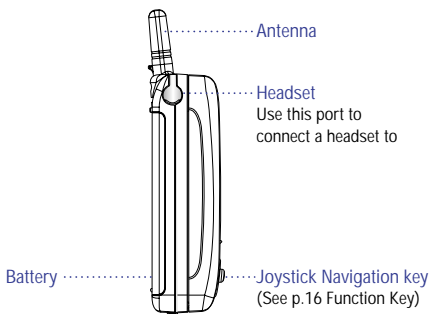


WARNING!: Use only batteries, chargers and accessories approved by the phone manufacturer. The use of any other types will invalidate any approval or warranty applying to the phone, and may be dangerous.

1. YOUR PHONE

Phone components



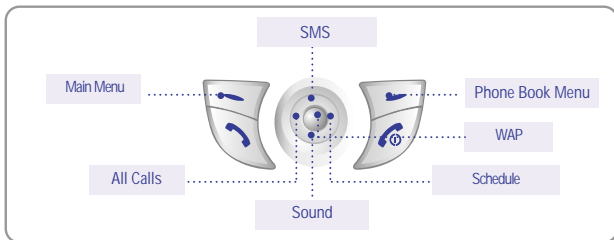


Note








- Since the connector can suffer an electrical short circuit from coming into contact with metal, do not remove the rubber covers.
If the phone turns off due to an electric short circuit, remove and re-install the battery and turn the phone on again.

Button functions

1. On the Idle Screen

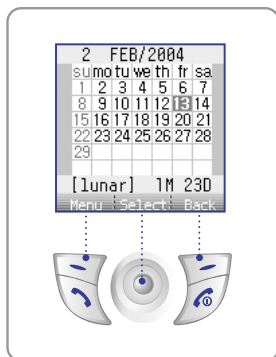



Key	Function
	<ul style="list-style-type: none"> • Launches the Main Menu 1.Call Info , 2.Sound 3.PDA, 4.Setting, 5.SMS 6.Phone Book , 7.Game , 8.Browser
	<ul style="list-style-type: none"> • All Calls: Launches the Call History in the Idle Screen.
	<ul style="list-style-type: none"> • Launches the SMS menu. (See p.41) • Scroll the screen & move up: Provides a screen scroll function to scroll up the screen to display menus and a move up function.
	<ul style="list-style-type: none"> • Melody: You can select Melody in the Idle Screen. • Scroll the screen & move down: Provides a screen scroll function to scroll down the screen to display menus and a move down function.
	<ul style="list-style-type: none"> • Scheduler: Launches the Scheduler in the Idle Screen.
	<ul style="list-style-type: none"> • Select Function: By pressing this button you can select a menu or function. • Middle Soft Key (OK) • [Long-press]: Launches WAP • [Short-press]: Select


- Move to an item by using the Joystick key and press the  to launch the function.
A hot key menu directly launches a function without accessing the corresponding menu.
In the Ready menu, press the , , , ,  and  to launch.


2. On the Menu Screen


(Example: Scheduler)





 Selects the bottom left item on the LCD screen.


 Selects the bottom right item on the LCD screen.

 Moves left

 Moves up

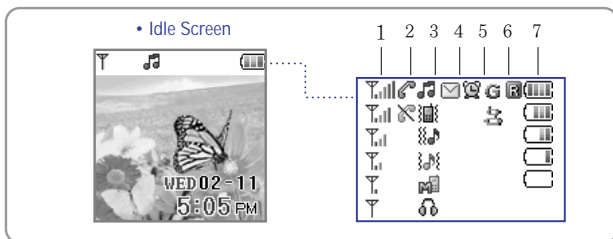
 Moves down

 Moves right

 Selects an item or Enable or Disable

ICON DEFINITIONS

1. Status Screen Icons



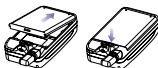
2. Icons

Icon	Description
	Signal strength of the service area
	Good Not Good Not in the Service Area
	Appears while attempting a call
	Attempting a Call Disconnected
	Appears when ring tone is selected
	Bell Vibration Bell and Vibration
	Bell after Vibration Manner Mode Ear Jack
	Appears when an SMS arrives.
	GPRS Connection GSM Connection
	Appears when the Alarm function is selected.
	Appears when the Roaming service is selected.
	Shows the remaining battery charge.
	High Mid Low
	Charge Required

2. GETTING STARTED

Installing and removing the battery

INSTALLING THE BATTERY



- Remove the battery from its protective packaging.
- Insert the bottom of the battery into the opening on the back of the phone.
- Press the top of the battery down until it “clicks” firmly into place.

REMOVING THE BATTERY



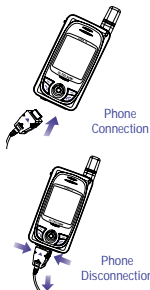
- Push the release button towards the top of the phone.
- Remove the battery by lifting it with the two (2) finger grips located on each side of the battery .



Warning! Before removing the battery, always make sure that the phone is switched off first.

Charging the battery

CHARGING THE BATTERY



Since the battery is not fully charged when you purchased the phone, please fully charge it prior to use.


1. Remove the rubber packing on the bottom of the phone.
2. Push the charger plug into the slot until it is fully inserted with the arrow on the charger facing up. You may void your warranty if you incorrectly insert the charger. Follow these instructions.
3. Plug the charger into an appropriate electrical outlet. (A red light will appear on the charger)
4. When you disconnect the charger from your phone, remove it by tightly holding both sides of the connector and pulling it out of the phone.

USING BATTERIES





1. Precautions for Battery Use

1. Charge your battery only with a charger approved by the phone manufacturer.
Never use a battery not approved by the phone manufacturer because it may cause damage to your phone, or may even explode.
2. Keep the charger and battery clean.
If there are strange substances on any of the metal parts, this may prevent the battery from charging.
3. Do not disassemble the battery or charger. Do not leave the battery near a fire.
There may be a danger of explosion.
4. Do not cause an impact to the battery and do not drop it.
This may affect and reduce the battery lifetime.
5. Keep the battery at room temperature (5~35°...).
Leaving the battery in a hot or cold place will reduce the capacity and life of the battery.
For long-term storage, separate the battery from the phone.
6. When the operating time (talk-time and standby time) is shorter than half of the optimal operating time, it is time to buy a new battery.
The battery can be charged and discharged repeatedly but it will eventually wear out.
7. A used battery must be handled as hazardous waste.
The battery includes recyclable metals.

2. Battery Charge Display

1. When the battery charge is low, the Battery icon '  ' blinks and the 'Low Battery Warning! Charging Required' message appears on the phone screen with a warning sound.
2. When the battery is completely discharged, the 'Battery Empty. Phone Turning Off' message appears and the mobile phone is turned off.

3. Battery Charge Status

			
Completely Charged	Insufficiently Charged	Charging Required	Completely Discharged

BATTERY USAGE TIME	
Talk and standby times for fully charged batteries.	
Status \ Type	Standard
Talktime	60 ~ 100 mins
Standby	80 ~ 120 hrs

TalkTime (talking, messaging, Internet access, downloads, and data connectivity) and standby time may vary depending on conditions.

BATTERY CHARGING TIME	
Charging times for fully discharged batteries.	
Type	Standard
Time	140 mins

Charging time may vary depending on charging conditions.
Charging may not occur in extreme hot or cold conditions. Charge the battery at room temperatures.


USING THE SIM CARD

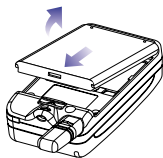
• Installing and Removing the SIM Card

- When the SIM card is improperly installed or the SIM card is damaged, the "Insert Card" message appears on the screen. If the card is improperly installed, remove the SIM card and insert it again. If the SIM card is damaged, contact your card provider.

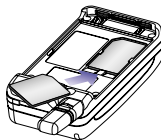
- When there is no installed SIM card, an "Insert Card" message appears.

