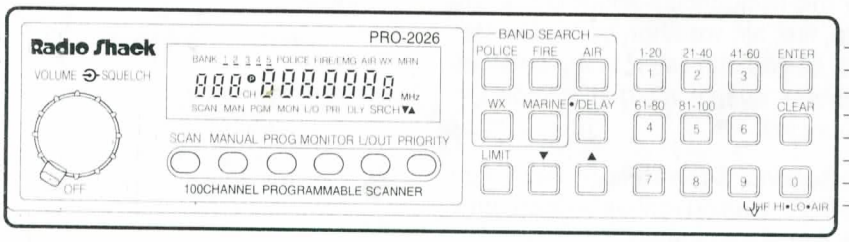
PRO-2026 100-Channel Mobile Programmable Scanner

OWNER'S MANUAL

Please read before using this equipment



Cat. No. 20-148B

Radio Shack®

FEATURES

Your new Radio Shack PRO-2026 100-Channel Mobile Programmable Scanner lets you in on all the action! The PRO-2026 gives you access to more than 30,000 frequencies used by police departments, fire departments, ambulances, aircraft, ham radio operators, and transportation services. You can store up to 100 frequencies into your scanner's channels, and you can scan and change your channel selection at any time.

The secret to your scanner's ability to scan so many channels so easily is its custom-designed microprocessor—a tiny, built-in computer. The microprocessor also gives your scanner these special features:

Service Search—lets your scanner scan the frequencies allocated to the police, fire, air, weather, or marine services, so you can listen to the services you prefer, even if you do not know the frequencies.

Two-Second Scan Delay—helps you keep from missing replies on a channel while you are scanning.

Lock-Out Function—limits the scan by skipping over a specified channel or group of channels.

Five Memory Banks—let you group channels so that you can easily scan related frequencies, such as the various frequencies used by services in different cities.

Priority Channel—instantly tunes the scanner to a selected channel whenever there is a transmission on the frequency.

Monitor Memory—lets you save a frequency located during a frequency search so you can easily store it in a channel.

Memory Backup—keeps the channel frequencies stored in your scanner's memory for up to 14 days if a power failure occurs.

Included Stand—makes it easy to place and use the scanner on a desk or table.

Two Power Sources—let you power your scanner from a vehicle's battery or from AC power (with an optional AC adapter).

Your scanner covers all of these bands:

- 29-29.7 MHz (10-Meter Ham Radio)
- 29.7-50 MHz (VHF Lo)
- 50-54 MHz (6-Meter Ham Radio)
- 108-136.975 MHz (Aircraft)
- 137-144 MHz (Government)
- 144-148 MHz (2-Meter Ham Radio)
- 148-174 MHz (VHF Hi)
- 406-420 MHz (Government)
- 420-450 MHz (Ham Radio)
- 450-470 MHz (UHF Lo)
- 470-512 MHz (UHF TV)
- 806-823.9375 MHz (UHF Hi)
- 851.0000-868.9375 MHz (UHF Hi)
- 896.1125-956 MHz (UHF Hi)

Note: Mobile use of scanners might be unlawful or require a special permit in certain areas. Check with your local authorities for current regulations. Radio Shack assumes no responsibility for the use of this scanner in such areas.

For your permanent records, please record your scanner's serial number in the space below. You can find the serial number on the back panel.

Serial Number: _____

FCC NOTICE

Your scanner might cause radio or TV interference, even when it is operating properly. To determine whether your scanner is causing the interference, turn off your scanner. If the interference goes away, your scanner is causing the interference. Try to eliminate the interference by:

- Moving your scanner away from the receiver
- Contacting your local Radio Shack store for help

If you cannot eliminate the interference, the FCC requires that you stop using your scanner.

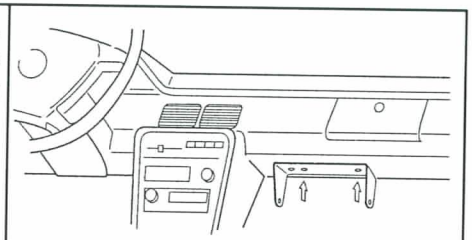
CONTENTS

PREPARATION

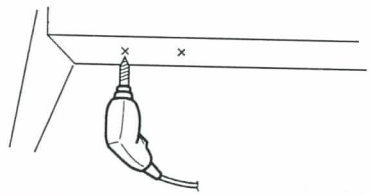
MOUNTING THE SCANNER

The most common mounting location for this scanner is under your vehicle's dashboard. When choosing a location, be sure the scanner is easy to reach, all cables are clear of the vehicle pedals or other moving parts, and the scanner is not directly in front of heating vents. Also, be sure that the scanner is located so that the passengers have enough leg room.

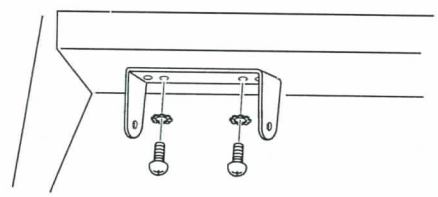
1. Choose a mounting location. Then, use the mounting bracket as a template to mark the positions for the mounting screw holes.



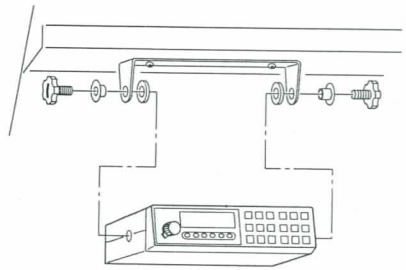
2. In the marked positions, drill holes slightly smaller than the supplied screws. Take care not to drill into or damage objects behind the mounting surface.



