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RADIOSHACK CORPORATION

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Cat. No. 19-1108

OWNER'S MANUAL

Please read before using this equipment.

HTX-420

**Compact Handheld 2m/70cm FM
Amateur Transceiver**



RadioShack®

FEATURES

Your RadioShack Compact Handheld 2m/70cm FM Amateur Transceiver is compact and rugged, making it easy to carry almost anywhere. The crystal controlled circuitry provides accurate and stable frequency selection, making it an ideal choice for your amateur communications needs.

Note : You must have a Technician Class or higher Amateur Radio Operator's License, and a call sign issued by the FCC, to legally transmit using this transceiver. Transmitting without a license carries heavy penalties. Getting a license is easier than ever. See "Introduction to Amateur Radio" on Page for more information.

Here are some of your transceiver's features.

Delux-Featured Dual-Band Radio – means flexible transmitting options with the latest built-in conveniences. Its compact size and light weight are perfect for an amateur radio operation on the go.

Full 16-Key DTMF (Dual-Tone Multi Frequency) Keypad – lets you dial and make telephone connections.

Up To 5 Watts Output – The transceiver transmits at 5 output when powered by 13.8V External power supply.

100 Memory Locations – let you store up to 100 frequencies and other settings.

S/RF and Battery Strength Meters – assure accurate signal and battery strength readings.

CTCSS (Continuous Tone Coded Squelch System) Subaudible Tone – both encodes and decodes 50 subaudible tones to help reduce interference from other nearby systems operating on the same frequency.

Repeater Offset – lets you select the offset value to match a local repeater.

Scan – the transceiver scans its full frequency range and 100 memory locations for transmissions.

Power Save – conserves battery power when the transceiver is not transmitting or receiving.

Programmable Frequency Steps – let you set the frequency increment for tuning or scanning to steps of 5, 6.25, 7.5, 10, 12.5, 15, 20, 25, 50kHz.

Signal Strength Indicator – a graduated bar shows the relative strength of the received signal.

Time-Out Timer – lets you set a maximum transmission time interval among 1,2,3,4,5,10,15,20 minute.

Earphone Jack and External Microphone Jack – let you connect an optional earphone, external microphone, or combination headset for more flexible operation.

External Power Jack – lets you use an external power source for maximum output.

Back Light – makes your transceiver easy to operate in low-light situations.

Weather SAME Alert – lets you watch specific area message from NOAA and listen to the weather broadcast.

Auto Power Off – lets your transceiver automatically turn off after a preset period of non-use.

Electronic Compass – lets you know the directions.

Cross Band Operation – lets you use the different frequency for transmitting and receiving.

Dual Watch – let you watch two different channels.

Air band receiver – lets you listen to air band broadcast.

MANUAL CONVENTIONS

Your transceiver's buttons perform multiple functions. The abbreviation or symbol for a function is printed on or above each button.

To activate certain transceiver features, you must press F (function) and another button at the same time. Those key combination instructions are printed as the first button name, +, then the second button name. For example, F+ TOT means hold down F while you press TOT.

Button names are printed in small, bold, capital letters such as CLR or MR. Words, symbols, and numbers that appear on the display are printed using a distinctive typeface, such as 146.940 or MR.

FCC INFORMATION

This device complies with Part 15 of the FCC Rules. Operation is subject to the following two conditions : (1) This device may not cause harmful interference, and (2) this device must accept any interference received, including interference that may cause undesired operation.

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INTRODUCTION TO AMATEUR RADIO

Your transceiver is the perfect first radio for anyone entering the exciting world of amateur radio, as well as a great additional transceiver for the experienced amateur radio operator. Your transceiver opens a door for you to the world from almost anywhere! All you need is an Amateur Radio Operator's License (Technician Class or higher) issued by the Federal Communications Commission (FCC). If you do not have a license, it is easier than ever to get one, and help from licensed operators is available. Here are a few tips to help you get started.