Turn the phone off and insert the card

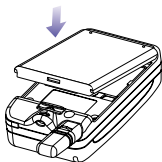
- When a SIM card is installed, the "Enter PIN Code" message appears on the screen. Enter the number supplied by the card provider that is longer than 4 digits, and press  (OK).
- If you enter an incorrect PIN 3 times in succession, the SIM card is locked. The "PIN Is Blocked" message appears and the "Enter PUK" message appears requiring the PUK code.
- In this case, enter the PUK code supplied when you purchased the card. If you enter an incorrect PUK code 10 times in succession, the card is locked.



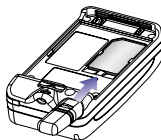
1. Remove the Battery



2. Insert the SIM Card



4. Install the Battery





3. Insert the SIM Card



Note

- Please take care when handling the SIM card. Rubbing or scratching the surface easily damages the SIM card.
- When not using the mobile phone, keep the SIM card out of reach of children.

• PIN

There are several PIN codes used for the mobile phone and the SIM card. These PIN codes prevent unauthorized use of the mobile phone and the SIM card. If the PIN is required hereafter, enter the PIN and press the  (OK) key (The PIN is displayed on the phone as "*****"). If you enter a wrong number, press  (CLR) to delete the number and enter the correct number.

• SIM PIN

A PIN (Personal Identification Number, 4 ~ 8 digits) is required to use the phone when the R-SIM card is installed. A PIN is normally supplied with the R-SIM card.

4. If you select PIN Enable in the 'Settings Menu' (see p.53), a PIN is required whenever you turn the phone on.




If you enter an incorrect PIN 3 times in succession, the R-SIM card is locked.

To unlock a locked card, refer to the following description about R-SIM PUK.

• SIM PUK

A PUK code (PIN unlock number, 8 digits) is used to unlock a locked PIN.

You can unlock a locked PIN in the following way.

1. When you turn the phone on, the "Enter PUK Code" message appears asking you to enter the PUK code.
2. Enter the correct PUK code and press  (OK) and unlock the locked R-SIM card.
3. When a new PIN code is required, enter the new PIN and press  (OK).
4. Enter the new PIN again and press the  (OK).

 **Note**



- A PUK code may not be supplied with the PIN when you purchase the card.
 - To unlock a locked PUK code, contact the card manufacturer or your card provider.
-
- If you enter an incorrect PUK code 10 times in succession, the R-SIM card is invalidated so that you cannot use the card anymore and you have to replace the card with a new one.
 - When the R-SIM card is invalidated due to 10 successive PUK code inputs, the 'Access Denied' message appears on the phone.
 - When the confirmed new PIN is different from the first one, the 'PIN Inconsistent' message and the 'Enter PUK Code' message appears again asking you to re-enter the PUK code.
- Since this is not a problem caused by an incorrect PIN, you can use the card even after 10 'PIN Inconsistent' messages appear, provided that you have entered the correct PUK code when the "Enter PUK Code" message appears. That is, you can unlock the locked PIN by entering the correct PUK code.

 **TIP**

You can unlock a locked PIN and use the phone by entering the PUK code as above. The card is locked when you successively enter an incorrect PIN. However, you can use the card as long as you don't enter an incorrect PUK code 10 times in succession. Therefore you can create a new PIN even if you forget the PIN. If you enter an incorrect PIN three times in succession when the PIN is required, the PUK Code is requested. At this time enter the PUK code supplied when the card was purchased to create a new PIN. At this time, if you enter a correct PUK once, 10 incorrect PUK codes are counted from that time on, and you should take care not to enter successive incorrect PUK codes.

• CALL


- When a SIM card is installed,

- If PIN Enable is selected for the card, a PIN is required when the phone is turned on. Pressing  at this time shows the Emergency List.
- To end an Emergency Call, press the .

- When a SIM card is in the Access Denied status,

- When an Access Denied SIM card is inserted, turning on the phone to make an Emergency Call displays the 'NO SIM CARD' message.

- When no SIM card is installed,

- When there is no SIM card, an animation is displayed showing that the insertion of the card is required. In this state, only Emergency Calls (112) are allowed.
- To end an Emergency Call, press .



Note


- When you insert the SIM card, you have to reset the phone.

4. BASIC FUNCTIONS



TURNING THE MOBILE PHONE ON AND OFF

Turning the phone on


Open your phone.



Press and hold .

As soon as the phone is powered on, the initial graphic images will be shown in this order.

- When the phone is in Manner Mode or Vibration Mode,  appears with vibration.
- In Lamp mode,  is displayed.


Turning the phone off

Press and hold  for 1.5 seconds or longer, to turn off the phone.



 **Note:** Press and hold  until the ending graphics appear. If the phone will not properly power off, remove and reinstall the battery. Then, you can turn the phone back on when you are ready.

MAKING AND ANSWERING CALLS

• Dialing


When the Idle Screen is displayed, enter the area code and the phone number and press .

- When you have entered a wrong number, press  to erase the last digit entered.

- When you have finished your call, close the phone or briefly press .
- Pressing  during a call, allows the use of In-Call Functions.

• Dialing with Recent Call History

Up to 10 recent Received, Dialed and Missed calls are saved and displayed.


- Press  to display the call history.
- Received and Missed numbers are recorded only when you have subscribed to the Caller Identification Service.


• Dialing with Speed Dial

You can dial by pressing a preset Speed Dial Number and pressing without entering the complete phone number. You can configure up to 8 Speed Dials.

- **1-digit address (2-9):** Press and hold down a speed dial number.

• Answering a Call

- When a call arrives, you can answer the call by opening the phone or pressing,  or pressing any key while the slide is opened.

When you have finished your call, close the slide or press .



The call time blinks and then the Idle Screen appears.

- When you have subscribed to the Caller Identification Service,
 - When a call arrives, the phone number of the caller is displayed. If the number is saved in the Phonebook, the Name of the corresponding Address is displayed.
 - When you miss a call, the number and time of the call is displayed.

In-Call Functions

- **Adjusting the Earpiece Volume**



You can adjust the earpiece volume by 5 levels.

- During a call, if you want to adjust the earpiece volume, press  and .

- For descriptions to adjust the earpiece volume in the Idle Screen, refer to p.46.



- **Hold**

You can place the current call on hold when a new call arrives.

- During a call, press .
- Press  to answer the new call.



- **End All Call**

You can disconnect all calls that may be connected with more than 3 persons.

- During a call, press .
- Press  to disconnect all calls.

- **Muting**

During a call, you can temporarily switch your phone's microphone off so that the other party cannot hear you.

- During a call, press .
- Press  to switch off the microphone of the phone.



- **DTMF ON/OFF**

You can switch DTMF tone on/off.

- During a call, press .
- Press  to switch DTMF time on/off.

- **Move to the Main Menu**



You can use the Main Menu during a call.


- During a call, press .
- Press  to use the Main Menu.

Idle Screen Functions

• Configuring Manner Mode

You can configure Ring Tone Vibration, Key Tone Mute and Manner Mode.


- Open the phone and press and hold  for a short while.
- Press and hold  for a short while, to disable this function.

When Manner Mode is disabled,  disappears.

- Once Manner Mode is selected it remains even after you turn the phone off and on.
- You can use Manner Mode when you are in places where silence is required as public places or auditoriums.

• Configuring Lock Mode

You can lock the phone with one-touch. When your phone is locked, you can unlock your phone by entering the PIN.

- Open the phone and press and hold  for a short while.
- If you enter the saved PIN, the locked phone is unlocked.

- The PIN is preset to '1234'.
- The 'Handset Lock' message appears.
- If Lock Mode is configured, the 'Enter Lock' message appears requiring the PIN when you move to the menu.

• Text input

KEYS FOR NUMBERS/LETTERS	
The following table shows letters/numbers displayed on screen when you press the corresponding keys.	
	0
	1, ., ', - ? ! @
	2, a(A), b(B), c(C)
	3, d(D), e(E), f(F)
	4, g(G), h(H), i(I)
	5, j(J), k(K), l(L)
	6, m(M), n(N), o(O)
	7, p(P), q(Q), r(R), s(S)
	8, t(T), u(U), v(V)
	9, w(W), x(X), y(Y), z(Z)

Key Functions

: Press to scroll and select a text entry mode.

