ClearLink 905 Owners Manual

Introduction.

Thank you for purchasing ClearLink Communications Family Service Radios.
ClearLink Communications is dedicated to innovation and excellence in wireless
communications, especially in the emerging area of "Family Radios" and related products.

"Family Radio Service."

The Federal Communications Commission (FCC) introduced "Family Radio
Service" in 1997 to provide the general public with broader access to short range, two way voice
communication.

To prevent interference with military and commercial radio systems, Family
Radio Service is limited to a maximum of 14 channels which operate on specific FCC assigned frequencies.
In addition, output power is limited to 500 mw. While the normal operating range is approximately one mile,
under ideal conditions Family Radios will operate within a range of up to two miles.

All Family Radios, including the ClearLink 905, are programmed to transmit and receive regulated signals
only on FCC assigned frequencies. Any attempt to modify either these signals or frequencies is in violation of
FCC regulations and may cause permanent damage to the radio.

Operation is further subject to the following conditions as established bythe FCC:

1. Family Service Radios may not be used to cause harmful interference with
other radios;

2. Individuals operating Family Service Radios must acknowledge that these
radios may be subject to occasional interference from military and commercial systems.

We offer several models of Family Service Radios, including the ClearLink
905.

The ClearLink 905 operates on the 14 FCC assigned channels. Each channel has 38 CTCSS (Continuous
Tone Coded Squelch System) often referred to as Privacy Codes for a potential of 532 private conversations.

This manual provides operating instructions, specifications and other important information pertaining to the
ClearLink 905.

ClearLink 905.

(Illustration)

1. Antenna

2. Power ON/OFF & Volume Control

3. LCD (Liquid Crystal Display) Screen

4. Microphone & Speaker Jack (*)

4. Call Button (CALL)

5. "Push To Talk" Transmission Button (PTT)

6. Monitor Button (MON)

7. "ME" Channel Memory Button

8. "CTCSS" Button

9. "SCAN" Up/Down Buttons

10. "CW" Call waiting

11. Microphone & Speaker

12. Transmitting & Low Battery Indicator Light (TX/BATT)

13. Channel Selector Switch

14. Battery Recharging Jack (*)

15. Battery Compartment

16. Removable Belt Clip

17. Adjustable Wrist Strap

(*) For use with Optional Accessories

Installing The Batteries.

The ClearLink 905 is powered by three AA alkaline batteries. This model can also be powered by an optional, rechargeable battery pack or by optional, rechargeable AA Nickel Cadmium (NiCad) batteries. See "Optional Accessories" at the end of this manual for further information.

To access the battery compartment on the back of the radio, slide the compartment cover downward and remove it. Insert three AA batteries (not supplied) in accordance with the polarity symbols (+ / -) embossed on the bottom of the compartment, and replace the compartment cover.

The radio is now ready to transmit and receive.

Worth Noting:

- If the red Low Battery warning indicator illuminates on the LCD screen when the radio is turned on, it is time to replace the batteries.
- When replacing the batteries, always replace all three.

"Turning It On."

To turn the radio on, turn the Power ON/OFF button (# 2) in a clockwise direction. The radio will emit a series of short "startup" tones indicating that it is ready to transmit and receive.

"Tuning It In."

ClearLink 905.

The ClearLink 905 operates on the 14 Channels Licensed by the FCC for license-free communications. Each of these channels has 38 associated CTCSS codes.

"Selecting a Channel"
In standard operating mode the "UP"(SCAN) or "DOWN"(ME) buttons will change the channel. Once the desired channel is selected you are ready to communicate.

"CTCSS or Privacy Codes"
A Continuous Tone Coded Squelch (CTCSS) or privacy code may be used to decrease the interference from other radios in the same area. There are 38 tones available on each channel to activate:
1.   Press the "CTCSS" button. The "CTCSS" icon will appear on the display and CTCSS code will flash.
2.   Press the "UP" or "DOWN" buttons to select the desired CTCSS code. Press the "PTT" button to save.
- A code of "00" means that no code is programmed.
- You must set CTCSS for each of the channels you want to use CTCSS on.

"Avoiding The Competition."

The ClearLink 905 has two SCAN modes. The first and most popular is the "BUSY" SCAN during which the radio will stop on occupied channels. The radio will remain tuned to that channel for approximately 5 seconds. The second SCAN mode is the "FREE" SCAN mode, which searches for and stops on unoccupied channels.

Accessing "BUSY" SCAN
1.   Press and release the "F" button then press and release the "UP" button. The SCAN icon will be displayed and the unit will now begin scanning through the channels.
2.   Pressing the "UP" or "DOWN" buttons will determine the direction of the scan either lowest to highest channel or highest to lowest channel.
3.   Pressing the "PTT" button returns the radio to normal operation.
4.   To exit this scan mode press "F" and the "UP" button. The SCAN icon should disappear from the display.

Accessing "FREE" SCAN
1.   Press and release the "F" button and then press and hold the "UP" button for 5 seconds. The BSCAN icon will appear on the display and the unit will begin to scan for blank channels.
2.   Pressing the "UP" or "DOWN" buttons will determine the direction of the scan either lowest to highest channel or highest to lowest channel.
3.   Pressing the "PTT" button returns the radio to normal operation.
4.   To exit this scan mode press "F" and the "UP" button. The SCAN icon should disappear from the display.

