
REGENCY SCANNERS MODEL D310 OWNER'S MANUAL



SAFETY PRECAUTIONS

1. Be sure to read and follow all safety and operating instructions before operating your unit. You should also retain all instructions for future reference.
2. Adhere to any warnings or special instructions which may appear in the operating instructions or on the unit itself.
3. DO NOT operate the unit near water (e.g. near a sink, in a wet basement, or near a pool), and DO NOT expose the unit to rain as electrical shock or fire could result.
4. Place the unit where the ventilation openings are not obstructed. Warm locations such as near heating vents or radiators should be avoided.
5. The power cord should be routed so that it will not be walked on or pinched by items placed upon or against it. DO NOT run a power cord under carpeting. Connect the unit to a power source only of the type described in the operating instructions or as marked on the appliance.
6. The unit should be used only with a cart or stand that is recommended by the manufacturer and should be mounted to a wall or ceiling with manufacturer's advice.
7. If the unit is to be left unused for a long period of time, the power cord should be unplugged from the outlet.
8. DO NOT attempt to service the unit yourself beyond what is described in the operating instructions. All servicing should be referred to a qualified technician. Should one of the following occur, send the unit to a qualified technician:
 - a). The unit shows a marked change in performance.
 - b). Power cord has been damaged.
 - c). The unit has been dropped or enclosure damaged.
 - d). The unit has been exposed to rain.
9. The unit should be cleaned only as recommended by the manufacturer.
10. Care should be taken so that objects do not fall and liquids are not spilled into enclosure through openings.
11. If an outside antenna is used, be sure it is located away from power lines. The antenna should also be grounded to protect against voltage surges and built up static charges. Refer to Figure 1 below.

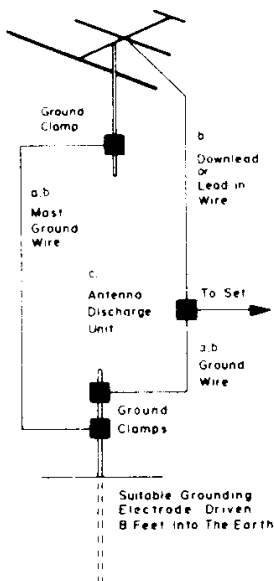


FIGURE 1

Example of antenna grounding as per National Electrical Code Instructions

- ^aUse No. 10 AWG copper-clad steel or bronze wire, or larger as ground wires for both mast and lead-in.
- ^bSecure lead-in wire from antenna to antenna discharge unit, and mast ground wire to house with stand-off insulators, spaced from 4 feet (1.22 meters) to 6 feet (1.83 meters) apart.
- ^cMount antenna discharge unit as closely as possible to where lead-in enters house.

PACKING LIST

- 1-Receiver Unit
- 1-AC Power Cord
- 1-DC Power Cord
- 1-Telescopic Antenna
- 1-Instruction Manual

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MAINTENANCE

All servicing should be referred to the Regency Customer Service Department.

UNAUTHORIZED ADJUSTMENTS MAY DAMAGE THE EQUIPMENT OR RESULT IN IMPROPER OPERATION AS WELL AS INVALIDATE THE WARRANTY.

Important

The sections on Preparation for Use and Operation should be thoroughly read before operating the unit. Reading the instructions will result in maximum performance and enjoyment of your radio.

WARNING: TO PREVENT FIRE OR SHOCK HAZARD, DO NOT EXPOSE THIS UNIT TO RAIN OR MOISTURE.

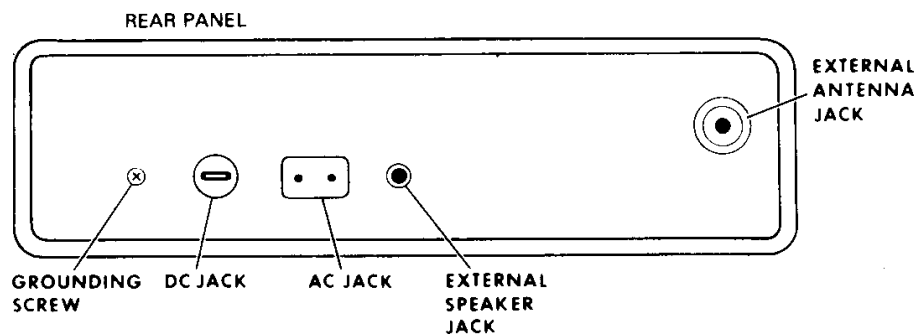
GENERAL DESCRIPTION

Your Regency D310 is a compact, programmable 30 channel, three band, FM monitor receiver for use at home or on the road. It is a double conversion, superheterodyne used to receive the narrow band FM communications in the amateur, public safety and business bands: 30-50, 144-174, and 440-512 MHz.

Sophisticated microprocessor-controlled circuitry eliminates the need for crystals. Instead, the frequency for each channel is programmed through the numbered keyboard similar to the one used on a telephone. A "beep" acknowledges contact each time a key is touched.

Any combination of two to thirty channels can be scanned automatically, or the unit can be set on manual for continuous monitoring of any one channel. In addition, the search function locates unknown frequencies within a band.

