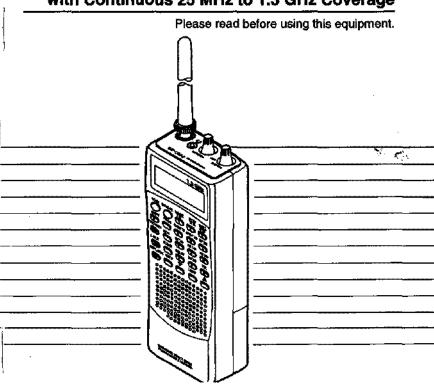
#### **OWNER'S MANUAL**

# PRO-26 Portable 200-Channel Scanner with Continuous 25 MHz to 1.3 GHz Coverage





#### INTRODUCTION

Your Realistic PRO-26 Portable 200-Channel Scanner lats you in on all the action! This scanner gives you direct access to multiple frequencies. You can select up to 200 channels to store in your scanner.

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

Your scanner also has these features:

Continuous Coverage—receives from 25 MHz to 1.3 GHz.

**HyperScan**—scans through programmed channels at 50 channels per second.

Ten Channel-Storage Banks—let you store 20 channels in each of 10 banks to group frequencies so you can easily identify calls.

Monitor Memories—let you store up to 10 frequencies you locate during a frequency search which you can then transfer into channels.

Limit Search—lets you search for transmissions within a set range.

Direct Search-lets you search from the current frequency.

**Search Skip**—lets you select up to 50 frequencies for the scanner to skip during a search, so you can avoid frequencies you have already discovered.

Auto Sort—lets you scan the stored channels in order from lowest to highest frequency to increase scanning speed.

**HyperSearch**—lets you set the scanner to search at 300 steps/second (in 5 kHz steps only).

Auto Store—quickly finds and automatically stores active frequencies into the selected banks (does not store the frequency if it is already stored in another channel).

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2- or 4-Second Scan Delay—delays scanning for 2 or 4 seconds before moving to another channel, so you can hear more replies.

Data Skip—skips nonmodulated signals or data signals during a limit or direct search.

**Lock-Out Function**—prevents channels you select from being scanned.

**Priority Channel**—checks a specified channel every 2 seconds so you do not miss important calls.

Automatic Modulation Mode—selects the modulation method—narrow-band frequency modulation (NFM), wide-band frequency modulation (WFM), or amplitude modulation (AM)—most often used for each band, and lets you manually override the preset mode (see "Changing the Modulation Mode").

**Selectable Frequency Step**—lets you select the frequency step during a limit or direct search.

**Weather Band Key**—scans the preprogrammed weather frequencies to keep you informed of the most current weather conditions. (The weather band is only available in Canada.)

Attenuator—adjusts the scanner's sensitivity to help eliminate interference from strong, nearby transmitters.

Low Battery Indicator-warns you when battery power gets low.

**Memory Backup**—keeps the channel frequencies stored in memory for up to 3 days during a power loss.

**Optional Power Sources**—let you power your scanner from alkaline batteries, rechargeable batteries, or AC or DC power, and even recharge rechargeable batteries in the scanner.

Your scanner can receive all of these bands:

Canada			Europe		
Range (MHz)	Freq.   Step (kHz)	Defauit Mode	Range (MHz)	rec. Default Step Mode (Hz)	
25.0000 - 28.9950	5	АМ	25 - 28.99	10 NFM	
29.0000 - 53.9950	5	NFM	29 - 53.995	5 NFM	
59.7500 - 71.7500	6000	WFM	54 - 71.95	50 WFM	
72.0000 - 75.9950	5	NFM	72 - 81.745	5 NFM	
81.7500 - 87.7500	6000	WFM	81.75 - 87.75	12.5 WFM	
88.1000 - 107.9000	200	WFM	87.8 - 108	50 WFM	
108.0000 - 136.9875	12.5	AM	108 - 136.9875	12.5 AM	
137.0000 - 173.9950	5	NFM	137 - 179.745	5 NFM	
179.7500 - 215.7500	6000	WFM	179.75 - 215.95	12.5 WFM	
216.0000 - 224.9950	5	NFM	216 - 224.995	5 NFM	
225.0000 - 399.9875	12.5	AM	225 - 399.9875	12.5 AM	
400.0000 - 511.9875	12.5	NFM	400 - 511.9875	12.5 NFM	
517.7500 - 805.7500	6000	WFM	512 - 805.95	50 WFM	
<b>806,0000 - 823,8375</b>	12.5	NFM.	806 1300	12.5 NFM	
823.9375 - 851.0000					
851.0000 - 868.9375	12.5	NEM			
888.9375 - 896.1125					
896.1125 -1300,0000	12.5	NFM			

The following Weather Service channels are preprogrammed into your scanner (can be received in Canada only):

- 162.4000 MHz (NFM)
- 162.4250 MHz (NFM)
- 162.4500 MHz (NFM)
- 162.4750 MHz (NFM)
- 162.5000 MHz (NFM)
- 162.5250 MHz (NFM)
- 162.5500 MHz (NFM)

For your records, we urge you to record your scanner's serial number in the space below. You will find the serial number of the scanner's back panel.

