

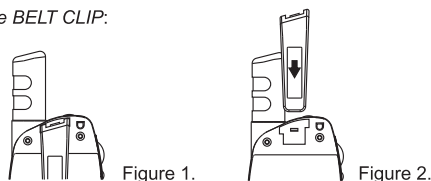
Communicator Controls

1. *Antenna*
2. *LCD Screen*: Displays current channel selection and other radio status symbols.
3. *SCAN S* button: Press and hold 1 sec. for channel scanning.
4. *Up ▲* button (VOLUME/CHANNEL): Press to adjust volume level and change channels.
5. *Down ▼* button (VOLUME/CHANNEL): Press to adjust volume level and change channels.
6. *Battery Compartment* (LOCATED ON THE REAR): Houses 3 x "AAA" alkaline or Ni-MH rechargeable batteries (not included).
7. *Speaker*
8. *Battery Compartment Cover Latch* (LOCATED ON THE REAR): Secures Battery Compartment cover.
9. *Menu/Power (On/Off) [M/⊙]* button: Press and hold the button to turn your unit ON/OFF. Allows you to change channels, select high/low power. Press to tune in and hold onto weak signals.
10. *Torch [T]* button: Press and hold to turn on the torch.
11. *Mic*: Microphone.
12. *PUSH TO TALK/CALL PTT/C* button: Press and hold for PTT. Press twice shortly for call tone transmission.
13. *TX* (Transmission) LED indicator: Illuminates red when transmitting. Lights up once every 15 seconds to show battery low.
14. *LED Torch*
15. *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:

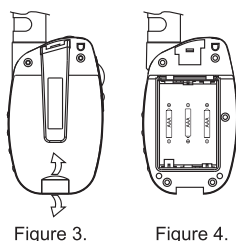


1. Pull the BELT CLIP LATCH away from the unit.
2. While pulling the BELT CLIP LATCH, push up on the BELT CLIP to remove it from the unit. See Figure 1.

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.

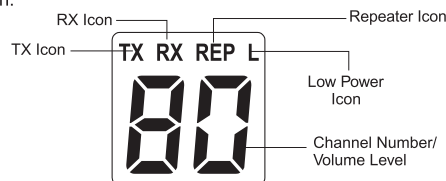
Battery Installation:



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 3x1.5V AAA alkaline batteries or Ni-MH rechargeable battery pack (optional) as shown.
3. Reinstall the BATTERY COMPARTMENT COVER and lock the BATTERY COMPARTMENT COVER LATCH into position.

When the COMMUNICATOR is not being used, conserve battery power by pressing the [M/⊙] button to OFF. Remove the batteries if the unit will not be used for a long period of time.

LCD Screen:



TX	Light on in Transmission mode
RX	Light on in Receiving mode
80	Volume Level/Channel Number changes from 1 to 80 as selected by user (channel 22,23,61,62 & 63 being inhibited).
L	Light on when low power is selected
REP	Light on when repeater function is switched on

Turning the Unit ON:

Press and hold the [M/⊙] 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 [M/⊙] 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 1 to 8 displayed on the LCD Screen.

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 is displayed. (See "LCD SCREEN" for details) and red LED indicator lights up.

Transmitting a Signal:

1. Check the channel activity by using MONITOR function (See below "MONITOR" section). You'll hear static if the channel is unoccupied. Don't TRANSMIT if someone is talking on the channel. Press and hold the PTT/C 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.
2. While holding the PTT/C button, speak into the unit using a normal tone of voice.
3. Release the PTT/C 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 "Changing Channels" section for more information.

Operation

Changing Channels:

The COMMUNICATOR has 75 available channels. To change channels:

1. Press the [M/⊙] button until 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 80, or from 80 to 1. (channel 22,23,61, 62 & 63 being inhibited).
3. Press the PTT/C button to confirm the selected channel and return to the NORMAL mode.

NOTE: Refer to the "Channel Table" section of this Owner's Manual for detailed frequency listings.

High/Low power selection:

1. Press [M/⊙] twice to enter High/Low power page.
2. Press ▲/▼ button to select the power level. The LCD panel indicate "L" when low power is selected. Low power can extend the life of battery life but would reduce the talking range.

Monitor:

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

1. Press the [M/⊙] button 3 times to activate this function.
2. Press again the [M/⊙] button to deactivate the function.

Using the Torch:

Press and hold the Torch button to shine the torch. The torch works even when the unit is switched off.

Automatic Power Save Feature:

After 6 seconds for the last operation, the PMR enters to the power saving mode automatically. The life of the batteries would be extended. The PMR is still able to receive transmission in this mode.

Low Battery Alert:

When the batteries in the unit are low, an alert tone will be heard and red LED will light up once every 15 seconds. Replace new batteries immediately.

Channel Scan:

CHANNEL SCAN performs searches for active signals in an endless loop from 1 to 80 (channel 22,23,61,62 & 63 being inhibited).