Other features include scan delay, priority and a bright/dim switch to control the brightness of the 9-digit Vacuum-Fluorescent display. The D310 can be operated on either 120VAC or 12VDC.



FRONT PANEL CONTROLS

Volume

When turned clockwise, the VOLUME knob provides power to the unit and increases the audio level to the desirable listening level.

Squelch

Eliminates background noise while the unit is scanning or searching until a transmission is received (see page 4).

Priority

Selects the priority feature when pushed up (ON) when in the SCAN or MANUAL mode (see page 11).

Display

Controls the brightness of the vacuum-fluorescent display. When pushed up (BRIGHT), the display is brightest for easier visibility in the daytime. When pushed down (DIM), the display dims for night use.

PROGRAM PANEL

The D310 has 16 touch-entry keys for easy operation.

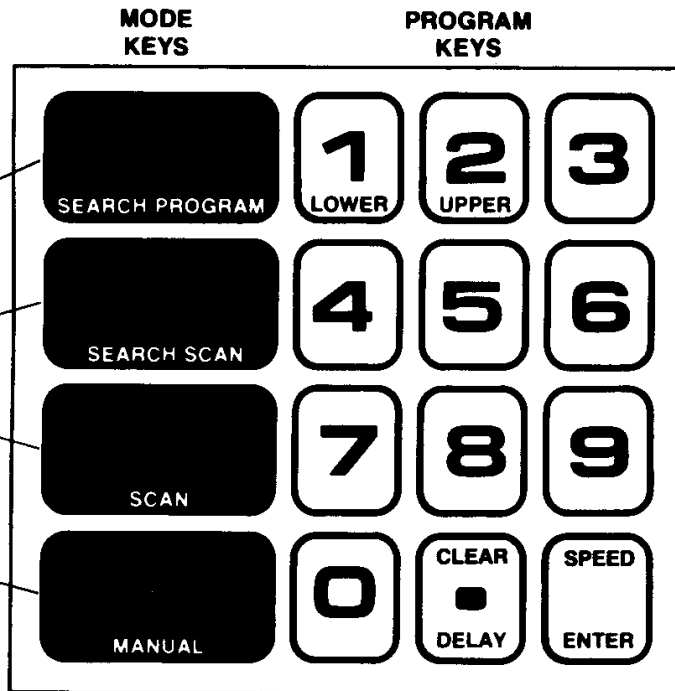
Mode Keys

Use this key prior to entering lower and upper frequencies into the search mode.

Starts the search process.

Puts the unit into the scan mode.



Provides for manual selection of any channel and is also used when entering frequencies.



Program Keys

The numbered keys are used for entering frequencies as well as selecting the channel number during programming.



NOTE: the  and  keys have two functions: they are number keys when entering frequencies, and are used to enter a frequency as the lower or upper limit to the search.

The following program keys provide special functions.



Provides the decimal point when entering frequencies and allows for a delay in the resumption of the SCAN or SEARCH processes (see pages 6, 10). Also used for clearing incorrect frequency numbers keyed in during programming (see pages 6, 10).



For entering a frequency into one of the 30 channels or as a search limit (see page 6). Also allows selection of two different scanning speeds (see page 8).

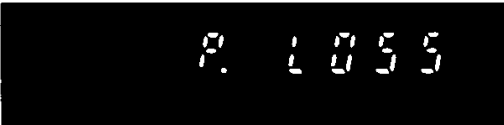
PREPARATION FOR USE

Before operating your D310, read the following directions carefully.

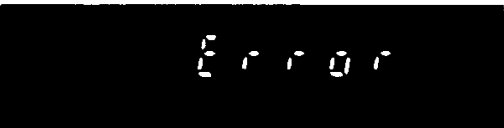
1. Unpack the unit from the carton and check for damage. If the unit is damaged, contact the place of purchase immediately as required by the warranty agreement.
2. Insert one end of the AC power cord into the AC jack provided on the rear of your scanner. See rear panel diagram on page 2. Plug the other end of the AC power cord into a 120VAC outlet (DC operation is covered on page 12).
3. Insert the telescopic antenna into the hole on top of the scanner. Tighten until secure.
4. Before turning on the receiver, turn the SQUELCH knob counterclockwise all the way.
5. Now turn the VOLUME knob clockwise to apply power to the receiver. A "click" indicates power is on. Further clockwise turning of the VOLUME knob increases the volume. Set the knob at approximately "12 o'clock" prior to programming.
6. To obtain proper scanning action, the squelch knob must be set properly. Turn CLOCKWISE until static is heard.

The proper adjustment is the point where the static just disappears. Turn the squelch knob COUNTERCLOCKWISE until this is achieved. Further clockwise turning of the squelch knob past this point may result in poor reception of weaker signals. During SCAN, however, the squelch knob may have to be turned slightly more counterclockwise to eliminate false stopping.

PROMPTING MESSAGES



Will be displayed upon initial power up or when unit is turned on after power has been disconnected for an extended period of time.



