

Communicator Controls

1. Antenna
2. LCD Screen: Displays current channel selection and other radio status symbols.
3. Up ▲ button (VOLUME/CHANNEL): Press to adjust volume level and change channels.
4. Down ▼ button (VOLUME/CHANNEL): Press to adjust volume level and change channels.
5. Call C button: Press to transmit CALL TONES.
6. Enter ↵ button: Used to turn LCD Screen LAMP ON/OFF. Buttons are locked when pressed and held.
7. Speaker
8. Battery Compartment (LOCATED ON THE REAR): Houses 4 x 1.5V "AAA" alkaline batteries or 4.8V "AAA" Ni-MH rechargeable battery pack (not included).
9. Battery Compartment Cover Latch (LOCATED ON THE REAR): Secures Battery Compartment cover.
10. Mic: Microphone.
11. Monitor M button: Press to tune in and hold onto weak signals.
12. Menu button: Allows you to change channels.
13. PUSH TO TALK PTT button: Press to transmit.
14. Scan S button: Used to activate/deactivate CHANNEL SCAN.
15. Power On/Off button: Press and hold the button to turn your unit ON/OFF.
16. TX (Transmission) LED indicator: Illuminates red when transmitting.
17. External Sp./Mic. Jack
18. Belt Clip (LOCATED ON THE REAR)

Getting Started

Carefully remove your communicator from its Packing. If there is any visible damage, do not attempt to operate this communicator. Return it to the place of purchase

Removing the BELT CLIP:

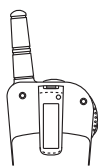


Figure 1.

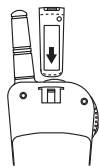


Figure 2.

1. Pull the BELT CLIP LATCH away from the unit.
2. While pulling the BELT CLIP LATCH, push up on the BELT CLIP to remove it from the unit. See Figure 1.

Installing the Belt Clip:

1. Slide the BELT CLIP into the BELT CLIP SLOT. See Figure 2.
2. A "click" indicates the BELT CLIP is locked into position.

Battery Installation:

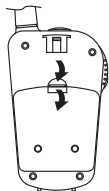


Figure 3.

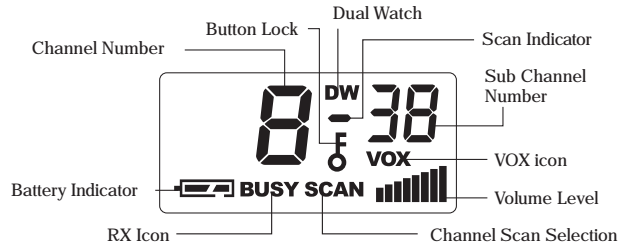


Figure 4.

1. Release the BATTERY COMPARTMENT COVER LATCH located on the rear side of the unit (see Figure 3) and remove the BATTERY COMPARTMENT COVER from the BATTERY COMPARTMENT (See Figure 4).
2. Install 4x1.5V AAA alkaline batteries or 4.8V "AAA" Ni-MH rechargeable battery pack (not included) as shown.
3. Reinstall the BATTERY COMPARTMENT COVER and lock the BATTERY COMPARTMENT COVER LATCH into position.

The COMMUNICATOR has a built in POWER SAVER feature for maximum battery life. But when the COMMUNICATOR is not being used, conserve battery power by pressing the button to OFF. Remove the batteries if the unit will not be used for a long period of time.

LCD Screen:



8	Channel Number changes from 1 to 8 as selected by user.
LOCK	Press and hold the ENTER ↵ button until the BUTTON LOCK symbol is displayed.
DW	Displayed during DUAL WATCH mode.
-	Displayed during waiting instruction.
38	CTCSS code. Sub Channel Number changes from 1 to 38 as selected by user.
VOX	Displayed during VOX mode is on.
 	Displays current VOLUME LEVEL.
SCAN	Displayed during CHANNEL SCAN mode.
BUSY	Displayed when receiving a signal.
BATT	Displays current BATTERY LEVEL.

Turning the Unit ON:
Press and hold the button. The unit will "beep" with dual tone and the LCD SCREEN will briefly display a SELF-TEST Screen.

Turning the Unit OFF:
Press and hold the button. The unit will "beep" with a signal tone and the LCD Screen will turn blank.

Adjusting Speaker Volume:

1. Press the Up ▲ button to increase the Speaker Volume.
2. Press the Down ▼ button to decrease the Speaker Volume.
3. The Speaker Volume level is indicated by the number of bars displayed in the lower right corner of the LCD Screen.

NOTE: Volume Up ▲ and Down ▼ buttons are disabled during BUTTON LOCK mode

Receiving a Signal:

The unit is continuously in the RECEIVE mode when the unit is ON and not Transmitting. When you receive a signal on the current channel, the RX icon (BUSY) is displayed. (See "LCD SCREEN" for details).

