

GENERAL SPECIFICATIONS*

FREQUENCY RANGE: 824.040 to 848.970 MHz, Transmit
869.040 to 893.970 MHz, Receive
NUMBER OF RF CHANNELS: 832 Channels, Full Duplex
CHANNEL SPACING: 30 kHz
DUPLEX SPACING: 45 MHz
FREQUENCY STABILITY: ± 2.5 PPM
OPERATING TEMPERATURE: -30°C to $+60^{\circ}\text{C}$
SUPPLY VOLTAGE: 13.7 V DC $\pm 20\%$, Negative Ground
CURRENT DRAIN: 1.8 A Typical, Transmit
0.6 A Typical, Receive
0.00 A Typical, Back-Up
RF POWER OUTPUT: 3 Watts
CONDUCTED SPURIOUS: 60 dB below Carrier
DIMENSIONS (W x D x H): Transceiver: 160 x 230 x 50 mm
Handset: 58 x 208 x 41 mm
Cradle: 64 x 120 x 53 mm
WEIGHT: Transceiver: 3 lbs. 8 oz. (1.4 kg)
Handset: 10.5 oz. (300 g)
Cradle: 9.9 oz. (280 g)

*Subject to change without notice.

Owner's Operating Instructions

NYNEX
Mobile Communications 

832
CELLULAR
CAR TELEPHONE

NYNEX
Mobile Communications 

FEATURES

- 11-Digit Dial Number Display
- 32-Digit Extended Dial Number Readability (NAM option)
- Repertory Dialing of 39 Numbers (shared with Scratch Pad Memory)
- Last Number Sent Memory
- Scratch Pad Memory
- Last Digit Clear
- Displayed Number Clear
- On-Hook Dialing
- Electronic Lock
- Call Restriction (NAM option)
- Horn Alert (NAM option)
- Call-in Progress Protection
- Volume Control for Handset and Speaker
- Mute Control
- Hands-Free Operation with External Microphone (NAM option)
- Compact Handset holder
- Four Function Call Timer
- 1-Minute & 5-Minute Call Signal Tone Off (NAM option)
- Handset Display of Channel Number and Signal Strength
- Self-Diagnostic Error Messages
- A/B Switch with Display Indicator
- Hands-Free Display Indicator
- AUX I/O JACK for Fax Machine, Computer and other equipments

NYNEX CELLULAR CAR TELEPHONE FOR BUSINESS ON THE MOVE

The NYNEX Cellular Car Telephone is the most technically advanced car telephone available today. In one sleek, compact system, NYNEX provides cellular mobile technology at its best. This means a car telephone system with eight hundred thirty-two available channels and an extended roaming capability that can interface with any cellular system in the United States.

NYNEX 832 Cellular Car Telephone offers an outstanding array of features such as push button on-hook dialing that enables you to dial while the handset is in the cradle; repertory dialing that lets you store and recall up to 39 of your frequently called numbers; and last number redial that permits you to redial the last number you called at the touch of a single button (a great help when calling frequently busy phones). An electronic "scratch-pad" allows you to enter a number into the unit while you are engaged in a conversation without writing it down; the number can be recalled later using the repertory dialing or last number redial features. The 832 also has a call time display feature that automatically counts the time that your phone is in operation, and touch tone from memory that allows you to access discount long distant services, signal pagers or banking by phone.

NYNEX has made the installation and maintenance of the Cellular Car Telephone simple. The small, sturdy, compact transceiver can be installed in one easy operation. A flexible mounting system allows the phone to be mounted wherever you want.

For all its high tech sophistication, the NYNEX 832 Cellular Car Telephone is surprisingly easy to use; you simply dial—no codes, no operators, no waiting, no hassle.

And the NYNEX Cellular Car Telephone is a no-nonsense, high quality instrument, rugged enough for off-road use as well as high speed freeway vibration.

The following pages, which describe the unit's functions and many of its components, will help you to make the easiest and most efficient use of NYNEX 832 Cellular Car Telephone.

SAFE DRIVING RECOMMENDATION FOR USERS OF CELLULAR MOBILE TELEPHONE*

- READ the literature on the safe operation of your unit.
- KEEP both hands on the steering wheel and the phone is in its cradle whenever the vehicle is in motion.
- PLACE calls only when vehicle is stopped. Use on-hook dialing and recall dialing of frequently used numbers to speed the time it takes to call.
- WHEN talking from a moving vehicle is unavoidable, drive in the slower lane. Keep conversation brief.
- IF conversation requires taking notes or complex thought, stop the vehicle in a safe place and continue your call.
- WHENEVER you use a mobile telephone you should exercise caution.

