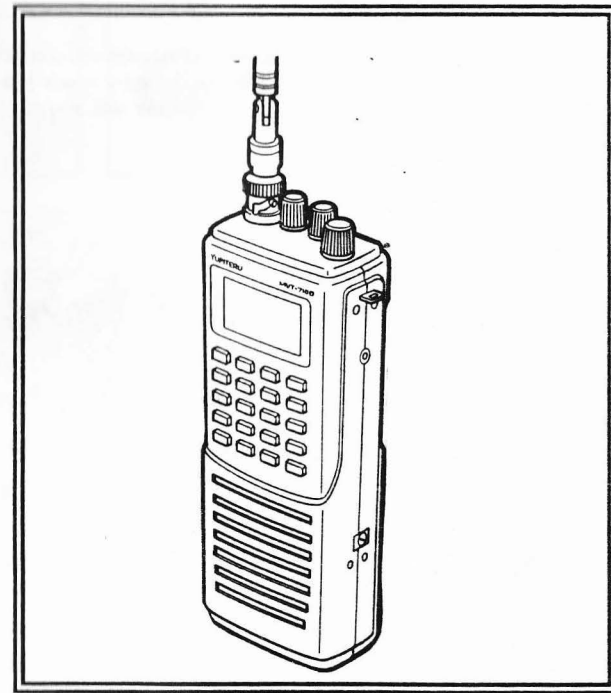


YUPITERU

MVT-7100

Wide Band Hand Held Receiver



Operating Instructions

YUPITERU MVT-7100 GENERAL DESCRIPTION

The MVT-7100 handheld receiver from YUPITERU is a follow on from their previous outstanding models. The MVT-7100 has continuous frequency coverage from 100KHz to 1650MHz, with modes of AM, Narrow FM, Wide FM, Upper Side Band (USB) & Lower Side Band (LSB). There are 1000 memory channels provided in 10 banks of 100 into which you can store frequency & mode while 10 programmable search banks are also available.

Please look after the packaging you receive your YUPITERU MVT-7100 in, it may be needed should it be necessary to return the unit to the place of purchase and you may also find it of value should you ever 'trade in' or sell your MVT-7100.

Please look after your YUPITERU MVT-7100 with care, avoid getting the unit wet (try not to use it in the bath - it has been known to have submerged receivers arrive for repair !) and also direct sunlight, in particular car dash boards. Taking care of your receiver will also maintain its value should you ever wish to sell or part exchange the set.

Those of you familiar with English instructions translated and printed in Japan will know that in most cases they leave a lot to be desired (after saying that their English is better than my Japanese !), we hope you will find these instructions far more comprehensive and understandable. Please read them carefully. Compared to some receivers the MVT-7100 is one of the easier ones to program and operate, (who said that !) however we do appreciate that some of the operations can be "complicated", especially to the newcomer and many faults which owners report are operations that have been carried out incorrectly. Should your MVT-7100 not do what it apparently should, please try again reading the instructions slowly before calling your dealer. Owners of previous Yupiteru models should have little trouble in operating this new set.



I hope you find this instruction booklet easy to follow, whilst some parts may seem long winded I have tried to explain the procedures in a manner which will allow users of varying 'scanner' know-how get the best out of the MVT-7100 as quickly as possible. For the experienced user some explanations may seem unnecessary and drawn out but we know from experience that no matter how hard you try you cannot answer everybodys questions. Any comments (or corrections !) would be most welcome.

Happy Scanning.

SUPPLIED ACCESSORIES

The MVT-7100 is supplied with the following accessories:-

4 Nicad AA size batteries

Mains Power supply unit/Battery Charger (12 volts DC, 200mA)

DC Lead with cigar lighter plug

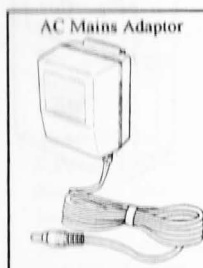
Telescopic antenna

Belt Clip

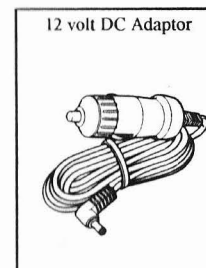
Carry Strap

Ear piece

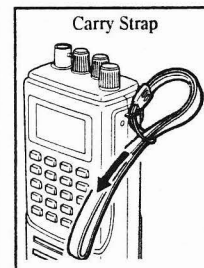
Instruction booklet



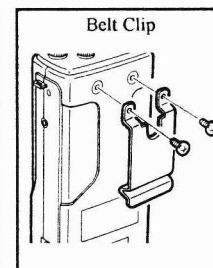
AC Mains Adaptor



12 volt DC Adaptor



Carry Strap



Belt Clip

NICAD BATTERIES

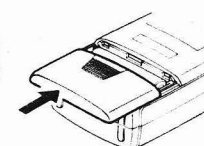
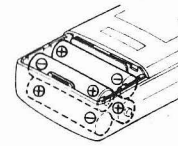
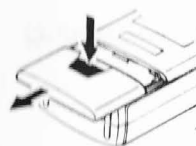
The nicads supplied are not factory charged and may require a good 15 hour charge with the charger supplied while the set is switched off before they can be used. You will find that rechargeable batteries will give far better results if every now and again you fully discharge them. Try to avoid mixing Nicad batteries purchased at different times together, you may not get the maximum performance available if you do.

MEMORY BACKUP

The memory backup battery will retain frequencies stored in memory for about 7 days should the nicads loose there charge or are removed. This backup battery will be charged each time an external 12v source is connected for at least one hour.

REPLACING BATTERIES

To replace the supplied batteries with either rechargeable or alkaline batteries remove the battery cover and place the four batteries into the rear of the receiver ensuring that the correct polarity is observed and replace the battery cover.

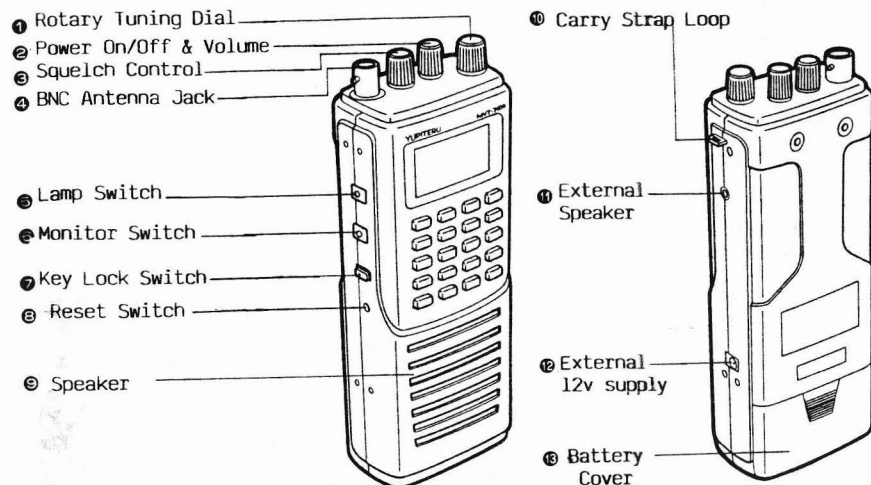


The Batteries will not be charged when the set is turned on.

Do not use the mains adaptor/charger with alkaline batteries fitted.

If the Nicad batteries are not charged within 7 days of going "flat" frequencies stored in memory channels will be lost.

CONTROLS



1. Rotary Tuning Dial

The rotary tuning knob has several functions on the MVT-7100:-

MANUAL MODE: The tuning knob allows you to tune up or down from the displayed frequency in the increment steps chosen.

MEMORY MODE: Turning the knob allows you to move up or down through the memory channels.

SCAN & SEARCH MODE: Turning the knob when the MVT-7100 has stopped on a transmission will restart the scan or search in the direction chosen.

MODE SELECTION: Used for the selection of AM, Narrow FM, Wide FM, USB or LSB when rotated after **FUNC + MODE**

INCREMENT STEP SELECTION: Used for the selection of any one of the various increment steps when rotated after pressing the **STEP** button.

The rotary knob is also be used for scrolling through frequencies entered into the Search Pass facility and in conjunction with the C/AC key when correcting a keyboard entry.

2. Power On/Off & Volume

Turning clockwise turns the set on and increases the volume. Turned fully anti-clockwise the receiver will be turned off.

3. Squelch Control

Turned fully anti-clockwise the squelch is off and constant background "noise" will be heard. To eliminate the noise and allow the MVT-7100 to scan or search turn clockwise until such time as the "noise" disappears. The further clockwise the less sensitive the MVT-7100 becomes & only stronger signals will be heard.