Transmitting a Signal:

1. Check the channel activity by pressing and holding the MONITOR M button. You'll hear static if the channel is unoccupied. Don't TRANSMIT if someone is talking on the channel.
2. Press and hold the PTT button to TRANSMIT. The TX LED Indicator will light up in red. Hold the unit in a vertical position with the MICROPHONE 2 to 3 inches from the mouth. While holding the PTT button, speak into the unit using a normal tone of voice.
3. Release the PTT button when you have finished transmitting.

NOTE: In order for other people to receive your transmission, they must also be on the same channel you are currently using. Refer to the "Channel Selection" section for more information.

Channel Selection

8 basic channels and 38 sub channels are available.

Changing Basic Channels

1. Press the MENU button once to enter BASIC CHANNEL SELECTION mode. The current channel number flashes on the LCD Screen.
2. While the channel number is flashing:
 - Press the Up ▲ button to move to a higher channel.
 - Press the Down ▼ button to move to a lower channel.
 - The channel changes from 1 to 8, or from 8 to 1.
3. Press the ENTER ↵ button to confirm the selected channel and return to the NORMAL mode.

Changing CTCSS Code - Subchannels

The COMMUNICATOR has 38 available CTCSS subchannels. To set the CTCSS code.

1. Press the MENU button twice until the CTCSS digits flash.
2. While the CTCSS code digits are flashing:
 - Press the Up ▲ button to move to a higher subchannel.
 - Press the Down ▼ button to move to a lower subchannel.
 - The subchannel changes from 0 to 38, or from 38 to 0.
3. Press the ENTER ↵ button to confirm your selection and return to the NORMAL mode.

NOTE: 1.To communicate with other PMR units, both units must be switched to the same channel and CTCSS subchannel.
2. Channel change operations are disabled during BUTTON LOCK mode.
3. Refer to the "Channel Table" section of this Owner's Manual for detailed frequency listings.

Monitor:

You can use the MONITOR feature to check for weak signals in the current channel.

1. Press the MONITOR **M** button once to activate this function.
2. Rx **BUSY** icon will display on the LCD Screen while this function is activated.
3. Press again the MONITOR **M** button to deactivate the function.

ENTER / Back-light / Button Lock:

1. Press and immediately release the ENTER **↵** button to light up the LCD Screen. The BACKLIGHT will automatically shut off after 4 seconds if no other buttons have been pressed.
2. Press and hold the ENTER **↵** button until the BUTTON LOCK icon is displayed on the LCD Screen.

NOTE: Volume and Channel Change Operations are disabled during BUTTON LOCK mode. Press and hold the ENTER **↵** button again to deactivate BUTTON LOCK mode.

Channel Scan:

CHANNEL SCAN performs searches for active signals in an endless loop from basic channel 1 to 8.

1. Press SCAN **S** button to activate CHANNEL SCAN. The channel number on the LCD Screen changes rapidly until an active signal is detected. During CHANNEL SCAN mode.
 - Press ENTER **↵** button to confirm the selected channel.
 - Press the CALL **C** button to change to CALL function and to send a CALL TONE on that active channel.
 - Press the SCAN **S** button again to deactivate CHANNEL SCAN mode.
2. When an active signal (one of 8 channels) is detected. CHANNEL SCAN pauses, keeping the active signal broadcasted.
3. Press the PTT button to communicate through the active signal channel and CHANNEL SCAN is deactivated.
4. When an active signal (one of 8 channels) is detected, but another channel is desired, press the Up **▲** or Down **▼** button to bypass the current channel and continue to search for another active channel.

Sending Call Tones

You can use CALL TONES to alert the other when you are attempting to contact them. You can also use CALL TONES to signal the beginning or the end of a transmission.

1. Press the CALL **C** button, the red TX LED indicator will light up and the CALL TONE continues for 3 seconds.
2. Release the CALL **C** button, your CALL TONES will transmit to nearby receivers set to the same channel.

Dual Watch:

You can use Dual Watch to monitor 2 channels.

To enter Dual Watch mode:

1. Press MENU **☰** button 4 times.
2. Press Up **▲** and Down **▼** buttons to select desired channel.
3. Once Dual Watch is on, automatically scan the channel that between 2 prefixed channel and the carrier stop on either activated channel to receive. Dual Watch restarts when the carrier disappears.
4. Press MONITOR **M** button to monitor weak signal.
5. Press ENTER **↵**, PTT **P** or CALL **C** button to end the Dual Watch mode.

Internal VOX Control Function

On VOX mode, automatically transmitting and receiving signals without pressing any button.

To turn on the VOX function:

1. Press MENU **☰** button 3 times to enter the VOX mode;
2. While the VOX icon is flashing;
3. Press Up **▲** button to select higher VOX sensitivity;
4. Press Down **▼** buttons to select lower VOX sensitivity;
5. Press MENU **☰** button twice or **↵** button to confirm the selected mode.

NOTE: The VOX sensitivity is indicated by the number of bars displayed in the lower right corner of the LCD Screen.