Serial Number:

#### NOTICE

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

- · Moving your scanner away from the receiver
- Connecting your scanner to an outlet that is on a different electrical circuit from the receiver
- Contacting your local Tandy/Radio Shack store for help

If you cannot eliminate the interference, tocal laws may require you to stop using your scanner.

Note: Mobile use of this scanner is unlawful or requires a permit in some areas. Check the laws in your area.

This device complies with North American regulations. 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.

Use of scanners must conform to the requirements of the law of the country where they are utilized. Always check that your intended use is legally permitted. InterTAN Inc. and its subsidiaries cannot be held responsible for the illegal use of scanners.

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#### **PREPARATION**

#### **POWER SOURCES**

You can power your scanner from any of three sources:

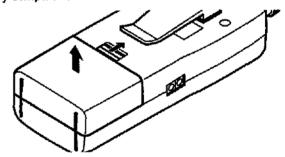
- Internal batteries
- Standard AC power (using an optional AC adapter)
- · Vehicle battery power (using an optional DC adapter)

#### **Using Internal Batteries**

You can power your scanner with four AA batteries. For the longest life and best performance, we recommend alkaline batteries. Or, you can use rechargeable nickel-cadmium batteries.

Follow these steps to install or replace batteries.

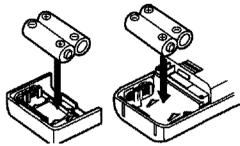
1. Push up the tab on the back of the scanner and lift open the battery compartment cover.



2. Remove any old batteries from the compartment and cover.

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

 Install two batteries in the compartment and two in the cover as indicated by the polarity symbols (+ and -) marked inside the compartment and cover.



Caution: Use only fresh, AA alkaline, nickel-cadmium, or general purpose batteries.

4. Replace the cover.

When the batteries are low, your scanner beeps every 15 seconds and flashes BATT. Lo. If this happens, immediately replace or recharge all four batteries and ensure all four batteries are of the same type. See "Important Information About the External Power Jacks" and "Charging Nickel-Cadmium Batteries."

# Important Information About the External Power Jacks

The scanner has two external power jacks—POWER and CHARGE. You should understand the purpose of each jack before you connect any adapter to the scanner.

The **POWER** jack lets you connect an external AC or DC adapter to power the scanner. You can plug an adapter into this jack with either rechargeable or non-rechargeable batteries installed.

The CHARGE jack lets you connect an external AC or DC adapter to power the scanner and also charge the internal batteries. Use the CHARGE jack only when rechargeable nickel-cadmium batteries are installed.

**Warning:** Never connect either adapter to the **CHARGE** jack with non-rechargeable batteries installed. If you try to recharge non-rechargeable batteries, they become very hot and could explode.

#### **Charging Nickel-Cadmium Batteries**

The scanner has a built-in charging circuit that lets you recharge nickel-cadmium batteries while they are in the scanner. To charge the batteries, simply connect an AC adapter or a DC adapter to the scanner's CHARGE jack.

Warning: Do not connect either adapter to the scanner's CHARGE jack if you have installed non-rechargeable batteries (standard, extra-life, or alkaline). Non-rechargeable batteries become hot and can even explode if you try to recharge them.

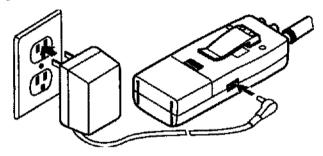
Fully discharged batteries take about 10 to 18 hours to recharge. You can operate the scanner while recharging nickel-cadmium batteries, but the charging time is lengthened.

#### **Using AC Power**

To power the scanner from AC power, you need an AC adapter.

Caution: You must use an AC adapter that supplies 9 volts with the center tip set to negative. It must deliver at least 300 milliamps, and its plug must properly fit the scanner's POWER jack. Using an adapter that does not meet these specifications could damage the scanner or the adapter.

Plug the adapter's barrel plug into the scanner's **POWER** jack. Then plug the adapter's power module into a standard AC outlet.



When you finish using the AC adapter, disconnect it from the AC outlet first. Then disconnect it from the scanner.

#### **Using Vehicle Battery Power**

To power the scanner from your vehicle's battery power, you need a DC adapter.

