

# **COMME X SCANNER I**

## **HF/VHFFlow/AIR/VHF high/UHF**

**PROGRAMMABLE AUTOMATIC**

# **SCANNING RECEIVER**

# **OWNER'S**

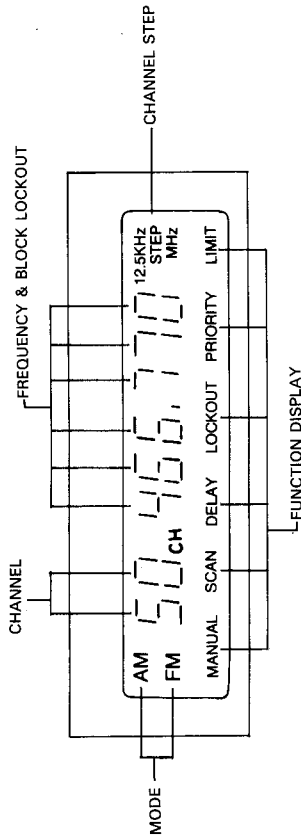
# **MANUAL**

**FREQUENCY RANGE**

- HF : 26.0 - 30.0 MHz (FM) *B + RA*
- VHF LOW : 68.0 - 88.0 MHz (FM) *Power Plus*
- AIR : 118.0 - 138.0 MHz (AM) *Police*
- VHF HIGH : 138.0 - 178.0 MHz (FM) *Police*
- UHF : 380.0 - 512.0 MHz (FM) *RA*

\* It can be selected AM and FM AUTOMATICALLY.

**INDICATION: LCD (LIQUID CRYSTAL DISPLAY)**



\* It indicates the Block locked-out group by pressing key switches.

**SCANNING FUNCTION CAN BE CONTROLLED WITH MICRO-COMPUTER**

- \* According to programs, this scanner checks memorized channels in order and shows you signals entered.
- \* This scanner can be scanned from 1ch to 50ch in case of closing squelch. When scanning stops to catch signals, a signal received can be heard from speaker.
- \* Without signals, scanning removes from present channels to another.
- \* By Delay function, it can be delayed about 2 seconds for scanning start.
- \* By channel lockout and block lockout, it can be skipped over to other channels.
- \* Priority always checks the channel 1 and will permit you to hear channel 1 any time it is active, regardless of any other signals being received at this time.

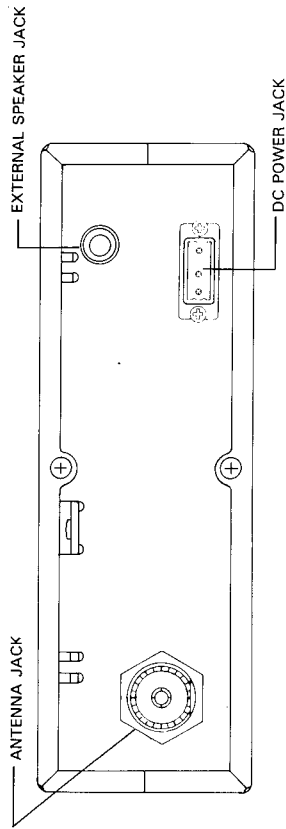
**SEARCH FUNCTION CAN CHECK ANY SIGNALS WITHIN BANDS**

When you designate upper and lower limit of the desired frequency on 5KHz or 12.5KHz or 25KHz, it checks with designated step and receives signal.

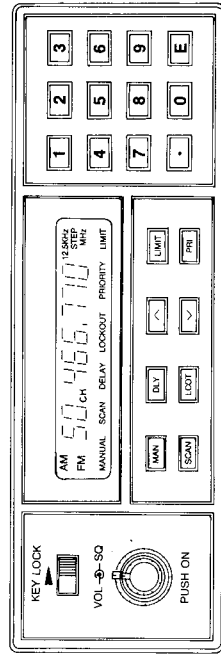
**REAR PANEL FUNCTIONS**

- ANTENNA JACK : Connect the supplied rod antenna to the antenna jack.
- DC POWER JACK : Connect the DC power plug into the DC power jack. Power cord is color coded as Black (-) and Red (+).