	(Type Text): In T9 mode, press one key per letter to Input text.
	(Type Numbers): In 123 (Numbers) mode, press once to Input numbers.
	(Next): In T9 mode, press to display other matching words.
	(Punctuation): In T9 mode, press to insert punctuation in a word and complete a sentence.
	(Space): Press to complete a word or insert a space.
	(Case): Press to cycle through lower case, upper case, or mixed mode
	(Clear): Press to delete a single space or character. Press and hold to delete entire words .

• Functional Key

Menu
(Changes the
Text Input Mode)



Delete



• Menu (Changes Text Input Mode, Saves Entered Text.)

1. Accept text: Saves the entered text.

- Text Input Mode

2. T9 Russian: T9 Russian Mode


3. T9 English: T9 English Mode



4. Multi-tap: Letter Mode


5. Numeric: Number Mode

6. Symbols: Symbol Mode


Inputting capital/lower English text





 Press an alphanumeric key repeatedly until the desired character appears in the edit window.

Characters appear one after another as follows  ,  .


- Press  key to change to other character input mode.






To continuously enter alphabet that is located on a same key.

wait for 5 seconds after input to be automatically entered or press  key to move the cursor.


- To insert a blank space, move the cursor using  key or press  key to select a blank character among the special character set.
- To delete the entered symbol, press .
- Press and hold  to delete all texts.


Inputting numbers


 Press the corresponding alphanumeric key.






- Press  key to change to other character input mode.
- To insert a blank space, move the cursor using  key or press  key to select a blank character among the special character set.
- Press  key to erase the entered character one by one.
- Press and hold  key to erase all entered characters.

Inputting Special Characters

Press  key from all input mode.

Move the cursor to the desired character by using  keys and press



 key to select the special character in the edit window.

- Press  key to go back to the previous input mode from the special character input mode.
- To insert a blank space, move the cursor using  key or press  key to select a blank character among the special character set.
- Press  key to erase the entered character one by one.
Press and hold  key to erase all entered characters.



Input mode

Changing input modes:



T9 Mode

- To use T9 input mode, press and hold .
- Press  then select Entry mode, then select T9 mode.


ABC Mode

- Press  then select Entry mode, then select ABC mode.
- Press and hold .

123 (Numbers) Mode

- Press  then select Entry mode, then select 123 mode.
- Press and hold .



Note:  : You can select capital/ small letters by pressing the Manner mode key.


Entering Information Using T9

T9 is a quick way to enter text. Using an internal dictionary, T9 predicts the word you are trying to enter. Press the corresponding key once to enter the letter. For instance, to enter BALL, press 2, 2, 5, 5. If the word does not appear, press NEXT to see other matching words.

T9 Text Input

Edit Short Messages and Phonebook entries using T9 text input.

Using the NEXT Key

After you have finished typing a word, if the word displayed is not the word you want, press  to display additional choices.

For example, follow these steps:

1. Press:    .
2. Display: Good
3. Press: 
4. Display: Home, Gone, Hood.....

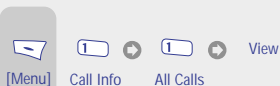
5. MENU FUNCTIONS



1. Call Info

All Calls (1-1)

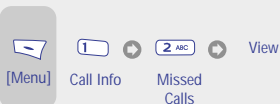
- Using this menu, you can view all call records.



- The call record shows received, dialed and missed calls.
- Numbers not configured in the Phonebook are represented by the caller's phone number and the name is represented by 'None'.
- To save a phone number, press [Menu] in the Call Record.
- You can directly view the call record by pressing in the Idle Screen.
- Pressing displays the call record.
- You can select a number from the call record and make a call with the number by pressing .

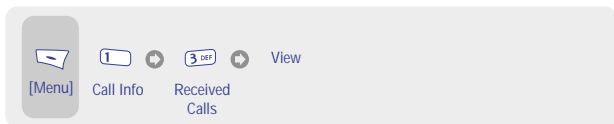
Missed Calls (1-2)

- You can view the numbers of missed calls.



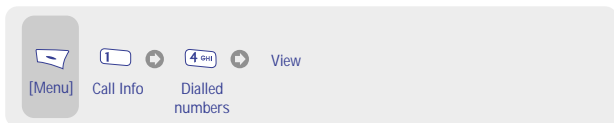
Received Calls (1-3)

- You can view the numbers of all received calls.



Dialled numbers (1-4)

- You can view dialed numbers.



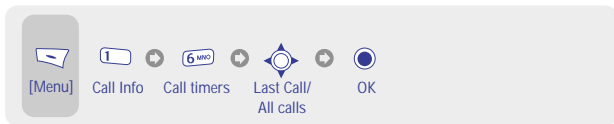
Clear logs (1-5)

- You can delete all call records.



Call timers (1-6)

- You can view the call timers that represent the total call time and the last call time.



GPRS Info (1-7)

- GPRS Info



1. **Current Connection:** Menu deleted
2. **All Connections:** Total amount of traffic
3. **Last Connection:** The amount of traffic of the last connection
4. **Clear Logs:** Deletes all GPRS Info records

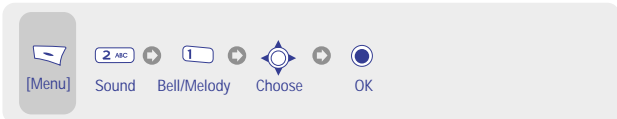


2. Sonnd

Using this menu, you can configure the bell and the volume of the phone.

Bell/Melody (2-1)

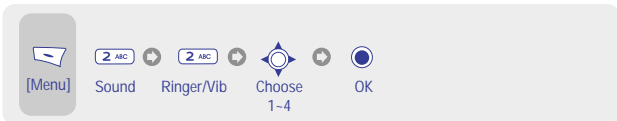
You can select one of 10 melodies.



- If an item from the Bell/Melody list is selected, the Bell/Melody is played so that you can listen to it before selecting it.
- The Bell/Melody continues to play until the item is unselected.
- When melodies have been downloaded through WAP or PC Sync., the downloaded melodies are added to the melody list that originally consists of the default melodies.
- To delete a downloaded melody, press . A confirmation message appears. (You cannot delete default melodies.)

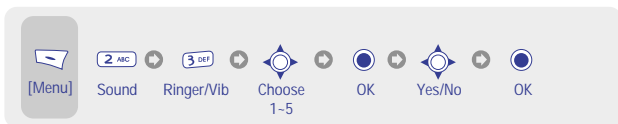
Ringer/Vib (2-2)

- You can select Bell Only, Vib. Only, Vib Then Bell, or Lamp.



Effect Sound (2-3)

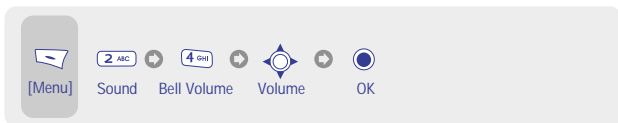
- You can decide whether to use various sound effects.



1. Key Tone : You can enable or disable the Key Tone.
2. Power On/Off : You can enable or disable the Power On and Off Sounds.
3. Folder On/Off : You can enable or disable the Slide Open and Close Sounds.
4. Warning Message : You can enable or disable the Warning Message Sound.
5. OK Message : You can enable or disable the OK Message Sound.

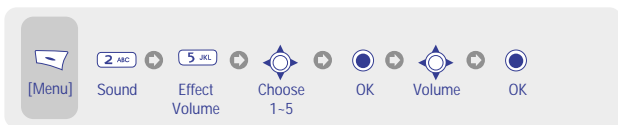
Bell Volume (2-4)

- You can adjust the bell volume.



Effect Volume (2-5)

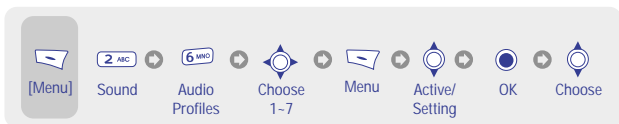
- You can configure the volume of the various sounds.