#### Cautions:

- You must use a DC adapter that supplies 9 volts with the center tip set to negative. It must deliver at least 300 milliamps, and its plug must properly fit the scanner's POWER jack. Using an adapter that does not meet these specifications could damage the scanner or the adapter.
- Your vehicle must have a 12-volt DC, negative-ground electrical system.
- To protect your vehicle's electrical system, be sure the adapter is connected to the cigarette-lighter socket only when it is also connected to the scanner.

Follow these steps to use vehicle battery power.

- 1. Connect the adapter's barrel plug to the adapter's cable with the tip set to (negative).
- 2. Set the adapter to supply 9 volts.
- 3. Insert the barrel plug into the scanner's POWER jack.
- 4. Plug the other end of the adapter into your vehicle's cigarette-lighter socket.

Note: If the scanner does not operate properly when you use a DC adapter, unplug the adapter from the lighter socket and clean the socket to remove ash and other debris. Also, check the vehicle's and DC adapter's fuses.

#### RESETTING THE SCANNER

if the scanner's display locks up or does not work properly after you connect a power source, you might have to reset the scanner.

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.

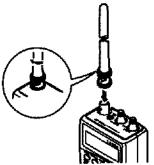




- 1. Turn off the scanner by turning VOLUME fully counterclockwise.
- 2. While you press and hold down the 2 and 9 keys, turn on the scanner by turning VOLUME clockwise.

#### **CONNECTING THE ANTENNA**

Follow these steps to attach the supplied flexible antenna to the connector on top of your scanner.



- 1. Slip the slots in the antenna connector over the tabs on the jack.
- Press down and rotate the antenna's base clockwise until it locks into place.

#### Connecting an Optional Antenna

The antenna connector on your scanner makes it easy to use with a variety of antennas, such as an external mobile antenna or outdoor base antenna. Your local Tandy/Radio Shack store sells a variety of antennas.

Use coaxial cable to connect an outdoor antenna. Always use 50-ohm coaxial cable, such as RG-58 or RG-8/M. For lengths over 50 feet, use RG-8 low-loss dielectric coaxial cable. You might also need a BNC connector (not supplied) to connect an optional antenna.

Warning: When installing or removing an outdoor antenna, follow all cautions and warnings included with the antenna.

### CONNECTING AN EARPHONE/ HEADPHONES

For private listening, plug an earphone (not supplied) or mono headset (not supplied) into the  $\,\Omega\,$  jack on top of your scanner. This automatically disconnects the internal speaker.

#### **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.

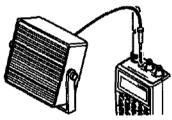
#### **Traffic Safety**

Do not wear headphones or an earphone while you drive a vehicle of ride a bicycle. This can create a traffic hazard and is illegal in some areas.

Even though some headphones and earphones are designed to let you hear some outside sounds when you listen at normal levels, they still present a traffic hazard.

#### **CONNECTING AN EXTENSION SPEAKER**

In a noisy area, an extension speaker (not supplied), positioned in the right place, might provide more comfortable listening. Plug the speaker cable's 3.5-mm (1/e-inch) mini-plug into the scanner's  $\Omega$  jack.



Note: Connecting an extension speaker disconnects the scanner's built-in speaker.

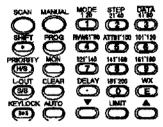
#### **USING THE BELT CLIP**

You can use the supplied belt clip for hands-free carrying when you are on the go. Use the two supplied screws to attach the belt clip to the scanner. Then slide the belt clip over your belt or waistband.



## **UNDERSTANDING YOUR SCANNER**

#### A LOOK AT THE KEYBOARD



A quick glance at this section should help you understand each key's function(s).

SCAN—scans through the programmed channels.

MANUAL --- stops scanning and lets you directly enter a channel number.

H/S/PRIORITY—sets and turns on and off priority for a particular channel; turns on and off hyper scan mode.

S/S/L-OUT-lets you lock out a selected channel.

KEYLOCK/>= -locks/unlocks the keypad to prevent accidental entries; turns on the display light for 15 seconds.

PROG - programs frequencies into channels.

MON—accesses the 10 monitor memories. See "Moving a Frequency from a Monitor Memory to a Channel" on Page 26.

CLEAR—clears an incorrect entry.

JDELAY—inputs a decimal point when you set a frequency; programs a 2- or 4-second delay for the selected channel.

LIMIT—turns on the limit search mode. See "Searching For and Temporarily Storing Active Frequencies" on Page 22.

▲ and ▼—selects the scan and search direction.

Number Keys—each key has a single digit with 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) indicates the channels that make up a memory bank. See "Understanding Channel Storage Banks" on Page 19.

