User Manual

DRAFT COPY OF THE INSTRUCTION MANUAL

Preface

This model is added FM/TV radio functions and binocular. Various kinds specification/functions are described to this specifications.

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Overview of Features
   Frequency(Receiver)
      Band Coverage(MHz)
       CAR
             150.9950 - 151.9550
             152.8700 - 153.7250
             154.4900 - 154.6250
             460.0000 - 470.0000
       MILITARY
             137.0000 - 144.0000
       800MHz
             806.0000 - 823.9375
             851.0000 - 868,9375
             896.1125 - 956.0000
       FEDERAL GOVERNMENT
             406.0000 - 420.0000
       AIR
             108.0125 - 136.9875
       MARINE
             156.0500 - 157.4250
       VHF/UHF
             148.0000 - 174.0000
             450.0000 - 470.0000
       HAM
             144.0000 - 148.0000
             420.0000 - 450.0000
       WX
             USA/CND(10CH)
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FM/TV

88.0000 - 108.0000(100KHz STEP) 475.7500 - 511.7500(6MHz STEP)

Key Functions

There are function key and editing key in the key.

Function Key

Manual

Del/Cancel

Private

Search



Hold/Call

Memory

Weather

FM/TV

Editing Key

0 - 9, . (A - Z, /, -, &, *)

ENTER

LCD Display

Manual Mode

Search Mode

Programmed Band

"CAR" is turn on, when tune to programmed CAR band.

"MIL" is turn on, when tune to programmed Military band. 800MHz

"800" is turn on, when tune to programmed 800MHz band.

"FED" is turn on, when tune to programmed Federal Government band.

- "AIR" is turn on, when tune to programmed Air band.
- "MRN" is turn on, when tune to programmed Marine band.
- "V/U" is turn on, when tune to programmed VHF/UHF band.
- "HAM" is turn on, when tune to programmed Ham band.

Private Mode

Jacks/Others

Earphone

Antenna

NOTES:

The possession, or use of this scanning radio in a motor vehicle may be prohibited, regulation, or require a permit in certain states, cities, and/or local jurisdiction. Your local law enforcement officials should be able to provide you with information regarding the law in your community.

Change or modifications to this product not expressly approved by Uniden, or operation of this product in any way other than as detailed by this operation guide, could void your authority to operate this product.

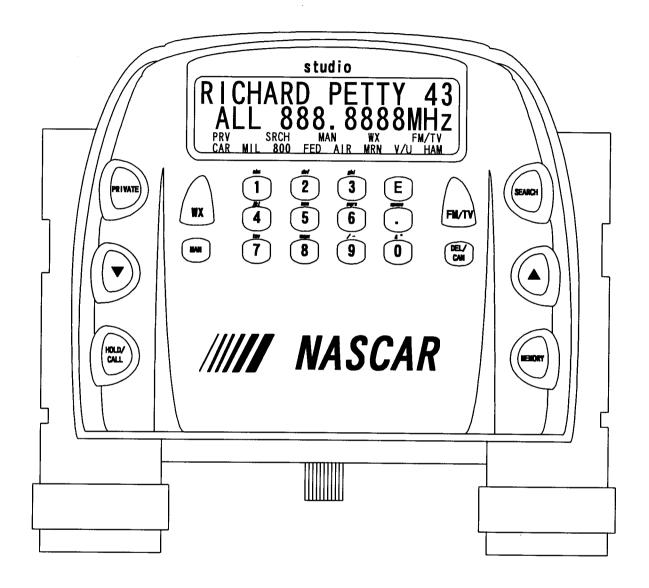
External View

See Fig. 0.1

Input and Output Devices

Power Switch

The Power Switch is combined with the Volume control device.



(TOP VIEW)

Fig. 0.1 External View

(See mechanical drawings for detailed appearance)

Display Device

■■■ Alignment of LCD Module ■■■

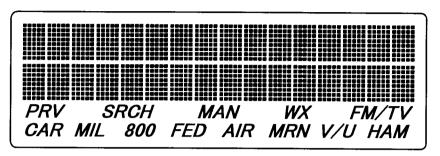


Fig. 0.1 LCD Display View

LCD Display

LCD spec

 $5 \times 8 \text{ dot} \times 16 \text{ digits} \times 2 \text{ lines} + 13 \text{ icons}$

ICONS

This LCD has 13 icons for programmed band and mode.