*As recommended by the AAA

SAFETY INFORMATION

- TURN OFF your cellular mobile telephone in an explosive atmosphere (near a fuel pump, blasting area, etc.).
- DO NOT load fuel containers in the trunk of the vehicle if the transceiver unit of the cellular system is mounted in the trunk.
- DO NOT operate your unit when someone is within two feet (0.6 meter) of your antenna.
- DO NOT dial when your vehicle is moving in those states where this action is illegal (this is not a prudent practice, even where it is legal).

WARNING

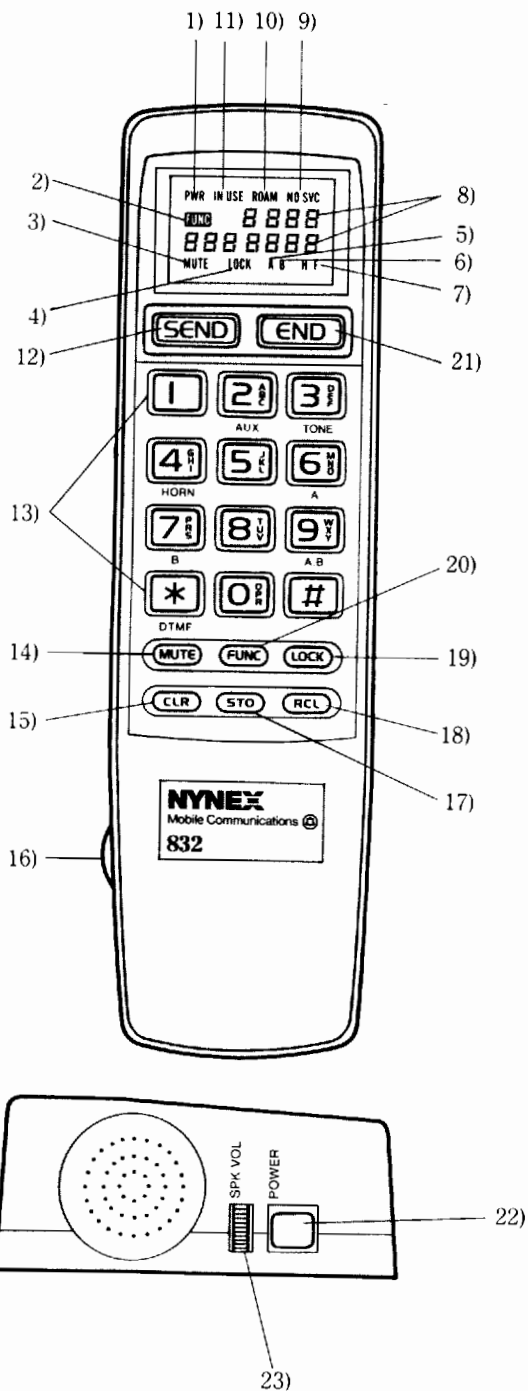
The following offenses can be punished by fine, imprisonment, or both:

- Using obscene, indecent, or profane language.
- Using the unit to give off false distress calls.
- Wiretapping or otherwise intercepting a telephone call, unless that person has first obtained the consent of the parties participating in the call.
- Making anonymous calls to annoy, harass, or molest other people.
- Charging to an account without authorization to avoid payment for service.
- Refusing to yield a party line when informed that it is needed for an emergency call. (It is also unlawful to take over a party line by stating falsely that it is needed for an emergency).

