Cat. No. 20-312
OWNER'S MANUAL
PRO-75 200-Channel
Portable Scanner
Please read before using this equipment.

Illustration will add

RadioShack LOGO

FEATURES
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Your RadioShack PRO-75 200-Channel Portable Scanner gives you direct access to over 25,000 exciting frequencies, including police and fire departments, ambulance service, and amateur radio services. You can select up to 200 channels to scan, and you can change your selection at any time.

The secret to your scanner's ability to scan so many frequencies is its custom-designed microprocessor – a tiny, built-in computer.

Your scanner has these special features:

HyperscanTM – lets you scan up to 25 channels per second and search up to 50 steps per second.

Band Search – let you search for transmissions within preset frequency ranges, so you can find interesting frequencies more quickly.

20 Monitor Memories – let you temporarily save up to 20 frequencies located during a frequency search, so you can move selected frequencies to channel storage later.

Direct Search – lets you search for new and unlisted frequencies starting from a specified frequency.

Ten Channel-Storage Banks – let you store 20 channels in each bank to group channels so calls are easier to identify.

Liquid Crystal Display – makes it easy to view and change programming information.

Two-Second Scan Delay – delays scanning for about 2 seconds before moving to another channel or frequency, so you can hear more replies.

Lock-Out Function – lets you set your scanner to skip over specified channels or frequencies when scanning or searching.

Keylock – lets you lock the keys to help prevent accidentally changing the scanner's programming.

Display Backlight – makes the scanner easy to read in low light situations.

Flexible Antenna with BNC Connector – provides excellent reception. The BNC connector is designed so you can easily attach and remove the antenna.

Memory Backup – keeps the frequencies stored in memory for about 1 hour during a power loss.

Three Power Options – let you power the scanner from internal batteries (non-rechargeable batteries or a rechargeable scanner battery pack) or external AC or DC power (using an optional adapter).

We recommend you record your scanner's serial number here. This number is on the scanner's back panel.

Serial Number: _____

Your PRO-75 scanner can receive all of these frequencies:

. 29-54 MHz
. 108-136.9875 MHz
. 137-174 MHz
. 380-512 MHz

FCC NOTICE

Your scanner might cause TV or radio 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 it. Try to eliminate the interference by:

. Moving your scanner away from the TV or radio.

. Connecting your scanner to an outlet that is on a different electrical circuit from the TV or radio.

. Contacting your local RadioShack store for help.

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

SCANNING LEGALLY

Your scanner covers frequencies used by many different groups including police and fire departments, ambulance services, government agencies, private companies, amateur radio services, military operations, pager services, and wireline (telephone and telegraph) service providers. It is legal to listen to almost every transmission your scanner can receive. However, there are some transmissions you should never intentionally listen to. These include:

. Telephone conversations (either cellular, cordless, or other private means of telephone signal transmission)

. Pager transmissions

. Any scrambled or encrypted transmissions

According to the Electronic Communications Privacy Act (ECPA), you are subject to fines and possible imprisonment for intentionally listening to, using, or divulging the contents of such a transmission unless you have the consent of a party to the communication (unless such activity is otherwise illegal). RadioShack encourages responsible, legal scanner use.

CONTENTS

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PREPARATION

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POWER SOURCES

You can power your scanner from any of three sources:

. Internal batteries or a rechargeable scanner battery pack
. Standard AC power
. Vehicle battery power using an optional DC cigarette lighter adapter.

Notes:
. Connecting an AC or DC adapter to the scanner disconnects any internal batteries, but it does not disconnect a rechargeable battery pack. If you install a rechargeable battery pack, you can operate the scanner and recharge the battery pack at the same time. See "Using Batteries" below and "Charging a Rechargeable Battery Pack."
. If the scanner stops working properly after you connect it to power, try resetting it. See "Resetting/Initializing the Scanner."

Using Batteries

You can power your scanner from six AA batteries. For the longest operation and best performance, we recommend alkaline batteries, such as RadioShack Cat. No. 23-552. You can also power the scanner using a rechargeable scanner battery pack, such as Cat. No. 23-288.

You can also use six rechargeable nickel-cadmium batteries (such as Cat. No. 23-125) to power the scanner. To use rechargeable nickel-cadmium batteries you use including rechargeable battery case.

Note: If you are using a rechargeable scanner battery pack, you must charge it first (see "Charging a Rechargeable Battery Pack."

Caution: Do not mix old and new batteries, different types of batteries (standard, alkaline, or rechargeable), or rechargeable batteries of different capacities.

Follow these steps to install batteries or a battery pack.

1. Press down on the battery compartment cover on the bottom of the scanner and slide the cover in the direction of the arrow to remove it.

2. Slide the battery holder or battery pack out of the battery compartment.

3. If you are installing individual batteries, insert six AA batteries in the battery holder as indicated by the polarity symbols (+ and-) marked on the holder.

4. Slide the battery holder or battery pack into the compartment as shown.

(add illustration)

Caution: The battery holder or battery pack fits only one way inside the battery compartment. Do not force it.