SHIFT—selects MODE, STEP, DATA, RVW, and ATT when used with the corresponding number keys.

For example, to use a function printed above keys 1–5 (MODE, STEP, DATA, RVW, and ATT), press SHIFT and then press the desired key.

MODE—selects the auto or selectable modulation mode function.

STEP—lets you select the frequency step during a direct or limit search.

DATA—turns on or off the data signal skip feature.

**RVW**—lets you review locked-out channels or search skip memory.

ATT—turns on or off the attenuator for each channel to help reduce interference from strong, nearby transmitters.

E/WX—enters the frequency when you program channels, and starts scanning the weather frequencies when you are not programming channels. (The weather frequencies are received only in Canada.)

**AUTO**—lets you automatically program frequencies into selected banks.

#### A LOOK AT THE DISPLAY

The display has several indicators that show the scanner's current operating mode. A quick look at the display will help you understand how your scanner operates.

**MON**—appears during a search or when you listen to a monitor memory. The number to the right of this indicator shows the current monitor memory number. See "Listening to Monitor Memories" on Page 26.

BANK—shows which channel-storage banks are turned on. See "Channel-Storage Banks" on Page 19.

SFT-appears when you press SHIFT.

**AUTO**—appears when the scanner is in the auto store or auto sort modes.

DATA—appears when you turn on the data skip function.

NFM/WFM/AN—shows the current modulation mode; flashes when you override the default mode.

5, 12.5, 25—shows which frequency step the scanner is set to during a limit or direct search.

K/L—appears when you lock the keypad.

BATT. Lo-flashes when the battery is low.

CH—digits that precede this indicator show which of the 200 channels the scanner is tuned to.

P-appears when you listen to the priority channel.

MHz—digits that precede this indicator show which frequency the scanner is tuned to.

SCAN-appears when you scan channels.

MAN-appears when you manually select a channel.

**ATT**—appears when you use the attenuator function to adjust the scanner's sensitivity.

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

**PRI** —appears when you set the scanner to scan the selected priority channel every 2 seconds.

L/O-appears when you manually select a locked channel.

**DLY**—appears when you program a channel for a 2- or 4-second delay or when you listen to a channel that has been programmed with the delay feature.

wx—appears when the scanner is in the weather band mode. (The weather band is received in Canada only.)

▲ and ▼-indicate the scan and search direction.

**SEARCH**—appears during a limit search (**-L-** also appears), a direct frequency search (**-d-** also appears), a hold direct search (**-h-** also appears), and a hold limit search (**-H-** also appears).

# UNDERSTANDING CHANNEL-STORAGE BANKS

You can store up to 210 frequencies into your scanner's memory. You store each frequency into either a memory, called a channel, or a temporary memory, called a monitor. This scanner has 200 channel memories and 10 monitor memories.

#### **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 of 20 channels each. Use each channel-storage bank to group frequencies, such as the police department, fire department, ambulance services, or aircraft.

For example, the police department might use four frequencies, one for each side of town. You could program the police frequencies starting with Channel 1 (the first channel in Bank 1) and program the fire department starting with Channel 21 (the first channel in Bank 2).

#### **Monitor Memories**

The scanner also has 10 monitor memories. You can use these memories to temporarily store frequencies while you decide whether to save them into channels. This is handy for quickly storing an active frequency when you search through an entire band. See "Searching For and Temporarily Storing Active Frequencies" on Page 22.

# TURNING ON THE SCANNER / SETTING VOLUME AND SQUELCH

- 1. Rotate VOLUME 1/4 turn clockwise to turn on the scanner.
- 2. Rotate SQUELCH fully counterclockwise.
- 3. Slowly turn SQUELCH clockwise until the hissing stops.

Note: To hear a weak or distant station, turn SQUELCH counterclockwise. You might hear hissing, but you will not miss any transmissions.

#### STORING FREQUENCIES

You can store up to 200 frequencies into your scanner's channels.

If you do not have a frequency reference for your area, use a limit or direct search to find a transmission. See "Searching For and Temporarily Storing Active Frequencies" on Page 22.

Follow these steps to manually store frequencies.

- 1. Press MANUAL. Enter the channel number you want to program.
- 2. Press PROG. PGM appears on the display.
- 3. Enter a frequency, ensuring you enter the decimal point.
- 4. Press E to store the frequency.

#### Notes:

- If you make a mistake in Step 3, Error appears on the display and the scanner sounds three beeps. Press CLEAR, then proceed again from Step 3.
- Your scanner rounds frequencies down to the next valid frequency. For example, if you enter 151.473, the scanner accepts this as 151.470.
- 5. Repeat Steps 1-4 to program more channels.

