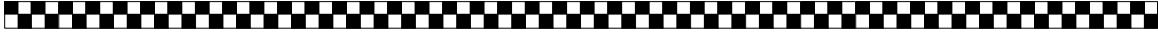# Track Scan
XSCAN 440 II

Race Scanner

☙FCC **IMPORTANT NOTICE**❧

It is a federal crime to intentionally intercept cellular or cordless telephone transmissions. This scanner has been manufacture to lockout those frequencies assigned by the FCC for cellular telephone usage.

Laws in your state may restrict or prohibit the use of scanning radios. Use of this radio in a motor vehicle may be prohibited, regulated, or require a permit. Check with state, city, and/or local jurisdictions prior to use.

DECLARATION BY MANUFACTURER

The Scanner receiver is not a digital scanner and is incapable of being converted or modified to a digital scanner receiver by any user.
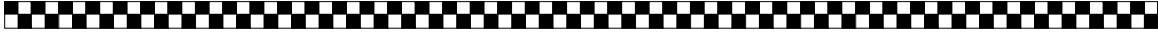
✄FCC IMPORTANT NOTICE ✄

1. Changes or modifications to this device not expressly approved by Kimark International, Inc. could void the user's authorization to operate this device.

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

3. The scanning receiver in this equipment is incapable of tuning, or readily being altered, by the User to operate within the frequency bands allocated to the Domestic public Cellular Telecommunications Service in Part 22.

WARNING: MODIFICATION OF THIS DEVICE TO RECEIVE CELLULAR RADIOTELEPHONE SERVICE SIGNALS IS PROHIBITED UNDER FCC RULES AND FEDERAL LAW.

⚑WELCOME⚑

The Track Scan is a new state-of-the-art compact radio frequency scanner. This scanner is designed to scan more than 400 channels over a broad frequency range that includes discrete channels for racetrack drivers and pit crews.

Track Scan brings the action of the track direct to you in a sleek and compact receiver. With a programmed Track Scan simply select the race series and the car number to experience the excitement of race crews as they strategically manage the race. Track Scan gives you a behind the scenes pass to the driver, crews and spotters thoughts, frustrations and excitement as the compete head-to-head with the rest of the field.

Track Scan is also capable of scanning public police, fire, rescue, air and military frequencies for those times when you are not listening to the race.
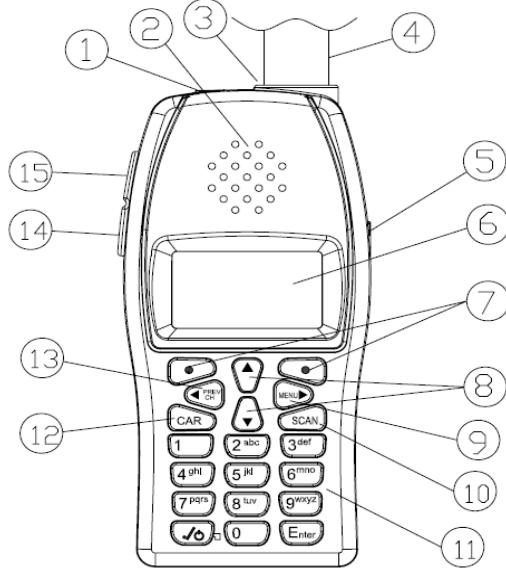
We are pleased that you have chosen Track Scan!
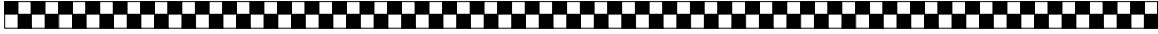
⚑TABLE OF CONTENTS⚑

Production Notes:
TOC will completed when graphics are finalized. ………………..
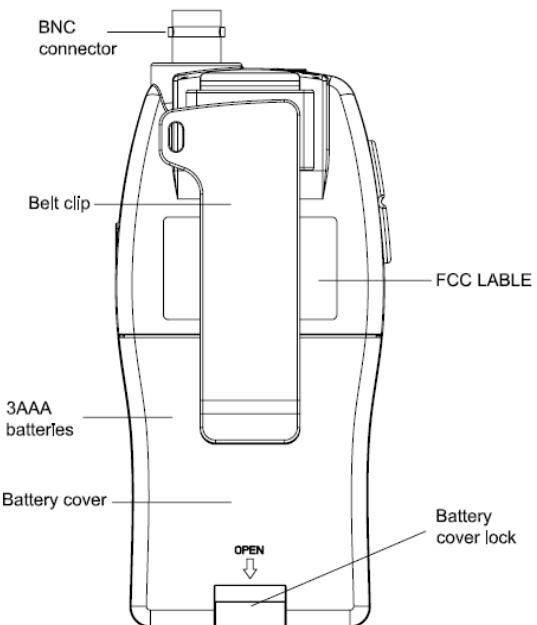……………

Know your scanner

1. Ext speaker jack
2. BNC connector
3. Antenna
4. Speaker
5. Programming jack
6. Left soft & right soft key
7. Up, down, left/Prev CH, right/MENU key
8. Scan key
9. Numeric/alphabet key pad
10. Car Key
11. LCD display
12. Volume down key
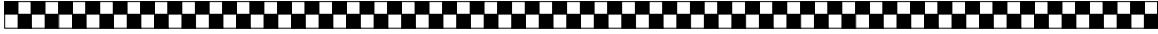13. Volume up key
14. Previous channel key

6

> **Warning:**
> Never mix alkaline battery with rechargeable battery.

BNC connector

Belt clip

FCC LABLE

3AAA batteries

Battery cover

OPEN

Battery cover lock

7

⚑FEATURED HIGHLIGHTS⚑

Programmable Channels: 440 channels (4 banks of 110 channels each).
Frequency Range: 450MHz – 470 MHz.
Priority Channels: Assign multiple Priority Channels in each series. Broadcasts activity on most important channel(s) while monitoring others.
Scan Lists: Customize scan lists.
Over-the-Air Programming: Loads channel frequencies through remote track broadcasts.
Race Series Channels: 440 channels split into four different series:
1. CUP Series – Channels 0, 00-09, 1-99
2. Bush Series – Channels 0, 00-09, 1-99
3. Truck Series – Channels 0, 00-09, 1-99
4. Open Series – Operator customizable channels 0, 00-09, 1-99

Memory Back-Up: Stores channels in nonvolatile memory.
Lighted Display: Lighted Display.
4-Ways key: Allows for one hand operation.

NOTE
Specifications are subject to change
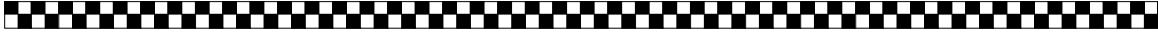
⚑ACCESSORIES⚑

Headset
Antenna: short removable antennas
Belt Clip
Case

> ### _Production Note_
> _Line Diagram of Accessories and Optional Accessories._
> _Need to photograph accessories to convert to line art._

⚑GETTING STARTED⚑

Your Track Scan is designed for easy set-up and use. With a few simple steps you can quickly scan race channels. However, for maximum enjoyment you should familiarize yourself with the information located in this guide.

SET-UP

1. Battery:
    a. Track Scan uses 3 AAA Batteries
    b. Do not mix brands, new and old or different types of batteries
    c. Battery Installation
        - Open the cover
        - Insert batteries
        - Replace cover

2. Antenna:
    a. Install the Flexible Antenna to the BNC connector on the top of the Track Scan.
        - The short antenna should be used at the track.
        - The long antenna works best for distant stations.

NOTE
The scanner can be used with out the antenna

⚑GETTING STARTED⚑

FREQUENCY RANGES

1.   The FCC assigns frequency bands for use by commercial and military broadcasts. The following is a general listing of some of the more common bands:

Frequency Band	Frequency Range
VHF Low Band	29.00 – 54.00
Aviation	108.000 – 137.000
Military	137.000 – 144.000
VHF High Band	148.000 174.000
Federal Government	406.000 – 420.000
UHF/NASCAR	450.000 – 470.000
UHF "T" Band	470.000 – 512.000
Public Service Band/IRL	806.000 – 956.000

2.   Racing Frequency Bands:
   a.   NEXTEL CUP: 450-470 MHz
   b.   BUSH SERIES: 450-470 MHz
   c.   CRAFTSMEN TRUCK: 450-470 MHz
   d.   CART/IRL: 450-470 MHz and 850-869 MHz

☙GETTING STARTED❧

TURNING THE SCANNER ON

1. Press and hold the **Power Key** for 2 seconds.
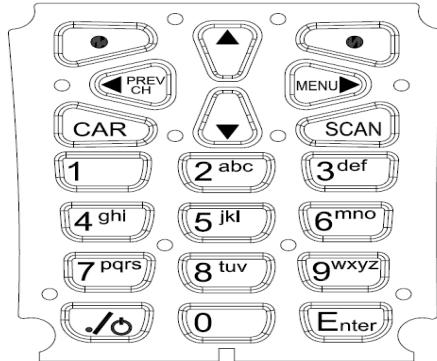
2. The scanner's display will illuminate.
3. Adjust the volume to a safe and comfortable level before connecting the headset.