5. Replace the cover.

When battery power is low, B appears and the scanner beeps continuously. When battery power is exhausted, the scanner turns itself off. Replace all six non-rechargeable batteries or recharge the battery pack/batteries (see "Charging a Rechargeable Battery Pack/Batteries").

Caution: Always dispose of old batteries promptly and properly. Do not bury or burn them.

Using Standard AC Power

To power the scanner from AC power, you need an AC adapter (Cat. No. 273-1665).

Cautions:

. You must use an AC adapter that supplies 9 volts and delivers at least 200 milliamps. Its center tip must be set to negative, and its plug must correctly fit the scanner's PWR/DC 9V jack. The recommended adapter meets these specifications. Using an adapter that does not meet these specifications could damage the scanner or the adapter.
. When you finish using the AC adapter, disconnect it from the AC outlet first. Then disconnect it from the scanner.

Plug the adapter's supplied 1.3 mm inner diameter/3.4 mm outer diameter barrel plug into the scanner's PWR/9V DC jack. Then plug the adapter's power module into a standard AC outlet.

(add illustration)

Warning: Do not use an AC adapter's polarized plug with an extension cord, receptacle, or other outlet unless the blades can be fully inserted to prevent blade exposure.

Using Vehicle Battery Power

To power the scanner from your vehicle's cigarette-lighter socket, you need a DC adapter (Cat. No. 270-1560).

Cautions:
. You must use a DC adapter that supplies 9 volts and delivers at least 200 milliamps. Its center tip must be set to negative, and its plug must correctly fit the scanner's PWR/9V DC jack. The recommended adapter meets these specifications. Using an adapter that does not meet these specifications could damage the scanner or the adapter.
. To protect your vehicle's electrical system, always plug the adapter into the scanner before you plug it into your vehicle's cigarette-lighter socket. Always unplug the adapter from the vehicle's cigarette-lighter socket before you unplug it from the scanner.

1. Connect the DC adapter's supplied 1.3 mm inner diameter/3.4 mm outer diameter barrel plug to the cable, with the tip set to – (negative).

2. Set the adapter's voltage switch to 9V.

3. Insert the barrel plug into the scanner's PWR/9V DC jack

(add illustration)

4. Plug the other end of the adapter into your vehicle's cigarette-lighter socket.

(add illustration)

Notes:
. Mobile use of this scanner is unlawful or requires a permit in some areas. Check the laws in your area.
. If the scanner does not operate properly when you connect a DC adapter, unplug the adapter from the cigarette-lighter socket and clean the socket to remove ashes and other debris.

Charging a Rechargeable Battery Pack/Batteries

Your scanner has a built-in charging circuit that lets you charge a rechargeable battery pack (Cat. No. 23-288) or rechargeable batteries with rechargeable battery case while it is in the scanner. To charge the battery pack, simply connect an AC or DC adapter to the scanner's PWR/9V DC jack.

It takes about 14-16 hours to recharge a battery pack/batteries that is fully discharged. You can operate the scanner while recharging the battery pack/batteries, but the charging time is lengthened.

Notes:
.If you want to take the battery pack out of the scanner to charge it, follow the instructions provided with the battery pack.
. A rechargeable battery pack/batteries lasts longer and delivers more power if you let it fully discharge once a month. To do this, simply use the scanner until the display flashes then the scanner tuns itself off. Then fully charge the battery pack/batteries.

Important! At the end of a rechargeable battery pack or battery's useful life, it must be recycled or disposed of properly. Contact your local county, or state hazardous waste management authorities for information on recycling or disposal programs in your area. Some options that might be available are: municipal curb-side collection, drop-off boxes at retailers such as your local RadioShack store, recycling collection centers, and mailback programs.

CONNECTING THE ANTENNA

Follow these steps to attach the supplies flexible antenna to your scanner.

(add illustration)

1. Align the slots around the antenna's connector with the tabs on the ANT jack.

2. Press the antenna down over the jack and turn the antenna's base clockwise until it locks into place.

Connecting an Optional Antenna

The ANT jack on the top of the scanner makes it easy to use the scanner with a variety of antennas. Instead of the supplied antenna, you can attach a different one, such as an external mobile antenna or outdoor base station antenna. Your local RadioShack store sells a variety of antennas.

Always use 50-ohm coaxial cable, such as RG-58 or RG-8, to connect an outdoor antenna. For lengths over 50 feet, use RG-8 low-loss dielectric coaxial cable. If your antenna's cable does not have a BNC connector , you will also need a BNC adapter (also available at your local RadioShack store).

Follow the installation instructions supplied with the antenna, route the antenna cable to the scanner, then connect it to the ANT jack.

Warning: Use extreme caution when installing or removing an outdoor antenna. If the antenna starts to fall, let it go! It could contact overhead power lines. If the antenna touches a power line, contact with the antenna, mast, cable or guy wires can cause electrocution and death! Call the power company to remove the antenna. Do not attempt to do so yourself.

