

20-135 PRO-135

Handheld Radio Scanner

Thank you for purchasing your 200–channel Handheld Radio Scanner from RadioShack.

Note: Wording required for FCC PART 15.21 is shown in page 33/40.



What's Included
Scanner
Antenna
Belt Clip (2) Screws
Preprogrammed
Frequency List
User's Guide
Quick Start Guide

Please read this user's guide before installing, setting up, and using your new scanner www.radioshack.com

Contents

Scanner Setup	4
Scanner Features	4
Connecting the Antenna	6
Attaching the Belt Clip	6
Powering Your Scanner	6
Installing Batteries	7
Battery Notes	8
Recycle Rechargeable Batteries	9
Using External Power	9
Connecting Headphones	10
Listening Safely	10
Understanding Your Scanner	10
Birdie Frequencies	11
Turning on the Scanner	12
Programming Frequencies into Channels	12
Soarching	4.4
Searching	14
Limit Search	
	14
Limit Search	14 14
Limit Search Starting Limit Search	14 14 14
Limit SearchStarting Limit SearchProgramming Search Ranges	14 14 14 15
Limit Search Starting Limit Search Programming Search Ranges Fine Tune	14 14 14 15
Limit Search Starting Limit Search Programming Search Ranges Fine Tune Service Bank Search	14 14 14 15 16
Starting Limit Search Programming Search Ranges Fine Tune Service Bank Search Storing Frequencies Found During a Search	14 14 15 16 n 16
Starting Limit Search Programming Search Ranges Fine Tune Service Bank Search Storing Frequencies Found During a Search Search Skip Memory	14 14 15 16 n 16 17
Starting Limit Search	14 14 15 16 16 17 18
Starting Limit Search	14 14 15 16 16 17 18
Limit Search	14 14 15 16 16 18 18
Limit Search	14 14 15 16 16 17 18 18 19

Contents

Manually Selecting a Channel	22
Weather Scan	22
Weather Alert	22
Testing the Weather Alarm	23
Skywarn	23
About Skywarn	23
Settings	25
Setting Delay	25
Turning Channel-Storage Banks On or Off	25
Locking Out Channels	26
Setting Priority	26
Using Keylock	27
Using the Display Backlight	27
Setting the Auto Backlight Display	27
Setting the Power On Backlight	28
Setting the Keytone	28
Setting the Battery Save Function	28
Advanced Programming	30
Transferring Data To or From another Scan	ner 30
Cloning Your Scanner	30
Transferring Data From a PC	31
Wired Programming	31
Additional Information	32
FCC Notice	32
Scanning Legally	32
Care	33
Service and Repair	33
Specifications	34
Troubleshooting	36
Resetting your Scanner	37

Scanner Features

SCAN / - 6

Scan the stored channel frequencies. Press and hold to activate Signal Stalker I.

MAN

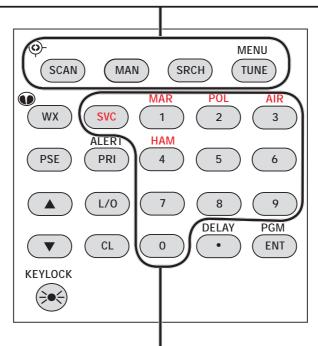
Go to manual mode.

SRCH

Start a limit search.

TUNE / MENU

Operate Fine Tune. Press and hold to enter menu.



SVC

Press to put the scanner in service mode.

1/MAR (Marine)

Press after **SVC** to select the marine band.

2/POL (Police)

Press after **SVC** to select the police and fire band.

3/**ΔI**R

Press after **SVC** to select the air band.

4/HAM

Select the ham band in service mode.

0-9

Input a number.

wx / **()**

Start weather scan. Press and hold to activate Skywarn.

PSE (Pause)

Stop and resume search or scan.

$\blacktriangle/\blacktriangledown$

Search up and down a selected frequency range; selects options in menu mode.

>•< / KEYLOCK

Turns the display and key backlight on. Press and hold to lock the keypad.

PRI (Priority)/ALERT

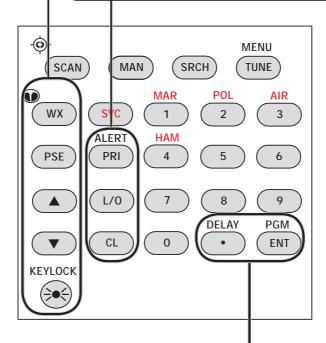
Turns the priority function on or off. Press and hold to turn weather alert on and off.

L/O

Lockout selected channels or skip specified frequencies during a search.

