

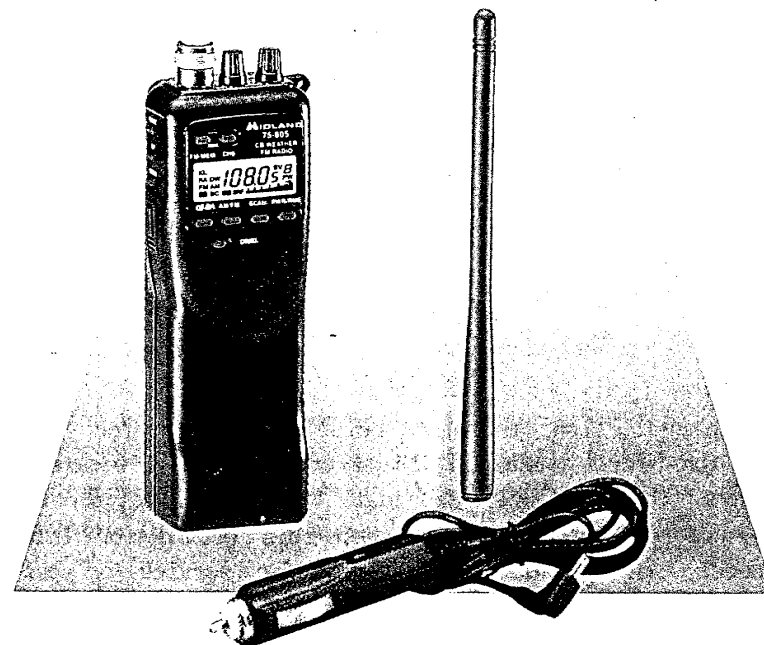
Additional information on this or any of Midland's
Fine communications and marine products may be obtained
by contacting



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Printed in Korea



OWNER'S MANUAL

40 CHANNEL LCD
HAND HELD
CB/WEATHER/FM RADIO

MODEL. 75-805

This device complies with part 15 of the FCC Rules.
Operation is subject to the condition that this device
does not cause harmful interference.

This device complies with FCC part 95

Midland 75-805

Deluxe Walkie Talkie

For your protection, the space below is provided for you to record the Serial Number of this Product which is located on the identification plate attached to the rear cabinet panel. After recording this number, keep this record for future reference. When contacting Midland for service or parts information, the FCC I.D. Number and Serial Number must be referred to in order to expedite your request.

FCC I.D. : MMA75-805
Serial Number :
Purchase Date :



DELUXE CB COMMUNICATION SYSTEM

PLEASE READ ALL INSTRUCTIONS BEFORE OPERATING YOUR 75-805

Over the years, we have had numerous requests for a high performance hand-held CB transceiver for industrial, hunting, fishing and outdoor activities of all types. Now we can offer even more, NOAA weather, and FM radio.

The 75-805 fills all these parameters and more. It has been engineered to deliver unexcelled performance and it obsoletes most units on the market today.

It features a new automatic battery saver circuit which substantially improves battery longevity. It has dual watch to monitor two channels; it also scans.

It's far more than a walkie-talkie. It's a hand-held professional communication system. It has more features than any unit currently on the market. It has more performance than a conventional walkie-talkie, plus weather receiver and FM radio.

Most walkie-talkies state 5 watts of power.

This is an input power rating.

The power delivered to the antenna is usually far less.

The 75-805 runs 4 watts of output power to the antenna which translates to over 7 watts of input power.

The receiver is a high performance chassis.

