



## Operating Instructions

## FCC Warnings

Replacement or substitution of transistors, regular diodes or other parts of a unique nature, with parts other than those recommended by Mercor, may cause a violation of the technical regulations of part 15 of the FCC Rules, or violation of Type Acceptance requirements of Part 2 of the Rules.

## Contents

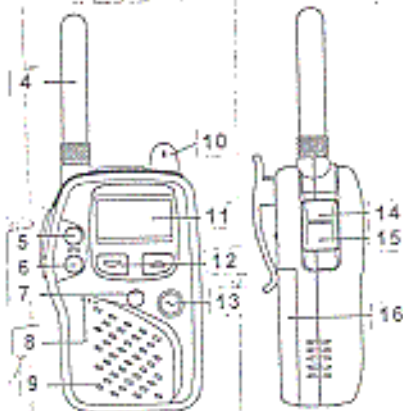
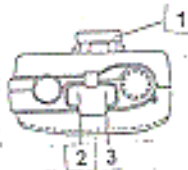
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## Features

- UHF FM Frequencies
- No Licence Required
- No Air Time Fees
- Up to 2 mile range
- 14 Main Channels
- 38 CTCSS Subchannels
- LCD Function Display
- Talk Confirmation Tone
- Call / Ring Button
- Auto Battery Saver Circuitry
- Auto Squelch
- Lock Key
- Belt Clip

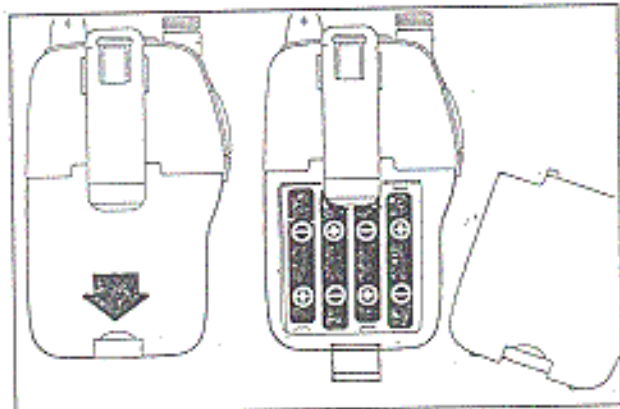
# Controls and Indicators

1. Belt Clip
2. Microphone Jack
3. Speaker Jack
4. Antenna
5. Function Button
6. Enter Button
7. Lock Button
8. Microphone
9. Speaker
10. Volume On/Off Control
11. Liquid Crystal Display
12. Channel Up/Down Select Buttons
13. Call Button
14. Monitor Button
15. PTT (Push To Talk) Button
16. Battery Chamber




## Operation

### Install Batteries

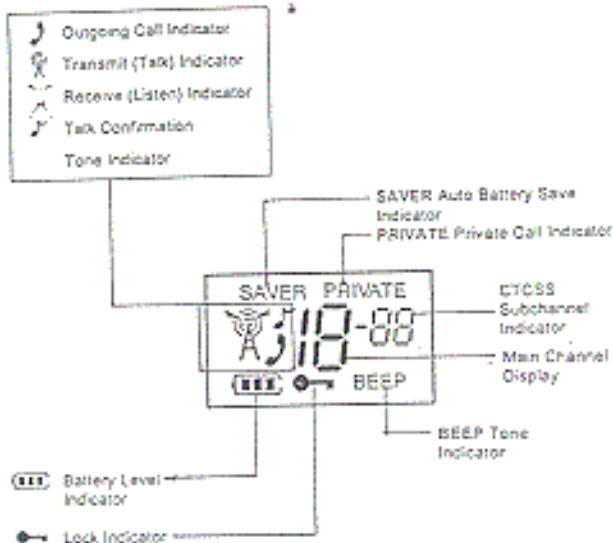


1. Pull lock tab down and lift door up (towards you) to remove battery cover.
2. Insert four "AAA" batteries. Position batteries according to polarity markings.