You can turn on your transceiver and scan the entire band to hear what is going on; however, do not attempt to transmit until you get your license. If you transmit without a license, you are in violation of federal law that can lead to severe penalties. Note that ham operators take the FCC rules very seriously and want nothing to do with "bootleggers" – their term for people who operate without a license.

Find out if there is a ham radio club in your area. Most clubs welcome new transmissions, write to the American Radio Relay League (ARRL) at the following address to find out how to contact a local affiliate. The ARRL is the national organization representing amateur radio in the United States. The league has more than 150,000 members. Most are ham operators, or members in the process of obtaining their license.

The American Radio Relay League
225 Main Street
Newington, CT06111
<http://www.arrl.org>

Starting for the license exams. Do not be intimidated by the word "study" because most people can go from knowing absolutely nothing about amateur radio to passing the Novice and Technician written exams in less than a month.

The exams test your knowledge of basic radio regulations and elementary radio theory. Many clubs hold license classes which can be a fun and easy way to learn about amateur radio. There are good books, cassette tapes, computer programs, and many other study aids available. Your local RadioShack store sells FCC License Preparation study guides for amateur radio operator licenses. While you are no longer required to

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learn Morse code for a Technician Class license, we encourage you to learn it anyway so you can advance to higher levels of operating privileges.

There is no fee to take the Novice exam. As soon as you pass the Novice exam, you can immediately take the Technician exam. All license level tests are administered by a three-member Volunteer Examiner Team. Contact the ARRL for a schedule of exam opportunities in your area.

The Technician Class license lets you use the transceiver to communicate directly with other operators, and use repeaters for distant communication.

Amateur radio is a great hobby that has enriched the lives of millions of people all over the world. The ARRL would be glad to hear from you if you need more information or would like to join!

PREPARATION

You can operate your transceiver from any of four power sources;

- Li-Ion batteries
- Alkaline batteries
- AC Power (using an optional AC adapter)
- Vehicle battery power (using an optional DC adapter)

USING INTERNAL BATTERIES

Using Rechargeable Batteries

You can power your transceiver using two lithium ion batteries supplied as a sealed pack.

The battery pack has a built-in circuit that lets you recharge Li-Ion batteries. To charge the batteries, connect an supplied external AC to DC adapter to the battery pack's CHG jack.

Caution) Please, clear the contact on the radio to the lithium ion battery pack with alcohol from time to time.

Testing Internal Batteries

To test the batteries, hold down PWR for about 1 second. The battery voltage briefly appears. The bars of battery icon on LCD appears as a battery monitor indicator. There more bars in side the icon, the stronger the batteries. When there are no bars in side of battery icon and flashes, recharge the battery or replace all the batteries if Alkaline batteries are used as soon as possible.

Using Non-Rechargeable Batteries

You can power your transceiver using four alkaline batteries using alkaline battery.

USING AC POWER

You can power the transceiver using a 13.8V DC power supply with a size H Adapta-plug adapter. This is available at your local RadioShack store.

USING VEHICLE BATTERY POWER

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You can power the transceiver from a vehicle's 13.8V power source or cigarette lighter socket using 13.8 V DC to DC power adapter and a size H Adaptaplug (neither supplied). Both are available at your local RadioShack store.

CONNECTING THE ANTENNA

Place the threaded base socket of the supplied antenna over the antenna connector on the top of the transceiver and turn the antenna clockwise to tighten it. To remove it, turn it counterclockwise.

Caution : Do not over-tighten the antenna

Note : You can connect an external antenna to the transceiver using an SMA to BNC adapter. This adapter and suitable antennas are available at your local RadioShack store.

ATTACHING THE BELT CLIP

Use the Philips screwdriver and the two supplied screws to attached the supplied belt clip to your transceiver. Do not over-tighten the screws.

ATTACHING THE WRIST STRAP

To attach the supplied wrist strap to the top of the belt clip, thread the strap's small loop through the opening in the top of the clip. Then insert the longer loop through the smaller loop and pull on the strap until the loop is tight.