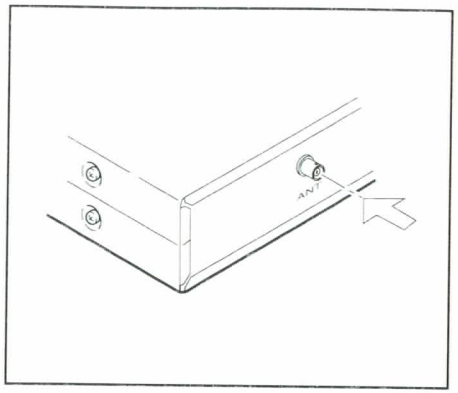
3. Attach the bracket using the supplied self-tapping screws and lock washers, as shown.



4. Attach the scanner to the bracket using the mounting knobs.



CONNECTING THE ANTENNA



Purchase the magnet-mount mobile all-band antenna (Cat. No. 20-012) and Motorola-to-BNC plug adaptor (Cat. No. 278-117). Or, you can use a multi-band outdoor antenna. Radio Shack stores sell a complete line of multi-band outdoor antennas for your specific needs. Follow the instructions provided with the antenna for installation.

To install the mobile antenna:

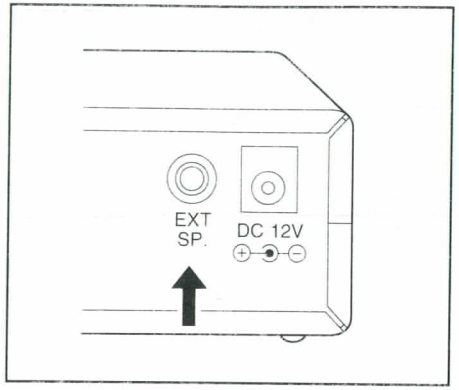
- As high as possible on the vehicle
- In a vertical position

After you mount the antenna, route the antenna's cable to the scanner and connect the cable to the scanner's **ANT** jack.

Cautions:

- Do not run the cable over sharp edges or moving parts that could damage the cable.
- Do not run the cable next to power cables or other antenna cables.
- Do not run the cable through areas in the engine compartment that produce extreme heat.

USING AN EXTERNAL SCANNER SPEAKER



You can connect an external speaker to the scanner. Use a speaker with a 1/8-inch plug, such as Radio Shack Cat. No. 21-549. Insert the plug into the **EXT SP** jack on the back of the scanner.

CONNECTING TO POWER

You can power your scanner from the following sources:

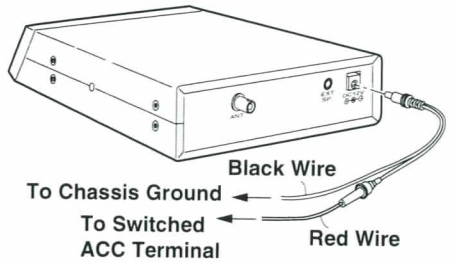
- Your vehicle's battery (using the supplied power cord)
- A standard AC outlet (using an optional AC adapter)

Connecting to Vehicle Battery Power

Note: Mobile use of scanners might be unlawful or require a special permit in certain areas. Check with your local authorities for current regulations.

We designed your scanner for connection to 12-volt power systems.

Note: The following illustrations are for vehicles with a negative ground electrical system. If your vehicle has a positive ground electrical system, reverse the connections for the red and black wires in the illustration and steps below.



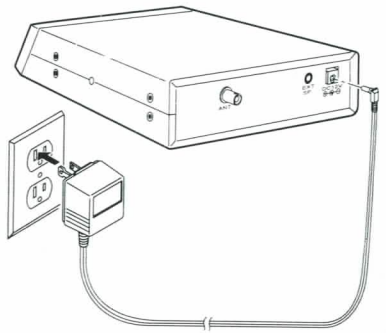
1. Connect the supplied power cord's small barrel plug into the DC 12V jack on the scanner's back panel.
2. Connect the red wire to a terminal that provides power only when you turn the ignition to ON or ACC.
3. Connect the black wire to a metal part of the vehicle's frame (chassis ground).

Note: Modern vehicles have many non-metallic parts. If you connect the black wire to a non-metallic part, or if a nonmetallic part insulates the wire from the vehicle's chassis, the scanner does not work.

Using AC Power

To power the scanner from an AC outlet, you need an AC adapter (not supplied), such as Cat. No. 273-1652.

Caution: You must use an adapter that supplies 12 volts DC power and delivers at least 500 milliamps. Its center tip must be set to positive, and its plug must properly fit the scanner's DC 12V jack. Using an adapter that does not meet these specifications could damage the scanner or the adapter.



1. Attach the green barrel plug to the adapter's cord to read TIP POS.
2. Insert the adapter's small barrel plug into the scanner's DC 12V jack.
3. Plug the adapter into a standard AC outlet.

USING THE FOLDING STAND

When you put the scanner on a desk, use the folding stand to elevate the front of the scanner. Be sure you fold the stand out completely so you do not accidentally damage the scanner.

A LOOK AT THE DISPLAY

The display has several abbreviated indicators that show the scanner's current operating mode.

The above illustration shows your scanner's display with all indicators turned on. The following is a brief explanation of the indicators.

BANK—bars to the right of this indicator show which memory banks are on in the scan mode. See "Understanding Channel-Storage Banks and Search Banks."

Numbers 1-5—represent the 5 memory banks.

POLICE, FIRE/EMG, AIR, WX, MRN—appears when you press the corresponding **BAND SEARCH** key. See "Using the Band Search Keys."

CH—digits preceding this indicator show the current channel.

P—appears when you tune to a priority channel.