CL

Press to clear an entry.



• / DELAY

Enter a decimal point. Turn delay on or off.

ENT (Enter) / PGM (Program)

Complete the entry of frequencies. Put the scanner in programming mode.

Headphones

VOLUME/OFF

Turn the scanner on or off; adjust the volume.

SQUELCH

Adjust the squelch.



Connecting the Antenna

Attach the supplied antenna to the scanner by aligning the slots around its base with the tabs on the scanner, and then slide into place.

When using an external antenna, always connect with 50-ohm, RG-58, or RG-8, coaxial cable. If the antenna is over 50 feet from the scanner, use RG-8 low-loss dielectric coaxial cable. If your antenna's cable does not have a BNC connector, your local RadioShack store carries a variety of BNC adapters.

Attaching the Belt Clip

Use a Phillips-head screwdriver and the supplied screws to attach the clip to the scanner.

Powering Your Scanner

You can power your scanner with batteries or an AC adapter.



Installing Batteries

- 1. Remove the battery compartment cover.
- 2. Set the **Battery Switch** inside the battery compartment to the appropriate setting:
 - **ALKALINE** when using alkaline batteries.
 - **Ni-MH** when using rechargeable (Ni-MH) AA batteries.
- 3. Insert two AA batteries (not included) into the battery compartment and two AA batteries into the battery compartment cover, matching the polarity symbols (+ and -) marked inside.
- 4. Replace the cover.



Warning: Only set the **Battery Switch** to **Ni-MH** for use with nickel metal hydride (Ni-MH) rechargeable batteries.

Never use non-rechargeable batteries when the switch is set to Ni-MH.

To charge batteries:

- 1. Set the Power Switch to Ni-MH.
- Install rechargeable batteries.
- 3. Connect an external power source to the DC 9V 300mA jack.

The scanner stops charging automatically after a maximum of 14 hours.

Warning: Do not attempt to charge batteries if non-rechargeable batteries are installed in the scanner and the switch is set to Ni-MH, or if you are unsure of the switch's position. Non-rechargeable batteries will get hot and can explode if you try to recharge them. The scanner displays **Er CHArg** if the wrong batteries are detected.

Battery Notes

- When battery power is low, That she's and the scanner beeps every 15 seconds. When battery power is depleted, the scanner turns itself off.
- Rechargeable batteries last longer and deliver more power if you let them fully discharge once a month. To do this, use the scanner until flashes.
- Use only fresh batteries of the required size and recommended type. Do not mix old and new batteries, different types (alkaline or rechargeable), or rechargeable batteries of different capacities.
- Remove old or weak batteries. If you will not use the scanner with batteries for a month, remove the batteries. Batteries can leak chemicals that destroy electronic circuits.
- Always dispose of old batteries promptly and properly. Do not bury or burn them.

Recycle Rechargeable Batteries

Placing rechargeable batteries into the trash or the municipal waste system can be harmful to the environment. RadioShack participates in an industry program to collect and recycle rechargeable batteries at the end of their useful life.

You can return your rechargeable batteries to your local RadioShack store for recycling free of charge. Or call 1-800-THE-SHACK (1-800-843-7422) for information on recycling rechargeable batteries in your area. RadioShack's involvement in this program is part of the company's commitment to preserving our environment and conserving our natural resources.

Using External Power

You can power your scanner using a power source that supplies 9V DC and delivers at least 300mA. Its center tip must be set to positive and its plug must fit the scanner's DC 9V 300mA jack. You

9

can use an "Adaptaplug C" for AC adapters. Using an adapter that does not meet these specifications could damage the scanner or the adapter.

To use an external power source:

- Connect the adapter (not supplied) to the scanner's DC 9V jack.
- 2. Plug the adapter into the power source.
- 3. To disconnect, unplug the adapter from the power source first.



Warning: Do not connect a charging adapter to the scanner if non-rechargeable batteries (such as alkaline batteries) are installed in the scanner and the switch is set to Ni-MH, or if you are unsure of the switch's position.

Connecting Headphones

For private listening, you can plug headphones (not included) into the headphone jack on top of your scanner. This automatically disconnects the internal speaker. Note that the sound is not in stereo.

Listening Safely

To protect your hearing, follow these earphone or headphones guidelines:

- 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 listening. Turn on the scanner, and adjust the volume to a comfortable level.
- After 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.
- Even though some earphones/headphones let you hear some outside sounds when listening at normal volume levels, they still can present a traffic hazard.