CONNECTING A MICROPHONE/SPEAKER

You can connect an external communications headset (consisting of a microphone and speaker) to the transceiver so you can use it privately. Lift the hinged, rubber dust cover from the MIC and SPK jacks on top of the transceiver. Then insert the plug of an optional voice activated headset with microphone, or an optional communication headset, into the jacks.

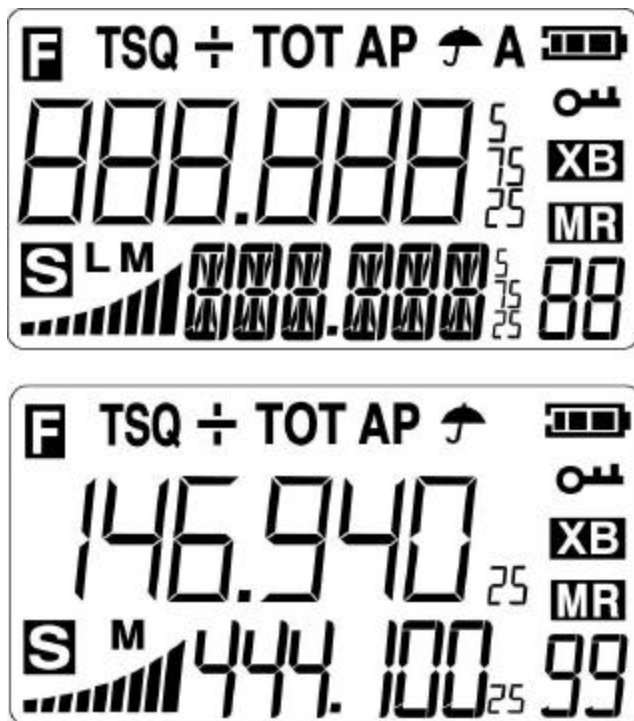
Caution : Use only microphone and speaker accessories that do not share a common ground for the speaker and microphone. Doing otherwise might damage the transceiver.

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Note : Connecting a headset's plug to the transceiver's SPK jack automatically disconnects the internal speaker.

You can also connect an optional mono earphone to the SPK jack. This lets you use the transceiver's push-to talk button to transmit as usual. Your local RadioShack store carries a wide selection of suitable communication headsets, earphones, and separate components.

A QUICK LOOK AT THE DISPLAY



1. F it will appear when F (function) key is pressed.
2. TSQ
This is for the function of tone squelch (CTCSS).
“T” will appear when Tone Squelch (CTCSS) is enabled for transmitting.
“SQ” will appear when Tone Squelch (CTCSS) is enabled for receiving.
“TSQ” will appear when Tone Squelch (CTCSS) is enabled for transmitting and receiving.
3. +/- : “+” will appear to indicate a positive repeater offset. “-” will appear to indicate a negative repeater offset.
4. TOT : “TOT” will appear when a time for the time out timer is selected.
5. AP : “AP” will appear when Auto Power Off is enabled.
6. Icon of umbrella : This icon will appear when Weather Radio is enabled. When it goes out of range, this icon blinks.

7. A : This icon shows when RX mode is in Air band.
8. battery icon : Battery icon indicates the battery strength.
9.  (key symbol) : this indicates that the key pad control is disabled to prevent accidental setting changes.
10. XBO : This is “Cross Band Operation”. When you use different frequencies for TX and RX, this will indicate you are using cross band operation.
11. MR (memory Channel Recall) : let you select a memory location using CH.
12. S: This appears when there is a receiving signal as a receiving indicator. When it is flashes, power save mode is enabled.
13. LM: “L” indicates the low TX power position . “M” indicates the mid TX power position.
14. SIGNAL INDICATOR BAR: It shows the relative signal strength.
15. Main Frequency display in the middle: This is to show RX frequency
16. Sub Frequency display in the bottom: This is to show TX frequencies and alphanumeric characters and Compass. In compass mode, the first 2 digit will show the direction in Alph. such as NW, SE, or something. And the last 3 digits will show the degree of direction such as 360, 180, 90, 45.
17. 2 digits below “MR” : This is memory address.