MHz—digits preceding this indicator show which frequency you tuned the current channel to.

SCAN—appears when the scanner is in the scan mode.

MAN—appears when the scanner is in the manual channel-selection mode.

PGM—appears when the scanner is ready for you to program. See "Programming the Scanner."

MON—appears when the scanner is in the monitor mode. See "Moving a Frequency from Monitor Memory to a Channel."

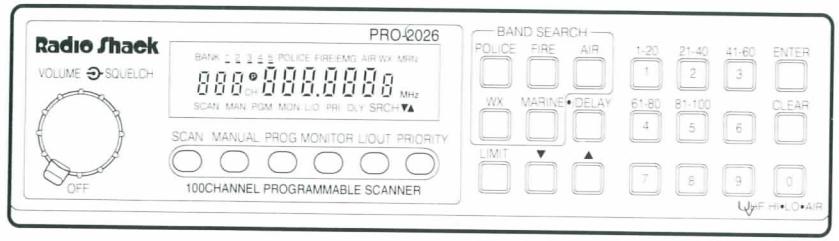
L/O—appears when you lock a channel out of the scan mode. See "Locking Out Channels."

PRI—appears when you turn on the priority channel feature. See "Using the Priority Feature."

DLY—appears when the scanner is on a channel that you have programmed with the delay feature. See "Using the Delay Feature."

SRCH—appears during a limit search. See "Searching for Active Frequencies."

A LOOK AT THE KEYBOARD



The keys on your scanner might seem confusing at first, but a quick glance at this page should help you understand each key's function.

SCAN—allows your scanner to scan through the channels you programmed.

MANUAL—stops the scanning and allows you to directly enter a channel number.

PROG—use this to program frequencies into channels.

MONITOR—accesses the monitor memory. See "Moving a Frequency from Monitor Memory to a Channel."

L/OUT—turns on the lock-out function. See "Locking Out Channels."

PRIORITY—selects the priority channel.

BAND SEARCH—lets your scanner scan the preprogrammed frequencies in the police, fire, air, weather, or marine band so that you have access to the bands even if you do not know the frequencies.

./DELAY—enters the decimal point necessary when programming frequencies or turns the delay feature on or off for the current channel. See "Using the Delay Feature."

LIMIT, ▲ , and ▼ —search for active frequencies within a specified range. See "Searching for Active Frequencies."

Number Keys—each key has a single-digit label and a range of numbers printed above it. The single digits refer to the number of a channel or frequency entered. The range of numbers (21-40, for example) shows the channels that make up a memory bank. See "Understanding Channel-Storage Banks and Search Banks."

ENTER—enters the frequency when you program channels.

CLEAR—deletes an incorrect entry.

UNDERSTANDING BANKS

Your scanner can store up to 100 frequencies. You store each frequency in either a permanent memory, called a channel, or a temporary memory, called a monitor memory. The scanner has 100 available channels and one monitor memory.

To make it easier to identify and select the channels you want to listen to, the 100 available channels are divided into 5 groups, each of which contains 20 channels. These channels are represented by labels located above the single-digit number keys on your keyboard. Each group of channels is called a bank.

Perhaps the best way to explain the use of memory banks is through a practical example.

Suppose you want to monitor four different agencies: the police department, fire department, ambulance service, and airport. As a rule, each agency has several different frequencies they use for different purposes.

For example, the police department might have four frequencies—one for each part of town. To make it easier to quickly determine which agency you are listening to, you could program the police department frequencies starting with Channel 1 (Bank 1). Then, start the fire department frequencies with Channel 21 (Bank 2), the ambulance service on Channel 41 (Bank 3), and the airport frequencies on Channel 61 (Bank 4).

Now, when you want to listen to only fire department calls, it is simple to turn off Banks 1, and 3 through 5 so that you only scan Bank 2. You can also use this feature to group the channels by city or county. See "Programming the Scanner."

Your scanner also has one monitor memory. Use this memory to temporarily store a frequency, while you decide whether to save it in one of the permanent channels. This is handy for quickly storing an active frequency when you are searching through an entire band. See "Searching for Active Frequencies" and "Moving a Frequency from Monitor Memory to a Channel."

OPERATION

INITIALIZING/RESETTING THE SCANNER

The scanner might not operate the first time you install and turn it on. It also might stop operating if the batteries become too low or if the scanner is dropped or subjected to a physical or electrical shock. If this happens, follow these steps:

Caution: This procedure clears all the information you have programmed into the scanner. Use this procedure only when you are sure your scanner is not working properly.

1. Turn off the scanner.
2. While you press and hold down 2 and 9, turn on the scanner.

SETTING THE VOLUME AND SQUELCH

Use **SQUELCH** to decrease the scanner's sensitivity to weak signals. This allows the scanner to receive only the strongest transmissions.

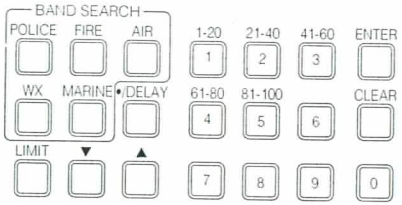
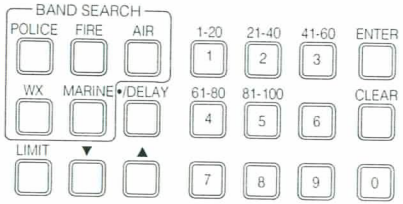
1. Turn **SQUELCH** and **VOLUME** fully counterclockwise.
2. Turn **VOLUME** clockwise until you hear a hissing sound.
3. Slowly turn **SQUELCH** clockwise until the hissing stops.