Understanding Your Scanner

We use a few simple terms in this manual to explain the features of the scanner. Familiarize yourself with these terms and the scanner's features, and you can put the scanner to work for you right away.

The scanner scans conventional frequencies. A **frequency**, expressed in kHz or MHz, is the tuning location of a station. To find active frequencies, use the **search** function or consult an online resource such as www.radioreference.com.

Besides searching within a selected frequency range, you can also search your scanner's service banks. **Service banks** are preset groups of frequencies categorized by the type of services that use those frequencies. The scanner is preprogrammed with all the frequencies allocated to the Ham, Marine, Aircraft, and Police (Fire/Emergency) services.

When you search and find a desired frequency, you can store it into a programmable memory location called a channel. *Channels* are grouped into channel-storage banks. Your scanner has 10 channel-storage banks (numbered 0-9) Each bank contains 20 channels (numbered 0-19). So the scanner has 200 channels total. You can *scan* the channel storage banks to see if there is activity on the frequencies stored there.

Note: Search for frequencies to find your local frequencies, after you have programmed these frequencies into channels, you can scan the channels.

Use each channel-storage bank to group frequencies. For example, the police department might use four frequencies in your town while the fire department uses an additional four. You could program the police frequencies in bank 0, and program the fire department frequencies in bank 1.

Birdie Frequencies

Every scanner has birdie frequencies. Birdies are signals created by the scanner's internal circuits. These stray frequencies might interfere with broadcasts on the same or similar frequencies. If

you program one of these frequencies, you hear only noise on that frequency. This scanner's known birdie frequencies (in MHz) are:

449.18125 449.24375 449.30625

Turning on the Scanner

- 1. Turn **SQUELCH** fully counterclockwise.
- 2. Turn **VOLUME/OFF** clockwise until it clicks and you hear a hissing sound.
- 3. Turn **SQUELCH** clockwise until the hissing stops.

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

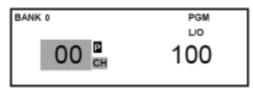
To perform a quick check of scanner operation, press the **WX** key. If you are near a NOAA weather station, you should hear weather information.

Programming Frequencies into Channels

Before the scanner can begin to scan, you must program a frequency into at least one channel.

To locate and store specific frequencies into channels for later use:

- 1. Press MAN.
- 2. Press **ENT/PGM** to put the scanner in programming mode. **PGM** appears.
- 3. Use the number keys to enter both the channel storage bank and the channel number you want to assign to a frequency.



Example shows entering bank 1 channel 00.

4. Press MAN.

Note: If you entered an invalid bank or channel number, **Error** appears and the scanner beeps. Enter a valid channel.

- 5. Use the number keys to enter the frequency, using for the decimal point.
- 6. Press **ENT/PGM** to store the frequency into the channel.
- 7. To program the next channel in sequence, press ▲ or ▼ and repeat Steps 5 and 6.

Notes:

- If you entered an invalid frequency in Step 5,
 Error appears and the scanner beeps. Enter a valid frequency.
- If you entered a frequency in Step 5 that already exists on another channel, the scanner beeps and displays that channel. Press CL to clear the display, or press ENT/PGM to store the frequency in both channels.
- The scanner automatically rounds the entered number to the nearest valid frequency. For example, if you enter 151.473 (MHz), your scanner accepts it as 151.475.
- After a transmission, the scanner automatically pauses for 2 seconds on this channel before proceeding to the next active transmission. Press •/DELAY to turn the delay function on or off. The scanner stores this setting in the channel.

If you do not have a list of frequencies in your area, use a limit search, fine tune, or service search to find transmissions. A good online resource is www.radioreference.com.

Searching

Use the search function to find active frequencies.

While doing a limit search, fine tune, or service bank search, press •/DELAY to turn the 2-second delay on or off.

Limit Search

This feature lets you search through preset frequency ranges. You can also program a range.

The preset frequency ranges are 25.0000 - 512.0000MHz.

Starting Limit Search

1. Press **SRCH**. **SRCH** and **-L**- appear.

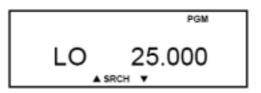


- 2. Press ▼ to search down or ▲ to search up.
- 3. When the scanner stops on a transmission, quickly press **PSE** to stop searching and listen to the transmission. **PAUSE** appears. To step through the frequencies during search pause mode, press ▼ or ▲.
- 4. To release the hold and continue searching, press **PSE**.

Programming Search Ranges

To define the search range during a limit search:

- 1. Press **MAN** then press **ENT/PGM** to put the scanner in programming mode.
- 2. Press **SRCH** to go to programming search bank mode.