"Transmitting & Receiving."

To send a voice transmission, depress and hold the PTT Button down. The red TX/BATT indicator light will illuminate confirming that the radio is in the transmission mode. Hold the Microphone (#7) approximately two inches from your mouth, and speak in a normal voice. When you are finished transmitting, release the PTT button; the radio will automatically revert to the receive mode.

"Call" Button.

To alert the operator of another radio that you are about to send a transmission, press and release the Call Button (# 4). The "call signal" will sound in both the transmitting and receiving units for approximately two seconds.

This "call signal" will be heard in other radios with which you are operating only when they are turned on.

"Roger" Signal.

The radio can be programmed to transmit a brief signal to the other radios with which you are operating when you end your transmission. To activate this feature, with the radio OFF depress and hold the "DOWN" or "ME" button turn the radio ON and release the buttons.

This feature will be retained in memory and will return to the selected choice when the radio is turned OFF and ON.

Adjusting The Volume.

To adjust the volume, turn the Volume Control Button (#2) clockwise (volume up) or counter clockwise (volume down). To determine the current volume level prior to turning the radio on, depress and hold the Monitor Button (#6). The Speaker will emit static approximating the current volume.

Battery Indicator
The Battery condition indicator located on the display, will show the amount of charge in the batteries powering the radio. Replace alkaline or recharge NiCad batteries as soon as possible after this signal shows less than two segments lit.

Battery "Reserve" Feature.

In order to reserve battery power, the radio is programmed to cycle from a fully operational mode to a standby mode if no transmissions are sent or received within a period of approximately six seconds. The cycle is continuous, and is interrupted whenever a transmission is sent or received.

This feature increases the useful battery life by approximately 50%.

Belt Clip & Adjustable Wrist Strap.

To install the Wrist Strap, thread the thin end of the Strap through the hole at the top of the Belt Clip creating a small loop. Thread the other, thicker end of the Strap through the small loop and pull the Strap tight.

To remove the Belt Clip from the back of the radio, pull it gently out and down.

Display Backlight

Press and hold the "F" button for 5 seconds. A beep will be heard. The backlight will remain on for approximately 5 seconds and will turn off to save battery power.

Key Lock

To avoid accidental channel changes the keypad may be locked. To lock, Press the "F" button and then press the "M" (Monitor) button. The KEY icon will appear in the display. In this lock mode only the PTT, CALL and "F" buttons are active, if any other button is pressed 3 quick beeps will be heard.
To unlock, press "F" and then press "M". The KEY icon will disappear.

Advanced Features

Button Stroke Tone Option

An audible tone will be heard each time a button is pressed in the event that discrete operation is required, doing the following can disable this tone. With the radio OFF, press and hold the "UP" (SCAN) button. Turn the radio ON and release the buttons.

Clear Sound Range Extender

This function reduces extraneous noise while keeping the signal intact. To engage the "CS" function press the "F" button and then press the "CS" (CTCSS) button. The "CS" icon will be displayed on the LCD screen. To deactivate, press the "F" button and then the "CS" button and the icon will disappear from the screen.

Voice Activation (VOX) with 6 Levels of Adjustment

This feature allows the user to operate the radio in a hands free manner. Instead of using the PTT button the user's voice will activate the Transmit function. To engage VOX press the "F" buttons and then press the "CALL" button. The VOX icon will appear on the LCD screen. To exit this mode, press the "F" button and then press the "CALL" button.

> Adjusting the VOX Sensitivity Level
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> The sensitivity of the VOX feature will determine what volume level will engage the transmit mode. For example, if you are in the car you would not want the sound of a passing car or the radio to engage transmit so you would not want the most sensitive level.
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> There are 6 sensitivity levels 1 is the most sensitive 6 the least. To set the sensitivity level:
>
> 1. With the radio OFF, press and hold the "CALL" button and turn the radio ON. "L-03 will appear on the display and the power-up tone will be sounded. Release the "CALL" button after power-up.
> 2. Press the "UP" or "DOWN" button to change the sensitivity level.
> 3. Press and release the "PTT" button to exit to standard operation.
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>
> Setting VOX Delay
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> There are 6 settings for VOX delay level 1 is the least delay level 6 the greatest delay. To adjust the delay:
>
> 1. With the radio OFF, press and hold the "CALL" button and turn the radio ON.
> 2. Press and release the "F" button. The radio will display "d-03" on the LCD screen.
> 3. Press the "UP" and "DOWN" buttons to increase or decrease the delay.
> 4. Press and release the "PTT" button to return to standard operation.

Call Waiting

The call waiting feature is unique to the ClearLink branded radios and offers a valuable feature for those who want to monitor more than one or two channels at a time. To enable this feature do the following:
1.   Select the first channel to monitor. Press and hold the "CW" button for 5 seconds, the heart icon will appear on the display.
2.   Select the second channel. Press and hold the "CW" button for 5 seconds until the heart icon appears.
3.   To set additional channels repeat the above process.
4.   Once selection is complete press and release "CW" and the radio will begin monitoring both channels.

