WELCOME

Thank you for choosing the new TX-120C, developed by top researchers to support the CDMA2000 1X system through Qualcomm-manufactured MSM6050 chips and CDMA technologies.

Among its many advanced features, the T9 input mode makes it much easier to enter words and names. In addition, the following state-of-the-art features make the TX-120C more user friendly:

- Full graphic display of 9 text input line and 1 icon line with variable font size.
- Voice Activated Dialing feature for easy dialing.
- T9 text input mode for easier message and name input.
- Web browsing & data services (i.e.; wireless internet access, Openwave, UP browser)
- Dual LCD Displays with inner TFT 65K Color LCD Display.
- Sophisticated features of speakerphone, and downloadable games, ringers and graphics.

IMPORTANT INFORMATION

This TX-120C user guide contains very important information about how to handle and use the product. So please read this manual thoroughly, pay attention to the warranty on the back page and be alert to the exclusions and limitations of your warranty, which are related with the unauthorized use of components.

TABLE OF CONTENTS
CHAPTER 1. BEFORE USING YOUR PHONE
INSIDE THE PACKAGE
NAVIGATION KEY
THE FUNCTION KEYS8
DISPLAY INDICATORS
BATTERY INSTALLATION 10
BATTERY REMOVAL
BATTERY CHARGING
POWER CONNECTION
PCS AND 1X BATTERY TIMES
BATTERY LIFE (FOR NEW BATTERY)
BATTERY HANDLING INFORMATION13 DOS
DON'TS
CHAPTER 2. BASIC OPERATION
TURNING THE PHONE ON / OFF
TURNING THE PHONE ON
ACCESSING THE MENU
MENU SUMMARY
BASIC FUNCTIONS
MAKING A CALL
PAUSE FEATURE
ANSWERING A CALL
CALLER ID FUNCTION
ADJUSTING VOLUME
MANNER MODE
LOCK
MUTE(UNMUTE)
SILENT
SEND MY PHONE #
MY PHONE NUMBER
MAKING AN EMERGENCY CALL
911 IN LOCK MODE
CHAPTER 3. MEMORY FUNCTION
STORING A PHONE NUMBER
STANDARD INPUT MODE
T9 INPUT MODE
NUMERIC MODE
SYMBOL MODE
SPEED DIALING
CHAPTER 4. MENU FUNCTION
PHONE BOOK
BY NAME 38
BY NAME
ADD NEW
GROUP
CHANGE GROUP NAME41
ERASE GROUP41

TABLE OF CONTENTS

SPEED DIAL	40
MSG. GROUP	
ADD NEW MSG. GROUP	
CHANGE MSG. GROUP NAME	
SEND MSG. GROUP	
ERASE GROUP	
MY PHONE #	
RECENT CALLS	
ALL CALLS	
MISSED CALLS	
RECEIVED CALLS	
DIALED CALLS	
CALL TIMERS LAST CALL	
ALL CALLS.	
HOME CALLS	
ROAM CALLS	
CUMULATIVE CALLS	
GET IT NOW	
START GET IT NOW	51
DOWNLOADING APPLICATIONS	51
DOWNLOADING MELODIES/WALLPAPERS	
APPLYING MELODIES/WALLPAPERS	
CHECKING DATA FOLDER MEMORY ERASING AN APPLICATION	52
MOBILE WEB	
CONNECT WEB	
BOOKMARK	
ADD BOOKMARK	
SAMPLE1.	53
SAMPLE2	
SAMPLE3	53
SAMPLE4	
MEDIA GALLERY	
FRAME	
GRAPHICS	
ANIMATIONS	
PHOTOS	
TONES	
SETTINGS	
SOUNDS	
RINGER TYPE	
VOLUME AI FRT	
ALERT	
TONE LENGTH	
DISPLAY	
MENU STYLE	
GRAPHICS	60
SUB SCREEN	
GREETING MESSAGE	
CONTRAST	
BACKLIGHT	
UP PROXY IP HOMF URI	
WEB IDLE TIME	
DATA SVC.	
SECURITY	
PHONE LOCK	
RESTRICT	66
CHANGE CODE	
SPECIAL #'S	
ERASE ALL	70

TABLE OF CONTENTS

Ð

RESET PHONE.		
	NS	
AUTO RETRY		
VOICE DIAL		
TTY MODE	74	
LOCATION		
S/W VERSION		
H/W VERSION		
	RSION	
SYSTEM		
SET MODE		
FORCE CALL		
UTILITIES		
	ST79	
ALARM		
ΜΕΜΟ ΡΑΟ		
	81	
	-	
SETTINGS		
CALCULATOR		
STOPWATCH		
CHAPTER 5. VOIC	E SERVICE	
CHAPTER 5. VOIC	E SERVICE	
VOICE RECOGNITI	ON MODE	
VOICE RECOGNITI NAME	ON MODE	
VOICE RECOGNITI NAME	ON MODE	
VOICE RECOGNITI NAME DIAL	ON MODE	
VOICE RECOGNITI NAME DIAL REDIAL	ON MODE	
VOICE RECOGNITI NAME DIAL REDIAL VOICE MEMO	ON MODE	
VOICE RECOGNITI NAME DIAL REDIAL VOICE MEMO PHONE BOOK	ON MODE	
VOICE RECOGNITI NAME DIAL REDIAL VOICE MEMO PHONE BOOK CANCEL	ON MODE	
VOICE RECOGNITI NAME DIAL REDIAL VOICE MEMO PHONE BOOK CANCEL	ON MODE	
VOICE RECOGNITI NAME DIAL REDIAL VOICE MEMO PHONE BOOK CANCEL VOICE SERVICE M	ON MODE	
VOICE RECOGNITI NAME DIAL REDIAL PHONE BOOK CANCEL VOICE SERVICE M VOICE MEMO	ON MODE	
VOICE RECOGNITI NAME DIAL VOICE MEMO PHONE BOOK CANCEL VOICE SERVICE M VOICE BIAL	ON MODE	
VOICE RECOGNITI NAME	ON MODE	
VOICE RECOGNITI NAME	ON MODE	
VOICE RECOGNITI NAME DIAL REDIAL PHONE BOOK CANCEL VOICE SERVICE M VOICE DIAL LIST ADD	ON MODE	
VOICE RECOGNITI NAME DIAL REDIAL VOICE MEMO PHONE BOOK CANCEL VOICE SERVICE M VOICE SERVICE M VOICE DIAL LIST ADD CLEAR ALL	ON MODE	
VOICE RECOGNITI NAME	ON MODE	
VOICE RECOGNITI NAME DIAL REDIAL VOICE MEMO PHONE BOOK. CANCEL VOICE SERVICE M VOICE BIAL UST CLEAR ALL TRAIN WORD YES	ON MODE	
VOICE RECOGNITI NAME DIAL REDIAL VOICE MEMO PHONE BOOK. CANCEL VOICE SERVICE M VOICE BIAL UST CLEAR ALL TRAIN WORD YES	ON MODE	
VOICE RECOGNITI NAME DIAL REDIAL VOICE MEMO VOICE MEMO VOICE SERVICE M VOICE SERVICE M VOICE DIAL ADD CLEAR ALL. TRAIN WORD YES NO.	ON MODE	
VOICE RECOGNITI NAME DIAL REDIAL VOICE MEMO PHONE BOOK VOICE SERVICE M VOICE SERVICE M VOICE MEMO UST LIST ADD CLEAR ALL TRAIN WORD YES WAKE-UP	ON MODE	
VOICE RECOGNITI NAME DIAL REDIAL VOICE MEMO PHONE BOOK VOICE SERVICE M VOICE SERVICE M VOICE MEMO UST LIST ADD CLEAR ALL TRAIN WORD YES WAKE-UP	ON MODE	
VOICE RECOGNITI NAME	ON MODE	
VOICE RECOGNITI NAME	ON MODE	
VOICE RECOGNITI NAME DIAL REDIAL VOICE MEMO PHONE BOOK CANCEL VOICE SERVICE M. VOICE DIAL VOICE DIAL VIEN VIEN VIEN VIEN VIEN VIEN VIEN VIEN	ON MODE	
VOICE RECOGNITI NAME DIAL REDIAL VOICE MEMO PHONE BOOK CANCEL VOICE SERVICE M. VOICE DIAL VOICE DIAL VIEN VIEN VIEN VIEN VIEN VIEN VIEN VIEN	ON MODE	
VOICE RECOGNITI NAME DIAL REDIAL VOICE MEMO PHONE BOOK VOICE SERVICE M VOICE SERVICE M VOICE DIAL LIST LIST ADD CLEAR ALL TRAIN WORD YES WAKE-UP UNDO TRAIN AL CHAPTER 6. VOIC WHEN A NEW ME VOICE MAIL	ON MODE	
VOICE RECOGNITI NAME	ON MODE	
VOICE RECOGNITI NAME DIAL REDIAL VOICE MEMO PHONE BOOK VOICE SERVICE M VOICE SERVICE M VOICE DIAL LIST LIST ADD CLEAR ALL TRAIN WORD YES WAKE-UP UNDO TRAIN AL CHAPTER 6. VOIC WHEN A NEW ME VOICE MAIL SEND MESSAGE INBOX REPLY REP	ON MODE	
VOICE RECOGNITI NAME	ON MODE	
VOICE RECOGNITI NAME	ON MODE	
VOICE RECOGNITI NAME	ON MODE	

3

TABLE OF CONTENT

	7
OUTBOX 100 CHECKING SENT TEXT MESSAGES 100 RESEND 100 SEND TO 100 SAVE TO CONTACT 101	
SAVE TO SAVED	
SAVED 102 SAVED 102 MY OBJECT 103 MY OBJECT 103	
QUICK TEXT 104 QUICK TEXT 104 RASE ALL 105 ERASE MESSAGES 105	
SETTINGS. 106 SAVE SENT MSG. 106 DEFAULT CALL BACK. 106 ALERT. 106	
AUTO ERASE	
BLOCK OR UNBLOCK	
CHAPTER 7. WEB BROWSING. 109 START INTERNET BROWSER 110 ACCESS THE INTERNET 110 BROWSER MENU 110 BACK 110 BACK 110 MARK SITE 110 MARK SITE 111 BOOKMARKS 111 BOOKMARKS 111 SETTINGS 112 HOMEPAGE 112 SCROLL MODE 112 SCROLL MODE 112 SCROLL MODE 112 SCROLL SPEED 112 SCROLL SPEED 112 SECURITY 113 ADVANCED 113	
CHAPTER 8. SAFETY AND WARRANTY 115 SAFETY INFORMATION FOR WIRELESS HANDHELD PHONES DRIVING SAFETY 117 ELECTRONIC DEVICES 118 OTHER SAFETY GUIDELINES 119 PRECAUTIONS 120 SAFETY INFORMATION FOR FCC RF EXPOSURE 121 CAUTIONS 122 FDA CONSUMER UPDATE 124 PROTECT YOUR WARRANTY 128 12 MONTH LIMITED WARRANTY 129	

4

Chapter 1 BEFORE USING

C H 1

YOUR PHONE

This chapter provides important information about using the TX-120C including:

- INSIDE THE PACKAGE
- HANDSET DESCRIPTION
- BATTERY USAGE
- BATTERY HANDLING INFORMATION

INSIDE THE PACKAGE

This package should include all items pictured below. If any are missing or different, immediately contact the retailer where you purchased the phone.

HANDSET DESCRIPTION

This phone is a tri mode (800 MHz Amps/CDMA, 1900 MHz PCS) CDMA2000 1X digital phone with web browsing capabilities. The TX-120C weighs XX oz. And the dimensions are X.X" x X.X" x X".





C H





Standard Battery



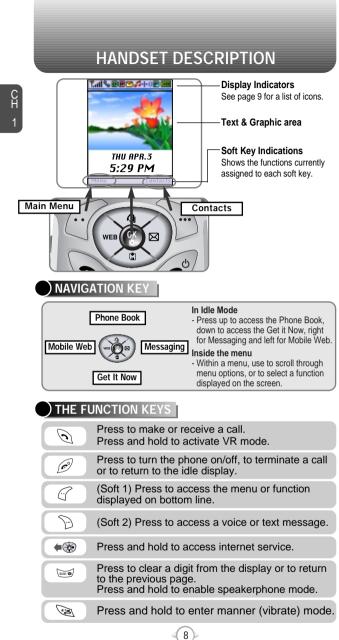


User Manual

Handstrap

6





HANDSET DESCRIPTION

Press and hold to enter lock mode.
 Press to scroll through the items and adjust volume up/down.

C H

DISPLAY INDICATORS Signal Strength Tatl Current signal strength - the more lines, the stronger the signal. Roaming R Phone is out of home area. Service Indicator P C Indicates call is in progress, 💸 indicates the phone cannot receive a signal from the system. Message \square New text or voice message. Digital mode D Phone is operating in digital mode. Battery Battery charging level - the more blocks, the stronger the charge. Mute M Phone is mute during a call. Silent C Appears when Silent is selected as the ring mode. **Emergency Call** Blinks when an emergency call is in progress. Voice Memo **B**a New voice memo has been recorded. Answering machine Phone is in answering machine mode. Manner Mode 1 Phone will vibrate when call is received. Schedule 덫 Appears when either an event or an alarm is set. Ring Mode 33 Appears when a ringer is set as a ringer mode.

