

Uniden®

Beacon!

BC898T Scanner



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[Software Help](#)

[Using Help](#)

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You can select information about how to use each category of help available.

When you click on [Using Help](#), you see the following underlined links:

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- [Using the Help Map](#) This link displays all subjects available in Help.

To display a help subject, simply click its link. For example, to display the help information available for “base frequency,” click “base frequency” in the index.

[Using the Table of Contents](#)

You can select links to all chapter titles in Help by using the [Table of Contents](#).

To find a subject using the Table of Contents, click [Table of Contents](#) at the top of the right side of the Help window. Chapter title links appear on the left side of the Help window.

Click a title on the left side of the Help window. That subject appears on the right side of the Help window. To see a list of all help topics, use the [Help Map](#).

[Using the Help Map](#)

You can select links to all subjects in Help and all entries in the Index.

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Introduction

This help information describes the software supplied with your new Uniden BC898T scanner. You can use the software to configure your computer and scanner so you can use them together more easily and efficiently.

System Requirements

In order for the software to work with your scanner and computer, you must have the following minimum software and hardware installed on your computer.

- Operating Environment: IBM-compatible PC
- Operating System: Microsoft Windows 98, Windows Millennium Edition, Windows 2000, Windows XP
- Recommended RAM: 128MB
- Recommended CPU: Pentium III 650 MHz

How The Software Works

You can select the following options on the opening screen.

SETUP – To use the scanner with your computer, you must use Setup to set the communications settings so the computer recognizes your scanner, the communications port you want to use, and other settings applicable to the software's operation.

Database – This option lets you program the scanner's memory channels and talk group IDs.
Database consists of:

Bank Editor – Use the Bank Editor to edit and work with data that already exists in the scanner or which you imported or gathered using the scanner or the software. You can work with data such as frequency records, talk group ID records, text descriptions, settings, and talk group numbers for each bank.

Reference Database – The Reference Database is a “holding” area you can use to import data you can work with by using other software options. You can import data from several different sources into the Reference Database then paste that data to the Bank Editor.

SCAN Control – This option lets you operate and control your computer and scanner together.

Scan Control consists of:

Basic – This mode displays a “virtual scanner” on your computer's screen that you can use your computer to operate.

Extended – In addition to the functions of the Basic mode, the Extended mode lets you find and save active frequencies and talk groups while you are scanning. You can then transfer this information into a file and use it to program your scanner.

Using the Software

[Configuring the Software Using SETUP](#)

Important: Make sure the included interface cable is connected to your computer and the scanner before configuring the software. See your [Owners Manual](#) for more information.

1. Start the software by double clicking on its icon. The opening screen appears.



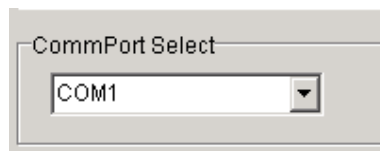
2. Click on **SETUP**. The setup screen appears.



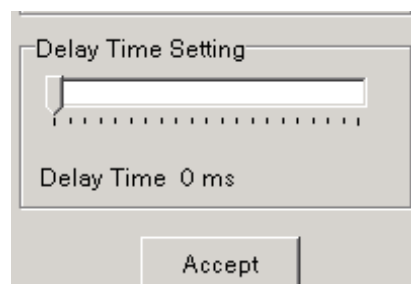
3. Click on the baud rate under **Baud Rate** that matches the baud rate for the serial port you used to connect the included interface cable. For example, if the serial port is set to 57,600 bps (bits per second), click on 57600bps.

Notes:

- Most COM ports are set to a baud rate of 19,200 or 57,600 bps. If the software does not work with your computer, make sure the baud rate you select matches the setting for the COM port you are using. If these settings match, set your computer's COM port to a lower baud rate and select a matching baud rate in Step 3.
 - You can find the baud rate for your computer's COM ports using Windows Device Manager. For more information about using Device Manager, consult your computer's documentation.
4. Select the COM port under **CommPort Select** where you connected the included interface cable. For example, if your computer's serial port is configured as COM1, select **COM1**.



5. Timing errors can cause data to be sent too fast and cause errors in loading and reading the scanner's memory. If you encounter erratic communication problems between the scanner and your computer, slide **Delay Time Setting** if necessary to change the delay time to a longer one.



6. When you have finished making all changes, click on **Accept**.



[Using SCAN Control](#)

[Basic Mode](#)

To select Basic mode, click on **SCAN Control** on the opening screen. The virtual scanner appears.



In Basic mode, you can use your mouse to click on the virtual scanner's keys to operate it, just like your real scanner. When you click on a key, it presses down on the screen just like it would if you pressed it on your scanner. All of the keys on the virtual scanner do the same thing as the same keys on your scanner.

Note: You cannot use the mouse to control the virtual scanner's rotary tuner, **SQUELCH**, or **VOLUME** controls.

Extended Mode

To select Extended mode, move the mouse pointer anywhere on the virtual scanner then click the right mouse button. A selection popup appears. Click on **Extended**. A window with the options available in Extended mode appears below the virtual scanner.



Extended scanning lets you import new scan lists without having to program them into the scanner. You can also log new frequencies and talk group IDs and save them into a list, which you can program into the scanner.

Note: All the controls for Resume and Step are still controlled by the top section of the virtual scanner's display when you select Extended mode.

Extended scanning has the following options.

Scanning

This option lets you select from a list of the most popular search ranges for your scanner and search them. You can also change any of the preset search ranges, select and change the search range's frequency step and other information, and gather and work with a list of active frequencies within the search range.

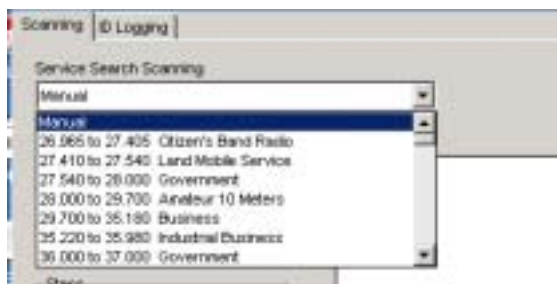
ID Logging

This option lets you log talk group IDs you find on a trunked radio system and save them to a file.

Using Scanning

Click on **Scanning** to work with the following options.

- Service Search Scanning



Click on the **Service Search Scanning** pull-down list to select the range of frequencies you want to search. A list of ranges appears. Then click on the range you want to search. The lower and upper limit frequencies for the range you selected appear in **Lower Frequency** and **Upper Frequency** respectively.

- Lower Frequency/Upper Frequency

A screenshot of a software interface showing two input fields. The first field is labeled "Lower Frequency" and contains the value "28.0000". The second field is labeled "Upper Frequency" and contains the value "29.7000".

While you can select the most common search ranges using the pull-down list, you can change

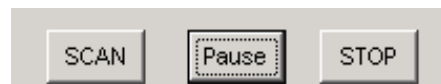
the displayed frequencies by typing any frequency the scanner can receive into **Lower Frequency** and **Upper Frequency**. The preset frequencies are replaced by the frequencies you type.

- Steps



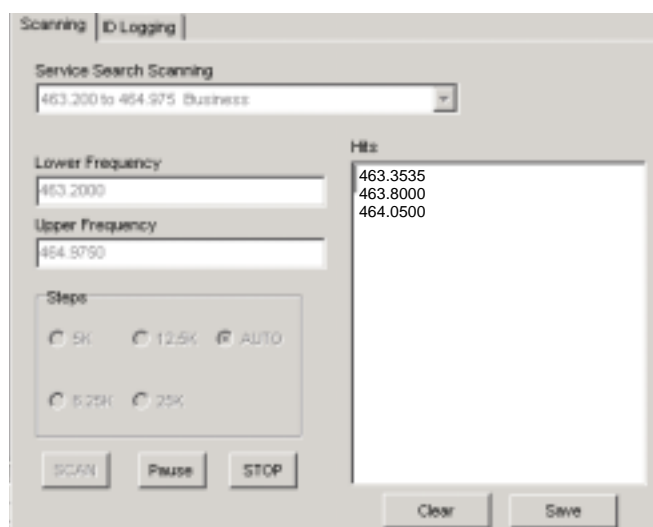
You can change the displayed step size by selecting a step. The step size changes to the one you selected. The default step size is set to **Auto** unless you click on a different step size.

- SCAN/Pause/STOP



Click on **SCAN** to start scanning. If you hear an interesting frequency, click on **Pause** to hold the frequency until you are ready to resume scanning. Click on **STOP** to stop scanning and select a new search range using the pull-down list or by entering the lower and upper frequency ranges.

- Hits



The Hits box displays a list of frequencies (called *hits*), where the scanner detected activity during a search. You can save the hits for later scanning or erase them and start a new

search.

Click on **Save** to save the hits. The software saves the hits in a file called FreqLog.txt.

Click on **Clear** to erase the hits and continue searching.

Using ID Logging



Click on **ID Logging** to work with the ID logging option. ID Logging lets you log talk group IDs you find on a trunked radio system and save them to a file.

To log talk group IDs, start scanning, select the bank or banks you want to log, and then click **Start**.

When the scanner detects activity on a talk group, it logs the talk group's ID number, the bank number, and the trunk type.

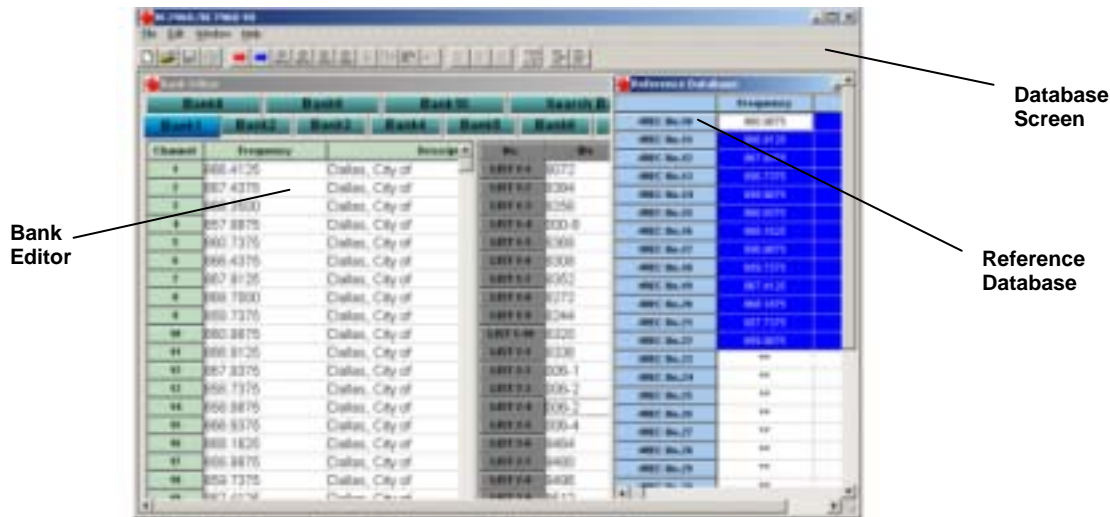
Click on **Save** to save the talk group IDs. The software saves the talk group IDs in a file called

IdLog.txt. Click on **Stop** to stop logging talk group IDs. Click on **Clear** to erase logged talk group

IDs and continue logging.

Using the Database

To select the database, click on **Database** on the opening screen. The Database screen appears. The Bank Editor and Reference Database appear in separate windows within the Database screen.