TABLE OF CONTENTS

CONTROLS AND FUNCTIONS.....	⑤
BASIC OPERATION.....	⑦
Removing the Handset Replacing the Handset	
Turning the Unit On Turning the Unit Off	
Call-in Progress Protection Locking the Unit	
Unlocking the Unit	
CALL PROCESSING.....	⑧
Placing a Call Reviewing the Preceding Digits	
Making Corrections Last Number Redial	
If a Call Fails to Go Through Receiving a Call	
Terminating a Call	
VOLUME ADJUSTMENT.....	⑩
Handset Volume Speaker Volume	
Alert Volume (Ring)	
REPERTORY DIALING.....	⑩
Storing Numbers in memory	
Recalling Numbers from Memory	
Dialing a Number Recalled from Memory	
SCRATCH PAD MEMORY.....	⑪
Storing the Number in the Scratch pad Memory	
Dialing the Number Stored in the Scratch Pad Memory	
CALL RESTRICTION (NAM OPTION).....	⑫
HORN ALERT (NAM OPTION).....	⑫
SYSTEM A/B.....	⑫
Normal Mode System A (Non-Wire) Mode	
System B (Wire) Mode	
CALL MUTE.....	⑬
DTMF TONE MUTE.....	⑬
RECALLING THE NUMBER WITH DTMF TONE.....	⑭
TIMER/COUNTER.....	⑭
Aired Time Display Accumulated Call Counter	
Call Time Signal Tone (Optional) Cumulative Call Timer	
HANDS-FREE OPERATION.....	⑮
Placing a Call Answering a Call	
Switching from Handset to Hands-Free Operation	
Switching from Hands-Free to Handset Operation	
AUX I/O Jack	
TABLE OF KEY OPERATION.....	⑯
FREQUENTLY CALLED NUMBERS.....	⑰
GENERAL SPECIFICATIONS.....	Back Cover

CONTROLS & FUNCTIONS



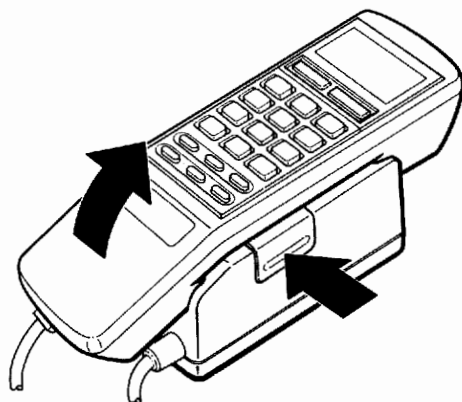
CONTROLS & FUNCTIONS

- 1) POWER INDICATOR **[PWR]**: Lights when the unit is turned on.
- 2) FUNCTION MODE INDICATOR **[FUNC]**: Lights when the FUNCTION KEY is pressed to select extended functions.
- 3) MUTE INDICATOR **[MUTE]**: Lights when the mute control is in effect.
- 4) LOCK INDICATOR **[LOCK]**: Lights when the unit is electronically locked.
- 5) SYSTEM A INDICATOR **[A]**: Lights when the system A (non-wire) only is selected.
- 6) SYSTEM B INDICATOR **[B]**: Lights when the system B (wire) only is selected.
- 7) HANDS-FREE MODE INDICATOR **[HF]**: Lights when the Hands-Free operation is selected.
- 8) 11-DIGIT NUMBER DISPLAY: Displays a telephone number dialed.
- 9) NO SERVICE INDICATOR **[NO SVC]**: Lights when a vehicle is out of the cellular service area.
- 10) ROAM INDICATOR **[ROAM]**: Receiving the service other than the registered system.
- 11) IN USE INDICATOR **[IN USE]**: Lights when a call is in progress.
- 12) SEND KEY **[SEND]**: Initiates a call and allows the user to answer calls when the handset is off the cradle.
- 13) DIGIT KEYS: Enters telephone numbers or 3-digit Unlock Code.
- 14) MUTE KEY **[MUTE]**: Switches off mouthpiece and hands-free microphone so the other party on the line cannot hear your private conversation off the line.
- 15) CLEAR KEY **[CLR]**: Clears the digit(s) from the display.
- 16) HANDSET VOLUME: Controls the volume of received voice.
- 17) STORE KEY **[STO]**: Used in conjunction with digit keys to store telephone numbers into memory.
- 18) RECALL KEY **[RCL]**: Recalls telephone numbers from memory.
- 19) LOCK KEY **[LOCK]**: Turns on the electronic lock.
- 20) FUNCTION KEY **[FUNC]**: Used in conjunction with digit keys, allows operation of extended functions.
- 21) END KEY **[END]**: Ends a call without requiring handset to be replaced.
- 22) POWER SWITCH **[PWR]**: Turns the unit on and off.
- 23) SPEAKER VOLUME: Controls the volume of received voice and key tone.