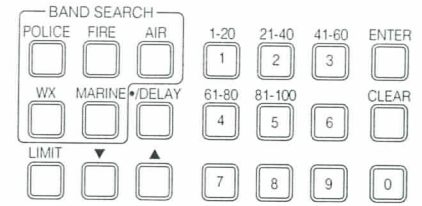
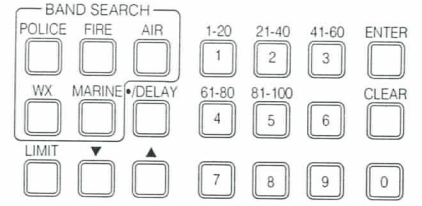
If you want to listen to a weak or distant station, turn **SQUELCH** counterclockwise. You might hear hissing between transmissions.

STORING FREQUENCIES INTO CHANNELS

A good reference for active frequencies is *Radio Shack's Police Call Directory Including Fire and Emergency Services*. We update this directory yearly, so be sure to get a current one. Also, refer to "Reception Notes," "Searching for Active Frequencies," and "Using the Band Search Keys" in this manual.

Follow these steps to store a frequency in a channel.

1. Turn **VOLUME** clockwise to turn on the scanner.	
2. Press **MANUAL**, enter the channel number you want to program, and press **PROG**. `PGM` appears on the display and shows that your scanner is in the programming mode.	
3. Use the keypad to enter a frequency.	
4. Press **ENTER** to store the frequency. If you made a mistake in Step 3, `Error` appears on the display and the scanner sounds three beeps. To clear the display, press **CLEAR**. Then, proceed again from Step 3. Your scanner automatically rounds the entered frequency to the nearest valid frequency. For example, if you try to enter a frequency of 151.473, your scanner accepts it as 151.475.	

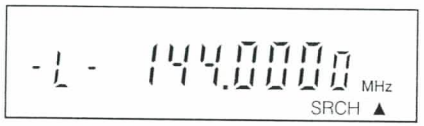
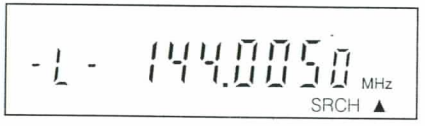
5. If you want your scanner to pause after each transmission before scanning to the next channel, press **./DELAY** until `DLY` appears on the display. See "Using the Delay Feature."	
6. To program more channels, repeat Steps 2 through 5. If you want to program the next channel in sequence, simply press **PROG** and repeat Steps 3 through 5.	

SEARCHING FOR ACTIVE FREQUENCIES

Use the following procedure to search for a transmission. This procedure is helpful if you do not have a reference to frequencies in your area. Also see "Guide to the Action Bands."

Follow these steps to search within a specific range of frequencies.

1. Press **PROG**.	
2. Press **LIMIT**.	
3. Enter the lower limit of the frequency range you want to search. Then, press **ENTER**.	

4. Press **LIMIT**.	
5. Enter the upper limit of the frequency range. Then, press **ENTER**.	
6. Press ▼ to search from the upper limit down to the lower limit. Or, press ▲ to search from the lower limit up to the upper limit.	
7. When the scanner stops on a transmission, you can store that frequency in the monitor memory by pressing **MONITOR**. This replaces the previously stored monitor frequency.	
8. To continue the search, press ▲ or ▼.	

Note: Press **./DELAY** until `DLY` appears, to make the scanner pause 2 seconds after a transmission before proceeding to the next frequency. Otherwise, the scanner begins to scan again as soon as the transmission ends. See "Using the Delay Feature."

USING THE SERVICE SEARCH KEYS

You can scan for police, fire, air, weather, or marine transmissions even if you do not know the frequencies being used in your area. The scanner is programmed with all frequency ranges allocated to these services. To use this feature, press the desired **BAND SEARCH** key. Then, press ▲ or ▼ to begin scanning.

When the scanner stops on a transmission, you can store that frequency in the monitor memory by pressing **MONITOR**.

To continue the scan, press ▲ or ▼

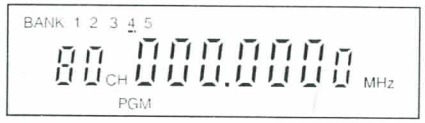
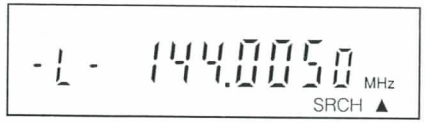
Notes:

- The priority and lock-out features do not function in this mode.
- The delay feature is programmed band by band in this mode.
- The 800 and 900 MHz bands are allocated to trunked services. This means that the police and fire departments share the frequencies with other services. The scanner might stop on transmissions by other services in these bands.
- Because there are many different frequency ranges allocated to fire and police departments, it takes several minutes to search all frequencies when you scan for these services.

MOVING A FREQUENCY FROM MONITOR MEMORY TO A CHANNEL

To listen to the frequency stored in the monitor memory, press **MANUAL**, and press **MONITOR**.

To copy the frequency from monitor memory to a channel, follow these steps.

1. Press **MANUAL**, the channel number you want to store the monitor frequency in, and **PROG**.	
2. Press **MONITOR**.	
3. Press **ENTER**. The scanner stores the frequency in the selected channel.	
4. If you want to return to a frequency search after this procedure, press **LIMIT**, followed by either ▲ or ▼ .	

SCANNING THE CHANNELS

To begin scanning the channels, press **SCAN**. Your scanner scans through all the channels (except the ones you have locked out) that are contained in the banks you have turned on. Be sure to read the following sections to get the full benefit from the special features of your scanner.

