

ESP700 OPERATING MANUAL



GENERAL SAFETY INFORMATION

The United States Department of Labor, through the provisions of the Occupational Safety and Health Act of 1970 (OSHA), has established an electromagnetic energy safety standard which applies to the use of this equipment. The following precautions are recommended to minimize exposure to electromagnetic energy:

WARNING

DO NOT operate the transmitter of the radio with the antenna touching the eyes, face or any exposed body parts.

DO NOT operate the radio unless the antenna connector is secure and any open connectors are properly terminated.

DO NOT allow children to operate transmitter equipped radio equipment.

DO NOT operate the radio near electrical blasting caps or in an explosive atmosphere.

In addition, all equipment must be properly serviced by a qualified technician.

SEA recommends that this equipment be maintained and repaired only by qualified technical personnel or under such supervision.

This device complies with Part 15 of the FCC rules. Operation is subject to the condition that this device does not cause harmful interference.

SEA700 FEATURES

- Trunked System operation
- Conventional System operation
- Repeater talk around
- Up to 10 Systems selectable
- Up to 10 Modes per System selectable
- Back lit 7 Character alphanumeric display for System and Mode identification and status indicators.
- System scan
- Mode scan
- User programmable scan list
- Telephone keypad
- Up to 9 store and recall telephone numbers of up to 24 digits each
- Volume reference tone
- Courtesy tone to indicate when talking may begin in trunking Modes
- Low battery indicator
- System search

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BATTERY CHARGING INFORMATION

Note: SEA Batteries are not fully charged when shipped. They must be charged before use.

For Longest Life and Best Performance

1. Charge the battery to full capacity. Place the battery in the rear "FAST" charge battery slot. The battery will be charged to approximately 90% of its capacity in about one hour. The battery charger's indicator will change from "FAST" to "SLOW". Leave the battery in the charger slot for another 3 - 4 hours after the charge indicator lights change from "FAST" to "SLOW" to "top-off" the battery to 100%. If you need the "FAST" charge slot to charge another battery you may move the first battery to the front "SLOW" battery slot to finish "topping off" the battery.

2. Use the battery soon as possible and use as much of the battery charge as possible or practical. A battery that is charged and discharged completely will maintain the longest running time and capacity. Also, several charge/discharge cycles are recommended to bring a new battery up to its rated capacity.

3. A battery will develop a reduced capacity through a "memory" effect that results from repeated shallow discharge and full recharge cycles. If such a condition is suspected, run the SEA 700 until the radio loses all power, then fully recharge and discharge again. Repeat this cycle 3 - 4 times. Full usable battery capacity should then become available.

4. Store and charge the batteries at room temperature (65° to 78° F), Batteries that have been stored for over a month should be recharged before being put into service because of chemical self-discharge which occurs at a rate of approximately 1% per day. Do not charge cold batteries (40° F or below).

WARNING! DO NOT PUT BATTERY IN FIRE OR
MUTILATE: THE BATTERY MAY
BURST OR RELEASE TOXIC
MATERIALS.

WARNING! DO NOT CARRY BATTERY LOOSE
IN YOUR POCKET OR PURSE.

WARNING! DO NOT ATTEMPT TO REPAIR
BATTERY.

WARNING! DO NOT RECHARGE BATTERY IN
A FLAMMABLE OR EXPLOSIVE
ATMOSPHERIC ENVIRONMENT.

RECYCLE! RETURN ANY USED OR DEFECT-
IVE BATTERIES TO YOUR
DEALER FOR RECYCLING.

CONFIGURATION CHECKLIST

Congratulations on your purchase of the SEA700 portable handheld transceiver. Your SEA700 has many features that can be tailored to suit your radio communications requirements. The feature list on the preceding page includes the complete capabilities of the SEA700; however, not all capabilities may not be offered or supported by your radio service provider.

The features that have been activated for your SEA700 are checked or circled below. Your dealer should complete this check list and explain the operation of each feature. In addition, this manual covers each capability under the corresponding page.

The general radio features listed below and identified as activated or not, are valid for all selected systems. The operating characteristics and activated features of the individual systems and the operational modes are listed on the following pages.