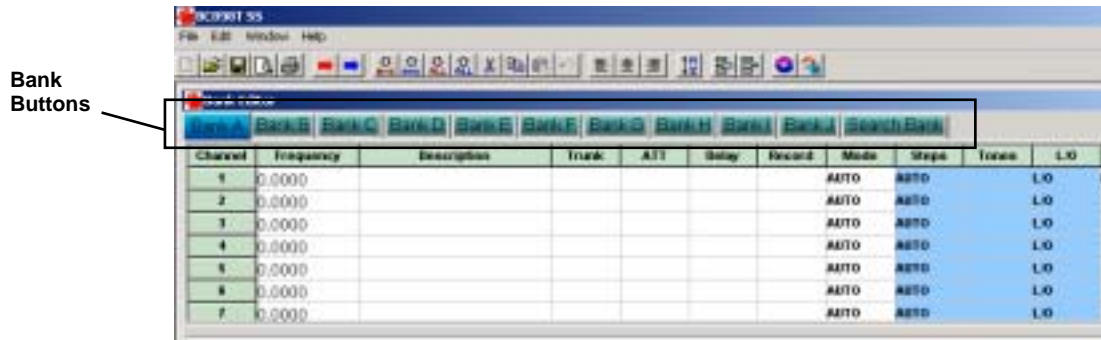
Note: Depending on how these windows were last viewed, the screens you see might not look exactly like the one shown here.

You can change the layout of the Bank Editor and Reference Database windows by:

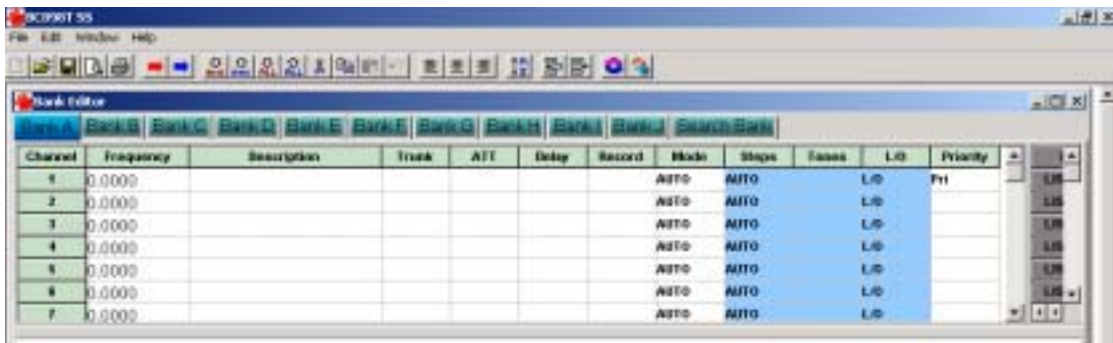
- Dragging either window to any position.
- Using the horizontal slider on the bottom of the screen to adjust the view for the screen you are working with.
- Minimizing one window while working with the other.
- Clicking on **Window** on the top of the Database screen, then selecting **Tile** or **Cascade**.

Using the Bank Editor

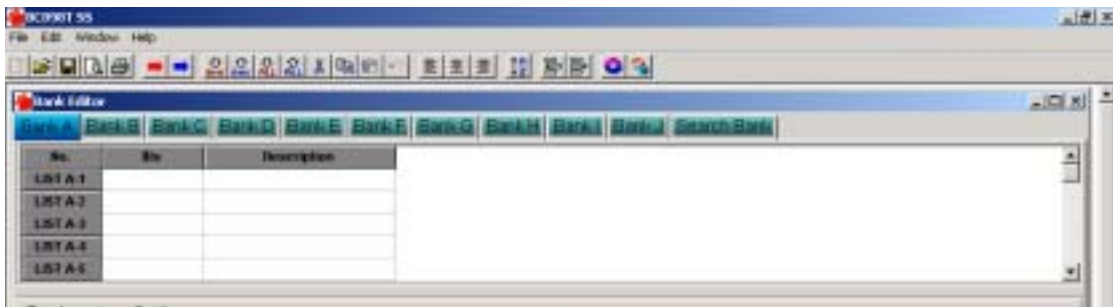
You can click on each bank button (Bank A, Bank B, and so on) to work with the information in that bank.



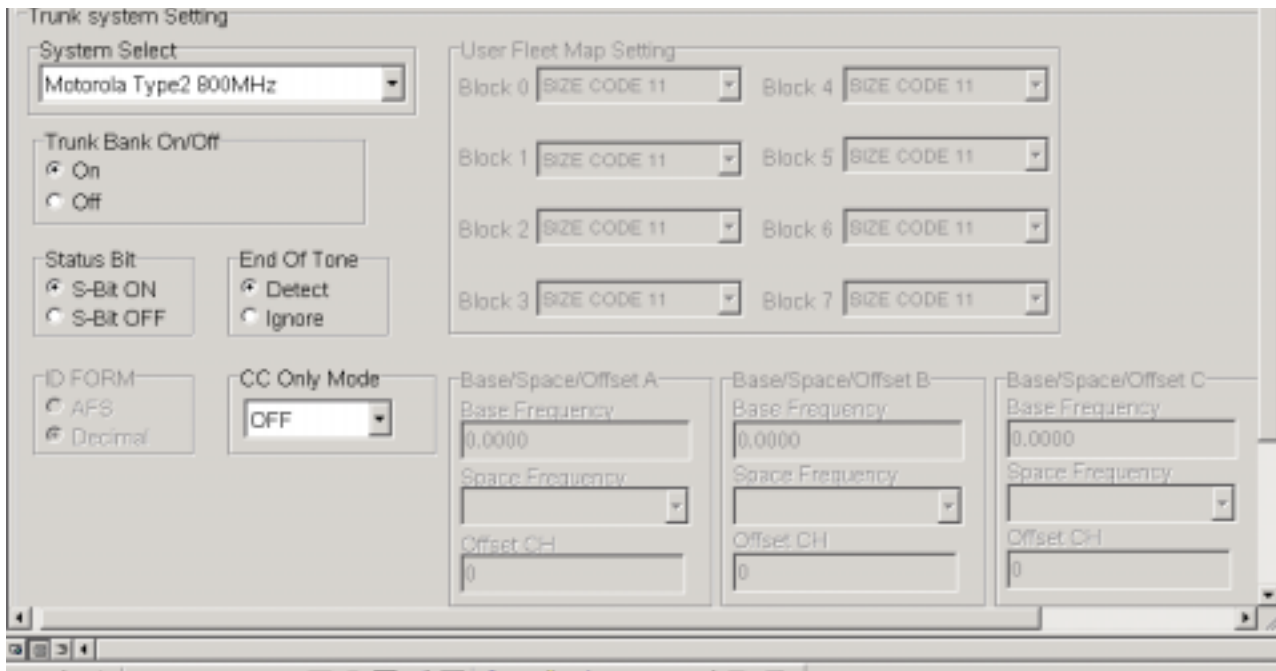
The Bank Editor contains these windows.



FREQUENCY WINDOW - contains frequencies, description tags, and associated settings.



TRUNKING WINDOW - contains talk group numbers and descriptions and settings. (This screen is normally on the right but is shown on the left here for clarity).



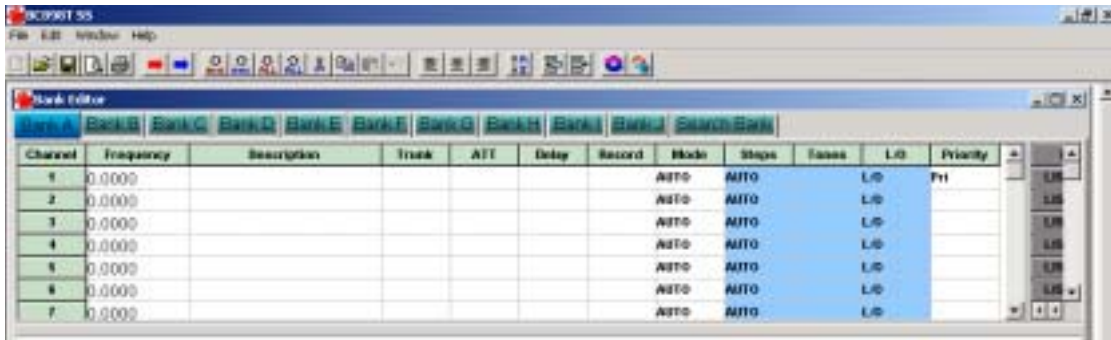
TRUNKING RECORD WINDOW - lets you enter and work with records for trunked systems.

Each window has scroll bars that help you move through the records.

To select a bank, click on the bank's button. If the bank you select is a trunking bank, you can enter the talk group's numbers and description tags. If the bank you select is a standard (non-trunking) bank, you can type in frequencies and description tags for the frequencies.

Note: There are several individual settings for each channel. However, if you do not change the settings in the database, the scanner defaults to any settings in the database column or its built-in settings if the column is blank.

Using the Frequency Window



In the Frequency Window, you can enter information about a specific channel including the frequency, a description of the frequency, whether the frequency is a trunked frequency or not, and other information.

To enter a frequency, click on the Frequency field to the right of the channel you want, then type in a frequency.

To enter a description, click on the Description field for the channel you want, then type in the description.

To enter a trunked channel, double click on the Trunk field for the channel you want. **On** appears.

To remove the trunk designation, double click on the field again. **On** disappears.

To turn on attenuation for a channel, double click on the ATT field for the channel you want.

On appears. To remove attenuation, double click on the field again. **On** disappears.

To turn on delay for a channel, double click on the Delay field for the channel you want.

On appears. To remove delay, double click on the field again. **On** disappears.

To turn on record for a channel, double click on the Record field for the channel you want.

On appears. To remove record, double click on the field again. **On** disappears.

To select the mode for a channel, click on the Mode field for the channel you want.

A pulldown menu appears with 5K, 6.25K, 12.5K, and 25K. Then select the option you want.

To select the step for a channel, click on the Steps field for the channel you want.

A pulldown menu appears with AM, FM, NFM, and AUTO. Then select the

option you want.

To select whether a channel has tone, click on the Tone field for the channel you want.

A pulldown menu appears with a blank space, CTCSS, and DCS. Then select CTCSS

(if the channel has CTCSS tone), DCS (if the channel has DCS tone), or the blank space

(if the channel has no tone).

To turn on lockout for a channel, double click on the L/O field for the channel you want.

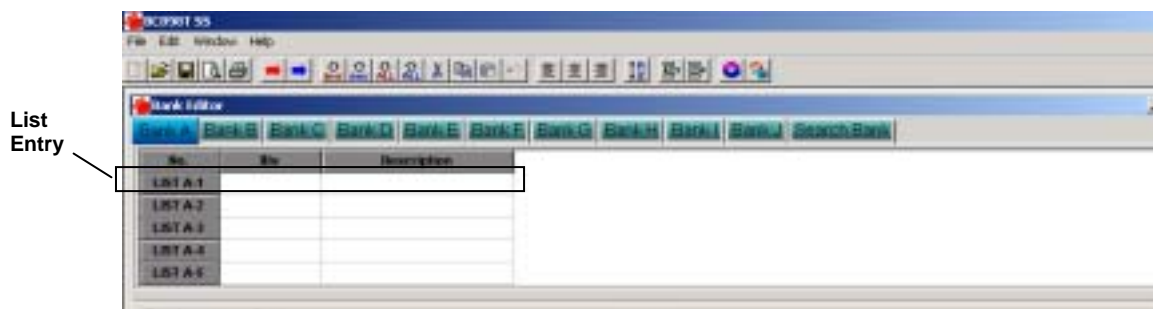
L/O appears. To remove lockout, double click on the field again. **L/O** disappears.