Note : When batteries are low or need charging the  BATT LOW indicator will blink. Replace alkaline batteries.

# Operation

## LCD Display

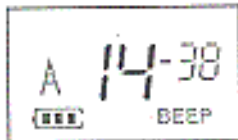


## Operation

### Turning On Your Unit

Rotate ON - OFF Volume Control "clockwise".

An audible "TONE" will indicate the unit is on and then the LCD will go through a 3 second self-test and then go to operational mode.

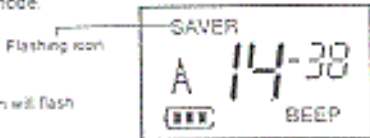


Operational Mode

Note : Whenever the unit is on, you can receive communications.

### Auto Battery Power Saver

Your unit has a unique circuit designed to extend battery life. If there are no transmissions within 5 seconds, the unit will automatically switch to battery save mode.



The SAVER icon will flash

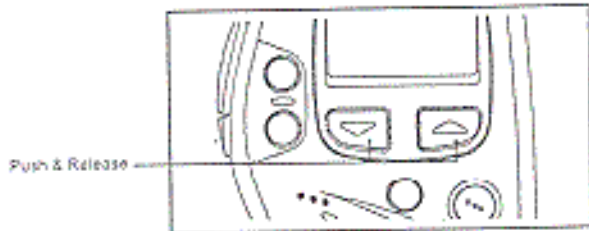
Note : The Auto Battery Save Circuit does not effect the unit's ability to receive incoming transmissions.

## Operation

### Select Main Channel (1-14)

Rotate ON - OFF Volume Control "clockwise".

- 1.) An audible "tone" will indicate the unit is on and then the LCD will go through a 3 second self-test and then go to operational mode.



- 2.) Select channel by pushing and releasing Channel (Up/Down) buttons.

### Channel Scan

Push and hold the Channel (Up/Down) buttons for fast channel advance.  
To stop Channel Scan, press PTT or Enter button.

#### Note :

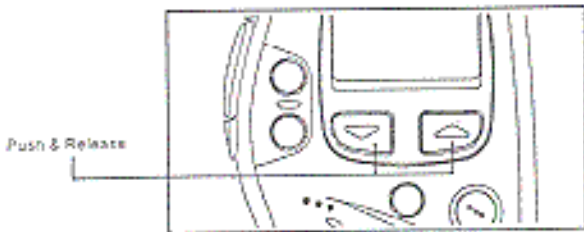
- 1.) Unit must be on same channel and subchannels to communicate.
- 2.) Channels 8-12 generally are less used and give better results for communications in most areas.

## Operation

### Select CTCSS Subchannel (00-38)

The CTCSS Subchannel allows the user to utilize a less used channel range (00-38) within a main channel.

- 1.) Rotate ON - OFF Volume Control "clockwise".  
An audible "tone" will indicate the unit is on and then the LCD will go through a 3 second self-test and then go to operational mode.
- 2.) Select main channel by pushing and releasing Channel (Up/Down) buttons.





## Operation

- 3.) Push and release FUNC. button. Small numbers flash next to channel display on LCD.



Note : CTCSS (Continuous Tone Controlled Squelch System) is an advanced subcoding system that allows segmentation of a main channel.

## Operation

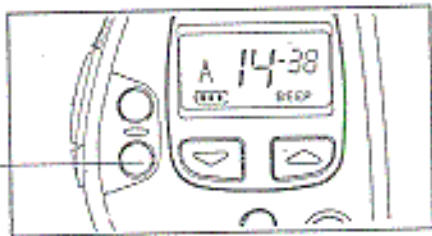
- 4.) Select subchannel number by pushing and release Channel buttons.

Push & Release



- 5.) When desired subchannel is displayed push and release Enter button.

