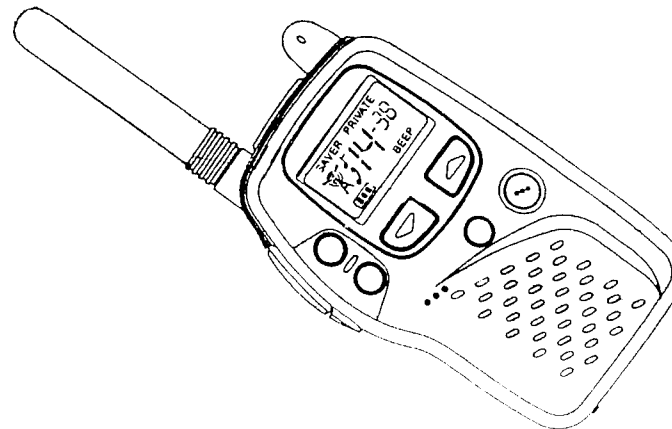


Memorex®

**14 CHANNEL FAMILY RADIO SYSTEM
WITH INTERNAL VOX FUNCTION**

MODEL # MK1970



Memcorp, Inc.
Weston, FL33331

Printed in Hong Kong

Visit our website at www.memcorpinc.com

052MK197055A

**BEFORE OPERATING THIS PRODUCT
PLEASE READ THESE INSTRUCTIONS
COMPLETELY**

FCC Warnings

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

Contents

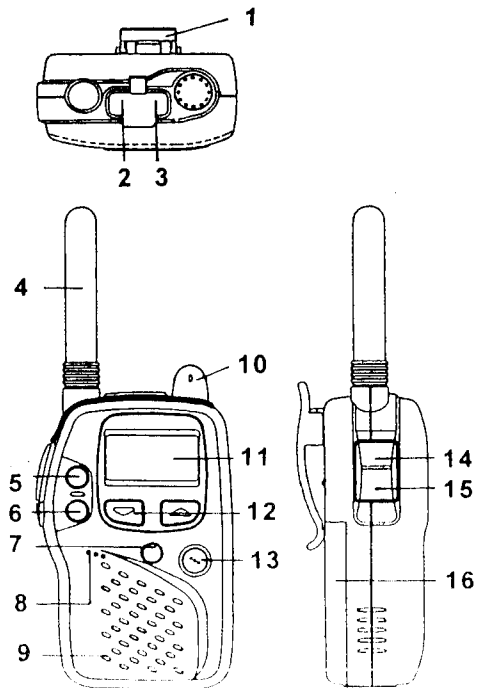
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Features