BATTERY USAGE



BATTERY INSTALLATION

Place the battery on the back of the handset and slide into place.
 Push the battery down until it locks into place.



BATTERY REMOVAL

Pull down the release latch, lift up the battery and 2 remove the battery from the handset.



BATTERY USAGE

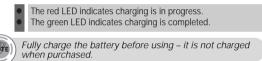
BATTERY CHARGING

POWER CONNECTION









CHARGING THE BATTERY WITH THE HANDSET

Attach the handset (with battery attached) to the charger.



- It is more efficient to charge the battery with the phone turned off.
- If the red LED does not illuminate when charging, check the power connection and make sure the handset is securely in place.

(11)

BATTERY USAGE

PCS AND 1X BATTERY TIMES

The operating time is subject to your handset usage and configuration.

Type Status	CDMA	AMPS
Talk (min)	150	103
Stand by (hrs)	103	25

BATTERY LIFE (FOR NEW BATTERY)

The operating time is subject to your handset usage and configuration.

Type Status	CDMA	AMPS
Talk (min)	150	103
Stand by (hrs)	103	25

(12)

BATTERY HANDLING INFORMATION

DOs

- Only use the battery and charger approved by the manufacturer.
- Only use the battery for its original purpose.
- Try to keep batteries in a temperature between 41°F (5°C) and 95°F (35°C).
- If the battery is stored in temperatures above or below the recommended range, give it time to warm up or cool down before using.
- Completely drain the battery before recharging. It may take one to four days to completely drain.
- Store the discharged battery in a cool, dark, and dry place.
- Purchase a new battery when its operating time gradually decreases after fully charging.
- Properly dispose of the battery according to local laws.

DON'Ts

- Don't attempt to disassemble the battery it is a sealed unit with no serviceable parts.
- Don't accidentally short circuit the battery by carrying it in your pocket or purse with other metallic objects such as coins, clips and pens. This may critically damage the battery.
- Don't leave the battery in hot or cold temps. Otherwise, it could significantly reduce the capacity and lifetime of the battery.

13

• Don't dispose of the battery into a fire.

TX-120C-7/14(N0-CAMERA)-1 2003.7.14 5:52 PM 페이지 14

C H MEMO

Chapter 2 BASIC OPERATION

This chapter addresses and explains the basic features of your phone including

- TURNING THE PHONE ON / OFF
- ACCESSING THE MENU
- MENU SUMMARY
- BASIC FUNCTIONS
- DURING A CALL
- MAKING AN EMERGENCY CALL

14

TURNING THE PHONE ON / OFF

TURNING THE PHONE ON

Press *intermediate* until your "Power On" logo appears and the tone sounds.

Н 2

- To select a logo, refer to page 60 for more details. (Settings>Display>Graphics) for more detail.
- If "Password" is displayed, the phone is locked. Enter your 4-digit password to unlock your phone.
- The default password is the last 4 digits of your phone number.

TURNING THE PHONE OFF

- Press and hold *m* until your "Power Off" logo appears.
 - Immediately change or recharge the battery when "Low Battery Warning Power Off" appears on the display. Memory may possibly be damaged if the phone turns off due to the battery completely draining.
 - Turn the phone off before removing or replacing the battery. If the phone is on, data may be lost.

ACCESSING THE MENU

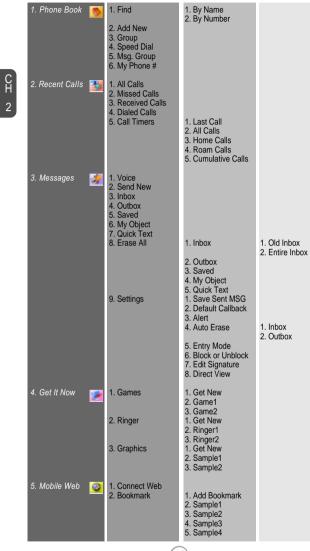
Your phone can be customized via the menu. Each function can be accessed by scrolling with the navigation key or by pressing the number that corresponds with the menu item.



- To access the menu in idle mode, press @ [MENU].
- Use the Navigation key to scroll through the menu.
- To return to the previous page, press imes [BACK]. To exit the current menu and return to idle mode, press imes.
- Press (a) to select a highlighted option or press the option's number to access it.

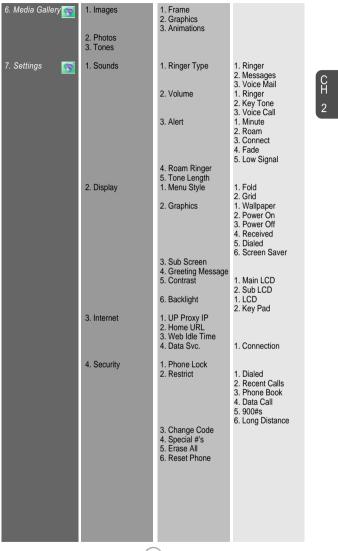
(17)

MENU SUMMARY



MENU SUMMARY

 \mathbb{H}



18

MENU SUMMARY

		 Others Others Phone Info. System 	Answer Options Auto Retry Auto Retry Voice Dial Language Voice Privacy TrY Mode T.Location SW Version Get It Now Version Set It Now Version Set It Node Sorce Call Nam Setting A. PRL ID	 Call Answer Active Flip Auto Answer Retry Time Repeat Set Active HFK Mode 1. Auto NAM 2. Change NAM
8. Voice Tools	2	1: Voice Memo 2: Voice Dial 3: Train Word 4: Voice Setting	1 : Record 2 : Play 3 : Play Speaker 4 : Erase All 1 : Record 2 : Play 3 : Play Speaker 4 : Erase All 1 : Yes 2 : No 3 : Wake-Up 4 : Undo Train All 1 : Set Active 2 : HFK Mode	
9. Utilities	\$	1: Event 2: Alarm 3: Memo Pad 4: Calculator 5: World Clock 6: Stopwatch	1 : Add Plan 2 : View Event List 1 : Item 1 2 : Item 2 3 : Item 3 1 : Add Memo 2 : View Memo 3 : Settings	
		2	0	

BASIC FUNCTIONS

MAKING A CALL

NOTE

Enter a phone number.

To modify the phone number you have entered :
To erase one digit at a time press is .
To erase the entire number, press and hold is .

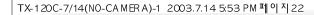
Press <a>left. The indicator, <a>left, will be displayed.

H

- If "Call Failed" is displayed or if the line is busy, press @.
 If you activate the "Auto Rerty" function, the phone will automatically retry the phone number for the set amount of times selected. (refer to page 72).
 When you place or receive a call to/from stored phone
 - numbers, both the name and phone number will be displayed. • You can also make calls using VR mode (voice activated
 - You can also make calls using VR mode (voice activated dialing). Please refer to page 87 for more details.

3 To end a call, press *A*.

(21)



BASIC FUNCTIONS

SPEAKERPHONE

- **1** To activate the speakerphone in idle, answering or calling modes, press and hold we.
- 2 After you have ended your call, speakerphone mode deactivates.

NOTE The phone resets to Speakerphone Off when it is turned off and on again.

PAUSE FEATURE

Pauses are used for automated systems (i.e., voice mail, calling cards). Insert a pause after a phone number then enter another group of numbers. The second set of numbers is dialed automatically after the pause. This feature is useful for dialing into systems that require a code.

1 Enter a phone number, then press \mathcal{C} [PSE] to insert a pause.

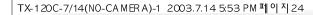


2 Press to dial or (STO) to store. Please refer to page 30 for more details about storing a phone number.

BASIC FUNCTIONS ANSWERING A CALL 🚺 To answer a call, press any key except 🔗 , 💓 or 🛞 . H In the Settings menu, you can select either "Any Key" or "Send Key" to answer a call. If "Send Key" is selected, the phone can only be answered by pressing (See page 71 for more information. **2** To end the call, press *i*. In Auto Answer Mode, a call is automatically answered after a preset number of rings. See page 72 for more information. CALLER ID FUNCTION Displays the caller's name and phone number, if available in the phone book. This feature is system dependent. Please contact your service provider for details. NOTE

22

The caller ID is stored in the call history.



BASIC FUNCTIONS

CALL WAITING FUNCTION

Notifies you of an incoming call when you are already on a call by sounding a beep tone and displaying the caller's phone number.

To answer another call while on a call, press ⊙. This places the first call on hold. To switch back to the first caller, press ⊙ again.

ADJUSTING VOLUME

CH

Adjusts the volume of the ringer, key tone and speaker.

Press @ [MENU] @ The The and select one of the following.

Ringer – Controls the ringer volume. Key Tone – Controls the keypad tone. Voice Call – Controls the speaker & earpiece volume.

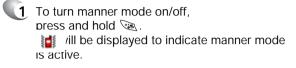
Adjust volume and press (2) [OK] to save the setting.

Press the navigation key to the left or right to adjust the earpiece volume during a call.

BASIC FUNCTIONS

MANNER MODE

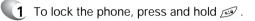
Mutes key tones and activates the vibration mode to alert you of an incoming call or message.





LOCK

Locks your phone to prevent unauthorized use. Your phone can only be used after inputting the password.



To unlock the phone, press is then input the password.

Lock feature will deactivate when the phone is power off. Upon next power up, you will need to press for to lock your phone again.

The default password is the last 4 digits of your phone number.





DURING A CALL

To display menu options during a call, press \mathcal{Q} .

MUTE (UNMUTE)

Mutes the microphone while you are on a call so the other party cannot hear you if you speak.

C H

To deactivate, press \mathscr{C} [MENU] . The phone will automatically un-mute in Emergency Call or Callback mode.

SILENT

Prevents the other end from hearing tones if any key is pressed during a call.



• Press 🕜 [MENU] 🖙 to deactivate it.

SEND MY PHONE

Automatically transmits your phone number to a pager during a call. (Dependent on pager service)

26

To transmit your phone number during a call press @ [MENU] [397].

DURING A CALL

(27)







HANDSET INFORMATION

Notifies you of your handset information. Please see page 75 for more details.





MAKING AN EMERGENCY CALL

911 IN LOCK MODE

Enter "911" and press 🕤 .

2 The call connects.

The phone exits the Lock Mode for 5 minutes.

When the call ends, the phone returns to the Lock Mode.

911 USING ANY AVAILABLE SYSTEM

L Enter "911" and press 🕤 .

2 The call connects.

The phone maintains the Emergency Mode for 5 minutes.

When the call ends, the phone returns to the Lock Mode.

• The phone continuously attempts to receive service from any available system.

Chapter 3

MEMORY FUNCTION

C H 3

This chapter addresses memory functions including:

- STORING A PHONE NUMBER
- ENTERING LETTERS, NUMBERS & SYMBOLS
- MAKING A CALL THROUGH THE PHONE BOOK

STORING A PHONE NUMBER

The phone book stores up to 300 entries.



4

- Enter phone # and press (SAVE).
- Choose "New Contact" or "Existing Contact". Press () [OK] to select.



The phone number will appear above a list of icons. The name of the icon is displayed below the list. Use the navigation key to choose the type of number you are entering, as indicated by the icon. Press ([OK] to select.

Enter a name and press \bigcirc [OK]. Follow instructions on page 31 for entering text. To change the input mode, press \bigcirc [MODE]. Press the navigation key down to select the group. Press the navigation key down to select other options (secret, email).

Min Group - Family, Friends, Work, Etc.
Min Graphic.
Set Secret - Yes, No.

Use the Navigation key to scroll through more options for the entry (VAD, secret).

The other fields are set to Numeric mode as a default.

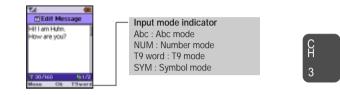
Construct To store the entry, press **(Construct)** [SAVE] "New contact added" will be displayed.

(30)

ENTERING LETTERS, NUMBERS & SYMBOLS

The input mode (Alpha editor) will be automatically activated when necessary to enter letters and numbers. As shown below, there are 4 available modes ; Standard input mode (abc), T9 input mode (T9abc), Numeric mode (123), and Symbol mode.

The input mode indicator appears on the lower right of the display when letters and numbers are entered. To select an input mode, press \Im [MODE].



The following illustrates the function assigned to each key in the Alpha Editor.

KEY	FUNCTION
) Mode	Press to change mode. [T9Abc][Abc][123][Symbol mode]
[@] Next	Press to view the next matching word if the highlighted word is not the word you intended.
[ﷺ] Space	Press to accept a word and add a space.
[🤕] Shift	Press to select a letter case of the standard text input or T9 text input mode. [Abc], [ABC], and [abc] indicate the standard text input. [T9Abc], [T9ABC], and [T9abc] indicate the predictive text input.
Clear 📷	Press to delete a character to the left of the cursor.
Save 🕐	Store the letters and numbers you enter.

ENTERING LETTERS, NUMBERS & SYMBOLS

STANDARD INPUT MODE

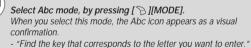
Use the digit keys to enter letters, numbers and characters.