USING THE DELAY FEATURE

Many agencies use a two-way radio system that might have a period of two or more seconds between a query and a reply. To keep from missing a reply, program a delay on the channels you identify as operating this way.

To program a delay, select the channel and press **./DELAY** so that `DLY` appears on the display. Now, when your scanner scans through channels, it pauses for 2 seconds after the completion of each transmission on that channel before it resumes scanning.

Some radio systems that operate at 800 MHz and above use a special "trunked" system. In this system, the transmitter selects an available frequency each time the operator keys the radio. Therefore, it is possible for the query to be on one frequency and the reply on another. To increase the possibility of hearing the full reply, do not set **DELAY**. The scanner begins to scan immediately when the first transmission ends.

For immediate scan resume, select the channel and be sure that `DLY` is not on the display. If `DLY` appears on the display, press **./DELAY** to turn off scan delay for that channel.

LOCKING OUT CHANNELS

You can make your scanner scan more efficiently by locking out channels. Manually select the channel and press **L/OUT** so that `L/O` appears on the display. This is handy for locking out channels that have a continuous transmission, such as a weather channel, or channels you have not yet stored frequencies into. You can still listen to a locked-out channel by manually selecting it.

To remove the lock-out from a channel, manually select the channel and press **L/OUT** so that `L/O` disappears from the display.

Note: You can lock out all but one channel in each bank.

To release all the locked-out channels press the **L/OUT** key for about 3 seconds until the scanner beeps.

TURNING THE BANKS ON AND OFF

You can set the scanner to skip over complete banks of channels.

To turn banks on and off, first press **SCAN**.

To turn on a bank, press the number key that corresponds to that bank until the bank indicator (a small bar) appears under the bank number.

The scanner can scan all the channels within that bank (except the ones that you have locked out).

To turn off a bank, press the number key that corresponds to that bank until the bank indicator disappears from under the bank number.

The scanner can not scan any of the channels within that bank. You can manually select any channel in that bank.

Note: You can turn off all but one bank.

USING THE PRIORITY FEATURE

The scanner automatically checks for a transmission every 2 seconds on the channel you designate as the priority channel, even if you are listening to another channel or scanning. To program a priority channel, press **PROG**, the desired channel number, and then **PRIORITY**.

The priority indicator P appears on the display to show that you set the scanner to the priority channel.

You can only program one channel as the priority channel. When you program a new channel as the priority channel, you clear the previous channel you chose.

Note: Channel 1 is automatically designated as the priority channel the first time you turn on your scanner.

MANUALLY SELECTING A CHANNEL

You can continuously listen to a single channel without scanning. This is useful if you hear an emergency broadcast on a channel and do not want to miss any of the details — even though there might be periods of silence — or if you want to monitor a channel that you have locked out.

To select a channel to listen to, press **MANUAL**, enter the channel number, and then press **MANUAL** again. Or, if your scanner is scanning and has stopped at the desired channel, press **MANUAL** one time. Pressing **MANUAL** additional times causes your scanner to step through the channels one at a time.

A GENERAL GUIDE TO SCANNING

BIRDIES

Birdies are frequencies your scanner uses when it operates. These operating frequencies might interfere with broadcasts on the same frequencies. If you program one of these frequencies, you hear noise on that frequency.

If the interference is not severe, you might be able to turn **SQUELCH** clockwise to cut out the birdie. The most common birdies to watch for are listed below.

Birdie Frequencies

31.050 MHz
32.400 MHz
36.225 MHz
41.400 MHz
46.575 MHz
51.750 MHz

RECEPTION NOTES

Reception of the frequencies covered by your scanner is mainly "line of sight." That means you usually cannot hear stations that are beyond the horizon.

During the summer months, you might be able to hear stations in the 30-50 MHz range located several hundred or even thousands of miles away. This is because of summer atmospheric conditions. This type of reception is unpredictable but often very interesting!

GUIDE TO THE ACTION BANDS

With a little investigation, you can find the active frequencies in your community. We can give you some general pointers on finding these frequencies and you can take it from there. Please use caution and common sense when you hear an emergency call. Never go to the scene of an emergency. It could be very dangerous.

Find out if there is a local club that monitors your community's frequencies. Perhaps a local electronics repair shop that works on equipment similar to your scanner can give you frequencies used by local services. A volunteer police department or fire department employee can also be a good source for this information.

As a general rule on VHF, most activity concentrates between 153.785 and 155.98 MHz and between 153.73 and 159.46 MHz. Here you find local government, police, fire, and most other emergency services. If you are near major railroad tracks, listen between 160.0 and 161.9 for signals.

In some larger cities, there has been a move to the UHF bands for emergency services. Here, most of the activity is between 453.025 and 453.95 MHz and between 456.025 and 459.95 MHz.

In the UHF band, mobile units operate between 456.025 and 459.95 MHz and between 465.025 and 469.975 MHz. A repeater picks up the mobile units' transmissions on one frequency, then rebroadcasts (or repeats) the transmission 5 MHz lower, but at a higher power level, than the mobile units (that is, 451.025-454.95 MHz and 460.025-464.975 MHz). This means that if you find an active frequency inside one of the mobile unit's frequency spreads, you can look 5 MHz lower to find the repeater frequency.

A system called trunked radio lets several services use the same set of frequencies in the 800 MHz band without interference. Several frequencies are allocated to two or more services (like fire, police, and water departments). As each service transmits, a separate control signal activates other radios in the same service, so that only that service hears the transmission. The frequency is selected as soon as the unit begins to transmit, and could be any one of the allocated frequencies.