Push & Release

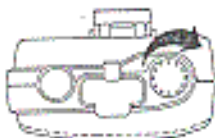


## Operation

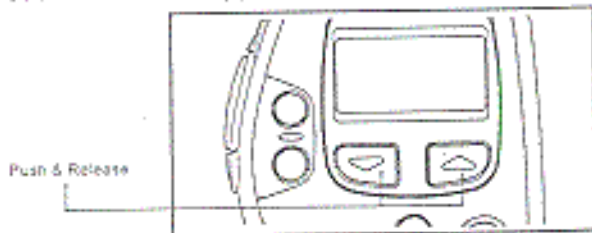
### Calling Another Party

To alert another party that you wish to communicate :

- 1.) Turn on your MK 1980 2-way radio. An audible "tone" will indicate the unit is on. The LCD will go through a 3 second self test and then to operational mode.





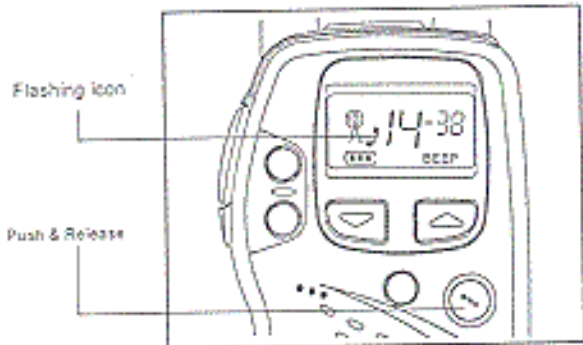
- 2.) Select desired channel by pushing and releasing Channel buttons



Note : Both the calling and receiving units must be on same channel and subchannel for the call function to work.

## Operation

- 3.) Push and release Call Button. The  indicator icon will flash and the  icon will remain on for 3 seconds. The unit you are calling will hear a 2 second ring tone.



Note : Your incoming "Call" audio ringing level is dependent on your unit's volume setting.

- 4 ) Wait for the party's response or proceed to 'Talking To Another Party' section on next page.

## Operation

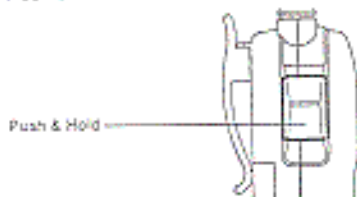
### Talking To Another Party

To send your outgoing message :

- 1.) Turn on your MK 1980 2-way radio. An audible 'tone' will indicate the unit is on. The LCD will go through a 3 second self test and then to operational mode.




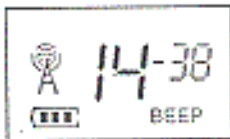
- 2.) Push and hold PTT button.



Note : While PTT button is depressed you cannot receive incoming calls.

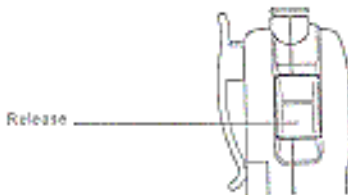
## Operation

3.) The  icon will appear.



4.) Hold mic about 2 inches from mouth. Speaker in a normal voice.

5.) Release PTT button and listen for response.



**Note :** When you release the PTT button, the person you are talking to will hear a tone indicating that it's ok to talk. See talk Confirmation Tone section.

## Operation

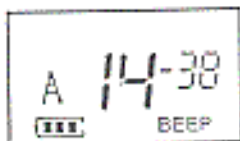
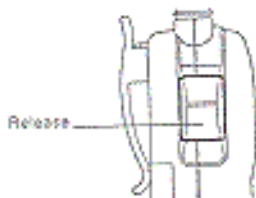
### Talk Confirmation Tone

Your listener will hear an audible tone when you release the PTT button. This alerts the other party that you are finished talking and it's OK for them to begin talking.

To set tone press and hold Enter button for 2 seconds. 🎵 icon appears. To cancel press and hold Enter button again. 🎵 icon disappears.

### Listening For Another Party

When finished talking :



Listening mode

- 1.) Release PTT button to receive incoming transmissions.

Your MK 1960 is always in listening mode when the PTT button is not pressed and you are not in function mode. See Advanced Features section.