OPERATION

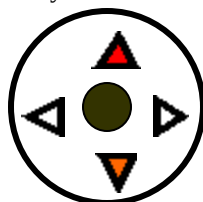
TURING ON /OFF THE TRANSCEIVER

To turn the transceiver, hold down “PWR” key for about 0.5 second. The radio beeps once if the key tone feature is enabled. Then the current battery voltage briefly appears and the last used frequency appears. To turn the transceiver off, press “PWR” key again.

CHANGING THE CHANNEL/FREQUENCY UP/DOWN

To change the channel or frequency, turn the rotary switch on the top. If you turn clockwise, channel or frequency goes up. If you turn counterclockwise, channel or frequency goes down.

Also you can use the universal type keys to turn up/down.



F +   are pressed to step through the frequencies in 1MHz steps (144, 145, 146)

Also, you can enter the frequency you want to use directly pressing 16 keys.

CHANGING THE VOLUME UP/DOWN

To change the volume, turn volume switch under the channel switch clockwise for up or counter wise for down.

CHANGING THE BANDS

To change the band you want to use, press  and it will turn VHF, UHF, AIR BAND, WX.

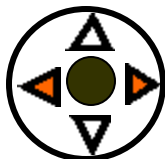
USING MONITOR BUTTON

To temporarily open the squelch, hold down “M”. To resume normal operation, release M.

While “M” is pressed, SQL, RPT, RXTONE, TXTONE is displayed on the sub frequency display and its value on the main frequency.

USING UNIVERSAL TYPE KEY FOR SET MODE

Press  or  repeatedly to select setting SQL 0 ~ 5, VHFRPT, UHFRPT, RXTONE, TXTONE, DTMF, AREA code set, SAME on/off mode in turns.



If you select a setting you want to change, press   to change value.

Setting the squelch level :

Press   to change the squelch setting. “00 ~ 05” on main frequency display and SQL on sub frequency display will appear.

VHFRPT : VHF Repeater frequency setting.

When you select value pressing up/down arrow key or rotating rotary switch,
press  to save and exit.

Repeater offset frequency range : 0KHz to 8MHz

Default frequency step : 5KHz

Default repeater offset : 600KHz

Default repeater offset step : 5KHz

UHF RPT : UHF Repeater Frequency Setting

When you select value pressing up/down arrow key, press  to save and exit

Repeater offset frequency range : 0KHz to 8MHz

Default frequency step : 12.5KHz

Default repeater offset : 5MHz

Default repeater offset step : 100KHz

RXTONE : RX CTCSS Frequency Setting

When you select a frequency or no frequency (CTCSS off) pressing up/down arrow key,
press  to save and exit

Default is “88.5”.

TXTONE : TX CTCSS Frequency Setting

When you select a frequency or no frequency (CTCSS off) pressing up/down arrow

Key or rotate a rotary switch, press  to save and exit

Default is "88.5".

dTMF : DTMF dial Setting

→ Initial Data Entry

1. Press  KEY to select DTMF mode.
2. Press  or rotary switch to select the address from d1 to d6.
3. Main frequency display shows -----. On the sub-frequency display, dTMF will be displayed and memory display shows d1 to d6.
4. Enter the code by pressing 16 keys. If you try to enter mode than 16 digits, the radio sounds two short beeps to indicate the error.
5. To enter the code to another address, press  or rotate the rotary switch.
The data in the previous address is stored automatically.
6. Do the same way of 4.
7. To reconfirm DTMF code, hold down "F" and rotate the rotary switch or F + 
8. After entering DTMF code, press  or PTT key to go to VFO mode.

→ Data re-entry

1. Select the address to modify.
2. Enter the desired data.

WX-Area Code Setting mode.

→ Initial Data Entry

1. Press  KEY to select Area setting mode.
2. Press  or rotary switch to select the address from A to A9.
3. Main frequency display shows -----. On the sub-frequency display, AREAF will be displayed and memory display shows A1 to A9.
4. Enter the code by pressing 16 keys. If you try to enter mode than 6 digits, the radio sounds two short beeps to indicate the error.
5. To enter the code to another address, press  or rotate the rotary switch.
The data in the previous address is stored automatically.