BASIC OPERATION

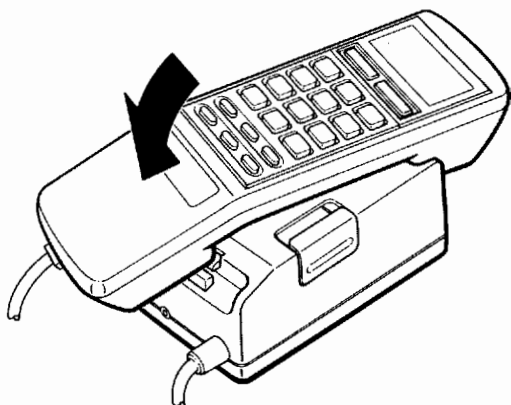
REMOVING THE HANDSET

Press and hold the release button on the cradle, then lift up the handset.



REPLACING THE HANDSET

Engage the notch in the bottom of the earpiece with the catch of the cradle, and depress the handset down so as the handset is engaged fully with the hook.



TURNING THE UNIT ON

- 1) Turn the ignition key of a vehicle on.
- 2) Press the power switch on the side of the cradle. The POWER INDICATOR [PWR] will appear in the display panel.

NOTES: 1. If the NO SERVICE INDICATOR [NO SVC] is displayed, calls cannot be placed or received as the cellular system is not available in the area you are currently in.

2. The ROAM INDICATOR [ROAM] explains the position of vehicle and the Type of System as follows. Refer to the column titled "SYSTEM A/B" for description of the terms used in the diagram below:

	IN Home Area	OUT of Home Area
When the unit is in the PREFERRED SYSTEM	ROAM IN-DICATOR is off.	ROAM IN-DICATOR lights on.
When the unit is in the NON-PREFERRED SYSTEM	ROAM IN-DICATOR flashes.	ROAM IN-DICATOR flashes.

TURNING THE UNIT OFF

- 1) Press the POWER SWITCH on the cradle. The display will go off, and the unit will be turned off.
- 2) The unit may be turned off by turning the ignition off. However, the unit remains on when the ignition is turned off during a call or in the horn alert mode.

CALL-IN PROGRESS PROTECTION

When the power switch is pressed off during conversation, the unit remains on and a call is still in progress. The unit will be turned off when terminating a call.

LOCKING THE UNIT

Press and hold the LOCK KEY [LOCK] until the LOCK INDICATOR [LOCK] appears in the display. The unit will remain locked electronically, even when the unit is turned off, until the unlock code is entered. The locked mode may be confirmed by pressing any of numeral keys. If no tone is heard and the number is not displayed, it is locked.

NOTE: However originating calls cannot be proceeded, calls from other party may be received.

UNLOCKING THE UNIT

Enter the unlock code consisting of 3 digits. The LOCK INDICATOR [LOCK] will go off and the unit will be unlocked.

NOTE: Unlocking of the unit can only be performed when the unit is turned on.

CALL PROCESSING

PLACING A CALL

- 1) Enter a desired telephone number by pressing digit keys while the handset is on-hook or off-hook. Each digit dialed will appear in the display panel, and it will scroll from the right to the left every time a new digit is entered. Although up to 32 digits can be dialed, the last 11 digits will remain in the display.
- 2) After completion of entering a telephone number, press the SEND KEY [SEND]. Calling will be automatically proceeded. The IN USE INDICATOR [IN USE] will light.

- 3) When the called party answers to proceed conversation with you, remove the handset from the handset holder.
- 4) If the telephone number dialed resulted in a busy signal or no answer from the called party, press the END KEY [END], or replace the handset (unit without hands-free option only) to terminate the call.

REVIEWING THE PRECEDING DIGITS

- 1) Press the FUNCTION KEY [FUNC] to select the extended function while a telephone number is displayed. The FUNCTION INDICATOR [FUNC] will appear in the display.
- 2) Press the [★] KEY to review the preceding digits. The telephone number is divided into 3 divisions (as shown in the chart 1 below), and the digits to be displayed depends upon how long the telephone number is, and how many times the [★] KEY is pressed. Refer to the chart 2 below for the correlation.

Division I	Division II	Division III
32..... 23	22..... 12	11..... 1
Up to 10 digits	Up to 11 digits	Up to 11 digits

CHART 1

	Division to be displayed		
Pressing [★] KEY	Number of digits entered		
Once	11 or less	12 through 22	23 or more
Twice	# Division III	Division II	Division I
3 Times	—	# Division III	Division II
	—	—	# Division III

CHART 2

The Function Indicator [FUNC] will go off.