PRV

This is private mode. You can set programmed names and frequencies, or amending them.

SRCH

This is search mode. You can search pre-programmed band by yours.

MAN

This is manual mode. Search mode and private mode is stopped by selecting manual mode. Then you can set names and frequencies directly.

WX

This is weather band. When you select weather band, this icon turns on.

TV/FM

This is TV/FM band. When you select TV/FM band, this icon turns on.

CAR

This is car band. When you select car band, this icon turns on.

MIL

This is military band. When you select military band, this icon turns on.

800

This is 800MHz band. When you select 800MHz band, this icon turns on.

FED

This is federal government band. When you select federal government band, this icon turns on.

AIR

This is air band. When you select air band, this icon turns on.

MRN

This is marine band. When you select marine band, this icon turns on.

V/U

This is VHF/UHF band. When you select VHF/UHF band, this icon turns on.

HAM

This is amateur radio band. When you select amateur radio band, this icon turns on.

Operation Logic

Power ON

Rotate the VOL switch knob clockwise to turn on the power. Then change MANUAL mode automatically and MAN icon turn on, other one turn off. Yet, it wake up in the condition before Power OFF in 2nd Power ON.

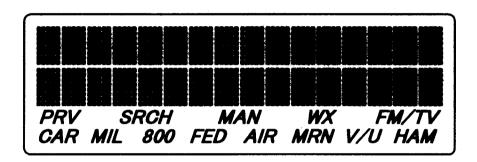


Fig. 0.1 Power ON Initial Display

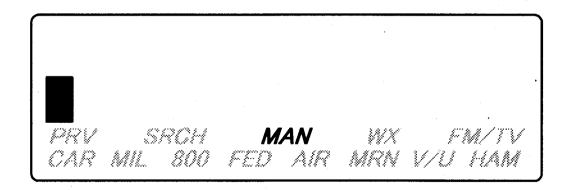


Fig. 0.2 Manual Mode (Power ON Default)

At this time, the set flashes a cursor and wait for key input for receiving band.

Power OFF

Rotate the VOL switch knob counterclockwise to turn off the power.

Search Mode

Band that wants to search it, by pushing the search key repeatedly able to be selected. After the search key is pushed it go to ALL most firstly. And, the band is selected whenever the search key is pushed.

ALL > CAR > MIL > 800 > FED > AIR > MRN > V/U > HAM > ALL > CAR

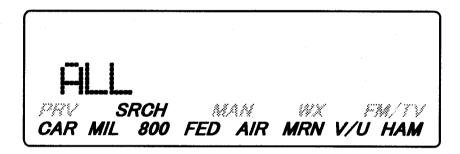


Fig. 0.3 Scan Mode (ALL band scanning)

All the band icons and SRCH icon turn on at the time of the ALL band selection.

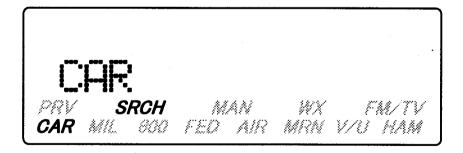


Fig. 0.4 Scan Mode (CAR band scanning)

The CAR icon and SRCH icon turn on at the time of the CAR band selection. Also, even other band are similar.

Search BAND at the time of ALL

It become selection receiving mode, when that the MEMORY or ENTER key is pushed in the ALL table current events. It becomes Fig. 0.5, by pushing MEMORY or ENTER key in the condition of Fig. 0.3.



Fig. 0.5 Scan Mode (Set Selection Receiving ON)

Whenever the MEMORY key is pushed here, ON and OFF change. And, the following icon is turned on and off in accordance with ON and OFF display.