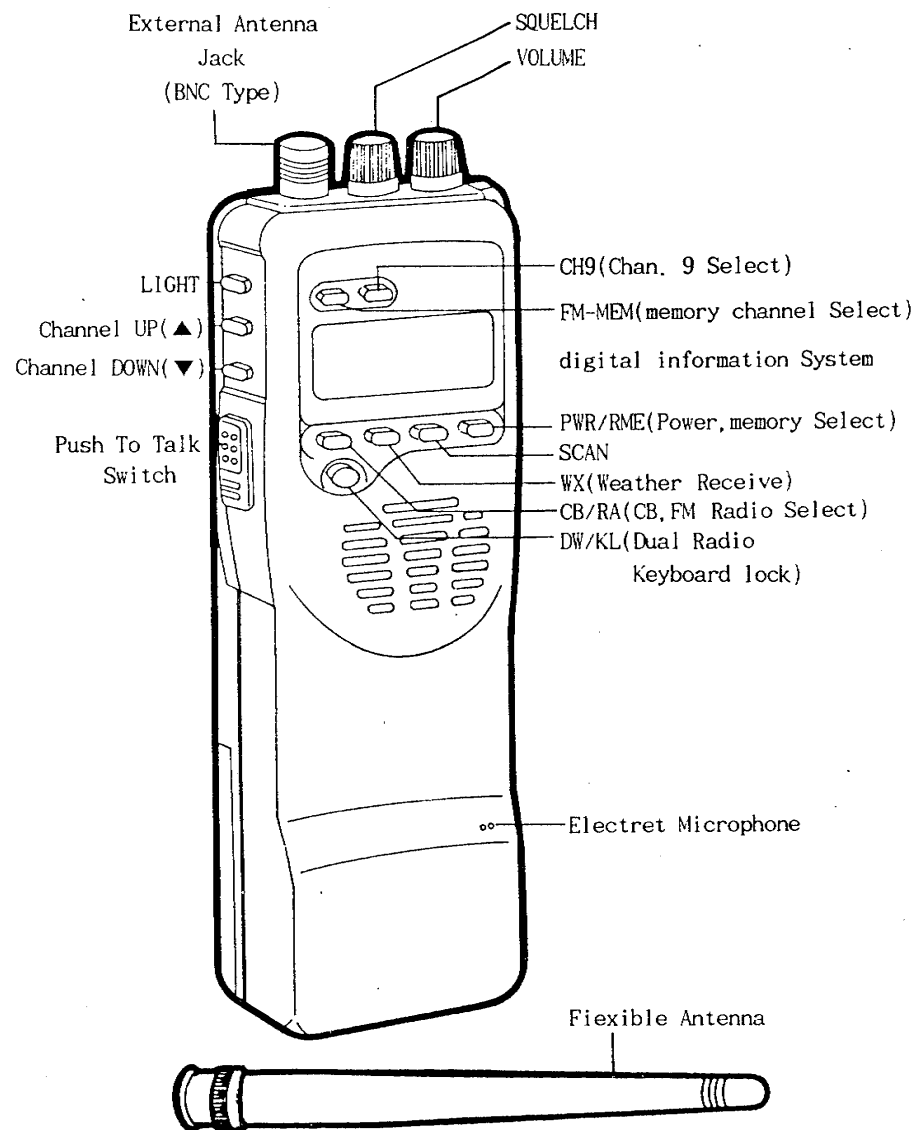
Combined with its powerful transmitter, it provides unparalleled long range.

The available options let you use your 75-805 as a car or marine unit as well as a portable, giving tremendous versatility to the unit.

Standard features include :

- NOAA WEATHER RECEIVE - 10 CHANNELS
- FM HI-FIDELITY RADIO COVERING 88-108MHZ
- PROGRAMMABLE FM RADIO CHANNELS(8)
- SCANNING OPERATION
- LCD MULTIFUNCTION DISPLAY SYSTEM
- DUAL WATCH FEATURE
- FULL 40-CHANNEL OPERATION
- ETR FREQUENCY CONTROL
- LCD LIGHT SWITCH
- HIGH-LOW POWER SWITCH
- INSTANT MEMORY CHANNEL 9
- MICROSWITCH TRANSMIT/RECEIVE SWITCH
- SIGNAL STRENGTH "S", AND POWER OUTPUT METER
- EXTERNAL 12 VOLT POWER JACK.
- EASILY REPLACEABLE PORTABLE FLEX ANTENNA
- EXTERNAL ANTENNA JACK
- HIGH IMPACT CABINET
- HIGH PERFORMANCE CHASSIS
- PROVISION FOR OPTIONAL MICROPHONE/EARPHONE ETC
- NEW HIGH PERFORMANCE-LOW PROFILE ANTENNA

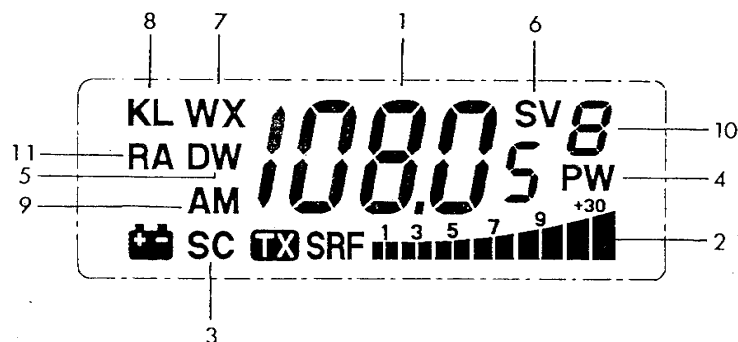
IMPORTANT FEATURES AND CONTROLS 75-805



DISPLAY PANEL INFORMATION COMMAND CENTER

The display panel of your 75-805 provides you with a visual command center of information. It shows you:

1. Channel of operation.
2. Shows you:
 - A. Incoming signal strength levels.
 - B. Transmitter relative output.
3. Shows you are in the scan mode.
4. Shows if you are in the high power position.
5. Shows you are in dual watch.
6. Shows you are in battery save position.
7. Shows you are in weather receive mode.
8. Shows key board is locked.
9. AM indicates you are in CB mode.
10. Shows FM memory channel
11. Shows you are in FM radio mode.