NOTE
Volume control keys are located on the left side of the scanner

4. Install the headset.

⚐LEARNING TO USE YOUR SCANNER⚐

<u>DISPLAY SCREEN</u>

1. Using the Display: LCD screen presents information and menu commands/prompts. Commands/prompts are displayed in the lower left and right portions of the display.
   a. Screen Layout
      - Center: Main display.
      - Upper left corner: Battery strength indicator.
      - Bottom left corner: Commands/Prompts activated by the **Left Soft Key**.
      - Bottom right corner: Commands/Prompts activated by the **Right Soft Key**.
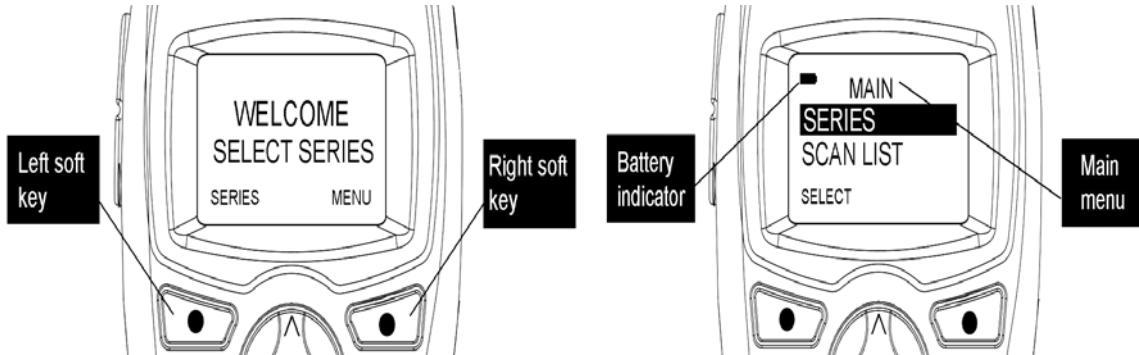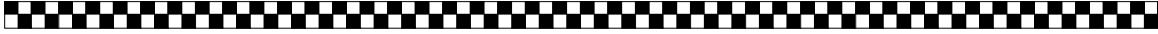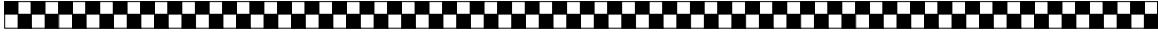
☙LEARNING TO USE YOUR SCANNER☙

SCANNER BASICS

1. **Command Keys**
    a. **Menu Key** (**MENU**): Displays scanners Main Menu or Secondary Menu.
    b. **Left Soft Key**: Selects left display command/prompt.
    c. **Right Soft Key**: Selects right display command/prompt.
    d. **Previous Channel Key** (**PREV CH**): Selects last tuned channel.
    e. **Car Key**: Stops automatic scanning and allows user to manually enter a channels number.
    f. **Scan Key**: Begins scanning the selected series channel list.

2. **4-Ways key** :
    Controls the display cursor and highlights display menus. Pressing the key moves the display cursor within the selected menu.
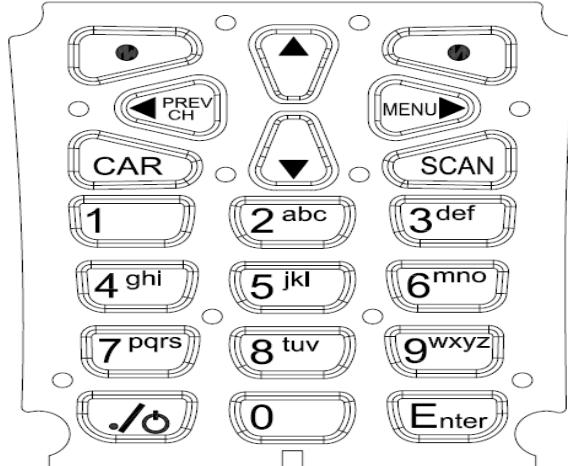
SCANNER BASICS (continued)

3. **Numeric/Alphabet Keys**:
    a. **Numeric Key Pad**: Enter channels and frequency information.
    b. **Alphabet Key**: Enter bank and driver names.
    c. **Enter Key:** Enter programmed information.

▷USING MENUS◁

MENU BASICS

1. **MENU**: Allow access to the basic functions of the scanner.
   a. Press the **MENU** Key to display the **main/secondary** menu.
   b. Press **Up** or **Down** on the **4-Ways key** to highlight an associated option.
   c. Options for the menu selection appear in the lower left and right corners of the display.
      Press the **Left Soft Key/ Right(MENU) key** to activate the displayed command/prompt.

Note: Main menu content.

MAIN
SERIES
SCAN LIST
PRIORITY
PREFERENCES
PROGRAM

MAIN
SERIES
SCAN LIST
SELECT

MENU BASICS (continued)

2. **Secondary Menu**: Allow quick access to ease of menus use. There are two secondary menu, one inside **SERIES** and the other one inside **SCAN LIST**.
   a. Secondary menu are submenu associated with a primary main menu. They are displayed as a pop-up windows on the display screen.
   b. Press the **Right (MENU)** Key while in stop scanning mode or when you are in **SCAN LIST.**
   c. Press **Up** or **Down** on the **4-Ways key** to highlight an option and press the **Right (MENU)** to select the desired option.
   d. To bypass the secondary menu press the **Left (PREV CH)** Key.

SCANLIST
PROGRAM
PRIORITY   MHz
MAIN
SCAN
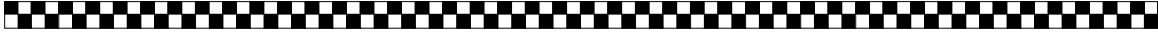
⚑USING MENUS⚑

MAIN MENU OPTIONS

1. **SERIES**: Select desired series. This must be accomplished before proceeding on to other menu or initiating the scan.

NOTE
There are 110 channels per series 00-09, 0, 1-99. Car numbers correspond with the channel number in the selected series.

2. **SCAN LIST**: Select only the channels you want to scan. Using the **Menu** key, the user can select or deselect channels within a series. This is helpful when an unwanted channel is transmitting continuously and/or dominating the scanner.
3. **PRIORITY**: Identify and select channels of importance. Select up to four priority channels. Channels assigned a priority will be scanned more frequently than non priority channels.
4. **PREFERENCES**: Adjust display lighting, squelch, priority scan and scan delay.
5. **PROGRAM**: Program scan channels and race/driver data. Using this menu function the operator can program the radio manually, by using pc programmer, or through an over the air broadcast.

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⚑USING MENUS⚑

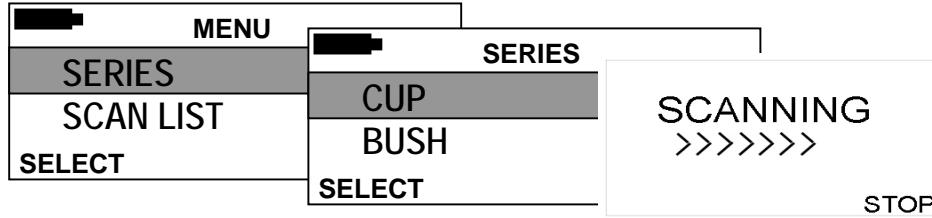**MAIN MENU SELECTIONS**

1. **SERIES**: Select one of three preassigned or one-user programmable race series (Cup, Bush, Truck or Empty) categories.

NOTE
Always select the appropriate SERIES on start-up. All other operations and menu options are based on the SERIES selection.

   a. Series channels must be programmed and will need to be updated for each race.
   b. Press the **Left Soft Key/ Right (MENU)** Key and select **SERIES**.
   c. Use the **4-Ways key** to scroll through series options.
   d. When the desired series is highlighted press the **Left Soft Key/ Right (MENU)** to select the series and start scanning all programmed/selected channels within that series.

MENU	SERIES	
SERIES	**CUP**	SCANNING
SCAN LIST	BUSH	>>>>>>>
SELECT	SELECT	STOP
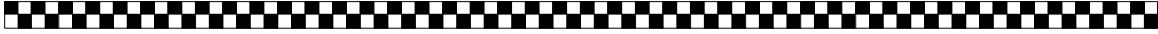
MAIN MENU SELECTIONS (continued)

2. **SCAN LIST**: Displays available channels within a selected series (**CUP, BUSH, TRUCK or USER**) and is used to customize the series channel list.
   a. Select **SCAN LIST** from the main menu. The channels for the selected series will be displayed.
   b. Scroll through driver channels and press the **Left Soft Key** (**SELECT/DESELECT**) to select /deselect channels on the scan list.

NOTE
Scan list selections will be marked with an arrow beside the name. Deselected channels will not have an arrow.

   c. Press the **Right Soft Key** when done to return to main menu.

```
██▬         MENU
    SERIES          ██▬       SCAN LIST
    SCAN LIST    ➤ 01 DRIVER
  SELECT          ➤ 02 DRIVER
                    DESELECT          DONE
```
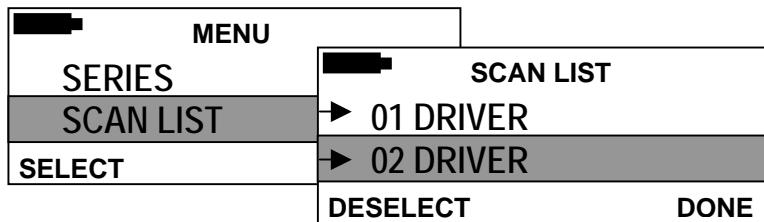
    d. When inside SCAN LIST, press MENU key to enter **secondary** pop-up menu. .

    e. Scroll up and down to highlight desired function, press **Right (MENU)** to select.