1. Key Tone, 2. Power On/Off, 3. Folder On/Off, 4. Warning Message, 5. OK Message

Audio Profiles (2-6)

You can configure the audio profiles.



- Select Normal, Meeting, Outdoor, Car or Silent.
- Select Bell/Melody, Ringer/Vib, Effect Sound, Bell Volume or Effects Volume

For more information, refer to pages 45~47.

- You can rename and save User1 and User2.

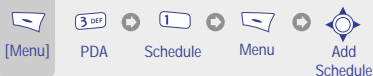


3. PDA

Schedule (3-1)

- Using this menu, you can easily manage anniversaries, important appointments and your schedule.

1. Add Schedule



- TIME** : Press , configure the time of the selected data (HH:MM) using the number keys and press [OK].
- TITLE** : Press and enter the title. (Refer to the Text Input Mode on page 33)
- CONTENTS** : Press and enter the description.
- ALARM** : Configure whether to set the alarm (ON/OFF) by pressing .
- MELODY** : Select one of the melodies (01~10) by using .
This menu is only configurable when ALARM is configured to 'ON' .
- When you finish the configuration, press to save the changes and to return to the previous screen.
- The configured date is represented by the icon.

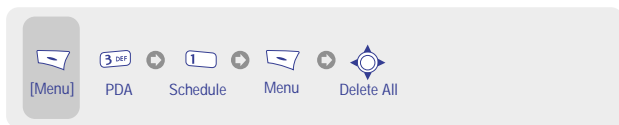
2. Add Dday




- When a D-day is configured, the configured date is represented by .

3. Delete All

- The function deletes all schedules.



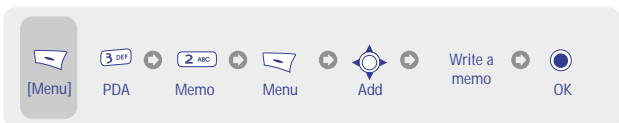
To view your schedule

- Press  on a date. The schedule list will be displayed.

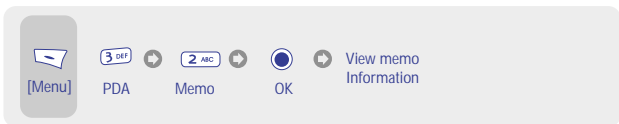
MEMO (3-2)

- You can easily record a memo whenever and wherever you want.

Text Input for New Memos



Viewing Saved Memos

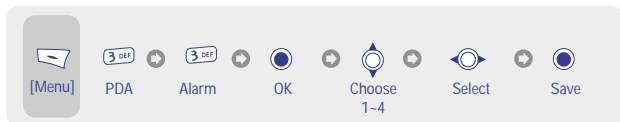


SUB MENU

1. **Add** : Adds a new memo.
2. **Delete** : Deletes the selected memo.
3. **Delete All** : Deletes all memos.


Alarm (3-3)

- You can configure the alarm for a specified time.




1. **AM/PM** Select either AM or PM.

2. **Time** Configure the alarm time.

- Select an item by using  and enter the time by pressing the number keys.

3. **Interval** Configure the alarm interval.

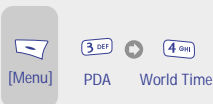
- Configure using .
- **Once** : The Alarm goes off once.
- **Daily** : The Alarm goes off at the same time everyday.
- **Weekday** : The Alarm goes off at the same time every weekday.

4. **Tone** You can select one of the 10 melodies and configure the alarm sound using the selected melody.


5. **Set** Select either On or Off.

World Time (3-4)

- Using this menu, you can check the current time for the major cities around the world.



Display Order	City	Display Order	City
1	Beijing	11	New York
2	Seoul	12	Santiago
3	Adelaide	13	Rio
4	Sydney	14	London
5	Auckland	15	Paris
6	Honolulu	16	Athens
7	Anchorage	17	Moscow
8	Los Angeles	18	Tehran
9	Denver	19	Karachi
10	Mexico	20	Delhi

- Move to another city by using .
- The current time is always displayed at the bottom of the screen.

Calculator (3-5)

- This menu provides a calculator function including memory save and accumulation functions.

<To calculate 3 X 5>



Key	Operation
UP	+ Addition
RIGHT	/ Division
DOWN	- Subtraction
LEFT	X Multiplication
*KEY	Decimal point
OK	= Equal
#KEY	AC Memory recall

- You can use the operators for calculations.
- You can enter up to 13 digits for a number. The result of a calculation has to be smaller than 8 digits.
- Press the key briefly to delete the last digit.



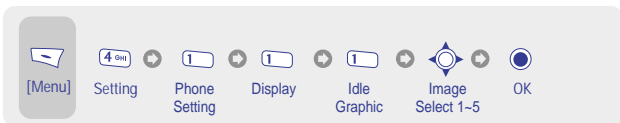
4. Setting

Phone Setting (4-1)


Display (4-1-1)

Idle Graphic (4-1-1-1)

- You can configure the image to be displayed on the Idle Screen.

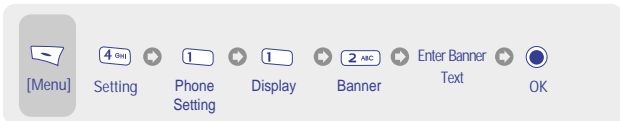


SUB MENU

1. **List** : You can select one from the Animation list 1-5.
2. **Image** : You can select one from the Animation preview 1-5.
3. When images have been downloaded via WAP or PC Sync., the downloaded images are added to the image list originally consisting of default images.
4. To delete downloaded image, press .
A confirmation message appears.
(You cannot delete the default images.)

Banner (4-1-1-2)

- Using this menu you can configure the banner to be displayed on the Idle Screen.
(A banner allows up to 14 English and 7 Spanish characters)



Contrast (4-1-1-3)

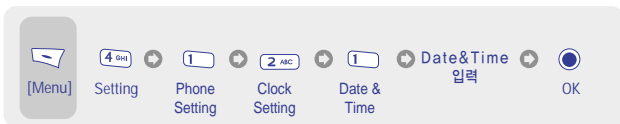
- Using this menu, you can adjust the brightness of the screen to your preferred




Clock Setting (4-1-2)

Date&Time (4-1-2-1)

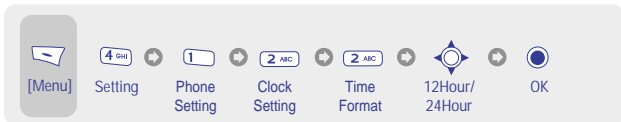
- You can configure the date and time.



- MM/DD/YYYY : Move to an item using , and directly configure the date.
- HH:MM : Directly enter the hour and the minutes by using the number keys.

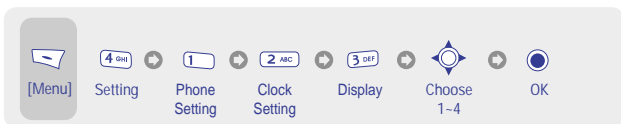
Time Format (4-1-2-2)

You can select either a 12Hour or 24Hour display option.



Display (4-1-2-3)

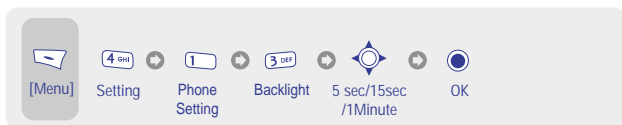
You can configure the display options of the time and date on the Idle Screen.



1. **Time Only** : Only display the time on the Idle Screen.
2. **Date Only** : Only display the date on the Idle Screen.
3. **Time & Date** : Displays both the time and the date on the Idle Screen.
4. **Off** : Does not display the time and the date on the Idle Screen.

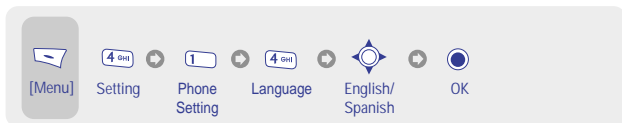
Backlight (4-1-3)

You can configure the LCD Backlight Time.