- 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

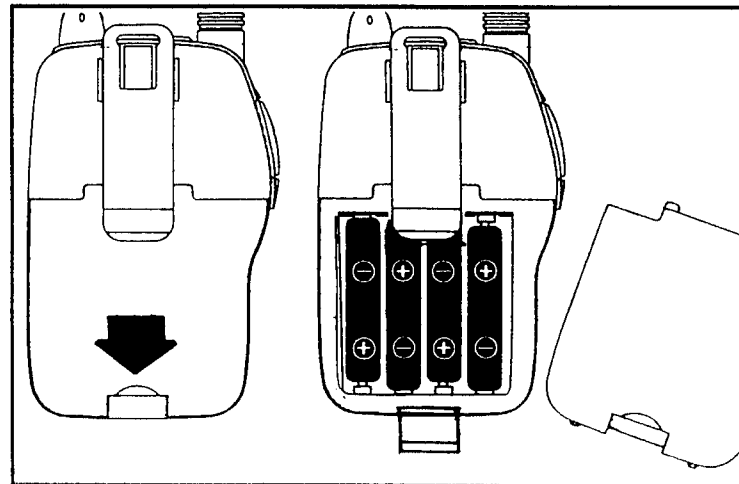
Controls and Indicators

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

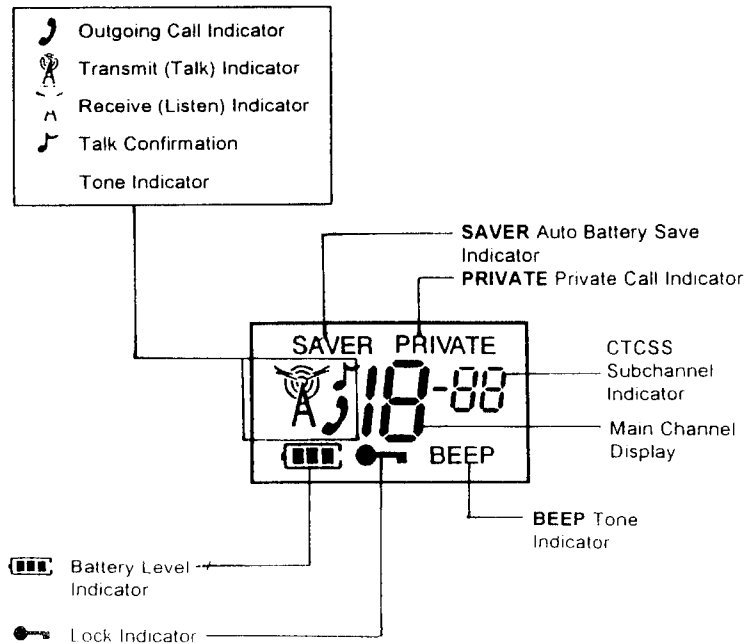


1. Pull lock tab down and lift door up (towards you) to remove battery cover.
2. Insert four "AAA" batteries. Position batteries according to polarity markings.

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

Operation

LCD Display

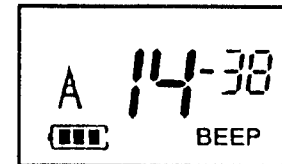
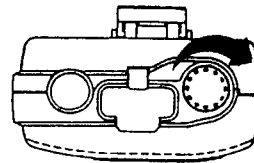


Operation

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.

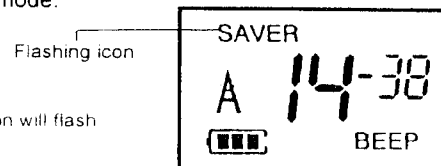


Operational Mode

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

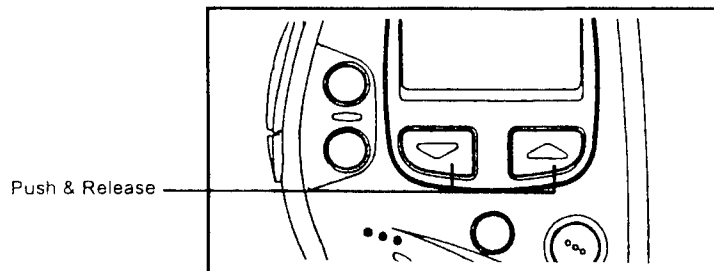
Note : The Auto Battery Save Circuit does not effect the unit's ability to receive incoming transmissions.

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 :

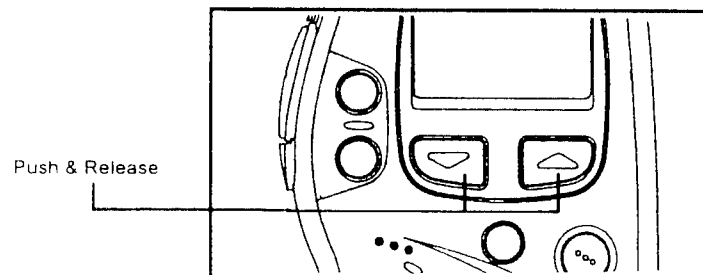
- 1) Unit must be on same channel and subchannels to communicate.
- 2) Channels 8-12 generally are less used and give better results for communications in most areas

Operation

Select CTCSS Subchannel (00-38)

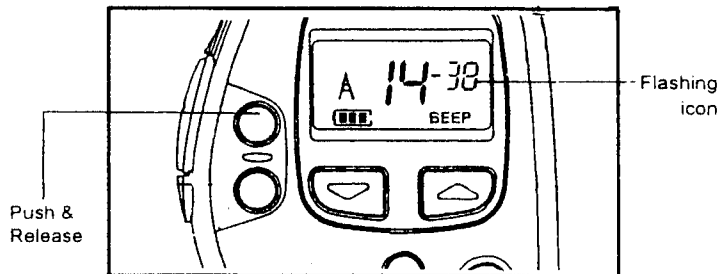
The CTCSS Subchannel allows the user to utilize a less used channel range (00-38) within a main channel.

- 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

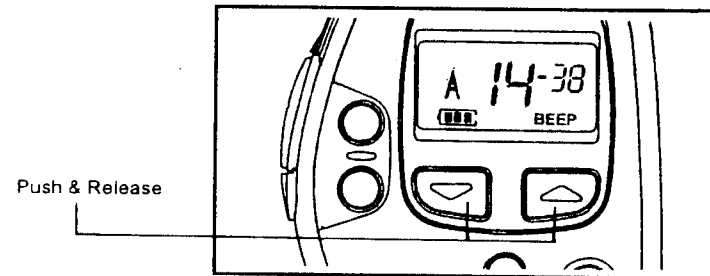
- 3.) Push and release **FUNC.** button. Small numbers flash next to channel display on LCD.