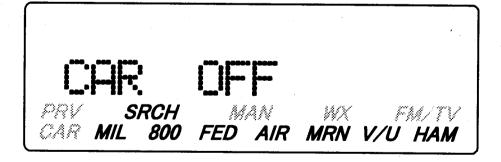


Fig. 0.6 Scan Mode (Set Selection Receiving OFF)

ON

: Search Enable

OFF

: Search disable

It go to next BAND by pushing ENTER key after the selection.

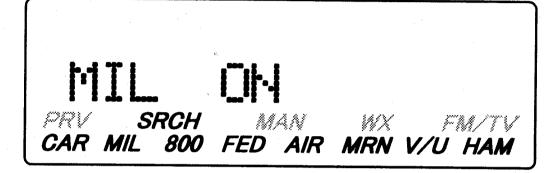


Fig. 0.7 Scan Mode (Set Next Band selection)

Also, BAND is changing like a following whenever the ENTER key is pushed.

CAR > MIL > 800 > FED > AIR > MRN > V/U > HAM > CAR

All setting contents of ALL are saved to EEPROM.

Search Start

After the BAND selection, the search is started with $UP(\triangle)$ key or DOWN key(∇). At this time, only BAND that is turning on it searches.



Fig. 0.8 Finished selection

In the case that a signal is received during the search, the search stop and stay to the receiving frequency. Searching is started once again, in the case that the signal disappeared. (Auto delay 2 sec) You can always change to Search Mode(See Section 0), by pushing the search key during receiving or during searching.

Search Hold

Even if there be not a radio wave in the frequency, by pushing the HOLD key during the search it can stay.

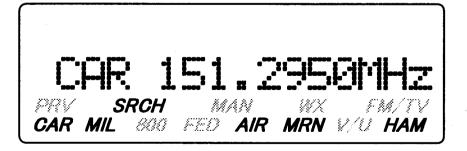


Fig. 0.9 Stay/Hold mode during the search

The SEARCH key is pushed once again, in the case that you want to cancel HOLD mode. Or $UP(\triangle)$ key or $DOWN(\nabla)$ key are pushed. Then once again it begins to search it.

Memory of frequency during the search mode

Present frequency is able to be remembered by pushing the MEMORY key in any condition of SEARCH MODE. And the data that memorized can call again by Private Mode.

After the MEMORY key is pushed, a cursor moves on the left most and become the input waiting of a frequency name.

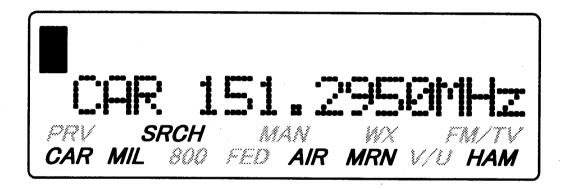


Fig. 0.10 Frequency name setting

In case of Fig. 0.10, the cursor is blinking. And it wait for the input of the name by the Editing Key.

The input method of the name is described following.

Key that uses it:

- a) 0-9, (A-Z,/,-,&,*) Key
- b) Enter Key(Name registration)
- c) Memory Key(Name registration)
- d) UP(▲) Key is left shift cursor(Clear Character)
- e) DOWN(▼) Key is right shift cursor(Settlement Character)
- f) Del/Cancel Key is function for return to before input.

Key input is becoming toggle, and an input character changes by that pushes repeatedly.

In case of that "1" key is pushed, display changes to the turn from A to 1.

A > B > C > 1 > A > B > ...

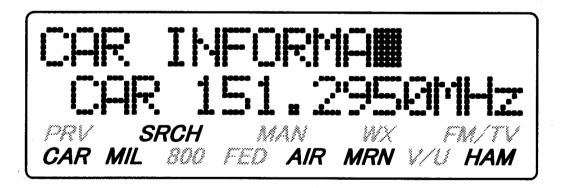


Fig. 0.11 Input character for frequency name 1

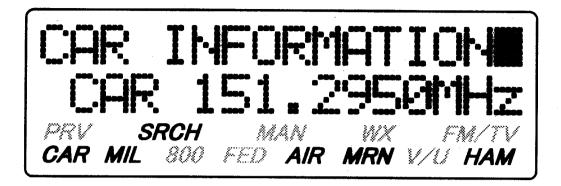


Fig. 0.12 Input character for frequency name 2

If name character input finishes, name registration finishes by pushing Enter Key or Memory Key. (See Fig. 0.13) In the case that you want to modify it, a cursor can be moved with UP key or DOWN key. And it returns in the condition before input by pushing Del/Cancel key in the case that I finish without inputting data. Also, It changes to Search Mode by pushing SEARCH and changes Private Mode by pushing PRIVATE.