LCD DISPLAY

Operating Controls, Connectors :

CHANNEL DIAL READOUT

108.05

Bold liquid crystal(LCD) display shows you which channel you are operating on. The display has been designed to operate in direct sunlight.

LCD "LIGHT" SWITCH



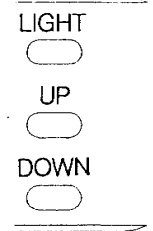
The switch is located next to the push to talk switch. When depressed, it provides backlighting to the display for nighttime viewing. The light will come on, stay on for five seconds and automatically shut off to save power.

EMERGENCY "CH9"



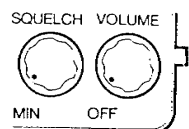
Your 75-805 has a memory button for instant access to emergency channel 9. This is a touch "ON-touch OFF" button. Simply touch the button once to access CH 9. NOTE: WHEN THE 75-805 IS IN CH9 MODE, WHICH IS BLINKING, THE UP-DOWN CHANNEL CHANGE BUTTONS WILL NOT OPERATE.

CHANNEL SELECTION



Your 75-805 has an ETR channel selection system. To select channels higher in number than what is shown on the channel readout system, simply touch the "UP" button. To select channels lower in number than what is shown on your channel readout touch the "DOWN" button. NOTE : THESE BUTTONS WILL NOT OPERATE NORMALLY IF THE EMERGENCY CHANNEL 9 BUTTON HAS BEEN ENGAGED.

Operating Controls, Connectors(cont)



RANGE/SQUELCH(SQ)

This control allows a quiet standby operation and controls your receiving range.

For maximum range, when no signals are present rotate the squelch control until the receiver background noise disappears. Incoming signals above the noise will overcome the squelch circuit.

To reduce range, continue advancing the control.

It will take louder and louder signals to overcome the SQUELCH/RANGE circuit.

NOTE : THIS CONTROL ONLY WORKS ON "RECEIVE" IT HAS NO EFFECT ON TRANSMIT.

VOLUME/POWER ON-OFF

This control turn your 75-805 on and off, and adjusts the sound level.

SCAN

SCAN



Your 75-805 incorporates a scanning feature. The 75-805 will scan through all 40 channels. It will stop at any BUSY channel.

It will stay on that channel for 10 seconds and then it will resume scanning.

To activate this feature, turn on the power and adjust the volume. Adjust the "SQUELCH". Depress the SCAN button to start scanning.

The word SC will appear in the LCD display window and the unit will start scanning. If you want to stop scanning you can push the scan button again or touch the push to talk switch.

If the unit is scanning and stops on a channel that you want to answer back on, simply depress the push to talk switch. This will shut off the scanning function and transmit on that channel.

Operating Controls, Connectors(CONT)

DUAL WATCH(D.W.)

This feature is like having two receivers in your 75-805. It gives you the ability to monitor any two different channels in the 40 channel range.

You can monitor emergency channel 9 and trucker channel 19.

You can be hunting with two different people each using a different channel.

The channel which you frequently want to monitor and establish communication on will be called the MAIN channel. The other channel which will be monitored momentarily will be called the SUB channel. Let's say you want to monitor channel 19(as the MAIN channel) but also want to receive channel 9(as the SUB channel).

NOTE : ALWAYS SET "MAIN" CHANNEL FIRST.

1. Turn the unit on-adjust the volume and squelch controls.
2. Using the channel up ▲ or ▼ down button-select channel 9.
3. Press the dual watch button once(the DW symbol will be shown on the display).
4. Using the channel up ▲ or ▼ down button-select channel 19. Touch the DW button again.
5. The display will start flashing 9 then 19 indicating the unit is monitoring each channel, it will stay on each channel for one seconds

Any two channels can be selected for dual watch. If you want to transmit, you can depress the push to talk switch.

If the sub or main channel becomes busy the receiver will stop on the busy channel and remain stopped for 10 seconds, allowing you to respond to the call.

To disable dual watch simply press the dual watch switch again.

Operating Controls, Connectors(CONT)

KL



KEYBOARD LOCK(KL)

This feature allows you to disable the function keys, preventing accidental channel or mode change.