Frequency entered is not within a band (see specifications on page 13 for band limits) or search limits are not within the same band. Also if the upper search limit is lower than lower limit (see pages 9, 10).



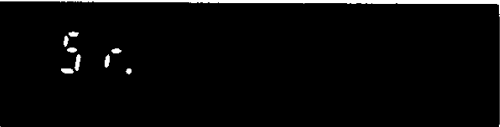
All channels have been locked out during scan mode (see page 8).



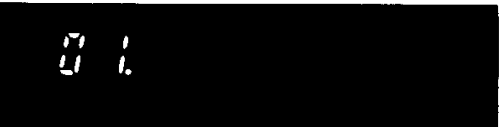
Blinking "Ch" — Frequency keyed in has been entered during programming but channel has not yet been selected (see page 6).



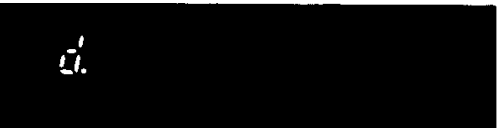
Blinking "LO" or "UP" — Frequency has been entered into search program but search limit (lower or upper) has not been selected (see page 9).



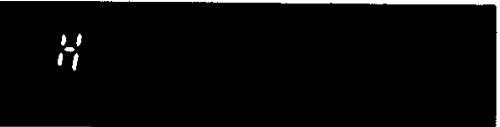
Indicates unit is in the search mode (see page 9).



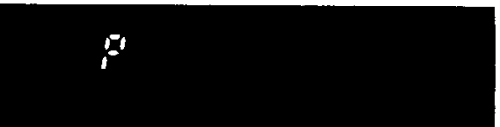
When "." appears following the channel number in the manual mode, it indicates that the channel is locked out of the scan sequence (see page 8).



Delay feature has been selected in either search or scan mode (see page 8).



An "H" in this position indicates HOLD while in SEARCH mode only (see page 10).



Priority feature has been selected (see page 11).


PROGRAMMING CHANNELS

The D310 has 30 channels available for your personal choice of frequencies. The sophisticated microprocessor-controlled circuitry eliminates the need for crystals and allows easy fingertip touch entry of all data.

Programming is done while in the MANUAL mode.

Example: Entering the frequency 465.250 into Channel 1.

Programming Channels (continued)

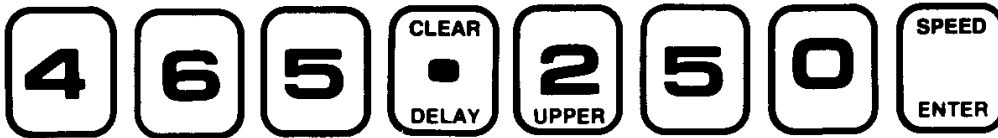
1. **PRESS:**  (a “beep” verifies contact). Each key will “beep” when touched.

Display:




NOTE: When programming the unit for the first time you will notice that the channels have been pre-programmed to 30 of the most popular frequencies. Entering your choice of frequencies will erase the pre-programmed frequencies.

2. **PRESS:**



After pressing “Enter”, “Ch” will blink indicating the unit is waiting for you to put the frequency into a specific channel.

NOTE: If incorrect frequency numbers have been keyed in, you may clear and

begin again by pressing the  key. If the decimal point had not yet been keyed in, press the CLEAR key twice.


3. **PRESS:**



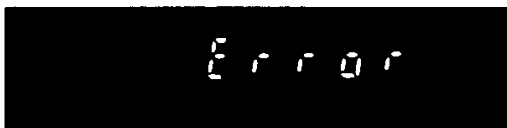
Display:



Frequency 465.250 is now in Channel 1. Repeat this procedure for each channel to be programmed. Whenever a frequency is programmed into a channel that was locked out in the scan sequence, that channel is now automatically locked in again.

IMPORTANT: Channels 1 through 9 require pressing  before pressing the channel number.

NOTE: If you enter an invalid frequency,




will appear in the display.


PRESS:




and begin again.

IMPORTANT: Each time  is selected for the purpose of entering a frequency, the scanning process immediately stops. The channel and frequency displayed in the digital readout will in no way be affected when you enter the new frequency, unless it is the one you wish to change.

Programming Hints

1. When programming numerous channels,  does not have to be pressed before keying in each frequency. Simply begin with step 2 on page 6 to enter additional frequencies.

2. If an invalid frequency entry is made ("Error" in readout), you may enter the

correct frequency without pressing  first.

3. If you wish to move a frequency from one channel to another such as from channel 1 to channel 8:

PRESS:



repeatedly or press and hold down until channel 1 is reached.

PRESS:



followed by



Now the frequency that was in channel 1 is in channel 8.

NOTE: The frequency is in both channels, 1 and 8. It has not automatically been erased from Channel 1. You must re-program channel 1 to change the frequency.

SCANNING

After you have programmed the frequencies of your choice, you can scan each one automatically when in the scan mode. To start the scanning process, press



If necessary, adjust the squelch control by turning counterclockwise until proper scanning action is obtained (see page 4).