CONNECTING AN EARPHONE/HEADPHONES

For private listening, you can plug an earphone or mono headphones (such as Cat. No. 33-175 or 20-210) into the (headphone symbol) jack on top of your scanner. This automatically disconnects the internal speaker.

(add illustration)

Listening Safely

To protect your hearing, follow these guidelines when you use an earphone or headphones:

. Do not listen at extremely high volume levels. Extended high-volume listening can lead to permanent hearing loss.
. Set the volume to the lowest setting before you begin listening. After you begin listening, adjust the volume to a comfortable level.
. Once you set the volume, do not increase it. Over time, your ears adapt to the volume level, so a volume level that does not cause discomfort might still damage your hearing.

Traffic Safety

Do not use an earphone or headphones with your scanner when operating a motor vehicle or riding a bicycle in or near traffic. Doing so can create a traffic hazard and could be illegal in some areas.

If you use an earphone or headphones with your scanner while riding a bicycle, be very careful. Do not listen to a continuous broadcast. Even though some earphones/headphones let you hear some outside sounds when listening at normal volume levels, they still can present a traffic hazard.

CONNECTING AN EXTENSION SPEAKER

In a noisy area, an extension speaker (Cat. No. 21-549) or an amplified speaker (Cat. No. 21-541) might provide more comfortable listening.

Plug the speaker cable's 1/8-inch mini-plug into your scanner's (headphone symbol) jack.

(add illustration)

USING THE BELT CLIP

You can use the belt clip attached to the back of the scanner for hands-free carrying when you are on the go. Simply slide the belt clip over your belt or waistband.

(add illustration)

YOUR SCANNER

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A LOOK AT THE KEYPAD

Your scanner's keys might seem confusing at first, but this information should help you understand each key's function.

MANUAL—stops scanning to let you directly enter a channel number.

SCAN—scans through the programmed channels.

LIGHT—turns the display's backlight on or off.

/¥ and ¥/--searches up or down from the currently displayed frequency, or changes scanning direction.

MON/CL—accesses the 20 monitor memories or clears an incorrect entry.

L/O RVW, L/O—lets you review locked-out frequencies, or lets you lock out selected channels/frequencies so they will not be scanned or searches.

Key symbol—locks/unlocks the keypad to prevent accidental entries.

PGM—lets you program frequencies into channels.

Number Keys—each key has a single-digit label and a range of numbers. Use the digits on the keys to enter the numbers for a channel or a frequency. Use the range of numbers above the key (21-40, for example) to select the channel in a channel-storage bank. See "Understanding Bands/Banks/Memories".

DELAY/.—programs a 2-second delay for the selected channel, or enters a decimal point (necessary when programming frequencies).

ENTER—enters frequencies into channels.

A LOOK AT THE DISPLAY

The display has indicates that show the scanner's current operation. A quick look at the display will help you understand how to operate your scanner.

Key symbol – appears when you lock the keypad.

BANK – appears with numbers (1—10). Bank numbers with a bar under them show which ones are turned on for scanning. See "Understanding Bands/Banks/Memories."

FIRE/POLICE – appears when you searches for fire/police band.

AIR – appears when you searches for air band.

HAM – appears when you searches for amateur radio band.

MRN – appears when you searches for marine band.

WX – appears when you scan weather channels.

B – appears when the batteries are low.

/¥ or ¥/ -- indicates the search or scan direction.

M – flashes with a number (1-20) to show which monitor memory you are listening to.

Ch – appears with digits (1-200) to show which channel the scanner is turned to.

MHz – appears with digits to show which of the 25,000 possible frequencies the scanner is tuned to.

SRCH – appears during a service, or direct frequency search.

SCAN – appears when you scan channels.

MAN – appears when you manually select a channel.

PGM – appears while you program frequencies into the scanner's channels.

DLY – appears when you program a 2-second delay.

L/O – appears when you manually select a channel you locked out while scanning or you review the locked out frequency.

Error – appears when you make an entry error.

-dUPL – appears when you try to store a frequency that is already stored in another channel.

-d- -- appears during a direct search.

-b- -- appears during a band search.

Ch-FULL – appear when you try to enter a frequency during a search when all channels are full.

F L-out – appears when you lock out the frequency while searching.

Flo -FULL – appears when 50 frequencies are locked out during a search.

L-r – appears when you review the lockout frequencies.

dEFAULt – appears when you remove the all locked out frequencies while band search.

FLo ALL-CL – appears when you remove the all locked out frequencies while band/direct search.

UNDERSTANDING BANDS/BANKS/MEMORIES

Search bands

Your scanner can tune over 25,000 different frequencies. Many of these frequencies are grouped within permanent memory locations called search bands.