4. BNC Antenna Socket

The MVT-7100 is supplied with 1 telescopic antenna which is connected at this point. It is possible to connect an alternative antenna to the set using this connector.

5. Backlight

The backlight will only remain lit whilst the button is pressed.

6. Monitor

Pressing the MONI key effectively opens the squelch fully while pressed.

7. Key Lock

To prevent accidental operations the keypad can be disabled by moving Key lock switch up to the "on" position showing a red dot. To restore the keypad the key lock switch has moved back down.

8. Reset Button.

Pressing this recessed button with a fine pointed object will result in the MVT-7100's Central Processor Unit (CPU) being re-set. This will clear all memory channels and also re-set the 10 search banks to the factory pre-set. This button should be pressed if the MVT-7100 appears to lock up or not accept frequencies, bear in mind however that all stored information will be lost so it may be a good idea to record all the stored frequencies first.

9. Speaker

Self Explanatory we think !

10. Carry Strap Hook

11. Earpiece/External Speaker socket. 3.5mm Jack

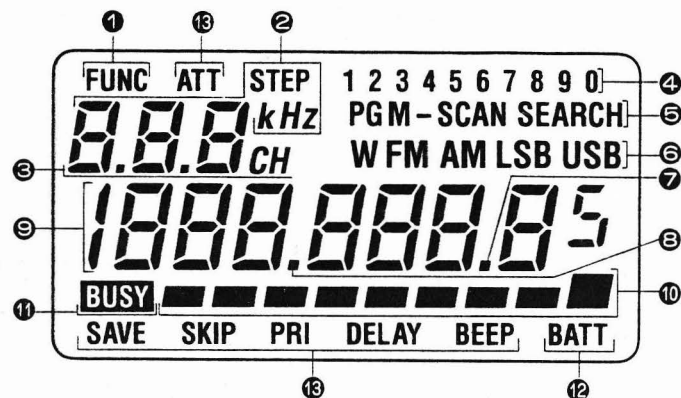
This is a 3.5mm standard socket. The earpiece supplied, headphones or external speaker may be connected to this socket but will disconnect the main speaker. The impedance should be 8 Ohms.

12. 12 Volt External Power Jack

The centre pin is positive. Used to connect the mains power charging unit or DC cigar lighter lead to the MVT-7100. Care must be taken to ensure the correct DC voltage (11-15 volts) is applied. When connected to this socket the external source will charge the internal nickel cadmium batteries. Do not connect an external source to the MVT-7100 when alkaline (non rechargeable) batteries are fitted. A full charge will take approximately 12-15 hours. Try not to overcharge the batteries, while this will not cause major damage, prolonged and constant overcharging can increase the temperature of the batteries to a point where they may explode.

13. Battery Compartment Cover

LCD DISPLAY



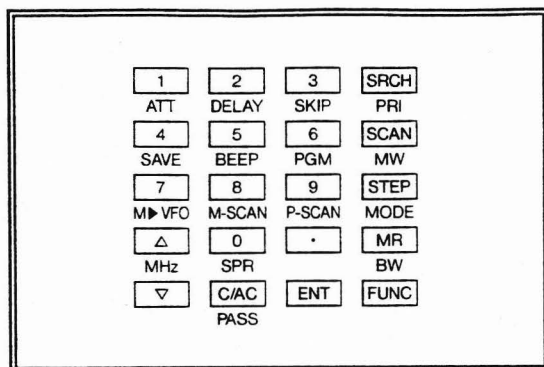
- 1** Displayed each time Function (FUNC) Key is pressed
- 2** STEP & KHz will be displayed together with the increment step display just below to the left. It will only be displayed in Manual or Search mode. When selecting increment steps STEP & KHz will flash.
- 3** When in Manual or Search Mode displays the selected increment step. When in Memory Mode or Scanning displays the channel number. When selecting increment steps these will flash.
A "P" will be displayed to the right when the Priority channel (1000) is selected)
A "P" will be displayed to the left to indicate a Search Pass frequency.
- 4** Bank Numbers. When Scanning or Searching indicates which bank or banks have been selected. These numbers will also indicate the number of channels in the Program Scan.
- 5** Indicates if the set is Scan Mode, Search Mode or Program Scan mode. Nothing is displayed when in Manual mode. PGM will be displayed with any channel in the Program Scan.
- 6** Displays selected mode of reception. The mode will flash when in Mode Scan.
- 7** Decimal Point. The 3 figures to the left are KiloHertz (KHz), figures to the right are Hertz (Hz).

- 8** Decimal Point. The figures to the left indicate MegaHertz (MHz).
- 9** The 'main' display shows the currently selected frequency in MHz. As you enter channel numbers or bank numbers these will also be temporarily displayed. "ALL PASS" will be displayed when all memory banks/channels have been locked out. "Error" will be displayed when an incorrect entry has been attempted. "FULL" will be displayed when the Frequency Pass facility for searching is full.
- 10** 9 segment Signal Strength Meter, the stronger the signal the more segments displayed.
- 11** Indicates when signal is being received or when squelch is opened.
- 12** Displayed when batteries become low and will soon need recharging or replacing.
- 13** SAVE Displayed when the receiver is in Standby Mode.
SKIP Displayed when the Skip facility has been activated.
PRI Displayed when the Priority channel has been activated.
DELAY Displayed when the Delay facility has been activated.
BEEP Displayed when the Keyboard sound is on.
ATT Displayed when the Attenuator has been selected.



You mean.... I have to understand all this ?

KEYPAD CONTROLS



The keypad consists of 20 keys most of which have at least two functions. The secondary function is used when pressed in conjunction with the **FUNCTION** key at the bottom right of the keypad.

The primary operation of each key is shown on the button itself while the secondary function of each key or button is shown in light blue below each key.

A description of each keys is as follows:-

PRIMARY KEY FUNCTIONS

Keys numbered 1 to 0 including . (decimal point)

These are used to enter frequencies, memory channels, scan & search banks.

Pressing keys 1 to 0 followed by **SEARCH** or **SCAN** will result in the MVT-7100 searching or scanning those banks selected.

SRCH (SEARCH)

For more details see Pages 29-32.

Press once to start either the search or programmed band search.

If you press the Search key when in manual mode with a frequency shown in the display the MVT-7100 will start to search up or down (you can change the direction if you wish with the rotary knob or up/down arrows). No bank numbers will show at the upper right of the screen.

When pressed after a single bank number (i.e. 0 to 9) the MVT-7100 will search between the two frequencies programmed into that particular bank. The bank selected to be searched will show in the upper right of the display.

Pressed whilst searching will stop the search.

SCAN

Pressing this key once starts the MVT-7100 scanning the memory channels. Pressing whilst the unit is scanning will stop the unit and return to memory mode.

For more details see Pages 23-28.

STEP

In conjunction with rotary dial (or up/down keys) used to change the selected increment step which will be shown in the top left of the display.

Pressing the **STEP** key will start the currently selected increment steps to start flashing, by turning the rotary knob on the top of the set or by using the direction arrows on the keyboard you can scroll through the alternate choices, when the chosen increment step is displayed press the red **ENT** (Enter) key.

MR (MEMORY READ)

If you wish to go straight to any one of the 1000 memory channels simply press the channel number then **MR**. As you press the channel number the 'digits' will appear in the main part of the display but when you press the **MR** key this will change to the frequency in the chosen channel, with the channel number now showing on top left of the display

If you are in Manual mode pressing the **MR** key will take you into Memory mode with the currently selected memory channel showing on the screen. You can scroll through the memory channels by turning the rotary knob on the top of the set or using the up/down keys.

If you are in Memory mode pressing the **MR** key takes you back into Manual mode. The frequency displayed will be the last one you selected in Manual mode.

For more details on Memory operations see Pages 18-22.



As with the rotary dial on top of the set the direction arrows have several uses in different modes.

MANUAL MODE: Pressing either key allows you to tune up or down from the displayed frequency in the increment steps chosen.

MEMORY MODE: Pressing either key allows you to move up or down through the memory channels.

SCAN & SEARCH MODE: Pressing either key when the MVT-7100 has stopped on a transmission will restart the scan or search in the direction chosen.

MODE SELECTION: Used for the selection of AM, Narrow FM, Wide FM, USB or LSB when pressed after **FUNC + MODE**

INCREMENT STEP SELECTION: Used for the selection of any one of the various increment steps when pressed after the **STEP** button.

The direction arrows are also used with the Search Pass Read key (in English it means you can recall which channels you have told the receiver to miss/jump over when searching), these two keys are used in conjunction with the **C/AC** key when correcting a keyboard entry.

C
Correction key, see pages 16 & 17.