Language (4-1-4)

You can select the language (English / Spanish).



Software Version (4-1-5)

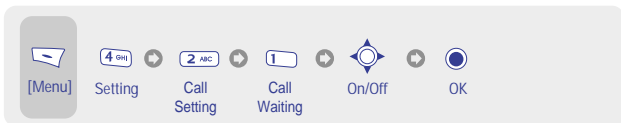
You can view the software version.



Call Setting (4-2)

Call Waiting (4-2-1)

You can decide whether to use Call Waiting mode.



Divert (4-3)

Divert

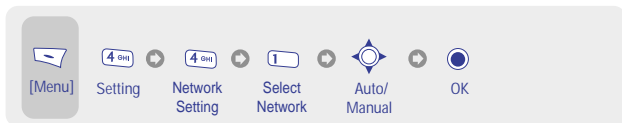


1. **All Calls** : Select this option to forward all calls to the phone.
2. **When Busy** : Select this option to forward calls that arrive while the line is busy.
3. **Not Reachable** : Select this option to forward calls that arrive when the phone is out of the service area.
4. **No Reply** : Select this option to forward calls that are not answered after a certain period of time.
5. **All Data Calls** : Select this option to forward SMS data
6. **All FAX Calls** : Select this option to forward FAX data
7. **Cancel All** : Select this option to cancel all configured Call Divert Options.

Network Setting (4-4)

Select Network (4-4-1)

You can configure the network settings.

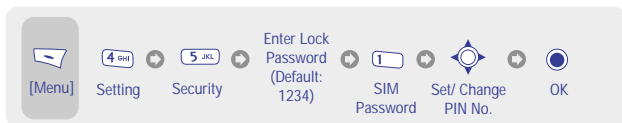



- Auto : Select this option to automatically select the network.
- Manual : Select this option to manually select a network from the available network list.

Security (4-5)

SIM Password (4-5-1)

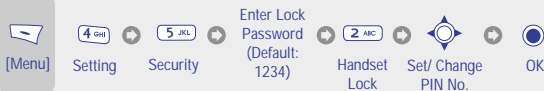
SIM Password를 변경합니다.




1. Set : Select either ON or OFF.
2. Change PIN No. : Enter the Old PIN1, the new PIN and the new PIN again, and then press  to save. The PIN is preset to '1234'.

Handset Lock (4-5-2)

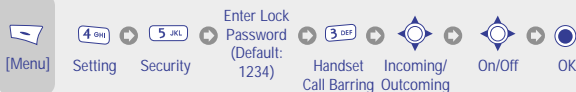
You can change the PIN of the phone.



1. **Set** : Select either ON or OFF.
2. **Change Lock No.** : Enter the Old PIN, the new PIN and the new PIN again, and then press  to save. The PIN is preset to '1234'.

Handset Call Barring (4-5-3)

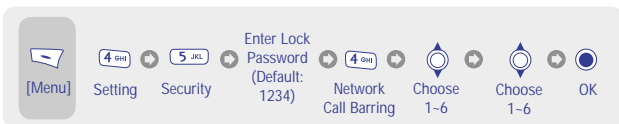
Handset Call Barring



1. **Bar Incoming** : Bars answering incoming call (On/Off)
2. **Bar Outgoing** : Bars dialing a phone number from the "Fixed Call" list. (On/Off)

Network Call Barring (4-5-4)

Network Call Barring



SUB MENU

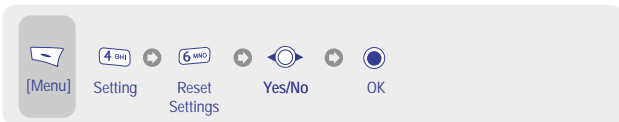
1. **Bar Foreign Calls** : Bars foreign calls.
2. **Only Local & Home** : Bars local calls.
3. **Bar Incoming Calls** : Bars answering incoming calls.
4. **Bar Incoming If Abroad** : Bars answering incoming international calls.
5. **Bar Outgoing Calls** : Bars dialing any calls.
6. **Cancel All** : Clears all settings of the "Network" menu.

SUB MENU

1. **All services** : On / Off / Status
2. **Voice calls** : On / Off / Status
3. **Data** : On / Off / Status
4. **Fax** : On / Off / Status
5. **Messages** : On / Off / Status
6. **All except msgs** : On / Off / Status

Reset settings (4-6)

Using this menu, you can reset the phone to the factory settings.



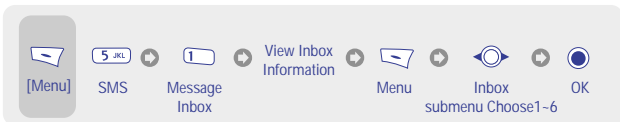


5. SMS

Messages are received and saved as long as there is free space on the SIM card.

Message Inbox (5-1)

You can view and save received messages.



SUB MENU

1. Delete : Deletes the selected message.

2. Delete All : Deletes all messages.

< After reading a message >

- Sub menu

1. **Text Reply** : Sends a reply to the message.

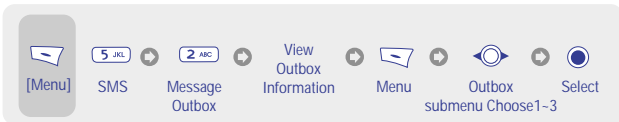
2. **Forward** : Forwards the message to another person.

3. **Delete** : Deletes the message from the phone.

- You can make a call to the sender of the current message by pressing the Send key.
- When there is no message, 'No more messages' appears.

Message Outbox (5-2)

You can view and save sent messages.



SUB MENU

1. Delete : Deletes the selected message.
 2. Delete All : Deletes all messages.
- < After reading a message >

SUB MENU

1. **Forward** : Forwards the sent message to another person.
2. **Edit** : You can edit and send the message.
3. **Delete** : Deletes the message from the phone.

Send Message (5-3)

Using this menu, you can write a message.



[Menu]

5 JKL

SMS

3 DEF

Send
Message

Input
Message

OK

Input
Sent to
Number

OK

(Send/Save)

SUB MENU

1. **Send** : Sends the message immediately.
2. **Save** : Saves the message in Message Outbox.

- Up to 462 Russian or 926 English characters are allowed for a message.
- For more information about using Text Input Modes, refer to page 33.

Message Box (5-4)

You can save a short message (up to 30 English Spanish).



[Menu]

5 JKL

SMS

4 GHI

Message
Box



Menu



Choose
1~3



OK

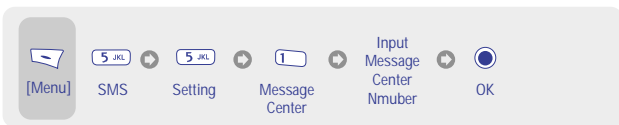
SUB MENU

1. **Edit** : Select this option to edit the message.
2. **Add Msg** : Saves a message. You can edit or send a saved message.
(For information about how to send a message, refer to page 64.)
3. **Delete** : Deletes the selected message.
4. **Delete All** : Deletes all messages in the Message Box.

Setting (5-5)

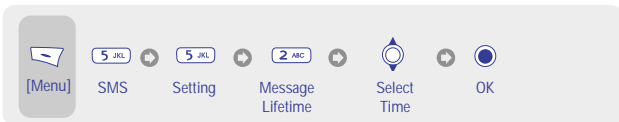
Message Center (5-5-1)

Message Center



Message Lifetime (5-5-2)

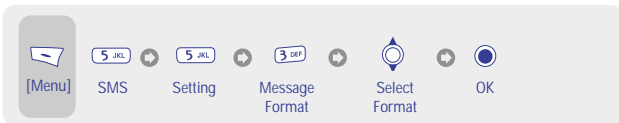
You can configure the lifetime of a message.



- **Lifetime:** One Hour, Two Hours, Six Hours, One Day, Two Days, One Week, Four Weeks and Six Months

Message Format (5-5-3)

You can configure the message format.