To set a channel as the priority channel in the bank, double click on the Priority field for

the channel you want. **Pri** appears. To remove priority, double click on the field again.

Pri disappears.

Using the Trunking Window



In the Trunking Window, you can enter up to 10 individual talk group ID numbers into each list entry.

By grouping talk group ID numbers in separate lists, you can easily enable or disable each list so

you hear only certain types of communications while scanning. For example, put as many as 10

police talk group ID numbers into one list entry, as many as 10 public service talk group ID

numbers into another list entry, as many as 10 tactical talk group ID numbers into another list

entry, and so on.

To enter a talk group ID number, click on the IDs field to the right of the talk group ID you want,

then type in each talk group ID number you want in the list entry. You can enter up to 10 talk

group ID numbers in each list entry. Otherwise, if the trunking system is an EDACS or Motorola

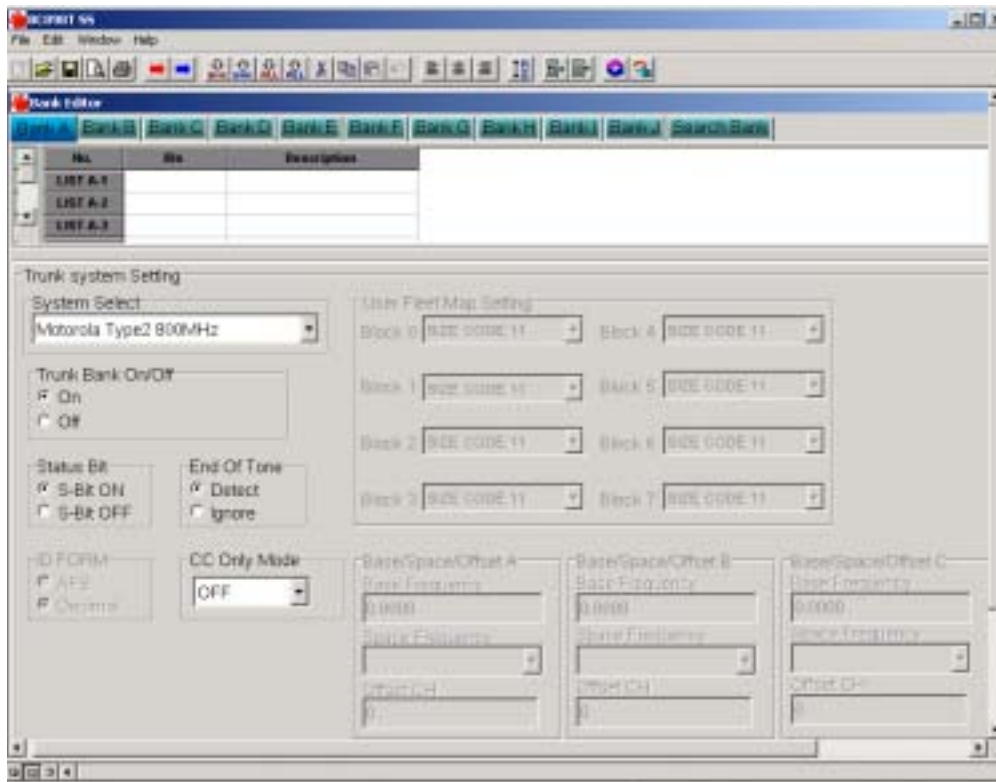
Type I or Type 2 system, enter a dash (-).

To enter a description of the talk group ID numbers in the list entry, click on

the Description field
for the list entry you want, then type in the description. The description you
enter appears instead
of the description of the active frequency when you scan in ID Scan mode.

-

Using the Trunking Record Window



In the Trunking Record Window, you can enter information about a specific channel including the type of trunked system, whether the trunk bank is on or off, whether the status bit is on or off, and other information.

Note: Depending on the type of trunking system you select, some of the options described below might not apply to that system. For example, if you select Motorola Type 1 (or Hybrid) in the System Select field, you can enter information in the User Fleet Map Setting fields but cannot enter information in the Base/Space/Offset fields. Consult your scanner's [Owners Manual](#) for more information about how to determine optimum settings for each type of trunking system.

To select the type of trunking system, click on System Select. A pull-down menu appears with system type options. Then click on the system type to select it.

Notes:

- When you select a trunking system type, the software automatically fills in some options for you. Always select the type of trunking system first before selecting any other options in this window. Otherwise, the software might unexpectedly change selections you have already made.

- You can select only one type of trunking system per bank. Select the type of trunking system applicable to the frequencies in that bank.

To select whether the scanner will scan frequencies entered in the bank as trunked frequencies, click on Trunk Bank On. Otherwise, click on Trunk Bank Off.

Note: If you click on Trunk Bank Off, the scanner scans all frequencies entered in the bank as conventional frequencies.

To turn on the status bit, click on S-Bit ON. Otherwise, click on S-Bit OFF.

To turn on end of tone detection, click on End of Tone Detect. Otherwise, click on End of Tone Ignore.

To set the ID FORM to AFS, click on AFS. Otherwise, click on Decimal.

If you selected Motorola Type 1 (or Hybrid) in the System Select field, you can change the displayed size code for each user fleet map if necessary. Click on the size code for each block you want to change under User Fleet Map Setting. A pulldown menu appears with size code options. Then click on the size code to select it.

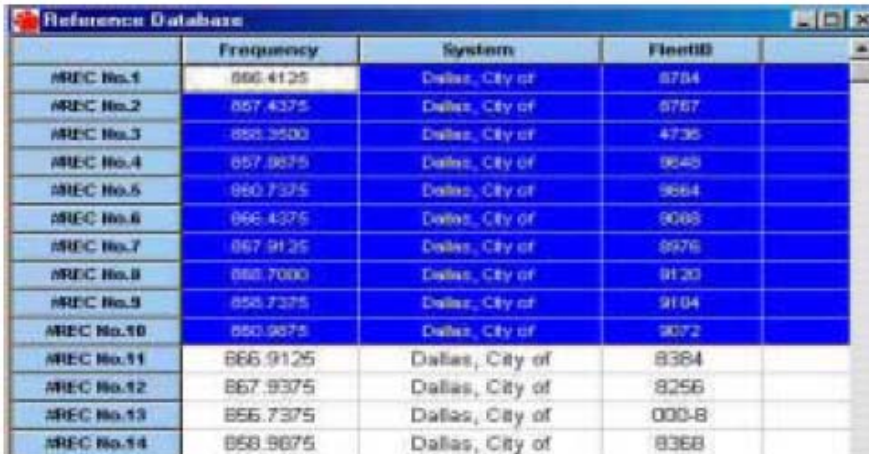
If you selected Motorola Type2 UHF or Motorola Type2 in the System Select field, you can change the displayed base frequency, space frequency, and offset channel if necessary.

To change the displayed base frequency, click on the frequency you want to change under Base Frequency, then enter the frequency you want to use.

To change the displayed space frequency, click on Space Frequency. A pulldown menu appears with space frequency options. Then click on the space frequency you want to use to select it.

To change the displayed offset channel, click on the offset channel you want to change under Offset CH, then enter the offset channel you want to use.

Using the Reference Database



REC No.	Frequency	System	FleetID
REC No.1	866.4125	Dallas, City of	8784
REC No.2	867.4375	Dallas, City of	8767
REC No.3	866.3500	Dallas, City of	4735
REC No.4	867.8675	Dallas, City of	9645
REC No.5	866.7375	Dallas, City of	9664
REC No.6	866.4375	Dallas, City of	9069
REC No.7	867.9125	Dallas, City of	9976
REC No.8	866.7000	Dallas, City of	9120
REC No.9	866.7375	Dallas, City of	9104
REC No.10	866.9675	Dallas, City of	9072
REC No.11	866.9125	Dallas, City of	8384
REC No.12	867.9375	Dallas, City of	8256
REC No.13	866.7375	Dallas, City of	000-B
REC No.14	868.8675	Dallas, City of	8368

The Reference Database is normally blank unless you have previously used it to work with data.

Note: You can download database files in .txt format at <http://www.bearcat1.com/free.htm>

Opening and Working With Database Files

Follow these steps to work with a database.

1. Make sure the Reference Database is blank and delete any old data if it is not. To delete old data and load new data, click on **File** on the top of the Database screen, then select **New**.
2. Otherwise, to open an existing database, click on **File** then select **Open**.
3. Select the database file you want to work with. You can select any of the following file types:
 - Text (.txt)
 - CSV (.csv)
 - DBF (.dbf)

Note: You cannot use the Reference Database to work with Bank Data (.ssd) files. They work only with the Bank Editor.

4. Database files you select must be in the following format.

- "Frequency"
- "System"
- "FleetID"
- "User"
- "City"
- "State"
- "Sys Type"
- "Notes"
- "Additional Notes"

For example:

```
"856.7125","Alabama, State  
of","***","***","Birmingham","AL","GE","***","***"
```

If the database file you are trying to open is not in this order, *No File Loaded* appears.

If this happens, you can use a text editor to correct the database and try again.

When you open a database file, it will contain several columns of frequencies, talk groups, and descriptions for both.

[Copying Records From the Reference Database to the Bank Editor](#)

1. Use your mouse to highlight the first row of the records you want to select in the Reference Database. The framed cell is the first one that will be filled. For example, to start at the 10th record to copy, click the cell in the 10th row and that is where the copy will start.
2. Hold down the left mouse button and drag down the cursor to select multiple records.
3. Open the Bank Editor then select the position in the Bank Editor where you want the imported data to go.
4. Click on **Edit** on the top of the Database screen, and then select **Copy Frequency List** (to copy the selected frequency information) or **Copy Trunking Ids** (to copy the selected talk group ID information).

Owners Manual

TRUNKTRACKER
BC 898T
Operating Guide

Trunk Tracker 500 Channel Base Scanner

The FCC Wants You to Know

This scanner has been tested and found to comply with the limits for a scanning receiver, pursuant to Part 15 of the *FCC Rules*. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This scanner generates, uses, and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications.

However, there is no guarantee that interference will not occur in a particular installation.

If this scanner does cause harmful interference to radio or television reception, which can be determined by turning the scanner on and off, you are encouraged to try to correct the interference by one or more of the following measures:

- Reorient or relocate the receiving antenna
- Increase the separation between the scanner and the receiver

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

Scanning Legally

Your scanner covers frequencies used by many different groups, including police and fire departments, ambulance services, government agencies, private companies, amateur radio services, military operations, pager services, and wireline (telephone and telegraph) service providers. It is legal to listen to almost every transmission your scanner can receive. However, there are some transmissions that 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), you are subject to fines and possible imprisonment for intentionally listening to, using, or divulging the contents of such a conversation unless you have the consent of a party to the conversation (unless such activity is otherwise illegal). This scanner has been designed to prevent the reception of cellular telephone transmissions and the decoding of scrambled transmissions. This is done to comply with the legal requirement that scanners be manufactured so they are not easy to modify to pick up these transmissions. Do not open your scanner's case to make any modifications that could allow it to pick up transmissions that are illegal to monitor. Modifying or tampering with your scanner's internal components or using it in a way other than as described in this manual could invalidate your warranty and void your FCC authorization to operate it.

In some areas, mobile use of this scanner is unlawful or requires a permit. Check the laws in your area. It is also illegal in many areas (and a bad idea everywhere) to interfere with the duties of public safety officials by traveling to the scene of an incident without authorization.

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TrunkTracker is a proprietary trademark of Uniden America Corporation.

Other trademarks used throughout this manual are the property of their respective holders.

