20-137
1,000-Channel Handheld Race Scanner

Contents

Thank you for purchasing your RadioShack 1000-Channel Handheld Race Scanner from *RadioShack*. Your handheld scanner is one of a new generation of race scanners.

What's Included

- scanner
- antenna : Long (1), Short (1)
- belt clip
- user's guide
- quick start guide
- preprogrammed frequency guide

your scanner's features

Func (Function) – has various functions in combination with other keys.
Press this key, then release it, and press the next key (described "F + xx" in this manual).

SEL/VOL/SQL – rotate this key to select next or previous channel, frequency or item, and to change scan or search direction up or down. Push this key to enter Volume Control mode, or to complete the entry of frequencies and text in Menu mode. Pressing after **Func** enter squelch control mode.

Menu – enters Menu mode. In Menu mode, press to return to the previous menu, and press and hold to exit Menu mode.

SCN/MAN – scans the stored channels or manually enter a channel.

CAR – selects cars manually and inputs car information.

SRCH/PSE (Pause) – display search select menu for selecting one of search. Pause or resumes search or fine tune operation in Search mode. Go to Fine Tune Search mode with pause condition directly.

∋•≼ / ⏻ **/ KEYLOCK** – press to turn the backlight on. Press and hold to turn the radio on or off.

1/PRI – Pressing after **Func** turn the priority function on or off.

2 ABC/DLY – Pressing after **Func** programs a 2-second delay for a selected channel or service.

3 DEF/WX – Pressing after **Func** starts weather scan.

0/ ◈ - Pressing after **Func** activates Signal Stalker   function.

E PGM/ ⓦ   - programs frequencies into channels. Pressing after **Func** turns SkyWarn I on.

   CLR/ L/OUT – enter a decimal point, clears the incorrect entry, and lockout selected channels or skip specified frequencies during a search.

PC/IF – connect and optional PC interface cable here to use the scanner with your computer.

6V 800mA – connect an external power source here (not included).

🎧   - connect an earphone or headphone here.

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

Warning: Only set the switch inside the battery compartment to **NiMH** for use with nickel metal hydride (NiMH) rechargeable batteries. Never use non-rechargeable batteries when the switch is set to **NiMH**.

Set the switch inside the battery compartment to the appropriate setting.

• **ALKALINE** when using alkaline batteries (not included).

Caution: You must use a Class 2 power source that supplies 6V DC and delivers at least 800mA. Its center tip must be set to positive and its plug must fit the scanner's DC 6V 800mA jack. Using an adapter that does not meet these specifications could damage the scanner or the adapter.

• **NiMH** when using rechargeable (NiMH) AA batteries (not included). The scanner stops charging automatically after at most14 hours when the DC jack is connected to power.

battery cautions
• Use only fresh batteries of the required size and recommended type.

• Always remove old or weak batteries. Batteries can leak chemicals that damage electronic circuits.
• Do not mix old and new batteries, different types of batteries (standard, alkaline, or rechargeable), or rechargeable batteries of different capacities.
• When the battery icon ⊡| flashes and the scanner beeps every 15 seconds, replace all three batteries.
• Always dispose of old batteries promptly and properly. Do not bury or burn them.

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 NiMH, or if you are unsure of the switch's position. Non rechargeable batteries will get hot and can even explode if you try to recharge them.

• Always connect the AC adapter to the scanner before you connect it to AC power. When you finish, disconnect the adapter from AC power before you disconnect it from the scanner.

connecting the antenna
Attach the supplied antenna to the scanner by screwing it tightly onto the anchor post at the top of the radio. When using an external antenna, always use 50-ohm, RG-58, or RG-8, coaxial cable to connect to it. 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 SMA connector, your local RadioShack store carries a variety of SMA adapters.

connecting an earphone/headphone
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 "mono" and not stereo.
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.
If you use an earphone or headphones with your scanner, 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.

attaching the belt clip
To attach the belt clip:
1. Rotate the belt clip so that the finger indentation is towards the top of the radio.
2. Align the center of the clip with the anchor post.
3. Place the clip on the post and slide the clip upwards until it clicks into place.

To remove the belt clip:
1. Rotate the clip so that the finger indentation is towards the bottom of the radio.
2. Slide the clip up until it comes free of the anchor post.

transferring data to or from another scanner or pc
You can transfer the programmed data to and from another 20-137 scanner using a connecting

cable which has 1/8-inch phone plugs on both ends (not supplied). Connect the cable between each scanner's PC/IF jacks. See "cloning your scanner". You can also upload or download the programmed data to or from a PC using an optional PC interface cable and software available through your local RadioShack store. See "wired programming."

about 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. Simply determine the type of communications you want to receive, then set the scanner to scan those communications.

The scanner scans conventional frequencies and racing.

A frequency, expressed in kHz or MHz, is the tuning location of a station. To find active frequencies, you use the search function.

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. For example, many amateur radio frequencies are located in the HAM service bank.

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. The scanner has 10 channel-storage banks. Each bank contains 100-channel sets. So the scanner has 1,000 channels. You can scan the channel storage banks to see if there is activity on the frequencies stored there.

Note: *You search frequencies when you want to find your local frequencies and scan channels after you programmed your found frequencies.*

understanding banks

service banks

The scanner is preprogrammed with all the frequencies allocated to the Car Band, Marine, Fire/Police, Aircraft, and Ham Band services. This helps you quickly find active frequencies instead of doing a chain search (see "service bank search").

channel storage banks

To make it easier to identify and select the channels you want to listen to, all the channels are divided into 10 banks of 100 channels. Use each channel-storage bank to group frequencies, such as those for the police department, fire department, ambulance services, or aircraft. For example, the police department might use four frequencies in your town while the fire department uses an additional four. You could program the four police frequencies starting with Channel 0 (the first channel in bank 0), and program the fire department frequencies starting with Channel 100 (the first channel in bank 1).

turning on the scanner

Make sure the scanner's antenna is connected, then press and hold ⧉ ⧉ / ⏻ / **KEYLOCK.** The scanner turns on.

setting the volume

1. Push the **SEL/VOL/SQL** knob.

2. Rotate the knob to select the volume level you want to set from 0 to 15.

setting the squelch
1. Press **Func**, then push the **SEL/VOL/SQL** knob.
2. Rotate the knob to select the squelch level you want to set from 0 to 15.

Using the Scanner at the Racetrack
You can hear drivers communicating with their pit crews, officials communicating with drivers and crews, and track workers communicating with everybody.
Each user at the racetrack transmits and receives on one or more frequencies.
The scanner organizes racetrack frequencies by the name of the race you are scanning and by car number. For example, you might hear drivers and their pit crews on the car number frequencies and officials and the news media on the race frequencies. When you are scanning, the scanner stops very briefly on each channel to see if there is activity. If there isn't, the scanner quickly moves to the next channel. If there is, then the scanner pauses on the transmission until it is over. You can activate one racing system and as many conventional systems as you want at the same time. Within a racing system, each driver can have multiple frequencies stored.

before you get to the track
Each driver's team has several different frequencies they can use during a race. These frequencies can change depending on local interference sources or other frequency issues. Your scanner is preprogrammed with all of the drivers and their possible frequencies that were known when it was manufactured.
Before you leave for the track, check the Internet to see if there are any frequency updates available for your race. You can save time at the track by setting up as much as possible before you leave.

when you get to the track
When you arrive at the race, get a list of the actual frequencies in use that race day. These are normally available for sale on the way into the facility. This list will show the actual frequency being used by each driver that day, as well as some other useful frequency information.
Then, follow the steps in the sections below to adjust the scanner settings.

loading the preset race frequency list
For your convenience, 6 exciting car race frequencies are pre-stored. You can use one of the race frequencies by loading to channel banks. Follow these steps to load the race frequencies:

1.Press **Menu**.