- 3. Using the number keys, enter the lower limit frequency, and then press **ENT/PGM**.
- 4. Press ▼ or ▲ to move from lower to upper.
- 5. Using the number keys, enter the upper limit frequency, and then press **ENT/PGM**.

Fine Tune

You can search up or down from the currently displayed frequency using a fine tune search. Searching stops when a transmission is found and resumes after the transmission ends (searching resumes after two seconds if delay is on).

1. When the frequency you want to start from appears, press **TUNE**.

Or, from search pause mode, enter a frequency using the number keys, then press **TUNE.**

Note: If you enter an invalid frequency, the scanner beeps and displays **Error**.

2. **SRCH**, **PAUSE**, and -t- appear.



- 3. Press ▼ or ▲ to move up or down one frequency step. Or press **TUNE** to start the fine tune search.
- 4. Press ▼ or ▲ to change search direction.
- 5. Press **PSE** to pause the search.

Service Bank Search

The scanner is preprogrammed with all the frequencies allocated to Ham, Marine, Aircraft, and Police (Fire/Emergency) transmissions.

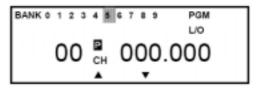
To search the service banks, press **SVC.** The current service symbol appears and the scanner starts searching. To select a different service bank, press **1/MAR**, **2/POL**, **3/AIR**, or **4/HAM**.

Note: Because there are many different frequencies allocated to Ham and Aircraft, it can take several minutes to search all the service frequencies.

Storing Frequencies Found During a Search

To store frequencies you find in limit search, fine tune, service bank, or Signal Stalker I searches:

- 1. Press **PSE** at the frequency you want to store.
- 2. Press **ENT/PGM** to enter programming mode.
- 3. The screen flashes, alternating between the smallest empty channel number, **000.000**, and the frequency you want to store.



Note: If there are no empty channels, the scanner selects the first channel in the bank.

- 4. Enter the bank number where you want to store the frequency.
- 5. Press ∇ or \triangle to change the channel.
- 6. Press **ENT/PGM** to store the frequency or **CL** to cancel.

Note: If the same frequency already exists on another channel, the scanner beeps and displays that channel. Press **CL** to cancel, or press **ENT/PGM** to store the frequency in both channels.

Search Skip Memory

You can skip up to 50 unwanted frequencies during a limit search, fine tune, service bank, or Signal Stalker I search.

Note: You cannot skip frequencies during WX service search.

To skip a frequency, press **L/O** when the scanner stops on the frequency during a search. The scanner stores the locked-out frequency in memory and automatically resumes the search.

To clear a single frequency from skip memory:

- 1. Press **PSE** to stop the search.
- Press ▼ or ▲ to select the frequency. L/O appears.
- 3. Press L/O. L/O disappears.

To clear all skipped frequencies at once:

- 1. While searching, press PSE.
- 2. Hold down **L/O** until the scanner beeps twice.

Notes:

- If you selected all frequencies to be skipped within the search range, the scanner beeps 3 times and does not search.
- If you select more than 50 frequencies to skip, each new frequency replaces a frequency previously stored, beginning with the first stored frequency.
- Press ▼ or ▲ to select a skipped frequency during pause. L/O appears when you select a skipped frequency.

Search Speeds

The scanner has two search speeds: Normal search at 55 steps/second and Hypersearch at 160 steps/second.

Hypersearch applies only to the 5 kHz step bands (25–27.995 MHz, 28–54 MHz, and 137–174 MHz).

Signal Stalker I

Signal Stalker I detects and then displays the frequency of nearby strong radio transmissions. Signal Stalker I works well for locating mobile and handheld two way radios in areas with no other strong transmission sources.

Signal Stalker I might not correctly display frequency information for transmitters using a highly directive antenna (such as an amateur radio beam antenna), if there are many transmitters operating at the same time in the same area, or if the transmitter is a broadcast television station.

Using Signal Stalker I

To turn on Signal Stalker I, turn **SQUELCH** fully clockwise, then press and hold **SCAN/** The icon appears. (In Only mode, the icon flashes.) Every 2 seconds, the scanner searches for active frequencies in the range you specify in "Setting the Signal Stalker I Options."

When the scanner finds a frequency, it alerts you according to its settings and **"Found"** appears. Press any key to confirm the displayed frequency. Press ▼ or ▲ to resume scanning.

To turn off Signal Stalker I and turn on normal scanning, press and hold **SCAN/**. The **o** icon disappears.