Important Notice

This scanning radio has been manufactured so that it will not tune to the radio frequencies assigned by the FCC for cellular telephone usage. The Electronic Communications Privacy Act of 1986, as amended, makes it a federal crime to intentionally intercept cellular or cordless telephone transmissions or to market this radio when altered to receive them. The installation, possession, or use of this scanning radio in a motor vehicle may be prohibited, regulated, or require a permit in certain states, cities, and/or local jurisdictions. Your local law enforcement officials should be able to provide you with information regarding the laws in your community.

Changes or modifications to this product not expressly approved by Uniden, or operation of this product in any way other than as detailed by this Operating Guide, could void your authority to operate this product.

Precautions

Before you use this scanner, please read and observe the following:

IMPORTANT!

The installation, possession, or use of this scanning radio in a motor vehicle might be prohibited, regulated, or require a permit in certain states, cities, and/or local jurisdiction. Check with your local law enforcement officials for information regarding the laws in your community.

EARPHONE WARNING!

Be sure to use only the included monaural earphone. You can also use an optional 32W stereo headset. Use of an incorrect earphone or stereo headset might be potentially hazardous to your hearing. The output of the phone jack is monaural, but you will hear it in both headphones of a stereo headset.

Set the volume to a comfortable audio level coming from the speaker before plugging in the monaural earphone or a stereo headset of the proper impedance (32W). Otherwise, you might experience some discomfort or possible hearing damage if the volume suddenly becomes too loud because of the volume control or squelch control setting. This might be particularly true of the type of earphone that is placed in the ear canal.

WARNING!

Uniden does not represent this unit to be waterproof. To reduce the risk of fire or electrical shock, do not expose this unit to rain or moisture.

Uniden® and Bearcat® are registered trademarks of Uniden America Corporation.

Introduction

Your new BC898T scanner is a brand new state-of-the-art scanner radio with TrunkTracking™ and automatic scanning capabilities. You can store frequencies such as police, fire/emergency, marine, air, amateur, and other communications into 10 banks of 50 channels each. Use it at home as a base unit, or install it in your vehicle as a mobile unit.

You can use the scanner's rotary tuner to quickly select channels and frequencies, and you can automatically program channels in an available bank using the AutoStore feature. Your scanner also has AutoSort, an automatic frequency-sorting feature that provides faster scanning within each bank.

Use your scanner to monitor:

- 800 MHz trunked public safety systems
- Police and fire departments (including rescue and paramedics)
- NOAA weather transmissions
- Business/Industrial Radio
- Utilities
- Marine and amateur (ham radio) bands
- Air band

This table lists the frequency ranges, default frequency step, default mode (AM, FM, or Narrowband FM), and type of transmissions you can hear for each range.

Frequency Range	Steps	Mode	Transmission
25.0-27.995 MHz	5 kHz	AM	Citizens Band/Business Band
28.0-29.995 MHz	5 kHz	FM	10 Meter Amateur Band
30.0-49.995 MHz	5 kHz	FM	VHF Low Band
50.0-54 MHz	5 kHz	FM	6 Meter Amateur Band
108-136.9875 MHz	12.5 kHz	AM	Aircraft Band
137.0-143.995 MHz	5 kHz	FM	Military Band
144-147.995 MHz	5 kHz	FM	2 Meter Amateur Band
148-174 MHz	5 kHz	FM	VHF High Band
216-224.9875 MHz	12.5 kHz	FM	VHF High Band
225-399.9875 MHz	12.5 kHz	AM	10 Meter Amateur Band
400-419.9875 MHz	12.5 kHz	NFM	Federal Land Mobile
420-449.9875 MHz	12.5 kHz	NFM	70cm Amateur Band
450-469.9875 MHz	12.5 kHz	NFM	UHF Standard Band
470-512 MHz	12.5 kHz	NFM	UHF "T" Band
806-823.9875 MHz	12.5 kHz	NFM	Public Service "800" Band
850-868.9875 MHz	12.5 kHz	NFM	Public Service "800" Band
895-956 MHz	12.5 kHz	NFM	Public Service "800" Band

Feature Highlights

Trunk Tracking – Follow 800 MHz trunked public safety and public service systems just as if conventional two-way communications

were used.

500 Channels – Program one frequency into each channel. You must have at least one channel programmed to use the scan mode.

10 Banks – Each bank contains 50 channels, large enough for even the largest trunked systems or useful for storing similar frequencies to maintain faster scanning cycles.

Signal Strength Meter – Your scanner's signal strength meter displays the relative strength of an active transmission, using up to five separate indicators.



CTCSS and DCS Squelch Modes – prevent interference from stations not using the mode you select. The scanner's search mode shows you if the station you are scanning is using CTCSS or DCS tones.

CTCSS (Continuous Tone Coded Squelch System) – When CTCSS is activated, your scanner tunes to a frequency only if the associated CTCSS tone you programmed is included with the transmission. You can also use this feature to search for a CTCSS tone when monitoring a transmission.

Subaudible Tone Search – Lets the scanner search for and identify agencies transmitting CTCSS or DCS tones. You can identify up to 50 CTCSS tones. This helps you find stations using these tones.

17 Bands – Includes 17 bands, with Aircraft and 800 MHz.

25 MHz-956 MHz – Your scanner covers an extensive frequency range so you can monitor most of the transmissions in your area.

Note: The scanner's frequency coverage is not continuous and does not include the cellular telephone band.

10 Priority Channels – You can assign one priority channel in each bank. Assigning a priority channel lets you keep track of activity on your most important channel(s) while monitoring other channels for transmissions.

VFO (Variable Frequency Oscillator) Control – Turn the large rotary tuner to select a desired frequency or channel.

AutoStore – Automatically stores all active frequencies within the specified bank(s).

Weather Alert – Lets your scanner alert you when a SAME weather alert is transmitted on a NOAA weather channel. The scanner also displays the transmitted SAME code. This helps you quickly find out about severe weather in your area and lets you avoid false alarms.

Weather Search– Lets your scanner receive your local NOAA weather transmission.

Chain Search – Lets your scanner search up to 10 ranges by selecting specific banks into which you have programmed search ranges.

Frequency Step – Lets you select a frequency step (5, 6.25, 12.5, or 25 kHz) for manual mode and chain search mode.

Auto Sort– Programmed frequencies are automatically sorted within each bank for faster scanning.

Unique Data Skip – Allows your scanner to skip unwanted data transmissions and reduces birdies.

Memory Backup – If power is lost or disconnected, the scanner retains the frequencies you programmed in its memory.

LCD Back Light – Makes the display easy to see in dim light. You can adjust the back light and even turn it off.

Auto Recording — Automatically record transmissions onto an optional tape recorder (not included).

Scan/Search Delay – You can set the scanner so it remains on a frequency two seconds after the last transmission to wait for a possible reply.

[About This Manual](#)

The screen displays used in this manual are representations of what might appear when you use your scanner. Since what you see depends on the frequencies and user IDs for your area and the settings you select, you might notice some differences between what is in this manual and what appears on your scanner.

To get the most from this manual, review the contents to become familiar with the basic functions available. If you are new to scanning or trunk tracking, be sure to read [Understanding Scanning](#) for a quick background on the technology behind the hobby. The first thing you'll need to do is plug the AC adapter into the scanner. Then you need to connect the included antenna to the scanner. See [Installing Your Scanner](#) if you need any help doing this. Then, to get a taste of what your scanner can do while you are reading the Owners Manual, press **MANUAL** then press **SRC**. The scanner stops on every active trunking talk group, regardless of whether you have programmed them into the scanner.

[Understanding Scanning](#)

This section provides you with the background on how scanning

works. You don't really need to know all of this to use your scanner, but some background knowledge will help you get the most from your BC898T.

[Understanding Banks and Channels](#)

The memory in your scanner is organized into 10 banks of 50 channels each. Each bank can contain conventional channels as well as 1 trunking system. For each trunking system, each bank can also store 10 groups of 10 talk group ID's (100 per bank).

[What is Scanning?](#)

Unlike standard AM or FM radio stations, most two-way communications do not transmit continuously. Your BC898T scans programmed channels until it finds an active frequency, then stops on that frequency and remains on that channel as long as the transmission continues. When the transmission ends, the scanning cycle resumes until the scanner receives another transmission.

[What is Searching?](#)

The BC898T can search each of its 17 bands and up to ten bands together to find active frequencies. This is different from scanning because you are searching for frequencies that have not been programmed into the scanner. When you select frequency bands to search, the scanner searches for any active frequency within the lower and upper limits you specify. When the scanner finds an active frequency, it stops on that frequency as long as the transmission lasts. If you think the frequency is interesting, you can program it into one of the banks. If not, you can continue to search.

[What is CTCSS/DCS?](#)

Your scanner can monitor systems using a Continuous Tone Control Squelch (CTCSS) and Digital Coded Squelch (DCS) system, which allow squelch to open only when the tone you have programmed with a specific frequency is received along with a transmission.

CTCSS and DCS are subaudible tone signaling systems sometimes referred to as PL (Motorola's trademarked term for Private Line). CTCSS and DCS are used only for FM signals and are usually associated with both amateur and commercial two-way repeaters. These systems make use of a special subaudible tone that accompanies a transmitted signal. The Electronics Industry Association (EIA) established a set of 38 standard CTCSS tones.

CTCSS and DCS are used for many purposes. In many cases, CTCSS and DCS are used to restrict access to a commercial repeater, so that only those units, which transmit the correct tone along with their signal can "talk to the repeater." You might also need to have your scanner coded correctly to "hear" the repeater.

CTCSS and DCS are also used in areas that receive interference where there are several stations with output frequencies close to each other. When this occurs, you might hear multiple communications at the same time. The stations might even interfere with each other to the point where it is impossible to clearly receive any of the stations. A scanner equipped with CTCSS and DCS (like your scanner) can code each received frequency with a specific CTCSS or DCS frequency. Then, when you receive multiple signals, you only hear the transmission with the CTCSS or DCS tone you programmed. If you do not receive the correct tone with a signal, the scanner's squelch remains closed and you hear nothing.

Local frequency allocation groups set cooperative standards to establish the CTCSS and DCS tone for each transmitter (or repeater).

You can search for the following CTCSS frequencies and DCS codes.

CTCSS Frequencies (Hz)

67.0	69.3	71.9	74.4	77.0	79.7	82.5	85.4	88.5	91.5
94.8	97.4	100.0	103.5	107.2	110.9	114.8	118.8	123.0	127.3
131.8	136.5	141.3	146.2	151.4	156.7	159.8	162.2	165.5	167.9
171.3	173.8	177.3	179.9	183.5	186.2	189.9	192.8	196.6	199.5
203.5	206.5	210.7	218.1	225.7	229.1	233.6	241.8	250.3	254.1

DCS Codes (Octal)

023	025	026	031	032	036	043	047	051	053
054	065	071	072	073	074	114	115	116	122
125	131	132	134	143	145	152	155	156	162
165	172	174	205	212	223	225	226	243	244
245	246	251	252	255	261	263	265	266	271
274	306	311	315	325	331	332	343	346	351
356	364	365	371	411	412	413	423	431	432
445	446	452	454	455	462	464	465	466	503
506	516	523	526	532	546	565	606	612	624
627	631	632	654	662	664	703	712	723	731
			732	734	743	754			

Conventional Scanning

Conventional scanning is a relatively simple concept. Each group of users in a conventional system is assigned a single frequency (for simplex systems) or two frequencies (for repeater systems) to use. Any time one of them transmits, their transmission always goes out on the same frequency. Up until the late 1980's this was the primary way that radio systems operated. Even today, there are many 2-way radio users who operate using a conventional system:

- Aircraft
- Amateur Radio
- FRS/GMRS Users
- Broadcast AM/FM/TV Stations
- Many Business Radio users

When you want to store a conventional system, all you need to know is the frequency they operate on. When you are scanning a conventional system, 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.