2. Rotate the knob to select **1:Preset Race**, then press **E PGM/** .

3. Rotate the knob to select **1:Load Race**, then press **E PGM/** .

4. Rotate the knob to select one of the race, then press **E PGM/** .
5. If you select race A to C, **Load Bank X into Bank0 Yes="1"/No="3"** appears. If you select race D to F, **Load Bank X into Bank0 and 1 Yes="1"/No="3"** appears. Press **1/PRI** to program the race or press **3 DEF/WX** to cancel.

storing the preset race frequency list
You can overwrite one of the race frequencies after you editing on the loaded bank. Follow these steps to overwrite:

1.Press **Menu**.

2. Rotate the knob to select **1:Preset Race**, then press **E PGM/** .

3. Rotate the knob to select **2:Store Race**, then press **E PGM/** .

4. Rotate the knob to select one of the race, then press **E PGM/** .
5. If you select race A to C, **Store Bank0 into Bank X Yes="1"/No="3"** appears. If you select race D to F, **Store Bank0 and 1 into BankX Yes="1"/No="3"** appears. Press **1/PRI** to program the race or press **3 DEF/WX** to cancel.

program driver frequencies
Follow these steps to select the appropriate frequency for each driver.

1. Press **CAR**, enter the driver's number, then press **E PGM/** .
2. If the car number is not stored, **Car# XX is not stored. Program new car?** Appears.
3. Enter the tag you want to assign to the car number such as driver's name, then press

E PGM/ .

4. Enter the frequency of the car, then press **E PGM/** .

5. If you want to input another frequency to the car, press **E PGM/** .

monitoring a car
Follow these steps to monitoring a car within the currently selected racing system.

1. Press **CAR**, enter the car number, then press **E PGM/** . Or press **CAR** then press **E PGM/** . Select the car from the list by rotating the knob, then press **E PGM/** . You can select the car's primary frequency.

Primary frequency is the frequency which is selected first when a car has more than two frequencies. Just after you have load the preset race frequency list, the frequency in the smallest channel works as a primary frequency. If you want to change the primary frequency, follow these steps:
1. Show the channel where the car number is programmed.
2. Press **F** then rotate the knob to select other frequency.

Note: Primary frequency is also changed automatically in the following situation:
- Select car channel by rotating the knob during manual mode
- Press **SCAN/MAN** when you monitor a car channel found by scan mode

storing known frequencies into channels
You can locate and store specific frequencies into channels for later use.

1. Press **SCN/MAN** to enter manual mode.

2. Press **E PGM/** to put the scanner in programming mode. **PGM** appears.
3. Use the number keys to enter the channel number you want to assign to a frequency.
4. Press **SCAN/MAN**.
5. Use the number keys and **•CLR / L/OUT** to enter the frequency, including the decimal point you want to store.

6. Press **E PGM/** to store the frequency.

Notes:

• *If you entered an invalid frequency in Step 5,* **Error** *appears and the scanner beeps error tones. Enter a valid frequency.*

• If you entered a frequency in Step 5, which already exists on another channel, the scanner beeps an error tone and displays that channel. Press •**CLR / L/OUT** to clear the display, or press

E 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.

7. Press **E PGM/** again. Edit Channel menu appears.

8. Rotate the knob to select 1: Edit Car# , then press **E PGM/** .

9. Use the number keys to enter the car number in 3-digits, then press **E PGM/** .

10. Rotate the knob to select 2: Edit Tag, then press **E PGM/** .

11. Use the number keys to enter the tag referring to the next section, editing a tag , then press **E PGM/**

12. To program the next channel in sequence, press Menu then repeat the Steps from 3.

editing a tag

Input a tag using the following functions:

Rotate clockwise to moves the cursor to the left, counterclockwise to the right.
Pressing Func toggle the input mode as follows: ABC → abc → 123→ ABC.
Press •**CLR / L/OUT** once to erase the character on which the cursor is put. Press and hold to erase all the characters.

Press **E PGM/** to save the tag and exit editing tag.

For example, to enter "Scanner":
1.Press [7 / PQRS] key 4 times to enter "S".
2.Press [FUNC] key to switch the capital letter to small letter.
3.Then press [2 / ABC / DLY] key 3 times to enter "c".
4.Turn [ROTARY KNOB] to move cursor.
5.Press [2 / ABC / DLY] key 1 times to enter "a".
6.Press [6 / MNO] key 2 times to enter "n".
7.Turn [ROTARY KNOB] to move cursor.
8.Press [6 / MNO] key 2 times to enter "n".
9.Press [3 / DEF / WX] key 2 times to enter "e".
10.Press [7 / PQRS] key 3 times to enter "r".
11.Press [E / PGM / SKYWARN] key to end the user's text entry.

	Number of times key is pressed										
Keys	1	2	3	4	5	6	7	8	9	10	11
1	,	(	)	—	+	*	/	@	^	&	!
2/ABC	A	B	C	2							
3/DEF	D	E	F	3							
4/GHI	G	H	I	4							
5/JKL	J	K	L	5							
6/MNO	M	N	O	6							
7/PQRS	P	Q	R	S	7						
8/TUV	T	U	V	8							
9/WXYZ	W	X	Y	Z	9						
0	Space	#	?	_	.	$	%	!	~	`	0

copying a frequency

If you want to copy a frequency to a channel, follow the steps below:
1. Manually select the channel which contains the frequency you want to copy.

2. Press **E PGM/** 🔘.

3. Press **E PGM/** 🔘 during program mode. Scanner displays the Edit Channel menu.

4. Rotate the knob to select 4: Copy Channel, then press **E PGM/** 🔘.
5. Rotate the knob to select the bank where you want to copy the frequency, then press **E PGM/**

🔘.
6. Rotate the knob to select the channel you want to copy the frequency, then press **E PGM/**

🔘. The frequency has been copied.

To cancel the copy, press **Menu**.

searching for and temporarily storing active frequencies

If you do not have a reference to frequencies in your area, use a chain, Fine Tune, or service search to find a transmission.
Notes:
• *While doing a chain, fine tune, or service bank search, press **Func + 2 ABC/DLY** if you want to turn the delay on or off (see "delay").*

Fine tune

You can search up or down from the currently displayed frequency using fine tune.
1. Press **SRCH/PSE** in scan mode or press **Func + SRCH/PSE** in search mode.

2. Rotate the knob to select **0: Fine Tune**, then press **E PGM/** 🔘. **SRCH** appears during searching.

Fine tune is also available from the frequency you entered.
1. Press **SCAN/MAN** to enter manual mode.

2. Use the number keys and •**CLR / L/OUT** to enter a frequency.
3. Press **SRCH/PSE. Fine Tune** appears.
4. Press **SRCH/PSE** again to start fine tune.
Note: *If you enter an invalid frequency, the scanner displays Error. Press •CLR / L/OUT to clear.*

service bank search

You can search for car band, marine, fire/police, aircraft and ham transmissions without knowing the specific frequencies used in your area. The scanner is preprogrammed with all the frequencies allocated to these services. To use this feature, press **SRCH/PSE**. Rotate the knob

to select a service bank, press **E PGM/** .
The selected service starts to be searched.