SCAN LIST

➤ 01 D | **SELECT ALL**
SELECT NONE
➤ 02 D | MAIN

DESELECT   **DONE**
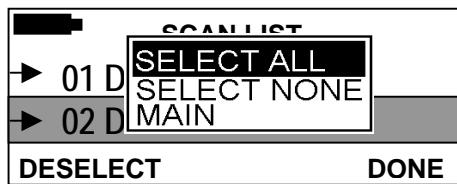
Note:
SELECT ALL will select
all channels in that SERIES.
SELECT NONE will de-select
all channels in that SERIES.
MAIN will go back to MAIN
menu.

MAIN MENU SELECTIONS (continued)

3. **PRIORITY**: Prioritized important channels. Important channels can be identified and selected based on the users preference. Select priority channels (up to 4 per series). Transmissions over priority channels will override nonpriority channels.
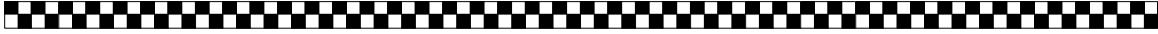   a. Priority **1** through **4** (with 1 being the highest and 4 the lowest) can be assigned to channels within a series.
   b. Select **SERIES** (**CUP, BUSH, TRUCK or USER**).
   c. Select **PRIORITY** from the Main Menu. The programmed channels for the selected series will be displayed.
   d. Scroll through driver channels and press **Left Soft Key** (**SELECT**) to assign a priority to the selected channel.
   e. Pressing the **Left Soft Key** repeatedly will scroll through the priority selection (**4,3,2,1**).
   f. Press **Right Soft Key** (**DONE**) when the priority is assigned.

```
         ████                MENU
          SCAN LIST         ████              PRIORITY
          PRIORITY           2    01 DRIVER
         SELECT              4    02 DRIVER
                             SELECT                    DONE
```

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MAIN MENU SELECTIONS (continued)

4. **PREFERENCES**: Selectable scanner features.
    a. **LIGHT**: Select Display light preferences. The following options are:
        ▪ **ON WHEN RECEIVING**: Display illuminates for 10 seconds when receiving.
        ▪ **OFF**: No Display lighting.
        ▪ **ALWAYS ON**: Display continuously lighted.

MENU		
PREFERENCES		
PROGRAM		
SELECT		

PREFERENCES		
LIGHT		
SQUELCH LEVEL		
SELECT		

Light	
→ On when receive	
Off	
SELECT	DONE

23
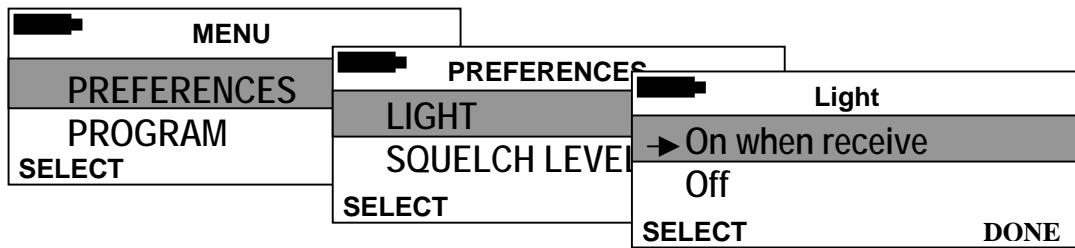
MAIN MENU SELECTIONS (continued)

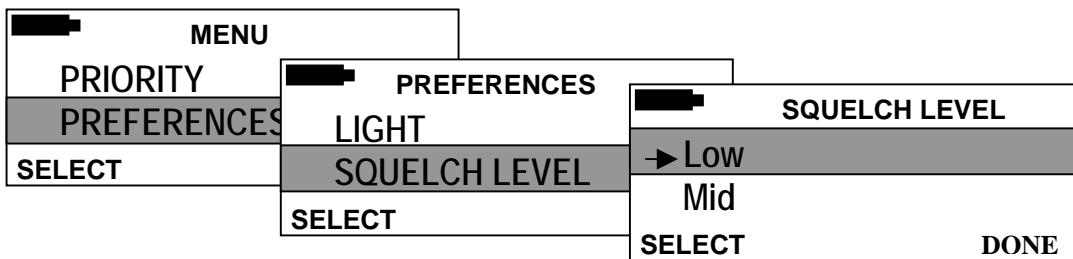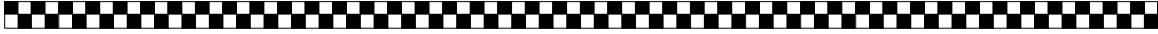b. **SQUELCH**: Squelch filters out unwanted noise. Squelch operates much like a gate to reduce noisy transmissions. If the transmission is strong, the gate will open and the transmission will be heard. If the transmission is weak or mostly static, the gate will remain closed and the transmission will not be heard. Track Scan squelch is adjustable (**Low, Mid, Sensitive**) representing when the gate will open.
- The lower the squelch setting the more noise that will get through. If a particular frequency is hard to hear or is getting cutoff attempt to adjust the squelch level:
  - Adjust the volume first, if that does not improve the transmission then adjust the Squelch level.
  - Select **SQUELCH**.
  - Select **Low** (normal setting), **Mid** or **Sensitive.**

```
┌─────────────────────────────┐
│ ▄▄▄     MENU                 │
│ PRIORITY   ┌──────────────────────────────┐
│ PREFERENCE │ ▄▄▄      PREFERENCES          │
│ SELECT     │ LIGHT     ┌──────────────────────────────┐
│            │ SQUELCH LEVEL ▄▄▄▄   SQUELCH LEVEL        │
│            │ SELECT    │ → Low                         │
│            └───────────│ Mid                           │
│                        │ SELECT              DONE      │
│                        └──────────────────────────────┘
```
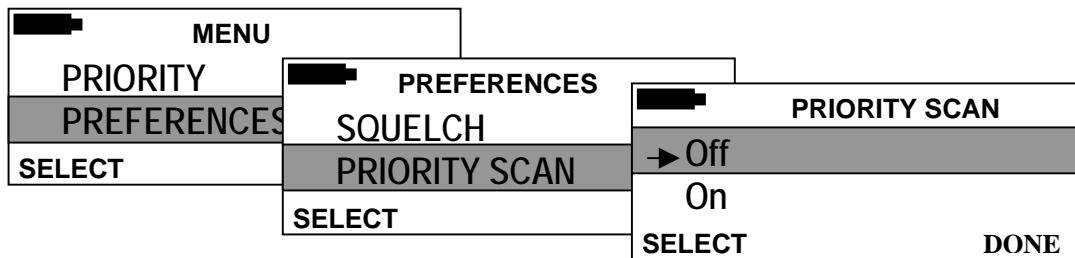
MAIN MENU SELECTIONS (continued)

   c. **PRIORITY SCAN**: Select priority scan preferences. The following options are:
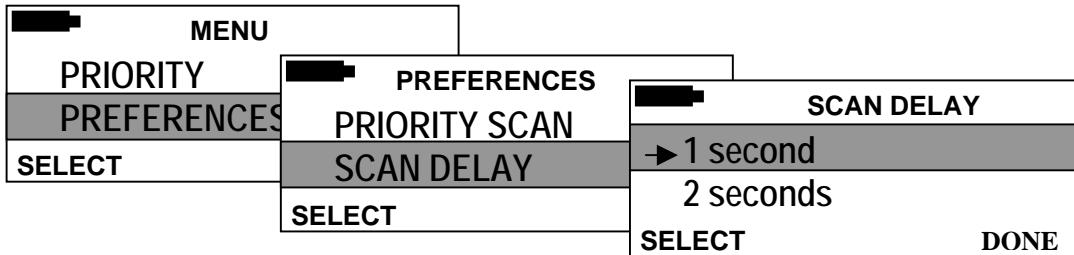- **Off**: Switch priority scan off.
- **On**:. Switch priority scan on

```
┌───────────────────────────┐
│ ███    MENU                │
│  PRIORITY                  │
│ ┌──────────────────────────────┐
│ │▒▒███▒▒▒▒PREFERENCES▒▒▒▒▒▒▒│
│ │  SQUELCH                 │   │
│ SELECT│ ┌──────────────────────────────┐
└───────┤ │ ███       PRIORITY SCAN       │
        │ │▒▒▒PRIORITY SCAN▒▒│           │
        │ │ → Off                        │
        │ SELECT│                        │
        └───────┤   On                   │
                │ SELECT          DONE    │
                └─────────────────────────┘
```
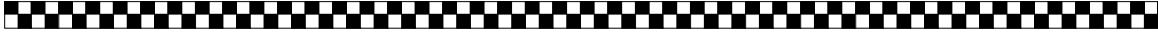
MAIN MENU SELECTIONS (continued)

d. **SCAN DELAY**: Scan delay is to delay the time hold on to a channel when the signal goes out before continuing scanning. The following options are:

- **1 second**: It will stay for 1 second before continuing scanning.
- **2 seconds**:. It will stay for 2 seconds before continuing scanning
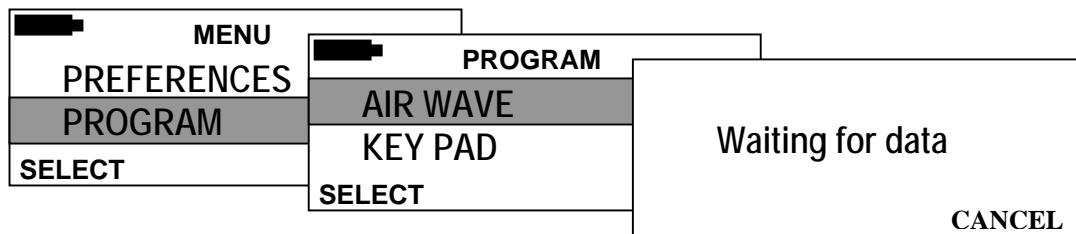- **3 seconds**: It will stay for 3 seconds before continuing scanning.

```
┌──────────────────────────┐
│ ▬▬▬▪    MENU              │
│ PRIORITY                 │
│ ┌─────────────────────────────┐
│ │PREFERENCES ▬▬▬▪   PREFERENCES│
│ SELECT │                       │
└────────│ PRIORITY SCAN ┌──────────────────────────┐
         │               │ ▬▬▬▪       SCAN DELAY     │
         │ SCAN DELAY    │                          │
         │               │ ➔ 1 second               │
         │ SELECT        │                          │
         └───────────────│ 2 seconds                │
                         │ SELECT          DONE     │
                         └──────────────────────────┘
```

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MAIN MENU SELECTIONS (continued)

5. **PROGRAM**: Use this menu to automatically or manually program channels. And also to read or delete channels. Channels can be programmed into the radio using one of three methods:

   a. **Method #1 (Track Programming Broadcasts)**: Track programming broadcasts are radio transmission that are broadcasted at the track. They contain race series driver channel information. When the scanner is set to **RECEIVE AIR WAVE,** programming transmissions are automatically download into the scanner. This is the preferred and fastest method of updating the scanner with the latest track/driver frequencies, names, codes and channel numbers.
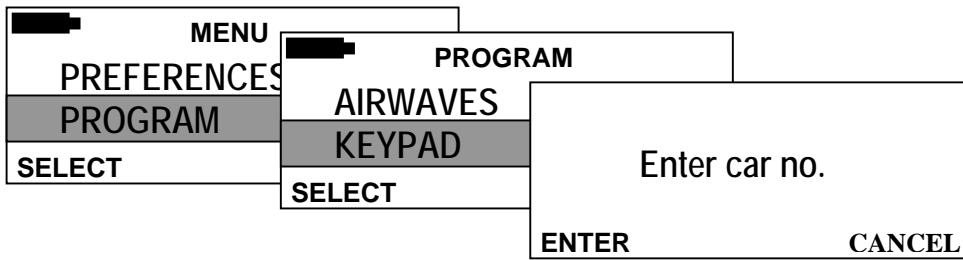
```
████      MENU
                       ████      PROGRAM
 PREFERENCES
                        AIR WAVE
 PROGRAM                                    Waiting for data
                        KEY PAD
 SELECT
                        SELECT                              CANCEL
```

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<u>**MAIN MENU SELECTIONS (continued)**</u>

    b. **Method #2 (Manual Entry)**: Select **KEY PAD** to manually enter track/driver
       frequencies, codes and driver names. This method is also used for entering other scan
       channels (police, fire, weather…).

<div align="center">

NOTE
**Frequency lists are available at the track or over the Internet. For race programming,
frequencies are matched to the car number within the series making channel selection
easy and intuitive. For example**: **NEXTEL Cup channel 24 is assigned to car number 24
and channel number 01 is assigned to car number 01. Bush Series channel 24 is
assigned to car number 24 and channel number 01 is assigned to car number 01. This
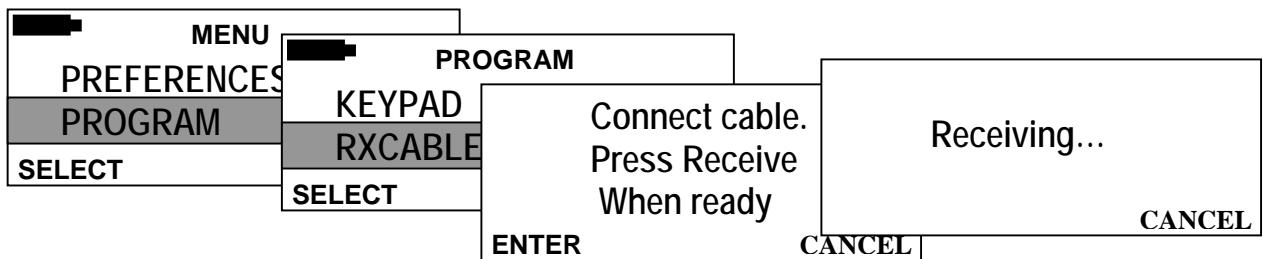channel numbering is repeated for all channels within a series.**

</div>

MENU	**PROGRAM**	
PREFERENCES	AIRWAVES	
PROGRAM	KEYPAD	Enter car no.
SELECT	SELECT	
		ENTER CANCEL

<div align="center">

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</div>

⚑USING MENUS⚑

MAIN MENU SELECTIONS (continued)

c. **Method #3 (RXCABLE)**: Select **RXCABLE** to download track/driver frequencies, codes and driver names from PC. A cable is connected to both scanners and PC. Select **RECEIVE** option to download track/race channels and data through a cable connected to PC.

NOTE
Frequency lists are available at the track or over the Internet. For race programming, frequencies are matched to the car number within the series making channel selection easy and intuitive. For example: **NEXTEL Cup channel 24 is assigned to car number 24 and channel number 01 is assigned to car number 01. Bush Series channel 24 is assigned to car number 24 and channel number 01 is assigned to car number 01. This channel numbering is repeated for all channels within a series.**
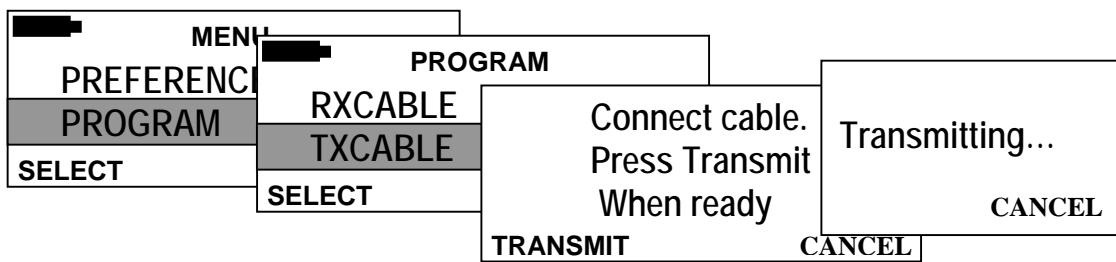
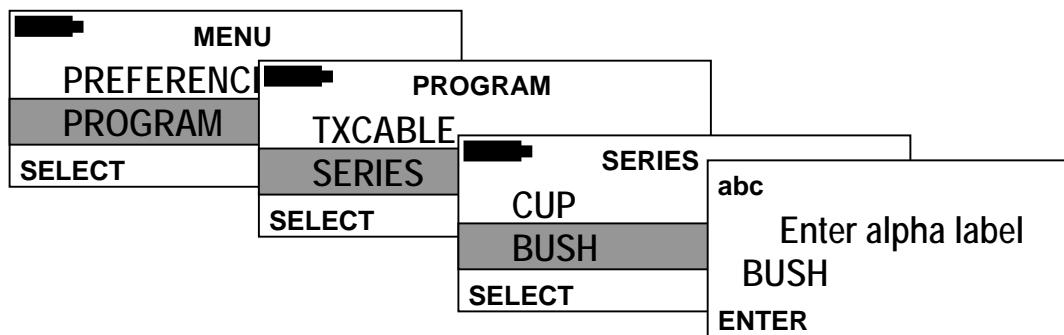| MENU			
PREFERENCES	PROGRAM		
PROGRAM	KEYPAD	Connect cable.	Receiving...
SELECT	RXCABLE	Press Receive	
	SELECT	When ready	
		ENTER CANCEL	CANCEL

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MAIN MENU SELECTIONS (continued)

d. **Read channels**: Select **TXCABLE** to upload channel information to PC. A cable is plug in PC and scanner. Select **TXCABLE** from scanner, press **TRANSMIT** to send data to PC.
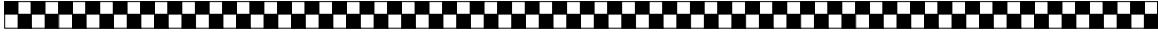
MENU	PROGRAM		
PREFERENC	RXCABLE	Connect cable.	Transmitting...
PROGRAM	TXCABLE	Press Transmit	
SELECT	SELECT	When ready	CANCEL
		TRANSMIT CANCEL	

MAIN MENU SELECTIONS (continued)

d. **Edit SERIES**: Select **SERIES** to view bank names, select the bank name to edit.