Simplex Operation

Simplex systems use a single frequency for both transmit and receive. Most radios using this type of operation are limited to line-of-sight operation. This type of radio is frequently used at construction job sites, and with inexpensive consumer radios such as GMRS/FRS radios. The range is typically 1-5 miles, depending upon the terrain and many other factors.

Repeater Operation

Repeater systems use two frequencies: one transmits from the radio to a central repeater; the other transmits from the repeater to other radios in the system. With a repeater-based system, the repeater is located on top of a tall building or on a radio tower that provides great visibility to the area of operation. When a user transmits (on an input frequency), the signal is picked up by the repeater and retransmitted (on an output frequency). The user's radios always listen for activity on the output frequency and transmit on the input frequency. Since the repeater is located very high, there is a very large line of sight. Typical repeater systems provide coverage out to about a 25-mile radius from the repeater location.

What is Trunk Tracking?

Your BC898T is designed to track the following types of trunking systems.

- Motorola Type I, Type II, Type III, Hybrid, SMARTNET™, and PRIVACYPLUS™ analog trunking systems*, which are extensively used in 800 MHz communication systems.
- LTR trunking systems
- EDACS trunking systems

When tracking these types of systems, you might want to remember these important points:

Your scanner defaults to monitor Type II systems; however, you can change this if the system in your area is different. (The types of

systems are discussed below.)

Your scanner can track more than one trunking system at a time and scan conventional and trunked systems at the same time.

The frequencies for many of the 800 MHz public safety systems are listed in the TrunkTracker™: National Public Safety Trunked System Frequency Guide included with your BC898T scanner.

* Motorola, SMARTNET, and PRIVACYPLUS are trademarks of Motorola Inc.

Conventional scanning is a simple concept. You enter a frequency used by someone you want to monitor into your scanner's memory. For example, the police in your area might transmit on 460.500 MHz, the fire department on 154.445 MHz, the highway department on 37.900 MHz, etc. So when your scanner stops on a frequency, you usually know who it is, and more importantly, you can stop on a channel and listen to an entire conversation. This type of scanning is easy and fun.

However, as the demand for public communications has increased, many public radio users do not have enough frequencies to meet their needs, creating a serious problem. Trunking radio systems help solve this problem.

In a trunked radio system containing up to 29 different frequencies, radio users are divided into groups often called talk groups. These talk groups are assigned specific IDs. When someone in a talk group transmits, their radio transmits a brief burst of data before each transmission. The trunking system's computer uses this data to temporarily assign each radio in a talk group to an available frequency. If a group using a frequency stops transmitting or pauses between replies for a few seconds, the trunking system might remove them from that frequency so another talk group can use it.

This sharing of the available public service frequencies is called trunking. Trunking allows cities, counties, and other agencies to accommodate hundreds of users with relatively few frequencies. However, following a conversation on a trunked system can be difficult if not impossible, because when there is a short break during the conversation you are monitoring, the talk group might be assigned to a completely different frequency in the trunked system. This type of scanning can be difficult and frustrating.

TrunkTracker™ changes this! Not only does your new BC898T scan channels like a conventional scanner, it actually follows the users of a trunked radio system. Once you know a talk group's ID, you won't miss any of the action.

If you are a new scanner enthusiast, you might want to read the first part of this manual and use your scanner in conventional mode

before you begin trunk tracking. Understanding scanning fundamentals and terminology will make trunk tracking much easier. If you are already an experienced scanner operator, you might want to go to Trunk Tracking on page 38 now.

Trunked Scanning

While conventional scanning worked great while there were only a few groups wanting to use the frequencies, with the advent of smaller, lower-cost radios more and more agencies and businesses wanted to take advantage of the utility of 2way radio. As a result, the bands that were used most became full, so new users were not able to take advantage of the technology as quickly as they wanted.

Trunking solved this frequency shortage by allowing multiple groups to use the same set of frequencies in a very efficient way. While each type of trunking system operates a little differently (see the next few sections), they all work on the same basic premise: even in a system with a lot of users, only a few users are ever transmitting at any one time.

Instead of being assigned a frequency, as with conventional systems, each group is assigned a talk group ID. A central computer controls the frequency each group operates on...and this frequency selection is made each time a user transmits. So, while on a conventional system queries, replies, and follow-ups are all on a single frequency, they could each be on completely different frequencies on a trunked system. This semi-random frequency assignment made monitoring such a system impossible prior to Uniden's invention of the Trunktracking scanner.

Types of Trunking Systems

Trunking systems divide a few frequencies among many different users, but the way that each system does this is slightly different. There are really two basic types that are important when using your TrunkTracker™ scanner. These are usually referred to as Type I and Type II systems.

One important distinction between these two systems is the amount of data transmitted by each radio when its push-to-talk button (PTT) is pressed. Every radio in a trunked system is assigned a unique ID so the central site computer can identify it when it's used. Both Type I and Type II systems place radios (or radio users) into groups, called talk groups, and these talk groups are also assigned unique IDs. Some radios have access to only one talk group, while others have access to many talk groups. Which talk group(s) each radio can access is called the radio's affiliation(s).

In a Type II system, when someone uses their radio, only the radio ID is transmitted when PTT is pressed, whereas in a Type I system the radio ID and its current affiliation are both transmitted when PTT is pressed.

Why the difference? Type II systems are slightly more advanced because the central computer maintains a database used to determine each radio's affiliation(s). Changes to a Type II system are easier than Type I because the system manager only need update the database instead of reprogramming individual radios.

Another difference between the systems is that Type I systems are arranged in a Fleet-Subfleet hierarchy. For example, it is possible for a city using a Type I system to designate 4 fleets, each with 8 subfleets. Their fleets might be the Police Department, the Fire Department, Utilities, and Administration. The Police might decide to further divide their fleet into subfleets such as Dispatch, Tactical Operations, Detectives, North, South, East and West Side Patrols, and Supervisors. All the available police radios would then be assigned to one of the police subfleets. Determining the exact fleet-subfleet hierarchy for a particular area is referred to as fleet map Programming.

The disadvantage of a Type I system is that when PTT is pressed, the brief burst of data must contain the radio's ID and its Fleet and Subfleet. This is three times the amount of data a Type II system radio sends, and as a result Type I systems usually accommodate fewer users than Type II systems.

Even though there are many Type II systems, Type I systems are still in use. There are also Hybrid systems, which are a combination of both Type I and Type II. Your scanner defaults to monitor Type II systems, but it's possible to select a Preprogrammed Fleet map or create a Custom Fleet map for your area.

Motorola Trunking

While there are 4 different types of Motorola trunking systems, they all use the same basic trunking method. The system consists of one control channel plus one or more voice channels (typically 10, 20, or 30 total channels). When a user presses Push To Talk (PTT) to transmit, their radio first sends their talk group information to the control channel. The computer then assigns that talk group to a specific voice channel and transmits that data over the control channel. All radios in that talk group switch over to the assigned voice channel and the user can begin speaking. This all typically takes place in about a second...the person transmitting hears a beep from their radio when the channel is assigned and it is OK to start talking.

The systems in use are:

- Motorola Type I – the radios send the radio ID, the fleet and subfleet talk group ID to the control channel each time they transmit. To program a Type I system, you need to know the system's fleet map. The most common fleet maps are included at the back of this manual. You can also find fleet map resources on the web.

- Motorola Type II – the radios only send the radio ID and radio channel code to the control channel. The central computer keeps a database of radio ID's and which talk group is assigned to which channel code for each radio, so with this system the user's radio sends only about 1/3 the data as a Type I system with each transmission. Type II systems do not use Fleet-subfleet talk groups; instead they use a 5-digit ID for each talk group.
- Type III Hybrid — these systems support a mix of both Type I and Type II users. Like Type I systems, you must know the system's fleet map to ensure proper tracking.

One big difference you will notice with digital versus analog transmissions, is that with analog systems, you might be able to hear weak signals interspersed with hissing. As you move further away from the system, the interference gradually increases until you are unable to make out the transmission. With digital systems, the cutoff point is much more abrupt. You might have a small area where partial decoding occurs...in which case you will hear partial and garbled audio. However, once the scanner is unable to receive the data well enough to decode it, the audio stops entirely. For the best range, antenna selection and placement is critical. See [For Home Use \(Desktop Installation\)](#) for more information.

[EDACS Trunking](#)

EDACS trunking works in much the same way as Motorola trunking with a couple of major differences. In an EDACS system, each frequency used by the system is assigned a Logical Channel Number (LCN) so that less data needs to be transmitted by the control channel. Also, talk groups are assigned in an Agency-Fleet-Subfleet (AFS) hierarchy. Also, there is one variation of EDACS called SCAT that your BC898T can monitor.

- Logical Channel Numbers – each frequency used by the system is assigned an LCN. This information is programmed into each user radio. When a user presses PTT, their radio sends their AFS information to the control channel. The computer then assigns that talk group to a channel and sends the LCN so that all other radios in that talk group will switch to the correct channel. To program an EDACS system in your scanner, you will need to know both the frequencies used by the system and the LCN for each frequency so that you can program the frequencies in LCN order.
- Agency-Fleet-Subfleet – talk group ID's for EDACS systems are assigned in a way that makes it easy to see at a glance the affiliation of the user. Each radio is assigned a 2-digit agency identifier from 00 – 15. For example, 01 might be used by the police, 02 by ambulance service, 03 by the fire department, and so on. Each agency is then subdivided up to 16 times to provide fleet identification, and then 8 more times to identify subfleets.

For example, the complete AFS for the Police Department West District's dispatch channel might be 01-062. 01 identifies the agency as the police department, 06 identifies the fleet as the West district, and 02 identifies the subfleet as the dispatch channel. While these assignments are somewhat arbitrary and vary from system to system, there are many resources on the web for finding the assignments for most systems. Because of the logical hierarchy of the AFS system, your BC898T lets you assign wildcard ID's that let you, for example, use only one ID memory to identify all units in either an agency or a fleet.

- EDACS SCAT – EDACS SCAT (Single Channel Autonomous Trunking) systems operate on a single channel and alternate control data with analog voice traffic. While your BC898T cannot track ID's in this system, it can eliminate the control data so that all you hear is the voice transmissions when you monitor this type of system.

LTR Trunking

LTR® (Logic Trunked Radio) systems are trunking systems used primarily by business or private communications service providers, such as taxicabs, delivery trucks, and repair services. These systems encode all control information as digital subaudible data that accompanies each transmission, so there is no separate control channel. Users on an LTR system are assigned to specific talk groups, which are identified by the radio as six digit numbers. These numbers are in the form AHUUUU, where:

A= Area code (0 or 1)

H= Home repeater (01 through 20)

U= User ID (000 through 254)

When the scanner receives a transmission on a channel set to the LTR mode, it first decodes the LTR data included with the transmission. In the ID Search mode, the scanner stops on the transmission and displays the talk group ID on the display. In the ID Scan mode, the scanner only stops on the transmission if the LTR data matches a talk group ID that you have stored in the bank's talk group ID list and have not locked out.

LTR systems are frequently programmed so that each radio has a unique User ID.

LTR systems also need to be programmed into your scanner in channel-order.

Since many LTR systems use only odd-numbered channel slots, you would program these systems using only the corresponding odd-numbered channels in a bank (for example, you would program a system with channels at 1, 3, 5, and 9 into Trunk 2 channels 101, 103, 105, and 109).