Enter letters using the keypad as follows:

				-	
Keypad	1 Time	Repetitions 2 times	Repetitions 3 times	Repetitions 4 times	Repetitions 5 times
1	1	•	@	-	1
2ABC	А	В	С	2	А
3DEF	D	E	F	3	D
4GHI	G	н	Ι	4	G
:	:			:	:
9WXYZ	W	х	Y	Z	9

To change the input mode, press \mathfrak{D} [MODE].

- 2 To enter a space, press *(iii)*. After two seconds, the cursor will automatically move to the next column.
- 3 Repeat until letters are entered. There is a 16-letter limit.
- 4 To delete one digit, press is . To delete the entire entry, press and hold is.
- 5 To change from lowercase to uppercase, press Sa .



Prind the key that corresponds to the fetter you want to enter.
 Press it as many times as needed for the letter to appear on the screen.

o h n

- To enter the name "John":

Press [5]
Press [6 6 6 6]
Press [🖣 🖣]
Press [15 1 15]



ENTERING LETTERS, NUMBERS & SYMBOLS

T9 INPUT MODE

The T9 input mode incorporates a built-in-dictionary to determine a word based on the entered characters. A word can be entered more quickly by pressing a key once per character.

- **(1)** Select the T9Abc mode by pressing \mathfrak{P} [MODE].
- Press a digit key once to enter the character you want and enter all the characters to input the word you want.
- $\mathbf{3}$ To view the next matching word, press \mathbf{w} .
- To accept matching word and enter a space, press is .

) To enter a compound word.

word.

e.g.

Enter the first part of the word and press [] to accept it.
 Enter the last part of the word and press []] to enter the

To enter "phone book" in the T9 input mode.

- Press [\mathcal{D}][MODE] to select the T9 input mode and [a] to choose the small letter case (T9abc).

Press [[] [] [] [] [] [] and you will see "phone" highlighted. Press [] to sea the next matching word and [] [] to select it.

Press [[] [] [] and you will see " book" highlighted. Press [] to move to the next matching word and [] to select the compound word and enter a space.

(33)

TX-120C-7/14(NO-CAMERA)-1 2003.7.14 5:53 PM 페이지 34

ENTERING LETTERS, NUMBERS & SYMBOLS

NUMERIC MODE

Enters numbers.

- Press > [MODE] to select Numeric Mode [NUM].
- **2** To enter a number, press a digit key.

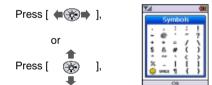
SYMBOL MODE

Allows you to enter symbols.



- Press > [MODE] to select Symbol Mode [SYM].
- 2 Choose the symbol you want to enter with the navigation key.

• Use the navigation key to view a different line of symbols.





34

MAKING A CALL THROUGH THE PHONE BOOK

SPEED DIALING

Dials a number simply by pressing its location number. Please refer to page 42 for more information.



- A phone number that is set secret will not be displayed.
- A call can be made by pressing its entry number and 🕤

TX-120C-7/14(N0-CAMERA)-1 2003.7.14 5:53 PM 페이지 36

С Н З MEMO

Chapter 4

MENU FUNCTION

This chapter addresses accessing the menu and using its functions and features to customize your phone.

C H 4

- PHONE BOOK
- RECENT CALLS
- GET IT NOW
- MOBILE WEB
- MEDIA GELLERY
- SETTINGS
- UTILITIES

36

TX-120C-7/14(N0-CAMERA)-1 2003.7.14 5:53 PM 페이지 38

PHONE BOOK

Stores up to 300 entries, each of which can be assigned to a group. Entries can be retrieved by name, phone number or group.

FIND

Retrieves an entry by group, voice name, name and number, and calls by simply pressing .

BY NAME

1 Press @ [MENU] 🔄 🔄 .

2 Enter a name or its character string and press the navigation key to display the names in alphabetical order. Please refer to page 31 about using the Alpha Editor.

If there is no match, "Cannot Find Name" will appear.

- Edit/Send Msg./Prefix/Erase.

If the entry is set to secret, you will be asked for your password.

 $\mathbf{4}$ To call the selected number, press \mathfrak{S} .

(38)

PHONE BOOK

BY NUMBER

- 1 Press @ [MENU] 🕞 🕞 🖅 .
- 2 Display the list of all phone numbers.
- 3 To search through the menu, enter a part of the phone number and press the navigation key.

If there is no match, "Cannot Find Name" will appear.

- - Send Msg./Erase/Prefix.
 - If the entry is set to secret, you will be asked for your password.



(39)



PHONE BOOK

ADD NEW

Adds a new entry.

To add a new entry to the phone book, press \mathcal{C} [MENU] \mathbb{D} \mathbb{Z} .

2 To enter a name or number, use the navigation key to select the phone book field.

PHONE BOOK FIELD : Name/Group/Mobile/Home/Office/Pager/Fax/Email/ Wireless Addr./Ringers/Msg.Ringer/Graphic/Memo/ Set Secret.

To save the entry, press (Save). To return to the previous page, press (BACK). Please refer to page 30 about storing a phone number.

Adds, changes and deletes groups.

ADD NEW GROUP

1	To add a new group, press 🕜 [MENU] 🕞 🖅 .
	A maximum of seven groups is allowed.

(40)

2 Press 🧭 [Menu] to select "Add Group".

3 Input a new group name.

4 Press 🚳 [OK] to save it.

PHONE BOOK

CHANGE GROUP NAME

- Select an existing group name using the navigation key.
- 2 Press @ [Menu] to select "Rename".
- **3** Input a new group name.
- 4 Press 🕐 [OK] to save it.

Do not edit default group name. (All, Personal, Business, Etc.)

ERASE GROUP

- Use the navigation key to select then delete the group. Press again to confirm.
- 2 Press 🏷 [Erase] to delete it.



Do not erase default group name.(All, Personal, Business, Etc.)

PHONE BOOK

SPEED DIAL

In idle mode, calls can be placed to numbers stored in speed dial by pressing its location number on the keypad.

- 🚺 Press 🕜 [MENU] 🕞 🔙 .
- To assign a phone number to a location, select the location and press the navigation key.

If a phone number is already assigned to the location, press \mathcal{D} [Erase] and the navigation key to delete.

- Locate the entry in the group where it is saved and press the navigation key.
- 4 Select the entry and press the navigation key; select the phone number and press the navigation key again.

MSG. GROUP Adds, changes and deletes msg. groups.

ADD NEW MSG. GROUP

To add a new group, press @ [MENU] Do Im . A maximum of seven groups is allowed.

2 Press 🧭 [Menu] to select "Add Group".

(42)

3 Input a new group name.

4 Press 💿 [OK] to save it.

PHONE BOOK

CHANGE MSG. GROUP NAME

- Select an existing group name with the Navigation key.
- 2 Press C [Menu] to select "Rename".
- 3 Input a new group name.
- 4 Press 👩 [OK] to save it.

SEND MSG. GROUP

Select an existing group name with the Navigation key.

- 2 Press @ [Menu] to select "Send Msg.".
- 3 Input a new group name.
- 4 Press 💿 [OK] to save it.

ERASE GROUP

- Use the Navigation Key to select, then delete the group. Press again to confirm.
- 2 Press 🅞 [Erase] to delete it.
- Press (OK) again to confirm it.



CH 4

TX-120C-7/14(NO-CAMERA)-1 2003.7.14 5:53 PM ┸┨ º | ┸┨ 44

PHONE BOOK

MY PHONE

To display your phone number and service provider.

🚺 Press 🕜 [MENU] 💽 🖅 .

10 return to the previous page, press (0) [OK].

(44)

RECENT CALLS

In idle mode, you can access Call History by pressing $\ensuremath{ \circlef{G}}$ [MENU], $\ensuremath{ \circlef{G}}$.

ALL CALLS

Displays information about the ten most recent calls.

To view details, press the navigation key.

The detail includes date, time, and phone number of all calls.

Press ♂ ☜ [Save] to save the number or press ⊕ [Erase] to delete it.

"Phone # is already saved in phone book" or "Move to phone book save mode?" may appear.

After the tenth all call, the oldest call will automatically be erased from the history.



RECENT CALLS

MISSED CALLS

1

Displays information of the 20 most recently missed calls. Place a call to a missed call number by simply pressing \Im .

To see the list of the 20 most recently missed calls, press ([MENU] (2)). If the number is already stored in your phone book, only the name appears. If the number is not stored, only the phone number appears.

2 To view missed call details, press the navigation key.

NOTE)) Call details include date, time and phone number.

"Phone # is already saved in phone book" or "Move to phone book save mode?" may appear.

After the 20 missed call, the oldest call will automatically be erased from the history.

(46)

RECENT CALLS

RECEIVED CALLS

Displays information of the 20 most recently answered calls. Saves the numbers and places calls by simply pressing \bigcirc .

- To see the list of the 20 most recently answered calls, press ♀ [MENU] ☞ ☞. If the number is already stored in your phone book, only the name appears. If the number is not stored, only the phone number appears.
- To view incoming call details, press the navigation key.



Press (Save] to save the number and (Erase] to erase it.

"Phone # is already saved in phone book" or "Move to phone book save mode?" may appear.

After the 20 incoming call, the oldest call will automatically be erased from the history.

(47)

TX-120C-7/14(NO-CAMERA)-1 2003.7.14 5:53 PM 페이지 48

RECENT CALLS

DIALED CALLS

NØTE

Displays information about the 20 most recently dialed numbers. Saves the numbers and places call by simply pressing \bigcirc .

To see the list of the 20 most recently dialed calls, press ♂ [MENU] ™ ™. If the number is already stored in your phone book, only the name appears. If the number is not stored, only the phone number appears.

To view dialed call details, press the navigation key.

The detail includes date, time, and phone number of outgoing calls.

Press \$\vee\$ \vee\$ [Save] to save the number and press \$\vee\$ [Erase] to erase it.

"Phone # is already saved in phone book" or "Move to phone book save mode?" may appear.

After the 20 outgoing call, the oldest call will automatically be erased from the history.

(48)

RECENT CALLS

CALL TIMERS

Checks the talk time and manages your calls within the limit you set. The four timers include:

LAST CALL

Displays talk time of last call.



2 To return to the previous page, press 🚳 [OK] .

ALL CALLS

Displays talk time of all incoming and outgoing calls, excluding web access calls.

- Press @ [MENU] Im Im and the message "Not intended for billing purposes" appears for 5 seconds.
- 2 Use the navigation key to view the time of the following items:

- Voice Call - Data/Fax Call

3 To return to the previous page, press 💿 [OK] .

HOME CALLS

Displays talk time of all calls made within Home area.

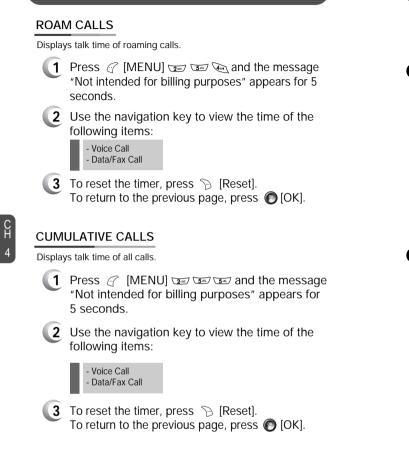
- Press @ [MENU] Im and the message "Not intended for billing purposes" appears for 5 seconds.
- Use the navigation key to view the time of the following items:



3 To reset the timer, press \mathcal{D} [Reset]. To return to the previous page, press ([OK].

(49)





GET IT NOW

Your phone provides a unique feature -Get It Now- that enables you to download melody ringers, wallpapers, games and more from your network to your phone. Please contact your service provider for the availability of these services.

START GET IT NOW

- When two or more icons appear on the screen, select an application with 🛞.
- 3 To start the application, press 🔞
- To end the application, press *@*. The phone will return to the standby mode.

DOWNLOADING APPLICATIONS

- 🚺 Press 🕜 됿 or 🆓 .
- 2 Select "Get It Now" with 🛞 then press 🔘 .
- Select "Start" with ress ().
- 4 The phone will access your service provider's server.

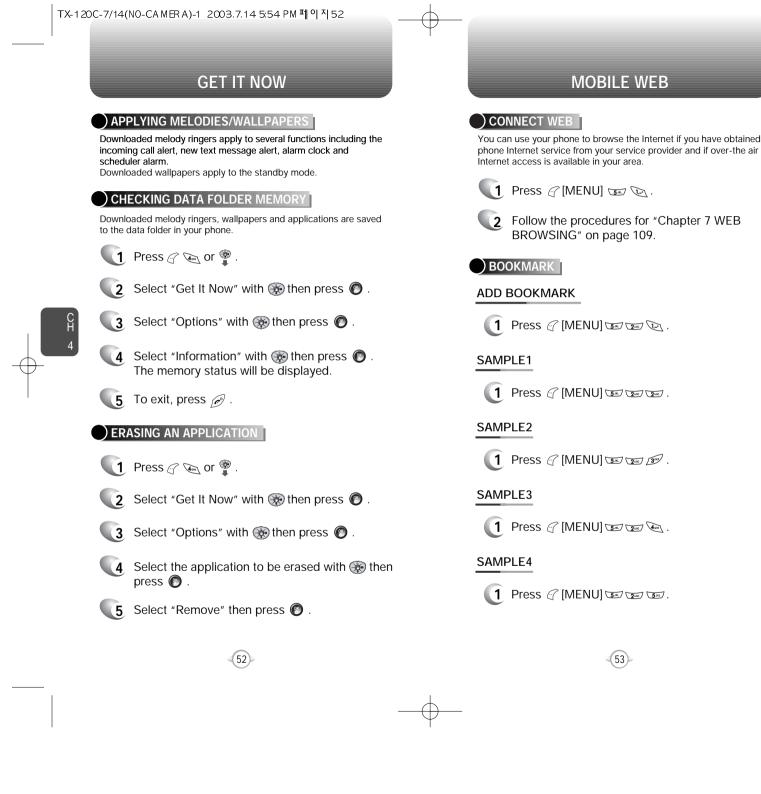
Follow the prompt to download applications.