To lock the keyboard press and hold the KL button for 3 seconds (or until the KL symbol lights in the display). To unlock hold the KL button again for 3 seconds or until KL goes off in the display.

WX



WEATHER RECEIVE(WX)

While in the CB or FM radio mode just push the WX button to activate the NOAA weather receiver.

Select the proper weather channel for your area (1 through 10) by using the UP/DOWN buttons.

To return to the previous mode just push WX again.

NOTE : It is normal to receive the same information on more than one channel, select the channel with best sound.

CB/RA



CB OR FM RADIO(CB/RA)

To select FM radio from the CB mode push the CB/RA button. Stations maybe selected by the up/down or FM-MEM buttons. Again push the CB/RA button to return to CB operation.

SETTING FM RADIO MEMORY CHANNELS (PWR/RME, FM-MEM)



FM-MEM

Enter into the FM Radio mode by pushing the CB/RA button. Select the desired radio frequency using the up/down buttons. When the desired frequency is displayed press and hold the PWR/RME for 3 seconds.

The channel number will begin flashing in the display. Select the desired memory channel by pressing the FM-MEM button until the correct channel is displayed. Press the PWR/RME button again to store this channel number. Repeat this operation for the remaining 7 memory channels. When listening to the FM radio a new channel maybe selected by pushing the FM-MEM button until the desired channel is displayed.

Operating Controls, Connectors :

SIGNAL/RF OUTPUT METER

Your 75-805 incorporates a twelve segment incoming signal "S" and power output "RF" meter in the LCD display panel.



If you are in the receive mode and a signal comes in, the "S" meter will indicate how strong the signal is. The meter has twelve segments.

A very weak signal will be indicated by one or two segments while a very

strong signal will have 11 or 12 segments.

When you transmit, the symbol "TX" will appear on the display.

If you are in the LOW power position only 4 or 5 segments will light while if you are in the "HIGH" power position 6-12 segments will light depending on the condition of your batteries or your power source.

HIGH-LOW "POWER"

POWER



There are two levels of power available on your 75-805, "PW" for long range and no indication for short range. The "PWR" switch is on the front of the unit. To the left of the channel display, the letters "PW" will indicate the unit is in the high power mode.

MIC



Your 75-805 is equipped with an electrostatic condenser microphone. This gives you a high level of talk-power. Simply hold the 75-805 2-4 inches from your mouth and speak into the "MIC" microphone in a normal voice.



EXTERNAL ANTENNA JACK(EXT ANT)

This jack allows you to connect an external antenna to your 75-805. It also accepts the flexible antenna.

Controls, Connectors(cont)



DC 13.8V

DC 13.8 VOLT JACK

This jack is used to power your 75-805 from a 12 volt automotive, boat, RV, truck, tractor, etc, battery.

A cigarette lighter plug power cord is supplied with your unit.

MIC/PTT



CHARGE



S.P

These jacks allows you to connect an optional earphone or an optional external microphone or speaker/ mic.

It also allows you to charge nickel cadmium batteries while they are in the unit.

A optional 18-395 charger is required.



PUSH TO TALK SWITCH

This switch engages the transmit mode. Simply depress it to transmit.

The letters "TX" will appear in the LCD display.

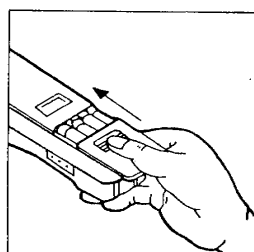
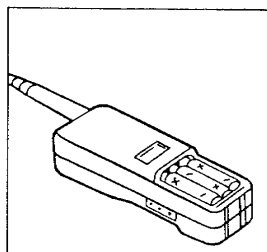
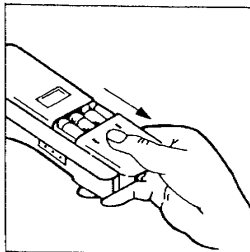
BATTERY INSTALLATION

We recommend using alkaline "AA" or rechargeable nickel cadmium batteries.

Your battery case requires nine "AA" alkaine cells or nine rechargeable "AA" nickel cadmium batteries.

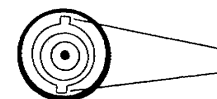
To install the batteries, turn unit over. Push the battery cover off by pressing in the direction of the arrow.

Install the batteries. Observe the polarity(+) (-) per the engraved emblems on the inside of the case.



Installing Flexible Antenna

Looking at the bottom of the antenna you will see two small slots.



SLOTS

Looking at the top the 75-805 antenna connector you will see two pins.



PINS

Simply match the slots to the pins and gently push down. Then turn the antenna one quarter turn clockwise to lock antenna in position.

Reverse this procedure to remove the antenna.