Using Weather Alert (SAME)

Important: Your scanner has been primarily designed to be a radio scanner. While it incorporates weather alert as one feature, we strongly recommend that you not use the scanner as your sole means for receiving emergency alerts. Your local electronics retailer carries several weather radios specifically designed for this function.

SAME (Specific Area Message Encoding) was adopted late in the last century to replace the wide-area alerts previously used. Weather alerts today are preceded by a digital packet that identifies not only the type of alert, but also the geographic location for the alert. Thus, it is possible for a weather broadcast that can be received across many counties to be targeted to a single county. To specify a county, SAME uses a standard established by the US Census bureau, called FIPS. The format of a FIPS code is:

DSSCCC

Where

D = area subdivision (0=entire area)

SS = State code (00=all states)

CCC = County code (000=all counties)

For example, the FIPS code for Tarrant County, Texas is: 048439 (48=Texas; 439=Tarrant County).

Some counties are further subdivided, in which cases, the first digit will be 0 for all subdivisions in the county and each subdivision will be labeled 1-9.

To program your scanner to alert you when the weather service issues an alert, you must set the scanner to the alert mode, and then leave the scanner monitoring the weather service. You cannot scan and monitor for weather alerts at the same time.

To limit alerts to a specific area, you must also program in the FIPS code(s) for the area(s) you want to receive alerts for. The scanner can be set to either alert for all areas, or only the areas you have programmed. You can get FIPS codes for your area by calling the National Weather Service at 1-888-NWR-SAME or visit their web site at <http://www.nws.noaa.gov/nwr/indexnw.htm>.

[Where to Obtain More Information](#)

By itself, this manual really only provides part of what you need to know to have fun scanning – how to program and use the scanner. The two supplied conventional and trunking frequency guides will give you a good head start on the other part of what you need to know – what frequencies have interesting content. You can also find a wealth of information on the Internet...check out scanners.uniden.com for the latest frequency information in your area.

In addition, you can contact the following source of frequency information:

- Scanner Master

(800) 722-6701 (Hours are from 10:00 a.m. to 5:00 p.m. Eastern Time Monday through Friday.)

To purchase another copy of the conventional or trunking frequency guide, contact one of the following:

- Uniden Parts Department

(800) 554-3988 (Hours are from 8:00 a.m. to 5:00 p.m. Central Time Monday through Friday.)

- Your local dealer

[Information On The Internet](#)

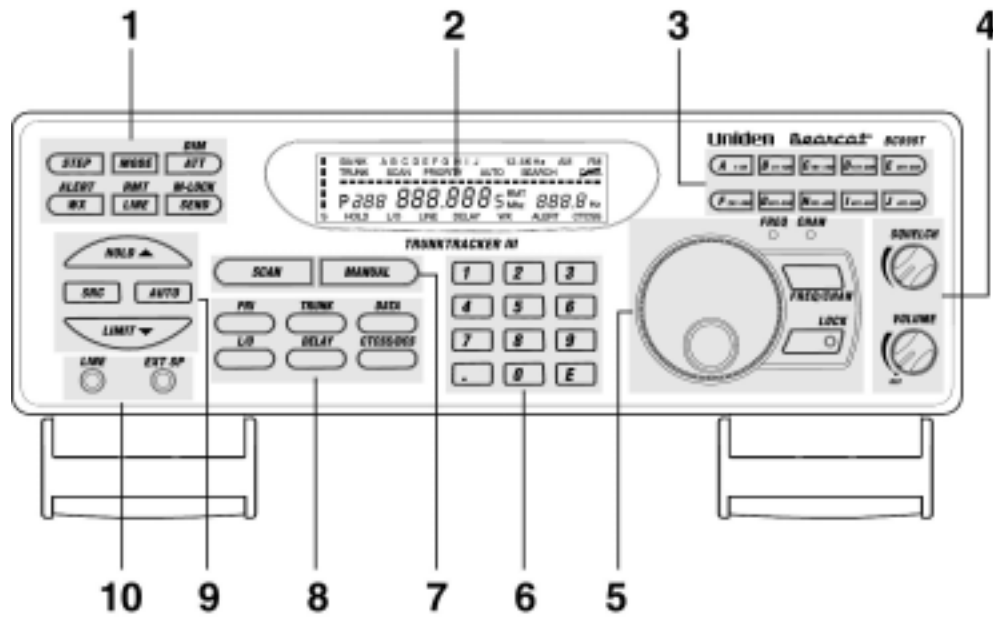
Many web sites have lists of frequencies for your area. You can use a search engine to find and use them.

For more information about Uniden and our other products, visit <http://www.uniden.com/>.

[Using a Computer to Control Your BC898T](#)

You can operate your scanner using the supplied demo software and a personal computer and connection cable (not included).

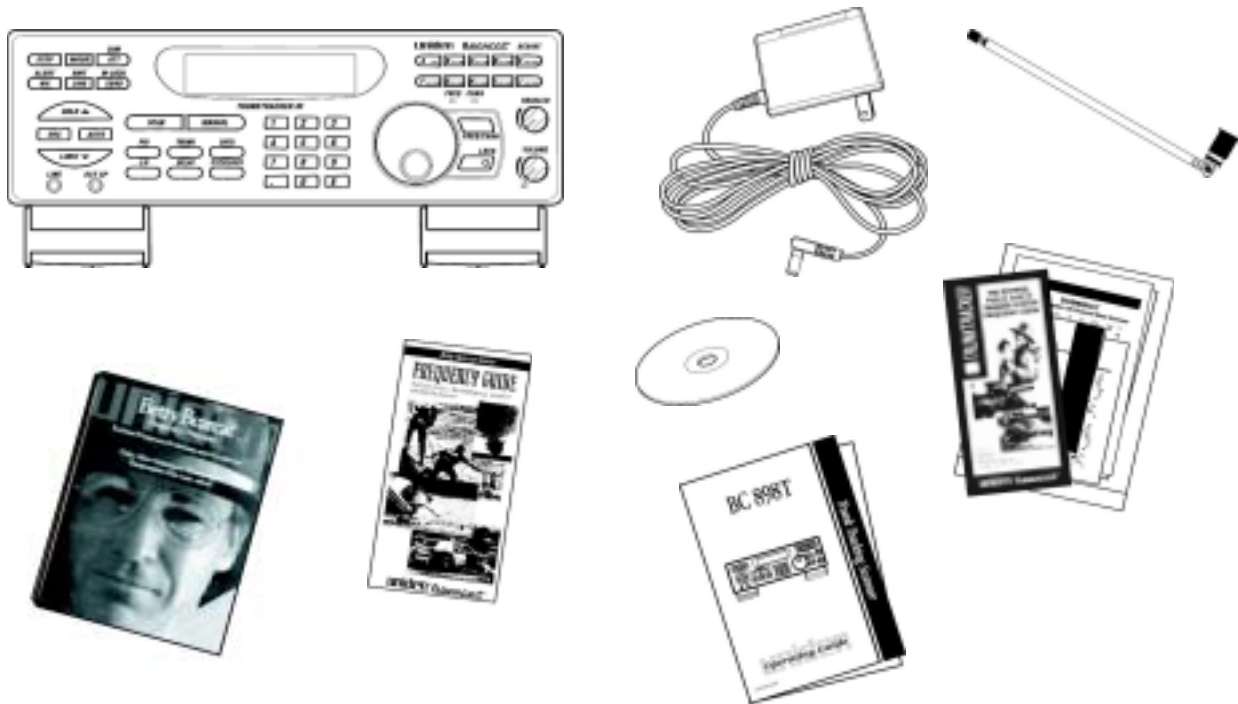
A Quick Look at Your Scanner



1. Programming and Status Keys
2. Display
3. Bank Keys
4. Squelch/Volume Controls
5. Rotary Tuner
6. Numeric Keypad
7. Scan/Manual Keys
8. Mode Keys
9. Search Keys
10. External Speaker/Line Jacks

Included With Your Scanner

If any of these items are missing or damaged, immediately contact your place of purchase or Uniden Customer Service at: (800) 297-1023, 8:00 a.m. to 5:00 p.m., Central, Monday through Friday.

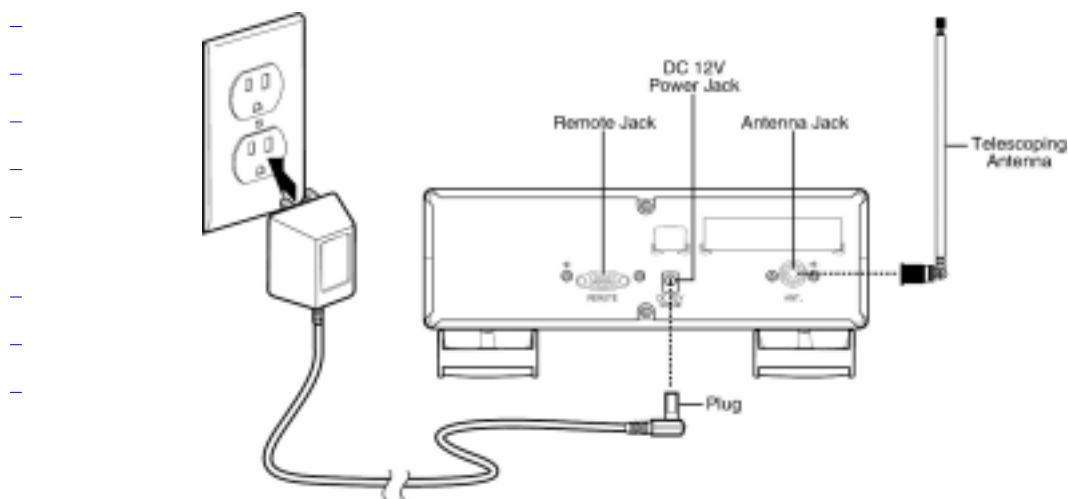


Installing Your Scanner

These guidelines will help you install and use your new scanner:

- If your scanner receives interference or electrical noise, move the scanner or its antenna away from the source. You might also try changing the height or angle of the telescoping antenna.
- To improve the scanner's reception, use an optional external antenna designed for multi-band coverage. (You can purchase this type of antenna at a local electronics store). If the optional antenna has no cable, use 50-70 ohm coaxial cable for lead-in. A mating plug might be necessary for the optional antennas.
- Use the included earphone or an optional stereo headset with proper impedance for private listening. Read the precautions on the inside front cover of this Guide.
- Do not use the scanner in high-moisture environments such as the kitchen or bathroom.
- Avoid placing the scanner in direct sunlight or near heating elements or vents.

For Home Use (Desktop Installation)



1. Insert the DC plug end of the included AC adapter into the DC 13.8V jack on the back of the scanner.
2. Plug the other end of the AC adapter into a standard 120V AC wall outlet.
3. Plug the included telescoping antenna into the ANT connector on the back of the scanner. Then extend the antenna to its full height.

Note: For frequencies higher than 406 MHz, shortening the antenna might improve the reception.

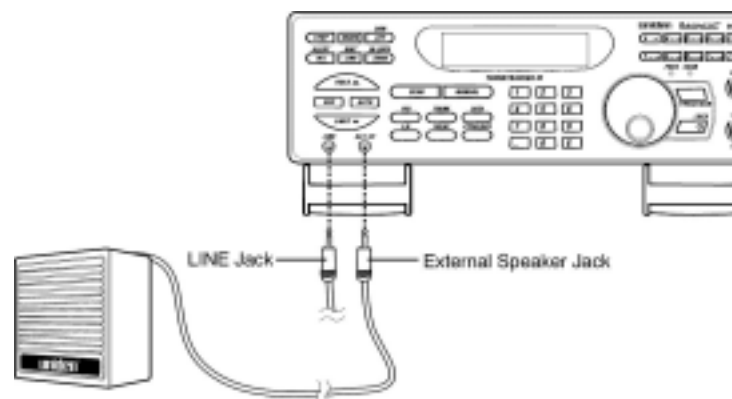
4. Use the scanner's desktop stand for a better viewing and operating angle.