- 3) To release this extended function, press the CLEAR KEY [CLR]. The FUNCTION INDICATOR [FUNC] will disappear from the display.

MAKING CORRECTIONS

- 1) If a wrong digit is entered, momentarily press the CLEAR KEY [CLR]. Each time the key is pressed, the last digit will be erased from the display.
- 2) If dialing error is found after completion of entering a telephone number, press and hold the CLEAR KEY [CLR] for longer than 0.5 second, or press the CLEAR KEY [CLR] and the END KEY [END] consecutively. The entire number will be erased.
- 3) Then enter the correct number.

LAST NUMBER REDIAL

The telephone number last dialed is automatically stored in the Last Number Memory (memory address number [0]) when the SEND KEY [SEND] is pressed to proceed the call following entering the telephone number. The number dialed will not be erased from the display unless the CLEAR KEY [CLR] is pressed or another telephone number is recalled or newly entered.

- 1) In case the call resulted in a busy signal or no answer, or if calling the same number is desired, the telephone number last dialed can be redialed simply by pressing the SEND KEY [SEND].
- 2) In case the last number is cleared from the display by pressing the CLEAR KEY [CLR] or turning the unit off and on, the last number is stored in the memory address number [0]. Therefore, press the RECALL KEY [RCL]

and the digit number [0] consecutively to recall the number. Then press the SEND KEY [SEND] to redial the last number.

IF A CALL FAILS TO GO THROUGH

- 1) If the "re-order" signal, or the fast busy tone is heard, press the END KEY [END] and try again. In this case re-entering a telephone number is not necessary. Simply press the SEND KEY [SEND] to redial a desired party.
- 2) If the "intercept" signal, or siren is heard, it indicates a dialing error is made. In this case, hang up and re-enter a telephone number. Then press the SEND KEY [SEND] to proceed the call.

RECEIVING A CALL

- 1) When ringing is heard, lift the handset to answer the call. The ringing will stop and the IN USE INDICATOR [IN USE] will light.
- 2) If the handset is out of the handset holder when ringing is heard, press the SEND KEY [SEND] to answer the call.

TERMINATING A CALL

Press the END KEY [END], or replace the handset in the handset holder. Just press the END KEY to terminate a call for the unit with hands-free option. The IN USE INDICATOR [IN USE] will go off.

VOLUME ADJUSTMENT

Each volume of HANDSET and SPEAKER can be adjusted independently.

HANDSET VOLUME

With the handset off-hook during conversation, adjust the volume to a desired level by turning the knob on the handset.

SPEAKER VOLUME

Adjust the speaker volume of the key tone and the received voice to a desired level by turning the knob on the cradle.

ALERT VOLUME (RING)

The alert volume can be adjusted only before installing a cradle to a vehicle.

REPERTORY DIALING

STORING NUMBERS IN MEMORY

Up to a maximum of 39 telephone numbers with up to 32 digits can be stored in the Repertory Dialing Memory system.

- 1) Enter a telephone number to be stored by pressing digit key.
- 2) Press the STORE KEY [STO]. The telephone number entered will blink once in every half second for 8 seconds.
- 3) Within these 8 seconds, enter the 2-digit memory address number, [01] through [39], in which the telephone number to be stored. The telephone number displayed will stop blinking, and the telephone number is now stored in memory.

NOTES: 1. The memory address number [0] is assigned to the Last Number Memory so as to automatically store the telephone number entered last. Any telephone number can be manually stored in the memory address number [0], but it cannot be used as the normal memory address number.
2. If the memory address number is previously occupied by another number, the newly entered

telephone number will replace the existing number.

3. If the END KEY [END] is accidentally pressed or the STORE KEY is pressed again during storing, the number storing mode will be released.
4. If any digits other than [01] through [39] is entered while the telephone number is blinking, the number storing mode will be released, and the newly entered digits will replace the telephone number.

RECALLING NUMBERS FROM MEMORY

•RECALLING NUMBERS FROM MEMORY ADDRESS NUMBER [01] THROUGH [09]

- 1) Press the RECALL KEY [RCL].
- 2) Enter the digit of one's place of the memory address number ([1] through [9])—Entering the preceding [0] is not needed. The telephone number stored in the corresponding memory address number [01] through [09] will be displayed.

NOTE: If the digit key [0] is pressed, the telephone number dialed last time will be recalled. When the digit of one's place ([1] through [9]) is entered following number [0], the telephone number stored in memory address number [01] through [09] will replace the currently displayed telephone number.