Note: To program the next channel, repeat Steps 2-4.

# SEARCHING FOR AND TEMPORARILY STORING ACTIVE FREQUENCIES

#### **Limit Search**

Limit search lets you search within a specific range of frequencies.

- 1. Press PROG, then LIMIT. Lo appears on the display.
- 2. Enter the lower limit of the frequency range you want to search.
- 3. Press E/WX, then LIMIT. Ed. appears on the display.
- 4. Enter the upper limit of the frequency range.
- Press E/WX.
- Press ▼ to search from the upper to the lower limit, or press ▲ to search from the lower to the upper limit. -L- appears.
- When the scanner stops on a transmission, press MON to store
  the frequency into the current monitor memory. Or, press ▲ or ▼
  to continue the search.

Note: You can halt the limit search by pressing LIMIT. -H-appears.

- Press ▲ or ▼ to step through the frequencies one at a time.
- Press MON to store the frequency into the current monitor memory.
- · Press LIMIT to return to the limit search.

#### **Direct Search**

Direct search lets you search up or down from a frequency stored in a channel.

- Press MANUAL, enter the channel number, then press MANUAL again to select the channel that has the frequency you want to start searching from.
- Press ▲ or ▼ to search up or down from the selected frequency.
   -d- appears on the display.
- When the scanner stops on a transmission, press MON to store that frequency in the current monitor memory. Or, press ▲ or ▼ to continue the search.

Note: You can halt the direct search by pressing LIMIT. -b- appears on the display.

- Press ▲ or ▼ to step through the frequencies one at a time.
- Press MON to store the frequency into the current monitor memory.
- Press LIMIT to return to the direct search.

#### Search Skip

You can skip specified frequencies during a limit or direct search. This lets you avoid frequencies that you know have data tones or that you have already stored in a channel. You can program up to 50 skip frequencies in the scanner's memory.

#### Notes:

- If you program more than 50 skip frequencies, the new frequencies replace the first ones you stored.
- You can select the skipped frequency when the scanner is halted. The scanner displays LO when you select a skipped frequency.

To skip a frequency, press **s/s/L-out** when the scanner stops on the frequency during a limit or direct search.

To remove the frequency from skip memory, halt the search and select the frequency, then press **S/S/L-OUT** until **L/O** disappears from the display.

### **Reviewing Skip Frequencies**

Follow these steps to see which skip frequencies you have stored.

- During a limit or direct search, press SHIFT. SFT appears on the display.
- Press RVW. The first skip frequency appears on the display. Use
   ▲ or ▼ to review the other skip frequencies.

#### **Automatically Storing Frequencies**

You can have your scanner automatically store active frequencies into empty channels within the banks you specify.

- 1. Press PROG then LIMIT. Lo appears.
- Use the number keys to enter the lower limit of the frequency range you want to search, then press E/WX.

**Notes:** If you enter an invalid frequency in Step 2 or 4, the scanner displays **Error**. Simply repeat the step.

- 3. Press LIMIT. Hi appears.
- Use the number keys to enter the upper limit of the frequency range you want to search, then press E/WX.
- 5. Press AUTO. AUTO and the numbers 1-10 flash on the display.
- Using the number keys, enter the numbers of the banks where you want to store frequencies.

#### Notes:

- . To select bank 10, press 0.
- If you select a bank that does not contain any empty channels, the scanner beeps and FULL appears for 2 seconds.
- · To unselect the bank, press the bank number again.
- Press ▲ to search from the lower to the upper limit, or ▼ to search from the upper to lower limit. AUTO and the selected bank number flash on the display.

When the scanner finds a transmission, it checks to see if the frequency is in another channel. If not, the scanner stores the frequency, then searches for more transmissions and stores their frequencies in empty channels in the selected banks.

8. To stop storing frequencies, press MANUAL.

When all channels fill, the scanner beeps twice and **End** appears for 2 seconds, then the scanner goes to the channel where it stored the last frequency.

#### LISTENING TO MONITOR MEMORIES

Once you have stored frequencies using a direct or limit search, you can listen to monitor memories by pressing MANUAL, MON, and then the number for the monitor memory you want to listen to.

# MOVING A FREQUENCY FROM A MONITOR MEMORY TO A CHANNEL

- 1. Press MANUAL.
- Enter the number of the channel where you want to store the monitor frequency, then press PROG. PGM appears on the display.
- Press MON, then enter the monitor memory number that contains the frequency you want to store. The selected channel number flashes
- Press EWX. The scanner stores the frequency into the selected channel.

#### **USING THE KEYLOCK**

Once you program your scanner, you can protect it from accidental program changes by turning on the keylock feature. In this mode, only the SCAN, MANUAL, and KEYLOCK keys function.