Note: *Because there are many different frequencies allocated to ham band, it can take several minutes to search all the service frequencies.*

chain search

This feature lets you search through preset frequency ranges. You can also preset a range. The preset frequency ranges are:

BankNo.	Frequency (MHz)	Step (kHz)
0	25.0000 – 27.9950	5
1	28.0000 – 54.0000	5
2	108.0000 – 136.9875	12.5
3	137.0000 – 174.0000	5
4	216.0000 – 224.9950	5
5	400.0000 – 449.99375	6.25
6	450.0000 – 469.99375	6.25
7	470.0000 – 512.0000	6.25
8	806.0000 – 956.0000	12.5
9	1240.0000 – 1300.0000	12.5

starting chain search

1. Press **SRCH/PSE**.
2. Rotate the knob to select **6: Chain Search.**

3. Press **E PGM/** . **SRCH** appears.
4. Press **0 – 9** to enable or disable the search bank number being searched.
Note: At least one bank needs to be entered. If you disable all the banks, the error tone beeps.
5. Rotate the knob to search down or search up.
6. When the scanner stops on a transmission, quickly press **SRCH/PSE** to stop searching to
    listen to the transmission. *****PAUSE***** appears.
7. To release the pause and continue searching, press **SRCH/PSE**.
Note: *To step through the frequencies while *PAUSE* appears, rotate the knob.*

storing found frequencies

You can store frequencies you find.

1. Press **E PGM/** when you find a frequency. The bank list appears.
2. Rotate the knob to select the bank number you want to store the frequency, then press **E**

   PGM/ . The smallest empty channel number and "0.0000" appears.
3. Rotate the knob to move to the channel where you wish to store the frequency.

4. Press **E PGM/** to enter the frequency.

If you want to assign the car number and tag, see step 8 of "storing known frequencies into channels" .

programming search ranges
You can define the search range during a chain search in each search bank.
1. Press **Menu**.
2. Rotate the knob to select **3: PGM Chain Srch**.
3. Press **E PGM/** .
4. Rotate the knob to select the bank number you want to change the range.
5. Rotate the knob to select **1:Edit limit**, then press **E PGM/** .
6. Using the number keys, enter the lower limit frequency, and then press **E PGM/** .
7. Using the number keys, enter the upper limit frequency, and then press **E PGM/** .

weather scan
You can also scan for weather transmissions. To start weather scan:
1. Press **Func + 3 DEF/WX**. **WX Scan** appears. You can change the scan direction by rotating the knob.
2. If you want to stop the scan, press **SRCH/PSE**. *PAUSE* appears.

turning on the weather alert feature
1. Press **Func + 3 DEF/WX** and start weather scan. See "weather scan."
2. Press **Func + 3 DEF/WX**. **WX Alert Standby** appears. This mutes the audio until the scanner receives a weather alert signal. When the scanner receives a signal, **WX ALERT!** appears. The scanner remains on the weather channel and the audio turns on so you can hear the weather broadcast. Press any key to stop the siren.

search skip memory
You can skip up to 200 specified frequencies during a chain, service search, fine tune and Signal Stalker I. This lets you avoid unwanted frequencies or those already stored in a channel.
Note: *You cannot skip frequencies during WX scan.*

To skip a frequency, press •**CLR / L/OUT** when the scanner stops on the frequency during a chain, service search, fine tune and Signal Stalker I. The scanner stores the frequency in memory and automatically resumes the search.

To clear a single frequency from skip memory so the scanner stops on it during a chain, fine tune and service search and Signal Stalker I:
1. Press **SRCH/PSE** to stop the search.
2. Rotate the knob to select the skipped frequency. **L/O** appears.
3. Press •**CLR / L/OUT**. **L/O** disappears.
Or
1. Press **Func + •CLR / L/OUT** to see all the skipped frequency at a list.
2. Rotate the knob to select the frequency you want to clear from the skip frequency.
3. **Press E PGM/** .

To clear all the skip frequencies at once while searching, press **SRCH/PSE**, then hold down •**CLR / L/OUT** until the scanner beeps twice.
Notes:
*- If you selected all frequencies to be skipped within the search range, **All channels Locked***

*out! or **All ranges Locked out!** Appears. The scanner beeps 3 times and does not search.
- If you select more than 200 frequencies to skip, L/O List Full! appears. Please clear any
  skipped frequency.*

scanning the stored channels

To begin scanning channels, press **SCAN/MAN**. The scanner scans through all unlocked channels in the activated banks. (See "locking out channels" and "turning channel-storage banks on and off"). When the scanner finds a transmission, it stops on it. When the transmission ends, the scanner resumes scanning.

Notes:
• *If you have not stored frequencies into any channels, the scanner does not scan.*
• *If the scanner picks up unwanted partial, or very weak transmissions, press **Func** then push the knob. **SQL Level** and current setting appears. Turn the knob to increase the number to decrease the scanner's sensitivity to these signals.*
• *To listen to a weak or distant station, turn the squelch level smaller.*
• *To ensure proper scanning, adjust the squelch until the audio mutes*

manually selecting a channel

You can continuously monitor a single 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.

Press **SCAN/MAN** to stop scanning, enter the channel number, and then press **SCAN/MAN**. The selected channel appears.

Or, during scanning, if the radio stops at a channel you want to listen to, press **SCAN/MAN**. Press **SCAN/MAN** to resume automatic scanning.

special features

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. You can monitor the channel frequency for an additional 2 seconds after the transmission stops before resuming scanning or searching.

Depending on the scanner operation, follow one of these steps to turn off or on a delay.
• To turn off the 2-second delay, press **Func + 2 ABC/DLY** while the scanner is monitoring a channel or searching. **DLY** disappears.
• To turn on the 2-second delay to a channel again, select the channel and press **Func + 2 ABC/DLY**. **DLY** appears.
• To turn on the 2-second delay to search again, press **Func + 2 ABC/DLY** 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.

Signal Stalker I also has a delay feature. It's delay time is 10 seconds.

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 100 channels in that bank.

While scanning, press the number key that corresponds to the bank you want to turn on or off. Numbers appear at the top of the display, showing the currently selected banks. The scanner

scans all the channels within the displayed banks that are not locked out (see "locking out channels"). The bank number flashes when the scanner scans a channel that belongs to the bank.

Notes:
• *You can manually select any channel within a bank, even if that bank is turned off.*
• *One bank must always be active. If you try to turn off all banks, error tone sounds.*

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, manually select the channel, then press •**CLR / L/OUT**. **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 •**CLR / L/OUT**. **L/O** disappears.

To unlock all channels in the banks that are turned on, press **SCAN/MAN** to stop scanning, then hold down •**CLR / L/OUT** until the scanner beeps twice.

priority

The priority feature lets you scan through the channels and still not miss important or interesting calls on specific channels. You can program any stored channels in each bank as a priority channel. If the priority feature is turned on, as the scanner scans the bank, it checks that bank's priority channel for activity every 2 seconds.

Follow these steps to select a different channel in a bank as the priority channel.
1. Enter the channel number you want to select as a priority channel, then press **SCAN/MAN**.

2. Press **E PGM/** .

3. Press **E PGM/** again. Channel menu appears.

4. Rotate the knob to select **3: Priotiry CH**, then press **E PGM/** .

5. Rotate the knob to select **1: On**, then press **E PGM/** .
6. Press **Menu** to exit menu. **P** appears.
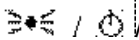
7. Repeat above steps for other channels you want to program as a priority channel.

To turn on the priority feature, press **Func + 1/PRI** in scan mode or manual mode. **PRI** appears. Then the scanner checks the designated priority channel every 2 seconds.