•RECALLING NUMBERS FROM MEMORY ADDRESS NUMBER [10] THROUGH [39]

- 1) Press the RECALL KEY [RCL].
- 2) Enter the digit of ten's place of the memory address number ([1], [2] or [3]). The telephone number stored in the memory address number [01], [02] or [03] will be displayed.
- 3) Enter the digit of one's place ([1] through [9]) of the memory address number. The telephone number stored in the corresponding memory address number [10] through [39] will replace the currently displayed telephone number.

DIALING A NUMBER RECALLED FROM MEMORY

Press the SEND KEY [SEND] while the telephone number recalled is displayed. The number will be automatically dialed.

SCRATCH PAD MEMORY

The display may be used as a scratch pad during conversation to enter up to a maximum of 32 digits of, for example, a telephone number informed by the other party or a numerical value important to remember, and as such. The telephone number or the numerical value will be stored in the memory, and it can be recalled and, if desired, it can be dialed later.

STORING THE NUMBER IN THE SCRATCH PAD MEMORY

- 1) If no telephone number is displayed, simply enter a telephone number. Then press the STORE KEY [STO] and enter the 2-digit memory address number ([01] through [39]) to store the number in memory.
- 2) If a telephone number is currently displayed, press the CLEAR KEY [CLR] first to erase the existing telephone number. Then follow the procedure given above.

DIALING THE NUMBER

STORED IN THE SCRATCH PAD MEMORY

- 1) Press the RECALL KEY [RCL] and press the digit key(s) ([1] through [9] and [1] [0] through [3] [9]) to enter

the memory address number ([01] through [39]) in which the Scratch Pad Memory is stored. The telephone number will be recalled in the display.

- 2) Press the SEND KEY [SEND] to dial the telephone number stored in the Scratch Pad Memory.
- 3) If the telephone number stored in the Scratch Pad Memory is not cleared and exists in the display, the number can be dialed simply by pressing the SEND KEY [SEND]

CALL RESTRICTION (NAM OPTION)

In the call restriction mode, only specific keys will function the unit as the memory address numbers so as to avoid other people operating the unit. To set in the call restriction mode, follow the procedure below.

- 1) Press the FUNCTION KEY [FUNC] first, then press the key [#]. Enter the NAM-registered code consisting of 3 digit numbers. The letters RESTRICTION will be displayed in the panel.
- 2) In the call restriction mode, the usable memory address numbers are limited to [1], [2], [1 1], [1 2], [2 1], and [2 2].
*For recalling numbers, refer to RECALLING NUMBERS FROM MEMORY on page 11.
- 3) To release the call restriction mode enter the NAM-registered code again. The letters REGULAR will be displayed in the panel.

HORN ALERT (NAM OPTION)

The HORN ALERT is the feature to inform the user out of a vehicle of having received a call with a sound of horn. For applying this feature, special electrical wiring and installation are required.

Follow the procedure below for setting in the horn alert mode.

- 1) Press the FUNCTION KEY [FUNC], then press the key [4]. The letters HORN will be displayed in the panel.
- 2) Turn the ignition key off. The letters HORN will be displayed in the panel again to be in the horn alert mode for 2 hours.
- 3) When receiving a call in the horn alert mode, the unit will send the horn alert signal intermittently for 20 seconds to inform the user.
- 4) Press the SEND KEY [SEND] while the alert signal (ring) is heard to answer the call.
- 5) The horn alert mode will be automatically released after 2 hours and the unit will be switched off at the same time.

NOTE: 1) It is not possible to originate a call in the horn alert mode.

- 2) For releasing the horn alert mode, turn the ignition switch on, or press the FUNCTION KEY [FUNC] and press the key [4].

SYSTEM A/B

There may be 2 different cellular systems existing in some cellular service regions. One of these 2 systems is the non-wire cellular system (System A); the other is the wired cellular system (System B). When the contract for the

cellular mobile telephone service is made, the supplier's service (either System A or system B) is assigned as the preferred service to your cellular service.

This cellular mobile telephone is designed to operate on either the System A or B. However, either one of the particular systems can be selected by following the procedure described below:

NORMAL MODE

When the unit is turned on, the Normal Mode is automatically selected. In this mode the unit starts to seek service on the preferred system (either System A or B). If radio frequency channel is not available on the preferred system for any reason, it will switch over to the non-preferred service (the other system opposite to the one assigned) to seek service.