**EXT. SPEAKER JACK:** The speaker jack is for use with an 8 ohm external speaker.



**FRONT PANEL CONTROL**



This scanner is prepared 10 pcs Numeric Keys and 6 pcs Function Keys. **NUMERIC KEYS 0 - 9:** Have to be used for Frequency, Channel, Channel step on search, and Block lockout together with Function keys.

**DOT KEY:** Used to indicated Dot of decimal point meaning to be under MHz.  
**E (ENTER):** Use to Enter designated frequency into channel for memory.  
EXAMPLE:  ,  ,  ,  (on channel 6, memorized 80.200MHz)

**FUNCTION KEYS:** They have to be used with Numeric keys for above Function and change or cancellation.

**MAN (MANUAL):** Used to enter designated Frequency into Channel for memory and re-call memorized Frequency (Channel).

Also used to return from Scan mode or Search mode to Manual mode. In case of Manual mode, indicates "MANUAL" at lower of left side on LCD.

**DLY (DELAY):** Used to Delay start scanning above 2 seconds to next channel. It is useful function for amateur Radio communication.

EXAMPLE: To program Delay on a Channel 2.

**▲(UP)/▼(DOWN):** When it is on Manual mode,  ,  ,  (Indicates "DELAY" on LCD) used to channel upward or downward. When it is on Search mode, by pressing  or  , starts search from lower or upper frequency to upper or lower frequency within search limit frequencies.

Used to designate upper and lower Limit Frequency of Search.

EXAMPLE: 145.000  (Indicated 51ch 145.000MHz and "LIMIT" at lower of right side on LCD.)

Then, 150.000  (Indicates 51ch 150.000MHz and "LIMIT" on LCD.)

And then, by pressing key  or  , starts searching within 145.00 – 150.000MHz.

Search channel step indicates as 25KHz or 12.5KHz etc. at upper of right side on LCD.

**SCAN:** Used to function the scan.

**LCOT (LOCKOUT):** Used to skip over the memorized channels or a block lockout. (10 channels = 1 bank) Indicates "LOCKOUT" on LCD.

EXAMPLE:  ,  ,  This channel 4 cannot be scanned by lockout, by pressing  again, it is cancelled.

EXAMPLE:  ,  About 2 seconds, indicates 2 "XLXXX" From 11 – 20 ch are "LOCKOUT". Push  ,  again, about 2 seconds indicates "XoXXX", 11 – 20 ch are cancelled.

About this function, explain later on.

By  ,  , from 1 – 10 ch are locked-out. But without Delay, press  ,  ,  only channel 2 is cancelled from lockout. It means, channel lockout takes priority than block lockout.

\*

\* Block lockout can be locked or cancelled for 1 – 10 ch  
11 – 20 ch  
21 – 30 ch  
31 – 40 ch  
41 – 50 ch  
Cannot be used for 6 – 15 ch, 24 – 33 ch etc...

**PRI (PRIORITY):** Press the Priority key, "PRIORITY" displayed at lower of right side on LCD.

While scanning, this function checks the memorized frequency in channel 1 every 2 seconds.

**SQUELCH CONTROL:** Used to eliminate annoying background noise when no signals is received. It means, "SQUELCH OPEN". Turn the Squelch control to clockwise to disappear background noise. It means, "SQUELCH CLOSE".

**ON – OFF PUSH SWITCH AND VOLUME CONTROL:** It is used to power on-off and volume control. Push the volume control to power switch on, then adjust the volume to a comfortable listening level. (SQUELCH CONTROL has to be OPENED.)

**KEY LOCK SWITCH:** When you set the lock switch to "LOCK", all keys are locked. Means even if you or somebody touch the keys, they will not work while key lock is being set to lock.

#### HOW TO USE

Connect the provided rod antenna to antenna jack.

You may need the roof antenna to use in a car, in building or in some weak wave area.

We recommend you to use roof antenna or antenna for communication equipment.