Using a Standard Citizensband Antenna

The antenna connector on your 75-805 is a BNC type.

Most CB antennas have a PL 259 type plug. A adapter is made to convert the BNC plug to a SO 239 which then accepts a PL 259 (MIDLAND 18-174) this is available from most electronic dealers or electronic stores.

Initial Setup-portable/Walkie Talkie CB Operation

1. Place the antenna into the "EXT ANT" jack on top of the 75-805
2. Install batteries.
You are now ready for portable or walkie talkie operation

Initial Operation

1. Rotate the power ON-OFF Volume Control clockwise to turn the unit. Adjust the volume for normal listening levels.
2. Adjust the RANGE/SQUELCH control per previous instructions.
3. Select the desired channel by touching the channel "UP" or "DOWN" Buttons.

NOTE : IF THE CHANNEL WILL NOT CHANGE, THE CH9 BUTTON MAY BE ENGAGED. IF THIS OCCURS, TURN THE 'CH9' BUTTON OFF

4. Put the "POWER" switch in the "PW" position.

NOTE : IF YOU WISH TO USE SCAN-DUAL WATCH ECT. REFER TO PREVIOUS INSTRUCTIONS.

TO TRANSMIT

Press and hold in the push to talk switch on the left side of the unit.

Hold the 75-805 2-4" from your mouth and speak into the microphone in a normal voice.

TO RECEIVE

Simply release the push to talk switch.

5. To receive weather press the "WX" button and select desired weather channel with the UP/DOWN buttons.
The unit will receive weather information up to 30-50 miles from the transmit site. Check the NOAA brochure for locations of weather bureau broadcasting stations

NOTE : NOT ALL AREAS OF THE USA/CANADA HAVE WEATHER TRANSMITTERS.

6. To listen to FM radio push the CB/RA button and select channel with the UP/DOWN buttons or the FM-MEM button.

Factors affecting effective Citizens band range

Frequency-channel number chart.

Frequency	Channel
26 965 MHz	1
26 975 MHz	2
26 985 MHz	3
27 005 MHz	4
27 015 MHz	5
27 025 MHz	6
27 035 MHz	7
27 055 MHz	8
27 065 MHz	9
27 075 MHz	10
27 085 MHz	11
27 105 MHz	12
27 115 MHz	13
27 125 MHz	14
27 135 MHz	15
27 155 MHz	16
27 165 MHz	17
27 175 MHz	18
27 185 MHz	19
27 205 MHz	20
27 215 MHz	21
27 225 MHz	22
27 255 MHz	23
27 235 MHz	24
27 245 MHz	25
27 265 MHz	26
27 275 MHz	27
27 285 MHz	28
27 295 MHz	29
27 305 MHz	30
27 315 MHz	31
27 325 MHz	32
27 335 MHz	33
27 345 MHz	34
27 355 MHz	35
27 365 MHz	36
27 375 MHz	37
27 385 MHz	38
27 395 MHz	39
27 405 MHz	40

Essentially, they're the same influences that optimize or limit AM, FM and other kinds of performance in moving vehicles.
Terrain : Hills and valleys naturally interrupt and shorten CB signals.

Obstructions : Inside a tunnel, covered parking garage or viaduct, CB sending/receiving capability may be cut off altogether. In short, you can expect to maintain maximum transmitting/receiving performance in flat, open country in stable (not necessarily clear) weather conditions.

Should effective range be limited in these conditions, check to see that your CB is connected properly. It may be necessary to consult your Midland CB Dealer's service department.

What causes noise?

If you have an abnormal noise problem, the chances are your vehicle itself is the cause. A CB receiver is a very sensitive instrument, able to pick up small noise signals and amplify them particularly if the source of these signals is within a few feet of your CB.

And noise that comes from your CB almost certainly comes from outside the unit itself.

Devices have been designed into your Midland CB (a noise blanker or an automatic noise limiter, for example) to minimize this kind of distraction.

Trouble-shooting aids.

Frequently, there are simple, quick actions you can take to eliminate or minimize such problems as interference and noise.

Noise suppression

A very common source of excessive noise is the ignition system of a CB owner's vehicle.

If you suspect this is true, simply turn off the ignition and set the key in the accessories (ACC) position.

This way you'll provide power to the transceiver, minus any ignition interference that might exist. If the noise goes away, you know instantly that the ignition system is the culprit. Still, there are a number of places in the ignition system where noise can originate.

Sparkplugs

As sparkplug wires are probably the worst noise producers. To eliminate this kind of noise, you can take any of four simple measures: (1) Install resistive sparkplug suppressors (2) resistor sparkplugs or (3) resistance-wire cabling, between plugs and the distributor and also between the distributor and ignition coil (4) Replace old plugs and sparkplug wiring and properly tune the engine. This generally cures most noise.