- **Format:** Normal, Fax, Voice Mail, ERMES, Nation¹ I Paging, X.400 and Internet

Storage Status (5-5-4)

Message Format을 설정합니다.



[Menu]

5 JKL

SMS



5 JKL

Setting



4 GHI

Storage
Status

- Shows the memory usage of the Message Box. (Usage / Total format.)

Voice mail (5-6)

Get Voice Mail (5-6-1)

Retrieves Voicemail



[Menu]

5 JKL

SMS



6 MNO

Voicemail



1

Get
VoiceMail



OK

Setting (5-6-2)

Setting



[Menu]

5 JKL

SMS



6 MNO

Voicemail



2 ABC

Setting



Home/Room
Mailbox



OK

Broadcast Message (5-7)

A broadcast message is a text message of up to 93 characters that is sent to all GSM terminals within a cell by the network at a regular interval.

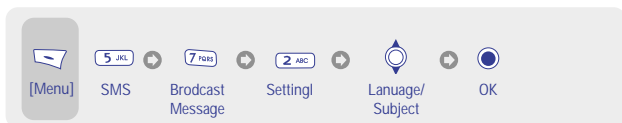
Read New (5-7-1)

You can view the last broadcast message.



Setting (5-7-2)

You can configure the Language and the Subject.



1. **Language** : You can add a Language by pressing .

- Deutsch, Italiano, Francais, Espanol, Dansk, Nederlands, Svenska, Dansk, Portugues, Suomi, Norsk and Turkce.
- The default language is English.
- The SMS Cell Broadcast Menu may be hidden depending on the service groups and related services availability.

2. **Subject**

1) User Defined

- Add : Standard ID (e.g. Weather forecast), Specific ID (e.g. 257), All (to receive all cell broadcast messages)

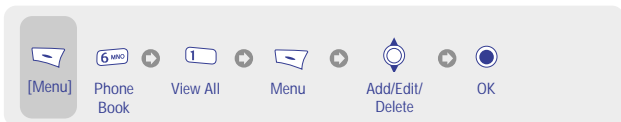
2) Active



6. Phone Book

View All (6-1)

Using this menu, you can view all numbers saved on the phone and the SIM card.



SUB MENU

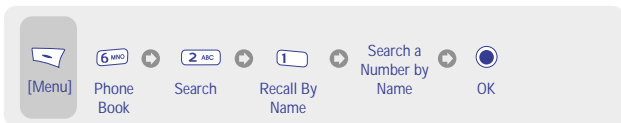
1. **Add** : You can add a new number. (See page 70)
2. **Edit** : You can edit and send the message.
3. **Delete** : You can delete the selected message.

Search (6-2)

You can search for a phone number saved on the phone and the SIM card


Recall By Name (6-2-1)

Using this menu, you can easily find a phone number saved in the Phonebook by entering a part or all of the name.



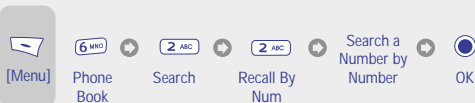
SUB MENU

1. **Add** : You can add a new number. (See page 70)
2. **Edit** : You can edit and send the message.
3. **Delete** : You can delete the selected message.

- If you enter a character, all addresses including the character are found.
- If you press  without entering a character, all numbers will be displayed.

Recall By Num (6-2-2)

Using this menu, you can easily find a phone number saved in the Phonebook by entering a part of or all of the number.



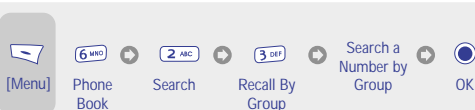
SUB MENU

1. **Add** : You can add a new number. (See page 70)
2. **Edit** : You can edit and send the message.
3. **Delete** : You can delete the selected message.

- You can easily find a phone number by entering a part of or all of the number.

Recall By Group (6-2-3)

You can find a phone number by searching by the group.



SUB MENU



1. **Add** : You can add a new number. (See page 70)
2. **Edit** : You can edit and send the message.
3. **Delete** : You can delete the selected message.

- Select a group from the group list and search for a number belonging to the group.

Add Entry (6-3)

Phone에 200개의 전화번호를 등록할 수 있으며, SIM Card는 용량에 따라 다릅니다.

Description of icon

	NAME		OFFICE
	GROUP		FAX
	PHONE		EMAIL
	HOME		BIRTHDAY

When you save to the phone,

You can save an entry according to the Phonebook Settings.



[Menu]

6 MNO

Phone
Book



3 DEF

Add Entry



Add new
information
in an empty
entry

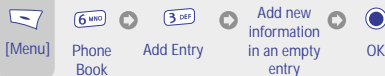


OK

- Select Name, Group, H.P-1, HOME, OFFICE, FAX, E-mail1 or Birth.
- You can assign an entry to a pre-configured group.

When you save to the SIM card,

The number of phone numbers that can be saved on a SIM card is determined by the capacity of the SIM card.

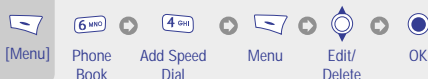


SUB MENU

1. **Name** : Enter the name.
2. **H.P-1** : Enter the phone number. (Up to 20 digits.)

Add Speed Dial (6-4)

Using this menu, you can add a speed dial number that can be used to make a phone call with a single key stroke.

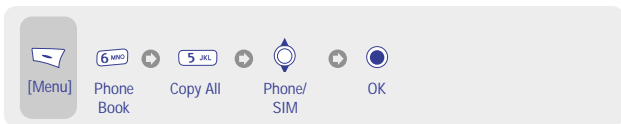


SUB MENU

1. **Edit** : You can enter or edit the name and phone number.
2. **Delete** : You can delete a registered Speed Dial.

Copy All (6-5)

Using this menu, you can copy all phone numbers saved on the SIM card or the phone.



1. Phone To SIM

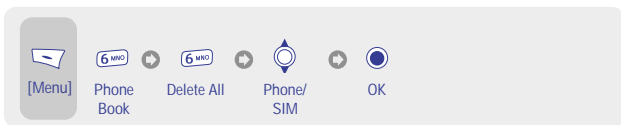
Copies the phone numbers saved on the phone to the SIM card.

2. SIM To Phone

Copies the phone numbers saved on the SIM card to the phone.

Delete All (6-6)

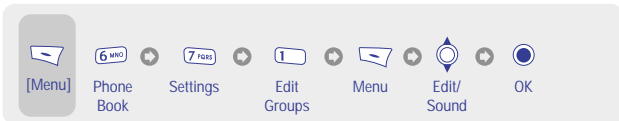
Deletes all phone numbers saved on both the phone and the SIM card.





Settings (6-7)

Edit Groups (6-7-1)

Using this menu, you can add, rename and edit a group.

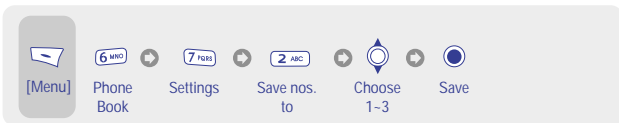


SUB MENU

1. **Edit** : You can change the default name of the 'Group' .
 2. **Sound** : Select a group by using  , and press  to configure the ring tone for the group.
- You can add up to 9 groups.
 - You can enter up to 15 alphanumeric characters for a group name.
 - For information on how to specify a group, refer to 'Add Entry'

Save nos. to (6-7-2)

전화번호 저장을 Phone과 SIM Card 중 선택하여 저장할 수 있게 설정합니다.

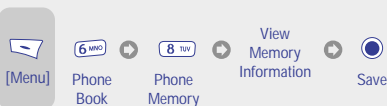


SUB MENU

1. **SIM card** : Select this option to automatically save Phonebook information on the SIM card.
2. **Phone memory** : Select this option to automatically save Phonebook information on the phone.
3. **Choice** : Select this option to select where to save to (either to the SIM card or the phone) when Phonebook information is saved.