Scanning (continued)

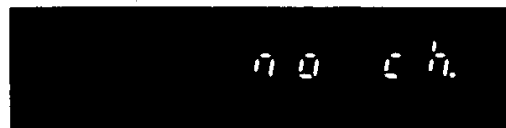
The display will show the NUMBER of each channel as it is scanned. If a transmission is found, the scanner will stop and the display will show both the channel number and the frequency:



Example:

At the conclusion of the transmission, scanning will resume automatically.

If, while scanning, you wish to omit a channel from the scan process, simply touch the channel's number. This is referred to as "locking out" a channel. A channel can only be locked out while the unit is in the scan mode (scanning or stopped on a channel). If all channels are locked out, the display will show:



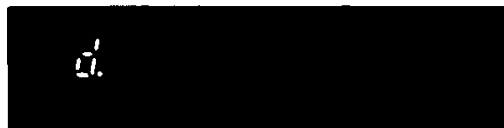
To put the channel(s) back in, simply touch the channel's number 01, 13, 28, etc.

Scan Delay

During the SCAN mode, you may want to delay resumption of the scan process in order to hear a reply that might otherwise be missed once the unit has gone on to



scan other channels. To do this, press WHILE THE UNIT IS SCANNING. A "d." will appear in the display:



Now, whenever a signal is received, the unit will stop on the channel, display the channel number and frequency and broadcast the message. At the conclusion of the message, the unit will wait approximately 2 seconds before scanning. To



de-activate DELAY, press again. The "d." will disappear from the display.

Scan Speed

During the SCAN mode, you may choose between two scan speeds. Normal



scan speed is approximately 15 channels per second. By pressing the key, you can slow down the scan speed to approximately 5 channels per second.

Manual Operation

If at any time you wish to monitor one channel continuously, press



. The unit will stop on a channel at random.



Press repeatedly, or press and hold down for at least one second, until the desired channel is reached. Any channel selected in manual that had previously been "locked out" during scan will have an "." after the channel number in the display.



Example:

SEARCHING

The D310 digital scanner includes a search function that enables you to locate new frequencies in addition to those you already know. It can locate active frequencies anywhere within a band.

Two frequencies (lower and upper) are used in the search mode. For example, to search for unknown active frequencies between 460.350 and 461.350 MHz:



The display will blink indicating the unit is waiting for you to select a limit.

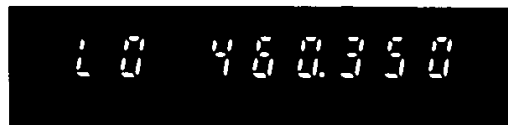
NOTE: If incorrect frequency numbers have been keyed in, you may clear and



begin again by pressing the key. If the decimal point had not yet been keyed in, press the CLEAR key twice.



Then, press:

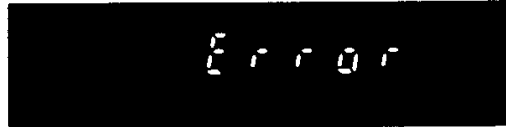


Display:

Frequency 460.350 is now entered as the lower limit to the search.

Searching (continued)

If you enter an invalid frequency,



will appear in the display. Simply re-enter a valid frequency.

PRESS:



Display:

Frequency 461.350 is entered as the upper limit to the search.

NOTE: Programming the SEARCH frequencies has no effect on the frequencies that have been programmed into SCAN or MANUAL channels 1 and 2.

NOTE: If incorrect frequency numbers have been keyed in, you may clear and

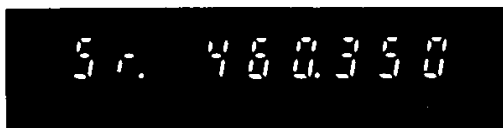


begin again by pressing the key. If the decimal point had not yet been keyed in, press the CLEAR key twice.



To start the search, press

The display will initially show "Srch." followed by the lower limit.



Example:

NOTE: Be sure squelch control is set to eliminate background noise.

The unit will now automatically sample every frequency within the limits you have selected. When an active frequency is found, the unit will stop searching, display the frequency and broadcast the message.

With the "d." in the display, the unit will wait approximately 4 seconds following the conclusion of the message before it resumes searching. If you wish



to select HOLD instead, simply press . An "H" replaces the "d." in the display. Now, when the unit finds a frequency during search, it will hold or stay on that frequency and not resume searching until you:



1) press **SEARCH SCAN** to step it off the frequency, or 2) press **CLEAR DELAY** to re-activate the 4 second delay.

NOTE: You cannot eliminate both DELAY and HOLD.

When the unit reaches the upper limit of the search it will automatically return to the lower limit and begin again. If at any time you wish to verify the limits you



have set for the search, press **SEARCH PROGRAM** (twice to see both limits).




If you decide to change modes (i.e. Manual or Scan) while the unit is searching, you may do so. The unit will remember at what frequency the search was



interrupted. To resume the search, press **SEARCH SCAN** and the unit will continue the search from that frequency.

You also have the option of entering frequencies found while searching directly into one of the 30 scan channels. For example: entering a frequency found in search into channel 5.