To turn off the priority feature, press **Func+ 1/PRI** again.

Note: *If you have locked out all priority channels, "Priority Scan No Channel" appears when you activate the priority feature. Priority feature is cancelled. To unlock any desired priority channels, see "locking out channels."*

using the keylock

To protect the scanner from accidental program changes, turn on the keylock feature. When the scanner is locked, only the knob, **Func** and ⧖ / ☉ **KEYLOCK** are available.

To turn on the keylock, press **Func +** ⋛⋨ / ⏻⃒ **KEYLOCK. Keypad locked.** appears.

To turn off, press **Func +** ⋛⋨ / ⏻⃒ **KEYLOCK. Keypad unlocked.** appears.

Note: *Using keylock does not prevent the scanner from scanning channels.*

wired programming
You can transfer programming data to your scanner using your PC and an optional interface cable (available at your local RadioShack store) 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 **PC/IF** on the side of the scanner.
3. Install the software to your computer and run the program.
4. To set up the program, <please describe the details depends on the software which is being developed in R/S>
5. Turn the scanner on. The scanner automatically goes into the wired programming mode.
6. **WIRED PROGRAMMING MODE** appears when the scanner receives data from the PC.
7. After completing the programming, turn the unit off, then remove the cable. Turn the unit on again.

cloning your scanner
You can clone all the frequencies programmed in your PRO-137 to another PRO-137 using an optional interface cable.
1. Make sure the scanners are turned off and then plug the cable into each scanner's **PC/IF** jack.

2. Turn on both scanners, then press **E PGM/** ⓦ⃒ of the master unit.
3. Press **1/PRI** to stat cloning. **Sending data…** appears on the master unit and **Receiving data…** on the slave unit.
4. When the data transfer is completed, **Finished.** appears.
5. After the clone operation is complete, turn the slave unit off, then remove the cable. Turn the unit on again.

If you want to clone another scanner, press •**CLR / L/OUT** of master unit, then repeat the step from 2.

using the display backlight
To turn on the display light for easy viewing at night, press ⋛⋨ / ⏻⃒ **KEYLOCK** .The display lights for 15 seconds. If you press ⋛⋨ / ⏻⃒ **KEYLOCK** again during the display lights, the scanner continue to light 15 seconds more.

using the auto backlight display
You can set the scanner so the auto backlight turns on for about 5 seconds when the scanner receives signals.

If you press a key within 5 seconds, the display remains lighted for more than 5 seconds.
To turn auto backlight display on or off:
1. Press **Menu**.

2. Rotate the knob to select **6:Settings**, then press **E PGM/** ⊕

3. Rotate the knob to select **1: Back light,** then press **E PGM/** ⊕

4. Rotate the knob to select **1: Auto Light**, then press **E PGM/** ⊕

5. Rotate the knob to select **1: On** or **2: Off,** then press **E PGM/** ⊕. Press and hold **Menu** to exit the menu mode.

Using Power on light

You can set the scanner so the auto backlight turns on for about 5 seconds when the scanner is turned on.

1. Press **Menu**.

2. Rotate the knob to select **6:Settings**, then press   **E PGM/** ⊕

3. Rotate the knob to select **1: Back light,** then press **E PGM/** ⊕

4. Rotate the knob to select **2: Power On Light**, then press **E PGM/** ⊕

5. Rotate the knob to select **1: On** or **2: Off,** then press **E PGM/** ⊕. Press and hold **Menu** to exit the menu mode.

turning the keytone off/on

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

1. Press **Menu**.

2. Rotate the knob to select **6:Settings**, then press **E PGM/** ⊕

3. Rotate the knob to select **2: Key Tone,** then press **E PGM/** ⊕

4. Rotate the knob to select **1: On** or **2: Off,** then press **E PGM/** ⊕. Press and hold **Menu** to exit the menu mode.

Adjusting the LCD contrast

You can set the LCD contrast from level 1 to 8.
To adjust the LCD contrast:

1. Press **Menu**.

2. Rotate the knob to select **6:Settings**, then press **E PGM/** ⊕

3. Rotate the knob to select **3: LCD Contrast,** then press **E PGM/** ⊕

4. Rotate the knob to select the contrast level you want to set, then press **E PGM/** ⊕. Press and hold **Menu** to exit the menu mode.

turning the battery save function on/off

When the scanner is set to receive (monitor) a manually selected channel, and it is not actively scanning, using the battery save feature conserves energy.
To turn the battery save function on or back off:

1. Press **Menu**.

2. Rotate the knob to select **6:Settings**, then press **E PGM/** ⊕

3. Rotate the knob to select **4:Battery Save,** then press **E PGM/** ⊕ .

4. Rotate the knob to select **1: On** or **2: Off,** then press **E PGM/** ⊕ . Press and hold **Menu** to exit the menu mode.

search speeds
Note: *Hypersearch applies only to the 5 kHz step bands (25–54 MHz, 137–174 MHz, and 216–224.9950 MHz).* The scanner has two search speeds. Normal Search (90 steps/second) Hypersearch (270 steps/second)

Skywarn
PRO-137 has 10 skywarn channels, and the Skywarn function lets you jump directly to the last

channel in memory (Channel 999) from any mode by press and **Func + E PGM/** ⊕ . The scanner goes into Skywarn mode and starts receiving transmissions in the last channel. Rotate the knob to select the skywarn channels you want to hear.

Before using this feature, enter the local Skywarn frequency for your area into Channel 990 to 999. If no frequency is programmed in the selected skywarn channel, **Skywarn freq. is not stored.** 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 (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.*

Signal Stalker I
Your scanner' s Signal Stalker I feature lets you set the scanner so it detects and then displays the frequency of a nearby strong radio transmission. You can set the scanner so Signal Stalker I works "in the background" while you are scanning other frequencies; turn off normal scanning while Signal Stalker I works; or turn off Signal Stalker I and use the scanner normally. You can set the scanner so it alerts you when Signal Stalker I finds a frequency. You can also set the frequency band where you want the scanner to look for transmissions.

Note: *Signal Stalker I works well for locating the source of strong local transmissions, such as mobile and handheld two way radios in areas with no other strong transmission sources. You can screen unwanted transmissions by pressing •CLR / L/OUT to lock them out. See "search skip memory" for more information. It 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.*

setting the Signal Stalker I options
1. Press **Menu**.

2. Rotate the knob to select **4:Signal Stalker**, then press **E PGM/** 🔘. One of the following Signal Stalker I options appears:

 1:Only Mode: Lets you select the Signal Stalker I mode settings.
 2:Voice Interrupt: Lets you select the Signal Stalker I voice interrupt settings.
   While the 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 and the audio signal breaks at that moment. If you do not want the break, set this function to **2:Off**. The scanner does not check signals while receiving an audio signal. The scanner resumes checking signals when the audio signal ends. If you want to keep the Signal Stalker I active despite the interruption, set this function to **1:On**.
 3:Logging: Lets you select the Signal Stalker I logging setting.
   When the scanner finds a strong signal, it automatically saves the signal to one of 10 log channels. If the scanner finds a new frequency after the 10 log channels are fully stored with frequencies, the oldest memory is deleted and the new frequency is stored in that channel. You can scan the log channels along with the normal 1000 channels.

   The 10 log channels are located after Channel 999 and you can manually access them by selecting channels as **S-00** to **S-09**.

   You cannot program frequencies in the log channels.
   You can lock out the log channels like normal channels.

   Set **3: Logging** to **1:On** to scan the log channels along with the normal channels. If you do not want to scan the channels, set it to **2:Off**.