F
Enter key. Used to enter Frequencies, Increment steps and Receiving modes.

NC
Pressed first when you wish to use the secondary function of each key, details of which follow.

SECONDARY KEY FUNCTIONS

In all cases to access any one of the facilities detailed below the FUNC key must be pressed first.

ATT (1 Key)
Attenuator. When selected *ATT* will appear in the display. The attenuator can be selected on any individual memory channel or frequency. In most cases the attenuator should be left 'off', if however strong signals are present it is possible that some interference may occur. To reduce the strength of signal and reduce the possibility of interference the attenuator should be selected. Remember however that pressing **FUNC + ATT** will only activate the attenuator for that particular channel/frequency, no other channels or frequencies will be affected. If you wish to deactivate the attenuator for a different channel and frequency you must select the memory channel then press **FUNC + ATT**. To turn the attenuator off, select the channel, *ATT* will show in the display then press **FUNC + ATT** again. *ATT* will clear from the screen indicating that the attenuator is no longer selected on that channel. See page 35.

DELAY (2 Key)
The delay facility will cause the MVT-7100 to pause for approximately 4 seconds after a transmission has ended and before it continues to scan or search. Without delay selected the pause time is around 2 seconds. *DELAY* will show in the display. Pressing **FUNC + DELAY** again returns the set to normal mode. See Page 35

SKIP (3 Key)
When **FUNC + SKIP** is pressed in either Scan or Search mode this will cause the MVT-7100 to continue scanning or searching after approx. 5 seconds from when it stopped on that channel or frequency even if the transmission has not finished. *SKIP* will show in the display. Pressing **FUNC + SKIP** again returns the set to staying on a channel for the entire duration of the transmission. See Page 35

PRI (SRCH Key)
Selects the monitor of the priority channel. See pages 21 & 22 for more on programming the Priority channel.

SAVE (4 Key)
Selects and cancels the save function. See page 36.

BEEP (5 Key)
Turns the Keyboard beep on or off. If *BEEP* is showing at the bottom of the display then the sound is on and a Beep sound will be heard each time a key is pressed. If *BEEP* is not showing in the display then no sound will be heard. See pages 35 & 36.

PGM (6 Key)

Used to select memory channels for the Program Scan mode. See pages 26 & 27.

MW (SCAN Key)

Memory Write. Used when you wish to store a displayed frequency into a specific memory channel. See pages 18, 19 & 32 for further details.

M→VFO (7 Key)

Transfers the frequency of a memory channel into manual mode when you will then be able to tune up or down from that particular frequency. See page 20.

M-SCAN (8 Key)

Mode Scan. Used to start the Mode Scan facility. See page 28.

P-SCAN (9 Key)

Program Scan. Used to start the Program Scan. See page 26 & 27.

MODE (STEP Key)

Used in conjunction with either the rotary knob on the top of the set of the direction keys allows you to change the mode of reception to either Wide FM, Narrow FM, AM, Lower Side Band (LSB) or Upper Side Band (USB) on any frequency. See page 13.

MHz (↑ Key)

In conjunction with the C/AC key can change the MHz digit of the display. See page 17.

SPR (0 Key)

Search Pass Read (*what !*). A new facility on the MVT-7100 is that you can specify certain frequencies (not channels) to be missed when searching. These can be frequencies with permanent interference on or maybe busy channels you just want to jump over. The Search Pass Read Key in conjunction with the Rotary tuner or direction arrows allow you to see which frequencies you have instructed the MVT-7100 to miss. For more details see pages 33 & 34 for further details.

BW (MR Key)

Bandwrite. Used for programming the frequency limits within Search banks. See pages 30 & 31.

PASS (C/AC Key)

Used for 'locking out' any memory channel or channels you do not wish to monitor in the Scan Mode. Also used to lock out specific individual frequencies (up to 500) when searching. See pages 25, 33 & 34.

.....Time for a break before we get
down to the "Real" business of
button pressing !.....



YUPITERU MVT-7100 OPERATION

To turn the set on slowly rotate the volume knob clockwise. Then rotate the squelch control fully anti-clockwise. Adjust the volume control to the desired level (not too loud though) and to silence the background noise rotate the squelch control clockwise, at some point the "mush" will disappear.

PRE-PROGRAMMED FREQUENCIES

Whilst all 1000 memory channels are empty when you first turn on your MVT-7100 (or press the reset button !) it has been pre-programmed at the factory with 10 search bands which are in most cases unsuitable for the U.K. listener. To search one of these banks simply press the bank number e.g. 1) followed by **SEARCH** or bank9 press 9 followed by **SEARCH**. Further details on searching and programming your own search parameters follow in a separate section but these are the pre-programmed limits.

Search Band	Start Freq	Stop Freq	Step Size	Mode
Bank 1	76.00	- 107.75MHz	50KHz Steps	WFM
Bank 2	108.00	- 142.00MHz	50KHz Steps	AM
Bank 3	144.00	- 146.00MHz	20KHz Steps	NFM
Bank 4	146.00	- 154.65MHz	10KHz Steps	NFM
Bank 5	156.00	- 162.05MHz	12.5KHz Steps	NFM
Bank 6	175.75	- 221.75MHz	50KHz Steps	WFM
Bank 7	430.00	- 440.00MHz	20KHz Steps	NFM
Bank 8	450.0125	- 451.50MHz	12.5KHz Steps	NFM
Bank 9	850.025	- 859.9875MHz	6.25KHz Steps	NFM
Bank 10	903.0375	- 904.9875MHz	12.5KHz Steps	NFM

Trying to search Bank 2, the whole of the VHF airband is rather a waste of time, as not only are the pre-programmed parameters far too wide, the increment steps are in 50KHz, when here in the United Kingdom we use 25KHz steps so the chance of monitoring active frequencies are rather slim. It is advisable when searching to keep the limits to just a few MHz and therefore increase the chance of locating new frequencies. Further details on programming your own search parameters follow.

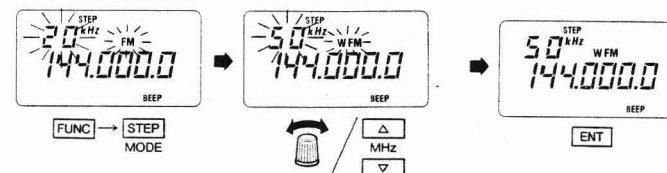
MANUAL MODE OPERATION

Before we look at how to enter and receive frequencies we shall quickly look at how we select the correct mode of reception and the desired increment steps. These can be changed after we have entered a frequency.

MODE SELECTION

To change the reception mode from that shown on the right of the screen press the **FUNC + MODE** key. The mode currently selected together with the step size to the left will now flash, by rotating the tuning dial or pressing the direction keys you can select any one of the alternative modes available. Once the desired mode is shown press the **ENT** key. Note that different step sizes may be associated with each mode.

EXAMPLE: To change from Narrow FM (FM) to Wide FM (WFM)



INCREMENT STEP SELECTION

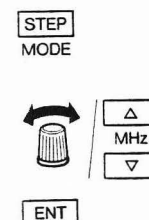
To change the increment step selection from that shown on the top left of the screen press the **STEP** key. The increment steps will now flash, by rotating the tuning dial or pressing the direction keys you can select any one of the alternative steps available. Once the desired step size is shown press the **ENT** key.

The following increment steps are available:-

Wide FM 50KHz, 100KHz

Narrow FM 1KHz, 5KHz, 6.25KHz, 9KHz, 10KHz, 12.5KHz, 20KHz, 25KHz, 50KHz & 100KHz

LSB & USBAs Narrow FM but with the additional choice of 100Hz & 50Hz



50Hz & 100Hz can only be selected in USB or LSB

In WFM only 50KHz & 100KHz can be selected

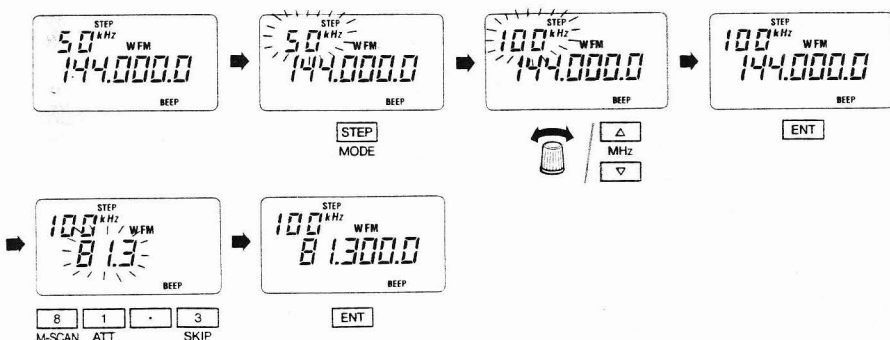
ENTERING FREQUENCIES

To enter a frequency in Manual (or VFO) is a simple matter. It can be a good idea to first ensure that the correct mode and desired increment step are selected but these can be changed as required after any frequency entry. Simply key in the frequency required using the numerical keypad followed by ENT. As you press each number it will appear on the screen and flash. When you press ENT it will add any trailing zeros and stop flashing.