One very useful service is the National Weather Service's continuous weather broadcasts. These broadcasts contain weather forecasts and data for the area around the station, plus bulletins on any threatening weather conditions. These stations use seven frequencies: 162.40, 162.425, 162.450, 162.475, 162.500, 162.525, or 162.55 MHz. In most areas of the country, you can receive one of these frequencies.

TYPICAL BAND USAGE

The following is a brief listing of the services that typically use the bands received by your scanner. This listing can help you decide which ranges you would like to scan.

Abbreviations:

Affiliate Radio System	**MARS**
Amateur	**Ham**
Automobile Emergency	**Auto Emer.**
Broadcast Remote	**BC. R.**
Bureau of Reclamation	**Bur. Recl.**
Civil Air Patrol	**CAP**
Department of Agriculture and Forestry	**Agr. and For.**
Fire Department	**F.D.**
Forest Products	**For. Prod.**
Forestry Conservation	**Fors. Cons.**
Government	**Govt.**
Highway Maintenance	**Hwy.**
Land Transportation	**Land Tr.**
Local Government	**L. Govt.**
Manufacturers	**Mfg.**
Military	**MIL**
Mobile Telephone	**Mob. Tel.**
Motion Picture	**Mot. P.**
Motor Carrier	**Buses. Trucks**
National Parks	**Nat. Park**
Petroleum	**Pet.**
Police	**P.D.**
Power Utilities	**Power**
Radio Paging	**Page**
Railroad	**R.R.**
Relay Press	
State Police	**St. P.D.**
Special Emergency	**Sp. Ind.**
Taxicab Radio	**Taxi**
Telephone Maintenance	**Tel. Maint.**
U.S. Coastal and Geodetic Survey	**U.S.C.G.S.**
U.S. Navy	**USN**
U.S. Weather Bureau	**U.S.W.B.**

29 - 54 MHz BAND

29.00 - 29.70	10-meter HAM
29.70 - 29.80	For. Prod.
29.80 - 30.00	Aero.
30.01 - 30.56	Govt.
30.56 - 30.62	Sp. Ind.
30.66 - 31.24	Ind. (Pet., For. Cons., Bus., For. Prod.)
31.26 - 31.98	Sp. Ind., For. Cons.
32.00 - 33.00	Govt.
33.02 - 33.16	Hwy., Sp. Emer., Bus.
33.18 - 33.38	Pet.
33.42 - 33.98	F.D.
34.00 - 35.00	Govt.
35.02 - 35.18	Bus.
35.22 - 35.66	Mob. Tel. & Page
35.70 - 35.72	Bus.
35.74 - 35.98	Sp. Ind. & Bus
36.00 - 37.00	Govt.
37.02 - 37.44	P.D. & L. Govt.
37.46 - 37.86	Power
37.90 - 37.98	Hwy. & Sp. Emer.
38.00 - 39.00	Govt.
39.02 - 39.98	P.D., L. Govt.
40.00 - 42.00	Govt.
42.02 - 42.94	St. P.D.
42.96 - 43.18	Sp. Ind. & Bus.
43.22 - 43.68	Mob. Tel. Page
43.70 - 44.60	Trucks. Bus.
44.62 - 45.06	St. P.D., For. Cons.
45.08 - 45.66	P.D.
45.68 - 46.04	P.D. Hwy., Sp. Emer.
46.06 - 46.50	F.D.
46.52 - 46.58	L. Govt.
46.60 - 47.00	Govt.
47.02 - 47.40	St. Hwy.
47.42	Red Cross
47.44 - 47.68	Sp. Ind. Sp. Emer.
47.70 - 48.54	Power
48.56 - 49.58	For. Prod., Pet.
49.60 - 50.00	Govt.
50.00 - 54.00	6 Meter Amateur (Ham) Band

108 - 136.975 MHz BAND

108.000 - 118.000	Air Navigation
118.000 - 136.975	Aircraft

137 - 174 MHz BAND

137.000 - 144.000	Govt.
144.000 - 148.000	HAM
148.010	MARS
148.150	CAP
148.155 - 148.250	MIL
148.290 - 150.750	USN
150.815 - 150.995	Bus.
151.010 - 151.130	HWY
151.145 - 151.475	For. Cons.
151.505 - 151.595	Sp. Ind.
151.625 - 151.955	Bus.
151.985 - 152.240	Mob. Tel. (RCC)
152.270 - 152.450	Taxi
152.480 - 152.840	Mob. Tel. Page
152.870 - 153.020	Sp. Ind. Mot. P.

153.050 - 153.440 ..... Pet., For. Prod.
153.470 - 153.710 ..... Power
153.740 - 154.115 ..... L. Govt.
154.130 - 154.445 ..... F.D.
154.450 - 154.600 ..... Sp. Ind., Pet., Bus.
154.655 - 155.145 ..... P.D., L. Govt., St. P.D.
155.160 - 155.400 ..... Sp. Emer., P.D.
155.415 - 156.030 ..... P.D., L. Govt.
156.045 - 156.240 ..... Hwy., P.D.
156.275 - 157.425 ..... Marine
157.456 - 157.500 ..... Auto Emer.
157.530 - 157.710 ..... Taxi
157.740 - 158.100 ..... Mob. Tel., Page
158.130 - 158.460 ..... Power, For. Prod., Pet.
158.490 - 158.700 ..... Mob. Tel. (RCC)
158.730 - 158.970 ..... P.D., L. Govt.
158.985 - 159.210 ..... P.D. Hwy.
159.225 - 159.465 ..... For. Cons.
159.510 - 160.200 ..... Trucks
160.215 - 161.565 ..... R.R.
161.600 - 162.000 ..... Marine
162.026 - 162.175 ..... Bur. Recl.
162.400 ..... U.S.W.B.
162.550 ..... U.S.W.B.
163.125 ..... Indian Affairs
163.175 ..... Bur. Recl.
163.275 ..... U.S.W.B.
163.388 - 163.538 ..... MIL
163.825 - 163.975 ..... Govt.
164.025 - 164.075 ..... U.S.C.G.S.
164.175 - 165.188 ..... Bur. Recl. Nat. Pk. Govt., Agr. & For.
169.300 ..... F.A.A.
169.450 - 169.725 ..... Ind., Data
170.150 ..... F.D., BC. R.
170.200 - 170.220 ..... U.S.C.G.S.
170.225 - 170.325 ..... Ind., Land Tr.
170.425 - 170.575 ..... For. Cons.
170.975 - 171.250 ..... Govt. Ind., Land Tr.
171.388 - 172.725 ..... Bur. Recl., For. Cons., Ind., Dept. Ag. & For., Govt.
172.775 ..... Nat. Pk.
173.025 ..... U.S.W.B.
173.075 ..... U.S.C.G.S.
173.204 .. Mot. P., Pet., Bur. Recl. Press Relay.