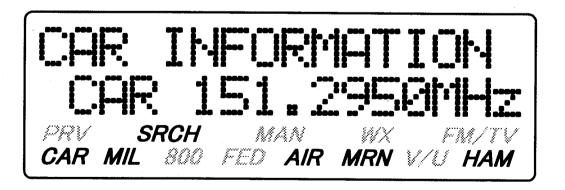


Fig. 0.13 Input character for frequency name 3

Private Mode

It can change to the Private Mode even from which mode by pushing the PRIVATE key. It is possibility to do the tune that selects your programmed BAND by pushing PRIVATE key repeatedly. After the private key is pushed it go to ALL most firstly. And, the band is selected whenever the search key is pushed. Yet, when it went Private Mode after the 2nd, It goes to condition of the previous time.

ALL > CAR > MIL > 800 > FED > AIR > MRN > V/U > HAM > ALL > CAR

Yet, only BAND that has already been registered is selected automatically.

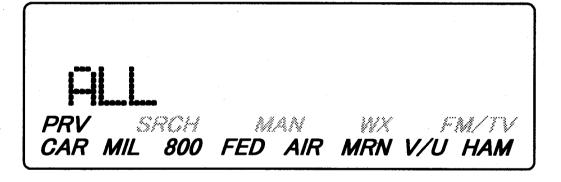


Fig. 0.14 Private Mode (Programmed all band scanning)

All the band icons and PRV icon turn on at the time of the ALL band selection.

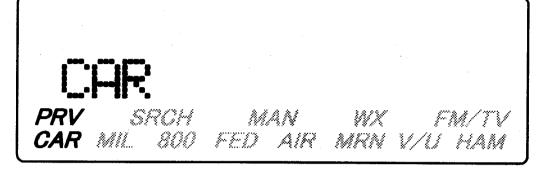


Fig. 0.15 Private Mode (CAR band scanning)

The CAR icon and PRV icon turn on at the time of the CAR band selection. Also, even other band are similar.

Private Search BAND at the time of ALL

It become selection receiving mode, when that the MEMORY key is pushed in the ALL table current events. It becomes Fig. 0.16, by pushing MEMORY key in the condition of Fig. 0.14.

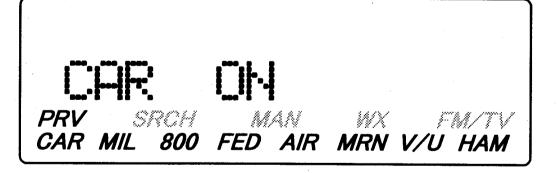


Fig. 0.16 Scan Mode (Set Selection Receiving ON)

Whenever the MEMORY key is pushed here, ON and OFF change. And, the following icon is turned on and off in accordance with ON and OFF display.

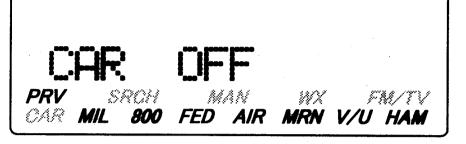


Fig. 0.17 Scan Mode (Set Selection Receiving OFF)

ON

: Search Enable

OFF

: Search disable

It go to next BAND by pushing ENTER key after the selection.

MAN WY HAM

PRV SRCH MAN WX FM/TV

CAR MIL 800 FED AIR MRN V/U HAM

Fig. 0.18 Scan Mode (Set Next Band selection)

Also, BAND is changing like a following whenever the ENTER key is pushed.