Fire/Police

Group	Frequency range (MHz)	Step (kHz)
1	33.420-33.980	20
	37.020-37.420	20
	39.020-39.980	20
	42.020-42.940	20
	44.620-45.860	40
	45.880	
	45.900	
	45.940-46.060	40
	46.80-46.500	20

2	153.770-154.130	60
	154.145-154.445	15
	154.650-154.950	15
	155.010-155.370	60
	155.415-155.700	15
	155.730-156.210	60
	158.730-159.210	60
	166.250	
	170.150	
3	453.0375-453.9625	12.5
	458.0375-458.9625	12.5
	460.0125-460.6375	12.5
	465.0125-465.6375	12.5

Air

Frequency range (MHz)	Step (kHz)
108.000-136.675	12.5

Amateur Radio

Group	Frequency range (MHz)	Step (kHz)
1	29.000-29.700	5
2	50.000-54.000	5
3	144.000-148.000	5
4	420.000-450.000	12.5

Marine

Frequency range (MHz)	Step (kHz)
156.025-156.750	25
156.800	
156.850	
156.875-156.975	25
157.025	
157.050	
157.100	
157.150	
157.175	
157.425	
160.625	
160.650-160.875	25
161.600	
161.800	
161.825-162.000	25

You can search these bands to quickly find active frequencies.

Note: The frequencies in the scanner's band search bands are preset. You cannot change them.

Channel-Storage Banks

To make it easier to identify and select the channels you want to listen to, channels are divided into 10 channel-storage banks (1-10) of 20 channels each. You can use each channel-storage bank to group frequencies, such as those used by the police department, fire department, ambulance services, and aircraft.

For example, there might be three or four police departments in your area, each using several different frequencies. Additionally, there might be other law enforcement agencies such as state police, county sheriffs, or SWAT teams that use their own frequencies. You could program all law enforcement frequencies starting with Channel 1 (the first channel in Bank 1), then program the fire department, paramedic, and other public safety frequencies starting with Channel 21 (the first channel in Bank 2).

Monitor Memories

The scanner also has 20 monitor memories that you can use to temporarily store frequencies while you decide whether to save them into channels. This is handy for quickly storing an active frequency when you are searching through an entire band.

You can store a frequency into a monitor memory during a band, or direct search. See "Storing Active Frequencies."

You can select monitor memories manually, but you cannot scan them. See "Listening to Monitor Memories."

OPERATION

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TURNING ON THE SCANNER/SETTING VOLUME AND SQUELCH

Note: Make sure the scanner's antenna is connected before you turn it on.

1. Turn SQUELCH MIN/MAX fully counterclockwise.
2. Turn VOLUME/OFF/MAX clockwise until it clicks and you hear a hissing sound.
3. Turn SQUELCH MIN/MAX clockwise, the leave it set to a point just after the hissing sound stops.

If the scanner automatically start scanning channels, press MANUAL to stop scanning.

Notes:
. If you have not stored frequencies into any channels (see "Storing Active Frequencies"), the scanner does not scan.
. If the scanner picks up unwanted, partial, or very weak transmissions, turn SQUELCH MIN/MAX clockwise to decrease the scanner's sensitivity to these signals. If you want to listen to a weak or distant station, turn SQUELCH MIN/MAX counterclockwise.
. If SQUELCH MIN/MAX is adjusted so you always hear a hissing sound, the scanner does not scan properly.

STORING ACTIVE FREQENCIES

You can store frequencies into channels using any of these methods:

. Manual storage
. Service, or direct search

Good references for active frequencies are RadioShack's "Police Call Radio Guide Including Fire and Emergency Services," "Aeronautical Frequency Directory," and "Maritime Frequency Directory." We update these directories every year, so be sure to get a current copy. See also "Guide to the Action Bands."

Manually Storing Frequencies

If you know a frequency you want to store, you can store it manually

1. Press PGM. PGM appears.

Add illustration

2. Use the number keys to enter the channel number where you want to store the frequency, then press PGM again.

3. Use the number keys to enter the frequency you want to store into that channel (including the decimal point).

4. Press ENTER to store the frequency.

Add illustration

Notes:

. If you entered an invalid frequency in Step 3, the scanner beeps and displays the channel number and Error. Simply repeat Steps 3 and 4.

. Your scanner automatically rounds the entered frequency down to the closest valid frequency. For example, if you try to enter a frequency of 151.4730, your scanner accepts it as 151.470.

. If you entered a frequency that is already stored in another channel, the scanner beeps three times and displays the lowest channel number where the frequency is already stored, and –dUPL- then the frequency flashes. If you want to store the frequency anyway, press ENTER again.

5. Repeat Steps 2—4 to store more frequencies into channels.

BAND SEARCH

If you do not know of a frequency to store, you can search your scanner's preprogrammed service search band for active frequencies, then store any that you find into your monitor memories.

Note: You can use the scanner's delay feature while using service search.

Follow these steps to search for and store active frequencies using band search.

1. Press BAND. The last selected band name (such as HAM), SRCH, and the frequency search group number (if search band have group) appear on the display.

Add illustration

2. To select a different band, repeatedly press BAND until the desired band name appears on the display (see "Search Bands").