MENU
PREFERENC
PROGRAM
SELECT

PROGRAM
TXCABLE
SERIES
SELECT

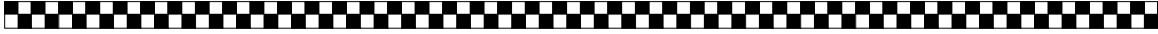**SERIES**
CUP
BUSH
SELECT

abc
Enter alpha label
BUSH
ENTER

31

MAIN MENU SELECTIONS (continued)

e. **Clear Scanner**: Select **DELETE ALL** to clears all channels and data from memory. Press **Yes** to delete.

MENU

PREFERENCES

PROGRAM

SELECT

PROGRAM

SERIES

DELETE ALL

SELECT

Are you sure?

YES   **NO**

DELETING
|||||||

32
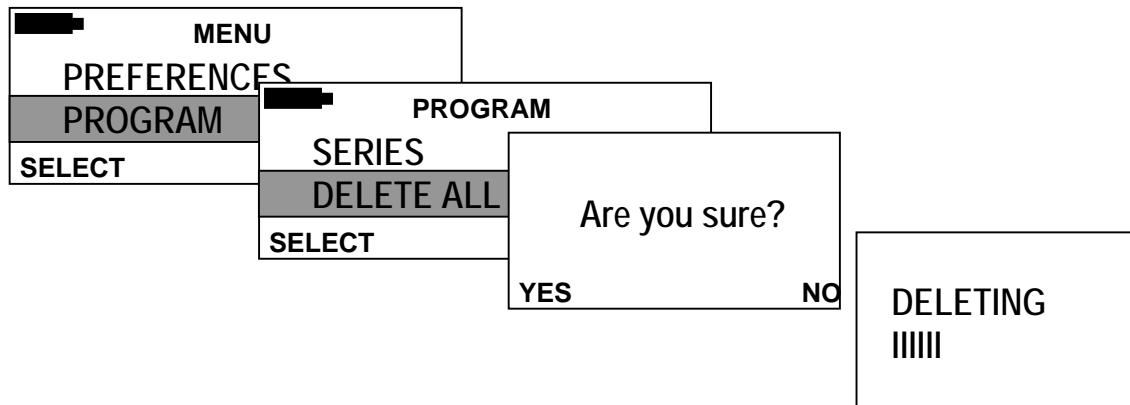
⚐SCANNER PROGRAMMING⚐

PROGRAMMING PROCEDURES
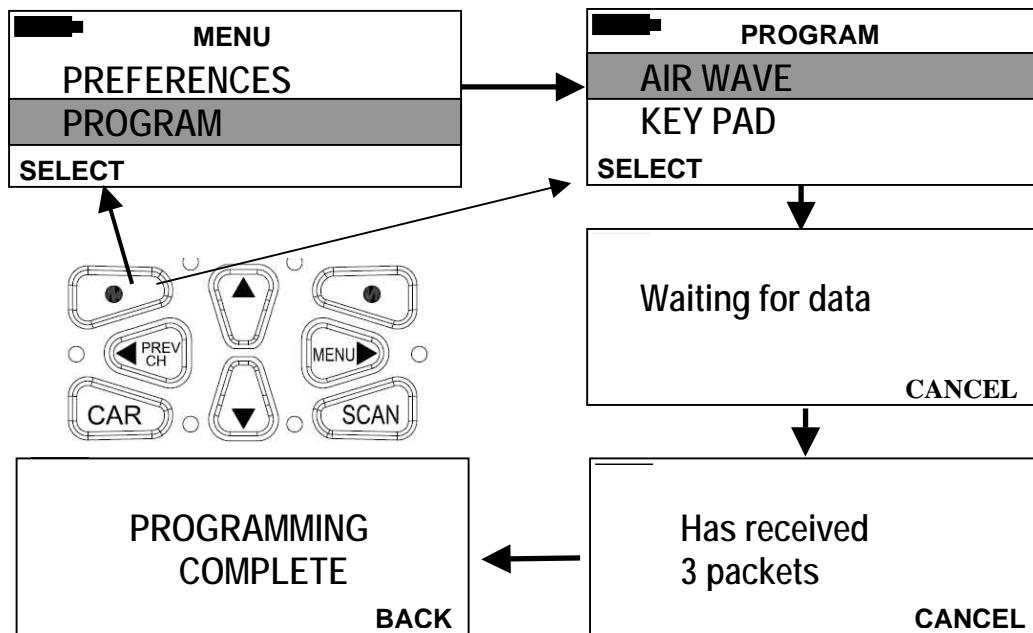Programming the scanner is accomplished by selecting one of the programming methods (air, PC or manual).

1. **RECEIVE AIRWAVE**:
   a. For Receive Air Wave method be sure to position the scanner frequency same as the transmission.
   b. Select and follow menu prompts.
   c. The display will show the progress of information as it is programmed into the scanner.
   d. Select **DONE** when the display shows **COMPLETE**.
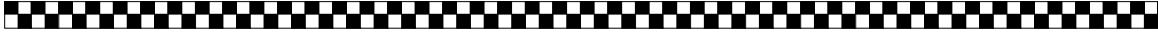
NOTE

To receive air wave Decoder unit is plug in to the TrackScan.
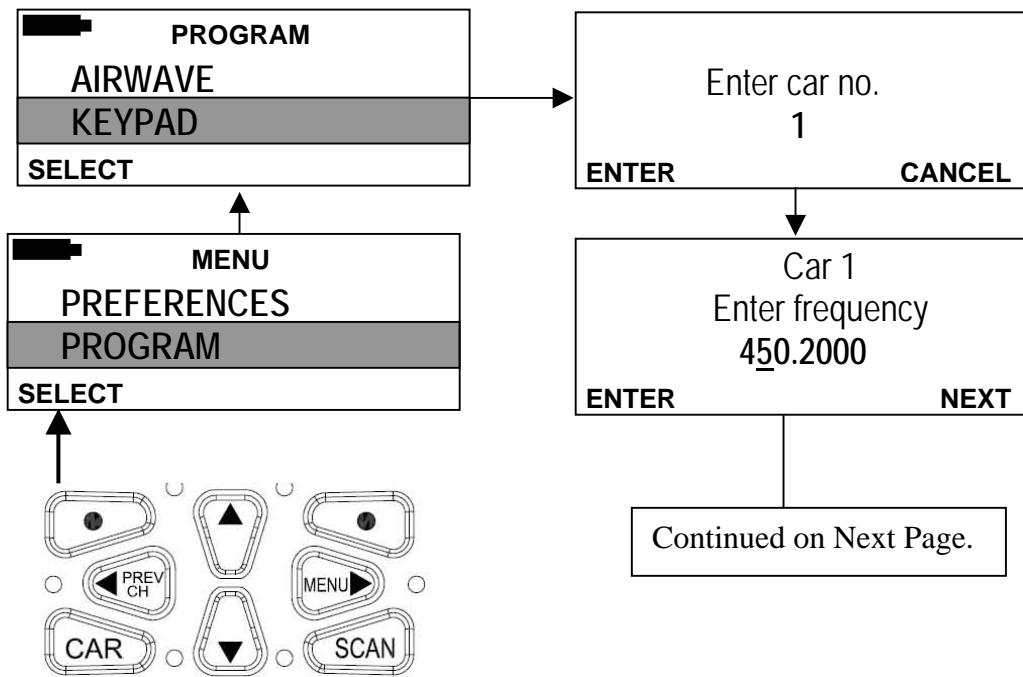
✒SCANNER PROGRAMMING✒
(BROADCAST)

MENU	PROGRAM
PREFERENCES	**AIR WAVE**
PROGRAM	KEY PAD
SELECT	SELECT

Waiting for data

CANCEL

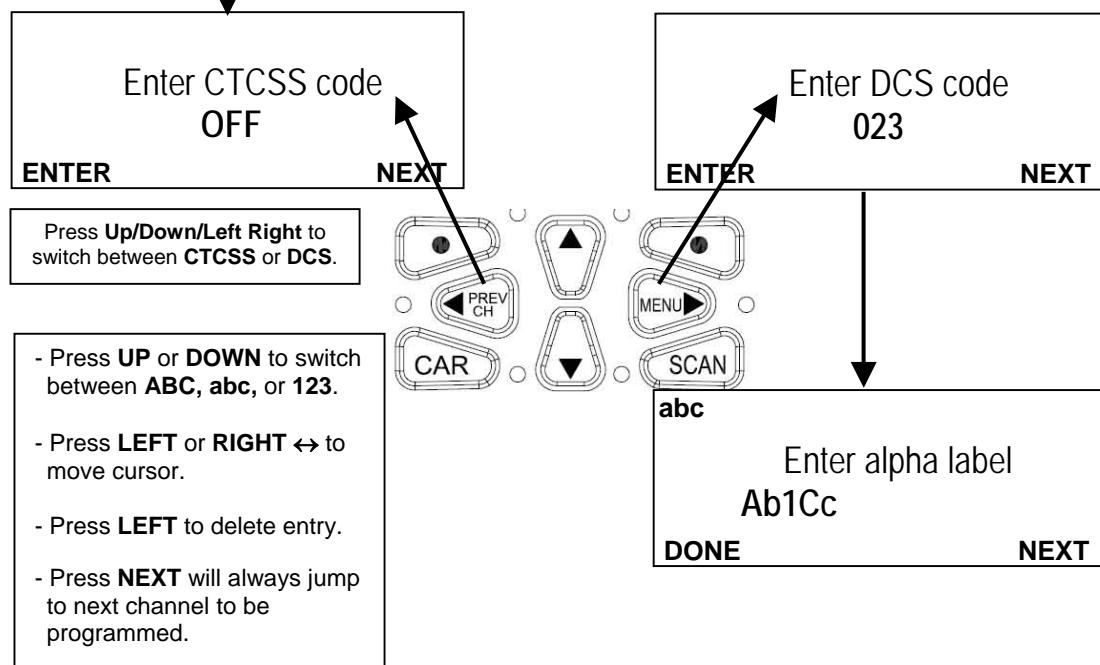| PROGRAMMING COMPLETE	Has received 3 packets
BACK	CANCEL