EXAMPLE

To tune the MVT-7100 to 81.3MHz, WFM mode (assuming the set is currently tuned to 144.00MHz, WFM, 50KHz steps)

1. Press STEP
2. Rotate the tuning knob until 100KHz is shown
3. Press ENT
4. Press 8 1 . 3
5. Press ENTER



If the incorrect mode has been chosen you can change to the correct mode by pressing **FUNC + MODE** then using the rotary knob followed by **ENT** when correct mode is shown.

EXAMPLE

To tune the MVT-7100 to 118.025MHz, AM mode (assuming the set is tuned to 81.30MHz, WFM, 100KHz following the above example 100KHz steps)

1. Press **FUNC + MODE**
2. Rotate the tuning knob until AM is displayed
3. Press **ENT**
4. Press **STEP**
5. Rotate the tuning knob until 25KHz is shown
6. Press **ENT**
7. Press 1 1 8 . 0 2 5
8. Press **ENT**

If the set was already in AM mode and 25KHz or 12.5KHz steps then procedures 1 to 6 need not have been carried out

As a little exercise try the previous example but this time enter 50KHz at step 5 and see what happens when you press ENT at the end!



NOTE:- (A little bit waffly this bit !)

118.025MHz is a 25KHz channel spacing and if you have 50KHz or 100KHz selected it will round itself to receive the nearest frequency because the larger number (50 or 100) does not divide into the smaller. Likewise if you try and enter a 12.5KHz spaced frequency (e.g. 455.6125MHz) when 25KHz or larger increment steps are selected it will not be accepted. Within the United Kingdom the VHF/UHF spectrum is mainly divided into 12.5KHz, 25KHz or 50KHz channel spacing, selecting 12.5KHz will always allow you to enter the exact frequency as they are all divisible by 12.5KHz. Just to add wood to the fire a 12.5KHz channel spaced frequency will not be accepted exactly if any of the smaller increment steps down to 1KHz are chosen. With a little practice you will soon get the hang of it!

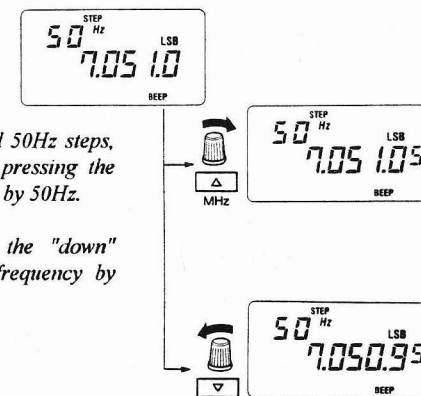
ROTARY TUNING / MANUAL TUNING

If you wish to use either the rotary tuning dial or the direction keys you can tune up or down from the displayed frequency in Manual mode. Each single turn of the dial or press of the key will increase or decrease the frequency by the increment steps chosen. To change increment steps simply press the **STEP** rotate the tuning knob to the desired steps and press **ENT**.

EXAMPLE:

If you manually tune to 7.051MHz, USB and 50Hz steps, each clockwise turn of the rotary knob or pressing the "up" direction key will increase the frequency by 50Hz.

Each anti-clockwise turn or pressing of the "down" direction key will decrease the displayed frequency by 50Hz.



CORRECTING A WRONG ENTRY

Should you realise you are entering an incorrect frequency the easiest thing to do to correct your mistake is, continue, Press ENT and then start again making sure you press the correct keys second time around, if that is not simple enough you can press the C/AC (Clear/All Clear) key **TWICE** while the display is flashing and **BEFORE** you press ENT. You will then be returned to the previous frequency displayed and you can start again.

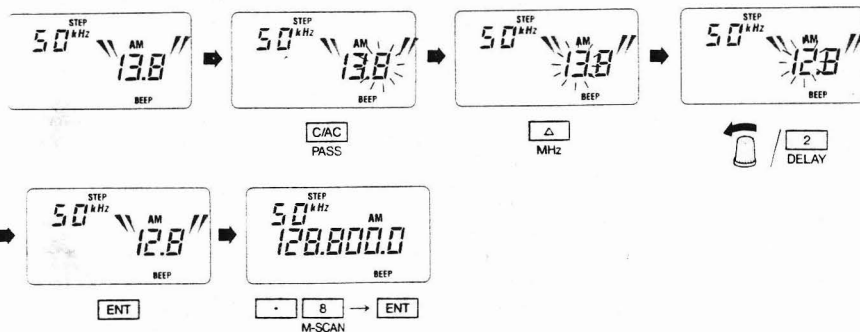
However if the above escape routes are not challenging enough the "wizkids" at Yupiteru have provided another alternative:

By pressing the C/AC (Clear/All Clear) Key while the display is flashing and **BEFORE** you Press the ENT key you can, by using the direction keys and rotary knob correct any digit on the screen, however it has to be said this is far more long winded than just starting all over again, but for the record here's what to do.....

EXAMPLE

You intended to enter 128.00 but accidentally keyed in 138.

1. Press C/AC while 138 is still flashing
(The 8 will now flash a little quicker than the rest of the display)
2. Press the \uparrow to select the 3 digit. This will now flash a little quicker.
3. Using either the rotary dial select the correct digit, in this case 2 or just press the 2 key
4. Press ENT
5. Complete the entry of 128.00 by pressing the "." then ENT



EXAMPLE

You key in 345.875 but intended to enter 354.875.

1. Press C/AC while 345.875 is still flashing
(The 5 will now flash a little quicker than the rest of the display)
2. Press the \uparrow 3 times to select the 5 digit. (This will now flash a little quicker).
3. Using either the rotary dial select the correct digit, in this case 4 or just press the 4 key
4. Press the \uparrow to select the next digit left (This "4" will now flash a little quicker)
5. Using either the rotary dial select the correct digit, in this case 5 or just press the 5 key
6. Press ENT
7. Complete the entry by pressing the ENT key.

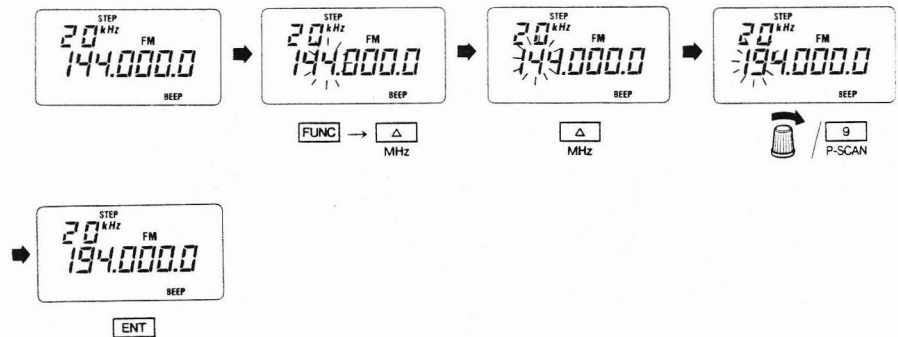
CORRECTING OR ADJUSTING THE MHz DIGIT(S) AFTER ENTRY

EXAMPLE

In manual mode the displayed frequency is 144.00Mhz but you wish to change this to 194.00Mhz

1. Press FUNC + MHZ (the first "4" will flash)
2. Press \uparrow to select the next digit
3. Using the rotary dial select 9 or just press the 9 key. (The 9 will now flash)
4. Press ENT to complete

You are now tuned to 194.00Mhz



EXAMPLE

In manual mode the displayed frequency is 468.955Mhz but you wish to change this to 145.955Mhz

1. Press FUNC + MHZ (the first "8" will flash)
3. Using the rotary dial select 5 or just press the 5 key.
2. Press \uparrow to select the next digit
3. Using the rotary dial select 4 or just press the 4 key.
2. Press \uparrow to select the next digit
3. Using the rotary dial select 1 or just press the 1 key.
4. Press ENT to complete

You are now tuned to 145.955Mhz

.....I'll get him... He said it was easy to use.....