3. If needed, Select search group with numeral key.

4. Hold Down ^ for about 1 second to search up from the bottom of the band, or v for about 1 second to search from the top of the band. ^ or v appears on the display.

Notes:

. To reverse the search direction at any time, hold down ^ or v for about 1 second.

. To search the band upward or downward in small increments, repeatedly press and release ^ or v.

When the scanner finds an active frequency, it stops searching and displays the frequency's number.

To store the displayed frequency in the lowest available channel, press ENTER. ^ or v and the channel and frequency flash twice, and the scanner stores the displayed frequency. The scanner continues to search for frequencies.

Notes:

. If there is no empty channel, CH-FULL appears. To store more frequencies, you must clear some channels. See "Deleting Frequency from a Channel." To continue searching after CH-FULL appears, press MON/CL then press and hold ^ or v for about 1 second.

. If you entered a frequency that is already stored in another channel, the scanner beeps three times and displays the lowest channel number where the frequency is already stored, and dUPL then the frequency flashes. If you want to store the frequency anyway, press ENTER again.

. To store the displayed frequency in the monitor memory, press MON/CL. The frequency flashes twice, and M and the monitor memory number flash. To search for another active frequency in the selected band, press and hold ^ and v for about 1 second. If you try to store a frequency in a monitor memory that is already stored in a channel, -dUPL- flashes then M, the channel number, ch, and the frequency flash. If you press MON/CL key while dUPL flashing, the scanner do not entry monitor memory and return search. If you press MON/CL while frequency appears on the display, to store monitor memory.

5. To select a different band and search for another active frequency, repeat Steps 2-3.

DIRECT SEARCH

You can search up or down from the currently displayed frequency and store frequencies into monitor memories.

Note: You can use the scanner's delay feature while using band search.

1. Press MANUAL or PGM, then enter the frequency you want to use as a starting point for the search.

Note: To start from a frequency already stored in one of your scanner's channels, press MANUAL or PGM, enter the desired channel number, then press MANUAL or PGM again.

2. Hold down ^ or v for about 1 second to search up or down from the selected frequency.

Notes:

. To reverse the rapid search direction at any time, hold down ^ or v for about 1 second.

. To search the selected band upward or downward in small increments (in steps 5, 12.5, or 25 kHz), press and release ^ or v.

When the scanner finds an active frequency, it stops searching and displays the frequency's number.

To store the displayed frequency in the lowest available channel, press ENTER. ^ or v and the channel and frequency flash twice, and the scanner stores the displayed frequency. The scanner continues to search for frequencies.

Notes:

. If there is no empty channel, CH-FULL appears. To store more frequencies, you must clear some channels. See "Deleting Frequency from a Channel." To continue searching after CH-FULL appears, press MON/CL then press and hold ^ or v for about 1 second.

. If you entered a frequency that is already stored in another channel, the scanner beeps three times and displays the lowest channel number where the frequency is already stored, and dUPL then the frequency flashes. If you want to store the frequency anyway, press ENTER again.

. To store the displayed frequency in the monitor memory, press MON/CL. The frequency flashes twice, and M and the monitor memory number flash. To search for another active frequency in the selected band, press and hold ^ and v for about 1 second. If you try to store a frequency in a monitor memory that is already stored in a channel, -dUPL- flashes then M, the channel number, ch, and the frequency flash. If you press MON/CL key while dUPL flashing, the scanner do not entry monitor memory and return search. If you press MON/CL while frequency appears on the display, to store monitor memory.

SCANNING THE CHANNELS

To begin scanning channels or to start scanning again after monitoring a specific channel, press SCAN.

The scanner scans through all channels (except those you have locked out) in the active banks.

Notes:

. You must store frequencies into channels before the scanner can scan them.

. The scanner does not scan empty channels.

. To change the scanning direction, press ^ or v.

TURNING CHANNEL-STORAGE BANKS OFF AND ON

To turn off banks while scanning, press the bank's number key until the bar under the bank's number disappears. The scanner does not scan any of the channels within the banks you have turned off.

Notes:

. You cannot turn off all banks. There must be at least one active bank.

. You can manually select any channel in a bank, even if the bank is turned off.

To turn on banks while scanning, press the bank's number key until a bar appears under the bank's number.

MOVING A FREQUENCY FROM A MONITOR MEMORY TO A CHANNEL

1. Press PGM.

2. Use the number keys to enter the channel number where you want to store the monitor frequency, then press PGM again.

3. Press MON/CL. M, the channel number, and ch flash.

4. Enter the desired monitor memory's number (1-20), then press MON/CL again. The selected monitor memory's frequency appears.

5. Press ENTER. The scanner stores the frequency in the selected channel.

6. To move another monitor memory frequency to the next channel, press PGM and repeat Steps 3-5.

DELETING FREQUENCY FROM A CHANNEL

1. Press PGM.

2. Use the number keys to enter the channel number containing the frequency you want to delete.

3. Press PGM again.

4. Press 0, then press ENTER. The frequency is deleted.

5. To delete more frequencies, repeat Steps 2-4.

LISTENING TO MONITOR MEMORIES

To listen to a monitor memory, press MANUAL, then press MON/CL. M, the monitor memory number, and ch flash, and the current monitor memory frequency appears. To select other monitor memories, use the number keys to enter the monitor memory's number (1-20), then press MON/CL. M and the monitor memory number where the frequency is stored and ch flash.