SYSTEM A (NON-WIRE) MODE

- 1) Press the FUNCTION KEY [FUNC] to select the extended function. The FUNCTION INDICATOR [FUNC] will light.
- 2) Press the digit key [6]. The SYSTEM A INDICATOR [A] will be displayed. In this mode, the unit seeks service only on the non-wire system (System A), and prevents switching over to the wire system (System B).

SYSTEM B (WIRE) MODE

- 1) Press the FUNCTION KEY [FUNC] to select the extended function. The FUNCTION INDICATOR [FUNC] will light.
- 2) Press the digit key [7]. The SYSTEM B INDICATOR [B] will be displayed. In this mode, the unit seeks service only on the wire system (System B), and prevents switching over to the non-wire system (System A).

NOTE: To return the unit to the Normal Mode, press the FUNCTION KEY [FUNC], then press the digit key [9].

CALL MUTE

- 1) Press the MUTE KEY [MUTE] during conversation on the line. The MUTE INDICATOR [MUTE] will light. In this mode, the transmit audio will be muted while the receive audio is still audible from the loudspeaker. You may converse privately with passengers in the vehicle during a call.
- 2) To release the mode and return to normal conversation, press the MUTE KEY [MUTE] again. The MUTE INDICATOR will go off and normal mode will be resumed.

NOTE: The Mute mode will be automatically released when the END KEY [END] is pressed or the unit is turned off.

DTMF TONE MUTE

The DTMF tone may be muted during conversation, for example, to store the number into the scratch pad memory without interrupting conversation.

- 1) During conversation, press the FUNCTION KEY [FUNC]. The FUNCTION INDICATOR [FUNC] will light.
- 2) Then press the digit key [3]. The FUNCTION INDICATOR [FUNC] will be off and the DTMF tone mute mode will be obtained.
- 3) The DTMF tone will be resumed if the same procedure above is repeated, or when the conversation is terminated.

RECALLING THE NUMBER WITH DTMF TONE

By following the procedure below, the DTMF tone can be heard when the telephone number is recalled from the repertory dial memory and is shown in the display:

- 1) Press the RECALL KEY [RCL] and the [] KEY consecutively.
- 2) Then enter two digit memory address number (01 ~ 39) according to the procedure described in the section titled "REPERTORY DIALING".
- 3) The DTMF tone will be heard in conjunction with the telephone number recalled and displayed.

NOTE: Recalling the number with the DTMF tone is not possible if the DTMF Mute mode is selected.

TIMER/COUNTER

AIRD TIME DISPLAY

- 1) Press the RECALL KEY [RCL] and the digit key [0] consecutively. The telephone number dialed last time will be recalled in the display.
- 2) Press the digit key [0] once more. The display will show the aird time of the last call in the minute-and-second format.
- 3) When any key is pressed during the call time display, the call time will be erased from the display.

NOTE: The timer counts up to maximum of 99 minutes 59 seconds. If the call time exceeds 100 minutes, the counter will be reset to "0:00" and start counting up again.

ACCUMULATED CALL COUNTER

The total number of calls may be checked by following the procedure below:

- 1) While the phone is not in use, press the RECALL KEY [RCL] once, then the digit key [6] twice in a series.
- 2) The upper row in the digit display shows the accumulated number of calls, and the bottom row in the display shows the temporality accumulated number of calls.
- 3) During the counter display, if the CLEAR KEY [CLR] is pressed the temporality accumulated number (the bottom row) will be reset to 0.
- 4) If the [] KEY and the CLEAR KEY [CLR] is pressed consecutively during the counter display, the accumulated number (the upper row) will be reset to 0.
- 5) To release the timer/counter mode, press any key other than CLEAR KEY [CLR], or turn the unit off and on.

CALL TIME SIGNAL TONE (OPTIONAL)

The single signal tone is heard from the loudspeaker once in every one minute and the double signal tone sounds once in every five minutes during conversation.

CUMULATIVE CALL TIMER

The CUMULATIVE CALL TIMER counts up the total aird time of calls. When the cumulative time becomes 9999 hours, 00 minute, and 00 second, the number will be reset to 0.

- 1) To enter into the cumulative call timer display mode, press the RECALL KEY [RCL] once, then the digit key [8] twice. The cumulative aird time will be displayed in the panel.