CONFIGURATION

NAME _____

DATE _____

GENERAL RADIO FEATURES

SUPERVISORY TONES

COURTESY TONE	YES	NO	PAGE 27
VOLUME SET TONE	YES	NO	PAGE 10
SYSTEM SEARCH ALERT	YES	NO	PAGE 24
OUT OF RANGE INDICATOR	YES	NO	PAGE 26
FREE SYSTEM RINGBACK	YES	NO	PAGE 25
SYSTEM SEARCH	YES	NO	PAGE 24
SCAN REVERT TYPE	FIXED	SCAN	PAGE 18

SYSTEM OPERATING PARAMETERS

SYSTEM # _____

SYSTEM TYPE

TRUNKED CONVENTIONAL UNUSED

SCAN

AUTOMATIC MODE SCAN	YES	NO	PAGE 18
USER MODIFIABLE SCAN LIST	YES	NO	PAGE 19
BUSY CHANNEL LOCKOUT	YES	NO	PAGE 26

TRANSMIT TIME-OUT TIMER ___ MINS PAGE 27

TELEPHONE INTERCONNECT

TELEPHONE INTERCONNECT	YES	NO	PAGE 21
MANUAL DIALING	YES	NO	PAGE 22
DIALING IN DISPATCH MODE	YES	NO	PAGE 24

MODE _____ NAME _____	MODE _____ NAME _____
In Scan List YES NO	In Scan List YES NO PAGE 19
Interconnect YES NO	Interconnect YES NO PAGE 21
Talkaround YES NO	Talkaround YES NO PAGE 15

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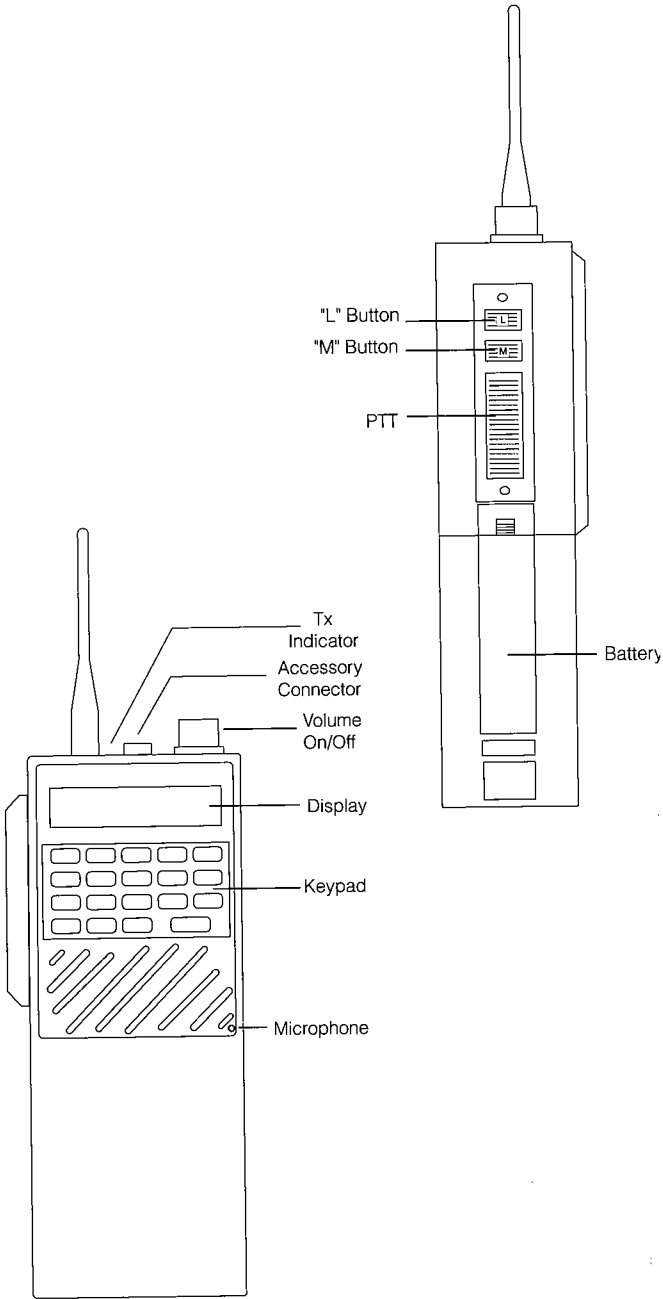
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INDICATORS AND CONTROLS

SEA700 INDICATORS

Alphanumeric Display

Displays name or identifier for System/Mode

Displays operating status indicators

Displays telephone number in "PHONE" condition

SYS **The digits below this legend indicate the currently selected System**
When scanning, the System number will change rapidly to the next System number as it is scanned.