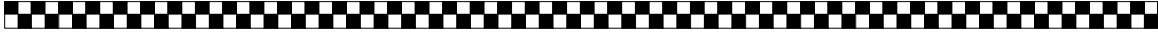PREV CH   MENU▶   CAR   SCAN

34

PROGRAMMING PROCEDURES (continued)

2. **KEY PAD**: Use the **Numeric Key Pad** to enter the following information:
   a. **Channel Number**: Enter cal number.
   b. **Frequency**: Enter a valid frequency by using **Up** or **Down Navigation Pad**. (450-469.9875)
   c. **CTCSS/DCS Code**
      ▪ This code is essential for monitoring track/driver channels.
      ▪ CTCSS and DCS Codes are sub-audio signaling formats designed to prevent interference from other broadcasting stations sharing the same frequency. When using CTCSS or DCS codes the scanner will only respond to transmissions carrying the tone. Therefore you only hear the race team's transmissions.
      ▪ Use **Up/Down/ Left (PREV CH) / Right (MENU) 4-Ways key** to adjust CTCSS/DCS code.
      ▪ Press **Left (PREV CH)** to turn CTCSS Code off**.**
      ▪ Press **Right (MENU)** to set DCS Code to first one**.**
   d. **Alpha Label**: Used to name the channel. This field can key letter or number.
      ▪ Use the **Numeric Key Pad** to enter letter/number in the display.
      ▪ Press the **Navigation Pad**
        • **Up** or **Down** to select upper/lower case letter or number.
        • **Left(PREV CH)** or **Right(MENU)** to move the cursor left or right.
        • **Left** to delete a letter.

▰▰▰▰▰▰▰▰▰▰▰▰▰▰▰▰▰▰▰▰▰▰▰▰▰▰▰▰▰

PROGRAM

AIRWAVE

KEYPAD

SELECT

MENU

PREFERENCES

PROGRAM

SELECT

Enter car no.

1

ENTER   CANCEL

Car 1
Enter frequency
450.2000

ENTER   NEXT

Continued on Next Page.

PREV
CH

MENU

CAR

SCAN

Enter CTCSS code
OFF

ENTER   **NEXT**

Enter DCS code
023

ENTER   **NEXT**

Press **Up/Down/Left Right** to switch between **CTCSS** or **DCS**.

- Press **UP** or **DOWN** to switch between **ABC, abc,** or **123**.

- Press **LEFT** or **RIGHT** ↔ to move cursor.

- Press **LEFT** to delete entry.

- Press **NEXT** will always jump to next channel to be programmed.

PREV CH

MENU

CAR

SCAN

abc

Enter alpha label
Ab1Cc

DONE   **NEXT**

PROGRAMMING PROCEDURES (continued)

3. **Receive Cable**:
   a. Connect the cable to the scanner.
   b. Select **PROGRAM** and **Receive Cable** on the scanner that needs to be programmed.
   c. Observe the display during the transfer and follow menu prompts.
   d. Select **DONE** when complete.

⚑SCANNER PROGRAMMING⚑
(RECEIVE CABLE)

MENU
PREFERENCES
PROGRAM
SELECT

→

PROGRAM
KEYPAD
RXCABLE
SELECT

PREV CH · MENU · CAR · SCAN

↓

Connect cable. Press Receive when ready
RECEIVE   BACK

↓

Receiving…
CANCEL

←

PROGRAMMING COMPLETE
BACK
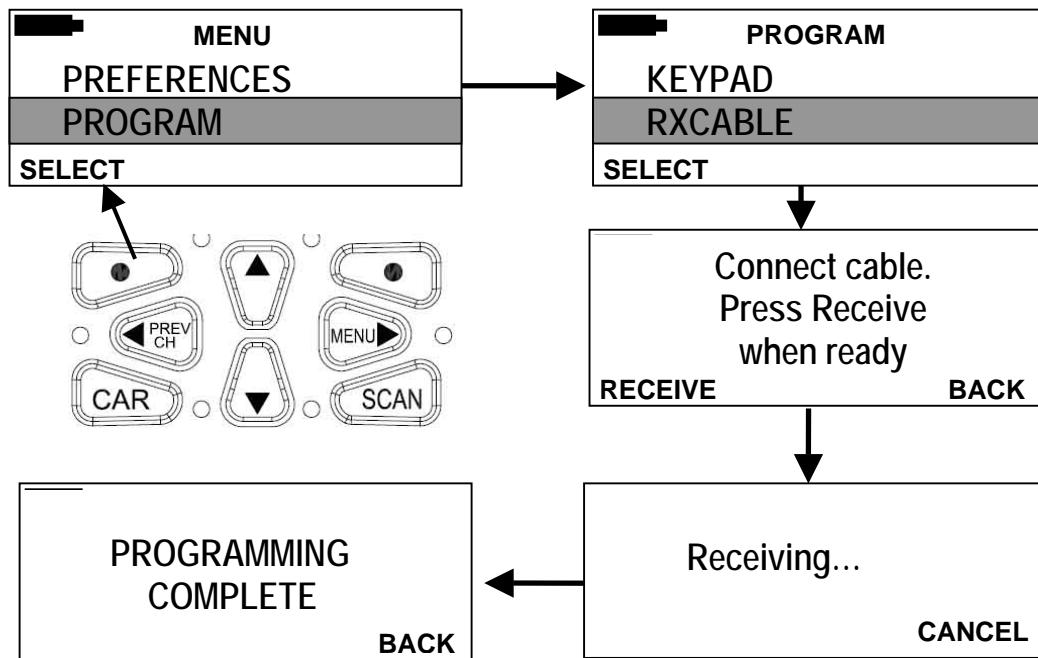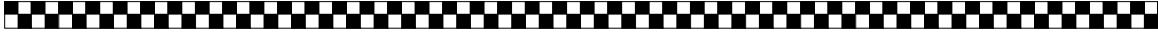
PROGRAMMING PROCEDURES (continued)

4. **TRANSMIT CABLE**:
   a. Connect the cable.
   b. Select **PROGRAM** and **TXCABLE** on the scanner that has the programmed information.

NOTE
Care should be taken to ensure that the transmit scanner and the PC are properly connected. Otherwise the data in the good scanner will be lost.

   c. Observe the display during the transfer and follow menu prompts.
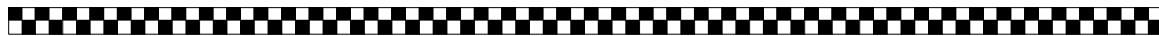
☙SCANNER PROGRAMMING☙
(TXCABLE)

MENU	
PREFERENCES	
PROGRAM	
SELECT	

→

PROGRAM	
RXCABLE	
TXCABLE	
SELECT	

↓

Connect cable. Press Transmit when ready	
TRANSMIT	BACK

↓

Transmitting…	
	CANCEL

←

PROGRAMMING COMPLETE	
	BACK
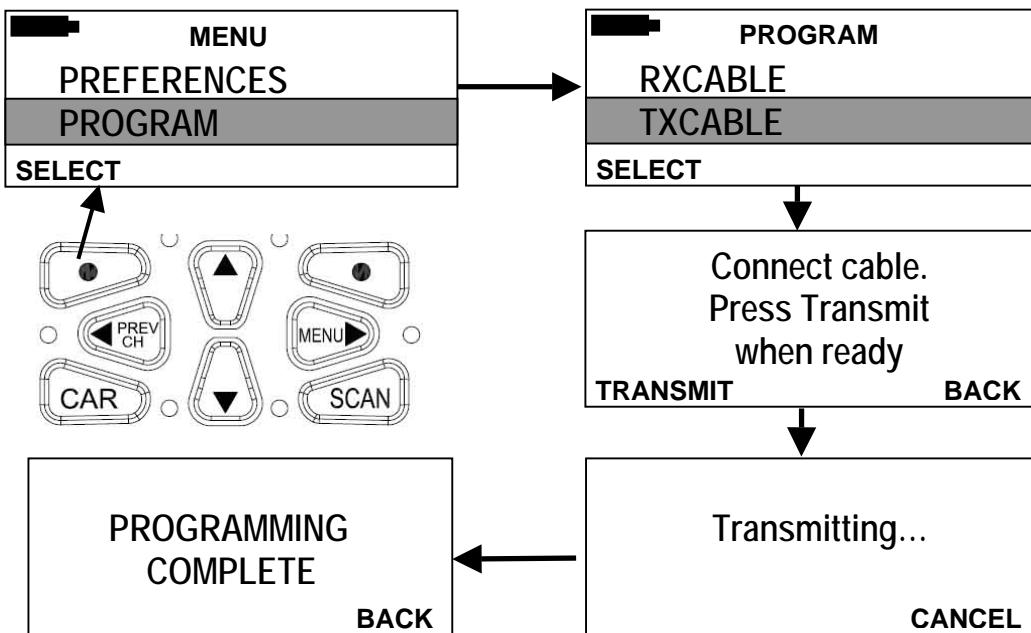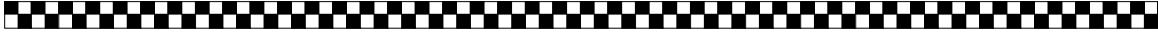
☞SCANNER OPERATIONS☜

BEGIN SCANNING

1. On start-up, the scanner will display the **WELCOME** screen.
2. Press the **Left Soft Key SERIES** to access the **SERIES** menu or the **Right Soft Key** to select **MENU** if the scanner needs to be programmed.
3. Cursor to the desired series and select by pressing the **Left Soft Key**.
4. With the series selected, the scanner will begin scanning.