Many cars come suppressor-cable equipped.

If yours didn't (consult your vehicle owners manual or dealer service department to be sure), you can get it at an auto supply store and, given a moderate amount of mechanical skill, install it yourself.

CAUTION

Do not undertake any ignition system repairs or modifications without either professional help or some automotive service experience.

Generator-brush sparking

Can create an annoying "whine".

It's caused by a dirty commutator, and is eliminated by polishing its surface with fine-grade emery cloth, and cleaning grooves with a small, sharp tool.

Voltage regulators Can cause a "hashy" sound in your CB when relay contacts jitter open and closed when the battery is fully charged. To eliminate this noise, mount coaxial feed through capacitors at the battery and armature terminals on the regulator box.

Alternator

Slip rings should also be kept clean and good brush contact maintained to minimize CB noise.

In addition, single-contact alternator regulator boxes need a coaxial capacitor at the ignition terminal.

Double-contact units should have a second capacitor at the battery terminal. Shielding between the regulator and alternator may be needed as well. Be sure to ground the shield at both ends.

Infrequent, though real, noise generators like your car's heat fan, turn signals, electric windows and windshield-wiper motors can also be silenced with a coaxial capacitor (consult your serviceman).

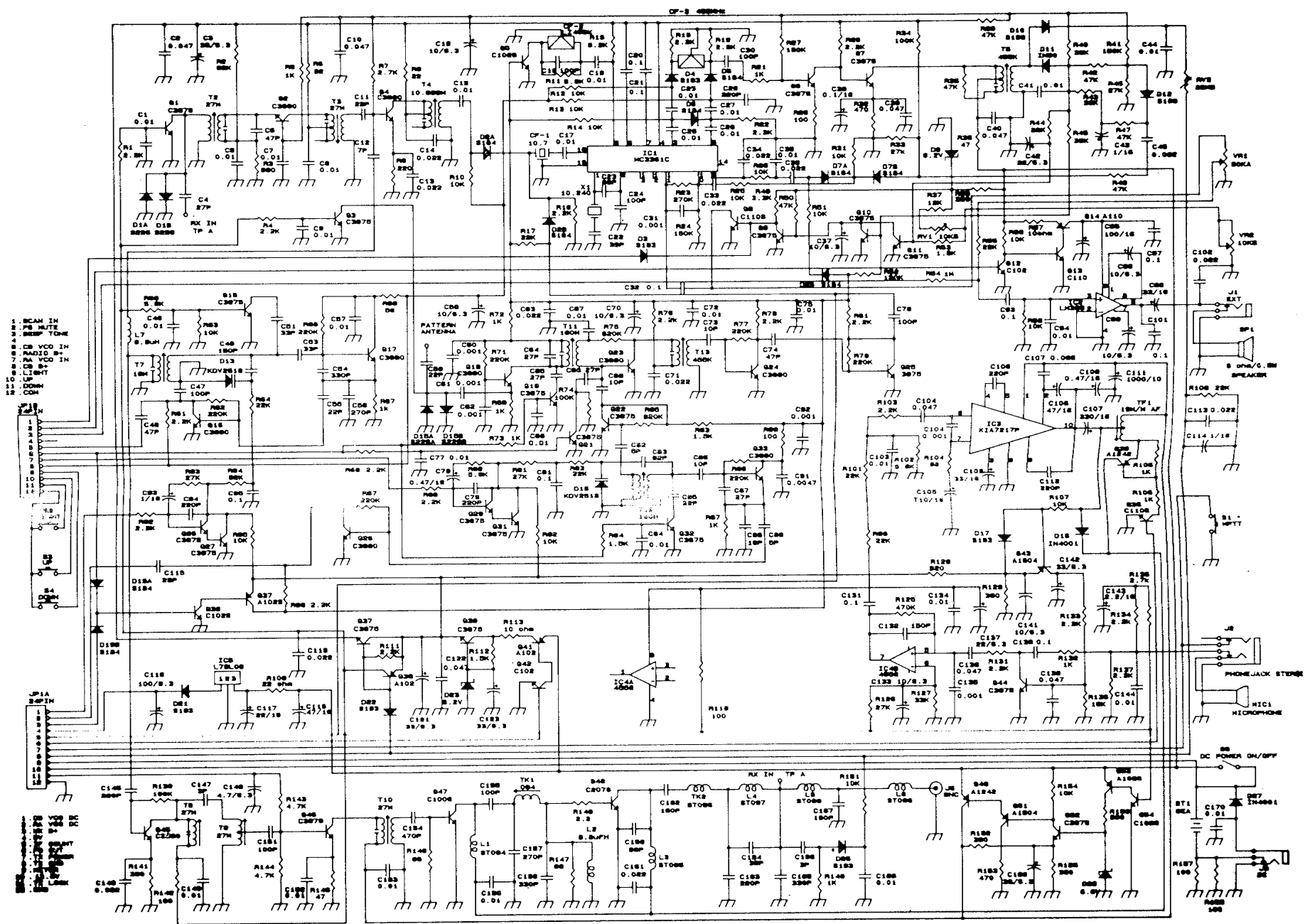
Wheels and tires

Can also cause CB noise also. Wheel noise is eliminated by putting static-collector springs between the wheel spindle bolt and grease retainer cup.

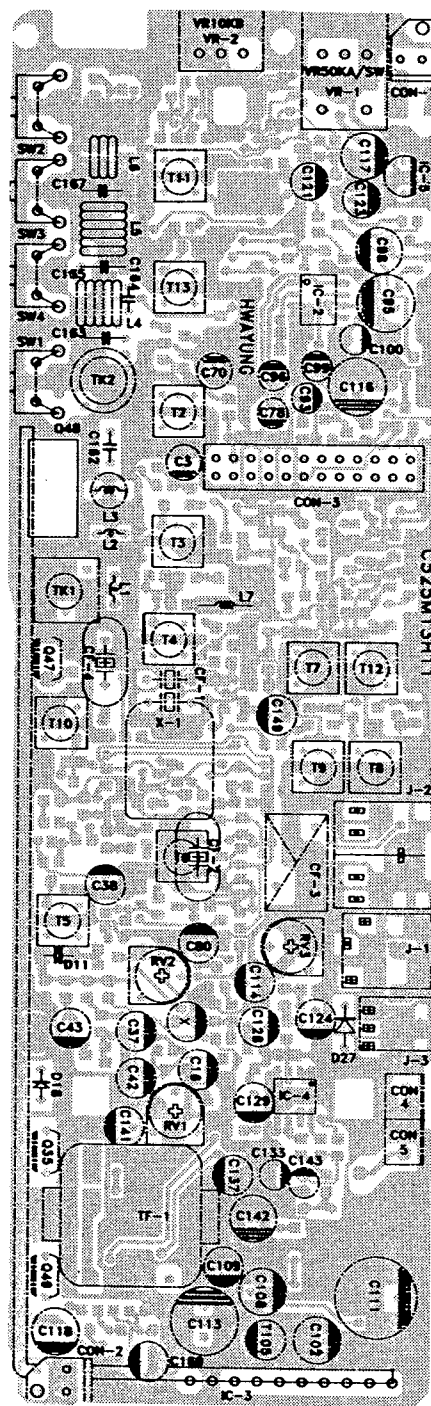
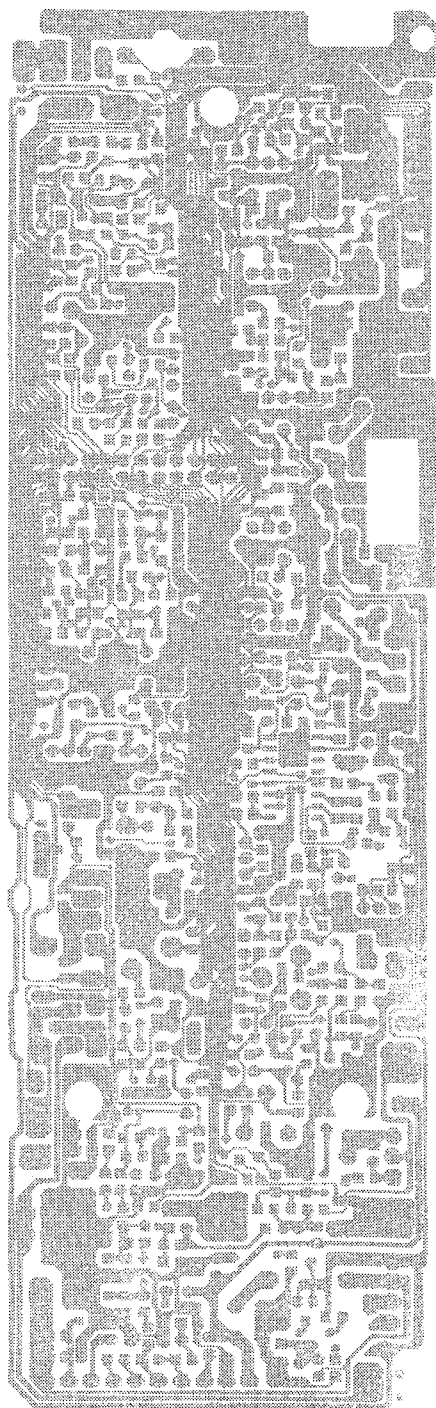
Tire static can be quieted with antistatic powder applied inside each wheel.