This set can be installed in any vehicle which has 12-volt, negative ground electrical system of 13.8 volt DC.

Connect the DC power plug into the DC power jack. Power cord is color coded as BLACK (-) and RED (+).

Push the volume control to power on, then you can see the illuminations for surroundings of volume.

And something are shown on LCD. It can be operated.

But in case to use for the first time, nothing is memorized in the micro-computer, so that somethings shown on display are just unexpected frequency or words.

#### HOW TO PROGRAM

You have to program correctly as shown below:

EXAMPLE: To memorize 144.100MHz in channel 1  
 ,  ,  ,  ,  ,  ,  ,  ,  
 ,  ,  ,  ,  ,

You can see above memorized Frequency on display, and if "LOCKOUT" indicator is shown on display, press the  key, then it will disappear.

Now you are ready to enter your desired frequency to channel 2 and up to 50. Then, again if "LOCKOUT" or "DELAY" indicator are shown on display, you just press the  or  key as mentioned above.

### HOW TO MAKE BLOCK LOCKOUT AND CANCELLATION

This scanner has 5 blocks (5 banks) as follows;

1-10 ch, 11-20 ch, 21-30 ch, 31-40 ch, and 41-50 ch.

In case, press , . Indicates which blocks are locked or unlocked. If indicator shows "LoLoL", "L" at left side means 1-10 ch and locked, next "o" means 11-20 ch unlocked, next "L" means 21-30ch locked, next "o" means 31-40 ch unlocked and last "L" means 41-50 ch locked.

"L" means LOCKED

"o" means UNLOCKED

So, if "LLLLL" are indicated, 1-50 ch are block lockout, "ooooo" means all unlocked.

\* NOTES: As mentioned before, lockout for each channel takes Priority than block lockout, so even if indicator shows "ooooo", some channels may lockout when you made lockout on certain channels.

When you press , , and if indicator shows "LLooo" on "o" means 31-40 ch unlocked and last "L" means 41-50 ch locked. Then when you want to cancel block lockout from 1-20 ch.

Press , . Indicator shows "oLooo"

Press , . Indicator shows "ooooo"

And then when you want block lockout only for 31-40 ch.

Press , . Indicator shows "oooLo"

Then want block lockout for 41-50 ch

Press , . Indicator shows "oooLL"

Then cancel of 31-40 ch

Press , . Indicator shows "ooooL"

### PRIORITY ON AND CANCELLATION

Press  key, "PRIORITY" appears on Display, and checks the memorized frequency in channel 1 every 2 seconds.

Again, press , cancel priority and disappeared from Display.

### SEARCH

Choose lower and upper limit of frequency in the same band.

EXAMPLE: To search from 144.000 MHz-146.000 MHz at the 25 KHz step.

Press , , ,

Press ,

(LCD Indicates 51 ch 144.000 MHz xxx step "LIMIT")

Then, press , , , ,

(LCD indicates 51 ch 146.000 MHz xxx step "LIMIT")

Then, press , ,  or ,

starts searching at 25 KHz step. When there is signal in any frequencies, it stops to receive; then press  or  key, it starts searching again.

In case to press  key, it starts searching from lower to upper frequency.

EXAMPLE: 146.000 MHz ... 144.00 MHz ... 144.025 MHz ... 144.050 MHz ... on display.

### "ERROR" INDICATION

If you mistake the operation, "ERROR" appears on display and you should operate correctly by reading this instruction manual again.

### HOLD MEMORY FUNCTION (BACK-UP)

This scanner has "HOLD (BACK-UP) MEMORY FUNCTION", so even power switched off, it can be memorized for 2 weeks. When you use this scanner, not necessary to memory same frequencies for 2 weeks.

### RECEIVER MOUNTING

Before installing the receiver in a car, truck and etc., be sure to choose a location which is convenient to the operating controls and will not interfere with the normal functions of the driver. The receiver may be mounted to the underside of the instrument panel or dashboard of a car, truck and etc., by means of the special brackets which are supplied with the receiver.