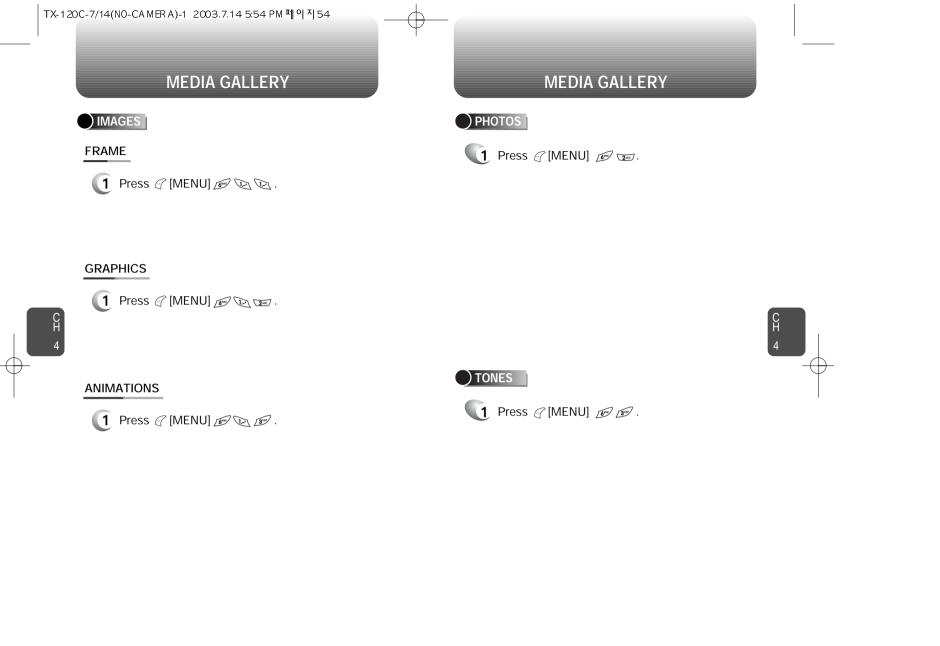
To select an option, press (*) then press (*).
When a prompt appears, press (*) to proceed or (*) to cancel.

DOWNLOADING MELODIES/WALLPAPERS

Before downloading melody ringers and wallpapers, you need to download the dedicated downloader. Please contact your service provider for details.







TX-120C-7/14(NO-CAMERA)-1 2003.7.14 5:54 PM 페이지 56

SETTINGS

Customizes your phone and optimizes performance through a variety of settings.

SOUNDS

Sets Ringer Type, Volume, Alert, Roam Ringer and Tone Length.

RINGER TYPE

To select a ringer type for incoming calls:

RINGER

1 Press @ [MENU] 🔄 🔄 🔄 .

- 2 Select "Music Bells", "Ring Tones" with the navigation key (left or right)
- 3 Select one of the available ring types. To confirm, press 🕐 [OK].

MESSAGES

1 Press 🖓 [MENU] 🗟 🔄 📼 .

- 2 Select "Tone_1,2,3,4,5" with the navigation key.(left or right)
- **3** Select one of the available ring types. To confirm, press 🕐 [OK].

VOICE MAIL

1 Press @ [MENU] 🗟 🕞 💽 🖅.

2 Select "Tone_1,2,3,4,5" with the navigation key (left or right)

(56)

3 Select one of the available ring types. To confirm, press 🕐 [OK].

RING	ER	
1	Press @ [MENU] 🔄 🕞 🖅 🕞 .	
2	Select one of the following options:	
	 Ringer Off Vibrate On Ringer Mode - Up&Down (Level 1~5). High&Vib - The ringer sounds after vibration, press ∋ (Max) Silent - Mute the ringer, press ♂ (Min) 	
3	To confirm, press 🛞 [OK].	
KEY T To adju	TONE 4	
1	Press of [MENU] En En 2007.	
2	Adjusts the keypad tone volume using the navigation key.	
	● Off/Level1-5 (Min- @, Max- ∋)	
3	To save, press 🍘 [OK].	
	E CALL ust earpiece volume:	
1	Press @ [MENU] En En Im 137	
2	Adjusts the earpiece volume using the navigation key.	
	• Level1-5 (Min- 🕜, Max- 🕞)	
3	To save, press 🞯 [OK].	
	57	



Controls the Ringer, Key Tone, and Voice Call volume.

VOLUME

TX-120C-7/14(NO-CAMERA)-1 2003.7.14 5:54 PM 페이지 58

SETTINGS

ALERT

When set, this setting alerts you to the following handset changes:

MINUTE

Sounds an alert every minute of a phone call.

1 Press @ [MENU] 🕞 🕞 🖅 🕞 .

Select "Off" or "On" using the navigation key and press ([OK] to save it.

ROAM

Sounds an alert when leaving a service area and entering a roaming service area.

1 Press @ [MENU] 🗔 🖸 🖅 🖅 .

Select "Off" or "On" using the navigation key and press ([OK] to save it.

CONNECT

Notifies you that a call has been successfully placed.

1 Press @ [MENU] 💿 🗊 🗿 .

2 Select "Off" or "On" using the navigation key and press () [OK] to save it.

FADE

Sounds an alert entering an area where calls cannot be made due to weak signal strength. The alert sounds in standby mode.

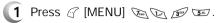
1 Press @ [MENU] 🕞 🕞 🗿 🔙 .

2 Select "Off" or "On" using the navigation key and press () [OK] to save it.

SETTINGS

LOW SIGNAL

Sounds an alert when you encounter low signal strength during a call.

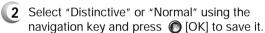


Select "Off" or "On" using the navigation key and press ([OK] to save it.

ROAM RINGER

Sounds a different ringer when you are in a roaming service area.





Normal – Sounds the same ringer type as used in Home area. Distinctive – Sounds a different ringer type.



To adjust tone length:

1 Press @ [MENU] 💿 🔄 .

Select "Normal" or "Long" using the navigation key and press ([OK] to save it.



TX-120C-7/14(N0-CAMERA)-1 2003.7.14 5:54 PM 페이지 60

SETTINGS

DISPLAY

Allows you to customize the display.

MENU STYLE

To select an display menu style:

1 Press @ [MENU] 🛛 🖅 🗁 .

2 Select "Fold" or "Grid" using the navigation key and press () [OK] to save it.

GRAPHICS

To select an LCD display:

WALLPAPER

- 1 Press @ [MENU] 🗺 📼 🕞 .
- 2 Select "Flower", "Digital Clock1,2", or "Analog Clock1,2" using the navigation key.
- 3 Select a display from the Animation list using the navigation key and press (6) [OK] to save it.

POWER ON



- Select "Defaults", "Downloads", or "Photos" using the navigation key.
- Select a display from the Animation list using the navigation key and press () [OK] to save it.

SETTINGS

POWER OFF

- 1 Press @ [MENU] 🚾 📼 🕬 .
- Select "Defaults", "Downloads", or "Photos" using the navigation key.
- Select a display from the Animation list using the navigation key and press () [OK] to save it.

RECEIVED

- 1 Press @ [MENU] Test Test Area .
- 2 Select "Defaults", "Downloads", or "Photos" using the navigation key.
- Select a display from the Animation list using the navigation key and press () [OK] to save it.

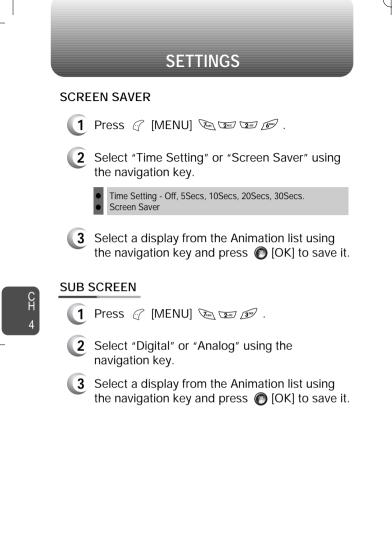
DIALED

- 1 Press @ [MENU] Ven 200 200 .
- Select "Defaults", "Downloads", or "Photos" using the navigation key.
- Select a display from the Animation list using the navigation key and press () [OK] to save it.





TX-120C-7/14(N0-CAMERA)-1 2003.7.14 5:54 PM 페이지 62



	SETTINGS	
GREETING MESSAGE		
To input a personal greeting: MSG/FONT COLOR/BACKGROUND COLOR/ ENTRY MESSAGE		
1	Press 🕜 [MENU] 🔄 📼 🔄 .	
2	Select "MSG", "Font Color", "Background Color" or "Entry Message" with the Navigation key. Press ([OK].	
	 MSG - On/Off. Font Color - White, Blue, Dark blue, Magenta, Gray, Black. Background Color - Transparent, White, Blue, Yellow, Gray, Black. Entry Message - Enter message. 	CH
3	To save, press 🕐 [OK].	4
CONTRAST		
To adju	ist the display contrast:	, i
MAIN	LCD/SUB LCD	
1	Press 🕜 [MENU] 🗺 🖼 🖭	
2	Select "Main LCD" or "Sub LCD" using the navigation key.	
	 Main LCD - Level 1~5. Sub LCD - Level 1~5. 	
3	To save, press 💿 [OK].	
	63	



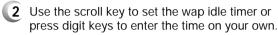


SETTINGS

WEB IDLE TIME

This function disconnects your phone from a network when there is no key input for a certain time period.





DATA SVC.

Transfers data from to PC.

CONNECTION Choose the connection mode for the usage of your phone.

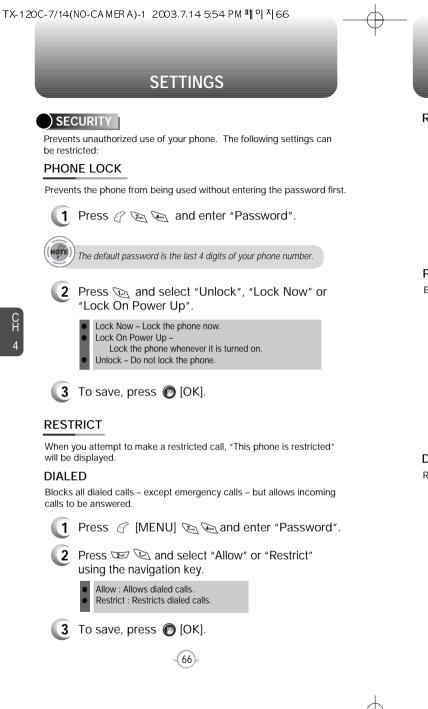
Press @ [MENU] 3 2 2 .

2 Select one of the following connection modes using the navigation key.

Voice Call : To receive a voice call.
Data Only : To receive data when connected to PC.
Fax Only : To function as a fax when connected to PC.

3 Press 💿 [OK] to save.

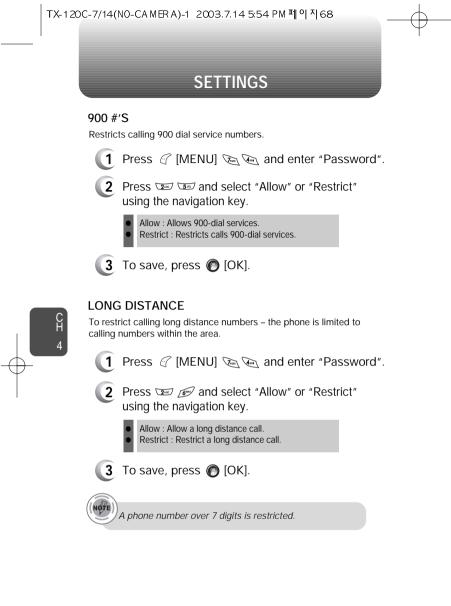
This function is available only when the phone is connected to data cable.



SETTINGS RECENT CALLS 1 Press @ [MENU] 🔙 🛥 and enter "Password". 2 Press 2m and select "Allow" or "Restrict" using the navigation key. Allow : Allows recent calls. Restrict : Restricts recent calls. Press 🕐 [OK] to save it. 3 PHONE BOOK Blocks access to, and protects data in your phonebook. (1 Press @ [MENU] The and enter "Password". 2 Press 🖅 🖅 and select "Allow" or "Restrict" with the Navigation key. Allow : Allow access to the phonebook. Restrict : Restrict access to the phonebook. 3 To save, press 👩 [OK]. DATA CALL Restricts data calls from being placed. 1 Press 🖉 [MENU] 🔙 🔙 and enter "Password". 2 Press 🖙 🖾 and select "Allow" or "Restrict" using the navigation key.