   The scanner stores signals found by the Signal Stalker I even the **3:Logging** function is **OFF**. The frequencies in the log channels are deleted when the scanner is turned off.

 4:Alert Beep: Lets you select the Signal Stalker I alert settings.
 5:Alert Light: Lets you select the Signal Stalker I back light settings.
 6: Band Switch: Lets you select the Signal Stalker I band.
     25-54   : VHF Low Band
    108-137   : AIR Band
    137-225   : VHF High Band
    400-512   : UHF Band
    806-956   : 800MHz Band (without Cellular Band)

3. Rotate the knob to select the option you want, then press **E PGM/** 🔘.

4. Rotate the knob to select **1:ON** or **2:OFF**, then press **E PGM/** 🔘.

   For **6:Band Switch** setting, press **E PGM/** 🔘 to select **On** and **Off**.

5. Press **Menu** to exit the menu mode.

using Signal Stalker I

To turn on Signal Stalker I, press **Func + 0/** appears. Every 2 seconds, the scanner searches for frequencies in the range you specified in "Setting the Signal Stalker I Options." When the scanner finds a frequency, it sounds the alert you specified in "Setting the Signal Stalker I Options", and **Found! Press any key.** appears. Press any key to confirm the displayed frequency. Rotate the knob to resume scanning.

To turn on Signal Stalker I and turn off normal scanning, turn **1:Only Mode** of Signal Stalker I options to on. flashes. See "setting the Signal Stalker I options."

To turn off Signal Stalker I and turn on normal scanning, press **Func + 0/** . disappears.

band meter for Signal Stalker

This meter allows you to see which band Signal Stalker is searching for. When a strong and consistent signal is detected, this meter will rise up to Max. And the scanner is tuned to the signal and shows up the band where the signal is detected.

However, there is a case that the scanner might not be able to catch the signal even if this meter rises to MAX. It is because the signal might be out of range or it might be a locked out frequency. If you want to improve the performance when signal stalker is On (not in "ONLY Mode"), disable the band (see xx).

 Note: This feature is different from so-called SIGNAL STRENGTH METER using RSSI.

frequently asked questions
These suggestions might help you locate the problem.

My scanner is on but will not scan, why?
• Squelch is not adjusted correctly; adjust squelch.
• Only one channel or no channels are stored.
• Store frequencies into more than one channel.
Why won't my scanner work at all?
• Check the batteries or make sure the AC adapter is connected properly.
• Recharge the rechargeable batteries or replace the non-rechargeable batteries.
• The AC adapter is not connected.
• Be sure the adapter's barrel plug is fully plugged into the **6V 800 mA jack**.
Why doesn't my keypad work?

The keylock function is activated. To turn off the keylock, press **F+** / **/ KEYLOCK.**
Keypad unlocked appears.
Why is ⬜ flashing?
Recharge the rechargeable batteries or replace the alkaline batteries.
Why am I getting poor or no reception?
Batteries are weak or completely discharged. Check the batteries or make sure the AC adapter is connected properly. Make sure an antenna is connected to the scanner.
Why does Error appear?
Programming error: re-enter the frequency or number correctly, including the decimal point.
How do I reset my 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 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. If you cannot turn off the scanner, remove the battery and install again.
2. While holding down **2**, **9** and **SCAN/MAN**, turn on the scanner. **Initializing…Please Wait.** as the scanner clears its memory.
Note: *Do not turn off the scanner again until **Initializing…Please Wait.** disappears. Otherwise, the scanner might not clear its memory properly.*

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

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 hat it is not legal to listen to. Doing so should 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

Frequency Coverage:
  25.0000 – 27.9950 MHz (in 5 kHz steps)
  28.0000 – 54.0000 MHz (in 5 kHz steps)
108.0000 – 136.9875 MHz (in 12.5 kHz steps)
137.0000 – 174.0000 MHz (in 5 kHz steps)
216.0000 – 224.9950 MHz (in 5 kHz steps)
400.0000 – 512.0000 MHz (in 6.25 kHz steps)
806.0000–823.9875 MHz (in 12.5 kHz steps)
849.0125–868.9875 MHz (in 12.5 kHz steps)
894.0125–956.0000 MHz (in 12.5 kHz steps)
1240.0000–1300.0000 MHz (in 12.5 kHz steps)
Number of Banks 10

Sensitivity (AM/FM):
FM .... 20 dB S/N at 3 kHz deviation
28–54 MHz... 0.3 µV
137–174 MHz ....0.3 µV
216–225 MHz ....0.4 µV
400–512 MHz ....0.4 µV
806–956 MHz ....0.4 µV
1240–1300 MHz ....0.5 µV
AM ....20 dB S/N at 60% modulation
25-28 MHz...1.0µV
108–136.9875 MHz ....1.1 µV
IF Rejection (at 162.4 MHz) .... 75 dB
Channels 1000
Operating Temperature:
Normal ....–4° to 140°F (–20° to 60°C)
Signal Stalker I ...14° to 140°F (–10° to 60°C)
Scan Speed .... 90 Channels/Second
Search Speed:
Normal .... 90 Steps/Second
Hypersearch ....270 Steps/Second
Priority Sampling .... 2 Seconds
Delay Time .... 2 Seconds
IF Frequencies 380.75 MHz, 10.8 MHz, 450 kHz
Antenna Impedance 50O
Audio Output ....500 mW maximum
Built-in Speaker ....1&7/16 Inches (36 mm)
8O Dynamic Type
Power:
3 AA Alkaline Batteries (4.5 VDC),
or 3 AA Rechargeable Ni-MH Batteries (3.6VDC) or Optional AC Adapter
Current Drain:

Squelched ....135 mA
Full Output .... 370 mA

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

Limited One-year warranty

REFERENCE: PRESET RECE FREQUENCY LIST

Bank A : Champ Car

CH	CAR#	Name	frequency
0	1	Bourdais	461.7125
1	1	Bourdais	468.5750

CH	CAR#	Name	frequency		CH	CAR#	Name	frequency
2	1	Bourdais	468.9500		48	42	Halliday	464.5000
3	2	Rahal	461.2875		49	42	Halliday	456.6500
4	2	Rahal	469.6250		50	42	Halliday	469.5500
5	2	Rahal	468.3625		51		Race Control	457.0125
6	2	Rahal	460.7625		52		Qualifying	464.8875
7	3	Servia	466.8875		53		Operations	457.1875
8	3	Servia	451.9500		54		Safety 1	451.1875
9	3	Servia	468.4875		55		Safety 2	451.8125
10	4	Clarke	452.7500		56		Safety 3	461.8125
11	4	Clarke	452.5000		57		Pace Car 1	451.5250
12	4	Clarke	451.4875		58		Pace Car 2	464.1500
13	5	Power	462.1375		59		Atlantic 1	457.5500
14	5	Power	466.3625		60		Bridgestone	464.1000
15	5	Power	463.2375		61		Cosworth 1	461.2500
16	5	Power	468.1250		62		Cosworth 2	464.2500
17	7	Dominguez	461.5375		63		TeamJasper	467.6375
18	7	Dominguez	460.9250		64		Radio A	455.9125
19	7	Dominguez	463.3875		65		Radio B	456.5250
20	8	Tagliani	468.3000		66		TV A	450.0125
21	8	Tagliani	463.5625		67		TV B	450.0250
22	8	Tagliani	461.8875		68		TV C	450.0375
23	8	Tagliani	464.0875		69		TV D	450.0875
24	8	Tagliani	464.9125		70		TV E	450.1250
25	9	Wilson	452.5375		71		TV F	450.1375
26	9	Wilson	466.7500		72		TV G	450.1875
27	9	Wilson	468.6500		73		TV H	450.2250
28	11	Legge	462.9625		74		TV I	450.2375
29	14	Doornbos	457.7500		75		TV J	450.2875
30	14	Doornbos	457.5000		76		TV K	450.3250
31	15	Pagenaud	461.0625		77		TV L	450.3375
32	15	Pagenaud	466.6375		78		TV M	450.3875
33	15	Pagenaud	463.4375		79		TV N	450.4250
34	19	Junqueira	467.1000		80		TV O	450.4375
35	19	Junqueira	463.6000		81		TV P	450.4875
36	19	Junqueira	461.7750		82		TV Q	450.5250
37	21	Jani	466.7625		83		TV R	450.5375
38	21	Jani	461.9375		84		TV S	450.5875
39	21	Jani	466.0000		85		TV T	450.6250
40	22	Gommendy	468.4625		86		TV U	450.7250
41	22	Gommendy	462.7625		87		TV V	450.8250
42	22	Gommendy	467.3500		88		TV W	450.9250
43	22	Gommendy	465.9250		89		TV X	461.0875
44	28	Dalziel	463.3750					
45	29	Moreno	462.3750					
46	42	Halliday	468.8375					
47	42	Halliday	464.5500					