When the unit stops on an active frequency,

PRESS:    **NOTE: You must press “ENTER” while the Search is still stopped on the frequency.**

Now the frequency found in search is entered into channel 5. Other frequencies found while searching can be entered into any of the other scan channels the same



way. Press **SEARCH SCAN** to resume the search.

NOTE: In the Search mode it is recommended that you limit the search range to 1 MHz or less. Your chances of catching an unknown active frequency will be considerably greater since transmissions are usually short.

PRIORITY

This is a special feature that lets you program your favorite frequency to be sampled approximately once every two seconds and also to have it override calls on other channels. Channel 1 has been set aside for this function. Enter your favorite frequency into channel 1 then move the PRIORITY switch up (ON).

NOTE: PRIORITY is active only in the MANUAL or SCAN modes. The display will indicate priority with a “P”:

While the unit is in MANUAL or scanning, the display will blink each time channel 1 is sampled. Any audio will also be briefly interrupted. Should a transmission begin on channel 1, the unit will go immediately to it and receive the message. After the message, the unit will resume scanning or return to the other channel. To de-activate priority, push the switch down (OFF).

HOME INSTALLATION

Plug one end of the AC cord into the AC jack on the rear of the radio. Plug the opposite end of the cord into a 120 volt wall outlet. Your unit requires very little ventilation, however very warm locations such as near radiators or heating vents should be avoided.

Insert the telescopic antenna provided with the unit into the hole at the top left of the unit. Tighten until secure. The telescopic antenna will be adequate in areas of moderate signal strength. In areas of very low signal strength, it may be necessary to use a better antenna system for proper reception. An external antenna mounted as far above the ground as practical will greatly increase the signal strength. If it is determined that proper reception will require an external or outside antenna, it is suggested that a tri-band antenna that covers both VHF bands (30-50 MHz and 146-174 MHz) and UHF be used. An external antenna jack is located on the rear panel of your unit should you wish to use one (see page 2).

IMPORTANT: Be sure the antenna system you select is grounded to protect against voltage surges and built up static charges. In addition, the antenna should be located away from power lines.

For proper input matching, 50 ohm coaxial cable should be used. A Motorola type antenna plug (Cinch-Jones No. 13B or H. H. Smith No. 1200) will have to be installed on the receiver end of the cable in order to utilize the antenna socket located on the rear panel (see diagram on page 2).

MOBILE (12VDC) INSTALLATION

NOTE: Mobile reception of a POLICE frequency by UNAUTHORIZED personnel is ILLEGAL in some areas. It is the responsibility of the person making the installation to be sure that the user of this receiver is authorized or cleared through the local police department. Under no conditions can Regency Electronics, Inc., the manufacturer of this set, be held responsible for its unauthorized installation or use.

The receiver can be used in any car, truck, boat, etc. that has a 12 volt negative ground electrical system. Plug the DC cord into the red receptacle on the receiver's rear panel. Connect the opposite end of the red DC cord to the positive (+) battery terminal for direct wiring, or to accessory terminal if radio is to be

turned off with the ignition switch. A black ground wire included with the DC cord must be connected from the grounding screw on the rear panel of the radio (see page 2) to the nearest negative or ground point in the system.

If an antenna other than the telescopic one is desired for better reception, see your local Regency dealer.

MEMORY

Your Regency D310 is equipped with a permanent backup system. No batteries are required. A special capacitor retains stored frequencies for approximately 1 week during a power outage or storage.

NATIONAL WEATHER SERVICE

The National Weather Service provides a continuous (24-hour) broadcast of local and area weather conditions. These weather messages are repeated until the next or updated report is issued. The Weather Service has broadcast facilities in many metropolitan areas of the country.

If you are located within 25 or 30 miles of one of these cities, reception can usually be obtained with the telescopic antenna supplied with the unit. Your local Regency dealer can advise you about your specific antenna requirement.

Note: When set to automatic scan, the unit will stop and remain on the Weather Channel (because it broadcasts continuously). Thus, this channel should only be activated when you desire to hear the current weather report.

SPECIFICATIONS

(Subject to change without notice)

Frequency Ranges:

VHF (Low Band)	30-50 MHz
VHF (Amateur)	144-148 MHz
VHF (High Band)	148-174 MHz
UHF (Amateur)	440-450 MHz
UHF (Standard)	450-470 MHz
UHF (Extended)	470-512 MHz

Search Frequency Increments:

VHF	5 KHz
UHF	12.5 KHz

Sensitivity (12 DB Sinad; at tune-up)

LO VHF (30-50 MHz)	0.35 μ V
HI VHF (144-174 MHz)	0.45 μ V
UHF (440-512 MHz)	0.5 μ V

Sensitivity (12 DB Sinad; maximum)

LO VHF (30-33 MHz, 48-50 MHz)	0.7 μ V
LO VHF (33-48 MHz)	0.5 μ V
HI VHF (144-146 MHz, 170-174 MHz)	0.7 μ V
HI VHF (146-170 MHz)	0.5 μ V
UHF (440-450 MHz)	0.9 μ V
UHF (450-495 MHz)	0.7 μ V
UHF (495-512 MHz)	1.0 μ V