MODE **The digits below this legend indicate the currently selected Mode. When scanning, the Mode number will change rapidly to the next Mode number as it is scanned.**

LOCK **Indicates the selected Mode is locked out of the scan list**
Indicates the keypad is locked when flashing

MONITOR **When displayed, the monitor function is enabled**

PHONE **When displayed the telephone function is enabled**

SRCH **Indicates the System Search function is enabled**

Indicates the currently selected Mode is programmed for telephone interconnect.

Indicates the audible keypad feedback tone function is enabled

+ 1 **Low Battery** **Indicates the battery charge is low**

- ◀ Number overflow Indicates the telephone number in the display contains more than 7 digits
- CALL** Indicates a call has been received on the currently selected Mode
- SCAN** Indicates that the scan function has been enabled
- BUSY** Indicates the selected Mode is busy with other traffic
- RANGE** Indicates the radio is out of range

OTHER INDICATORS

- TX** When red, the radio is transmitting

SEA700 CONTROLS

VOL Turns portable on/off Adjusts volume

A reference tone sounds for two seconds after the portable is turned on. Adjust the reference tone volume to the desired level with the volume control. The reference tone can be disabled/enabled by holding the "MUTE" button in the depressed position while the portable is turned on.

L Illuminates the display

Pressing and releasing the "L" button will illuminate the display. The display will remain illuminated for 10 seconds after the button is released.

M Unmutes speaker so conventional channel conversations can be monitored.

PTT Enables transmitter

KEYPAD

- SYS** **Changes the operating System of the portable**
A System is the radio System which provides radio communications in a geographic area. It is also the equivalent of a channel position in conventional operation or a System in trunked operation. Traveling from one area to another may require accessing another System to maintain communications.
Pressing the "SYS" button will cause the portable to advance to the next System. The System number is displayed in the upper left corner of the display under "SYS".
- MODE** **Changes the operating Mode of the radio**
A Mode is the equivalent of a talk group. Pressing the "MODE" button will cause the portable to advance to the next Mode position. The Mode number is displayed in the lower left corner of the display under "MODE".
- PHONE** **Changes the function of the keypad to "telephone dialing"**
When enabled, the functions of some control keypad buttons change to secondary functions for telephone operation. The secondary functions are described in the following explanations when identified by ().
- T/A** **Talkaround, (SND)**
Pressing the "T/A" button will enable talkaround in the selected conven-

tional System. When talkaround is enabled “TLKARND” will be displayed.

Pressing “PHONE” will change the “T/A” button’s function to “SND” (SEND).

MUTE, (STR)

**Mutes the audible keypad feedback tones,
Mutes the reference tone**

Pressing the “MUTE” button while the portable is on will turn off/on the audible feedback tone that sounds when any keypad button is pressed. Holding the “MUTE” button in the depressed position while turning the portable on will enable/disable the volume reference tone.

Pressing “PHONE” will change the “MUTE” button’s function to “STR” (STORE).

SCN, (RCL)

**Enables scan function,
Enables System search**

Pressing the “SCN” button and then pressing the “SYS” button within three seconds will enable System Scan.

Pressing the “SCN” button and then pressing the “MODE” button within three seconds will enable Mode Scan. Mode Scan can only be enabled when System Scan is not enabled, nor can System Scan be enabled when Mode Scan is enabled.

Pressing and holding the “SCN”



button depressed until a triple beep is heard disables scan.

Depressing the "SCN" button when turning the radio on will enable System Search.

Pressing "PHONE" will change the "SCN" button's function to "RCL" (RECALL).

LCK, (CLR)

Deletes (Mode) from scan list

Locks keypad

Pressing "PHONE" will change the "LCK" button's function to "CLR" (CLEAR) the numeric keys, 0-9, '*' and '#' keys used to enter telephone numbers for telephone interconnect operation. Each press of the "CLR" key deletes the rightmost telephone digit from the display.