Adapter Safety Feature

The AC adapter included with the scanner might be equipped with a polarized line plug — a plug with one blade wider than the other. This plug fits into a power outlet only one way. If you are unable to insert the adapter's plug into an AC outlet, try reversing the plug.

Using An Optional External Speaker/Earphone/Headphone

For private listening or for listening in a noisy area, you can plug a 1/8-inch (3.5mm) mini-plug earphone's or headphone's or monitor speaker's (not supplied) cable into the EXT SP jack on the front of the scanner. This automatically disconnects the scanner's internal speaker.



Listening Safely

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

- Do not use an earphone to listen to the WX alert siren test or when in SAME alert mode. The alert tone's volume is not adjustable and damage to your hearing could occur.
- Do not listen at extremely high volume levels. Extended high-volume listening can lead to permanent hearing loss.
- Set **VOLUME** to the lowest setting before you begin listening. After you begin listening, adjust **VOLUME** to a comfortable level.
- Once you set **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.

Using An Optional Tape Recorder

Your tape recorder must have both microphone and remote input jacks to work with the scanner. Follow these steps to connect the recorder to the scanner:

1. Connect a cable from the LINE jack on the front of the scanner to the tape recorder's microphone jack.

2. Connect a cable from the RCA-type AUX jack on the back of the scanner to the tape recorder's remote jack.

Using the Supplied Demo Software

You can operate your scanner using a personal computer and the supplied demo software.

If you have installed the software and it is running, select Help by right clicking anywhere on the opening screen. A selection popup appears. Move the cursor to **Help**. **BC898TSS Help** appears. Then click on **BC898TSS Help**.



To use the computer controlled feature, hold down **RMT** on the front of the scanner until you hear two short beeps, then refer to the information in the supplied help file.

Press **RMT** again to cancel the computer controlled feature.

Installing The Software

The demo software's installation program starts automatically when you insert the included CD into your computer's CD-ROM drive. The following programs are included on the CD.

- BC898T SS Install – Installs the software. You must install the software to use the scanner with your computer.
- Acrobat Reader Install – Installs Adobe Acrobat Reader onto your computer. To read the electronic [Owners Manual](#) included with the scanner, you must install Adobe Acrobat Reader if it is not already installed.
- View [Owners Manual](#) – Lets you view the electronic Owners Manual.

After you install the BC898T SS Install program (and Adobe Acrobat Reader if necessary), start it by double clicking on the desktop icon or by selecting it in the Start Programs list.

You can upgrade the included software to a full version by obtaining a registration key at <http://www.uniden.com/>.

[Installing The Scanner In a Vehicle](#)

[Mounting the Scanner](#)

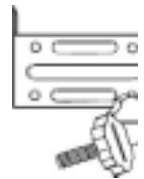
1. Select a location in your vehicle to mount the scanner. Avoid a location that could interfere with your driving. In a passenger car, the ideal location is underneath the dashboard on the passenger side.

Warning: Make sure there are no obstructions such as wires or an air bag behind the mounting location you select. Use the shortest mounting screws that will securely hold the mounting bracket on the mounting location you select. If you are not sure if the mounting location is safe and free of obstructions, check with your vehicle's dealer.

2. Use an optional mounting bracket as a template for marking the location for the mounting screws.

Note: If there are screws already holding the dashboard, you can use the same screw holes to mount the bracket.

3. Drill the necessary holes and secure the mounting bracket in place using the screws provided with the bracket.
4. Mount the scanner to the bracket only after the wiring has been connected to the scanner's rear panel.



[Connecting the Antenna Plug](#)

Connect an optional mobile antenna plug into the ANT connector on the back of the scanner. (For more information on antenna installation, please refer to the instruction guide that came with your antenna.)

[Connecting the DC Power Cord](#)

If you are not experienced in connecting accessories to your vehicle's fuse box, please consult your vehicle's dealer for advice on proper installation before completing the steps below.

[Installing a Temporary Power Cord:](#)

Warning: Do not use the cigarette lighter power cord in a positive ground vehicle.

Use an optional cigarette lighter power cord for an easy, temporary installation.

Plug one end of the cigarette lighter power cord into your vehicle's cigarette lighter jack, then plug the other end into the DC 13.8V jack on the back of the scanner.

Installing a Permanent Power Cord

1. Check the vehicle's battery connections to determine which battery terminal (positive or negative) is grounded to the engine block or chassis. Most of today's vehicles use a negative ground. If your vehicle has a negative ground, follow the steps below. Otherwise, consult your vehicle's dealer for advice on installing negative ground accessories in your vehicle.
2. Connect an optional DC power cord's RED wire to the accessory contact in your vehicle's +13.8 VDC fuse box.
3. Connect the DC power cord's BLACK wire to the negative side of the vehicle (usually the chassis).
4. Insert the DC plug into the DC 13.8V jack on the back of the scanner.

Basic Operation

Turning On the Scanner

Turn **VOLUME** clockwise to turn on the scanner, or counterclockwise until it clicks to turn it off.

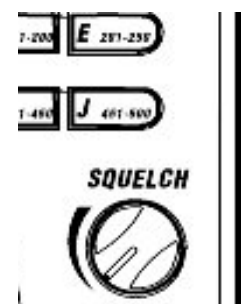
Setting the Squelch

Your scanner's squelch control acts like a gate to reduce or eliminate noise from received signals. Turning **SQUELCH** counterclockwise raises the gate so high that only very strong signals can get through, while turning **SQUELCH** clockwise lowers the gate so that everything can get through — noise, weak signals, and strong signals.

To set the squelch, you must first set the scanner to its manual mode and the scanner must not be receiving a signal.

Follow these steps to set the scanner's squelch.

1. Adjust **VOLUME** to a comfortable listening level.
2. Hold down **MANUAL** until you do not hear a signal.
3. Turn **SQUELCH** fully clockwise.
4. Turn **SQUELCH** counterclockwise until you hear a hiss.



5. Turn **SQUELCH** back clockwise just until the hiss stops. This sets the squelch so that only clearer signals can get through.

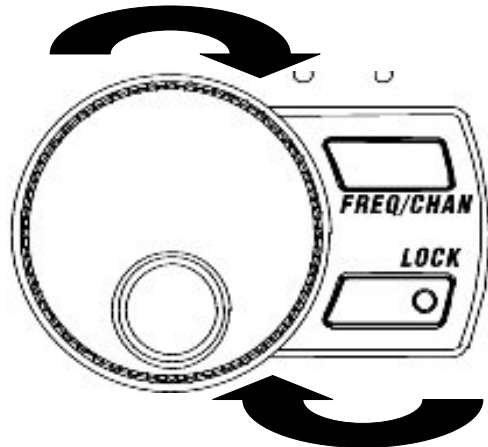
In trunking mode, it usually isn't necessary to manually adjust the squelch since it is automatically adjusted. However, the squelch setting you select before you begin trunk tracking can affect how fast your scanner acquires the data channel, and, in some instances, the squelch setting can prevent your scanner from acquiring the data channel at all.

You can change the squelch setting, if necessary, to provide better performance in your area.

Using the Rotary Tuner

Use the rotary tuner to:

- Rapidly and precisely select frequencies or channels
- Select a CTCSS tone during CTCSS programming
- Scroll through scan and lockout lists in the trunking mode.



Using the Frequency/Channel Mode Selector

Repeatedly press **FREQ/CHAN** to switch between channel and frequency mode. When the CHAN LED is on, you can use the rotary tuner to step rapidly through channels. When the FREQ LED is on, you can use the rotary tuner to tune frequencies quickly and accurately.

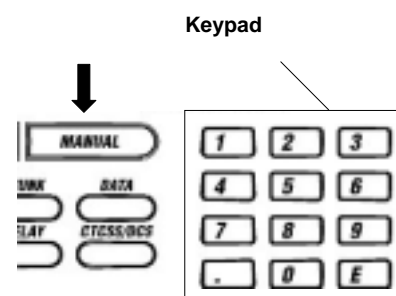


Using the Lock Key/LED

Press **LOCK** to enable or disable the rotary tuner. When the LOCK LED is on, the rotary tuner is locked. This prevents accidentally changing the displayed channel and frequency while monitoring a transmission.

Manually Selecting a Channel

To manually select a channel, press **MANUAL**, enter the channel's number using the keypad, then press **MANUAL** again. The channel's number and any frequency stored in the channel appears.

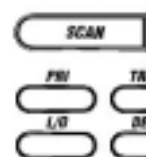


Scanning Programmed Channels

Before you can scan, you must first program channels. See the appropriate programming section for complete instructions.

To begin scanning, simply turn on your scanner or, if the scanner is not currently scanning, press **SCAN**.

The scanner checks each system you have programmed that is not locked out and stops if there is activity. **SCAN** scrolls across the display, right to left.



When the scanner receives a signal on a programmed channel, it stops on that channel and displays the channel information.

The bank indicators A – J selected for scanning appear, and the bank you are currently monitoring flashes. You can deselect banks from active scanning by pressing that bank's number on the keypad. The indicator for each deselected bank turns off, and the scanner does not scan that bank's channels.

Note: One bank must always be active. You cannot deselect all ten banks at the same time. If you try to turn off all the banks, the scanner automatically selects the first bank.

To restore a bank to active scanning, press the bank's number on your keypad. The bank's indicator appears.

Press **MANUAL** to stop on a channel while scanning. Press **SCAN** to resume scanning.

[Locking/Unlocking Banks](#)

When you are scanning conventional banks, the scanner displays the digit corresponding to all unlocked banks. To lock out a bank so that the scanner does not scan its channels, press the number that corresponds to the bank. The scanner replaces that bank's number with a dash.

To unlock locked-out banks, simply press that bank's number again. The scanner displays that bank's number and includes it when scanning.

Note: You cannot lock out all banks. One bank must be unlocked at all times.

[Locking/Unlocking Channels](#)

To lock out a channel so that the scanner does not stop on it while scanning, press **L/O** when the scanner is stopped on that channel, or manually select the channel and press **L/O**.

To unlock the channel, manually select it and press **L/O** again.

Note: You cannot lock out all channels in a bank. At least one channel must remain unlocked. If you want to lock out an entire bank, see the previous section.

[Restoring All Locked Out Channels](#)

To simultaneously unlock all channels, press **MANUAL** then hold down **L/O** for about 2 seconds. The scanner beeps twice and unlocks all channels.

Priority Scanning

When priority scan is turned on, the scanner checks the priority channels in the unlocked banks every 2 seconds between transmissions. If a signal is present on a priority channel, the scanner switches to monitor that transmission, even if it had been stopped on another channel. One channel in each bank is designated as the priority channel.

To turn priority scan on or off, press **PRI**. **PRIORITY** appears (if priority scan is on) or disappears (if priority scan is off).

Note: If all priority channels in unlocked banks are locked out, **LocOut** appears when you try to turn on the priority scan mode.

Changing the Priority Channel

You cannot eliminate the priority channel, but you can change it to any of the 50 available channels in each bank. Follow these steps to change the priority channel.

1. Press **MANUAL**.
2. Use the keypad to enter the channel number for the new priority channel.
3. Press **MANUAL**.
4. Hold down **PRI** for about 2 seconds.

The scanner beeps twice and the priority channel changes to the one you selected.