Allow : Allows data calls. Restrict : Restricts data calls.

3 To save, press 👩 [OK].



SETTINGS

CHANGE CODE

Changes your 4-digit password.



) The default password is the last 4 digits of your phone number.

- 2 Press 🖅 .
- (3) Enter a new password and press (OK).
- Enter the new password again and press (OK).

SPECIAL #'S

Stores 3 phone numbers that can be called even in the lock mode.

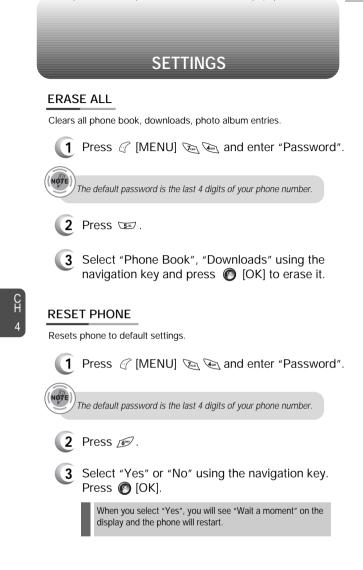
Press @ [MENU] 🗺 🔄 and enter "Password".

The default password is the last 4 digits of your phone number.

Press Can and select a location using the navigation key.

Press ([OK] and input a phone number, press ([OK] again to save.





SETTINGS

OTHERS

ANSWER OPTIONS

CALL ANSWER To select an answer mode:

1 Press @ [MENU] The De De .

Select "Any Key" or "Send Key" with the Navigation key.

3 To save, press 🕐 [OK].

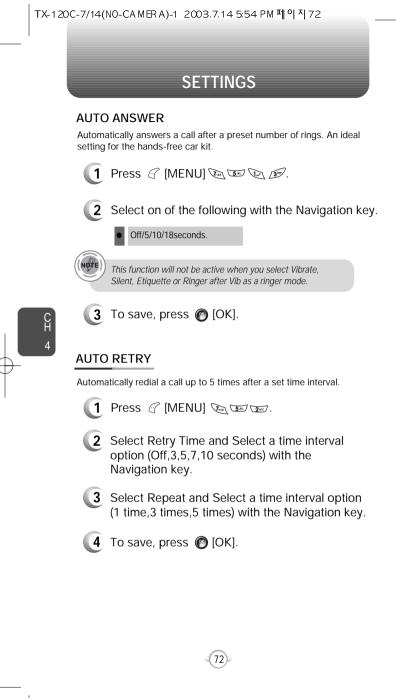
ACTIVE FLIP Selects an Active Flip Answer mode as follows.

1 Press @ [MENU] The IN 2007.

2 Select "On" or "Off" with the navigation key.

3 To save, press 🕐 [OK].

When Active Flip On is selected, an incoming phone call can be answered simply by opening the phone. When Active Flip Off is selected, you will need to open the phone and follow the Answer mode you have selected.



SETTINGS

VOICE DIAL

- 1 Press @ [MENU] Ver 39.
- Select Set Active and Select "Active Flip" or "Send Key" with the Navigation key.
- 3 Select HFK Mode and Select "On" or "Off" with the Navigation key.
- 4 To save, press 🕐 [OK].

LANGUAGE

Selects the language in which letters are displayed on screen.

1 Press @ [MENU] The Is .

- 2 Select either "English" or "Spanish".
- 3 To save, press 🔞 [OK].

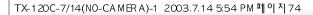
VOICE PRIVACY

Enhances voice privacy and avoids tapping during a call.

- Press @ [MENU] The IM .
- 2 Select "Standard" or "Enhanced" with the Navigation key
- 3 To save, press 👩 [OK].

"Enhanced" - Makes it more difficult to wire tap.

(73)



SETTINGS

TTY MODE

Your phone is able to operate with a TTY (Teletyperwriter) device in both analog and digital modes. This feature is system dependent and may not be available in all areas.

1 Press @ [MENU] 🗺 🗺 .

Select one of the following options (TTY Full/ TTY+TALK/TTY+HEAR/TTY Off) with the Navigation key and press () [OK].

LOCATION

To determine whether or not the network system can detect your position:

Press @ [MENU] The Ist Test.

2 Select "Location On" or "911 Only" with the Navigation key.

911 Only - Your location will be hidden from network & application except 911.
 Location On – Your location is now available to the network.

3 To save, press 👩 [OK].

SETTINGS

PHONE INFO.

To display the version of your phone:

S/W VERSION

- 1 Press @ [MENU] 🗺 🖅 💽 .
- 2 You are to see the version of software.
- 3 Press () [OK].

H/W VERSION

- 1 Press @ [MENU] Test 600 200.
- **2** You are to see the version of hardware.
- 3 Press 🕐 [OK].

GET IT NOW VERSION

- 1 Press @ [MENU] Tes 6 32.
- 2 You are to see the version of get it now.
- **3** Press **(** [OK].





SETTINGS

SYSTEM

SET MODE

Selects the Preferred System.



Select one of the following options (Automatic B /Automatic A /Home only) with the Navigation key and press ([OK].

> Automatic B : Scan the radio channels based on the Automatic B setting.
> Automatic A : Scan the radio channels based on the Automatic A setting.
> Home only : Only within your home area or home affiliated area.

FORCE CALL

Temporarily forces phone to use Analog mode – mode automatically ends in 10 minutes.

1 Press @ [MENU] Tes Tes 2007.

Select one of the following options (CDMA-IS95/Analog/No) with the Navigation key and press ([OK].

CDMA-IS95 Analog No

SETTINGS

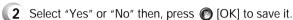
NAM SETTING

Enables Auto NAM (Number Assignment Modules) or manually selects a NAM.

AUTO NAM

Automatically switches phone to proper NAM when you have multiple NAM registrations.





CHANGE NAM

Changes the NAM used by the phone when you have multiple registrations.



Select "NAM1-VERIZON" or "NAM2-VERIZON" then press () [OK] to save it.



PRL ID

Displays the phone's PRL (Preferred Roaming List).

(1 Press @ [MENU] 🕞 🖓 .



TX-120C-7/14(N0-CAMERA)-1 2003.7.14 5:55 PM 페이지 78

UTILITIES

EVENT

Sets an event and reminds you of that event.

ADD PLAN



- 2 Move the Navigation key to choose a date in the calendar and press ([OK].
 - Use left,right,up and down instead of leftward,upward, rightward and leftward.

TIME SETTING

To select "Time Setting" for the event, press select a melody with the Navigation Key.

- Choose one of the following on the first line: On time, 10 Min Before, 30 Min Before, 1 Hour Before, No Alarm.
- Use the Navigation Key to move to year, month, day, time and input using the digit keys.
- Down press Navigation Key to return to editing mode.

MELODY SETTING

To set a "Melody Setting" for the event, press select a melody with the Navigation Key.

MESSAGE SETTING

To set a "Message Setting" for the event, press 2 .

3 Press **(a)** [OK] to save it or \mathcal{D} [Back] to return to the calendar.

4 The date of the event will be marked on your calendar.

(78)

100			1.1	77	
U			=:		3
9	_	-	_	-	-

VIEW EVENT LIST

- 2 Move the Navigation key to choose a list and press () and choose one at the \mathcal{A} , () , \mathcal{B} .

(79)



UTILITIES

ALARM

You can set up to 3 alarms.

- To display alarm entries, press ♂ [MENU] ☞ ☞.
- Select one of the entries using the navigation key. To set a new alarm, choose item 1, 2 or 3. To edit an existing alarm, select that alarm. Press (C) [OK].

• To delete the existing one, press \mathcal{D} .

 To set a time, press E from the Alarm Setting Menu.

> Use the navigation key to choose an alarm frequency (Once, Daily, Weekly, Monthly, Yearly). To save, press () [OK]. "Save Complete" will be displayed and the screen will return to the alarm list.

2. To set a melody, press zer from the Alarm Setting Menu.

Use the navigation key to scroll through the list of 10 ring tones and 30 melody tones.
 To set a melody, press ([OK]

3. To set a snooze, press in from the Alarm Setting Menu.

Select one of the following: No use, 1 Time, After 3 minutes.

4. To set a pause, press Set from the Alarm Setting Menu.

Pause setting is available for existing alarms. It is not available for new entries.

UTILITIES

MEMO PAD

Your phone comes with a memo pad you can use to compose and store reminders and notes to help keep you utilities.

ADD MEMO

To compose a memo (There is a 80-letter limit):





VIEW MEMO

To view saved a memo:



- Display the list all memo in saved order. To select with Navigation keys and press ([OK].
- Select an entry and pressing (MENU) to view the time of the following items:

Add New/Erase All

Selected memo will be displayed. If you want edit memo, press (7 [MENU] to select "Edit" and Input a new text memo.

SETTINGS

To select memo pad background image

1 Press 🥜 [MENU] 🖻 🖅 .

Select (Paper/Pattern/Sea/Sky/Flower) with the navigation key.(left or right) and press ([OK].





UTILITIES

CALCULATOR

To access the calculator:



2 Follow the instructions below to calculate $(8^{*}6)/4-2.5$

> Input 8. Press the navigation key to the right. Input 6 and press the navigation key to the left. Input 4 and press the navigation key down. Input 2 and press the Setto input (.). Press 5, 🕐

【 3 To reset, press 🕞 [Reset].

WORLD CLOCK

Notifies you of the time in a specific preprogrammed city.

【 1) Press 🕜 [MENU] 🖅 🗺 .



2 Select a city using the navigation key.

82

3 The world map is displayed with the city, the date and time.

UTILITIES

STOPWATCH

Simultaneously times up to six different events. To operate the stopwatch:

Press @ [MENU] m 6. 1

- **2** To measure a time period.
 - 1. To start the stopwatch, press 👩 .
 - 2. To pause it, press 🕐
 - 3. To resume it or 🅤 [RESET] to return to the previous page, press \Im [EXIT].
- **3** To time up to six events at once:
 - 1. To start, press 👩 .
 - 2. To stop a time period and continue measuring another one, press @ [CONT].
 - 3. To stop the second and continue measuring a third one, press @ [CONT].
 - 4. To measure up to six time periods, repeat the above steps.
 - 5. To stop, press 🕐 . To review the results, press @ [VIEW].
 - 6. To return to the stopwatch, press (6) or \Im .
 - 7. To reset it, press \mathcal{P} [RESET].

MEMO

84

Chapter 5

VOICE SERVICE

This chapter addresses Voice Service, an advanced feature that allows you to place calls using your voice. With Voice Memo (VM) you can record voice messages and set the Answering Machine. Topics include:

85

C H 5

- VOICE RECOGNITION MODE
- VOICE SERVICE MENU

TX-120C-7/14(NO-CAMERA)-1 2003.7.14 5:55 PM 페이지 86

VOICE RECOGNITION MODE

Voice Recognition (VR) enables you to place calls using your voice and to record voice memos.

- Press and hold 🕤 until your phone turns to Voice Recognition mode.
- The display to the right will appear when the phone turns on Voice Recognition mode.

Depending on the prompt mode, expert or beginner, you will hear either of the following prompts. The second prompt automatically plays when nothing is said. (Please see page 92 for more information on prompt modes.) Beginner Mode

1st: "Main Menu"
 2nd: "Speak a name to call, or say dial.

Expert Mode

1st: A sequence of low tone and high tone.
 2nd: "Main Menu"

Once you say your selection, you will be taken through each of the procedures (name, dial, redial, voice memo, phone book, cancel).

NAME

NOTE

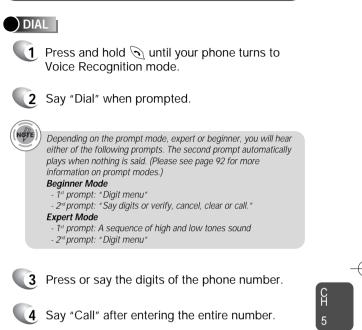
ľ	1
	-

Press and hold 🕤 until your phone turns to Voice Recognition mode.

If you say a name or tag that is already in the phone book, the number and name will be displayed and you will hear "Calling (name)".

(86)

VOICE RECOGNITION MODE



(87)

VOICE RECOGNITION MODE

REDIAL

Press and hold 🕤 until your phone turns to Voice Recognition mode.

2 Say "Redial" to dial the last dialed number.

VOICE MEMO

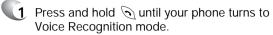
- Press and hold () until your phone turns to Voice Recognition mode.
- Say "Voice Memo" and follow the steps as instructed on the display.
- To stop recording a memo, press
 To cancel, press
 B.

) To pause, press 🕞 . To resume, press 🔘

After recording a voice memo you can "Review", "Re-record", or "Save".

VOICE RECOGNITION MODE

PHONE BOOK

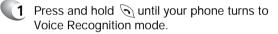


2 Say "Phone Book".

All phone book entries with voice tags will appear and be played.

) To call a phone number with an attached voice tag, say "yes" while the voice tag is playing.

CANCEL



To exit the Voice Recognition mode or to return to idle mode, say "Cancel".

Ĥ



TX-120C-7/14(NO-CAMERA)-1 2003.7.14 5:55 PM 페이지 90

VOICE SERVICE MENU

VOICE MEMO

Press @ 📼 to start Voice Service menu.