CAR > MIL > 800 > FED > AIR > MRN > V/U > HAM > CAR

Private Search Start

After the BAND selection, the search is started with $UP(\triangle)$ key or DOWN key(∇). At this time, only BAND that is turning on it searches. At this time, scanner changes 1 memory each with usual \triangle/∇ key input and carry out searching of a signal by pushing \triangle or ∇ for 2 seconds.

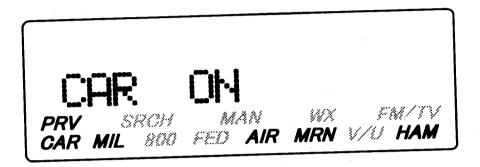


Fig. 0.19 Finished selection

In the case that a signal is received during the search, the search stop and stay to the receiving frequency. Searching is started once again, in the case that the signal disappeared. (Auto delay 2 sec) However, it does not search it even if a signal disappears when it is not searching it. You can always change to Private Mode(See Section 0), by pushing the private key during receiving or during searching.

Modification of band frequency and name

When the MEMORY key is pushed, a cursor moves and blinks to the biggest column of the present frequency. Moving a cursor in the place where you want to modify with UP or DOWN key, it modifies it with the Editing Key. It is registered with ENTER or MEMORY key after the modification. Outputting the error alert, in case that the frequency that does not exist is input it displays to LCD as "ERROR". That moment, it returns to the frequency before MEMORY is pushed.

It moves to the setting of a name automatically after frequency setting. A name even also frequency as it inputs it with the EDITING key similarly. It is registered with ENTER or MEMORY key after the modification.

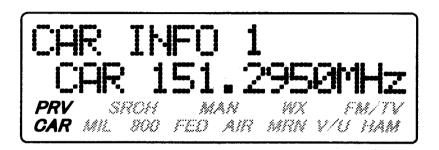


Fig. 0.20 Finished frequency and name modification

It becomes HOLD condition with the frequency that set up it after the input of the band name. And it returns in the condition before input by pushing Del/Cancel key in the case that I finish without inputting data. Also, It changes to Search Mode by pushing SEARCH and changes Private Mode by pushing PRIVATE.

Search Hold in Private Mode

Even if there be not a radio wave in the frequency, by pushing the HOLD key during the search it can stay. The $UP(\triangle)$ key or $DOWN(\nabla)$ key is pushed once again, in the case that you want to cancel HOLD mode. Then once again it begins to search it.

Calling of the registered memory

Frequency can be called and can be searched from the name that was registered. The CALL mode is changed by pushing HOLD/CALL key from the BAND selection screen of PRIVATE mode. When it changed to the CALL mode, the cursor is displayed to the top of a registration name. A cursor blinks. The name is input by using the EDIT key.

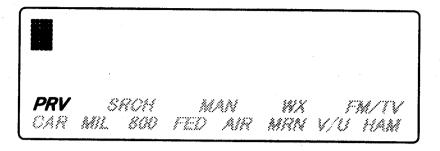


Fig. 0.21 Call Mode

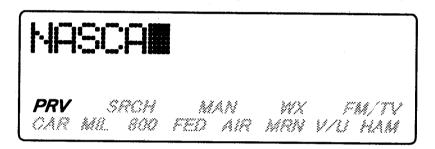


Fig. 0.22 Call Mode(During Input)

When HOLD/CALL key is pushed after the input of a name the set start the searching of data and the nearest data is displayed. After that, other data are displayed in order with $UP(\blacktriangle)$ key and $DOWN(\blacktriangledown)$ key. Yet, the next alternative is displayed, when there is not only 1 searching alternative. For instance, all the data that begin with "A" become the searching alternative when "A" is searched. And data is displayed in order from the small one of alphabet. It searches all memory, in case that searching with no character.

Pushing ENTER key or HOLD/CALL key once again and data is decided, if the intended name is discovered into the alternative that searched it. It becomes HOLD condition with the frequency after decision. And it returns in the condition before input by pushing Del/Cancel key in the case that I finish without inputting data. Also, It changes to Search Mode by pushing SEARCH and changes Private Mode by pushing PRIVATE.