406 - 512 MHz BAND

406.000 - 420.000 ..... Govt.
420.000 - 450.000 ..... HAM
450.050 - 450.950 ..... Remote Br.
451.000 - 451.150 ..... Util.
451.175 - 451.750 ..... For. Prod., Pet., Power., Tel. Maint.
451.775 - 451.975 ..... Spec. Ind.
452.000 - 452.500 ..... Taxi, Mot. Carrier, R.R.
452.525 - 452.600 ..... Auto Club
452.625 - 452.975 ..... Motor Carr., R.R.
453.000 - 453.975 ..... L. Govt., P.D., F.D.
454.000 - 454.975 ..... Mob. Tel.
455.000 - 455.975 ..... Remote Br.
456.000 - 458.975 ..... P.D., F.D., Ind., Lan. Tr.
459.000 - 459.975 ..... Domestic Public
460.000 - 460.625 ..... P.D., F.D.
460.650 - 462.175 ..... Bus.
462.200 - 462.450 ..... Taxi
462.750 - 462.975 ..... Bus.
463.000 - 463.175 ..... Medical
463.200 - 464.975 ..... Bus.
465.000 - 467.500 ..... P.D., F.D., Ind., Land Tr.
467.750 - 467.925 ..... Bus.
467.7375 - 469.975 .. Pub. Safety. Ind., Land Tr.

TV Bands for Special Communications

470 - 476 T.V. Channel 14
476 - 482 T.V. Channel 15
482 - 488 T.V. Channel 16
488 - 494 T.V. Channel 17
494 - 500 T.V. Channel 18
500 - 506 T.V. Channel 19
506 - 512 T.V. Channel 20

6 MHz Segment is allocated for Channel 14

470.0125 - 470.2875 ..... Domestic Public, (Base, Mob.)
470.3125 - 471.1375 ..... Public Safety
471.1625 - 471.2875 ..... Reserve Pool A
471.3125 - 471.4125 ..... Pwr., Tel. Maint.
471.4375 - 471.6375 ..... Spec. Ind.
471.6625 - 471.7875 ..... Reserve Pool B
471.8125 - 472.3375 ..... Bus.
472.3625 - 472.4375 ..... Taxi
472.4675 - 472.7875 ..... R.R., Motor Carrier, Auto Emer.
472.8125 - 472.9875 ..... Pet., For. Prod., Mfg.
473.0125 - 473.2875 ..... Domestic Public
473.3125 - 474.1375 ..... Public Safety
474.1625 - 474.2875 ..... Reserve Pool A
474.3125 - 474.4125 ..... Pwr., Tel. Maint.
474.4375 - 474.6375 ..... Spec. Ind. (Mobile)
474.6625 - 474.7875 ..... Reserve Pool B
474.8125 - 475.3375 ..... Bus.
475.3625 - 475.4375 ..... Taxi
475.4625 - 475.7875 ..... R.R., Motor Carrier, Auto Emer.
475.8125 - 475.9876 ..... Pet., For. Prod. Mfg.

806 - 947 MHz BAND

806.000 - 816.000 .... Domestic Public (Mobile)
816.000 - 821.000 ..... Mobile Trunking
851.000 - 861.000 ..... Domestic Public (Base)
861.000 - 866.000 ..... Base Trunking
902.000 - 928.000 ..... Industrial Scientific

These frequencies are subject to change and might vary some from area to area. For a more complete listing, refer to the *Police Call Radio Guide Including Fire and Emergency Services* at your local Radio Shack store.

You might discover one of your regular stations on a frequency that is not listed. This could be what is known as an "image." For example, if you find a station on 453.2750 that you also hear on 474.8750, do a little math to see if it is an image. Take the intermediate frequency of 10.8 MHz and double it (21.6 MHz). Then, subtract 21.6 MHz from the "new" frequency. If the answer is the normal frequency, you have tuned to an image. Occasionally, you might get interference on a weak or distant channel from a strong broadcast 21.6 MHz (2 x 10.8 MHz) below the tuned frequency. This is rare, and the image signal is usually cleared whenever a broadcast on the actual frequency is in progress.

TROUBLESHOOTING

IF YOU HAVE PROBLEMS...

Here are some suggestions which might help.

PROBLEM	POSSIBLE CAUSE	REMEDY
Scanner does not operate at all.	The power connection is loose or the red power wire's fuse is blown.	Secure the connection or replace the fuse. See "Replacing the Fuse."
Scanner is on but does not scan.	The **SQUELCH** control is not correctly adjusted.	Adjust the **SQUELCH** control clockwise.
In the scan mode, the scanner stops on frequencies that have an unclear transmission.	"Birdies"	Avoid programming frequencies listed under "Birdies."
The keys are inoperative or the scanner displays random segments.	The CPU is locked up.	Reset the scanner. See "Initializing/Resetting the Scanner."