1. Press and hold SCAN **S** button for 1 second to turn on scan function. The channel number on the LCD Screen changes rapidly until an active signal is detected.

During CHANNEL SCAN mode.

- Press and hold **PTT/C** button you can talk to others who use the same channel.
- Press the **PTT/C** button to change to CALL function and to send a CALL TONE on that active channel.
- Press and hold SCAN **S** button again for 1 second to deactivate CHANNEL SCAN mode.

2. When an active signal (one of 80 channels) is detected. CHANNEL SCAN pauses, keeping the active signal broadcasted.

3. Press the **PTT/C** button to communicate through the active signal channel and CHANNEL SCAN is deactivated.

4. When an active signal (one of 80 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.

Repeater Function

Press **S** button once to switch on/off Repeater function. When Repeater function is On, channel 1 - 8 will be switched to channel 31 - 38, channel 41-48 will be switched to channel 71-78 and LCD panel will show REP icon.

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

Time-out Timer

The unit will disable transmitting while the **PTT** button pressed exceed 180 seconds.

Press the **PTT** button again to re-activate transmitting.

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 three (3) new "AAA" alkaline batteries or 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, use the MONITOR function.
Cannot change channels.	<ul style="list-style-type: none"> • To change channels, press the PI/O button until the channel number flashes on the LCD Screen. • Press the Up ▲ or Down ▼ buttons to change channels. • Batteries may be weak.
Range is limited.	<ul style="list-style-type: none"> • BATTERIES may be weak. • Replace with new batteries if there is low battery alert tone. • 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 5 Km in clear unobstructed conditions.

Specifications:

Channels Available	80 Channels
Output Power (TX)	0.5W
Battery Life	30 Hours (typical)
Range	Up to 3 Km

CHANNEL TABLE		CHANNEL TABLE		CHANNEL TABLE	
Channel Number	Frequency (MHZ)	Channel Number	Frequency (MHZ)	Channel Number	Frequency (MHZ)
1*	476.4250	28	477.1000	55	476.7875
2*	476.4500	29	477.1250	56	476.8125
3*	476.4750	30	477.1500	57	476.8375
4*	476.5000	31*	477.1750	58	476.8625
5*	476.5250	32*	477.2000	59	476.8875
6*	476.5500	33*	477.2250	60	476.9125
7*	476.5750	34*	477.2500	61++	-
8*	476.6000	35*	477.2750	62++	-
9	476.6250	36*	477.3000	63++	-
10	476.6500	37*	477.3250	64	477.0125
11	476.6750	38*	477.3500	65	477.0375
12	476.7000	39	477.3750	66	477.0625
13	476.7250	40	477.4000	67	477.0875
14	476.7500	41*	476.4375	68	477.1125
15	476.7750	42*	476.4625	69	477.1375
16	476.8000	43*	476.4875	70	477.1625
17	476.8250	44*	476.5125	71*	477.1875
18	476.8500	45*	476.5375	72*	477.2125
19	476.8750	46*	476.5625	73*	477.2375
20	476.9000	47*	476.5875	74*	477.2625
21	476.9250	48*	476.6125	75*	477.2875
22+	476.9500	49	476.6375	76*	477.3125
23+	476.9750	50	476.6625	77*	477.3375
24	477.0000	51	476.6875	78*	477.3625
25	477.0250	52	476.7125	79	477.3875
26	477.0500	53	476.7375	80	477.4125
27	477.0750	54	476.7625		

* Channel 5 and 35 are for emergency calling. Please do not use these channels in non-emergency cases.

+ Speech telephony is inhibited on Channel 22 and 23.

* Channel 1-8 and 31-38, 41-48 and 71-78 are used as repeater channels with 750kHz offset. Channels 1-8 and 41-48 are used for mobile reception and channels 31-38 and 71-78 for mobile transmission.

Only use this repeater function when a long distance communication via the local repeater facility is specifically required. Unless it is necessary, avoid operation on locally used repeater input channels (channels 31 to 38 and channels 71 to 78) or locally used repeater receiving channels (channels 1 to 8 and channels 41 to 48) is recommended.

++ Channel 61, 62 and 63 are reserved for future use. They cannot be activated until approved by the ACMA CBRS Class Licence in Australia.

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

Note to user:

Use of the citizen band radio service is licensed in Australia by ACMA Radio communications (Citizen Band Radio Stations) Class Licence and in New Zealand by MED General User Radio Licence for Citizens Band Radio. Operation is subject to conditions contained in those licences.

Note:

This product is made to the new standard 2011 version.

There are possible operational issues during the changeover from the old version 25kHz to the new version of 12.5kHz channel spacing. They include the consequences of narrowband (with 2.5kHz deviation) transmissions being received on the old wideband equipment, and wideband (with 5.0kHz deviation) transmissions being received on newer narrowband equipment.

There is a possibility of interference due to the older equipment being operated on channels adjacent to new narrowband channels.

The list of currently authorised channels can be obtained from the ACMA website in Australia and the MED website in New Zealand.