6. Do the same way of 4. and 5.

7. After entering AREA code, press  or PTT key to go to VFO mode.

→ Data re-entry

1. Select the address to modify.

2. Enter the desired code.

- Once area code is entered, WX SAME mode works only area code is matched.
- If there is no data in A9, ----- appears.

WX-SAME : Weather SAME Mode On/Off

When you select WX SAME mode on or off pressing up/down arrow key, press



to save and exit. (If mode is On, umbrella icon will appear when the radio is tuned in weather channel.)

Display: Main : OFF-ON, Sub : SAME.

REPEATER OPERATION

Press “F” + “+/-“ to select +, -, or OFF.

If main frequency display shows 144.000 for instance, sub frequency display shows +600.

When “REV” is pressed, “+” will be changed to “-“. On pressing “PTT”, sub frequency display shows – 600.

If frequency is out of the amateur band, error tone sounds.

MEMORY OPERATION

Your transceiver has 100 standard memory locations that you can use to store frequencies for quick access. You can store frequencies used for the VHF, weather, and UHF bands. When you store a frequency, all other settings associated with that frequency (such as the repeater offset and CTCSS tones) are stored as well.

STORING A TRANSMIT/RECEIVE FREQUENCY (MEMORY WRITING)

Select the freq. you want to store. Once you selected a frequency, the other values such as the repeater offset and the CTCSS tones for that frequency are also stored in the memory location.

Press “F” + “MW(MR)”. The last used memory location appears and MR flashes on the display.

Repeatedly press  arrow key or turn CH rotary switch to select the desired memory location. Press “F + MW” again to store the selected frequency and exit the memory mode. You can use up to 100 memory locations to store the frequency.

RECALLING MEMORIES (MEMORY READER)

To recall saved memory settings, press “MR”. MR appears and the last used memory location number appears beneath MR. Then rotate or press CH switch or up/down keys to select a different memory location. When pressing “SC”, it scan memory channels To return to the VFO mode, press .

If there is a channel skipped, “MR” blinking. On scan mode, this channel is skipped. If “SC” is pressed again, it returns to VFO. In scan mode, if there is a signal, it will stop for 8 sec. and scan again.

CHECKING MEMORY LOCATION SETTINGS

Press “MR”, then rotate CH switch (or press up/down arrow keys) to select the memory location. Then hold down “M” key. The settings stored in the memory in the memory location appear in sequence starting with the squelch setting value and ending with the frequency.

CLEARING A SINGLE MEMORY

Press “F” + “CLR(6)” to clear the selected memory location. The next location in sequence appears.

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Memory No. 1 will not be cleared.

USING THE CALLING-FREQUENCY MEMORY

Press “Call” key to display the current calling frequency. The frequency appears. To change the store frequency, press F + Call (CM) after enter a new frequency in VFO. To enable the calling frequency, press “CALL” key at any time.

SCANNING OPERATION

SCANNING FOR ACTIVE FREQUENCY

Press “SC” key to scan up or down the band’s full frequency range. The decimal point flashes as the transceiver scans. The radio stops on each active frequency for 8 seconds. To change the scanning direction, press up or down arrow key or rotate the rotary switch. To stop on a frequency or stop scanning, press “SC” or PTT key again.

CONTINUOUS TONE CODED SQUELCH SYSTEM FEATURES

Your transceiver can transmit and receive a low-level, selectable, subaudible tone at the same time as it transmits (TX) or receives (RX) a regular signal. This special tone lets you listen only to other radio set to the same tone frequency when you use the transceiver in simplex operation. It also lets you match your radio to the subaudible tone frequency used by a local repeater.

USING THE CTCSS TONES

To enable only the transmit (TX) tone, press “F” + “T.SQL(1)” key. T appears above the displayed frequency. To enable only the receive (RX) tones, press F + T.SQL(1) key and then SQ appears above the displayed frequency. To enable Both TX and RX tones, press “F” + “T.SQL(1)” key again and then TSQ appears above the displayed frequency.