If none of these suggested remedies solves the problem, return your scanner to your local Radio Shack store for assistance.

REPLACING A FUSE

If the scanner does not operate, you might need to replace the red power wire's fuse.

Note: Also check your vehicle's fuses.

Use the following steps to check/change a fuse.

Warning: Before you begin, turn off the scanner and your vehicle's ignition.

1. Disconnect the red power wire.
2. Push and twist the fuse holder so that it springs apart.
3. If the fuse is blown, replace it. Use only standard 30 mm, 1-amp fuses.
4. Reassemble the fuse holder by pushing and twisting the two parts until they snap together.
5. Reconnect the red power wire to the ACC terminal.

CARE AND MAINTENANCE

Your Radio Shack PRO-2026 Mobile Programmable Scanner is an example of superior design and craftsmanship. The following suggestions will help you care for the PRO-2026 so that you can enjoy it for years.

Keep the scanner dry. If it does get wet, wipe it dry immediately. Liquids can contain minerals that can corrode the electronic circuits.

Handle the scanner gently and carefully. Dropping it can damage circuit boards and cases and can cause the product to work improperly.

Use and store the scanner only in normal temperature environments. Extreme temperatures can shorten the life of electronic devices and distort or melt plastic parts.

Keep the scanner away from dust and dirt, which can cause premature wear of parts.

Wipe the scanner with a dampened cloth occasionally to keep it looking new. Do not use harsh chemicals, cleaning solvents, or strong detergents to clean the scanner.

Modifying or tampering with the scanner's internal components can cause a malfunction and might invalidate the scanner's warranty and void your FCC authorization to operate it. If your scanner is not operating as it should, take it to your local Radio Shack store for assistance.

SPECIFICATIONS

Frequency Coverage:

Ham	29 - 29.7 MHz (in 5 kHz steps)
VHF-Lo	29.7 - 50 MHz (in 5 kHz steps)
Ham	50 - 54 MHz (in 5 kHz steps)
Aircraft	108 - 136.975 MHz (in 12.5 kHz steps)
Government	137 - 144 MHz (in 5 kHz steps)
Ham	144 - 148 MHz (in 5 kHz steps)
VHF-Hi	148 - 174 MHz (in 5 kHz steps)
Government	406 - 420 MHz (in 12.5 kHz steps)
Ham	420 - 450 MHz (in 12.5 kHz steps)
UHF-Lo	450 - 470 MHz (in 12.5 kHz steps)
UHF-TV	470 - 512 MHz (in 12.5 kHz steps)
UHF-Hi	806.0000 - 823.9375 MHz (in 12.5 kHz steps)
	851.0000 - 868.9375 MHz (in 12.5 kHz steps)
	896.1125 - 956 MHz (in 12.5 kHz steps)
Channels of Operation	Any 100 channels in any band combinations (20 channels x 5 banks) and 1 monitor channel

Sensitivity (20 dB S/N with 60% modulation for AM: 3 kHz deviation for FM):

29 - 54 MHz	0.5μV
108 - 136.975 MHz	1.6μV
137 - 174 MHz	0.7μV
406 - 512 MHz	0.7μV
806 - 956 MHz	0.8μV

Spurious Rejection:

29 - 54 MHz	50 dB at 40 MHz
108 - 136.975 MHz	50 dB at 124 MHz
137 - 174 MHz	50 dB at 154 MHz
406 - 512 MHz	Not Specified
806 - 956 MHz	Not Specified

Selectivity:

±9 kHz	-6 dB
±15 kHz	-50 dB

Limit Search Speed/Band Search Speed	19 Steps/Sec.
Scan Speed	14 Channels/Sec.
Priority Sampling	2 Seconds
Delay Time	2 Seconds
Modulation Acceptance	±12 kHz
IF Frequencies	10.8 MHz and 450 kHz

Squelch Sensitivity:

Threshold: Less than 0.9μV

Tight:

VHF Lo, Hi, UHF	(S + N)/N 25 dB
Aircraft	(S + N)/N 15 dB
Antenna Impedance	50 Ohms
Audio Power	1.1 W Maximum
Memory Backup	14 days
Built-in Speaker	3-Inch (77mm) 8-Ohm, Dynamic Type
Power Requirement	12V 500mA
Dimensions	$1\ ^{5}/_{8}$ x $6\ ^{5}/_{16}$ x $7\ ^{3}/_{8}$ Inches (HWD) (41mm x 160mm x 188mm)
Weight	2 Lbs. 3 Oz. (1 kg)

RADIO SHACK LIMITED WARRANTY

This product is warranted against defects for 1 year from date of purchase from Radio Shack company-owned stores and authorized Radio Shack franchisees and dealers. Within this period, we will repair it without charge for parts and labor. Simply **bring your Radio Shack sales slip** as proof of purchase date to any Radio Shack store. Warranty does not cover transportation costs. Nor does it cover a product subjected to misuse or accidental damage.

EXCEPT AS PROVIDED HEREIN, RADIO SHACK MAKES NO WARRANTIES, EXPRESS OR IMPLIED, INCLUDING WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE. Some states do not permit limitation or exclusion of implied warranties; therefore, the aforesaid limitation(s) or exclusion(s) may not apply to the purchaser.

This warranty gives you specific legal rights and you may also have other rights which vary from state to state.

We Service What We Sell

RADIO SHACK
A Division of Tandy Corporation
Fort Worth, Texas 76102

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