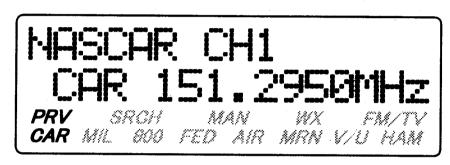


Fig. 0.23 Searching Alternative

Manual Mode

The input of the frequency is possible with manual in the MANUAL mode. When MANUAL mode key is pushed, the set blinks a cursor and wait for key input frequency. The frequency is input by using the EDIT key. It becomes HOLD condition by Eight column input or ENTER key is pushed after input.

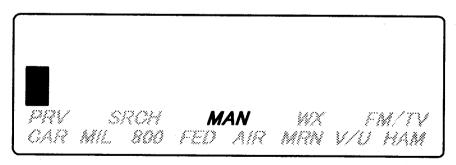


Fig. 0.24 Manual Mode (MANUAL key is pushed)

In the case that the frequency that does not exist is input ERROR alert is output, and displays ERROR message to LCD. At this time, the LCD display returns in the blinking condition of a cursor. When the MEMORY key is pushed during the MANUAL mode, it changes to the MEMORY mode. The input method is similar as MEMORY MODE(See Section 0).

One Touch Service search

The search is possible with one touch operation, by pushing WEATHER key and FM/TV key.

Weather Channel Search

WAETHER can search 10 channels of USA/CND. It is delayed for 2 seconds automatically, when it was able to receive it. Furthermore, it changes in HOLD condition when HOLD key is pushed.

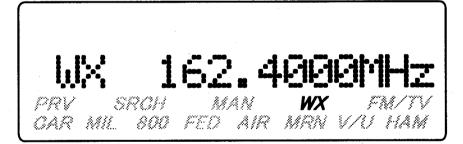


Fig. 0.25 WX Channel

WX Channel(USA/CND):

- a) 161.6500MHz
- b) 161.7750MHz
- c) 162.4000MHz
- d) 162.4250MHz
- e) 162.4500MHz
- f) 162.4750MHz
- g) 162.5000MHz
- h) 162.5250MHz
- i) 162.5500MHz
- j) 163.2750MHz

TV/FM Channel Search

It becomes HOLD condition with 88.0000MHz in default state, when TV/FM key is pushed. It starts to search with UP key and DOWN key. Also, this search is possible with one touch memory, while it is able to receive the station of somewhere. It makes figure key("0" - "9") One Touch Key to call. Registration channel is tuned by pushing One Touch Key. It is able to register to memory, by continuing to push One Touch Key for one second.



Fig. 0.26 FM/TV Channel

In case of the selected frequency is used for FM radio, LCD displayed as FM. In case of frequency for TV, LCD displayed as TV, also. One Touch Key registration after, the memory number that registered is displayed to 1st line.

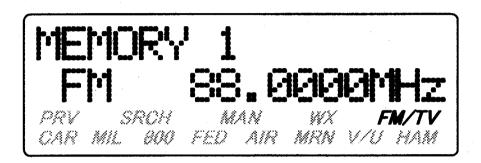


Fig. 0.27 One Touch Key Registration

When the memory key is pushed, Temporary One Touch Registration name is cleared. Cursor displays left and The set goes name registration mode. The name registration method is same as other one.

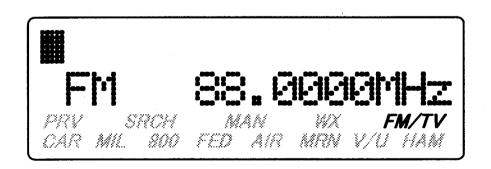


Fig. 0.28 One Touch Name Registration

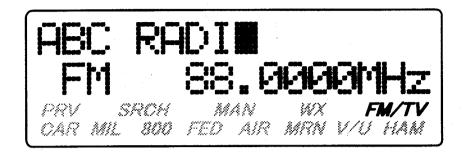


Fig. 0.29 Name Input In One Touch Key Registration Mode

Tone

This set have 3 kinds of tone. These are used according to situation. The tone that is used is the following.