☞OPERATING THE SCANNER☜

MONITORING THE SCANNER

1. When the scanner is scanning channels, the scanner will lock on to active channels and stay locked on that channel until there is a pause in the transmission. When the transmission stops for more than 2 seconds the scanner will resume scanning for the next active channel.
2. While scanning, the display will show a scanning moving symbol (>>>>). When an active channel is found the display will show the preset number, channel number and frequency.

STOPPING/PAUSING THE SCANNER

1. To stop or pause the scanner using the **Right Soft** key:
   - Press the **Right Soft** key to stop scanning.
   - Pressing the **Right Soft** key once and the display will hold.

   HOLD will freeze the display. However, the scanner will still monitor priority channels and tune to them if they are active.
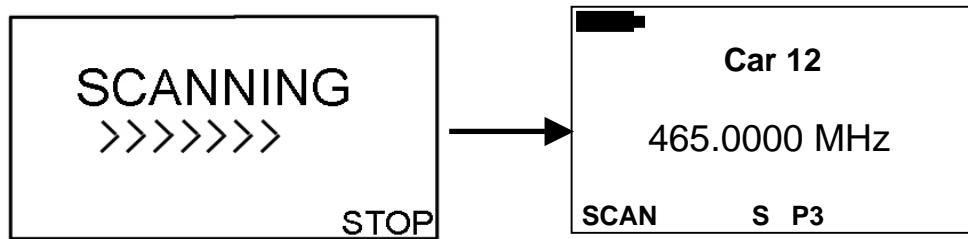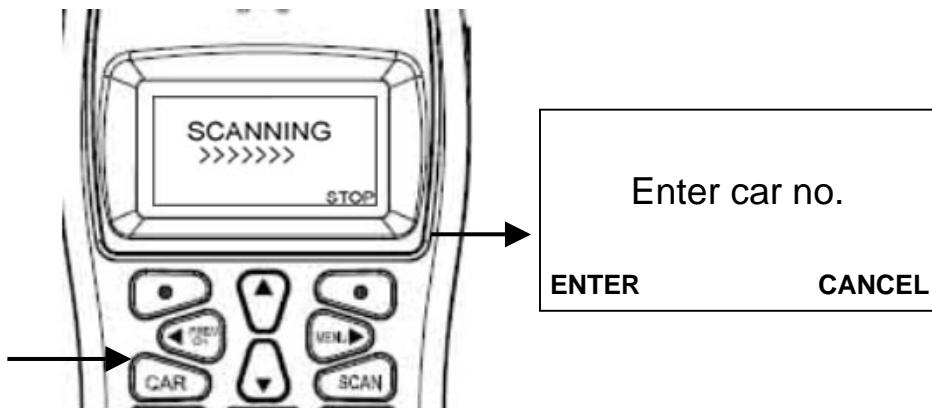
▷ OPERATING THE SCANNER ▷

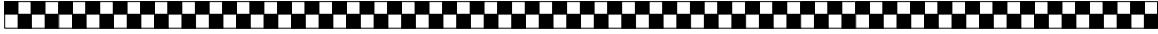### STOPPING/PAUSING THE SCANNER (continued)

2. To stop the scanner using the **CAR** key:
   - Press either the **CAR** key or the **Right Soft** Key.
   - Both of these keys will **HOLD** the current channel in the display.

NOTE
With the scanner paused, press Up and Down on the Navigation Pad to manually scan other channels. As you scroll the channels will change.
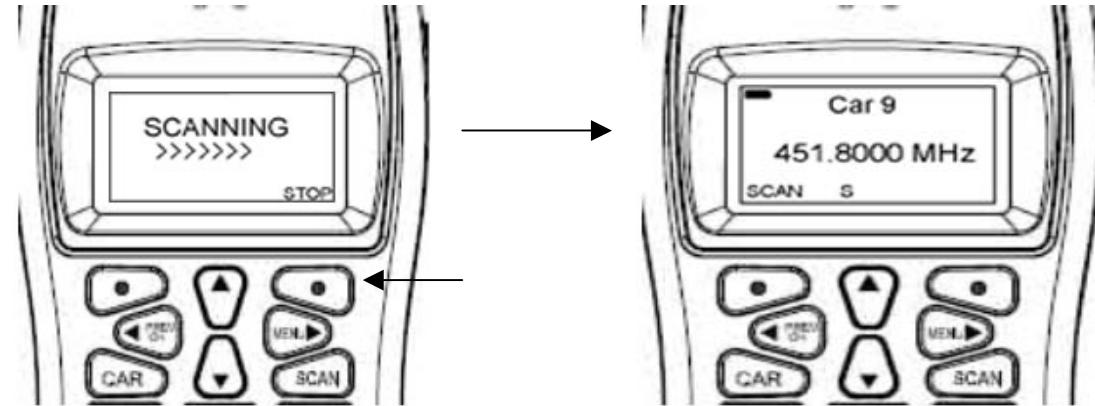

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☞OPERATING THE SCANNER☞

MANUAL SCANNING
You can manually scan channels in your scan list.

1. While scanning channels
2. Press the **Right Soft** key to stop the automated scanning.
3. Then press the **Up** or **Down** on the **Navigation Pad** to manually cycle through the current scan list.
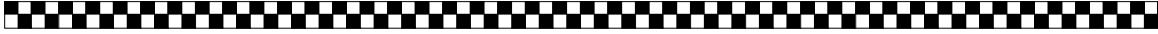4. To resume scanning press the **Scan Key**.

MANUAL CHANNEL TUNING

You can tune to any channel within a series by pressing the **CAR** key and entering the channel number.

1. While scanning channels.
2. Press the **CAR** Key.
3. Enter the Channel Number and press the **Left Soft** or **Enter** Key when finished.
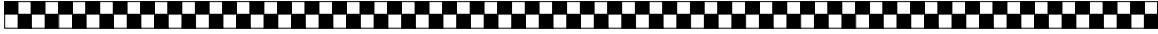
```
┌──────────┐      ┌──────────┐      ┌─────────────────────┐
│   CAR    │ ───▶ │ CHANNEL  │ ───▶ │ Left Soft or Enter  │
│          │      │ NUMBER   │      │                     │
└──────────┘      └──────────┘      └─────────────────────┘
```

<u>**PREVIOUS CHANNEL**</u>
Use the **PREV CH Key** to select the last tuned frequency. This key is only active when the scanner is stopped on a frequency.

1. While scanning channels.
2. Press the **Car Key**.
3. Manually enter the two desired channel numbers using the **Numeric Key Pad**.
4. Press the **PREV CH Key** to switch between the two channels.
5. To resume scanning press the **Scan Key**.

SELECTING PRIORITY CHANNELS
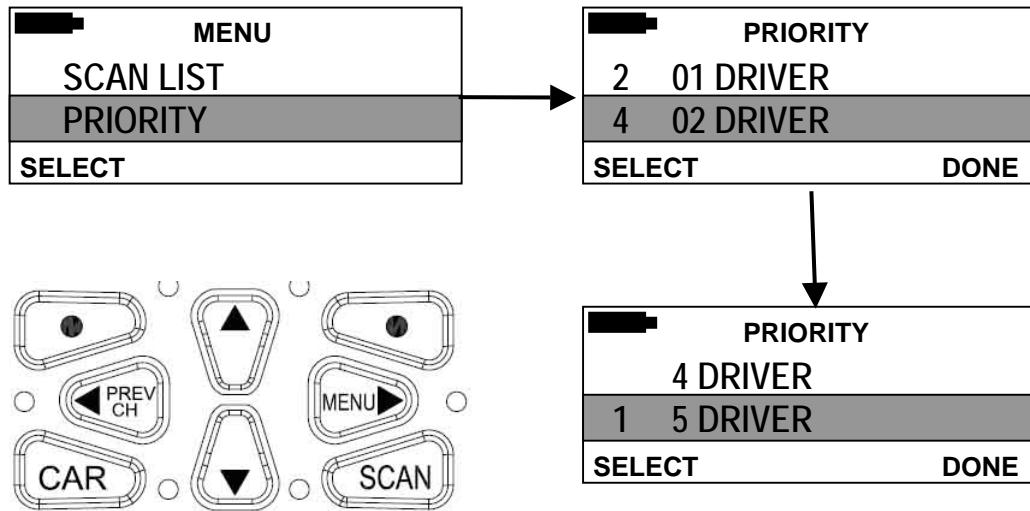You can prioritize up to 4 channels in each series.