OPERATING INSTRUCTIONS

DISPATCH (MOBILE-TO-MOBILE) CALLING

To Receive a Dispatch Call

Switch the unit on by turning the VOL control clockwise. Unless the reference tone has been disabled, you will hear a tone for two (2) seconds after the radio is turned on. Use this reference tone to adjust the volume to a comfortable listening level with the volume control knob.

Using the SYS button, select the desired System. Then select the desired Mode using the Mode button. You are now prepared to receive messages on the selected Mode.

When a call is received, "CALL" will be displayed (if programmed) and the message will be heard through the speaker.

You may respond by pressing the push-to-talk (PTT) button. Hold the grill of the portable 1/2 to 2 inches from your mouth and speak into the grill at a normal voice level. Speak slowly and clearly into the microphone.

Release the PTT to listen.

Receiving a Priority Call

If a priority call is received and the priority call matches the talk group number in a programmed mode, the radio will change to the programmed mode and the display will also change. Otherwise the display will indicate "PR1" or "PR2" during receipt of a priority call.

Your dealer will explain how your radio is programmed for priority calls.

To Scan Modes for a Call

Select the desired System by pressing and releasing the SYS button until the desired System number is displayed.

Press the SCAN button; then press the Mode button within 3 seconds. You are now prepared to receive messages on any of the Modes programmed into the displayed System.

To exit Scan, press and hold the SCAN button until three beeps are heard in rapid succession.

To Make a Dispatch Call on a Trunked System

Select the desired System and Mode if necessary.

Press the PTT (push-to-talk) button

If programmed a courtesy tone will sound to indicate that the communication path is complete and you may begin speaking. If a busy or intercept tone sounds, the path is not complete. Release the PTT, wait a few seconds and attempt your call again by pressing the PTT.

Once the path is established, hold the grill of the portable 1/2 to 2 inches from your mouth and speak into the grill at a normal voice level.

Release the PTT to receive a reply.

To Make a Dispatch Call on a Conventional System

Select the desired System and Mode if necessary.

Monitor (listen to) the Mode (channel) to insure that no one else is talking. To monitor a conventional Mode, press the 'M' button located on the side of the portable above the PTT. The word "MONITOR" will appear in the display and the speaker will unmute and you will be able to hear all radio traffic on that channel. Additionally, the word "BUSY" will appear in the display whenever there is traffic on the channel.

If the portable is programmed for Busy Channel Lockout, the Monitor button will not function and the speaker will unmute only when traffic for your talk group is being transmitted. A busy tone will sound if you push the PTT when the channel is busy.

When the Mode is clear of traffic, you may transmit. Hold the grill of the portable 1/2 to 2 inches from your mouth and speak into the grill at a normal voice level.

Release the PTT to receive a reply.

TALKAROUND OPERATION

Talkaround is rarely authorized by the system operator. Talkaround bypasses the repeater system and lets radios out of range of the repeater system continue to communicate as long as they are within range of each other. Radios operating in talkaround can interfere with the repeater system.

TALKAROUND CALLING

To receive a call in Talkaround, select the system and mode programmed for talkaround operation. Selecting the system and mode is the same as described in DISPATCH CALLING. Press the talkaround (T/A) button. "TLKARND" will be displayed.

When a call is received, the message will be heard through the speaker. You may respond by pressing the push-to-talk (PTT) button and speaking into the microphone.

To initiate a call in Talkaround, select the system and mode programmed for talkaround operation. Selecting the system and mode is the same as described in DISPATCH CALLING. Press the talkaround (T/A) button.

Press the PTT (push-to-talk) button. Hold the grill of the portable 1/2 to 2 inches from your mouth and speak into the grill at a normal voice level.

Release the PTT to receive a reply.

Note: All radios must be in talkaround mode and in range of each other to communicate. Radios not in talkaround can receive a call but cannot respond until placed in talkaround mode.

While in Talkaround, the display will not change. The courtesy tone will not be heard to indicate that the communications path is complete.

SCAN OPERATIONS

General

Your SEA700 portable radio can be programmed for scan operation. When the System scan function is enabled, the radio will rapidly and continuously change from one System to the next. When the radio detects activity on a System, it stops scanning long

enough to determine if that activity is a call for one of its Modes (talk groups). If the call is not for one of that System's talk groups, it resumes scanning. If the call is one to the System's talk groups, scanning stops --- the speaker is unmuted and the call is heard.

