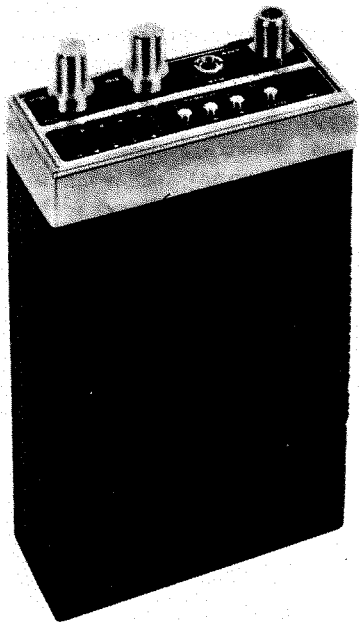


# INSTRUCTION MANUAL

**SCOOPER**

10 Channel FM Pocket type  
Scanning Monitor.



**MODEL MR-3000A**  
**FM-VHF High / Low**  
**MODEL MR-3000B**  
**FM-VHF / UHF**

## GENERAL DESCRIPTION

This Pocketable crystal controlled FM Monitor Receiver is supplied with Automatic Scanning designed to operate.

This Monitor Receiver is an all solid state dual conversion FM-VHF/UHF receiver capable of automatically switching 10 programmable crystal-controlled channels.

This is designed to be very compact and easy to carry to everywhere you want with DC battery operation.

This monitor has bypass channel (3 channels) feature. You can take out of scanning sequence. The automatic scanning feature can be switched to "MANUAL" and any single channel can be selected by push-in the channel selector switch. The noise-free squelch system is independent of all of the above features and provides very smooth listening and quiet switching between channels.

Program switch is provided for all channels so that any channel can be programmed for UHF/VHF-Low (Model MR-3,000B) or VHF-High /Low (Model MR-3,000A). This pocketable monitor receiver can be used by three ways, DC battery (UM-3 x 4 pcs. 6V), AC home current by using AC adaptor and DC 12V car battery by using exclusively designed bracket for this version optionally.



For VHF-High band:

$$\text{Crystal frequency} = \frac{\text{Desired channel frequency} - 10.7 \text{ MHz}}{3}$$

### Model MR-3,000B (UHF/VHF-Low)

For UHF band:

$$\text{Crystal frequency} = \frac{\text{Desired channel frequency} - 10.7 \text{ MHz}}{9}$$

For VHF-Low band:

$$\text{Crystal frequency} = \frac{\text{Desired channel frequency} + 10.7 \text{ MHz}}{2}$$

### CRYSTAL CORRELATION:

Resonance . . . . .	Parallel
Overtone . . . . .	3rd
Load Capacity . . . . .	20pF
Max. Series Resistance . . . . .	35 ohms
Maximum Drive . . . . .	2 milliwatts
Frequency Tolerance . . . . .	
VHF at 25°C from -30°C . . . . .	±0.001%
to +80°C . . . . .	±0.005%
UHF at 25°C from -30°C . . . . .	±0.0007%
to +80°C . . . . .	±0.001%

In special cases where interference is encountered from strong adjacent stations, the formula is changed by substituting a positive sign (+) for the negative sign (-) or vice versa. These crystals are available on special order.

**REMEMBER:** When ordering crystals from your dealer always give you the model number of the unit, crystal frequency and specify crystal type HC-25U.

All crystals are 3rd overtone and 20pF load capacity.

# FRONT PANEL CONTROL

## a. On-Off Volume Control

Turn the volume control clockwise to ON, then adjust the volume to a comfortable level.

## b. Squelch

The squelch is used to cut off or eliminate background noise in the absence of an incoming signal.

Slowly turn the control clockwise (Making sure there is not station transmitting on the frequency) until the background noise just disappears. If the control is increased past this point, it will take much stronger signal to override the squelch, thereby not permitting weaker signals to be heard.

## c. Auto/Manual Switch

You can change the scanning ways from automatic to manual scanning by using this switch. In case the switch is on "MAN" position, you can change the channel manually by pushing "SEL" switch.

## d. Channel Selector Switch

Push the "MAN" switch to obtain you desired channel (#1ch. through #10ch.). In this case the "AUTO/MAN" switch must be in the "MAN" position.

## e. Bypass

This feature prevents receiving from being locked on busy frequencies. Slide "PASS CH" switch on upper position.

Channel 1, 2, 3 can be bypassed in the scanning sequence, by engaging "PASS CH" switch.