To turn on keylock, press and hold **KEYLOCK** until **K/L** appears on the display.

To turn off keylock, press and hold KEYLOCK until K/L disappears.

#### **SCANNING THE CHANNELS**

To begin scanning the channels, press SCAN. The scanner scans through all non-locked channels in the activated banks. (See "Locking Out Channels" and "Turning Channel-Storage Banks On and Off.")

**Note:** If the scanner does not scan, be sure you have set **SQUELCH** so you do not hear the hissing sound between transmissions.

#### **Locking Out Channels**

You can increase the effective scanning speed by locking out channels that have a continuous transmission, such as a weather channel.

To lock out a channel, manually select the channel then press S/S/L-OUT so L/O appears on the display.

To remove the lock-out from a channel, manually select the channel then press S/S/L-OUT so L/O disappears from the display.

To unlock all channels in selected banks, select the banks while the scanner is scanning. Then press manual and hold **S/S/L-OUT** until the scanner beeps twice.

#### Notes:

- There must be at least one active channel in each bank. You cannot lock out all channels.
- You can manually select then review the channels you have locked.

Follow these steps to manually select locked-out channels.

- 1. Press MANUAL.
- 2. Press SHIFT. SFT appears on the display.
- Press RVW. The next locked-out channel appears. Repeatedly press RVW to see the locked-out channels in sequence.

# Turning Channel-Storage Banks On and 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 corresponding to the bank you want to turn on or off. If the memory bank number at the top of the display is on, the bank is turned on and the scanner scans all channels within that bank that are not locked out. If the indicator is off, the scanner does not scan any of the channels within that bank.

#### Notes:

- You can manually select any channel in a bank, even if the bank is turned off.
- There must be at least one active bank. You cannot turn off all banks.

#### **MANUALLY SELECTING A 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 want to monitor a specific channel.

To manually select a channel, press MANUAL, enter the channel number, then press MANUAL again.

Or, if your scanner is scanning and stops at the desired channel, press MANUAL one time. Pressing MANUAL additional times causes your scanner to step through the channels.

### **SPECIAL FEATURES**

#### **DELAY**

Many agencies use a two-way radio system that might have a period of 2 or more seconds between a query and a reply. To keep from missing a reply on a specific channel, you can program a 2- or 4-second delay.

Follow these steps to switch between the 2- or 4-second delay time and then program a channel with that delay time.

- 1. Turn off the scanner.
- Press and hold DELAY, then turn on the scanner. 2 SEC or 4 SEC appears on the display for 3 seconds.
- To program a delay on a specific channel, select the channel, then press DELAY so DLY appears on the display.

#### **PRIORITY**

You can scan through the programmed channels and still not miss an important or interesting call on a specific channel which you designate as the priority channel.

To program a stored channel as the priority channel, press **PROG**, the desired channel number, then **H/S/PRIORITY**. **P** appears beside the channel number.

Note: You can only select one channel at a time as the priority channel.

To turn on the priority feature, press H/S/PRIORITY during scanning. PRI appears on the display. The scanner checks the priority channel every 2 seconds, and stays on the channel if there is activity. P appears on the display whenever the scanner is set to the priority channel.

To turn off the priority feature, press H/S/PRIORITY until PRI disappears from the display.

#### **USING THE DISPLAY BACKLIGHT**

You can turn on the display's backlight for easy viewing in the dark. Press >=</ri>
/KEYLOCK to turn on the display light for 15 seconds. To turn off the light sooner, press >=
/KEYLOCK again.

Note: Do not hold down >=/KEYLOCK for longer than about 1 second. Doing so locks the keypad.

# USING THE PROGRAMMABLE ATTENUATOR

To reduce interference or noise caused by signals from a strong local broadcast, you can reduce the scanner's sensitivity by turning on the attenuator. This feature is especially useful in the WFM mode.

You can program the attenuator on each channel or use this function during a limit or direct search.

- Press SHIFT. SFT appears on the display.
- 2. Press ATT until ATT appears on the display.

To turn off this function, press SHIFT then press ATT until ATT disappears.

#### **USING AUTO SORTING**

You can set the scanner so it scans from the channel with the lowest frequency to the channel with the highest frequency instead of from the lowest channel to the highest channel. The scanner scans faster when auto sorting is turned on.

Follow these steps to turn on auto sorting.

- 1. Turn off the scanner.
- Press and hold AUTO, then turn on the scanner. ON SORT appears on the display for 3 seconds. During scanning AUTO appears on the display.

To turn off auto sorting, repeat Steps 1–2. **OFF SORT** appears on the display for 3 seconds.