When the radio is scanning, all systems and modes that are locked out by scan list programming are ignored.

When the Mode scan function is enabled the scan operation is the same as above except only the modes in the selected system are scanned.

When the System scan function is enabled the radio will scan all systems and all modes in each system.

The Systems and Modes the radio scans are said to be stored in a "scan list". The radio can be programmed to scan all Systems and Modes, or some Modes may be permanently or temporarily removed from the scan list.

The radio can be further programmed to allow the user uninhibited scan list modification or, user scan list programming can be restricted to some lesser degree of list modification.

If the radio is programmed to deny scan list programming by the user, the "LCK" will not return an audible feedback tone when it is pressed and the LOCK status of the selected Mode will remain unchanged.

When the radio is scanning, "IN SCAN" is displayed in the alphanumeric portion of the display. "IN SCAN" will be replaced by Mode and status information when Systems or Modes are changed manually or if a call is received. The SCAN icon is also shown in the display and it remains visible while the scan function is enabled. The System and Mode numbers will change as the radio scans to the

Systems and Modes.

SCAN FEATURES

Your portable radio will be programmed for either Scan Revert or Fixed Revert.

SCAN REVERT

When the scan function is enabled and the PTT is pressed, or scan is disabled, the radio reverts either to the Mode where the last call was received, or to the Mode that was last selected with the Mode control, whichever occurred most recently. In scan revert, when a call is received, the call indicator will appear in the display, and will remain displayed when scanning resumes.

FIXED REVERT

When the scan function is enabled and the PTT is pressed, or scan is disabled, the radio will revert to the Mode that was last selected with the Mode control. In fixed revert, when a call is received, the call indicator will appear in the display. The call indicator will disappear when scanning resumes.

SCAN RESUME

Scanning will stop when a call is received. When the call terminates, scanning will resume after the scan resume delay period expires.

SYSTEM SCAN

In System Scan, the radio scans each System in turn and simultaneously scans all modes in each System.

MODE SCAN

In Mode Scan, the radio simultaneously scans all modes in the selected System. The radio will stop scanning and unmute the speaker if it detects a call on one of that System's Modes. If another call is not heard or if the PTT is not pressed within 9 seconds

after the call ends, scanning will resume.

AUTO MODE SCAN

This feature is an option programmed by your dealer. If Auto Mode Scan is enabled in your radio all the pre-programmed Modes in the System currently selected will be scanned. Any system containing a mode programmed for interconnect cannot be programmed for Auto Mode Scan.

To Enable the Scan Function

To scan Systems, press the "SCN" button and then the "SYS" button within 3 seconds. "IN SCAN" will appear in the display. The radio scans each system in turn and simultaneously scans all modes in the scanned system. If all modes in a system are locked out of the scan list, that system will be skipped when scanning.

To scan only the Modes in a single System, select the desired System and press the "SCN" button and then the "MODE" button within 3 seconds. "IN SCAN" will appear in the display.

If the "SCN" button is pressed and neither the "SYS" or "MODE" button is pressed within 3 seconds or if some other key or control is operated, the radio will sound 3 short tones in rapid succession and exit scan.

To Turn Scan Off

Press and hold the "SCN" button. The radio will sound two short tones, at approximately 1 second intervals, followed by 3 short tones in rapid succession.

SCAN LIST PROGRAMMING

Scan list programming deletes and restores the selected Mode from/to the list of Modes that are scanned by the radio when scan is enabled.

To Temporarily Delete a Mode from the Scan List

With Scan On and locked to an active Mode, or after selecting the Mode to be deleted, press the “LCK” button. The Mode that was displayed prior to pressing the “LCK” button will be temporarily deleted from the scan list. The LOCK icon will be displayed whenever that Mode is selected to indicate that the Mode is deleted from the scan list.

To Restore a Temporarily Deleted Mode to the Scan List

Turning off either the radio or the scan function restores all temporarily deleted Modes to the scan list. Deleted Modes can be individually restored by selecting the Mode and pressing the “LCK” button

To Permanently Delete a Mode from the Scan List

With Scan off, select the Mode to be deleted, and press the “LCK” button. The Mode that was displayed prior to pressing the “LCK” button will be permanently deleted from the scan list. The LOCK icon will be displayed whenever that Mode is selected to indicate that the Mode is deleted from the scan list.