1. From the menu select **PRIORITY** or while in hold scanning, press the **Menu Key** (pop-up window).
2. Select PRIORITY to enter priority list.
3. Press **Up** or **Down** on the **4-Ways keys** to scroll through the frequency list.
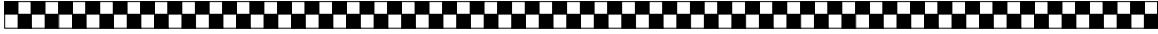4. Press the **Left Soft Key** to assign a priority (**4,3,2,1**) to the channel.

NOTE
Priority channels will be scanned more frequently and will override lower priority channels.

5. When channel are assigned, press DONE to go back to hold scanning mode.
6. Resume scanning when finished with selections.
7. Priority channel is active at stop, scanning, and receiving mode.
8. Press Enter key to stop/restart priority channel function if user wants.
9. Press the **Menu Key** (pop-up window).and select on or off to turn on /off priority channel function.

MENU
SCAN LIST
PRIORITY
SELECT

PRIORITY	
2 01 DRIVER	
4 02 DRIVER	
SELECT	DONE

PRIORITY	
4 DRIVER	
1 5 DRIVER	
SELECT	DONE

PREV CH

MENU

CAR

SCAN

50

☙OPERATING THE SCANNER☙

SELECTING AND DESELECTING SCAN CHANNELS
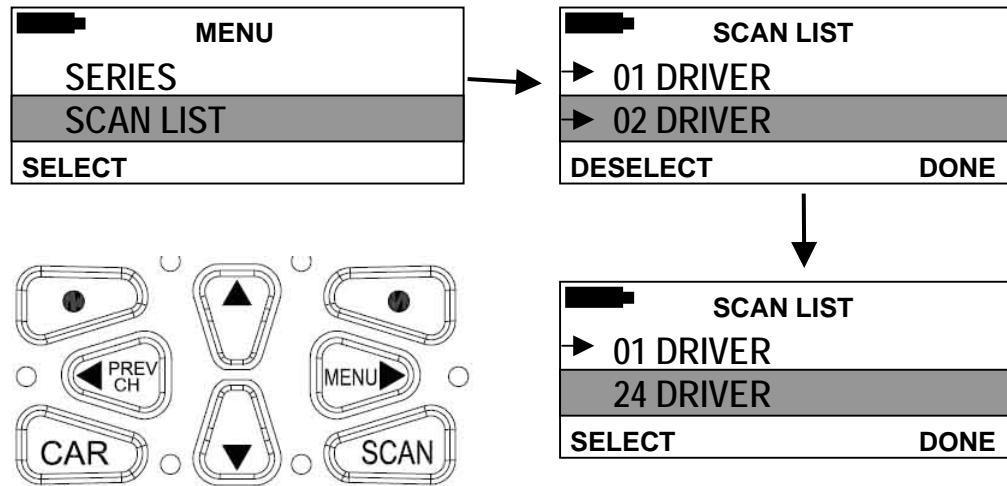The scan list can be modified to select or deselect channels as desired.

1. From the menu select **SCAN LIST**.
2. Press **Up** or **Down** on the **4-Ways keys** to scroll through the frequency list.
3. Press the **Left Soft Key** to **SELECT** or **DESELECT** the highlighted channel.

NOTE

When modifying a large scan list, it may be simpler to DESELECT ALL (press the Menu Key when you are on the scan list) and then reselect only the channels you want to scan.

4. **SCAN LIST** Secondary Menu: While on a **SCAN LIST** a secondary menu will pop-up when the **Menu Key** is pressed. The secondary list allows the operator to globally select all or none of the channels for scanning.
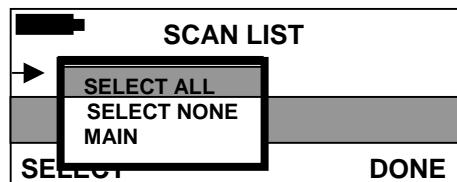
MENU	
SERIES	
SCAN LIST	
SELECT	

SCAN LIST	
➤ 01 DRIVER	
➤ 02 DRIVER	
DESELECT	DONE

SCAN LIST	
➤ 01 DRIVER	
24 DRIVER	
SELECT	DONE

PREV CH   MENU
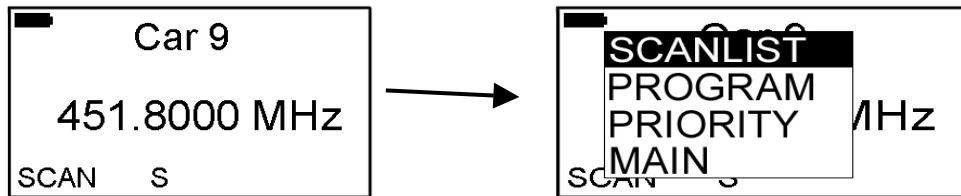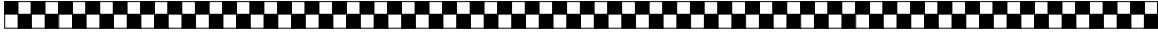
CAR   SCAN

SELECTING SECONDARY MENUS

1. Secondary Menus are controlled by the **4-Ways key**.
2. Secondary Menus are available for:
   a. **SCAN LIST** Menu. Press the **Right (MENU) Key** while on the **SCAN LIST** to access the following pop-up menu.

   b. While in Scan stop mode: Press the **Right (MENU)** Key while in Scan stop mode to access the following pop-up menu.

In addition to automated channel programming the scanner can be programmed manually. Manual programming enables you to enter and scan track channels as well as police, fire and other civil channels and frequencies. Using the manual programming features of the scanner you can enter or modify all scanner channels.

BASICS
    a. Select a **SERIES** (**USER**).
    b. Use the **PROGRAMMING** menu and the **KEY PAD** selection to enter channels manually.
    c. Enter a channel numbers between **0, 00-09, 1-99**.
    d. Enter a channel frequency between 450MHz and 456.9875MHz:
- The frequency field consists of 7 digits.
- Use the number zero to fill in open spaces.
- Press the **4-Ways key** to the left or right to move the cursor.
- Press the **4-Ways key** up down to delete mistakes within the field.

    e. Enter CTCSS or DCS Codes:
- Press Up Down Left Right on the **4-Ways key** to switch between CTCSS and DCS codes.

Note: Please refer to page   for manual KEYPAD programming.
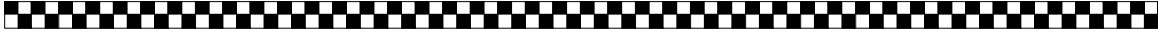
☜CARE AND MAINTENANCE☞

CARE

1. Avoid using the scanner in high moisture environments.
2. Do not submerge the unit or expose to excessive amounts of water.
3. Avoid placing the scanner in direct sunlight or exposing to high heat
4. Turn the scanner off and remove the batteries before cleaning.
5. Clean the outside of the scanner with a damp cloth.
6. Do not use detergent, solvents or cleaners.
7. Use a soft lens cloth to clean the display. Be careful not to scratch the display window.
8. Only use authorized attachments and accessories.

MAINTENANCE

1. Under normal use the scanner should last ## hrs with fresh alkaline batteries installed. Turn the scanner off prior to replacing the batteries
2. Do not attempt to repair the scanner. The scanner is only repairable by an authorized dealer.

☙TROUBLESHOOTING☙

Troubleshooting begins with verifying scanner settings. If after checking all settings the scanner is still not performing properly, try the following:

NO POWER

1. Check/replace batteries
2. Remove and reinstall the batteries

DOES NOT RECEIVE

1. There are no channels programmed:
    a. Reload program scanner
    b. Manually enter channels

2. No reception:
    a. Check antenna connection.
    b. Adjust location of the scanner and antenna position.
    c. Verify channel list; scan list/priority channels may not be broadcasting

DOES NOT RECEIVE (continued)

3. All channels are deselected:
   a. Verify channel selections using the **SCAN LIS**T menu.
   b. Select **ALL** from the scan list

4. Check reception:

SCANNER IS LOCKED ON ONE CHANNEL

1. Cycle series select
2. Verify more than one channel is selected in the scan list

TRANSMISSION IS DISTORTED/UNINTELLIGENT

1. Adjust volume
2. Adjust squelch
3. Change or remove antenna
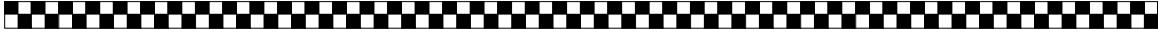
⚐TECHNICAL SPECIFICATIONS⚐

OPTIONAL ACCESSORIES AND REPLACEMENT PARTS
1 YEAR LIMITED WARRANTY

Product Registration