**Note :** While PTT button is depressed you cannot receive incoming calls.

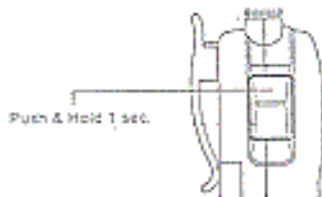
## Operation

### Auto Squelch

Your MK 1980 is equipped with Auto Squelch, which automatically shuts off weak transmissions and unwanted noise due to terrain conditions or if you have reached your range limit.

### Monitor

Auto squelch can be temporarily removed to allow all signals to enter by pressing the **(M)** button (Monitor).



- 1.] Push and hold the **(M)** button for 1 second to allow all signals to enter.



## External Microphone / Speaker Jack

### External Microphone Jack

Your MK 1580 can be fixed with an external microphone freeing your hands for other tasks.

To attach the external microphone.

- 1.) Open Mic/Spkr tab on top of unit.



- 2.) Insert jack into the Mic port.



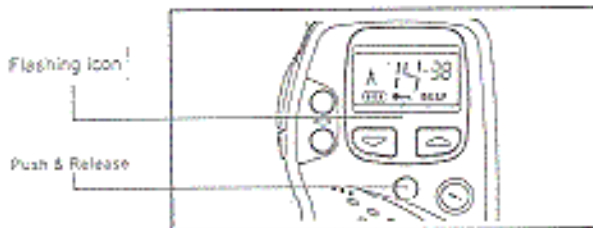
Note : External microphone is included and external speaker is not included with this unit .



## Advanced Features

### Lock Function

The purpose of the LOCK function is to lock most buttons to avoid accidental operation.

To engage the LOCK function :



- 1.) Push and hold Lock button for 2 seconds.  icon appears. Most buttons are locked.
- 2.) To 'unlock' push and hold Lock button for 2 seconds again. Button are 'unlock' and  icon disappears

**Note :** Call button, Monitor button and PTT button do not lock and are fully operational while the unit is locked. The unit cannot lock while in function mode.

## Advanced Features

### BEEP Function



#### Set Beep

- 1.) Press the Function button.
- 2.) Press the Lock button, BEEP icon appears.
- 3.) Press the Enter button to turn on BEEP.

#### Cancel Beep

- 1.) Press the Function button.
- 2.) Press the Lock button, BEEP icon disappears.
- 3.) Press the Enter button to turn off BEEP.

## Frequency Range

The MK 1980 unit represents one of the most advanced FM two-way radios used.

FRS Channel	Channel Frequency In MHz
1	462.5625
2	462.5875
3	462.6125
4	462.6375
5	462.6625
6	462.6875
7	462.7125
8	467.5625
9	467.5875
10	467.6125
11	467.6375
12	467.6625
13	467.6875
14	467.7125

# Specifications

## 1. General Specifications

### A. Frequency

CH=14 Channels within 462 - 467 MHz.

### B. Receiver

	Unit	
1. Sensitivity For 12 dB sinad	$\mu$ V	0.25
2. Max. audio output @10% THD	MW	300
3. Max. S/N ratio @ 1mV RF Input	dB	40
4. Squelch Sens	$\mu$ V	0.2
5. Audio frequency resp. @ 300 Hz	dB	$\pm 10$
@ 3000 Hz	dB	$\pm 10$
6. Signal displacement BW	+/-KHz	5
7. Adjacent CH. rejection	dB	55
8. Intermodulation rejection	dB	55
9. Spurious response rejection	dB	55

## Specifications

### C. Transmitter

	Unit	
1. Effective radiated power	mW	500
2. Carrier freq. stability	Hz	500
3. Modulation limiting	KHz	2.5
4. Carrier attack time	mS	80
5. Audio frequency response		
@ 300 Hz	dB	±10
@ 3000 Hz	dB	±10
6. Audio distortion	%	3
7. Hum and Noise	dB	40

### D. Power Supply

1. Battery life (1:1:8 Ratio)	HR	30
2. Battery, AAA x 4	V	4.8 - 6.0

## Limited Warranty