MONITORING A STORED CHANNEL

You can continuously monitor a specific channel without scanning. This is useful if you hear an emergency broadcast on a channel and do not want to miss any details – even though there might be periods of silence – or if you simply want to monitor that channel.

Follow these steps to manually select a channel.

1. Press MANUAL.

Add illustration

2. Enter the channel number.

3. Press MANUAL again.

LISTENING TO A WEATHER BAND

Weather Channel	Frequency range (MHz)
1	162.400
2	162.450
3	162.450
4	162.475
5	162.500
6	162.525
7	162.550

The FCC (Federal Communications Commission) has allocated channels for use by the National Oceanic and Atmospheric Administration (NOAA). Regulatory agencies in other countries have also allocated channels for use by their weather reporting authorities.
NOAA and your local weather reporting authority broadcast your local forecast and regional weather information on one or more of these channels.

To hear your local forecast and regional weather information, pressing BAND until WX appears, then hold down ^ or v key for about 1 second. Your scanner scans through the weather band. Your scanner should stop within a few seconds on your local weather broadcast.

To reverse the scanning direction, press and release ^ or v key.

To manually select a preprogrammed weather channel, hold down ^ or v key for about 1 second. MAN appears on the display. In this mode, you can select weather channel directory by pressing channel number (1-7).

SPECIAL FEATURES

DELAY

Many agencies use a two-way radio system that might have a pause of several seconds between a query and a reply. To avoid missing a reply, you can program a 2-second delay into any of your scanner's channels or frequencies. Then, when the scanner stops on the channel or frequency, DLY appears on the display and the scanner continues to monitor the channel/frequency for 2 seconds after the transmission stops before it resumes scanning or searching.

You can program a 2-second delay in any of these ways:

. If the scanner is scanning and stops on an active channel, quickly press DELAY/. before it starts to scan again.
. If the desired channel is not selected, manually select the channel then press DELAY/..
. If the scanner is searching, press DELAY/. during the search. DLY appears on the display and the scanner automatically adds a 2-second delay to every transmission it stops on.

To turn off delay, press DELAY/. when DLY is displayed.

LOCKING OUT CHANNELS AND FREQUENCIES

You can scan existing channels or search frequencies faster by locking out channels or frequencies that have a continuous transmission, such as a weather channel.

Locking Out Channels

To lock out a channel while scanning, press and release L/O/L/O RVW when the scanner stops on the channel. To lock out a channel manually, select the channel then press and release L/O/L/O RVW until L/O appears on the display.

Notes:
. You can delete all the frequencies stored in locked-out channels.
. You can still manually select locked-out channels.

To remove the lockout from a channel, manually select the channel and press L/O/L/O RVW until L/O disappears from the display.

Locking Out Frequencies

To lock out a frequency during a band, or direct search, press L/O/L/O RVW when the scanner stops on the frequency. The scanner locks out the frequency, then continues searching.

Notes:

. The scanner does not store locked-out frequencies during a search.

. You can lock out as many as 50 frequencies during a search. If you try to lock out more, Flo FULL appears on the display.

Reviewing Locked-Out Frequencies

To review the frequencies you locked out, hold down L/O/L/O RVW more than 2 seconds while search. L-r appears on the display and calls the lowest locked out frequency. As you press ^ or v, the scanner displays all locked out frequencies. The scanner beeps two times, scanner displays all locked out frequencies and return the lowest locked out frequency.

Remove All Locked Out from a Channels/Frequencies

To remove all locked out from a channels as follows:

1. Press MANUAL.

2. Hold down MON/CL then press L/O/L/O RVW. Lo ALL-CL appears on the display.

3. Press ENTER to clear all lock out. If you do not clear lockout, press MON/CL.

To remove all lock out from frequencies as follows:

1. To start direct search.

2. Hold down MON/CL then L/O/L/O RVW. FLo ALL-CL appears on the display.

3. Press ENTER to clear all lock out. If you do not clear lockout, press MON/CL.

To remove lockout from frequencies while band search as follows:

1. Press BAND to start service search.

2. Hold down MON/CL then press BAND. dEFAULt appears on the display.

3. Press ENTER to clear all lock out. If you do not clear lockout, press MON/CL.

USING THE DISPLAY BACKLIGHT

You can turn on the display's backlight for easy viewing in dimly-lit areas. Press LIGHT to turn on the display light for 5 seconds. To turn off the light before it automatically turns off, press LIGHT again.

TURNING THE KEY TONE ON AND OFF

Each time you press any of the scanner's keys (except (key symbol) and LIGHT), the scanner sounds a tone.

Follow these steps to turn the scanner's key tone off or back on.