USING DTMF CODE

DTMF (Dual-Tone Multi-Frequency) tones are those typically associated with the use of your telephone. Your transceiver can transmit up to 16 separate DTMF tones and store a sequence of tones in up to 6 different memory locations (d1 to d6). You can use DTMF to transmit to a land-patch and then to a telephone line. This lets you enable or disable certain repeater functions, which is handy if you are involved with repeater administration. You can also signal to another radio equipped to receive DTMF codes.

TRANSMITTING A DTMF CODED FROM MEMORY

Press “F” + “D.SEL” and , select desired the DTMF code memory pressing up or down arrow key or rotary switch. Press  or PTT or “F + “D.SEL” to exit to VFO mode.

Press “PTT” +  to transmit a DTMF in memory.

TRANSMITTING A DTMF CODE USING DIRECT ENTRY

Hold down “PTT” and enter each character of the desired DTMF code in order. There is no limit on the number of DTMF characters.

DTMF code is displayed on the sub frequency display and if there is no entry for 3 sec while pressing “PTT”, the last used data is displayed. If you re-enter the character, it will continue to display after the last used data.

OTHER SPECIAL FEATURES

LOCKING THE KEYPAD

Press “F” + “Lock (DW)” key. To unlock the keypad, press “F” + “Lock”.
PWR won’t be locked.

LIGHTING THE DISPLAY

When you press any key except “PTT” or “F”, the backlight turns on for about 5 seconds.

TURING THE KEY TONE ON AND OFF

Press “F” + “BEEP (7)” to turn on and off.
Display : Beep on → BP ON Beep off → BP OFF

SETTING THE FREQUENCY STEP

Press “F” + “STEP(2)”. The current step setting appears with “STEP” on LCD.
Repeatedly, press  key or channel rotary switch until the desired new setting appears.
You can change the frequency step to 5, 6.25, 7.5, 10, 12.5, 15, 20, 25, 50KHz.
Press  or “PTT” to store your selection.

POWER SAVE

Press “F” + “PS(5)”.  appears.

AUTO POWER OFF

Press “F” + “APO (3)”. Auto Power Off is normally disabled. OFF appears.
Repeatedly press either up or down arrow key or channel rotary switch to select a time period until power shut off.
You can select Off, 30, 60, 90, or 120 minutes.
Press “PTT” or  store your selection and exit to the VFO mode.
To turn off the auto power off feature, press “F” + “APO”.

TIME-OUT-TIMER

Press “F” + “TOT(4)”. The default setting OFF appears with TOT on LCD. Repeatedly press

 key or channel rotary switch to select the desired time-out-timer interval from 1, 2, 3, 4, 5, 10, 15, 20 min. When you select a value for the time-out-timer feature, “TOT” appears on the LCD. Press  to store the setting and exit to the VFO mode.

When TOT is on, “TOT” on LCD is blinking.

For instance, when it is set to 4 min, warning tone beeps at 3min 50 sec.

TURING THE WEATHER RADIO FREQUENCIES

Press  to select weather band. Then, press  to select your local weather channel. Main channel display will show CH-01 and sub channel display will show WX.

When SAME is on, sub channel display will show SAME.

WEATHER SAME ALERT

Press  to select SAME mode. Press up/down key to select weather SAME on or off. When you set Weather SAME area code and weather SAME is on, the transceiver detect the SAME signal and display in WX Channel as below

WARN for Warning

WATCH for Watches

STMT for Statement

TEST for Test

Umbrella icon appears when SAME mode is on.

It detects SAME code in selected weather Channel. During SAME code detects, audio is muted.

Main channel display shows the selected weather channel and sub channel display shows one of alerts (WARN, WATCH, STMT or TEST) for 5 sec.

If area code is not designated, it will not detect 4 kinds of alert.

Area code can be input only in AREA mode on set mode.