Specifications (continued)

Threshold Squelch	Less than 12 DB Sinad
Selectivity	± 7.5 KHz @ 6 DB ± 18 KHz @ 50 DB
Spurious Rejection (except Primary Image)	50 DB
Primary Image	
VHF (Low Band)	50 DB
VHF (High Band)	30 DB
UHF	12 DB
Modulation Acceptance	± 7.5 KHz
I.F. Frequencies	1st IF: 10.7 MHz; Crystal Filter 2nd IF: 455 KHz; Ceramic Filter
Reference Oscillator (Synthesizer)	Crystal Controlled
Scanning Rate	approx. 15 channels per second
Search Scanning Rate	
VHF	approx. 17 seconds per megaHertz
UHF	approx. 6 seconds per megaHertz
Scan Delay	
Normal	approx. 0.6 seconds
With Delay Option	approx. 2 seconds
Search Delay	approx. 4 seconds
Priority Sampling Rate	approx. 2 seconds
Audio Output	1W @ 10%, or less Distortion
Speaker (Internal)	16 Ohms, 2¼" Round
Speaker (External)	16 Ohms, min.
Power Requirements	110-130 VAC, 60 Hz; 12 Watts max. 11.5-15 VDC; 7 Watts max.
Display (Frequency & Message Readout)	12 Digits, 7-Segment VFD Type
UL Listed	Radio Receivers, Audio Systems and Accessories
FCC Certified	Part 15, Subpart C
Size	10½" Wide \times 3½" High \times 7" Deep
Weight	3¾ Lbs.

EXTERNAL SPEAKER

An external (or remotely mounted) 16 ohm speaker can be used by merely inserting the mating phone plug into the 3.5mm jack on the unit's rear panel (see rear panel diagram on page 2). A 16 ohm speaker is recommended for optimum performance. Do NOT use a 4-8 ohm speaker. The internal speaker is automatically disconnected when an external speaker is used.

BIRDIES

Every complex receiver has frequencies that are difficult or impossible to receive because of internally generated signals. These frequencies are called "birdies". The following is a partial list of such frequencies that may occur in the D310.

Low VHF (30-50 MHz)	High VHF (144-174 MHz)	UHF (440-512 MHz)
30.730	145.600	478.100
32.100	153.675	
33.600	156.800	
39.200	163.920	
40.980		
44.800		
46.360		
46.385		

In addition, there are other frequencies that are difficult to receive because of interference from externally generated signals, such as T.V. stations, other receivers nearby and various other sources of man-made noise. These frequencies vary from location to location and are therefore impossible to list. When this type of interference is encountered, it can sometimes be eliminated by moving the Squelch Control knob counterclockwise (increase squelch action).

TROUBLESHOOTING GUIDE

NOTE: Please perform the simple checks indicated for improper operation before returning the unit for service.

TROUBLE	CHECK
No display, no sound	Volume knob should be turned clockwise. Power Cord (AC or DC Connection). See also specifications for power requirements. DC cord — Replace 1.5 AMP fuse if blown.
Display, no sound	Volume Control setting — check by turning clockwise.
No reception (no station heard)	Squelch Control setting — see page 4. Antenna not installed. Incorrect frequencies entered.
Weak or poor reception	Antenna should be fully extended. Stations too far away; external antenna may be needed. See page 12. Incorrect frequencies entered.
Does not scan	If in Manual mode, press SCAN. Channels locked out — see page 8. Squelch control setting — see page 4.
Search Scan stops on channels without stations	Birdies — see page 14.
“Error” appears in readout	Invalid frequency entered — see pages 6, 10.
“P. LOSS” appears in readout	Initial power-up, proceed with programming. Power failure — no memory battery or battery low in voltage.

NATIONAL FREQUENCIES

The following is a partial list of the common public service band frequencies as allocated by the FCC. You will not be able to pick up activity on every frequency listed here. Only those frequencies assigned to the services which are applicable to your area will be received. We advise you to compile your own frequency list for your monitoring area.

Abbreviations

Automobile Emergency	Auto Emerg.
Business	Bus.
Bureau of Reclamation	Bur. Reclam.
Forestry-Conservation	For.-Cons.
Forest Products	For. Prod.
Government	Govt.
Highway Maintenance	Hwy.
Local Government	Local Govt.
Manufacturers	Manu.
Mobile Telephone	Mob. Tel.
Motion Picture	Mot. Pic.
National Weather Service	NWS
Petroleum Industry	Pet.
Power Utilities	Power
Railroad	RR
Relay Press	Rel. Press
Remote Broadcast	Remote Broad.
Special Emergency	Spec. Emerg.
Special Industrial	Spec. Ind.
Telephone Maintenance	Tel. Maint.
Weather	WX