To Restore a Permanently Deleted Mode to the Scan List

With scan off, select the Mode to be restored. Press the “LCK” button. The LOCK icon will disappear and the Mode will be restored to the scan list.

INTERCONNECT (TELEPHONE CALLING)

Interconnect calling is an optional feature that may be offered by your System operator. This capability may not be available to you.

To Receive an Interconnect Call (Trunked System)


Switch the radio on. Adjust the volume, System and Mode selection as outlined above.


When “ringing” is heard through the radio speaker, answer the call in a normal manner by pressing the PTT to talk. Hold the grill of the portable 1/2 to 2 inches from your mouth and speak into the grill at a normal voice level.

Release the PTT to receive a reply.

When your telephone conversation is finished, hang up by pressing the PTT followed by the # key.

To Make an Interconnect Call (Trunked System)

Using the “SYS” and “Mode” buttons, select the desired Mode programmed for interconnect operation. Those Modes that are programmed for interconnect operation will be identified by the  icon. Press the Phone button. The display will clear and “PHONE” will appear. The keypad is now ready to perform telephone interconnect functions.

Enter the desired telephone number using the 1 ~ 0 telephone keys. As each number is entered, it will appear in the display and the number is temporarily stored in memory. If the telephone number is greater than 7 digits the first digits selected will scroll off the display, (the last 7 digits dialed will remain visible) and the  symbol will be displayed to indicate there are more than 7 numbers in the buffer.

After dialing the desired number, momentarily press

and release the PTT button to acquire dial tone. When you hear the dial tone, press and release the send "T/A" (SND) button. The displayed number will be dialed from memory. Listen for the called party to answer.

When the call is answered, press the PTT to talk. Hold the grill of the portable 1/2 to 2 inches from your mouth and speak into the grill at a normal voice level.

Release the PTT to receive a reply.

When your telephone conversation is finished, hang up by pressing the PTT followed by the # key.

TELEPHONE FEATURES OPERATION AND KEYPAD FUNCTIONS

The telephone interconnect operation is accessed by pressing the PHONE key. Normally, if telephone interconnect is not available, this keypress is ignored, otherwise, pressing the PHONE key will change the function of the keys and the 'PHONE' icon will be displayed.

In special cases the dealer may program the radio to allow dialing of numbers in the dispatch mode. This capability is described in Dialing in Dispatch Mode below.

Manual Dialing

This capability may not be available to you. In that case, all dialing must be from pre-programmed speed dial memory locations. If manual dialing is enabled on your radio, you may dial a number by holding the PTT depressed and dialing the desired number on the keypad. Release the PTT when you are finished dialing.

Speed Dialing

The desired number (up to 24 digits) can be manually entered into temporary memory from the keypad or recalled from 1 of 9 pre-programmed speed dial memory locations.

Storing Speed Dial Numbers in Memory

To store a number in 1 of 9 available speed dial memory locations, select a System that has a Mode programmed for interconnect operation and press the PHONE key to change the keypad functions. The PHONE icon will appear in the display.

Using the telephone keypad 1 ~ 0 keys, enter the number to be stored in memory. If the telephone number is greater than 7 digits, the first digits selected will scroll off the display; the last 7 digits dialed will remain visible and the ◀ symbol will be displayed to indicate there are more than 7 numbers in the buffer.

Determine the memory speed dial location and press STR followed by any key between 1 ~ 9 that represents the speed dial memory location you selected for this number. The number is now stored in that memory location.

To Speed Dial a Number Stored in Memory

To dial a number stored in a speed dial memory location, select a System that has a Mode programmed for interconnect operation and press the PHONE key to change the keypad functions. The PHONE icon will appear in the display.

Press "RCL". RECALL will appear in the display. Then press a key between 1 and 9 for the speed dial memory location of the number to be dialed. The speed dial number will appear in the display. If the number is greater than 7 digits, the first digits will

appear in the display for 2 seconds and then the next 7 digits of the stored number will be displayed and the ◀ symbol will also be displayed to indicate that there are more than 7 numbers in the speed dial memory.