(Reference of Area code at <http://www.nws.noaa.gov/nwr/nwral.htm>)

ELECTRONIC COMPASS

Press “F” + “COMP (H/L)” to see magnetic direction.

2 digits of direction such as SE, NW appear in the left and up to 3 digits of degree such as 360, 180,

090, 045, 005, appear by 5 degree step in the right on the display.

For calibration of compass, press "PWR" + "COMP" key and then confirm the display "CAL". Then, turn the unit twice clockwise or counterclockwise. And then press "PTT" or  to return to normal mode.

To see the more precise compass direction, have the unit horizontal.

The display provides 8 primary directions ; N, NE, E, SE, S, SW, W and NW.

On the mode of XBO, compass will be displayed unless the radio is receiving the signal.

If the radio receives signal, it shows the frequency.

While pressing any key, frequency appears.

TX POWER OUTPUT SETTING

Press "H/L" key repeatedly. You can select High (No display), Mid (display: M), Low(display : L) in turn.

SKIP

Press "F" + "M (SKIP)" to turn this feature on or off. When SKIP is on, "MR" is blinking.

SKIP works in only memory channel.

RESETTING

To reset, press "6" + "MR" + "PWR".

XBO CHANNEL OPERATION. (Main channel : RX, Sub channel : TX)

Press "F" + "XBO(SC)". "XB" appears on the LCD. Enter main frequency for RX frequency and then press "F"+ "REV(8)" to switch to sub channel with main channel. Enter frequency to main channel.

DUAL WATCH

If radio is in VFO mode, press "DW" to enter dual watch. Enter the frequency you want to watch on the main-freq. display by keying in the frequency or read the memory. (Default is the last memory channel).

The radio scans in main frequency for 200 msec and sub-frequency for 2.5sec.

If main (VFO or memory channel) is not active, it scan sub (VFO or memory channel).

If main is active, it receives in main. If it drops out, it waits for 2.5 sec. During this time, if the radio

don't receive in signal, it goes to scan in sub. If pressing PTT, it transmits in last memory channel before entering the dual watch mode and dual watch is canceled.

If "M" key is held down, it scans in sub frequency till "M" is released. If released "M" key, it waits 200 msec in main channel and back to the sub frequency.

The initial frequency in main and sub. is same.

RECEIVING AIR BAND

Select Air band frequency by pressing  and tune the frequency you want to hear pressing   or rotate Ch rotary switch. When the mode is air band, "A" appears on the top of LCD.

The air band RX range is 108.000 ~ 136.9875MHz.

SPECIFICATION

GENERAL

Frequency

2-Meter ----- TX:144 ~148MHz/RX: 137 ~ 174MHz

70-cm ----- TX:438 ~450MHz/RX: 420 ~ 512MHz

Weather Channel ----- RX : CH1 ~ CH7

Airband ----- RX : 108.000 ~ 136.9875MHz

Frequency Generation ----- PLL Synthesizer

Frequency Stability ----- +/- 10 ppm

Operating Temp. ----- 32' to 140' F (0' to 60'C)

Operating Voltage ----- DC 5V to 12 V

Modulation ----- F3E

Impedance ----- 50ohm

Dimension (HxWxD) ----- 4 1/2 x 2 2/5 x 1 1/5 (122 x 61 x 31 mm)

Weight (with CHG. Battery) ----- 10.6 oz

(300g)

RECEIVER

Circuit Type ----- Dual Conversion, Superheterodyne

IF Freq.

1st IF ----- 45MHz

2nd IF -----450kHz

Sensitivity ----- 02uV For 12dB Sinad

Distortion ----- 5% max

S/N Ratio ----- 40dB min.

Audio Output @ 10%THD ----- 400mW at 8ohm

TRANSMITTER

Power Output ----- 3W, DC 7.2V

5W, DC12V

Distortion (Nominal) ----- 3%

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Deviation ----- +/- 5kHz MAX.

S/N Ratio ----- 40dB

Current Drain ----- 1200mA, DC 7.2V
1500mA, DC 12V