Bank B : ARCA RE/MAX

CH	CAR#	Name	frequency		CH	CAR#	Name	frequency
					1	1	D. Casola	462.8875
					2	2	M. Mcdowell	462.2875
0	0	W. Peterson	461.8125		3	3	J. Clements	464.8250

4	4	S. Lagasse	456.6500
5	5	B. Gerhart	465.7625
6	6	Dexter Bean	456.3875
7	8	Dustin Boney	462.0750
8	9	C. Cockrum	461.3750
9	10	Adam Edwards	460.0125
10	11	Bryan Silas	469.4625
11	12	M. Gosselin	463.3750
12	14	S. Marlin	464.5000
13	16	J. Allgaier	463.1125
14	21	Todd Bowsher	461.3500
15	23	Josh Krug	463.9500
16	24	B. Chastain	463.5500
17	25	B. Venturini	468.9250
18	26	Brad Smith	461.1750
19	29	B.Keselowski	457.0875
20	30	Terry Jones	464.8125
21	31	Tim Peters	468.2500
22	32	J. Buescher	466.4125
23	34	D. Basham	466.2625
24	37	M. Theriault	461.0750
25	38	Mike Harmon	461.7500
26	39	R. Johns	463.5250
27	40	B. Clauson	456.6500
28	46	Frank Kimmel	464.6625
29	47	P. Mcgilton	467.4125
30	48	Nick Tucker	466.2625
31	50	Norris	468.3125
32	51	B. Whitt	451.6125
33	52	Ken Schrader	461.0875
34	55	Damon Lusk	469.1625
35	57	TBA	462.2875
36	59	Justin South	459.5875
37	60	P. Sheltra	467.8125
38	61	S. Wallace	464.1375
39	62	C. Mccumbee	452.2625
40	63	D. Bryan	451.5750
41	64	Josh Allison	457.1625
42	65	Justin Marks	466.9500
43	75	Billy Tanner	461.0375
44	79	Mike Koch	468.4375
45	82	J. Cobb	461.8125
46	84	Norm Benning	453.2375
47	87	Tony Weber	459.1000
48	89	Bryan Weber	469.5750
49	90	Gabi Dicarlo	463.9750
50	91	Mike Duncan	460.7250
51	93	W. Edwards	469.2875
52	94	Dugan Basham	465.8875
53	95	Blake Freese	456.8375
54	97	S. Cummings	456.1875

55	99	Erik Damell	465.0250
56	00	Ed Kennedy	464.5375
57	02	B Santos III	467.3250
58	03	S. Brafford	465.6875
59	06	Tim Mitchell	459.0125
60	08	J. Hedlesky	468.6375
61		RACE CONTROL	461.2000
62		TOWER	464.6000
63		SAFETY	451.2250
64		QUALIFY	451.5750

Bank C : Indy Racing

CH	CAR#	Name	frequency
0	2	T. Scheckter	465.9875
1	2	T. Scheckter	454.3250
2	3	H. Cstrnvs	464.6750
3	4	Victor Meira	468.5375
4	4	Victor Meira	466.4125
5	5	Sarah Fisher	463.2875
6	5	Sarah Fisher	461.7125
7	6	S. Hornish	464.9250
8	7	D. Patrick	463.3625
9	7	D. Patrick	465.8125
10	8	Scott Sharp	469.8750
11	8	Scott Sharp	468.7125
12	9	Scott Dixon	469.8875
13	9	Scott Dixon	461.6125
14	10	Dan Wheldon	467.0375
15	10	Dan Wheldon	461.6625
16	11	Tony Kanaan	466.2625
17	11	Tony Kanaan	467.8875
18	14	D. Manning	461.4625
19	14	D. Manning	463.6375
20	15	Buddy Rice	468.7125
21	15	Buddy Rice	464.9875
22	17	Jeff Simmons	466.9125
23	17	Jeff Simmons	468.8875
24	20	Ed Carpenter	468.2500
25	20	Ed Carpenter	468.9750
26	22	A.J. Foyt IV	466.9250
27	22	A.J. Foyt IV	469.2250
28	25	Marty Roth	469.4375
29	25	Marty Roth	466.7625
30	26	M. Andretti	464.1375
31	26	M. Andretti	469.7500
32	27	D. Frnchtt	466.5375
33	27	D. Frnchtt	468.3875
34	55	K. Matsuura	464.9750
35	55	K. Matsuura	456.1000
36		TV	455.4500
37		TV	450.2125
38		SAFETY	451.6875
39		IRL INSPCTRS	464.7750
40		IRL RC CNTRL	468.8250
41		IRL DRCTRS	464.1750
42		IRL OFFCLS	466.1250
43		IRL RADIO	450.4125
44		IRL RADIO	454.0000
45		IRL RADIO	455.8375
46		FIRESTONE	464.1000