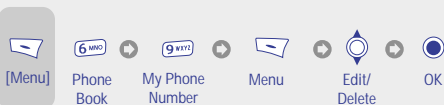
Phone Memory (6-8)

You can check the memory usage of the Phonebook for the SIM card and the phone.



My Phone Number (6-9)

Using this menu, you can save your phone number.



SUB MENU

1. **Edit** : You can edit the name and the phone number.
2. **Delete** : You can delete the item.

7. GAME

Cusion Tank (7-1)

Cushion Tank is a special tank, which contains weapons whose shots rebound off ground objects.

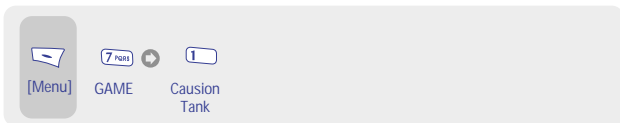
The ground where the game is played on, is surrounded by blocks and walls, so when the Cushion Tank launches its cannon, the launched shot is reflected by the angle of the ground objects.

Per turn, the gamer can move the position of the tank to the left or the right, and adjust the angle of the cannon to try to hit the opponent's camp or tank.





If the angle of the launching cannon is incorrectly calculated, it is possible that gamers may hit themselves, so it is very important to try to correctly calculate the launch angle and the use of the items.

'Cushion Tank Battle Round' can be enjoyed in two modes, singles mode or doubles mode. Singles mode is for a single gamer to play against the PHONE and which has five stages of advancing difficulties. Doubles mode allows two gamers to take turns playing against each other.

If you can successfully win both modes, you can proudly consider yourself the best operator of the most advanced weapon, the Cushion Tank.



Key Operation

	Direction Control / Move		View Menu
	Fire		
	Use an Item		

Game Progress

- The game has two modes, singles and doubles mode. Singles mode is for a single gamer to play against the phone through five stages of advancing difficulties. Doubles mode allows two gamers to play against each other in turns.
- The gun barrel of the tank can be adjusted between 15 and 75 degrees in both the left and the right directions, and the gun can be fired in the adjusted direction.
- A triangle appears and disappears above the tank depending on whose turn it is to attack.
- The location of the 10 reflective blocks, positioned in the game space, change after each turn, and one of the reflective blocks is an item block. Firing the weapon and hitting the item block shown as an icon, will reflect the weapon and the gamer obtains the item.
- There are a total of 15 items, which consist of 9 attack items, 3 defense items and 3 miscellaneous items. When an item is obtained, it fills the Item Box at the bottom of the screen, and can be used by the gamer using the use item button (button number 9) when it is that gamer's turn.
- The function of the Question Item (which belongs to the miscellaneous items) is not known when it is obtained or in the Item Box, and its real capability can only be known when it is being used, so it needs to be used with care.
- The Item Box can only keep one item, and therefore it is replaced with a new item whenever a new item is obtained, even though there is an unused item in the box. So, it is advantageous to use the obtained item appropriately and quickly.
- When the tank is hit, the number displayed above it, is the number of HP (Hit Points) being lost. (With the exception of the time when HP are being added, as a reverse function depending on the item)
- The outcome of the game is determined when the tank exhausts all HP and explodes, or one of the players falls into the ground within their own positional block.
- The stage result screen shows the score that was calculated from the remaining HP quantity at the completion of the stage, and taking into account the number of turns used. Even though the stage can be cleared using the same quantity of HP, the number of turns

used can make the difference, so it is important to finish as quickly and with using as few turns as possible.

- Because the tank being hit by the weapon loses its HP based on where it was hit and by what weapon it was hit by, the key strategy to win the game is to use movement and precise angle adjustments to deliver maximum damage.

- **HEIGHT DESTROY ITEM**

The Height Destroy Item is an attack item that can destroy all positional blocks in a vertical direction when hitting the positional blocks where the tank is located.

- **QUESTION ITEM**

The Question Item is an item whose function is unknown when it is obtained and is in the Item Box. The Question Item exists with the ' ? ' status in the Item Box, and only turns into an item when it is used and performs its function.

- **GAGE CHANGE ITEM**

The Gage Change Item is an item that exchanges the HP gages of the gamer and the opponent.

- **DRACULA ITEM**

The Dracula Item is an item that fills the opponent's HP in reverse by the amount of the damage inflicted. When hit by the weapon using this item, the opponent's HP is filled with the amount of damage. However when it hits the positional ground, it is destroyed without any change.

- **50% ITEM**

The 50% Item is an item that decreases the HP of the tank by half. The 50% Item is an item that decreases the gage by half regardless of the remaining quantity of HP, and it might show up when using the Question Item, so be careful.

- **PERFORATION ITEM**

The Perforation Item is an item that enables the weapon to penetrate the positional block. There is hardly any damage when this launched weapon hits the tank, but when it hits the positional block, the weapon penetrates in the direction of its movement and causes damage accordingly.

Types and Functions of items

- **SECOND CHANCE ITEM**

The Second Chance Item is an item that enables the launching of a weapon one more time. When this item is used, one more round is launched in the currently adjusted direction.

- **DOUBLE COUNTER ITEM**

The Double Counter Item is an item that separates the weapon into two parts and attacks from the position where they first hit.

- **NUCLEAR ITEM**

The Nuclear Item is the most powerful weapon, a nuclear bomb weapon.

- **REMOTE CONTROL ITEM**

The Remote Control Item is a weapon item that explodes when the button is pressed once again after the weapon is launched. When an item is chosen and the weapon is launched, the weapon goes on rebounding like any other normal weapon, and if the weapon launch button is pressed once again, the weapon explodes at that spot. The weapon functions normally until pressed once again.

- **LAND ADD ITEM**

The Land Add Item enables the recovery of the tank's positional blocks (land). The Land Add Item does not recover the entire land, but it recovers the lowest level line block that prevents the tank from crashing.

- **ROOT SIGHT ITEM**

The Root Sight Item is an item that shows the rebound route of the weapon being launched by the tank. This item shows on a dotted line the moving direction of the weapon to be fired. The route shown is for 10 rebounds, and the weapon to be used must be a normal weapon.

- **HP ADD ITEM**

The HP Add Item is an item that enables the recovery of the HP gage of the tank. Starting with a total of 180 HP, when this item is used, 40 HP are filled. No weapon is launched, and it is the turn of the opponent.

- **SHIELD ITEM**

The Shield Item is an item that provides a tank defense shield. A defense shield is created around the tank and provides a defense for two turns. The Shield Item does not provide a defense against positional block damage, and so it does not provide a defense against the tank crashing.

- **WIDTH DESTROY ITEM**

The Width Destroy Item is an attack item that can destroy all positional blocks in a horizontal direction when hitting the positional blocks where the tank is located.

8. Browser

Home (8-1)

You can connect to the URL set in the WAP profile.

Resume (8-2)

You can use this menu to connect to the page last accessed.

Bookmarks (8-3)

You can view the bookmark list in this menu. (When there is more than one bookmark in the list) You can change or delete the names and addresses of the bookmark.

Setting (8-4)

This menu is configured as follows. :

- WAP Profiles
- Cache Mode

WAP profiles (8-4-1)

Choose a profile from the list or add a new profile through “Add New”.

1. Activate

You can activate the profile by choosing one from the profile list.

2. Edit

You can change all values set in the browser, and this menu is configured in the following way.

- | | |
|---------------------|------------------------|
| - Homepage | - Gateway |
| - Image | - Bearer |
| - Connection Type | - Data Bearer Settings |
| - Connection Option | - GPRS Bearer Settings |
| - Confirm Download | |

2-1 Homepage

This menu enables you to enter a URL site to use as the home page.

You do not need to include 'http://' . which is automatically added by the WAP browser.

2-2 Image

You can use the value of the default image settings without changes.

- Display Image

This menu enables you to choose whether to display the WAP card.

- Update Image

This menu enables you to choose whether to allow the display to be shown before the download of the WAP card is completed. You can choose whether to show the ALT text or not while the image is being downloaded and before it is displayed.