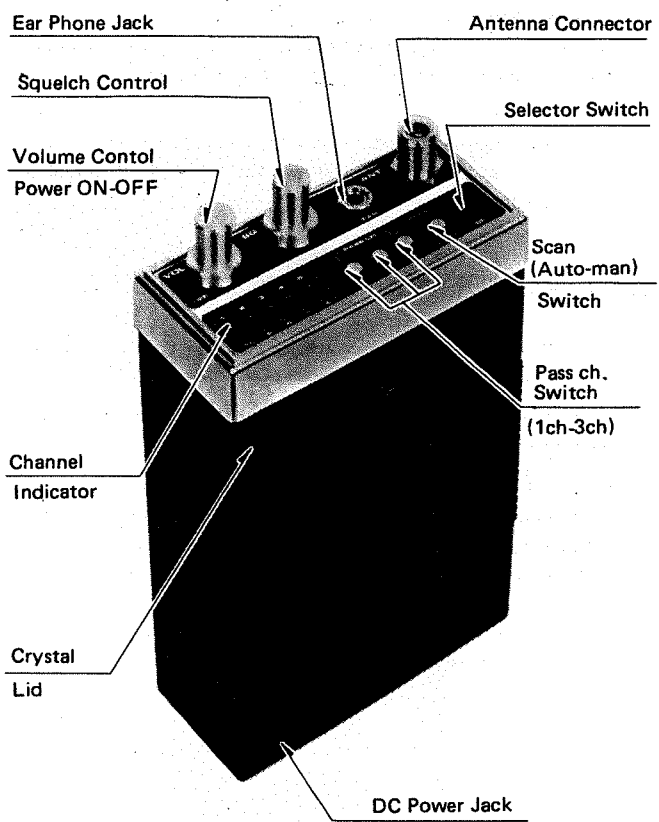
## f. Earphone

The earphone jack permits listening without disturbing others. Simply plug an earphone supplied into the earphone jack on the unit. The speaker will be disconnected and receiving will be heard only through the earphone.

## g. Antenna Plug

There are two type of antenna supplied to the unit as accessories and you can use either one according to the place.

# OPERATION



## BOTTOM SIDE CONNECTOR

### a. AC Power Jack

Connect the plug of AC Adaptor into the power jack and another plug of AC Adaptor into AC home current socket.

### b. DC Car 12V use

Install this unit itself into optional car bracket, which is made exclusively for this purpose. The bracket should be connected to the 12V battery.

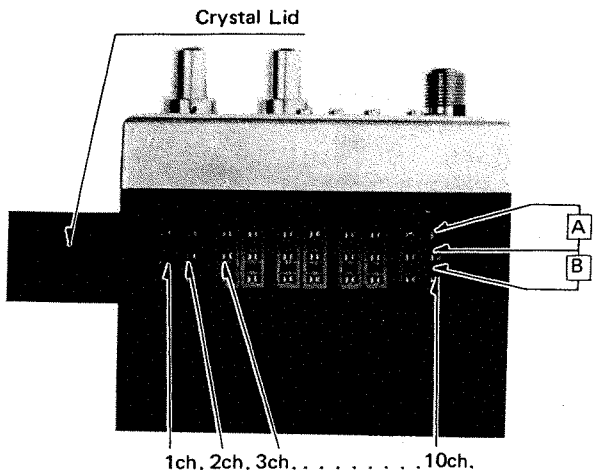
## CRYSTAL SOCKETS AND INSTALLATION

- a. Take off the crystal lid by pushing and sliding the lid toward left hand side.
- b. The channel indication label (where at the side of crystal socket) shows the location of crystals.
- c. Insert the crystals into the sockets where channel number is designated, and then using the label provided, write in the each frequencies. Affix the label to cover for easy reference. Please refer the figure number for the frequency program set-up.

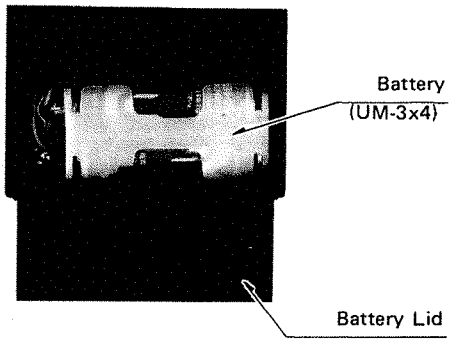
Every police, fire and other municipal, civilian defense or federal department, etc. broadcast on specific frequency.

These frequencies will differ in each town or city. Your local dealer or town hall can tell you the frequencies being in your area.

In order to obtain the correct crystal to the monitor a specific channel, the following formula must be followed to obtain the crystal frequency.



	A	B
MR-3,000A	VHF HIGH	VHF LOW
MR-3,000B	UHF	VHF LOW





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