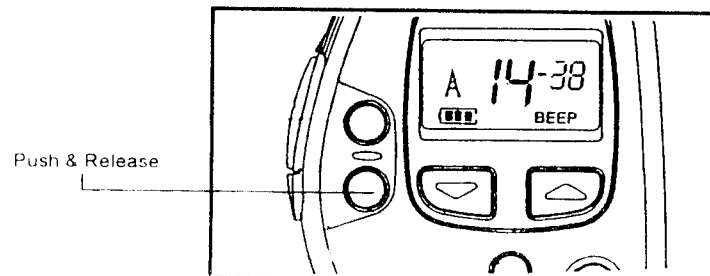
Note : CTCSS (Continuous Tone Controlled Squelch System) is an advanced subcoding system that allows segmentation of a main channel.

Operation

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



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

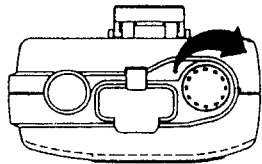


Operation

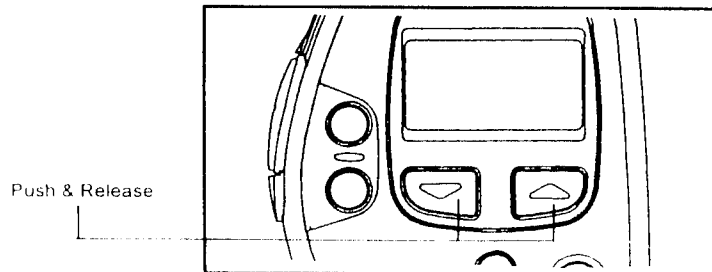
Calling Another Party

To alert another party that you wish to communicate :

- 1.) Turn on your MK 1970 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.





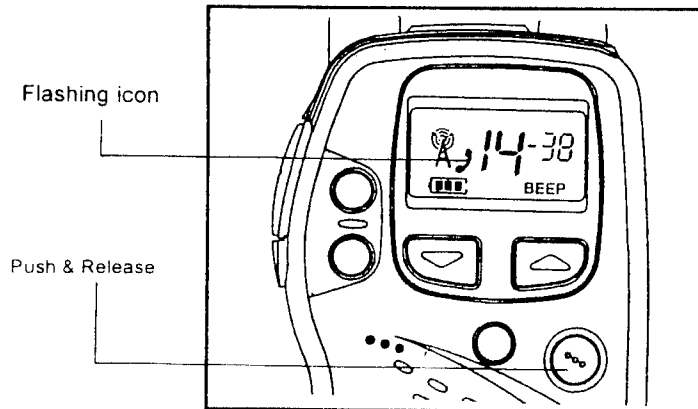
- 2.) Select desired channel by pushing and releasing **Channel** buttons.



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.

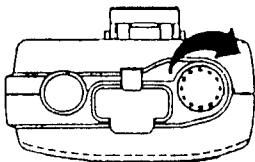
Operation

Talking to another party

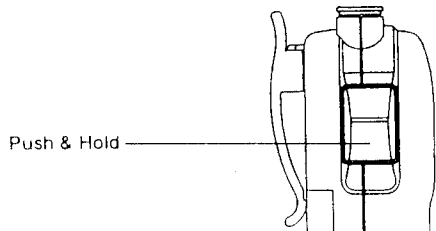
To send your outgoing message :

Internal VOX function

- 1.) Turn on your MK 1970 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 with Internal VOX function.




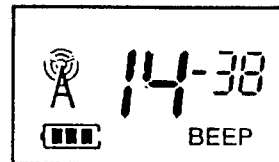
- 2.) Push and hold **PTT** button or speak to microphone.



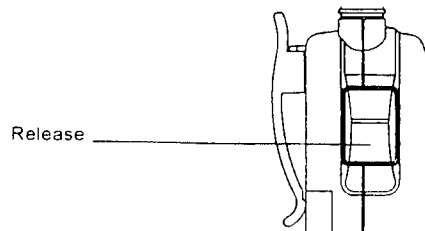
Note : While **PTT** button is depressed you cannot receive incoming calls.
Internal VOX function cannot disable.