#### SKIPPING DATA SIGNALS

You can set the scanner so it skips nonmodulated or data signals (such as preamble signals for pagers or control frequencies for trunked systems) during a limit or direct search.

Note: This feature does not work in the AM mode.

Follow these steps to skip the data signals.

- 1. Press SHIFT. SPT appears on the display.
- 2. Press DATA until DATA appears on the display.

To turn off this feature, press SHIFT then press DATA until DATA disappears.

#### **TURNING ON OR OFF THE KEY TONE**

To turn off the key tone beep, follow these steps.

- 1. Turn off the scanner.
- Press and hold >==/KEYLOCK and turn on the scanner. OFF beep appears.

To lum on the beep, repeat Steps 1-2, On bEEP appears.

#### **CHANGING THE FREQUENCY STEP**

The scanner automatically selects the frequency step for each frequency range. However, you can manually change the frequency step while the scanner is searching for frequencies.

- 1. Press SHIFT. SFT appears on the display.
- 2. Press STEP until the desired frequency step appears (5 kHz, 12.5 kHz, or 25 kHz).

#### CHANGING THE MODULATION MODE

Your scanner receives amplitude modulated (AM), narrow-band frequency modulated (NFM), or wide-band FM (WFM) transmissions. It selects the mode most commonly used in each frequency range. However, you can manually change the mode while the scanner is searching for frequencies. The selected mode flashes if it is not the default.

Follow these steps to change the modulation mode.

- 1. Press SHIFT. SFT appears on the display.
- Press MODE until the desired modulation mode (AM, NFM, or WFM) flashes in the display.

To return to the default modulation mode, press **MODE** until the mode no longer flashes.

#### A GENERAL GUIDE TO SCANNING

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 commonly known as skip. This type of reception is unpredictable but often very interesting!

#### **GUIDE TO FREQUENCIES**

### National Weather Frequencies (Canada only)

1.	161.650	5.	162.440	9.	162.525
2.	161.775	6.	162.450	10.	162.550
3.	162.400	7.	162.475	11.	163.275
A	169 495	A	182 500		

#### **Ham Radio Frequencies**

The following chart shows the frequencies that Hams use:

Wavelength (meters)	Frequency (MHz)		
10-meter	28.000-29.700		
6-meter	50.000-54.000		
2-meter	144.000-148.000		
70-cm	420.000-450.000		
23-cm	1240.000-1300.000		

#### **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. You can also use the search skip memories to avoid unwanted birdie frequencies.

Here are the birdie frequencies on this unit that you might want to watch for:

38.4000	311.7500	313.1625	497.7500
74.2000	312.2875	322.1625	818.9750
115.2375	312.3000	341.8500	818.9875
132.2750	312.3125	345.7125	820,7000
137.6400	312.3250	368.7000	908.4500
137.6500	312.4625	380.8875	967,8000
230.4750	312,4750	403.3375	1083.9500
288.0875	313.1250	428.6125	1083.9875
288.1000	313.1375	628.6250	1114.0500
311.7375	313.1500	455.3500	1260.3000
			1290,4000

To find the birdies in any receiver, begin by disconnecting the antenna and moving it away from the receiver. Make sure that no other nearby radio or TV sets are turned on near the receiver. 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.

#### **FREQUENCY CONVERSION**

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 by 1,000.

 $9.62 \, \text{MHz} \times 1000 = 9620 \, \text{kHz}$ 

To convert from kHz to MHz, divide by 1,000.

2780 kHz + 1000 = 2.780 MHz

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

300 + 7.1 MHz = 42.25 meters

## **TROUBLESHOOTING**

If you have problems, here are some suggestions which might help. If none of these suggestions help, take your scanner to your local Tandy/Radio Shack store for assistance.

PROBLEM	POSSIBLE CAUSE	REMEDY  Check the batteries, or make sure you plugged the scanner into a working AC or DC outlet.	
Scanner is totally inoperative.	No power.		
Scanner is on but will not scan.	SQUELCH is not cor- rectly adjusted.	Adjust SQUELCH clockwise.	
While scanning, the scanner locks on fre- quencies that have an unclear transmission.	"Birdies."	Avoid programming frequencies listed under "Birdie Frequencies" on Page 34 or only listen to them manually.	
Keyboard does not work.	Keylock is activated.	Press and hold KEY- LOCK until K/L dis- appears.	

#### CARE AND MAINTENANCE

Your PRO-26 200-Channel Direct Entry Programmable Scanner is an example of superior design and craftsmanship. The following suggestions will help you care for the PRO-26 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.



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



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



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 your scanner's internal components can cause a malfunction and might invalidate the scanner's warranty and void the units legal certification to operate. If your scanner is not operating as it should, take it to your local Tandy/Radio Shack store for assistance.