Bank D : CrftsmnTruck

CH	CAR#	Name	frequency
0	00	Josh Wise	451.4375
1	00	Josh Wise	451.6375
2	06	B. Mallory	457.9125
3	07	Tim Sauter	462.7125
4	07	Tim Sauter	467.7125
5	08	Eric Norris	466.3125
6	08	Eric Norris	467.9125
7	09	Joey Clanton	463.6875
8	09	Joey Clanton	468.2875
9	1	Aaron Fike	459.0125
10	1	Aaron Fike	463.7375
11	2	K. Harvick	456.4500
12	2	K. Harvick	467.2000
13	4	Joe Ruttman	461.5625
14	4	Joe Ruttman	461.6625
15	5	Mike Skinner	469.4250
16	5	Mike Skinner	469.4187
17	6	T. Kvapil	462.2500
18	6	T. Kvapil	467.2500
19	7	Jason White	461.8125
20	7	Jason White	463.2750
21	8	B. Bjorklund	461.5125
22	8	B. Bjorklund	462.6125
23	9	Ted Musgrave	452.9875
24	9	Ted Musgrave	452.7125
25	10	David Starr	464.2750
26	10	David Starr	452.3500
27	11	RedHourse RC	460.7750
28	11	RedHourse RC	467.4250
29	13	Willie Allen	468.6875
30	13	Willie Allen	465.1875
31	14	R. Crawford	465.6625
32	14	R. Crawford	461.8750
33	15	Bill Lester	461.1125
34	15	Bill Lester	464.3375
35	16	Derrike Cope	468.4000
36	16	Derrike Cope	469.0250
37	18	Ken Schrader	468.7750
38	18	Ken Schrader	457.0875
39	21	S. Compton	461.7875
40	21	S. Compton	456.9250
41	23	J. Benson	461.2375
42	23	J. Benson	462.8375
43	24	TRD TEST	468.9375
44	24	TRD TEST	460.1625
45	25	W. Racing	469.1625
46	25	W. Racing	469.8125
47	28	Shane Sieg	461.3875
48	28	Shane Sieg	467.7875
49	29	Scott Lynch	461.0125
50	29	Scott Lynch	462.1375
51	30	Todd Bodine	451.5625
52	30	Todd Bodine	451.5125
53	31	TBA	451.9625
54	31	TBA	469.7250
55	33	R. Hornaday	467.2000
56	33	R. Hornaday	456.4500
57	36	Ryan Mathews	462.8625
58	36	Ryan Mathews	464.5125
59	40	Clay Rogers	460.6875
60	40	Clay Rogers	468.1875
61	44	Frank Kreyer	457.2000
62	44	Frank Kreyer	456.7750
63	46	T. Peters	462.0000
64	46	T. Peters	461.9000
65	47	Kraig Kinser	466.8000
66	47	Kraig Kinser	466.8250
67	50	TJ Bell	460.6625
68	50	TJ Bell	453.0750
69	51	Kelly Sutton	464.3375
70	51	Kelly Sutton	467.2875
71	59	Terry Cook	453.0375
72	59	Terry Cook	453.1375
73	60	Jack Sprague	468.6750
74	60	Jack Sprague	468.7250
75	62	TBA	468.9125
76	62	TBA	469.6750
77	63	TBA	469.5125
78	63	TBA	468.5125
79	64	J. Simpson	467.8750
80	64	J. Simpson	469.1250
81	75	D. Setzer	457.8125
82	75	D. Setzer	460.9125
83	76	Chris Wimmer	457.2625
84	77	B. Gaughan	469.6750
85	77	B. Gaughan	456.3375
86	78	TBA	468.9375
87	78	TBA	465.0000
88	86	Dana White	461.1125
89	86	Dana White	466.3375
90	88	Matt Crafton	467.2125
91	88	Matt Crafton	468.3750

92	91	J C Stout	463.0125
93	91	J C Stout	463.2125
94	95	W. Edwards	461.7500
95	95	W. Edwards	470.0000
96	98	E.. Racing	451.7375
97	98	E.. Racing	451.7125
98	99	Erik Darnell	462.3250
99	99	Erik Darnell	463.2500
100		Race Control	461.2000
101		BU RC CNTRL	464.6000
102		Safety	451.2250
103		Garage	451.4250
104		Qualifying	451.5750
105		Weather	467.8500

Bank E : Busch Series

CH	CAR#	Name	frequency
0	05	Brett Rowe	464.8750
1	05	Brett Rowe	469.4000
2	06	Roush	463.9500
3	06	Roush	464.8125
4	08	Jason White	462.5750
5	08	Jason White	462.6375
6	0	Eric McClure	468.5125
7	0	Eric McClure	469.4125
8	1	J.J. Yeley	463.1250
9	1	J.J. Yeley	458.1750
10	2	Clint Bowyer	461.5125
11	2	Clint Bowyer	461.5875
12	4	Regan Smith	456.9750
13	4	Regan Smith	452.8875
14	5	Kyle Busch	461.3375
15	5	Kyle Busch	466.3375
16	6	David Ragan	468.6937
17	6	David Ragan	463.4500
18	7	Mike Wallace	461.9375
19	7	Mike Wallace	456.3750
20	8	D. Earnhardt	464.9250
21	8	D. Earnhardt	451.3250
22	9	Kasey Kahne	461.6250
23	9	Kasey Kahne	461.7750
24	10	Dave Blaney	452.3375
25	10	Dave Blaney	468.3375
26	11	M. Truex	466.5250
27	11	M. Truex	462.9000
28	12	Kurt Busch	469.1500
29	12	Kurt Busch	456.2750
30	13	T. Roberts	463.4750
31	13	T. Roberts	462.0500
32	14	K. Krisiloff	464.9000
33	14	K. Krisiloff	465.9125
34	15	Paul Menard	452.0500
35	15	Paul Menard	464.8750
36	16	Greg Biffle	465.0250
37	16	Greg Biffle	468.4500
38	17	Matt Kenseth	469.5125
39	17	Matt Kenseth	463.7125
40	18	Kevin Conway	467.7625
41	18	Kevin Conway	466.0125
42	19	JGR	451.3000
43	19	JGR	451.9000
44	20	A. Almirola	451.8500
45	20	A. Almirola	451.9000
46	21	T. Peters	469.6375
47	21	T. Peters	462.6000
48	22	Mike Bliss	464.7000
49	22	Mike Bliss	464.6500
50	23	B. Kslwsk	468.3625
51	23	B. Kslwsk	461.4500
52	24	Casey Mears	457.8875
53	24	Casey Mears	464.1125
54	25	D. Gilliland	469.5750
55	25	D. Gilliland	456.6250
56	26	Roush	463.9500
57	26	Roush	464.8125
58	27	Ward Burton	467.4125
59	27	Ward Burton	461.5625
60	28	J. Sauter	457.1500
61	28	J. Sauter	463.2750
62	29	Scott Wimmer	468.2500
63	29	Scott Wimmer	464.5875
64	30	Mike Bliss	461.0375
65	30	Mike Bliss	452.3875
66	31	P. Sellers	465.0125
67	31	P. Sellers	469.2375
68	32	Chad Blount	463.1125
69	32	Chad Blount	463.4125
70	33	K. Harvick	465.9875
71	33	K. Harvick	469.5375
72	34	Jay Sauter	458.1750
73	34	Jay Sauter	459.7750
74	35	B. Hamilton	468.5625
75	35	B. Hamilton	466.3750
76	36	B. Sherman	463.3125
77	36	B. Sherman	461.8375
78	37	J. McMurray	469.9375
79	37	J. McMurray	469.5500
80	38	Greg Biffle	466.9250
81	38	Greg Biffle	463.0125
82	41	R. Sorenson	456.6500
83	41	R. Sorenson	456.7750
84	42	J. Montoya	456.3250
85	42	J. Montoya	452.4750
86	43	PJ Jones	457.2000
87	43	PJ Jones	456.7750
88	44	TBA	464.1750
89	44	TBA	450.6000
90	47	Jon Wood	457.6500
91	47	Jon Wood	463.8375
92	49	S. Grissom	457.1500
93	49	S. Grissom	461.2750
94	52	D. Nunbrgr	457.1500
95	52	D. Nunbrgr	461.2750
96	55	Robby Gordon	461.8500
97	55	Robby Gordon	466.3375
98	56	D. O'Quinn	469.8750
99	56	D. O'Quinn	463.7000
100	58	Chris Horn	469.8750
101	58	Chris Horn	463.7000
102	59	M. Ambrose	457.1125
103	59	M. Ambrose	456.6625
104	60	Carl Edwards	451.1375
105	60	Carl Edwards	461.3500
106	61	RWI	463.2125
107	61	RWI	467.1125
108	63	J. Goeters	456.3875
109	63	J. Goeters	459.3625