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

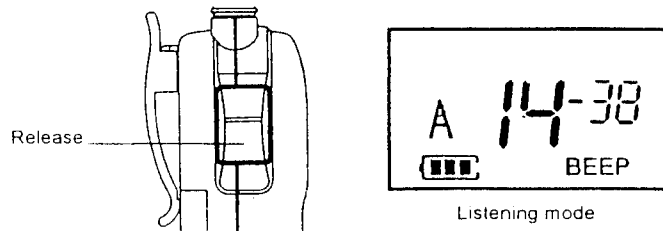
Talk Confirmation Tone

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 :



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

Your MK 1970 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.

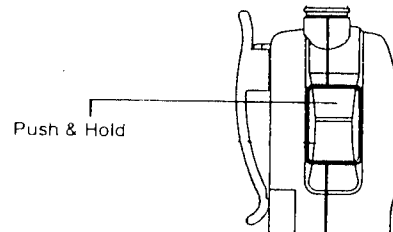
Operation

Auto Squelch

Your MK 1970 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).



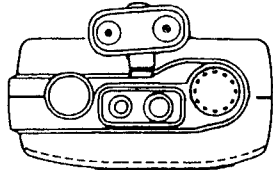
- 1.) Push and hold the **(M)** button allow all signals to enter.

External Microphone / Speaker Jack

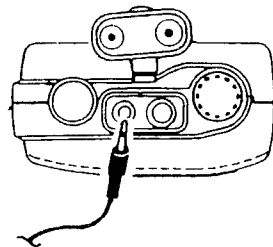
External Microphone Jack (Activate Voice Activation Function)

Your MK 1970 can be fitted 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. Voice-activation function will automatically turn ON.



3.) Unplug Mic. plug to activate internal voice-activated hand-free transmission. (Internal VOX)

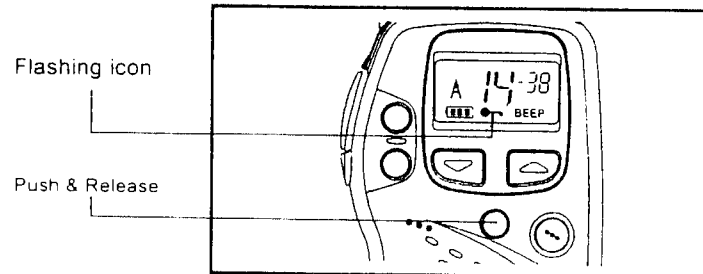
Note : External microphone and external speaker is not included with this unit


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.

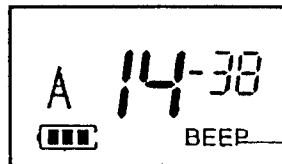
Note : **Call** button, **Monitor** button and **PTT** button do not lock are fully operational while the unit is locked. The unit cannot lock while in function mode.

Note :

In case you hear "beep" while beep indicator does not show on the LCD Display, turn off and turn on the unit for reset.

Advanced Features

BEEP Function



The **BEEP** icon

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**.

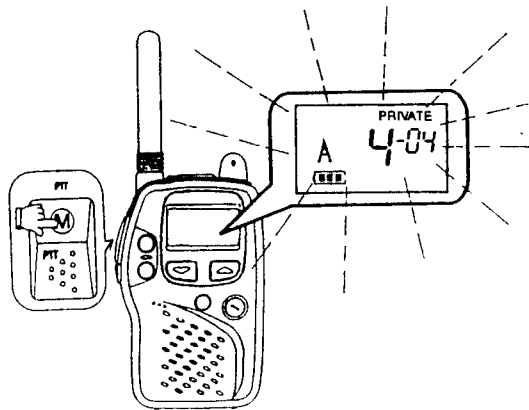
Frequency Range

The MK 1970 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

Lamp Control

The lamp is used to illuminate the Liquid Crystal Display. It turns ON every time you press the MONITOR button. The lamp will go out after 3 seconds.



If you press the MONITOR button while the lamp is currently ON, the lamp will discontinue to illuminate. Press the MONITOR button again and the lamp will once again illuminate for 3 seconds.

Note:

The amount of power consumed with lamp continuously ON is slightly more than with lamp OFF.

Specifications

1. General Specifications

A. Frequency

CH=14 Channels within 462 - 467 MHz.

B. Receiver

	Unit	
1. Sensitivity For 12 dB sinad	uV	0.25
2. Max. audio output @10% THD	MW	300
3. Max. S/N ratio @ 1mV RF input	dB	40
4. Squelch Sens	uV	0.2
5. Audio frequency resp. @ 300 Hz	dB	±10
@ 3000 Hz	dB	±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