1. If the scanner is on, turn VOLUME OFF/MAX counterclockwise until it clicks to turn it off.

2. While you hold down the 2 and ENTER keys, turn on the scanner.

3. After 1 second, release 2 and ENTER.

USING THE KEY LOCK

Once you program your scanner, you can protect it from accidental program changes by turning on the keylock feature. When the keypad is locked, the only controls that operate are SCAN, MANUAL, LIGHT, VOLUME OFF/MAX, and SQUELCH MIN/MAX (and the scanner can still scan channels).

To turn on the keylock, hold down (key symbol) for about 3 seconds until the scanner beeps three times and (key symbol) appears on the display. To turn it off, hold down (key symbol) for about 3 seconds until the scanner beeps three times and (key symbol) disappears from the display.

A GENERAL GUIDE TO SCANNING

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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.

GUIDE TO FREQUENCIES

US Weather Frequencies

162.400	162.425	162.450	162.475
162.500	162.525	162.550	

Other Weather Frequencies

161.650	161.775	162.440	163.275

Ham Radio Frequencies

Ham radio operators often transmit emergency information when other means of communication break down. The following chart shows the frequencies the scanner receives that Ham radio operators normally use:

Wavelength (meters)	Frequencies (MHz)
10-Meter	29.000-29.700
6-Meter	50.000-54.000
2-Meter	144.000-148.000
70-cm	420.000-450.000

Birdie Frequencies

Every scanner has birdie frequencies. Birdies are signals created inside the scanner's receiver. These operating frequencies might interfere with broadcasts on the same frequencies. If you program one of these frequencies, you hear only noise on that frequency. If the interference is not severe, you might be able to turn SQUELCH clockwise to cut out the birdie.

The birdie frequencies on this unit to watch for are:

Birdie Frequencies will add

To find the birdies in your scanner, begin by disconnecting the antenna and moving it away from the scanner. Make sure that no other nearby radio or TV sets are turned on near the scanner. Use the search function and scan every frequency range from its lowest frequency to the highest. Occasionally, the searching will stop as if it had found a signal, often without any sound. That is a birdie. Make a list of all the birdies in your scanner for future reference.

GUIDE TO THE ACTION BANDS

United State Broadcast Bands

In the United State, there are several broadcast bands. The standard AM and FM bands are probably the most well known. There are also four television audio broadcast bands – the lower three transmit on the VHF band and the fourth transmits on the UHF band.

Typical Band Usage

VHF Band

Low Range	29.00-50.00 MHz
6-Meter Amateur	50.00-54.00 MHz
U.S. Government	137.00-144.00 MHz
2-Meter Amateur	144.00-148.00 MHz
High Range	148.00-174.00 MHz

UHF Band

Military Aircraft	380.00-384.00 MHz
U.S. Government	406.00-420.00 MHz
70-cm Amateur	420.00-450.00 MHz
Low Range	450.00-470.00 MHz
FM-TV Audio Broadcast, Wide Band	470.00-512.00 MHz

Primary Usage

As a general rule, most of the radio activity is concentrated on the following frequencies:

VHF band

Activities	Frequencies
Government, Police, and Fire	153.785-155.980 MHz
Emergency Services	158.730-159.460 MHz
Railroad	160.000-161.900 MHz

UHF Band

Activities	Frequencies
Land-Mobile "Paired" Frequencies	450.000-470.000 MHz
Base stations	451.025-454.950 MHz
Mobile units	456.025-459.950 MHz
Repeater Units	460.025-464.975 MHz
Control Stations	465.025-469.975 MHz

Note: Remote control stations and mobile units operate at 5 MHz higher than their associated base stations and relay repeater units.

SPECIFIED INTERVALS

Frequencies in different bands are accessible only at specific intervals. For example:

Frequency Range(s)	Specified Interval
29-54 and 137-174 MHz	5.0 kHz steps
108-136.9875, 380-512 MHz	12.5 kHz steps

Note: In band search, frequency interval is not same as above. See "Search bands."

BAND ALLOCATION

To help decide which frequency ranges to scan, use the following listing of the typical services that use the frequencies your scanner receives. These frequencies are subject to change, and might vary from area to area. For a more complete listing, refer to the "Police Call Radio Guide including Fire and Emergency Services," available at your local RadioShack store.

BAND ALLOCATION list will add

FREQUENCY COVERSION

The tuning location of a station can be expressed in frequency (kHz or MHz) or in wavelength (meters). The following information can help you make the necessary conversions.

1 MHz (million) = 1,000 kHz (thousand)

To convert MHz to kHz, multiply the number of megahertz by 1,000:

32.62 (MHz) x 1000 = 32,620 kHz

To convert from kHz to MHz, divide the number of kilohertz by 1,000:

127,800 (kHz) / 1000 = 127.8 MHz

To convert MHz to meters, divide 300 by the number of megahertz:

300 / 50 MHz = 6 meters

TROUBLESHOOTING

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If your scanner is not working as it should, these suggestions might help you eliminate the problem. If the scanner still does not operate properly, take it to your local RadioShack store for assistance.