To complete your call, momentarily press and release the PTT button to acquire dial tone. When you hear dial tone, press and release the send “T/A” (SND) button. The displayed number will be dialed from memory. Listen for the called party to answer.

When the call is answered, press the PTT to talk. Hold the grill of the portable 1/2 to 2 inches from your mouth and speak into the grill at a normal voice level.

Release the PTT to receive a reply.

When your telephone conversation is finished, hang up by pressing the PTT followed by the # key.

To Correct an Error

If an error occurs while entering a number, simply press “CLR”. This will delete the last digit dialed. Each press of “CLR” will delete the number in the right most position in the display. Enter the correct number(s).

To clear the entire number from the display, press RCL followed by ‘0’. This will clear the display and the temporary memory. Reenter the number either manually or from speed dial memory as outlined above.

Dialing in Dispatch Mode

(If this feature is enabled by your dealer) for special signaling needs of the radio system, pressing the PHONE key will change the function of the keys and the ‘PHONE’ icon will be displayed. The keypad will function in the manner described above.

ADDITIONAL FEATURES

SEARCH

Depressing the SCN button while turning the radio on enables System Search.

If the radio is programmed for search and the search function is enabled, the radio will search through its Systems for an in-range system whenever a call is unsuccessfully attempted because the System is out of range, or if an update is not received from the current system for 30 seconds.

If the intercept tone sounds when the PTT is pressed the radio will automatically commence searching for an in-range System. The radio will sound a tone for 1 second when an in-range System is located and another call can be attempted

The search "SRCH" legend is displayed any time the search function is enabled whether the radio is actively searching or not. "IN SCAN" is displayed when the radio is actively searching. Manual selection of a system or mode stops the search function. Selection of System or Mode Scan automatically disables the search function until it is re-enabled during the power-up sequence.

FREE SYSTEM RINGBACK

(If this feature is enabled by the dealer) if an interconnect or disPatch call is attempted and an intercept tone is heard, the radio will sound a one second ringing tone when the system is free and another call can be attempted.

Free System Ringback will be discontinued if the System selection is changed manually, by scanning or if a call is received.

LAST MODE

Upon power-up, the radio will return to the last System selected if the last system selected is left unchanged for 5 seconds before power is turned off. The radio will return to the last mode selected in the last system if the mode selection occurs 5 seconds after the last system change.

BUSY CHANNEL LOCKOUT

The Busy Channel Lockout feature is recommended for conventional Systems and is similar to the trunked System's busy feature operation. All conventional Modes have the capability of being programmed for this operational feature.

When a conventional channel is busy and the PTT is pressed, Busy Channel Lockout prevents the radio from transmitting.

When Busy Channel Lockout is enabled, the operator does not have to monitor the channel prior to attempting a transmission. The busy tone will sound if the channel is busy and the transmitter is locked out.

KEYPAD LOCK

Keypad Lock enable: Depress the LCK key and listen for 3 short beeps followed by a double beep. The LOCK legend will be flashing in the display and all front panel keys (except LCK) are disabled until the previous keypress sequence is repeated or the radio is powered off and on.

RANGE INDICATOR

This feature is an option programmed by your dealer. If out of range indicator is enabled by your dealer and the radio does not receive a periodic

update from the radio system after a certain amount of time, or if the radio fails to connect with a radio system when a transmission is attempted, the radio will display "RANGE" indicating an out of range condition. To remove the "Range" alarm, operate any control on the handheld.

SUPERVISORY TONES

The tones described below provide an audible indication of radio operation status. During inter-connect telephone calls, you may hear a tone not described here. Those tones are part of the telephone system.

Busy Tone

The Busy Tone is similar to a busy telephone signal and is used to indicate that the radio System is busy. It will sound as long as the PTT is depressed or until the radio System is no longer busy. *This feature is available for conventional System operation only if Busy Channel Lockout is enabled by the dealer.*

Courtesy Tone (Trunked Dispatch Modes Only)

When the Courtesy Tone is enabled, a short beep will sound after the PTT is depressed to indicate when speaking may begin. This Courtesy Tone helps prevent the first word or syllable from being missed by the receiving party because the sender began speaking too quickly after pressing the PTT.