When the radio hears activity on either channel, monitoring will stop on that channel for 5 seconds and then resume monitoring both channels selected. To remain on the channel on which activity was detected push the "PTT" button. This will deactivate call waiting and allow you to communicate normally.

Programmable Memory Channels

The ClearLink 905 has the ability to remember up to 10 different channel settings. To enter channels in memory:
1.   Choose the desired main channel by pressing and releasing the "UP" or "DOWN" button. To enter in memory, press the "F" button then press and hold the "ME" button for 5 seconds. The "M" icon will appear on the display and the memory channel number will flash in the lower left of the display.
2.   Select a memory channel by pressing and releasing the "UP" or "DOWN" channel buttons. If the memory channel you want to program is the displayed then press PTT button to lock that channel into memory

Reading Memory Channels
1.   Press the "F" button and then press "ME". A memory channel will be displayed. This will be the location without the "M" above the number. If the number is flashing this indicated the memory channel is not programmed.
2.   Press and release the "UP" or "DOWN" button to select a memory channel previously programmed. To exit this mode, press "F" button and press "ME".

Worth Noting.

•   Do not attempt to remove or otherwise adjust the radio antenna.
•   The LED display on the ClearLink 905 is sensitive to extreme temperatures and humidity. Exposing the radio to temperatures below - 50 F (- 20 C) or above 140 F (60 C) may cause permanent damage.
•   The ClearLink 905 is moisture resistant; it is not waterproof. Avoid immersing it in water or other liquids.
•   Keep the ClearLink 905 out of direct sunlight.

Optional Accessories

The following accessories generally are available through your local
retailer. If your retailer does not stock the accessory you wish to purchase, please call us at 000-000-0000 for pricing and ordering information.

Item   Item #

Single Ear Piece "Push To Talk" Microphone

Headset "Push To Talk" Microphone

Rechargeable Nickel Hydride Battery Pack

Rechargeable AA NiCad Batteries

A/C Battery Charging Adapter (*)

12 Volt "Cigarette Lighter" Battery Charging Adapter (*)

Carrying Case/Arm Band Strap

(*) For use with Nickel Hydride Battery Pack Only

ClearLink 905 Specifications

Channels...14

CTCSS...38 per channel

Frequency..462/467 MHz

Audio Frequency..1 KHz

Reference Deviation ....1.5 KHz DEV. (FM)

Audio Output... 500mV

Maximum Deviation.. 2.5KHz

Operating Temperature .... - 50 F (- 20C ~ 140 F (60 C)

Power Source.. 4.5Volts DC

Dimensions .... 2.1" (W) x3.9" (H) x 1.2" (D)

Weight... 3.5 ounces

Questions & Service.

Questions regarding the ClearLink Connect 3 and ClearLink Connect 14 may be directed to our Customer Service Department at 000-000-0000.

When returning the radio or accessories to ClearLink for service, please enclose a detailed, typed or clearly printed explanation of the problem(s) you are experiencing. Please also enclose your name, return shipping address (No P.O. Box) and daytime phone number.

Pack the item or items carefully to prevent damage in transit. If possible, use the original packing material.

Insure and ship the package prepaid via a carrier through which the shipment can be traced to ClearLink Communications, 34 Franklin Street, Suite S-703, Nashua, NH 03060.

In the event the radio or accessories are returned to us for service or replacement within one year of the date of original consumer purchase, our Limited One Year Warranty may apply. Please read the terms and conditions of this warranty carefully.

Limited One Year Warranty.

ClearLink Communications warrants that the ClearLink Connect 3 Family Radio Service Radio ("the Radio") and the ClearLink Connect 14 Family Service Radio ("the Radio"), its component parts and accessories will be free from defects in workmanship and materials for a period of one (1) year from the date of original consumer purchase.

This limited warranty may be enforced by the original consumer purchaser only and provided that the Radio as been operated exclusively within the United States of America. At its sole discretion, ClearLink Communications will repair or replace defective Radios or component parts or accessories without charge upon delivery to the ClearLink Service Department.

Items being returned must be accompanied by the sales receipt or copy of the sales receipt or other valid proof of the date of purchase by the original consumer. The original consumer must pay all charges associated with the return of the Radio or component parts or accessories. ClearLink Communications will pay the associated charges to return Radios or component parts or accessories when repaired or replaced under warranty.

This limited warranty does not apply to 1.) damage resulting from an accident; 2.) damage resulting from misuse or abuse of the product or from unauthorized alterations or repairs; 3.) in the event the serial number has been altered, defaced or removed; or, 4.) in the event the owner of the Radio resides outside of the United States of America.

All implied warranties, including warranties of merchantability and suitability for a particular use are limited in duration to the length of this warranty. ClearLink Communications shall not be liable for any incidental, consequential or other damages including, without limitation, damages resulting from loss of use or cost of installation.

Note: Some states do not permit limitations on the length of an implied warranty and/or do not permit exclusion or limitation of incidental or consequential damages. Consequently, the limits stated in this warranty may not be applicable to the original consumer.