- 2) To release the cumulative call timer mode, repeat the procedure above, or press the CLEAR KEY [CLR].
- 3) To reset the timer to 0, enter the cumulative call timer reset code consisting of 3 digits (NAM-registered) in the cumulative call timer display mode.

HANDS-FREE OPERATION

In the Hands-Free operation, calls may be proceeded without removing the handset from the handset holder.

NOTE: Although the Hands-Free unit is designed to cancel most of noises, it is recommended that you try to reduce the noise of the vehicle interior as much as possible (by turning the radio/stereo off and close windows, etc.) when engaging the Hands-Free operation.

PLACING A CALL

- 1) While the handset is on-hook, dial a desired telephone number.
- 2) Press the SEND KEY [SEND]. The HANDS-FREE MODE INDICATOR [HF] will light and the call progress tones will be heard from the Hands-Free speaker incorporated in the handset.
- 3) When the called party answers, proceed conversation using the external microphone and the speaker.
- 4) When a call ends, press the END KEY [END]. The HANDS-FREE MODE INDICATOR [HF] will go off.

ANSWERING A CALL

- 1) When ringing is heard, press the SEND KEY [SEND] to answer the call. The HANDS-FREE MODE INDICATOR [HF] will light.
- 2) Proceed conversation using the external microphone and the speaker.
- 3) Press the END KEY [END] to terminate the call.

SWITCHING FROM HANDSET TO HANDS-FREE OPERATION

- 1) If a call is preceeded using the handset and switching to the Hands-Free operation is desired, simply replace the handset in the handset holder. The HANDS-FREE MODE INDICATOR [HF] will light.
- 2) Proceed conversation using the external microphone and the speaker.
- 3) Press the END KEY [END] to terminate the call.

SWITCHING FROM HANDS-FREE TO HANDSET OPERATION

- 1) If a call is proceeded using the Hands-Free unit and switching to the handset operation is desired, simply remove the handset from the handset holder. The HANDS-FREE MODE INDICATOR [HF] will go off.
- 2) Proceed conversation using the handset.
- 3) Press the END KEY [END] to terminate the call.

AUX I/O JACK

By pressing the FUNCTION KEY [FUNC] and the digit key number [2] consecutively during conversation, I/O JACK can be used for use of Fax machine, Modem and other equipment (impedance 600 ohms only). To release this function, press the FUNCTION KEY and the digit key number [2] consecutively again.

TABLE OF KEY OPERATION

KEY OPERATION	FUNCTION
FUNC + *	Displays the preceding digits.
FUNC + 2	Enable AUX I/O JACK
FUNC + 3	Mutes and resumes the DTMF tone.
FUNC + 4	Enters into the horn alert mode.
FUNC + 6	Switches to the System A mode.
FUNC + 7	Switches to the System B mode.
FUNC + 9	Resumes the Normal mode.
FUNC + # + 3-DIGIT NAM CODE	Enables Call Restriction Mode
LOCK	Electronically locks the unit.
CLR	Erases the last digit. If held, erases entire number from display.
CLR + END	Erases entire number from display.
DESIRED TELEPHONE NUMBER + STO + MEMORY ADDRESS NUMBER	Stores the telephone number in memory.
RCL + 0	Recalls the last number.
RCL + 0 + SEND	Redials the last number.
RCL + 0 + 0	Displays the time of current or last call.
RCL + 6 + 6	Displays the accumulated number of calls.
RCL + 7 + 7	Displays the channel being used and the strength of signal.
RCL + 8 + 8	Enters into the cumulative call timer display mode. Indicates up to 9999 hours, 00 minute, and 00 second.
RCL + MEMORY ADDRESS NUMBER	Recalls the telephone number from memory.
RCL + * + MEMORY ADDRESS NUMBER	Adds the DTMF tone to recalled number.
MUTE	Enters into the mute mode.
SEND	Receives a call when the handset is off-hook.
DESIRED TELEPHONE NUMBER + SEND	Proceeds a call.
END	Terminates a call.

FREQUENTLY CALLED NUMBERS

MEMORY ADDRESS	NAME	TELEPHONE NUMBER
01		
02		
03		
04		
05		
06		
07		
08		
09		
10		
11		
12		
13		
14		
15		
16		
17		
18		
19		
20		
21		
22		
23		
24		
25		
26		
27		
28		
29		
30		
31		
32		
33		
34		
35		
36		
37		
38		
39		