Fault Tone

The Fault Tone is a two-tone alert (bee-boop) that will sound in two second intervals if the radio detects certain low performance conditions. If a continuous Fault Tone is heard, this is most likely an indication that the battery requires recharging. If

the fault tone persists after installing a well re-charged battery and/or recycling the power, make a note of any unusual indications in the display and contact your dealer for service.

Intercept Tone

The Intercept Tone may be heard when attempting to transmit. A siren-like tone that indicates transmission is inhibited, the Intercept Tone is usually the result of an out-of-range condition. The radio will attempt to access the System several times. If the attempts are unsuccessful the intercept tone sounds. Release the PTT and try your call again later.

Free System Ringback Tone

The Free System Ringback tone is a short one second ring tone that indicates the availability of a free channel after an unsuccessful transmission attempt has terminated with the intercept tone.

Time-out Timer Tone

The Time-out Timer Tone is an electronic warble that will sound when the radio transmits continuously up to the maximum, dealer-programmed time. The timer will stop the radio from transmitting if the PTT becomes stuck or the operator talks for an extended period.

OPERATIONAL TIPS

Speaking into the Microphone

The microphone is located in the lower right hand corner of the speaker grill. For best results, hold the portable 1/2 to 2" from your mouth and speak into the microphone at a normal voice level. Speak slowly and distinctly at a normal conversational level. Do not shout into the microphone. Press the PTT button before you begin to speak. Release the PTT as soon as you are finished speaking.

Battery Life

When the radio is on but not receiving or transmitting, the power consumption is fairly low. The radio can be left on for long periods of time before the battery must be recharged. In normal operation, the radio's battery life can last for most of an eight hour work day. However, high usage, either in receiving or transmitting, will shorten the battery life.

To extend battery life, turn the radio off when not in use. Cold weather can affect battery capacity. When the temperature is cold enough to affect battery capacity, the radio should be turned off when not in use.

When the battery's electrical charge has been consumed, the Low Battery indicator will appear in the display and the radio will not transmit.

Speaker Microphone

When a speaker microphone is connected to the radio, the internal microphone and speaker and the PTT switch are disabled. The PTT, microphone and speaker on the speaker-microphone must be used.

Operation in a Vehicle

The SEA700 handheld portable may not operate effectively inside a vehicle. If radio communications from a vehicle is necessary it may be best to consider using a radio designed for operation from a vehicle.

If portable operation from a vehicle is still required your dealer should advise you on the use of an external antenna for possibly achieving better performance.

FACTORY LIMITED WARRANTY

SEA Inc. warrants to the original purchaser that each SEA land mobile radio product, or SEA branded accessory is free of defects in material and workmanship for a period of one year from the date of delivery, except as noted below*. SEA Inc. will provide through its authorized service agent, supplier, or directly, the parts and labor to repair such products found defective.

The purchaser is responsible for any cost of travel or transportation connected with warranty repair. The purchaser is also responsible for all costs of investigating or correcting a failure caused by the purchaser's misuse, abuse, or neglect, by unauthorized alteration or repair, by accidents or other factors beyond the control of SEA Inc. No warranty is made as to availability of the radio repeater system provided by the carrier or repeater operator or the system's coverage, grade of service or operation.

SEA reserves the right to make changes in design and/or improvements to its products, at any time, without any obligation to include these changes in previously manufactured products. Correction of defects by repair or replacement shall constitute fulfillment of all warranty obligations on the part of SEA. Corrective actions may include replacement of defective modules with factory rebuilt modules which are warranted for the remainder of the product's warranty period. Peripheral equipment purchased from other manufacturers or vendors which are incorporated into radio systems carry the original equipment manufacturer's warranty.

This is the sole and exclusive express warranty offered by SEA for any claim of damages arising from any defect in the SEA product. Implied warranties, including any warranty of merchantability or fitness for a particular purpose, are limited to the duration of this written warranty, and are excluded to the extent permitted by law. SEA shall have no liability for consequential damages or personal injury or for loss, damage or expense directly or indirectly arising from the use of its products. Some states do not allow limitations on how long an implied warranty lasts, or exclusion of incidental or consequential damages, so the above limitations 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.

- * 90 days - Portable radio batteries
- No warranty on expendable parts, such as fuses and lamps.