Antenna corona discharge noise most frequently occurring with sharp-pointed "whip" models- can happen just before or during electrical storms. The only cure is for the storm to blow over or pass. Many of the same factors that affect citizens band range will also affect VHF weather mode range

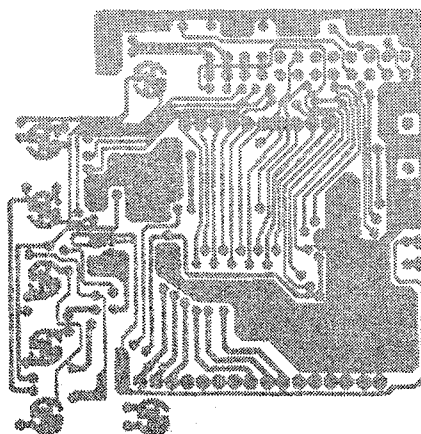
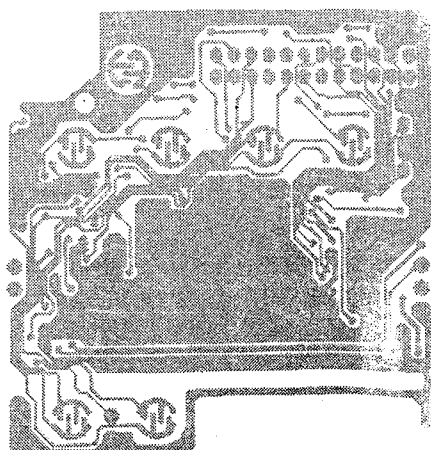
Schematic Diagram



MAIN PCB



SUB PCB



TECHNICAL SPECIFICATIONS

GENERAL

Frequency range.....26.965-27.405 MHz
 Channels.....40
 Modulation type.....AM
 Antenna impedance.....50 Ohm
 Loudspeaker.....8 Ohm 0.5W
 Microphone.....condenser type
 Power supply....10.9V/15.6V, nominal 13.8V(9 batteries 10.8V)

RECEIVER(CB,26.965-27.405 Mhz)

Sensitivity at 10dB S/N.....0.5uV
 Selectivity.....6 dB @ 5KHz
 Squelch range.....0.5uV-500uV
 Audio output power.....0.4W @ 8 Ohm(10% distortion)
 Distortion at 1000mV.....3%
 Audio frequency response.....400-2400 Hz
 Intermediate frequency.....I* 10.695MHz o II* 455 KHz
 Spurious response.....more than 40dB
 Current drain at stanby.....50mA when the save mode is off
25mA when the save mode is on

TRANSMITTER

RF Output Power.....4.0W/1W
 Frequency Tolerance.....0.005%
 Harmonic Suppression.....more than 60dB
 Current Drain.....900 mA
 Modulation.....90%(5%)

SPECIFICATION WEATHER RECEIVER]]

CHANNELS

01	162.550	06	162.500
02	162.400	07	162.525
03	162.475	08	161.650
04	162.425	09	161.775
05	162.450	10	163.275

Sensitivity _____ 1.0uV for 20 db
 Audio Power _____ 400 mW
 Audio Load _____ 8 ohms
 Intermediate Frequency _____ 455Khz

SPECIFICATION FM RADIO RECEIVER

Frequency Range _____ 87.5 to 108 Mhz
 Sensitivity _____ 2.0uV
 Audio Power _____ 400 mW
 Audio Load _____ 8 ohms

NOTE :All features and specifications subject to change without notice.

SERVICE :

If it ever becomes necessary to return your unit for service:

Pack the unit in its oriiginal box and packing.Improper packing may result in damage during shipment.

Include a full describition of any problems.
 Include your telephone number.

You do not need to return accessory items(brackets,screws, power cord,antenna,etc) unless they maybe directly related to the problem.

Include a photocopy of the bill of sale or other proof of purchase showing the date of sale. This information must be included before warranty service can be considered.

CARE OF RECHARGEABLE NI-CAD BATTERIES

Always follow the battery manufactures recommendations for charging and disposing of ni-cad batteries.

The following is meant as general information regarding ni cad batteries.

1. Occasionally allow the batteries to fully discharge before recharging. Full discharge will be indicated by the low battery indicator coming on during receive operation.
2. Always allow the battery to fully charge before using.
3. The above will prevent the batteries from developing "memory" which effectively reduces their capacity.
4. It is better to store ni-cad batteries that are discharged rather than charged.