Frequency — MHz

Service or Allocation

LOW VHF BAND 30-50 MHz

30.00-30.56	Government
30.58-30.64	Special Industrial
30.66-31.24	Pet., For.-Cons., For. Prod., Bus.
31.26-31.98	Spec. Ind., For.-Cons.
32.00-33.00	Government
33.02-33.16	Spec. Ind., Hwy., Spec. Emerg., Bus.
33.18-33.38	Petroleum
33.42-33.98	Fire
34.00-35.00	Government
35.02-35.18	Business
35.22-35.66	Mobile Telephone, Paging
35.70-35.98	Special Industrial, Business
36.00-37.00	Government
37.02-37.42	Police, Local Government
37.44	Forest Products
37.46-37.86	Power
37.88-37.98	For. Prod., Hwy., Spec. Emerg.
38.00-39.00	Government
39.02-39.98	Police, Local Government
40.00-42.00	Government
42.02-42.94	Police
42.96-43.18	Special Industrial, Business
43.22-43.68	Mobile Telephone, Paging
43.70-44.60	Motor Carrier (Buses, Trucks)
44.62-45.06	Police, For.-Cons.
45.08-45.66	Police, Local Government
45.68-46.04	Police, Hwy., Spec. Emerg.
46.06-46.50	Fire
46.52-46.58	Local Government
46.60-47.00	Government
47.02-47.40	Highway Maintenance
47.42	Red Cross
47.44-47.68	Spec. Ind., Spec. Emerg.
47.70-48.54	Power
48.56-49.58	Pet., For. Prod., Spec. Ind.
49.60-50.00	Government

HIGH VHF BAND 144-174 MHz

144.000-148.000	Amateur
148.150	Civil Air Patrol
148.200-150.800	Government
150.815-151.475	Bus., Auto Emerg., For.-Cons., Hwy.
151.490-151.595	Special Industrial
151.625-151.955	Business
152.000-152.255	Mobile Telephone
152.270-152.480	Business, Taxi
152.495-152.855	Mobile Telephone, Paging

Frequency — MHz

Service or Allocation

HIGH VHF BAND (Continued)

152.870-153.035	Remote Broad., Spec. Ind., Mot. Pic.
153.050-153.380	Manu., Pet., For. Prod.
153.410-153.710	Power, Pet., For. Prod.
153.755-154.115	Fire, Local Government
154.130-154.445	Fire
154.450-154.625	Bus., Pet., Spec. Ind.
154.650-155.145	Police, Local Government
155.160-155.400	Police, Spec. Emergency
155.415-156.030	Police, Local Government
156.045-156.240	Police, Hwy. Maintenance
156.275-157.450	Marine
157.470-157.500	Auto Emergency
157.530-157.740	Business, Taxi
157.755-158.115	Mobile Telephone, Paging
158.130-158.460	Manu., Power, Pet., For. Prod.
158.475-158.715	Mobile Telephone
158.730-158.970	Police, Local Government
158.985-159.210	Police, Hwy. Maintenance
159.225-159.465	Forestry-Conservation
159.495-160.200	Motor Carriers (Buses, Trucks)
160.215-161.565	Railroad
161.600-161.625	Marine
161.640-161.760	Marine, Remote Broadcast
161.775-162.025	Marine
162.026-162.175	Bureau of Reclamation
162.400	NWS (WX-2)
162.475	NWS (WX-3)
162.550	NWS (WX-1)
163.125	Indian Affairs
163.175	Bureau of Reclamation
163.250	Special Emergency
163.275	National Weather Service
163.385-163.975	Military, Government
164.025-164.075	U.S. Coastal & Geodetic Survey
164.175-165.190	Bur. Reclam., Government
166.250	Fire
169.300	Federal Aviation Administration
169.425-169.525	Bus., Power, Pet., For. Prod., Spec. Ind., RR
170.150	Fire
170.200-170.220	U.S. Coastal & Geodetic Survey
170.225-170.325	Bus., Power, Pet., For. Prod., Spec. Ind., RR
170.425-170.475	Forestry-Conservation
170.575	Forestry-Conservation
171.025-171.125	Bus., Power, Pet., For. Prod., Spec. Ind., RR

HIGH VHF BAND (Continued)

171.475-171.575	Forestry-Conservation
171.825-171.925	Bus., Power, Pet., For. Prod., Spec. Ind., RR
172.225-172.275	Forestry-Conservation
172.375	Forestry-Conservation
172.775	National Parks
173.025	National Weather Service
173.075	U.S. Coastal & Geodetic Survey
173.200-173.400	Police, Power, Pet., For. Prod., Mot. Pic., Rel. Press, Spec. Ind., Manu., Bus., L. Govt.