Problem	Possible Causes	Remedies
The scanner does not work at all.	. The batteries are dead.	. Replace the batteries with fresh ones or recharge the battery pack or rechargeable batteries (if used).
	. The optional AC or DC adapter is not connected.	. Be sure the adapter is fully inserted into the PWR/DC9V jack.
Poor or no reception.	. Improperly connected antenna.	. Be sure the antenna is properly connected.
	. Programmed frequencies are the same as birdie frequencies.	. Avoid programming frequencies listed under "Birdie Frequencies" or only select them manually.
Keypad does not work.	Keylock is turned on.	Turn off keylock.
Error appears on the display.	Programming error.	Enter the frequency correctly, including the decimal point.
Keys do not work or display changes.	Undetermined error.	Turn the scanner off then on again, or reset the scanner (see "Resetting/Initializing the Scanner").
Scanner is on but will not scan.	SQUELCH is not correctly adjusted.	Adjust SQUELCH clockwise (see "Turning On the Scanner/Setting Volume and SQUELCH").
In the scan mode, the scanner locks on frequencies that have an unclear transmission.	Birdies.	Avoid programming frequencies listed under "Birdie Frequencies" or only listen to them manually.

RESETTING/INITIALIZING THE SCANNER

If the scanner's display locks up or does not work properly after you connect a power source, you might need to reset or initialize it.

Important: If you have problems, first try to reset the scanner. If that does not work, you can initialize the scanner; however, initializing clears all information stored in the scanner's memory.

Resetting the Scanner

1. Turn off the scanner, then turn it on again.

2. Insert a pointed object, such as a straightened paper clip, into the reset opening on the side of the scanner. Then gently press and release the reset button inside the opening.

illustration will add.

Initializing the Scanner

Important: This procedure clears all information you stored in the scanner's memory. Initialize the scanner only when you are sure the scanner is not working properly.

1. Turn off the scanner, then turn it on again.

2. While holding down MON/CL, insert a pointed object, such as a straightened paper clip, into the reset opening on the side of the scanner. Then gently press and release the reset button inside the opening.

Note: You must release the reset button before you release MON/CL. Otherwise, the memory might not clear.

3. When the display reappears, release MON/CL.

CARE AND MAINTENANCE

Your RadioShack PRO-75 200-Channel Portable scanner is an example of superior design and craftsmanship. The following suggestions will help you care for your scanner so you can enjoy it for years.

Keep the scanner dry. If it gets 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 scanner to work improperly.

Use only fresh batteries of the recommended size and type. Always remove old and weak batteries. They can leak chemicals that destroy electronic circuits.

Use and store the scanner only in normal temperature environments. Temperature extremes can shorten the life of electronic devices, damage batteries, 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 damp 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 its warranty and void your FCC authorization to operate it. If your scanner is not operating as it should, take it to your local RadioShack store for assistance.

SPECIFICATIONS
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Frequency Coverage

        29-54 MHz (in 5 kHz steps) (FM)

        108-136.9875 MHz (in 12.5 kHz steps) (AM)

        137-174 MHz (in 5 kHz steps) (FM)

        380-512 MHz (in 12.5 kHz steps) (FM)

Operational Channels	200 channels plus 20 monitor memories
Sensitivity	FM: (S+N)/N 20 dB, Dev.: 3kHz at 1kHz
	AM: (S+N)/N 20 dB, Mod.: 60% at 1 kHz
29-54 MHz	0.5 uV
108-136.9875 MHz	1 uV
137-174 MHz	0.5 uV
380-512 MHz	0.7 uV
Spurious Rejection	
(FM at 154 MHz)	50 dB
Selectivity	
+/-10 kHz	-6 dB
+/-18 kHz	-50 dB
IF Interference Ration	
10.7 MHz at 154 MHz	70 dB
Scanning Rate	25 channels/sec
Search Rate	50 steps/sec
Delay Time	2 sec
IF Frequencies	10.7 MHz, and 455 kHz
Squelch Sensitivity	
Threshold	less than 1.0 uV
Tight (FM)	(S+N)/N 25 dB
Tight (AM)	(S+N)/N 20 dB
Antenna Impedance	50 ohms
Audio Power	200 mWatts nominal (10%THD)
Built-in Speaker	1 3/8" (36 mm), 8-ohm, dynamic type
Power Req.	+9V DC, 6 AA batteries
	or a suitable adapter (negative ground only)
Current Drain (Squelched)	50 mA
OP Temp.	+14F to +140 F (-10C to +60C)
Dimensions	6 1/4 x 2 1/2 x 1 11/16" (HWD) (160 x 62 x 43 mm)
Weight	approx. 8.1 oz (230 g) without antenna

Specifications are typical; Individual units might vary. Specifications are subject to change and improvement without notice.

9.0   Instruction Manual

Attached is a preliminary copy of the Instruction Manual.

This manual will be provided to the end-user with each unit sold/leased in the United States.