STORING FREQUENCIES IN MEMORY CHANNELS FROM MANUAL MODE

MVT-7100 has 1000 memory channels, (plus one other when you count the priority channel) organised in 10 banks of 100 channels into which you may program any frequency and mode, and various settings can also be stored. Memory channels are shown as a three digit number on the left of the display. It can be a good idea to group types of frequencies together, for example, store your VHF airband frequencies in one bank, all the UHF airband frequencies in another and so on.

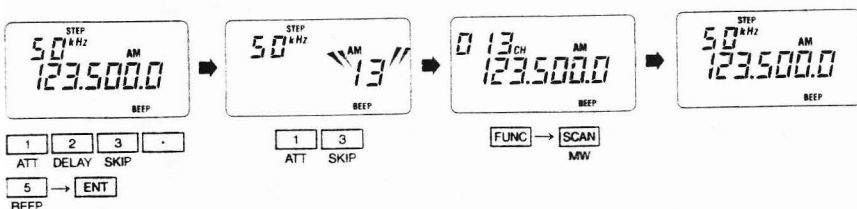
To store a frequency in a memory channel it is first necessary to follow the procedures for manual mode described earlier. It is then a simple case of informing the MVT-7100 which memory channel you wish to store the frequency in.

It must be remembered that storing a frequency in a memory channel will overwrite any information that is already stored in that memory channel. When you first use your MVT-7100 all the memory channels are empty (an empty memory channel displays 000.000.0MHz) so no damage can be done, but once in "full swing" be careful not to overwrite a frequency by storing something else in that channel.

EXAMPLE
store 123.50MHz, AM mode, in channel 13. (assuming the set is in AM, if not refer to the earlier section on selecting the correct mode and increment step size)

1. Press 1 2 3 . 5
2. Press ENT
3. Press 1 3
4. Press FUNC + MW

The MVT-7100 will confirm the entry by a double beep (if the sound is on!) and temporarily show the memory channel on the left of the screen then return to normal Manual mode.



EXAMPLE

To store 441.8125MHz, NFM mode in channel 127 (assuming the set is currently displaying 123.50, AM and 25KHz increment steps following the previous example)

1. Press **FUNC + MODE**
2. Rotate the tuning knob until FM is displayed
3. Press **ENT**
4. Press **STEP**
5. Rotate the tuning knob until 12.5KHz is shown
6. Press **ENT**
7. Press **4 4 1 . 8 1 2 5**
5. Press **1 2 7**
6. Press **FUNC**
7. Press **MW**

MEMORY STORAGE - CONSECUTIVE CHANNELS

A bit difficult to describe this one without being too long winded.....

By pressing **FUNC + MW** without specifying a channel whilst a frequency is displayed in manual mode will store this frequency shown into the **LAST MEMORY CHANNEL DISPLAYED** in memory mode - so if memory channel 066 was displayed in either memory mode or scan mode and you have manually entered 129.875MHz, pressing **FUNC + MW** will store 129.875MHz in channel 066 overwriting what was there before. Subsequent presses of **FUNC + MW** will result in 129.875MHz also in channels 67, 68, 69, 70 and so forth.

So if you want to store a set of frequencies in consecutive channels the following routine can be used:-

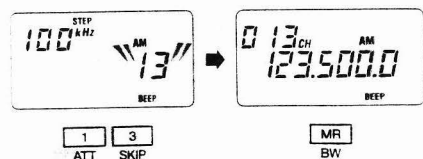
1. Enter first frequency to be stored
2. Enter the channel number you wish to start at
3. Press **FUNC + MW**
4. Enter second frequency to be stored
5. Press **FUNC + MW**
6. Enter third frequency to be stored
7. Press **FUNC + MW**

After each press of **FUNC + MW** the channel number will appear on the screen for a short moment.

.....and so forth **BUT REMEMBER** that storing a frequency in a memory channel will overwrite any information that is already stored in that memory channel and if you do not enter a **specific channel at operation 2** above then the MVT-7100 will start to store frequencies from the last memory channel that was displayed on the screen.

RECALLING A MEMORY CHANNEL

Any one of the 1000 memory channels can be recalled. If you wish to recall channel 13 simply press **3 + MR**. The MVT-7100 will now be in MEMORY MODE and the display will show the channel number and frequency stored in it.



In Memory Mode you can use either the rotary tuning dial or the direction arrow keys to select any channel. Each single turn of the dial or press of the key will move to the next or previous channel.



To change from MANUAL (VFO) Mode to MEMORY Mode or Vice-versa simply press the **MR** key.

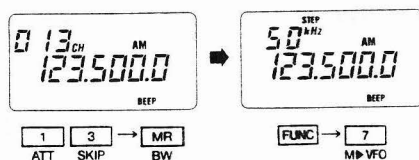
TRANSFERRING A FREQUENCY FROM A MEMORY CHANNEL TO MANUAL MODE

If you wish to transfer the contents of a memory channel into the MANUAL (VFO) mode simply press **FUNC + M → VFO**. You may then either tune up/down or search from the displayed frequency in manual mode.

EXAMPLE

Transfer the frequency contained in Channel 013 to manual mode

1. Press **013 + MR** (To recall channel 013 if not already on that channel)
2. Press **FUNC + M → VFO**



The Display will still show the same frequency but the memory channel number, in this case 013 will be replaced by the currently selected increment step.

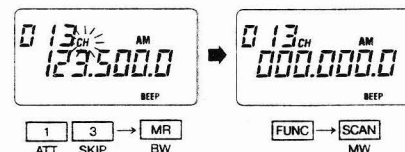
CLEARING A MEMORY CHANNEL

If you wish to clear the contents of a memory channel press **FUNC + MW** when the channel you wish to clear is displayed. Once cleared the display will show 000.000.0MHz.

EXAMPLE

To clear memory channel 013.

1. Press **1 3 + MR** (If this channel is not already selected)
3. Press **FUNC + MW**



When a frequency has been deleted it will continue to be received until a different channel has been selected manually or by scanning.

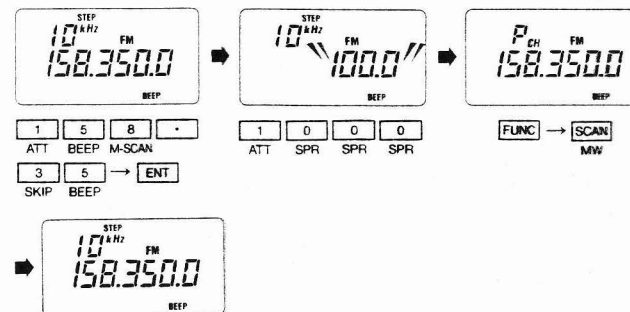
PRIORITY MEMORY CHANNEL - FREQUENCY STORING

One additional memory channel, channel number 1000 is available as a Priority channel. Any frequency and mode within the receivers coverage can be stored in this channel and monitored every 5 seconds irrespective of whether the unit has stopped on any other frequency or is in Manual, Scan or Search mode.

EXAMPLE

To store 158.35MHz as the Priority frequency

1. Press **1 5 8 . 3 5 + ENT**
3. Press **1 0 0 0**
4. Press **FUNC + MW** (P ch will temporally show & the display will then return to manual mode)



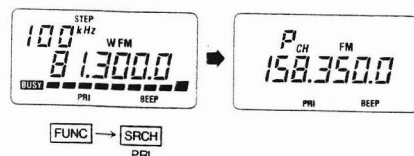
Don't Forget to set the correct mode.

TO MONITOR PRIORITY MEMORY CHANNEL

To set the receiver to monitor the Priority channel press **FUNC + PRI**.

PRI will appear in the bottom centre of the display.

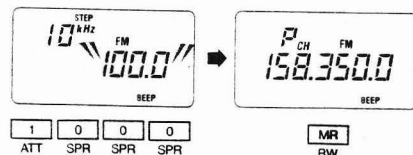
The Priority channel will be checked for activity every 5 seconds, this will cause a slight "break" during the reception of any other transmissions. If the Priority channel is active then this frequency will be received, once the transmission on the Priority channel has ended the set will return to the previous mode of operation.



The Priority channel can be monitored in any mode, Manual, Scan or Search.

TO CHECK THE CONTENTS OF PRIORITY CHANNEL

If you wish to see which frequency is currently stored in the Priority channel recall channel 1000 as you would any other memory channel press **1000 + MR**.



When the Priority channel is recalled "**P** ch" will be displayed rather than channel 1000.

MEMORY SCANNING

The memory channels in the MVT-7100 are organised in 10 banks of 100 channels. Once you have programmed frequencies into the MVT-7100 memory it is possible to scan either all the channels or a selection of banks.