【 2 To enter a voice memo, press 💿 .

1.To record a voice memo, press L. Instructions will be displayed and you will hear "Please record at the tone."

2. To play voice memos, press 🖅.

4.To erase all voice memos, press 🦗 .

4 To stop recording a memo, press 🔘 .

To pause or resume, press \Im . To stop, press O .

5 After recording a voice memo you can "Review", "Re-record", or "Save".

VOICE SERVICE MENU

VOICE DIAL

LIST

Lists, adds, or erases phone book entry voice tags.

To list phone book entries with attached voice tags, press \mathcal{C} \mathcal{D} .

2 Select one with the Navigation key and press 💿 .

EDIT : Retrain / Voice Setting / Clear. PLAY : Voice tag play.

3 To play a voice tag, press 💿 .

4 To edit an existing voice tag, press 🦪 .

 Retrain - "Retrain Voice Name" displays. Press O then say a name.
 Voice Setting - "Change" displays. Press O, select a phone number, then press O again.
 Clear - "Removing voice names proceed" displays. Press O and "All voice tags were deleted successfully" appears.

H

5

VOICE SERVICE MENU

ADD

To add a voice tag to a phone book entry, press @ 100 100 100.

- 2 Select one group with the Navigation key and press ().
- Select a phone number with the Navigation key and press
- 4 To add the voice tag, say the name.

CLEAR ALL

- To erase all voice tags in the list, press (7 1) (1) (2)
- 2 You will see "Removing all voice tags proceed?".
- **3** Press **(C)** and you will see a message "Delete all tagged book entries too?"

NO : Delete all voice tags. YES : Delete all voice tags and phone book entries. CNCL : Return to the previous page.

92

VOICE SERVICE MENU

TRAIN WORD

Trains the Control Words into categories as follows.

YES

Use the "Yes/No" to train or untrain the Voice Recognition with the control words, "Yes".

1 Press @ [MENU] 💷 🖅 🔄 .

2 Select one of the following options with the Navigation key and press (2).

List Words : Displays list of control words in the "Yes" set. Select a control word, press 🕐 and either train, untrain or view the status of the word. To train with a word, press 🖓 and follow the voice prompts. Untrain All : Untrain "Yes" set to recognize trained control words.

NO

Use the "Yes/No" to train or untrain the Voice Recognition with the control words, "No".

1 Press 🕜 [MENU] 🖅 🖅 💷 .

2 Select one of the following options with the Navigation key and press (2).

List Words : Displays list of control words in the "No" set. Select a control word, press 🕐 and either train, untrain or view the status of the word. To train with a word, press kan and follow the voice prompts. Untrain All : Untrain "No" set to recognize trained control words.

VOICE SERVICE MENU

WAKE-UP

Use the Wake-Up to train or untrain the Voice Recognition with the control word, wake up.

Press @ [MENU] I Press @ .
 Select one of the following options with the Navigation key and press @ .

List Words : Displays list of control words in the Yes/No set. Select a control word, press 🕐 and either train, untrain or view the status of the word. To train with a word, press 🕞 and follow the Untrain All : Untrain Wake-up to recognize trained control words.

UNDO TRAIN ALL

1 Press @ [MENU] 🖭 💷 🏎 .

2 Select "Yes" or "No" with the Navigation key and press ().

Chapter 6 VOICE MAIL AND TEXT MESSAGE

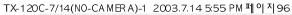
This chapter addresses Voice Mail and Text Messaging functions including:

WHEN A NEW MESSAGE ARRIVES

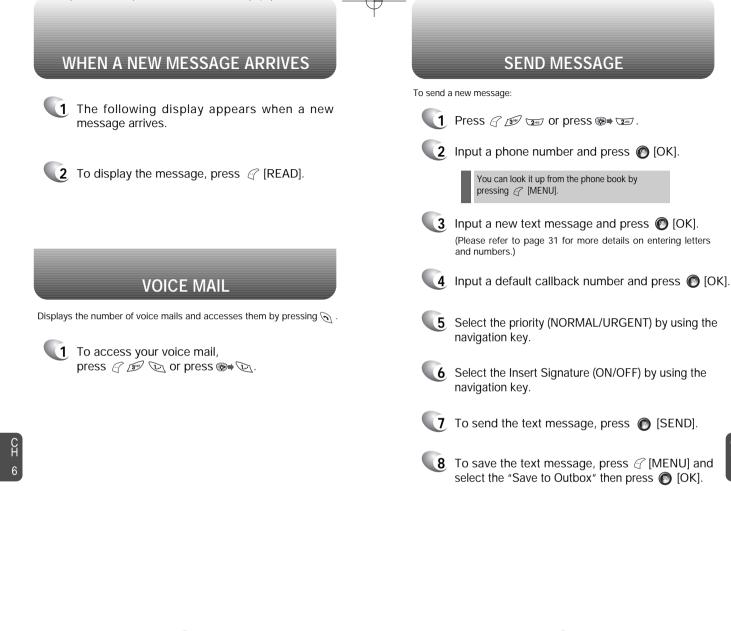
- VOICE MAIL
- SEND MESSAGE
- INBOX
- OUTBOX
- SAVED
- MY OBJECT
- QUICK TEXT
- ERASE ALL
- SETTINGS



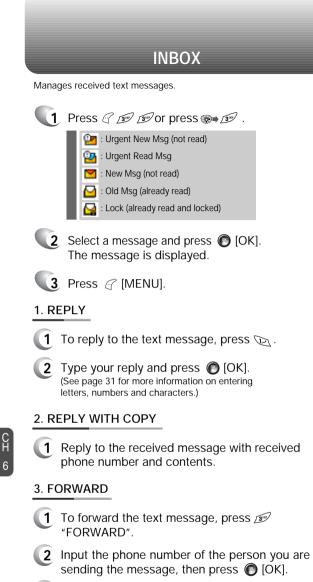
95



(96)







(3 Input any text message to go along with the forwarded message, then press (6) [OK].

(98)

-φ					
	INBOX				
	4. SAVE TO SAVED				
	To save the text message in your phone, press 🚈 "SAVE TO SAVED".				
	2 Press (2).				
	5. SAVE TO QUICK TEXT				
	Press 📼 .				
	6. SAVE TO CONTACT				
	Press 🖅 .				
	7. LOCK & UNLOCK				
	To lock or unlock the text message, press En "LOCK/UNLOCK".				
	2 Select LOCK to lock the message or UNLOCK to unlock the message, then press ([OK].				

(99)

 \bot



OUTBOX

3. SAVE TO CONTACT

1 Press 🔊 .

4. SAVE TO SAVED

1 Press 🐼 .

5. LOCK & UNLOCK

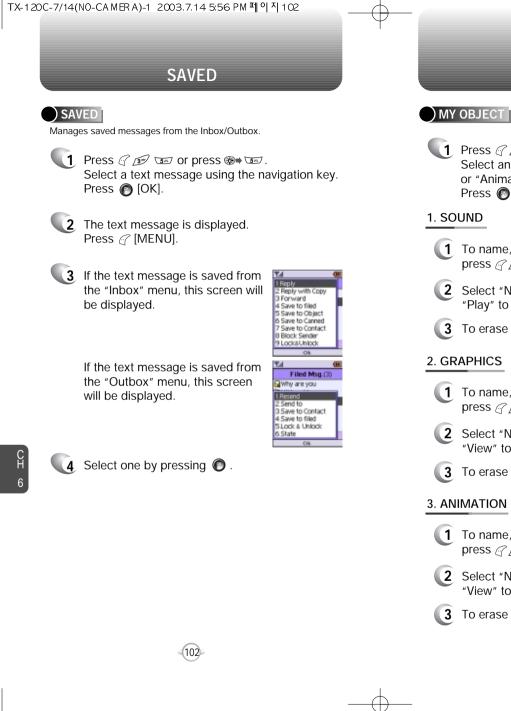
- To lock or unlock the text message, press "LOCK/UNLOCK".
- 2 Select LOCK to lock the message or UNLOCK to unlock the message, then press ().

6. STATE

To display the status of an outbox message, press 🖅 .

(101)





MY OBJECT

- 🚺 Press 🕜 🖅 🞯 or press 🐲 🚳 . Select an my object type "Sound", "Graphics" or "Animation" with the Navigation key. Press 🕐 [OK].
- **1** To name, play or erase saved sound objects, press 🕜 🖅 🕞 🕞 or press 🛞 🔊 💽 .
- **2** Select "Name" to rename a sound with *C* or "Play" to play a sound with
- To erase a sound, press 🐷 .

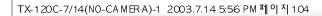
2. GRAPHICS

- **1** To name, play or erase saved graphic objects, press (7 3 50 200 or press (8) 50 200 .
- Select "Name" to rename a graphic with @ or "View" to view a graphic with (.
- To erase a graphic, press 🐷 .

3. ANIMATION

- **1** To name, play or erase saved animation objects, press (3" 5" 3" or press (5" 3").
- 2 Select "Name" to rename animation with @ or "View" to view animation with 🔘
 - To erase animation, press 🐷 .





QUICK TEXT

To edit the quick text message you have saved:

- Press @ B Concernent or press (Press @ Decernent or press (Press (Pres) (Press (Press (Press (Pre
- The text message is displayed. Press @ [MENU].
- To edit the saved quick text message, press ₪ [Add New].

To add the saved quick text message, press 🖅 [Edit].

To erase the saved quick text message, press \mathcal{D} [Erase].

104

ERASE ALL

ERASE MESSAGES

- Press 🕜 🖅 🐨 or press 🛞 🐨.
- $\fbox{2}$ 1. To erase all the inbox messages, press \boxdot .

Erases entire inbox or old inbox.

2. To erase all the outbox messages, press 2.

Erases entire outbox or old outbox.

- 3. To erase the saved messages, press 3.
- 4. To erase the my object items "Sound", "Graphics" or "Animation", press .
- 5. To erase the quick text, press 5......



TX-120C-7/14(NO-CAMERA)-1 2003.7.14 5:56 PM 페이지 106

SETTINGS

Manages messaging features through various features.

SAVE SENT MSG

Saves every sent message

- 📢 Press 🕜 🖅 륫 or press 🐲 륫 .
- 2 Press 💿 . Select "Off", "On", or "Prompt" using the navigation key, then press (OK).
- DEFAULT CALL BACK

Edits a default call back number so that the recipient can call back or reply.

【 1 Press 🦳 🖅 🔊 or press 🐲 🔊.

2 Press 🖅 . Input a call back number, then press (OK).

ALERT

Enables phone to alert you of an incoming message.

1 Press 🕜 🖅 痾 or press 🐲 痾 .

2 Press 3 Select "Ringer", "Vibrate", "Silent", "Ringer & Remind", or "Vibrate & Remind" using the navigation key.

106

The Ringer & Remind or Vibrate & Remind rings or vibrates every 2 minutes to remind you of a new message. They will be cleared when any key is pressed.

3 Press **(**[OK].

SETTINGS

AUTO ERASE

Automatically erases inbox/outbox messages when new messages arrive.

1. AUTO ERASE INBOX



- 2 Press 🕞 . Select "Disable" or "Old Inbox" using the navigation key.
- **3** Press **()** [OK].

2. AUTO ERASE OUTBOX

🚺 Press 🕜 🖅 🔊 🐼 or press 🐲 🔊 🐼

2 Press 2. Select "Disable" or "Old Inbox" using the navigation key.

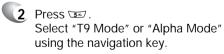
3 Press 🕐 [OK].

ENTRY MODE

Sets an Entry Mode as a default. The T9 mode indicator will appear whenever the input mode is activated if the T9 mode is the default.

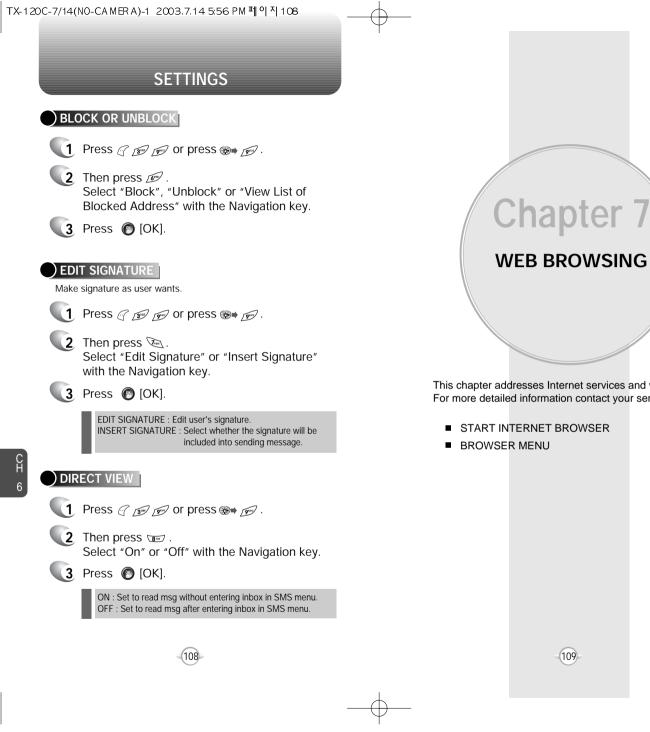


📢 Press 🕜 🖅 🔊 or press 🐲 🔊 .