To turn off the VOX function:

1. While the VOX icon is flashing, press Down **▼** buttons until the number of bars disappears.
2. Press MENU **☰** button twice or **↵** button to confirm the VOX off mode.

To activate the VOX sensitivity:

1. While the VOX mode is on, plug the connector of the headset (not included) into SP/MIC jack of the communicator and then speak through the microphone of the headset to activate the transmitting mode.
2. Transmitting mode will turn on automatically and on standby mode.
3. The TX LED indicator illuminates red when transmitting.

NOTE: The VOX sensitivity is automatically activated once plug the connector of the Headset (not included) into SP/MIC jack of the communicator. You don't have to push the PTT **P** button of the communicator while transmitting.

Battery Level Indicator:

1. The BATTERY LEVEL is indicated by the number of squares present inside the BATTERY icon on the LCD Screen.
2. When the BATTERY LEVEL is low, the BATTERY icon will flash to indicate that the batteries need to be replaced.

Troubleshooting

SYMPTOM	SOLUTION
No power.	<ul style="list-style-type: none"> = Check batteries. Ensure that the batteries are installed properly. = The batteries may be weak. = Replace old batteries with four (4) new "AAA" alkaline batteries or 4.8V "AAA" Ni-MH rechargeable battery pack.
Reception is weak.	<ul style="list-style-type: none"> = Press the Up ▲ button to increase VOLUME. = The receiving signal may be weak and/or out of range. = If this happens, press the MONITOR M button.
Cannot change channels.	<ul style="list-style-type: none"> = To change channels, press the MENU ☰ button until the channel number flashes on the LCD Screen. = Press the Up ▲ or Down ▼ buttons to change channels. = Batteries may be weak. = BUTTON LOCK ↵ must be deactivated.
Range is limited.	<ul style="list-style-type: none"> = BATTERIES may be weak. = Replace with new batteries if the BATTERY LEVEL indicator is low. = The maximum range will vary depending on terrain and environment. = Open fields provide the maximum range, while steel/concrete structures, heavy foliage and use in buildings and in vehicles may limit the range significantly. = Wearing the radio close to the body, such as in a pocket or on a belt, will decrease range; change the location of the radio.
Sound distortion problems.	<ul style="list-style-type: none"> = If you are transmitting, speak in a normal tone of voice, 2 to 3 inches away from the MICROPHONE. = If you are receiving, lower the volume to a comfortable level. = Radios too close. Radios must be at least 5 feet apart; increase your distance. = Radios too far apart. Obstacles interfere with transmission. Talk range is up to 3 miles in clear unobstructed conditions.

Specifications:

	Channels Available	8 Channels	
	CTCSS Sub-channel	38 for each Channel	
	Output Power (TX)	0.5W	
	Battery Life	30 Hours (typical)	
	Range	About 3 Miles	
CHANNEL TABLE			
CHANNEL	FREQUENCY (MHz)	CHANNEL	FREQUENCY (MHz)
1	446.00625	5	446.05625
2	446.01875	6	446.06875
3	446.03125	7	446.08125
4	446.04375	8	446.09375

CTCSS (Continuous Tone Coded Squelch System) Frequency Table.

Sub Channel	Frequency (Hz)	Sub Channel	Frequency (Hz)	Sub Channel	Frequency (Hz)
1	67.0	14	107.2	27	167.9
2	71.9	15	110.9	28	173.8
3	74.4	16	114.8	29	179.9
4	77.0	17	118.8	30	186.2
5	79.7	18	123.0	31	192.8
6	82.5	19	127.3	32	203.5
7	85.4	20	131.8	33	210.7
8	88.5	21	136.5	34	218.1
9	91.5	22	141.3	35	225.7
10	94.8	23	146.2	36	233.6
11	97.4	24	151.4	37	241.8
12	100.0	25	156.7	38	250.3
13	103.5	26	162.2	0	No Tone

NOTE: The maximum transmission range will vary depending on terrain and environment.

To Charge The COMMUNICATOR

In the event you wish to use the unit with rechargeable battery (not included) you will be required to use an DC adaptor - input 230 VAC 50Hz - Output 6 DC 200mA (optional)

1. Turn the unit OFF (Do not turn ON the unit during Battery Charge Mode).
2. Install 4.8V "AAA" Ni-MH Rechargeable Battery Pack into the battery compartment of unit.
3. Place the unit into the Charger Base.
4. Plug the adaptor into the wall outlet and insert the round end into the Charge Jack on the rear of the charger base.
5. The LED light on the Charger Base will turn RED once electricity get connected.
6. Unplug the Adaptor. Turn the unit ON. The Battery Level Indicator on the LCD Screen will display the new Battery Level.

* LED Indicator on the charger base will NOT turn OFF automatically, except take out the unit from the charger base and disconnect the electricity.

** It takes approximately 6 hours to fully charge the batteries if they are at their lowest level or takes around 14 hours to fully charge the new batteries.