- Bank 1 = Channels 000-099
- Bank 2 = Channels 100-199
- Bank 3 = Channels 200-299
- Bank 4 = Channels 300-399
- Bank 5 = Channels 400-499
- Bank 6 = Channels 500-599
- Bank 7 = Channels 600-699
- Bank 8 = Channels 700-799
- Bank 9 = Channels 800-899
- Bank 0 = Channels 900-999

If you wish to scan the entire contents of the memory simply press the **SCAN** key. You may have to adjust the squelch control to allow the set to scan through the channels.

The display will show each channel number and frequency as it scans through the banks. If you have frequencies in all 10 banks the display will also show all the bank numbers across the top.

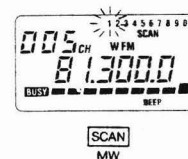
When a transmission is detected on one of the frequencies the receiver will stop on that particular channel until either the transmission ends or you either rotate the rotary dial on the top of the set or press the direction arrow keys to start scanning again in either up or down through the channels.

If you have activated the Priority channel (see previous section) there will be a short break during the reception of signals when the receiver "jumps" to the Priority channel to see if that channel is active.

EXAMPLE

To start scanning the all the memory channels that have been programmed.

1. Press **SCAN**



If there are no frequencies stored in memory channels "Error" will be displayed when the **SCAN** key is pressed

"ALL PASS" will be displayed when the **SCAN** key is pressed if all the channels within the banks selected have been passed (Locked Out)

When the set stops on a transmission the bank number will flash indicating which bank the channel received is in.

TO STOP SCANNING

Pressing the **SCAN** key whilst scanning will stop the set on whichever channel it happens to be on and return you to Memory Mode. You can select other memory channels from this point by either using the rotary dial, direction arrows or by entering the desired channel followed by **MR**.

You can also press the **MR** when scanning and you will be returned to memory mode, just the same as pressing the **SCAN** key as above. Key in a memory channel followed by **MR** when scanning and you will go direct to the chosen channel.

If you wish to return to Manual mode when Scanning press the **MR** key twice.

SELECTIVE MEMORY BANK SCANNING

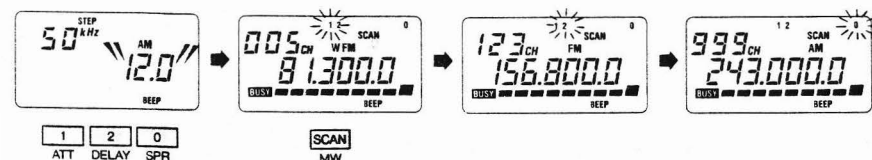
By pressing the **SCAN** key you scan all the memory channels that you have programmed frequencies in to. However more often than not you may not wish to scan the entire contents. If for example you have grouped frequencies together and all your local amateur frequencies are in Bank 1 then you may wish to scan just that one bank or you may wish to scan the banks that contain your VHF & UHF airband frequencies. By simply pressing the bank number or numbers prior to pressing the **SCAN** key you can tell the MVT-7100 which banks to scan.

EXAMPLE

To scan banks 1, 2 and 0.

1. Press 1 2 0
2. Press **SCAN**

Unfortunately you can only specify a maximum of any 4 banks out of the 10 to scan in this manner.



The MVT-7100 will now only scan banks 1, 2 & 0, you will notice that the display will only show these 3 banks at the top of the screen. When the set stops on a transmission the bank number will flash indicating which bank the channel received is in.

If you had selected to scan just bank 7 by pressing 7 + **SCAN** then the small figure 7 on the display would show and you would only be scanning channels 600 - 699.

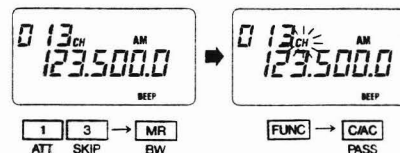
MEMORY CHANNEL PASS (LOCKOUT)

In the previous example (Selective Memory Bank Scanning) we have seen how we can program the MVT-7100 to scan just one or up to 4 individual banks. You may also wish to lockout or omit a single channel or channels from a particular bank whilst scanning.

EXAMPLE

To pass (lockout) channel 013 when scanning.

1. Press 1 3 + Press **MR** (If channel not already displayed)
3. Press **FUNC**
4. Press **PASS**



Any channel that is passed in Memory scanning can be recalled in Memory mode.

The small "ch" after the memory channel will now flash indicating that during scanning the unit will "pass" this channel. The channel can still be recalled by manually in memory mode.

You can also pass a channel in memory scan by pressing **FUNC** + **PASS** during a transmission, next time round this channel will not be monitored.

*If all the channels in the bank or banks selected to be scanned have been passed then ALL PASS will be displayed when the **SCAN** key is pressed.*

CANCELLING CHANNEL PASS

To cancel Memory channel pass simply recall the particular channel and press **FUNC** + **PASS** again. The small "ch" after the channel number will stop flashing.

PROGRAM SCAN

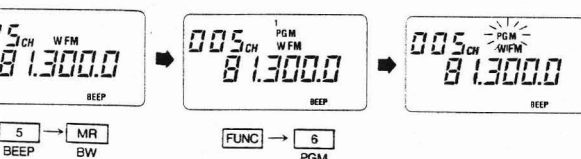
A useful facility on the MVT-7100 has been provided so that you can program the set to scan any 10 individual channels from each bank. Up to 100 different channels can be scanned (no more than 10 from any one bank though) without having to lockout or Pass numerous other channels that you may not wish to scan.

So for example, if you put channels 5, 122, 145, 166, 255, 367, 389, 399, 499, 501, 523, 822, 823, 868, 976, & 999 into the Program Scan memory each time you pressed **FUNC + P-SCAN** all these memory channels would be scanned. You can also just scan a single bank or any number of banks just like "normal" scanning.

EXAMPLE

To enter channel 5 into the Program Scan Memory

1. Press **5 + MR** (To recall channel 5)
3. Press **FUNC + PGM**

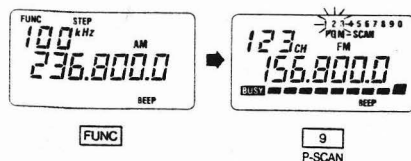


The letters *PGM* will be displayed and flash when any channel that has been entered into the Program Scan is re-called.

EXAMPLE

To scan all the channels in Program Scan

1. Press **FUNC + P-SCAN**

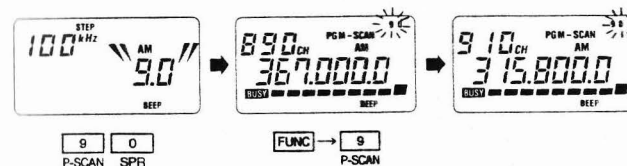


PGM-SCAN will be displayed together with the banks being scanned. When a transmission is received the bank number in which the channel is located will flash.

EXAMPLE

To scan only the Program Scan channels in Banks 9 & 0

1. Press **9 0**
2. Press **FUNC + P-SCAN**



You can only specify a maximum of any 4 banks in this manner

PGM-SCAN will be displayed together with the banks being scanned, in this case just 9 & 0. When a transmission is received the bank number in which the channel is located will flash.

If the bank or banks selected for Program Scan have no Program Scan memory channels entered "Error" will be displayed.

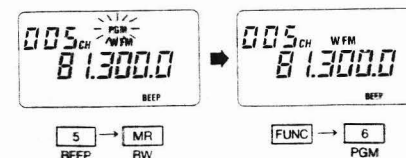
REMOVING CHANNELS FROM PROGRAM SCAN

To cancel a channel from the Program Scan memory you re-call the memory channel and repeat the same procedure as above except that this time the letters *PGM* will disappear and the channel will then no longer be in the Program Scan memory.

EXAMPLE

To cancel channel 5 from the Program Scan Memory

1. Press **5 + MR** (To recall channel 5 - *PGM* will be flashing)
3. Press **FUNC + PGM** (*PGM* will no longer be displayed)



MODE SCAN

Another little useful scanning mode provided on the MVT-7100 is Mode Scan. If for example you wanted to Scan all the channels that had been programmed in FM you would select "FM" mode in Manual mode and press **FUNC + M-SCAN**. You would then scan any memory channels that contained frequencies in FM mode.

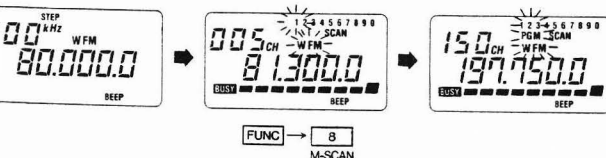
This can be particularly useful, if for example you wanted to scan all your airband frequencies (*which would be in AM, if they are not they should be !*) but they were spread between several different banks. Rather than have to mess around with passing channels or selecting only certain banks to scan it is a simple case of selecting AM on any frequency in manual mode then **FUNC + M-SCAN**. Hey Presto you now are now scanning only frequencies in AM.