## **SPECIFICATIONS**

#### Frequency Coverage and Default Modulation Modes

Canada			Europe		
Range (MHz)	Freq. Step (kHz)	Default Mode	Freq. Default Renge (MHz) Step Mode (kHz)		
25.0000 - 28.9950	5	AM	25 - 28.99 10 NFM		
29.0000 - 53.9950	5	NFM	29 - 53.995 5 NFM		
59.7500 - 71.7500	6000	WFM	54 - 71.95 50 WFM		
72.0000 - 75.9950	5	NFM	72 - 81.745 5 NFM		
81.7500 - 87.7500	6000	WFM	81.75 - 87.75 12.5 WFM		
88.1000 - 107.9000	200	WFM	87.8 - 108 50 WFM		
108.0000 - 136.9875	12.5	AM	108 - 136.9875 12.5 AM		
137.0000 - 173.9950	5	NFM	137 - 179.745 5 NFM		
179.7500 - 215.7500	6000	WFM	179.75 - 215.95 12.5 WFM		
216.0000 - 224.9950	5	NFM	216 - 224.995 5 NFM		
225.0000 - 399.9875	12.5	AM	225 - 399.9875 12.5 AM		
400.0000 - 511.9875	12.5	NFM	400 - 511.9875 12.5 NFM		
517.7500 - 805.7500	6000	WFM	512 - 805.95 50 WFM		
806.0000 - 823.9375	12.5	NFM	806 - 1300 12.5 NFM		
823.9375 - 851.0000					
851.0000 - 868.9375	12.5	NFM			
868.9375 - 896.1125					
896.1125 -1300.0000	12.5	NFM			

#### General

Sensitivity (20 dB S/N with 60% modulation for AM; 3 kHz deviation for NFM; 30 dB S/N with 22.5 kHz deviation for WFM)

NFM	40.84	MHz 0.5 μV
S+N/N=20dB	162.4	MHz 0.6 μV
	453.25	MHz 0.6 μV
	954.9125	i MHz 0.8 μV
	1299.9125	MHz 1.0 μV
WFM	62.45	MHz 5.0 μV
S+N/N=30dB	195.5	MHz 5.0 μV
	531.5	MHz 5.0 μV
	765.25	MHz 5.0 μV

AM	25.5	MHz 1.3 μV
S+N/N=20dB	108.5	MHz 1.5 μV
	127,175	MHz 1.5 μV
	230.05	MHz 1.5 μV
	325.05	MHz 2.0 μV
Direct Search Speed/Li	mit Searc	
		100 Steps/Sec.
Hyper Mode (for onl	y 5 kHz ste	ep band) 300 Steps/Sec.
Scan Speed		50 Channels/Sec.
Priority Sampling		2 Seconds
Delay Time	,,,,,,,,,	2 or 4 Seconds (Selectable)
IF Frequencies		. 1st IF 380.7 MHz or 254.4 MHz
*** *** **** **** **** **** **** **** ****		2nd IF 58.075 MHz
		3rd IF 455 kHz (NFM)
		or 5.5 MHz (WFM)
Audio Power		250 mW Maximum
Built-in Speaker	1 <sup>7</sup> /16-ind	ch (36mm) 8-Ohm, Dynamic Type
Maximum Current Drain		220 mA
Power Requirement		4 AA batteries (6 volts);
• • • • • • • • • • • • • • • • • • •		optional AC Adapter;
		or optional DC Adapter
Dimensions		154 × 66 × 42 mm (HWD)
		$(6^{1}/16 \times 2^{5}/8 \times 1^{5}/8 \text{ Inches})$
Weight	. ,	240 g (8.47 oz)
<del>-</del>		

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

# **NOTES**

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#### InterTAN WARRANTY

InterTAN warrants that this product will be free from defects in materials and workmanship for a period of one (1) year from the date of purchase. Within this period, simply take the product and your proof of purchase to any InterTAN store or dealer and the product will be repaired without charge for parts and labour. InterTAN reserves the right to charge for transportation. Any product which has been subject to misuse or accidental damage is excluded from this warranty.

This warranty is only applicable to a product purchased through InterTAN's company owned stores and dealers and to a product that is presented for repair in a country where InterTAN offers the product for sale. While this warranty does not conter any legal rights other than those set out above, you may have additional statutory rights which will vary under the laws of the various countries, states, provinces and other governmental entities in which InterTAN operates. This warranty is subject to all statutory rights you may have in the country of purchase.

#### WE SERVICE WHAT WE SELL

MANUFACTURED IN THE PHILIPPINES, IMPORTED FOR/IMPORTE POUR InterTAN CANADA LTD., BARRIE, CANADA, L4M 4W5
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