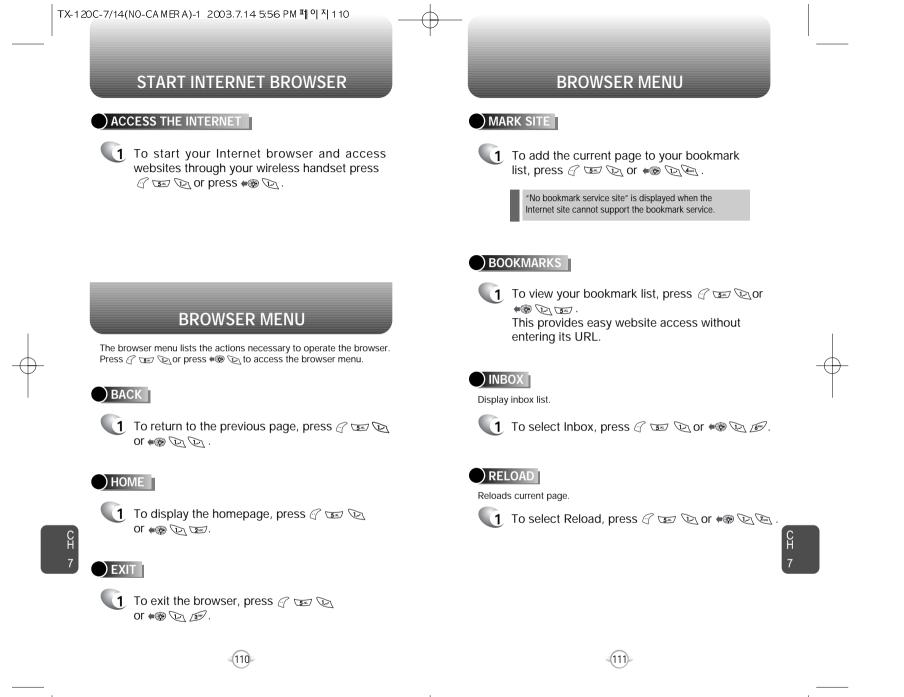
3 Press **(**[OK].





This chapter addresses Internet services and web browsing. For more detailed information contact your service provider.





BROWSER MENU

SETTINGS

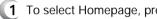
Displays Browser Menu Settings.



【 1) To select Settings, press 🕜 📼 🕞 or 🐗 🕞 📼 .

HOMEPAGE

Enables you to change the homepage.



1 To select Set UP.Link, press 🖙.

CIRCUIT LINGER

1 To select Circuit Linger Timer, press 🖅 .

SCROLL MODE

1 To select scroll mode, press 🔙 .

SCROLL SPEED



1 To select scroll speed, press 📼 .

KEY PRESS TIMEOUT



1 To select Key Press Timeout, press B

(112



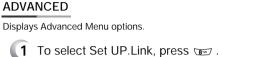


1 To select Homepage, press 🕞 .

PROXY

Enables you to select another WAP PROXY.





-SHOW URL Displays the URL (Uniform Resource Locator) of the current page.

BROWSER MENU

SECURITY

Display Security Menu Options.

1 To select Security, press 🔊 .

1. To select Show URL, press 🕞

-RESTART BROWSER Causes the deck history and deck cache to be cleared and starts a new session with the UP. Link.

1. To select Restart Browser, press 🖅.





MEMO

Chapter 8 SAFETY AND WARRANTY

This chapter addresses the safety guidelines and precautions to follow when operating your phone. Please make sure to be aware of all the details about the safety to operate your phone in the way that you are supposed to.

This chapter contains the terms and conditions of services and the warranty for your phone. Please review them thoroughly.

- SAFETY INFORMATION FOR WIRELESS HANDHELD PHONES
- SAFETY INFORMATION FOR FCC RF EXPOSURE
- SAR INFORMATION
- FDA CONSUMER UPDATE
- PROTECT YOUR WARRANTY
- 12 MONTH LIMITED WARRANTY



114

115

SAFETY INFORMATION FOR WIRELESS HANDHELD PHONES

Read This Information Before Using Your Handheld Portable Cellular Telephone

EXPOSURE TO RADIO FREQUENCY SIGNALS

Your wireless handheld portable telephone is a low power radio transmitter and receiver. When it is ON, it receives and also sends out radio frequency (RF) signals.

In August 1996, the Federal Communications Commissions (FCC) adopted RF exposure guidelines with safety levels for handheld wireless phones. Those guidelines are consistent with the safety standards previously set by both U.S. and international standards bodies:

ANSI C95.1 (1992) * NCRP Report 86 (1986) * ICNIRP (1996) *

Those standards were based on comprehensive and periodic evaluations of the relevant scientific literature. For example, over 120 scientists, engineers, and physicians from universities, government health agencies, and industry reviewed the available body of research to develop the ANSI Standard (C951).

The design of your phone complies with the FCC guidelines (and those standards).

ANTENNA CARE

Use only the supplied or an approved replacement antenna. Unauthorized antennas, modifications, or attachments could damage the phone and may violate FCC regulations.

SAFETY INFORMATION FOR WIRELESS HANDHELD PHONES

DRIVING SAFETY

Talking on the phone while driving is extremely dangerous and is illegal in some states. Remember, safety comes first. Check the laws and regulations on the use of phones in the areas where you drive. Always obey them.

Also, if using your phone while driving, please:

- Give full attention to driving. Driving safely is your first responsibility.
- Use hands-free operation, if available.
- Pull off the road and park before making or answering a call, if driving conditions so require.

If you must use the phone while driving, please use one-touch, speed dialing, and auto answer modes.

An airbag inflates with great force. DO NOT place objects, including both installed or portable wireless equipment, in the area over the airbag or in the air bag deployment area. If in-vehicle wireless equipment is improperly installed and the air bag inflates, serious injury could result.





1* : American National Standards Institute.

2* : National Council on Radiation protection and measurements.

3* : International Commission on Nonionizing Radiation Protection.

116

SAFETY INFORMATION FOR WIRELESS HANDHELD PHONES

ELECTRONIC DEVICES

Most modern electronic equipment is shielded from RF energy. However, certain electronic equipment may not be shielded against the RF signals from your wireless phone.

PACEMAKERS

The Health Industry Manufacturers Association recommends that a minimum separation of six (6") inches be maintained between a handheld wireless phone and a pacemaker to avoid potential interference with the pacemaker. These recommendations are consistent with the independent research by and recommendations of Wireless Technology Research. Persons with pacemakers :

- ALWAYS keep the phone more than six inches from your pacemaker when the phone is turned on.
- Do not carry the phone in a breast pocket.
- Use the ear opposite the pacemaker to minimize the potential for interference.
- If you have any reason to suspect that interference is taking place, turn your phone OFF immediately.

OTHER MEDICAL DEVICES

If you use any other personal medical device, consult the manufacturer of your device to determine if they are adequately shielded from external RF energy Your physician may be able to assist you in obtaining this information.

Turn your phone OFF in healthcare facilities when any regulations posted in these areas instruct you to do so. Hospitals or healthcare facilities may be using equipment that could be sensitive to external RF energy.

POSTED FACILITIES

Turn your phone OFF where posted notices so require.

SAFETY INFORMATION FOR WIRELESS HANDHELD PHONES

OTHER SAFETY GUIDELINES

AIRCRAFT

FCC and Transport Canada Regulations prohibit using your phone while in the air. Turn your phone OFF before boarding an aircraft.

BLASTING AREAS

To avoid interfering with blasting operations, turn your phone OFF when in a "blasting area" or in areas posted: "Turn off two-way radio." Obey all signs and instructions.

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.

Areas with a potentially explosive atmosphere are often, but not always, clearly marked. They include fueling areas such as gas stations; below deck on boats; fuel or chemical transfer or storage facilities; vehicles using liquefied petroleum gas (such as propane or butane); areas where the air contains chemicals or articles, such as grain, dust, or metal powders; and any other area where you would normally be advised to turn off your vehicle's engine.



SAFETY INFORMATION FOR WIRELESS HANDHELD PHONES

PRECAUTIONS

Your Handheld Portable Telephone is a high quality piece of equipment. Before operating, read all instructions and cautionary markings on (1) AC Adaptor (2) Battery and (3) Product Using Battery.

DO NOT use this equipment in an extreme environment where high temperature or high humidity exists.

DO NOT abuse the equipment. Avoid striking, shaking or shocking. When not using, lay down the unit to avoid possible damage due to instability.

46

DO NOT expose this equipment to rain or spilled beverages.

DO NOT use unauthorized accessories.

DO NOT disassemble the phone or its accessories. If service or repair is required, return unit to an authorized Audiovox cellular service center. If unit is disassembled, the risk of electric shock or fire may result.

DO NOT short-circuit the battery terminals with metal items etc.

SAFETY INFORMATION FOR FCC RF EXPOSURE



CAUTIONS

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

Use only the supplied or an approved antenna. Unauthorized antennas, modifications, or attachments could impair call quality, damage the phone, or result in violation of FCC regulations.

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

BODY-WORN OPERATION

This device was tested for typical body-worn operations with the back of the phone kept 2.0 cm. from the body. To maintain compliance with FCC RF exposure requirements, use only belt-clips, holsters or similar accessories that maintain a 2.0 cm. 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.

VEHICLE MOUNTED EXTERNAL ANTENNA (OPTIONAL, IF AVAILABLE)

A minimum separation distance of 7.9 inches (20cm) must be maintained between the user/bystander and the vehicle mounted external antenna to satisfy FCC RF exposure requirements.





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 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 governmentadopted 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 1.28mW/g and when worn on the body, as described in this user guide, is 0.547mW/g. (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 PP4TX-120C.

122

Additional information on Specific Absorption Rates (SAR) can be found on the Cellular Telecommunications Industry Asso-ciation (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 sub-stantial margin of safety to give additional protection for the public and to account for any variations in measurements.

(123)

FDA CONSUMER UPDATE



U.S. Food and Drug Administration -Center for Devices and Radiological Health Consumer Update on Wireless Phones

1. Do wireless phones pose a health hazard?

The available scientific evidence does not show that any health problems are associated with using wireless phones. There is no proof, however, that wireless phones are absolutely safe. Wireless phones emit low levels of radiofrequency energy (RF) in the microwave range while being used. They also emit very low levels of RF when in the stand-by mode. Whereas high levels of RF can produce health effects (by healting tissue), exposure to low level RF that does not produce heating ef-fects causes no known adverse health effects. Many studies of low level RF exposures have not found any biological ef-fects. Some studies have suggested that some biological ef-fects may occur, but such findings have not been confirmed by additional research. In some cases, other researchers have had difficulty in reproducing those studies, or in determining the reasons for inconsistent results.

2. What is FDA's role concerning the safety of wireless phones?

Under the law, FDA does not review the safety of radiation-emitting consumer products such as wireless phones before they can be sold, as it does with new drugs or medical de-vices. However, the agency has authority to take action if wire-less phones are shown to emit radiofrequency energy (RF) at a level that is hazardous to the user. In such a case, FDA could require the manufacturers of wireless phones to notify users of the health hazard and to repair, replace or recall the phones so that the hazard no longer exists. Although the existing scientific data do not justify FDA regula-tory actions, FDA has urged the wireless phone industry to take a number of steps, including the following:

- Support needed research into possible biological effects of RF of the type emitted by wireless phones;
- Design wireless phones in a way that minimizes any RF ex-posure to the user that is not necessary for device function;

and

· Cooperate in providing users of wireless phones with the best possible

information on possible effects of wireless phone use on human health. FDA belongs to an interagency working group of the federal agencies that have responsibility for different aspects of RF safety to ensure coordinated efforts at the federal level. The following agencies belong to this working group:

- · National Institute for Occupational Safety and Health
- Environmental Protection Agency
- Federal Communications Commission
- Occupational Safety and Health Administration
- National Telecommunications and Information Administration

The National Institutes of Health participates in some inter-agency working group activities, as well. FDA shares regulatory responsibilities for wireless phones with the Federal Communications Commission (FCC). All phones that are sold in the United States must comply with FCC safety guidelines that limit RF exposure. FCC relies on FDA and other health agencies for safety questions about wireless phones. FCC also regulates the base stations that the wireless phone networks rely upon. While these base stations operate at higher power than do the wireless phones themselves, the RF expo-sures that people get from these base stations are typically thousands of times lower than those they can get from wire-less phones. Base stations are thus not the subject of the safety questions discussed in this document.

3. What kinds of phones are the subject of this update?

The term "wireless phone" refers here to hand-held wireless phones with built-in antennas, often called "cell," "mobile," or "PCS" phones.

FDA CONSUMER UPDATE

These types of wireless phones can expose the user to measurable radiofrequency energy (RF) because of the short distance between the phone and the user's head. These RF exposures are limited by Federal Communications Commission safety guidelines that were developed with the advice of FDA and other federal health and safety agencies. When the phone is located at greater distances from the user, the exposure to RF is drastically lower because a person's RF exposure decreases rapidly with increasing distance from the source. The so-called "cordless phones," which have a base unit connected to the telephone wiring in a house, typically operate at far lower power levels, and thus produce RF expo-sures far below the FCC safety limits.