As with "normal" Scan and Program Scan channel pass can be used and you can specify a single bank or upto 4 different banks in Mode Scan. So if you only wanted to scan those frequencies in FM in Banks 4 & 7 you would select FM on any frequency in manual mode, then press **4, 7, FUNC, M-SCAN**.

EXAMPLE

To scan only those frequencies stored in WFM mode

1. You must be in manual mode, any frequency will do in WFM
2. Press **FUNC + M-SCAN**




You must be in
MANUAL MODE
when initially
selecting the mode
you wish to scan.

When in Mode Scan **SCAN** will be displayed together with the selected mode which will be flashing. When a transmission is received the bank number in which the channel is located will flash. PGM will flash with any channel that has been included in the Program Scan as well.

To return to normal Scan mode simply press the **SCAN** key.

To return to memory mode press either **FUNC + M-SCAN** again or just the **MR** key. Key in a memory channel followed by **MR** when scanning and you will go direct to the chosen channel.

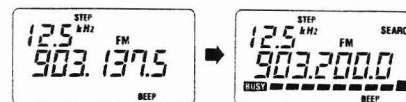
If you wish to return to Manual mode when in Mode Scan press the **MR** key twice.


SEARCHING

To start storing frequencies into memory channels assumes that we already know what frequencies we want to listen to either through previous experience or via one of the many publications now available. If you wish to try and locate new active frequencies within certain parts of the radio spectrum the MVT-7100 has a Search facility which will allow us to rapidly "search", in any mode or increment step up or down from a displayed frequency or alternatively between two frequencies. To start the MVT-7100 searching up from a displayed frequency just press the **SEARCH** key, the MVT-7100 will ultimately work its way to 1650MHz. By rotating the tuning knob or pressing the **↓** direction arrow you can reverse the search direction to go 'backwards' all the way to 530KHz..

EXAMPLE

The displayed frequency, in manual mode is 903.1375, FM, 12.5KHz steps. Press **SEARCH** to start searching upwards from the displayed frequency.



 Note that **NO** Search Bank numbers are indicating at the top of the display

If you wish to change the reception mode or increment steps you may do so while the set is searching following the instructions earlier on page 13.

PRE-PROGRAMMED SEARCH BANKS

The MVT-7100 has been pre-programmed at the factory with the following 10 search banks which are in most cases unsuitable for the U.K. listener.

Search Band	Start Freq	Stop Freq	Step Size	Mode
Bank 1	76.00	- 107.75MHz	50KHz Steps	WFM
Bank 2	108.00	- 142.00MHz	50KHz Steps	AM
Bank 3	144.00	- 146.00MHz	20KHz Steps	NFM
Bank 4	146.00	- 154.65MHz	10KHz Steps	NFM
Bank 5	156.00	- 162.05MHz	12.5KHz Steps	NFM
Bank 6	175.75	- 221.75MHz	50KHz Steps	WFM
Bank 7	430.00	- 440.00MHz	20KHz Steps	NFM
Bank 8	450.0125	- 451.50MHz	12.5KHz Steps	NFM
Bank 9	850.025	- 859.9875MHz	6.25KHz Steps	NFM
Bank 10	903.0375	- 904.9875MHz	12.5KHz Steps	NFM

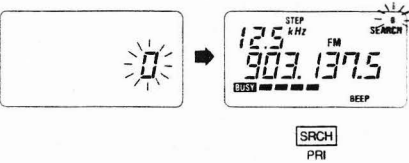
To start searching a particular bank simply press the bank number followed by **SEARCH**.

EXAMPLE

To search Bank 0

- 1. Press 0 (0 will flash)
- 2. Press **SEARCH**

The set will now start searching from 903.0375MHz to 904.9875MHz stopping on any active frequencies. The 0 at the top right of the display indicated Bank 0 is being searched.



EXAMPLE

To search Bank 9, between 850.025MHz and 859.9875MHz, FM, 6.25KHz steps.

- 1. Press 9
- 2. Press **SEARCH**

PROGRAMMING NEW SEARCH BAND LIMITS

Whilst the pre-programmed bands may be a great interest to Fred Bloggs living in downtown Tokyo they are of little use to you Fred Bloggs of downtown U.K.

To make the best use of the search banks we need to re-program them with frequencies of your own interests. Try and keep the limits to just a few MHz as to increase the chance of receiving previously unheard transmissions. Just do a few MHz at a time as it will prove far more productive than trying to do the whole lot in one !

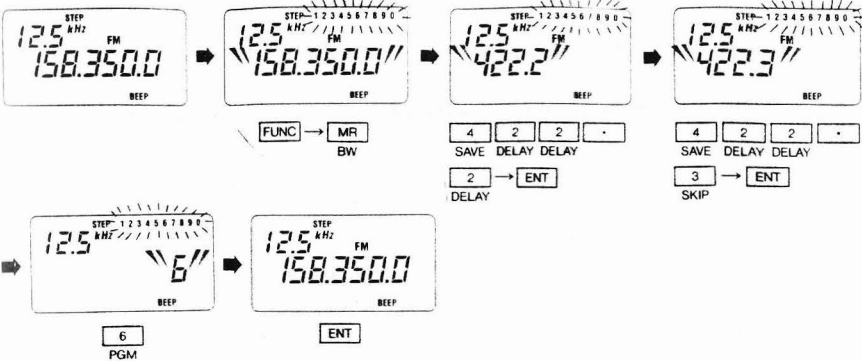
To program search limits is a relatively simple operation (!), all we need to do is enter the start and end frequencies into one of the 10 search bands.

If you want to set the Mode and Increment steps that you wish to Search in you can do so in Manual mode before you re-program any banks. You can however change the Mode and Increment steps of any Search Bank while searching.

EXAMPLE

To program search Bank 6 to start at 422.20MHz & finish at 422.30MHz

- 1. Ensure you are in **manual mode** and not searching or scanning (In the example below the set is tuned to 158.35MHz, Narrow FM in 12.5KHz steps)
- 2. Press **FUNC + BW** (The display will now flash)
- 3. Press 4 2 2 . 2 (The bottom limit/the frequency we wish to start at)
- 4. Press **ENT**
- 5. Press 4 2 2 . 3 (The top limit/the frequency we wish to finish at)
- 6. Press **ENT**
- 7. Press 6 (this is the bank we will store these limits in)
- 8. Press **ENT** (If the "beep" is still on a double beep will sound to indicate the above has been accepted the display will return to the previous frequency in manual mode)



You have now re-programmed bank 6. When you now press 6 + **SEARCH** your set will search between 422.20MHz & 422.30MHz in Narrow FM and 12.5KHz increment steps.

EXAMPLE

To program search Bank 2 to start at 324.20MHz & finish at 330.00MHz

- 1. Ensure you are in manual mode and not searching or scanning
- 2. Press **FUNC + BW** (The display will now flash)
- 3. Press 3 2 4 . 2 (The bottom limit/the frequency we wish to start at)
- 4. Press **ENT**
- 5. Press 3 3 0 (The top limit/the frequency we wish to finish at)
- 6. Press **ENT**
- 7. Press 2 (this is the bank we will store these limits in)
- 8. Press **ENT**



DON'T FORGET if you want to change the mode or increment steps you can do so when the set is searching by simply by pressing **FUNC + MODE** then rotating the rotary knob and pressing **ENT** or to change the steps just press the **STEP** and rotate the tuning knob then press **ENT**

The same procedure should be used for re-programming any of the other bands with frequency limits of your choice but remember keeping the limits to just a few MHz (no more than say 10MHz) will greatly increase the chances of locating previously unheard active frequencies.

STORING FREQUENCIES IN MEMORY FROM SEARCH

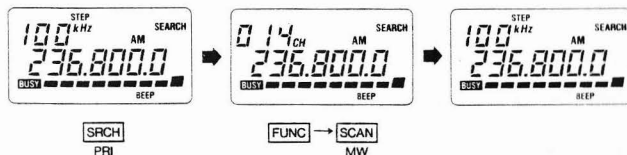
You can store frequencies found during Search direct into any one of the 1000 memory channels by pressing **FUNC + MW** whilst the set remains on a transmission. The frequency on the display will be transferred into memory.

If no channel is specified the frequency will be transferred into the last memory channel re-called. If you wish to store the frequency in a specific memory channel key in the **memory channel** then **FUNC + MW**.

EXAMPLE

The set searching from 230.00MHz upwards and stops on 236.80MHz, you wish to store this in a memory channel.