Note: Signal Stalker I doesn't run in weather search or programming mode.

Setting the Signal Stalker I Options

- Press and hold **TUNE/MENU** to open the menu.
- Press ▼ or ▲ to select a Signal Stalker I menu option. (The � icon appears with Signal Stalker I menu options.)

Note: See below for a description of the Signal Stalker I options.

- 3. Press **ENT/PGM**. The scanner flashes the setting **On** or **OF** (On or Off).
- Press ▼ or ▲ to select On or OF. Press ENT/ PGM.
- 5. Press ▼ or ▲ to select another option or press CL to exit the menu mode.

Signal Stalker I Options

- **ALErt:** Alert. Set to **On** if you want to hear an alert when Signal Stalker I finds a frequency.
- **Light:** Backlight. Set to **On** if you want the backlight to flash when Signal Stalker I finds a frequency.
- **PGrSCr:** Pager Screen. Set to **On** if you want to screen out common pager frequencies.
- Only: Only Mode. Set to On to turn off normal scanning while Signal Stalker I runs.
 Set to Off to continue normal scanning while Signal Stalker I runs in the background.
- **Lo bnd:** Low Band. Set to **On** to search VHF Low Band (25-54MHz).
- **Airbnd:** AIR Band. Set to **On** to search AIR Band (108-137MHz).
- Hi bnd: High Band. Set to On to search VHF High Band (137-174MHz).

- **UHFbnd:** UHF Band. Set to **On** to search UHF Band (380-512MHz).
- IntrPt: Voice Interrupt. While Signal Stalker I is on and the scanner is receiving an audio signal (voice) in normal scanning, the scanner checks the Signal Stalker I every 2 seconds causing the audio signal to break at that moment.

Set Voice Interrupt to **On** if you want to keep the Signal Stalker I active despite interruptions while the scanner is receiving an audio signal. Set to **Off** if you do not want to hear interruptions. The scanner resumes checking signals when the audio signal ends.

Scanning

Scanning Stored Channels

Press **SCAN** to begin scanning your programmed frequencies. **SCAN** appears and the scanner scans through all non-locked channels in the activated banks.

Select any combination of banks to scan by pressing the corresponding number keys. The bank numbers appear at the top of the display. The bank number which is currently being scanned blinks.



When the scanner finds a transmission, it stops on it. When the transmission ends, the scanner resumes scanning. If it is a long transmission and you want to move on, press **SCAN** to resume scanning.

If you press **PSE** when the scanner stops on a transmission, the scanner goes to manual mode. Press **PSE** or **SCAN** to resume scanning.

Notes:

- If you have not stored any frequencies into channels, the scanner does not scan.
- If the scanner picks up unwanted partial, or weak transmissions, turn SQUELCH clockwise to decrease the scanner's sensitivity to these signals.
- To listen to a weak or distant station, turn SQUELCH counterclockwise.
- To ensure proper scanning, adjust SQUELCH until the audio mutes.

Scanning

Manually Selecting a Channel

You can continuously monitor a single channel without scanning. This is useful if you want to monitor a specific channel or 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.

To directly access a channel:

- 1. Press **MAN** to stop scanning.
- 2. Enter the bank and channel number and press **MAN**. The selected channel appears.

To stop at a channel while scanning:

- 1. Press **MAN** to stop scanning.
- 2. Press ▼ or ▲ to select the next or previous channel.
- 3. Press **SCAN** to resume scanning.

Weather Scan

To scan for weather transmissions:

- Press WX/♠. WX appears. Change the search direction by using ▼ or ▲.
- 2. To stop the search, press **PSE**. **PAUSE** appears.

Weather Alert

- 1. Press **WX/** to start the weather scan.
- 2. Press **PRI/ALERT**. **ALT** appears.

If the scanner detects the 1050Hz weather alert signal, it sounds an alarm for 5 minutes and **ALT** blinks. After the 5-minute alarm, the scanner beeps every 10 seconds.

Press any key to turn off the alert. The audio turns on so you can hear the weather broadcast.

Testing the Weather Alarm

To hear the alarm for the weather alert signal, press **WX/** to select the weather service, then hold down **PRI/ALERT** for about two seconds. The tones sound and **TEST** appears. Press any key to end the test.

Skywarn

The Skywarn function lets you jump directly to the last channel in memory (Bank 9, Channel 19) from any mode by pressing and holding **WX/** The scanner goes into manual mode and starts receiving transmissions in the last channel.

Note: Before using this feature, enter the local Skywarn frequency for your area into Bank 9, Channel 19.