4. What are the results of the research done already?

The research done thus far has produced conflicting results, and many studies have suffered from flaws in their research methods. Animal experiments investigating the effects of radiofrequency energy (RF) exposures characteristic of wire-less phones have yielded conflicting results that often cannot be repeated in other laboratories. A few animal studies, how-ever, have suggested that low levels of RF could accelerate the development of cancer in laboratory animals. However, many of the studies that showed increased tumor develop-ment used animals that had been genetically engineered or treated with cancer-causing chemicals so as to be pre-dis-posed to develop cancer in the absence of RF exposure. Other studies exposed the animals to RF for up to 22 hours per day. These conditions are not similar to the conditions under which people use wireless phones, so we don't know with certainty what the results of such studies mean for human health. Three large epidemiology studies have been published since December 2000. Between them, the studies investigated any possible association between the use of wireless phones and primary brain cancer, glioma, meningioma, or acoustic neuroma, tumors of the brain or salivary gland, leukemia, or other cancers. None of the studies demonstrated the existence of any harmful health effects from wireless phone RF exposures. However, none of the studies can answer questions about long-term exposures, since the average period of phone use in these studies was around three years

5. What research is needed to decide whether RF expo-sure from wireless phones poses a health risk?

A combination of laboratory studies and epidemiological stud-ies of people actually using wireless phones would provide some of the data that are needed. Lifetime animal exposure studies could be completed in a few years. However, very large numbers of animals would be needed to provide reliable proof of a cancer promoting effect if one exists. Epidemiological stud-ies can provide data that is directly applicable to human popu-lations, but 10 or more years' follow-up may be needed to pro-vide answers about some health effects, such as cancer. This is because the interval between the time of exposure to a can-cer- causing agent and the time tumors develop - if they do -may be many, many years. The interpretation of epidemiologi-cal studies is hampered by difficulties in measuring actual RF exposure during day-to-day use of wireless phones. Many fac-tors affect this measurement, such as the angle at which the phone is held, or which model of phone is used.

6. What is FDA doing to find out more about the possible health effects of wireless phone RF?

FDA is working with the U.S. National Toxicology Program and with groups of investigators around the world to ensure that high priority animal studies are conducted to address impor-tant questions about the effects of exposure to radiofrequency energy (RF). FDA has been a leading participant in the World Health Orga-nization International Electromagnetic Fields (EMF) Project since its inception in 1996. An influential result of this work has been the development of a detailed agenda of research needs that has driven the establishment of new research programs around the world.



Н 8

FDA CONSUMER UPDATE

The Project has also helped develop a series of public information documents on EMF issues. FDA and the Cellular Telecommunications & Internet Asso-ciation (CTIA) have a formal Cooperative Research and De-velopment Agreement (CRADA) to do research on wireless phone safety. FDA provides the scientific oversight, obtaining input from experts in government, industry, and academic organizations. CTIA-funded research is conducted through con-tracts to independent investigators. The initial research will include both laboratory studies and studies of wireless phone users. The CRADA will also include a broad assessment of additional research needs in the context of the latest research developments around the world.

7. How can I find out how much radiofrequency energy exposure I can get by using my wireless phone?

All phones sold in the United States must comply with Federal Communications Commission (FCC) guidelines that limit radiofrequency energy (RF) exposures. FCC established these guidelines in consultation with FDA and the other federal health and safety agencies. The FCC limit for RF exposure from wire-less telephones is set at a Specific Absorption Rate (SAR) of 1.6 watts per kilogram (1.6 W/kg). The FCC limit is consistent with the safety standards developed by the Institute of Electri-cal and Electronic Engineering (IEEE) and the National Council on Radiation Protection and Measurement. The exposure limit takes into consideration the body's ability to remove heat from the tissues that absorb energy from the wireless phone and is set well below levels known to have effects. Manufacturers of wireless phones must report the RF expo-sure level for each model of phone to the FCC. The FCC website (http://www.fcc.gov/oet/rfsafety) gives directions for locating the FCC identification number on your phone so you can find your phone's RF exposure level in the online listing.

8. What has FDA done to measure the radiofrequency en-ergy coming from wireless phones ?

The Institute of Electrical and Electronic Engineers (IEEE) is developing a technical standard for measuring the radiofrequency energy (RF) exposure from wireless phones and other wireless handsets with the participation and leader-ship of FDA scientists and engineers. The standard, "Recom-mended Practice for Determining the Spatial-Peak Specific Absorption Rate (SAR) in the Human Body Due to Wireless Communications Devices: Experimental Techniques." sets forth the first consistent test methodology for measuring the rate at which RF is deposited in the heads of wireless phone users. The test method uses a tissue-simulating model of the human head. Standardized SAR test methodology is expected to greatly improve the consistency of measurements made at different laboratories on the same phone. SAR is the mea-surement of the amount of energy absorbed in tissue, either by the whole body or a small part of the body. It is measured in watts/kg (or milliwatts/g) of matter. This measurement is used to determine whether a wireless phone complies with safety guidelines.

9. What steps can I take to reduce my exposure to radiofrequency energy from my wireless phone?

If there is a risk from these products-and at this point we do not know that there is-it is probably very small. But if you are concerned about avoiding even potential risks, you can take a few simple steps to minimize your exposure to radiofrequency energy (RF). Since time is a key factor in how much exposure a person receives, reducing the amount of time spent using a wireless phone will reduce RF exposure.

· If you must conduct extended conversations by wireless phone every day, you could place more distance between your body and the source of the RF, since the exposure level drops off dramatically with distance. For example, you could use a headset and carry the wireless phone away from your body or use a wireless phone connected to a remote an-tenna.

FDA CONSUMER UPDATE

Again, the scientific data do not demonstrate that wireless phones are harmful. But if you are concerned about the RF exposure from these products, you can use measures like those described above to reduce your RF exposure from wire-less phone use

10.What about children using wireless phones?

The scientific evidence does not show a danger to users of wireless phones, including children and teenagers. If you want to take steps to lower exposure to radiofrequency energy (RF), the measures described above would apply to children and teenagers using wireless phones. Reducing the time of wire-less phone use and increasing the distance between the user and the RF source will reduce RF exposure. Some groups sponsored by other national governments have advised that children be discouraged from using wireless phones at all. For example, the government in the United King-dom distributed leaflets containing such a recommendation in December 2000. They noted that no evidence exists that using a wireless phone causes brain tumors or other ill effects. Their recommendation to limit wireless phone use by children was strictly precautionary: it was not based on scientific evi-dence that any health hazard exists

11.What about wireless phone interference with medical equipment?

Radiofrequency energy (RF) from wireless phones can inter-act with some electronic devices. For this reason, FDA helped develop a detailed test method to measure electromagnetic interference (FMI) of implanted cardiac pacemakers and defibrillators from wireless telephones. This test method is now part of a standard sponsored by the Association for the Ad-vancement of Medical instrumentation (AAMI). The final draft, a joint effort by FDA, medical device manufacturers, and many other groups, was completed in late 2000. This standard will allow manufacturers to ensure that cardiac pacemakers and defibrillators are safe from wireless phone EMI. FDA has tested hearing aids for interference from handheld wireless phones and helped develop a voluntary standard sponsored by the Institute of Electrical and Electronic Engi-neers (IEEE). This standard specifies test methods and per-formance requirements for hearing aids and wireless phones so that that no interference occurs when a person uses a "com-patible" phone and a "compatible" hearing aid at the same time. This standard was approved by the IEEE in 2000. FDA continues to monitor the use of wireless phones for pos-sible interactions with other medical devices. Should harmful interference be found to occur. FDA will conduct testing to assess the interference and work to resolve the problem.

12.Where can I find additional information?

For additional information, please refer to the following re-sources:

FDA web page on wireless phones (http://www.fda.gov/cdrh/ phones/index.html)

(127)

- Federal Communications Commission (FCC) RF Safety Pro-gram
- (http://www.fcc.gov/oet/rfsafety)
- International Commission on Non-Ionizing Radiation Protection (http://www.icnirp.de)
- World Health Organization (WHO) International EMF Project (http://www.who.int/emf)
- National Radiological Protection Board (UK) (http://www.nrpb.org.uk/)

TX-120C-7/14(NO-CAMERA)-1 2003.7.14 5:56 PM 페이지 128

PROTECT YOUR WARRANTY

Read your Warranty carefully, with the special consideration to paragraph seven of the Limited Warranty for your unit.

"Warranty does not apply to... or to any product or part thereof which has suffered through alteration... mishandling misuse, neglect or accident".

Many companies are making look alike accessories and in some cases, promoting that their product is equal to or better than the Audiovox product. Be careful. Some of these products may not be compatible to use with your Audiovox product and may damage the unit or cause it to malfunction. If service is required on your unit and it is determined that a non-Audiovox accessory has created the problem with your unit, the Warranty will not apply. In addition, if the unit has already suffered irreversible damage by reason of a noncompatible accessory, the Warranty will be voided. To protect your Warranty, use only compatible accessories which cannot damage or interfere with the functioning of your Audiovox product.



AUDIOVOX COMMUNICATIONS CORP.

555 Wireless Blvd., Hauppauge, New York 11788, 800-229-1235 16808 Marquardt Avenue, Cerritos, California 90703, 562-802-5100 Audiovox Canada 5155 Spectrum Way, Unit #5, Mississauga, Ontario Canada L4W 5A1, 800-465-9672

12 MONTH LIMITED WARRANTY

Audiovox Communications Corp. (the Company) warrants to the original retail purchaser of this Audiovox handheld portable cellular telephone, that should this product or any part thereof during normal consumer usage and conditions, be proven defective in material or workmanship that results in product failure within the first twelve (12) month period from the date of purchase, such defect(s) will be repaired or replaced (with new or rebuilt parts) at the Company's option, without charge for parts or labor directly related to the defect(s).

The antenna, keypad, display, rechargeable battery and battery charger, if included, are similarly warranted for twelve (12) months from date of purchase.

This Warranty extends only to consumers who purchase the product in the United States or Canada and it is not transferable or assignable.

This Warranty does not apply to:

- (a) Product subjected to abnormal use or conditions, accident, mishandling, neglect, unauthorized alteration, misuse, improper installation or repair or improper storage;
- (b) Product whose mechanical serial number or electronic serial number has been removed, altered or defaced.
- (c) Damage from exposure to moisture, humidity, excessive temperatures or extreme environmental conditions;
- (d) Damage resulting from connection to, or use of any accessory or other product not approved or authorized by the Company;
- (e) Defects in appearance, cosmetic, decorative or structural items such as framing and non-operative parts;
- (f) Product damaged from external causes such as fire, flooding, dirt, sand, weather conditions, battery leakage, blown fuse, theft or improper usage of any electrical source.

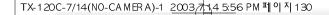
The Company disclaims liability for removal or reinstallation of the product, for geographic coverage, for inadequate signal reception by the antenna or for communications range or operation of the cellular system as a whole.

To obtain repairs or replacement within the terms of this Warranty, the product should be delivered with proof of Warranty coverage (e.g. dated bill of sale), the consumer's return address, daytime phone number and/or fax number and complete description of the problem, transportation prepaid, to the Company at the address shown below or to the place of purchase for repair or replacement processing.









12 MONTH LIMITED WARRANTY

In addition, for reference to an authorized Warranty station in your area, you may telephone in the United States (800) 229-1235, and in Canada (800) 465-9672 (in Ontario call 905-712-9299).

THE EXTENT OF THE COMPANY'S LIABILITY UNDER THIS WARRANTY IS LIMITED TO THE REPAIR OR REPLACEMENT PROVIDED ABOVE AND, IN NO EVENT, SHALL THE COMPANY'S LAIBILITY EXCEED THE PURCHASE PRICE PAID BY PURCHASER FOR THE PRODUCT.

ANY IMPLIED WARRANTIES, INCLUDING ANY IMPLIED WARRANTY OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE, SHALL BE LIMITED TO THE DURATION OF THIS WRITTEN WARRANTY. ANY ACTION FOR BREACH OF ANY WARRANTY MUST BE BROUGHT WITHIN A PERIOD OF 18 MONTHS FROM DATE OF ORIGINAL PURCHASE. IN NO CASE SHALL THE COMPANY BE LIABLE FOR AN SPECIAL CONSEQUENTIAL OR INCIDENTAL DAMAGES FOR BREACH OF THIS OR ANY OTHER WARRANTY, EXPRESS OR IMPLIED, WHATSOEVER. THE COMPANY SHALL NOT BE LIABLE FOR THE DELAY IN RENDERING SERVICE UNDER THIS WARRANTY OR LOSS OF USE DURING THE TIME THE PRODUCT IS BEING REPAIRED OR REPLACED.

No person or representative is authorized to assume for the Company any liability other than expressed herein in connection with the sale of this product.

Some states or provinces do not allow limitations on how long an implied warranty lasts or the exclusion or limitation of incidental or consequential damage so the above limitation 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 or province to province.

IN USA : AUDIOVOX COMMUNICATIONS CORP.

555 Wireless Blvd. Hauppauge, NY 11788 (800) 229-1235

IN CANADA : AUDIOVOX CANADA LTD. 5155 Spectrum Way, Unit #5 Mississauga, Ontario L4W 5A1 (800) 465-9672