2-3 Connection Type

This menu has two options, "None" and "Secure", and is related to the gateway that the user connects to.

- None: Connectionless secure connection.
- Secure: Connection-orientated secure connection.

2-4. Connection Option

The Connection Options are "Temporary" and "Continuous" and are related to the gateway that the user connects to.

- Temporary

This menu is a service of a non-connecting type.

- Continuous

This menu provides an assured transmission method, but can generate lots of network traffic.

2-5 Gateway

Most WAP gateways do not require a User ID and Password. If the user gateway is used and supported by the network, it needs to be set up before connecting to the WAP site.

2-6 Bearer

You have to choose a bearer service that is supported by the respective WAP gateway. This service will be either Data, SMS or GPRS.

2-7 Data Bearer Setting

The value setting of this service is only useful when “Data” is chosen.

- IP Address

You can enter the IP address of the WAP gateway that is used to connect to the WAP page.

- Dial

You need to enter the phone number needed for dialing a connection to the WAP gateway. This value is to be provided by the respective network.

- Data Call Type

You have to determine the type of data call for a connection. The types are “Analogue” and “ISDN” and are to be provided by the respective network.

- Data Call speed

The Data Call Speed represents the data connection speed of the user, and is to be provided by the respective network. The values are 2400, 4800 and 9600.

- User ID

This User ID is used by the dial-up server (not the WAP gateway), and is to be provided by the respective network.

- Password

This is a Password for the access point (not the WAP gateway). This value is to be provided by the respective network.

- Timeout

The user has to determine the timeout period from three choices (30, 60, or 120). Even if the user did not successfully send or receive the data during the determined timeout period while using the browser, the respective data request will automatically end when the timeout period ends. From the current screen, the user can view the cards effectively stored in the handset cache of the memory through the WML cards, or via "Offline", but from the current screen, if the user chooses the linked card not stored in the cache, a new data call will be requested.

2-8 GPRS Bearer Setting

The settings of this service are valid only when the bearer is configured as "GPRS".

- IP Address

You can enter the IP address of the WAP gateway that is used to connect to a WAP page.

- Access Point Name

You have to enter the WAP gateway APN to connect to a WAP page.

The network should provide this value. The default value is "cmwap".

- User ID

This is the user ID to connect to an access point. The network should provide this value.

- Password

This is the password to connect to an access point (not for a WAP gateway).

The network should provide this value.

3. Change Name

You can change the name of a Profile.

4. Delete Profile

You can delete a Profile saved in the Profile List.

Cache mode (8-4-2)

You can determine whether to check for pages in the Lode cache when connecting to a WAP page. Using this menu, you can avoid loading a page that is already saved in the cache.

- Always Cache: Check cache when connecting to WAP.
- Never Check: Never check cache when connecting to WAP.

Empty cache (8-5)

Using this menu, you can delete all data in the cache.

Version Info (8-6)

Using this menu, you can view the version of the WAP.

SPECIFICATIONS

Frequency Band		Transmission (TX): 824.64 MHz ~ 848.37 MHz Reception (RX): 869.64 MHz ~ 893.37 MHz
Frequency Precision		Within allocated frequency ± 300 Hz
Weight		Less than 85 g
Transmission Power		0.3 W ± 50 %
Operation Temperature	Phone	-20°C ~ +50°C
	T/A	0°C ~ +40°C
Relative Humidity		5% ~ 95%

Patent and Trademark Information

"T9 text Input is covered by U.S.Pat.5,818,437,U.S.Pat.5,953,541,U.S.Pat.6,011,554,U.S.Pat.6,307,548 and other patents pending."

Licensed by QUALCOMM Incorporated under one or more of the following United States Patents and/or their counterparts in other nations:

4,901,307 5,490,165 5,056,109 5,504,773 5,101,501
 5,506,865 5,109,390 5,511,703 8,228,054 5,535,239
 5,267,261 5,544,196 5,267,262 5,568,483 5,337,338
 5,600,754 5,414,796 5,657,420 5,416,797 5,659,569
 5,710,784 5,778,338

Issue 1

Safety Information

1 . SAFETY INFORMATION FOR FIXED WIRELESS TERMINALS

.POTENTIALLY EXPLOSIVE ATMOSPHERES

Turn your phone OFF when in any area with a potentially explosive atmosphere and obey all signs and instructions. Sparks in such areas could cause an explosion or fire resulting in bodily injury or even death.

.

INTERFERENCE TO MEDICAL DEVICES

Certain electronic equipment may be shielded against RF signal from your wireless phone. (pacemakers, Hearing Aids, and so on) Turn your phone OFF in health care facilities when any regulations posted in these areas instruct you to do so.

RF signals may affect improperly installed or inadequately shielded electronic system in motor vehicles.

.EXPOSURE TO RF ENERGY

Use only the supplied or an approved replacement antenna.

Do not touch the antenna unnecessarily when the phone is in use.

Do not move the antenna close to, or touching any exposed part of the body when making a call.

SAR INFORMATION

THIS MODEL PHONE MEETS THE GOVERNMENT'S
REQUIREMENTS FOR EXPOSURE TO RADIO WAVES.

Your wireless phone is a radio transmitter and receiver. It is designed and manufactured not to exceed the emission limits for exposure to radiofrequency (RF) energy set by the Federal Communications Commission of the U.S. Government. These limits are part of comprehensive guidelines and establish permitted levels of RF energy for the general population. The guidelines are based on standards that were developed by independent scientific organizations through periodic and thorough evaluation of scientific studies. The standards include a substantial safety margin designed to assure the safety of all persons, regardless of age and health. The exposure standard for wireless mobile phones employs a unit of measurement known as the Specific Absorption Rate, or SAR. The SAR limit set by the FCC is 1.6 W/kg. * Tests for SAR are conducted with the phone transmitting at its highest certified power level in all tested frequency bands. Although the SAR is determined at the highest certified power level, the actual SAR level of the phone while operating can be well below the maximum value. This is because the phone is designed to operate at multiple power levels so as to use only the power required to reach the network. In general, the closer you are to a wireless base station antenna, the lower the power output. Before a phone model is available for sale to the public, it must be tested and certified to the FCC that it does not exceed the limit established by the government adopted requirement for safe exposure. The tests are performed in positions and locations (e.g., at the ear and worn on the body) as required by the FCC for each model. The highest SAR value for this model phone when tested for use at the ear is **0.4 W/Kg** and when worn on the body, as described in this user guide, is **0.317 W/Kg**. (Body-worn measurements differ among phone models, depending upon available accessories and FCC requirements). While there may be differences between the SAR levels of various phones and at various positions, they all meet the government requirement for safe exposure. 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: MC6TDG-320TME**

Additional information on Specific Absorption Rates (SAR) can be found on the Cellular Telecommunications Industry Association (CTIA) web-site at <http://www.wow-com.com>.

* 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.

SAFETY INFORMATION FOR RF EXPOSURE

Body worn operation

This device was tested for typical body-worn operations with the back of the phone kept 15 mm. from the body. To maintain compliance with FCC RF exposure requirements, use only belt-clips, holsters or similar accessories that maintain a 15 mm. separation distance between the user's body and the back of the phone, including the antenna. The use of belt-clips, holsters and similar accessories should not contain metallic components in its assembly. The use of accessories that do not satisfy these requirements may not comply with FCC RF exposure requirements, and should be avoided.

FCC Compliance Information

This device complies with Part 15 of FCC Rules.

Operation is subject to the following two conditions:

- (1) This device may not cause harmful interference, and
- (2) This device must accept any interference received.

Including interference that may cause undesired operation.

U.S.A.

U.S.FEDERAL COMMUNICATIONS COMMISSION

RADIO FREQUENCY INTERFERENCE STATEMENT

INFORMATION TO THE USER

NOTE : 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 of a circuit different from that to which the receiver is connected.
- Consult the dealer or an experienced radio/TV technician for assistance.

Changes or modification not expressly approved by the party responsible for Compliance could void the user's authority to operate the equipment. Connecting of peripherals requires the use of grounded shielded signal cables.