The scanner has 10 channels for Skywarn: Bank 9, Channels 10-19. Press ▼ or ▲ to select other Skywarn channels. Press MAN to exit Skywarn.

Note: If no frequencies are programmed in the Skywarn channels, **No Prg** appears and the scanner sounds an error tone.

About Skywarn

Skywarn is an organized group of trained weather observers. A Skywarn group exists in virtually every US County with a significant population. During inclement weather, reports made by Skywarn observers include information about:

- Pea-sized and larger hail
- Wind and wind gusts of 40 MPH and greater
- Heavy rainfall
- Lightning (cloud-to-cloud and especially cloud-to-ground)
- Wall clouds seen in severe thunderstorms

Scanning

(which spawn tornadoes)

- Severe lowering of a wall cloud
- Turbulence in a wall cloud
- Funnel clouds
- Tornadoes
- High water areas
- Downed power lines
- Other emergency conditions that affect life or property

Listen to NOAA for weather alerts and warnings, watch box notices, and weather-forecasts. Listen to Skywarn to hear trained observers in your vicinity call in official reports to a net control station which relays those reports to NOAA and other emergency agencies.

Note: If you tune to a Skywarn frequency when the Skywarn net is not active, you may hear nothing, or you may hear amateur radio operators talking on a local repeater system.

Settings

Setting Delay

Sometimes a user might pause before replying to a transmission. To avoid missing a reply on a specific channel, the scanner automatically programs a 2-second delay into any channel or frequency.

Depending on the scanner operation, follow one of these steps to turn the delay on or off.

- To turn off the 2-second delay, press
 /DELAY while the scanner is monitoring a channel, scanning, or searching. DLY disappears.
- To turn on the 2-second delay for a single channel, manually select the channel and press •/DELAY. DLY appears.
- To turn on the 2-second delay for the search function, press •/DELAY while the scanner is searching. DLY appears and the scanner automatically adds a 2-second delay to every frequency it stops on in that band.

The Signal Stalker I delay time is 10 seconds.

Turning Channel-Storage Banks On or Off

You can turn each channel-storage bank on and off. When you turn off a bank, the scanner does not scan any of the 20 channels in that bank.

While scanning, press the number key that corresponds to the bank you want to turn on or off. The scanner scans all the channels within the displayed banks that are not locked out.

Notes:

 You can manually select any channel within a bank, even if that bank is turned off.

Settings

 One bank must always be active. If you try to turn off all banks, bank 0 remains.

Locking Out Channels

You can increase the scanning speed by locking out channels that have a continuous transmission (such as a weather channel). To lock out a channel, quickly press **L/O** when the scanner stops on a transmission. Or, manually select the channel and then press **L/O**. **L/O** appears.

Note: You can still manually select locked-out channels.

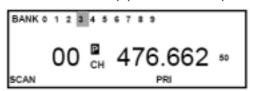
To remove the lockout from a channel, manually select the channel, then press L/O. L/O disappears.

To unlock all channels in the selected banks, press **MAN** to stop scanning, then hold down **L/O** until the scanner beeps twice.

Setting Priority

The priority feature lets you scan through the channels and still not miss important or interesting calls on specific channels. You can program one stored channel in each bank as a priority channel. The scanner checks the designated priority channel every two seconds in each bank.

Press **PRI** during scanning to turn the priority feature on and off. **PRI** appears when priority is on.



Note: If you have locked out all priority channels, **All Loc** appears when you activate the priority feature.

The scanner automatically designates each bank's

first channel as its priority channel. To select a different channel as the priority channel:

- Press MAN then press ENT/PGM.
- 2. Press ∇ or \triangle to select the channel you want to set as priority, then press and hold **PRI**.
 - Or, enter the bank and channel number you want to set as priority and then press **PRI**.
 - **P** appears to the left of the selected channel frequency.
- 3. Repeat Steps 1 and 2 for the channel in each bank that you want to program as a priority channel.

Using Keylock

The keylock feature protects the scanner from accidental program changes. When the scanner is locked, the only control that operates is >•
/ KEYLOCK.

- To turn on keylock, hold down > √KEYLOCK until appears.
- 2. To turn off keylock, hold down > ✓ /KEYLOCK until disappears.

Using the Display Backlight

To turn on the display light for easy viewing at night, press >•€. The display lights for 15 seconds.

Setting the Auto Backlight Display

You can set the scanner so the backlight turns on for about 5 seconds when the scanner receives signals. If you press a key within the 5 seconds, the display remains lighted for 15 more seconds.