110	66	S. Wallace	464.1375
111	66	S. Wallace	461.5375
112	68	T. Kittleson	462.5750
113	68	T. Kittleson	462.6250
114	70	J. Dierks	461.0000
115	70	J. Dierks	467.3875
116	72	D.J. Knnngtn	454.2000
117	72	D.J. Knnngtn	452.6500
118	73	Brett Rowe	464.8750
119	73	Brett Rowe	461.6500
120	75	Caleb Holman	462.0750
121	75	Caleb Holman	461.0000
122	76	Ketus Davis	467.9000
123	76	Ketus Davis	456.4500
124	79	S. Howard	457.5625
125	79	S. Howard	457.0875
126	84	TBA	459.0125
127	84	TBA	463.7375
128	87	Joe Nemechek	464.2875
129	87	Joe Nemechek	468.8375
130	88	S. Huffman	464.2625
131	88	S. Huffman	461.7875
132	90	S. Leicht	467.3750
133	90	S. Leicht	467.3500
134	91	David Green	464.5625
135	91	David Green	466.0875
136	95	S. Barrett	456.8375
137	95	S. Barrett	453.2875
138	98	Alex Garcia	464.0125
139	98	Alex Garcia	464.0250
140	99	D. Reutimann	464.6625
141	99	D. Reutimann	463.2375
142		Race Control	461.2000
143		BU RC CNTRL	464.6000
144		Safety	451.2250
145		Qualifying	451.5750
146		MRN/PRN	454.0000
147		Weather	467.8500

Bank F : Nextel Cup

CH	CAR#	Name	frequency
0	00	H. Sadler	462.9500
1	00	H. Sadler	467.1625
2	01	Mark Martin	463.2875
3	01	Mark Martin	461.3250
4	02	Brandon Ash	461.1250
5	02	Brandon Ash	463.2500
6	04	Eric McClure	468.7750
7	07	Clint Bowyer	469.2375
8	07	Clint Bowyer	464.4625
9	09	Mike Wallace	469.3125
10	09	Mike Wallace	460.7375
11	1	M. Truex	466.6875
12	1	M. Truex	457.6000
13	2	Kurt Busch	451.8250
14	2	Kurt Busch	464.8250
15	4	Ward Burton	468.8500
16	4	Ward Burton	461.7500
17	5	Kyle Busch	468.2125
18	5	Kyle Busch	467.0375
19	6	David Ragan	460.9500
20	6	David Ragan	466.7500
21	7	Robby Gordon	469.4500
22	7	Robby Gordon	463.6500
23	8	D. Earnhardt	464.9500
24	8	D. Earnhardt	463.7250
25	9	Kasey Kahne	451.8500
26	9	Kasey Kahne	452.6500
27	10	Scott Riggs	462.7625
28	10	Scott Riggs	462.5875
29	11	Denny Hamlin	467.4750
30	11	Denny Hamlin	462.4250
31	12	Ryan Newman	457.7875
32	12	Ryan Newman	466.2125
33	13	Joe Nemechek	469.4625
34	13	Joe Nemechek	469.5875
35	13	Greg Sacks	469.3750
36	13	Greg Sacks	464.2375
37	14	S. Marlin	457.1750
38	14	S. Marlin	452.1250

39	15	Paul Menard	452.0500
40	15	Paul Menard	464.8750
41	16	Greg Biffle	468.4500
42	16	Greg Biffle	465.0250
43	17	Matt Kenseth	458.4750
44	17	Matt Kenseth	462.4500
45	18	J.J. Yeley	467.4500
46	18	J.J. Yeley	462.5000
47	19	E. Sadler	456.8500
48	19	E. Sadler	452.4500
49	20	Tony Stewart	462.5250
50	20	Tony Stewart	462.4750
51	21	Ken Schrader	452.0125
52	21	Ken Schrader	452.2000
53	22	Dave Blaney	468.9375
54	22	Dave Blaney	460.1625
55	24	Jeff Gordon	467.0625
56	24	Jeff Gordon	465.8625
57	25	Casey Mears	466.7875
58	25	Casey Mears	462.0625
59	26	J. McMurray	465.9750
60	26	J. McMurray	460.7250
61	27	K. Shlmrdn	459.3625
62	27	K. Shlmrdn	460.0125
63	29	K. Harvick	469.0125
64	29	K. Harvick	462.0250
65	30	Rick Ware RC	467.5250
66	30	Rick Ware RC	465.0125
67	31	Jeff Burton	468.5750
68	31	Jeff Burton	468.6000
69	33	Scott Wimmer	468.2500
70	33	Scott Wimmer	464.5875
71	34	Chad Chaffin	463.2125
72	34	Chad Chaffin	467.1125
73	36	J. Mayfield	460.1625
74	36	J. Mayfield	468.9375
75	37	Kevin Lepage	468.8125
76	37	Kevin Lepage	468.8250
77	38	D. Gilliland	466.9500
78	38	D. Gilliland	466.4500
79	39	Regan Smith	456.9750
80	39	Regan Smith	452.8875
81	40	D. Stremme	461.3750

82	40	D. Stremme	462.1000
83	41	R. Sorenson	466.1500
84	41	R. Sorenson	458.0000
85	42	J. Montoya	452.7000
86	42	J. Montoya	466.1000
87	43	B. Labonte	467.7750
88	43	B. Labonte	464.4500
89	44	Dale Jarrett	463.2125
90	44	Dale Jarrett	469.1125
91	44	HMS R&D	461.3375
92	44	HMS R&D	466.3375
93	45	Kyle Petty	461.2250
94	45	Kyle Petty	464.4000
95	47	Jon Wood	457.6500
96	47	Jon Wood	463.8375
97	48	J. Johnson	451.9875
98	48	J. Johnson	452.2375
99	49	Mike Bliss	461.4125
100	49	Mike Bliss	466.2875
101	55	M. Waltrip	452.8125
102	55	M. Waltrip	452.1125
103	60	Boris Said	462.2500
104	60	Boris Said	467.2500
105	61	Chad Chaffin	463.2125
106	61	Chad Chaffin	467.1125
107	66	Jeff Green	466.5000
108	66	Jeff Green	469.1375
109	70	J. Sauter	464.6375
110	70	J. Sauter	469.7375
111	71	J. Leffler	466.9250
112	71	J. Leffler	463.0125
113	72	B. Whitt	462.8125
114	72	B. Whitt	467.3125
115	74	Derrick Cope	464.4125
116	74	Derrick Cope	464.5500
117	78	K. Wallace	452.2625
118	78	K. Wallace	466.0250
119	80	A. Almirola	462.4250
120	80	A. Almirola	462.5000
121	83	B. Vickers	451.6125
122	83	B. Vickers	451.9750
123	84	AJ Allmndngr	452.0875
124	84	AJ Allmndngr	456.5625

125	88	Ricky Rudd	468.5250
126	88	Ricky Rudd	466.3750
127	89	M. Shepard	467.1375
128	89	M. Shepard	468.6500
129	92	Frnt Mtrsprt	463.8125
130	92	Frnt Mtrsprt	467.5500
131	95	S. Barrett	451.7125
132	95	S. Barrett	464.3500
133	96	Tony Raines	461.1625
134	96	Tony Raines	466.2625
135	99	Carl Edwards	466.2750
136	99	Carl Edwards	466.8625
137		Race Control	461.2000
138		BU RC CNTRL	464.6000
139		Safety	451.2250
140		Qualifying	451.5750
141		MRN/PRN	454.0000
142		TV	450.2375
143		TV	450.2750
144		TV	450.6875
145		TV	450.5875
146		TV	450.6250
147		TV	450.5625
148		TV	450.0875