1. Press **FUNC + MW** while the set is on that frequency



Memory channel 14 was the last channel re-called so 236.80MHz will now be stored in that channel replacing the existing frequency. If you wish to store any further frequencies into subsequent channels each press of **FUNC + MW** will store the frequencies in channels 15, 16, 17 and so forth.

EXAMPLE

The set searching from 230.00MHz upwards and stops on 236.80MHz, you wish to store this in memory channel 134.

1. Press **1 3 4**
2. Press **FUNC + MW** while the set is on that frequency

SEARCH PASS MEMORY

When searching it is possible to program the MVT-7100 to pass those frequencies which always cause the receiver to stop. These frequencies may be local interference, data signals or maybe just frequencies you do not wish to monitor.

Up to 500 different frequencies can be entered into the Search Pass Memory, any frequency that is stored in this memory will not be monitored when the unit is searching. If you try and enter more than 500 frequencies in the Search Pass Memory "FULL" will be displayed and you will have to remove some frequencies before others can be added. Any frequencies stored in the Search Pass Memory can still be recalled in Manual, Memory or Scan mode.

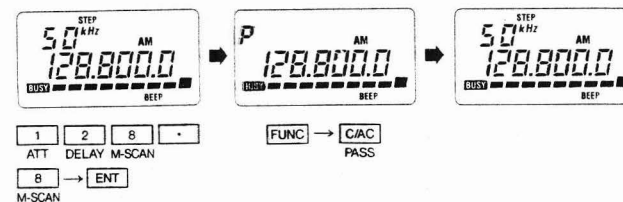
If you know of any frequencies you wish to enter into the Search Pass Memory, enter them in Manual mode then press **FUNC + PASS**. The display will temporarily show a "P" on the left before returning to manual mode.

If when searching the MVT-7100 stops on a signal you do not wish to monitor in future press **FUNC + PASS** while on that particular frequency, the display will temporarily show "P" then resume searching.

EXAMPLE

To store 128.80 into the Search Pass Memory.

1. Press **128.80 + ENT**
 2. Press **FUNC + PASS**
- A "P" appears on the left of the display then the unit returns to manual mode



EXAMPLE

To store 353.20 into the Search Pass Memory during Search

2. Press **FUNC + PASS** (when stopped on the desired frequency)
- A "P" appears on the left of the display then the units continues searching



CHECKING CONTENTS OF THE SEARCH PASS MEMORY

If you wish to check the contents of the Search Pass Memory you must be in Manual mode then press **FUNC + SPR**.

The "P" shown to the left of the display will be flashing when recalling frequencies stored in Search Pass Memory. The first frequency to be displayed will be the one nearest the frequency shown in Manual Mode just before you pressed **FUNC + SPR**. If no frequencies are in the Search Pass Memory then "Error" will be displayed.

By using the Rotary dial or direction arrows you can scroll through those frequencies stored in the Search Pass Memory. If only one frequency is stored in the Search Pass Memory then the display will not alter.

To return to Manual mode either press **FUNC + SPR** again or the **C/AC** key once.

REMOVING FREQUENCIES FROM SEARCH PASS MEMORY

If you wish to remove any frequencies from the Search Pass Memory and therefore monitor them again when searching you must recall the frequency as described above, and when the frequency is displayed press **FUNC + PASS**. The display will then show the next frequency in the Search Pass Memory.

EXAMPLE

To remove 13.270MHz from the Search Pass memory

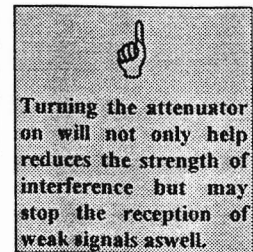
1. You must be in Manual Mode
2. Press **FUNC + SPR**
3. Using the **rotary dial** or **direction arrows** to select 13.270MHz
4. Press **FUNC + PASS**

If you remove the last frequency from the Search Pass Memory you will automatically return to Manual Mode. To return to Manual mode either press **FUNC + SPR** again or the **C/AC** key once.

ATTENUATOR

When strong signals are present on certain frequencies some interference may occur. To reduce the signal strength of strong signals the Attenuator should be switched on. To turn the attenuator on press **FUNC + ATT**. When the attenuator is on **ATT** will be shown in the display. In memory mode the Attenuator must be set for individual channels. In Search or Manual mode the Attenuator will be on for all frequencies. To turn the attenuator off press **FUNC + ATT** again.

The Attenuation is approximately -15dB (at 108MHz)



DELAY

After a transmission has finished the MVT-7100 will continue to Scan or Search after approximately 2 seconds. If you wish the resumption to be a little longer to perhaps allow for a delayed reply then by pressing **FUNC + DELAY** there will be a 4 second delay.

When the Delay facility is on **DELAY** will be displayed. To cancel the Delay facility press **FUNC + DELAY** again.

SKIP

During Scan and Search the MVT-7100 will remain on a frequency for the duration of the transmission, with the Skip facility on scanning or searching will continue after 5 seconds of stopping on a frequency. To turn Skip on press **FUNC + SKIP**. With skip on **SKIP** will be displayed. To turn the skip facility off press **FUNC+SKIP** again.

BEEP

With the beep sound on **BEEP** will show in the display. To turn the beep sound off press **FUNC + BEEP**. With the beep sound off press **FUNC + BEEP** to turn it back on again

There are 3 types of "Beep" !

- ❶ A single Beep is heard each time a key is pressed.
- ❷ A double Beep is heard when you store and erase information.
- ❸ Three Beeps (the latter two slightly higher in tone) indicate an Error.

BATTERY SAVE

By turning the Battery Save facility on you can put the MVT-7100 into several states of standby mode, this will reduce consumption.

The Save facility will only work when in Manual or Memory Channel Recall mode. There are 3 Save Modes:-

SAVE MODE	PERIOD OF NON OPERATION
1	0.3 seconds
2	0.9 seconds
3	1.5 seconds

When the Save facility is turned on and there is no activity on the selected frequency for 5 seconds after the end of a transmission the MVT-7100 will enter the selected Save mode and monitor the displayed frequency for 0.3 of a second. If for example Save Mode 1 was selected, the MVT-7100 would monitor the displayed frequency every 0.3 seconds for 0.3 of a second, if Save Mode 3 was selected the frequency would be monitored every 1.5 seconds for 0.3 of a second.

When a signal is detected the MVT-7100 will "turn itself on" for the duration of the transmission then return to Save mode after 5 seconds of non activity.

Does all that make sense ?

EXAMPLE

To Set Battery Save Mode 3

1. Select chosen frequency either in Manual or Memory recall Mode
2. Press 3
3. Press FUNC + SAVE



The unit will stay in Save mode whilst remaining in Manual or Memory recall mode even if you turn the set off and back on again. To cancel Battery Save press FUNC + SAVE.

If you start the set scanning or searching Battery Save will be cancelled automatically.



That's it - Finished...
...What ! A false start....I've
got to start again...Aghhh..

MVT-7100 TECHNICAL SPECIFICATIONS

Manufacturer	Yupiteru Industries Co Ltd, 12-33 Shibaura, 4-Chome, Minato-Ku, Tokyo 108, Japan.		
Frequency Coverage	530KHz to 1650KHz		
Receiving Modes	Wide FM, Narrow FM, AM, , Lower Side Band, Upper Side Band		
Tuning Steps	Wide FM: 50KHz & 100KHz Narrow FM: 1KHz, 5KHz, 6.25KHz, 9KHz, 10KHz, 12.5KHz, 20KHz, 25KHz, 50KHz, 100KHz		
Sensitivity	0.53Mhz - 2MHz	AM	10uV (S/N 10dB)
	2.0MHz - 30MHz	AM	1.0uV (S/N 10dB)
		USB/LSB	1.0uV (S/N 10dB)
		FM	1.5uV (SINAD 12dB)
	30MHz-1000MHz	AM	0.5uV (S/N 10dB)
		USB/LSB	0.5uV (S/N 10dB)
		FM	0.5uV (SINAD 12dB)
		WFM	0.75uV (SINAD 12dB)
	1000MHz-1300Mhz	FM	1.0uV (SINAD 12dB)
Memory Channels	1000 (In 10 banks of 100)		
Search Banks	10		
Priority Channels	1		
Scan Speed	30 Channels per second (approx)		
Search Speed	30 Increments per second (approx)		
Power Requirements	4.8V Internal (4 x AA nicads) 12V DC External (200mA)		
Audio Output	100mW (8 ohm)		
Current Consumption	140mA		
	100mA Standby		
	10mA Save		
Dimensions	64.4 (w) x 155 (h) x 38.2 (d) mm		
Weight	320g		

NOTES