To turn auto backlight display on or off:

 Press and hold TUNE/MENU to open the menu.

Settings

- 2. Press ▼ or ▲ to select **AutLit**, then press **ENT/PGM**.
- Press ▼ or ▲ to select On or OF. Press ENT/ PGM.
- 4. Press **TUNE/MENU** or **CL** to exit the menu mode.

Setting the Power On Backlight

The backlight can be set to light for 5 seconds when you power on the scanner. To turn the power on backlight on or off:

- Press and hold **TUNE/MENU** to open the menu.
- 2. Press ▼ or ▲ to select **PonLit**, then press **ENT/PGM**.
- Press ▼ or ▲ to select On or OF. Press ENT/ PGM.
- 4. Press **TUNE/MENU** or **CL** to exit the menu mode.

Setting the Keytone

Each time you press any of the scanner's keys, the scanner sounds a tone. To turn the scanner's key tone on or off:

- 1. Press and hold **TUNE/MENU** to open the menu.
- 2. Press ▼ or ▲ to select **bEEP**, then press **FNT/PGM**
- Press ▼ or ▲ to select On or OF. Press ENT/ PGM.
- 4. Press **TUNE/MENU** or **CL** to exit the menu mode.

Setting the Battery Save Function

The battery save feature conserves energy when the scanner is set to monitor a manually selected channel and it is not actively scanning. The scanner repeatedly turns off the internal power for one second, and then turns it back on for half a second to check for a transmission.

To turn the battery save function on or off:

- 1. Press and hold **TUNE/MENU** to open the menu.
- 2. Press ▼ or ▲ to select **b-SAVE**, then press **ENT/PGM**.
- Press ▼ or ▲ to select On or OF. Press ENT/ PGM.
- 4. Press **TUNE/MENU** or **CL** to exit the menu mode

Advanced Programming

Advanced Programming

Transferring Data To or From another Scanner

You can clone your scanner by transferring the programmed data to or from another PRO-135 scanner using a connecting cable. You can also upload or download programmed data from a PC through wired programming.

Cloning Your Scanner

You can clone all the frequencies in your PRO-135 to another PRO-135 or PRO-136 using an optional interface cable with 1/8-inch phone plugs on both ends and software available at your local RadioShack or www.radioshack.com.

- Make sure the scanners are turned off and then plug the cable into each scanner's PC/IF jack.
- 2. Turn on both scanners. **WirEd** and **PGM** appear.
- 3. Press ▼ or ▲ on the scanner from which you want to send frequencies. This is the "master unit." The receiving scanner is the "slave unit."
- 4. Press **ENT/PGM** on the master unit to send the data. **SEnd** and the transfer progress are displayed in the master unit.



Advanced Programming

- When the data transfer is completed, donE appears on both units. If the transfer was not successful, Error appears.
- 6. After the clone operation is complete, remove the cable, turn both units off and then on again.

Transferring Data From a PC

Wired Programming

You can transfer programming data to your scanner using your PC and an optional interface cable and software (available at your local RadioShack or www.radioshack.com).

- 1. Make sure your scanner is turned off.
- 2. Connect the interface cable to your computer and then connect the other end of the cable to the scanner's **PC/IF** jack.
- 3. Install the software to your computer and run the program.
- 4. To set up the program, click on **Tools**, select **Configuration**, and select **PRO-135** (if necessary).
- 5. Turn the scanner on. The scanner automatically goes into the wired programming mode. **WirEd** and **PGM** appear. When the scanner begins to communicate with the PC, **PC** flashes.

PC WirEd

- 6. **PC** stops flashing when the scanner has successfully received all data. Turn the scanner off and remove the cable.
- 7. Turn the scanner on again.

Additional Information

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 it. Try the following methods to eliminate the interference:

- Move your scanner away from the receiver.
- Connect your scanner to an outlet that is on a different electrical circuit from the receiver.
- Contact your local RadioShack store for help.

In some areas, mobile use of a scanner is unlawful or requires a permit. Check the laws in your area.

This device complies with Part 15 of the FCC Rules. Operation is subject of the following two conditions: (1) This device may not cause harmful interference. (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 (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), as amended, 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).

This scanner is designed to prevent reception of illegal transmissions, in compliance with the law which requires that scanners be manufactured in such a way as to not be easily modifiable to pick up those transmissions. Do not open your scanner's case to make any modifications that could allow it to pick up transmissions that are not legal to listen to. Doing so could subject you to legal penalties.

We encourage responsible, legal scanner use.