STANDARD UHF BAND 440-470 MHz

440.000-450.000	Amateur
450.050-450.950	Remote Broadcast
451.025-451.150	Power Utilities
451.175-451.750	Power, Pet., For. Prod., Manu., Tel. Maint.
451.775-452.025	Special Industrial
452.050-452.500	Power, Pet., For. Prod., Spec. Ind., Manu., Tel. Maint.
452.525-452.600	Auto Emergency
452.625-452.950	Power, Pet., For. Prod., Spec. Ind., Manu., Tel. Maint., Motor Carrier, R.R.
452.975-453.000	Relay Press
453.025-454.000	Power, Pet., For. Prod., Spec. Ind., Manu., Tel. Maint., Local Govt., Police, Fire, Hwy., For.-Cons.
454.025-454.650	Mobile Telephone
455.025-454.925	Remote Broadcast
456.025-456.150	Power Utilities

STANDARD UHF BAND (Continued)

456.175-456.700	Power, Pet., For. Prod., Manu., Tel. Maint.
456.725-457.025	Special Industrial
457.050-457.500	Power, Pet., For. Prod., Spec. Ind., Manu., Tel. Maint., Motor Carrier, RR, Taxi
457.525-457.600	Business
457.625-457.950	Power, Pet., For. Prod., Spec. Ind., Manu., Tel. Maint., Motor Carrier, RR
457.975-458.000	Relay Press
458.025-459.000	Power, Pet., For. Prod., Spec. Ind., Manu., Tel. Maint., Local Govt., Police, Fire, Hwy., For.-Cons., Spec. Emerg.
459.025-459.650	Mobile Telephone
460.025-460.625	Power, Pet., For. Prod., Spec. Ind., Manu., Tel. Maint., Police, Spec. Emerg.
460.650-462.175	Business
462.200-462.450	Manufacturers
462.475-462.525	Power, Pet., For. Prod., Manu., Tel. Maint.
462.750-462.925	Business
462.950-463.175	Police, Special Emergency
463.200-465.000	Business
465.025-465.625	Power, Pet., For. Prod., Spec. Ind., Manu., Tel. Maint., Police
465.650-467.175	Business
467.200-467.450	Manufacturers
467.475-467.525	Power, Pet., For. Prod., Manu., Tel. Maint.
467.750-467.925	Business
467.950-468.175	Police, Special Emergency
468.200-469.975	Business

EXTENDED UHF BAND 470-512 MHz

A number of the larger cities or metropolitan areas may utilize some of the lower UHF TV channels for land mobile radio services. UHF TV channels 14 through 20 are re-allocated in these cities as follows:

City/Area	Channel	Frequency Range
Boston	14, 16	470-476 MHz, 482-488 MHz
Chicago	14, 15	470-476 MHz, 476-482 MHz
Cleveland	14, 15	470-476 MHz, 476-482 MHz
Dallas/Fort Worth	16	482-488 MHz
Detroit	15, 16	476-482 MHz, 482-488 MHz
Houston	17	488-494 MHz
Los Angeles	14, 20	470-476 MHz, 506-512 MHz
Maryland	18	494-500 MHz
Miami	14	470-476 MHz
New York	14	470-476 MHz
Northeastern		
New Jersey	15	476-482 MHz
Oakland	17	488-494 MHz
Philadelphia	19, 20	500-506 MHz, 506-512 MHz
Pittsburgh	14, 18	470-476 MHz, 494-500 MHz
San Francisco	16	482-488 MHz
Washington, D.C.	17	488-494 MHz

Each 6 MHz segment (or channel) has the same allocation pattern as illustrated below for channel 14:

Frequency — MHz	Service or Allocation
470.0125-470.2875	Mobile Telephone
470.3125-471.1375	Public Safety
471.1625-471.2875	Reserve Pool A
471.3125-471.4125	Power, Telephone Maintenance
471.4375-471.6375	Special Industrial
471.6625-471.7875	Reserve Pool A
471.8125-472.3375	Business
472.3625-472.4375	Taxi
472.4625-472.7875	Motor Carrier, RR, Auto Emerg.
472.8125-472.9875	Pet., For. Prod., Manu.
473.0125-473.2875	Mobile Telephone
473.3125-474.1375	Public Safety
474.1625-474.2875	Reserve Pool A
474.3125-474.4125	Power, Telephone Maintenance
474.4375-474.6375	Special Industrial
474.6625-474.7875	Reserve Pool B
474.8125-475.3375	Business
475.3625-474.4375	Taxi
475.4625-475.7875	Motor Carrier, RR, Auto Emerg.
475.8125-475.9875	Pet., For. Prod., Manu.

REGENCY SCANNERS LIMITED WARRANTY

1. The warranty applies to the original or subsequent owners of the product for a period of 1 year from the original purchase date.
2. We agree to repair or replace all parts showing defects in material or workmanship.
3. Warranty service will be provided free of charge if unit is delivered to us intact, transportation charges prepaid, accompanied by dated proof of purchase within one year of the date of sale to the original purchaser.
4. The warranty does not apply to units subject to misuse, neglect, accidents, incorrect wiring not our own, improper installation, or units used in violation of the instructions furnished by us. Nor does the warranty apply to units: damaged by lightning, excess current, repaired or altered outside the factory, or units with altered or removed serial numbers.
5. To have your unit serviced under the warranty return it, freight prepaid, with proof of purchase receipt, to:
Customer Service Department
Regency Electronics, Inc.
7707 Records St.
Indianapolis, IN 46226
Only factory personnel are authorized to perform warranty service.
NOTE: When returning unit for warranty service, do NOT include any accessories (antenna, power cord, memory battery, etc.).
6. This warranty gives you specific legal rights, and you may also have other rights which vary from state to state.