- a) Key Touch Tone("Pi")
- b) Error Tone / Battery Low Tone("Bu")
- c) Confirmation Tone("Pi" "Pi")

Key Touch

This set has the function that outputs tone("Pi") when the key pad was pushed.

Key Touch Tone:

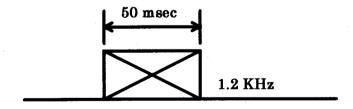


Fig. 0.1 Key Touch Tone Frequency Diagram

Error Tone

When in the case that the value of range outside is input and the key that is not able to use is pushed tone is output to etc.

Error Tone/Battery Low Tone:

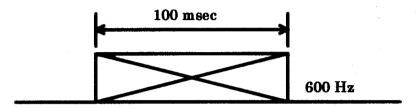


Fig. 0.2 Battery Low Tone Frequency Diagram

Battery Low Tone

It informs it with LCD display("Battery Low") and alert("Bu"), in the case that battery voltage is low. Battery Low Alert sounds every 15 seconds.

Error Tone/Battery Low Tone:

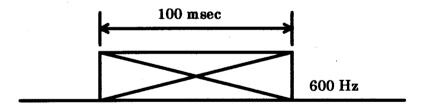


Fig. 0.3 Battery Low Tone Frequency Diagram

Confirmation

Confirmation tone ("Pi" "Pi") is sounded twice at the time of setting completion. This tone is due to setting completion confirmation.

Battery Low Display

"Battery Low" is displayed to LCD, in case that battery voltage low. And it blinks it

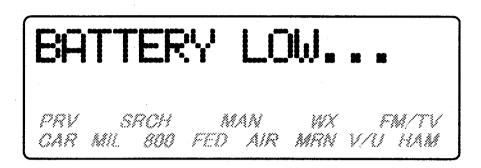


Fig. 0.1 Battery Low Display

Key Lock/Unlock

This set has the lock function of key operation. This is possible by moving the slide switch. All the key operation without working in Lock condition. That moment, the LCD displays as "KEY LOCK ON". And the display disappears 3 seconds later. Similarly, the LCD displays as "KEY LOCK OFF" in Unlock condition. And the display disappears 3 seconds later, also.

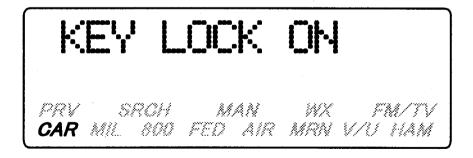


Fig. 0.1 Key Lock ON

KEY LOCK OFF FRY SPICH MAN WX FM/TY CAR MIL 800 FED AIR MEN V/U HAM

Fig. 0.2 Key Lock OFF

Key Input Action In Key Lock Condition

When key was pushed in key lock condition, key operation is ineffective. And LCD displays as "KEY LOCK" for LCD informs this condition to user. This display disappears 3 seconds later. After that LCD be return to the display of the previous time.

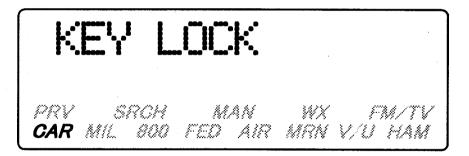


Fig. 0.3 Key Is Pushed In Key Lock Condition

Initial Setting

The setting contents at the time of factory shipment are described. And, this set have the initialization command. This set returns to factory shipment condition by doing following operation at power off condition.

[2], [9] and [MAN] keys are pushed simultaneously

Going Power ON condition by this operation, initialization is started. If power supply was turned off(Power OFF) midway of initialization, the scanner starts initialization at next Power ON.

No.	Item	Initial Value	Remarks
1	Channel Memory	000.0000MHz	100CHs all
2	Alpha Name	Not registered	100CHs all
3	Start UP Mode	Manual Mode	-
4	Selected BAND in PRV	ALL	-
5	Selected BAND in SRCH	ALL	-
6			
7			