Care

Keep the scanner dry. If it gets wet, wipe it dry immediately. Use and store the scanner only in normal temperature environments. Handle the scanner carefully; do not drop it. Keep the scanner away from dust and dirt, and wipe it with a damp cloth occasionally to keep it looking new.

Service and Repair

If your scanner is not performing as it should, take it to your local RadioShack store for assistance. To locate your nearest RadioShack, use the store locator feature on RadioShack's website (www. radioshack.com), or call 1-800-The Shack (800-843-7422) and follow the menu options. 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.

Specifications

E		C	
Fred	luencv	Covera	aae
	10.00		

25.0000-27.9950 (in 5 kHz steps)

28.0000-54.0000 (in 5 kHz steps)

108.0000-136.9875 (in 12.5 kHz steps)

137.0000-174.0000 (in 5 kHz steps)

380.0000-399.9875 (in 12.5 kHz steps)

400.0000-512.0000 (in 6.25 kHz steps)

Sensitivity (AM/FM)

FM20 dB S/N at 3 kHz deviation		
28.0000-54.0000		
137.0000-174.0000		
400.0000-512.0000		
AM 20 dB S/N at 60% modulation		
25.0000-27.99501.3μV		
108.0000-136.98751.5μV		
320.0000-399.98751.3µV		
IF Rejection at 453.2500 MHz60 dB		
IF Frequencies 254.30-40 MHz, 10.85 MHz, 450 kHz		
Channels200		
Number of Banks10		
Operating Temperature		
Normal4° to 140°F (-20° to 60°C)		
Signal Stalker I14° to 140°F (-10° to 60°C)		
Scan Speed 55 Channels/Second		
Search Speed		
Normal55 Steps/Second		
Hypersearch160 Steps/Second		

Antenna Impedance50 Ω		
Audio Output260 mW maximum		
Built-in Speaker		
Power		
4 AA Alkaline Batteries (6.0 VDC), or		
4 AA Rechargeable Ni-MH Batteries (4.8 VDC) o		
Optional AC Adapter (9V DC; 300mA; center tip set to positive)		
Current Drain		
Squelched75 mA		
Full Output160 mA		
Dimensions (HxWxD)		
Weight (without antenna, batteries, or belt clip)		
Specifications are typical; individual units might vary. Specifications and depictions are subject to change and improvement without notice.		

Troubleshooting

Problem	Cause	Solution
Scanner is on but will not scan.	SQUELCH is not adjusted correctly.	Adjust SQUELCH.
	Only one channel or no channels are stored.	Store frequencies into more than one channel.
Scanner won't work at all.	Scanner is not re- ceiving power.	Recharge the re- chargeable batteries or replace the non-re- chargeable batteries.
	The AC adapter or DC adapter is not connected.	Be sure the adapter's barrel plug is fully plugged into the DC 9V 300 mA jack.
Keypad doesn't work.	The keylock function is activated.	Press and hold > (KEYLOCK until disappears.
is flashing.	Batteries are low.	Recharge the re- chargeable batteries or replace the alkaline batteries.
Poor or no reception.	Batteries are weak or completely dis- charged.	Check the batteries or make sure the AC adapter or DC adapter is connected properly.
	Antenna loose.	Make sure an antenna is connected to the scanner.
Error appears.	Programming error.	Re-enter the frequency correctly, including the decimal point.

Resetting your Scanner

If the scanner's display locks up or stops operating properly, you might need to reset the scanner.

Caution: This procedure clears all the information you have stored in the scanner. Before you reset the scanner, try turning it off and on again to see if it begins working properly. Reset the scanner only when you are sure it is not working properly.

- 1. Turn off the scanner.
- 2. While holding down **2**, **9** and **PSE**, turn on the scanner. **CLEAr** appears for about 2 seconds as the scanner clears its memory.

Note: Do not turn off the scanner again until **CLEAr** disappears. Otherwise, the scanner might not clear its memory properly.

Follow these steps to restore the 150 preprogrammed frequencies stored in the private bank.

- 1. Make sure your scanner is turned off.
- 2. Press **3** and **ENT/PGM** simultaneously while turning on the scanner. After several seconds, the scanner restores the frequencies.

Notes:

Notes:

Limited One-year Warranty

This product is warranted by *RadioShack* against manufacturing defects in material and workmanship under normal use for one (1) year from the date of purchase from *RadioShack* company-owned stores and authorized *RadioShack* franchisees and dealers. For complete warranty details and exclusions, check with your local *RadioShack* store.

RadioShack Customer Relations300 RadioShack Circle, Fort Worth, TX 76102

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