Using the Dimmer

Hold down **DIM** for about two seconds to dim the back light, turn it off, or turn it on.

Trunk Scanning Options

When you are scanning a trunked system, there are several trunking-only options available to you. This section outlines these options.

Searching for Active Talk Groups (ID Search)

If you want to hear all activity on a system, use the ID search mode by pressing **MANUAL** then **SRC**. **SEARCH** appears and the BC898T stops on every active talk group, regardless of whether you have programmed it into your scanner. This makes it easy to find unknown talk groups.



Note: If you have not yet programmed any talk group IDs into the scanner, this is the only trunk scanning mode available.

[Searching Only Stored Talk Groups \(ID Scan\)](#)

To scan only those talk groups you have stored into your scanner, press **SCAN**. When one of the talk groups you have stored becomes active, the scanner switches to that transmission and displays the ID number for that talk group.

Note: You must store at least 2 talk group IDs in the system for ID scanning to work.

[Monitoring Talk Group IDs](#)

To see all the talk group IDs that are active on the system, while monitoring a trunked system press **TRUNK**. The scanner stops trunking the system and instead holds on the system's control channel. You hear the control data and the scanner displays every talk group ID as it becomes active in the system. To resume trunk tracking, press **TRUNK** again.

[Holding On a Single Talk Group](#)

To hold on an active talk group when scanning or searching, press **HOLD** Δ . The BC898T stops scanning and holds on the current trunking system. It only receives transmissions on the talk group that was active when you pressed **HOLD** Δ .

To select a talk group to hold on when that talk group is not active, you must first program that talk group into an ID list. Then, while scanning that system, use the scroll bar to select the talk group ID to hold on.

To select a talk group to hold on when that group is not active, while ID scanning or ID searching the system, press **HOLD** Δ . Then, either enter the ID or (if you have stored the ID) scroll to the ID you want to hold on.

[Locking Out Talk Groups](#)

Like conventional scanning, you can lock out unwanted talk group traffic on trunking systems. This is particularly important if you are ID searching a trunking system, as many systems share both voice traffic (that you usually want to hear) with some data traffic from water meter systems, door alarms, traffic signals and other data sources that you don't want to hear. You can lock out up to 200 talk group IDs at the same time.

To lock out a talk group, press **L/O** when the scanner stops on that group. Or, if you have stored the talk group in an ID list, select that ID and press **L/O**.

[Reviewing Locked Out Talk Group IDs](#)

You can confirm which talk group IDs are locked out in the scanner.

To review locked out talk group IDs, hold down **L/O** for about 2 seconds. The locked-out talk group IDs appear.

[Restoring All Locked Out Talk Group IDs](#)

To restore all locked out talk group IDs, press **HOLD** Δ then hold down **L/O** for about 2 seconds.

[EDACS Blockout](#)

This is a powerful form of lockout that is only available for EDACS systems. EDACS Blockout lets you lock out entire agencies or fleets, not just individual talk groups.

To use blockout, while scanning an EDACS system, press **HOLD** Δ then hold down **L/O** for about 2 seconds to clear all the lockouts from the system. Then enter the agency or the agency and fleet and press **.** then press **L/O**.

[Setting the Attenuator](#)

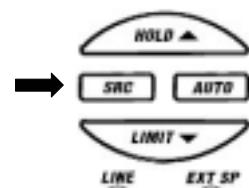
If you are near a very strong signal source, the signal can overload the scanner's RF front end, causing poor audio quality or missed reception.

Repeatedly press **ATT** until **ATT** appears (to turn the attenuator on) or until **ATT** disappears (to turn the attenuator off).

[Searching](#)

Your BC898T includes powerful search features that let you discover new active frequencies in your area. You can save up to 10 custom search ranges in your scanner. This section details how to use custom search ranges and also details the various settings that affect search operation.

To start a search, first program one or more search ranges (see [Setting a Single Search Range](#) and [Setting a Chain Search Range](#)). Then, press **SRC**. The scanner begins searching within the selected search range. To change to a different search range, press the number button associated with that range. By default, your scanner only searches one range at a time. To search multiple ranges, turn on chain search (see [Setting Chain Search](#)). When you turn on chain search, each time you press a number button, the associated range is turned on or off. Note that you must have at least one range turned on at all times.



[Setting a Single Search Range](#)

The BC898T can search a specific frequency range to find frequencies if you don't have a frequency guide available or if new stations have been added since your guide was published.

1. Press **MANUAL** to stop scanning.
2. Use the keypad to enter the lower frequency of the search range. For example, enter 155.000 MHz.
3. Press **LIMIT** ▽.
4. Use the keypad to enter the higher frequency of the search range. For example, enter 157.000 MHz.
5. Press **LIMIT** ▽.
6. Press **SRC**.

You can press **STEP** to change the step increment during a search.

Repeatedly press **STEP** until you select the increment you want. If you select the default step increment for the frequency band you are searching, the indicator stops flashing.

Setting a Chain Search Range

The scanner allows you to search multiple ranges simultaneously. You can search up to 10 different search bands and all ranges in a chain of frequency bands.

1. Press **MANUAL** to stop scanning.
2. Press **SRC**.
3. Press **HOLD** △.
4. Use the rotary tuner to set the scanner to search hold mode.
5. Select the search range by pressing A-J. The selected range and the low and high frequencies within the range flash.
6. Use the keypad to enter the lower frequency of the search range. For example, enter 155.000 MHz.
7. Press **E** or **LIMIT** ▽.
8. Use the keypad to enter the higher frequency of the search range. For example, enter 157.000 MHz.
9. Press **E** or **LIMIT** ▽.
10. Press **SRC** to start chain search.

The scanner searches only one range at a time.

[Holding On An Active Frequency](#)

To hold on the current frequency, press **HOLD** Δ . To resume searching, press **SRC**.

[Setting Chain Search](#)

The scanner allows you to search multiple conventional frequency ranges simultaneously. The scanner searches only one range at a time.

Note: You cannot use chain search to search trunked frequencies. You can search trunked frequencies using the scanner's ID search mode.

1. Press **SRC**.
2. Press **HOLD** Δ or rotate the rotary tuner to go to search hold mode.
3. Press the bank keys where you want to search for frequencies. The selected range and the lower and upper limit frequencies for the range you selected appear.
4. Use the keypad to enter the lower and upper frequency limits, then press **E**.
5. Press **SRC** to start chain search.

[Setting Data Skip](#)

The scanner normally stops on any frequency with activity, and remains there until either the activity stops or you press **SRC** to resume scanning. However, some signals are identifiable by the scanner as data signals, and you can set the scanner to automatically skip these channels.

Note: Even with this option turned on, the scanner might pause for a couple of seconds on data transmissions before resuming.

[Skipping Frequencies](#)

If a particular frequency continues to interrupt search scanning, you can set the scanner so it skips the frequency.

To skip over a frequency, press **L/O** when the scanner is stopped on a frequency you want to skip.

Notes:

- You can program up to 200 skip frequencies. The 201st skip frequency entered causes the first skipped frequency to unlock.
- If all frequencies in the search range are set to skip, a beep sounds and it moves to search hold mode. To resume searching:
 - a. Unskip all skipped frequencies

— OR —

 - b. Select a different search frequency range.

To unskip all skipped frequencies, hold down **L/O** for about 2 seconds in search hold mode.

Storing Found Frequencies

If you find a frequency you want to save into a channel, simply press **E** or **SEND** when the scanner is stopped on that frequency.

Notes:

- If you have already stored this frequency, the scanner displays a warning and the channel where the frequency is stored. To store the frequency anyway, press **E** again.
- After you store the frequency, the scanner resumes searching.
- If all channels are used, the scanner defaults to the last-used channel prior to entering the search mode.

Automatically Storing Frequencies

During searching, you can have the scanner automatically store active frequencies into a bank you choose.

Note: You must program a chain search range for auto store to work.

1. Press **AUTO**.
2. Press the bank keys where you want to store the frequencies the scanner finds. The bank letter you select stops blinking.
3. If the bank you selected has no empty channels, **FULL** appears for about 3 seconds and the scanner sounds an error tone.
4. Press **SRC** to start the auto-store operation.

5. Press **MANUAL** or **HOLD** \triangle to stop auto store. The scanner exits the auto store mode.

Note: To ensure that you catch most active frequencies for the band, you should allow the auto store operation to continue through at least a few complete sweeps of the band. Depending on the types of services, some occasionally active frequencies might not have activity for minutes or hours at a time.

Setting Subaudible Tones for Searching

You can set the scanner to only stop on transmissions that either have no subaudible tone or include a specified CTCSS or DCS tone during searches. This setting affects all search ranges. For this feature to work, you need to turn on the tone mode (see [Setting the Squelch](#)).

1. Press **PRI** to turn off priority scan.
2. Hold down **CTCSS/DCS** for about 2 seconds. **CTCSS** and **DCS** blink and the scanner searches for CTCSS or DCS tones. When the scanner finds a CTCSS or DCS tone, the frequency blinks.

Attenuating All Search Ranges

If you are near a strong RF source, you might need to attenuate the input signal in order to search properly. Repeatedly press **ATT** until **ATT** appears (to turn on attenuation) or until **ATT** disappears (to turn off attenuation).

Setting Delay For All Search Ranges

You can set the scanner to have a 2-second delay after the end of a transmission before searching resumes. This slows searching, but helps you prevent missing replies on a frequency. To turn on this option for all search ranges, select the channel where you want to add a delay then press **DELAY**.

Searching a Trunked Bank

Before you search a trunked bank with your scanner, consider the following:

- You can only trunk track one bank at a time.
- Use **TRUNK** to toggle between the conventional and the trunk tracking modes.
- Press **DATA** while in the trunk tracking mode to review which bank is currently in use. The appropriate bank icon will flash

at the top of the display for 5 seconds.

If you have programmed frequencies for a trunked system in one or more of the 10 available banks and you are in conventional mode, follow these steps to begin trunk searching:

1. Press **TRUNK**. The bank indicators begin to flash.
2. Press A-J to select the trunked bank you want. For example press B.

Note: You will see the frequencies quickly displaying as your scanner looks for the data channel, which controls the system.

Once the data channel is acquired, the scanner begins trunk tracking. Talk group IDs, which represent different service groups, appear.

3. Press **TRUNK** again to return to conventional scanning mode.

While searching, you won't know exactly to whom the IDs are assigned until you listen awhile or until ID lists are available in frequency guides or on internet sites. However, it usually only takes a few minutes to figure out police, fire, and emergency medical personnel. Other IDs might take some time, but determining who each ID represents is half the fun of TrunkTracker™.

Trunk ID Hold Mode

During trunking search mode, you can hold on an ID without entering it into memory.

1. Press **HOLD** Δ while in search mode.
2. Use the keypad to enter the ID you want.
3. Press **HOLD** Δ again. **HOLD** flashes.
4. Press **SRC** to return to search mode.

Note: The ID hold mode works in scan list mode, and the steps are the same; however, **SEARCH** doesn't appear in the display.

Using Weather Search and Weather Alert (SAME)

Your scanner allows you to either search for a local NOAA weather broadcast, or be set to alert when a SAME weather alert is broadcast on a NOAA channel.

Weather Alert

In weather alert mode, your scanner functions as a severe weather warning radio. This is especially useful when your area is expecting severe weather conditions late at night. When you set the scanner to weather alert mode, it emits a loud siren and displays information about the weather alert whenever your local NOAA weather station transmits a severe weather emergency tone.

To use weather alert:

1. Press **WX** to find your local weather station.
2. Press **HOLD** Δ .
3. Hold down **ALERT** for about 2 seconds. **ALERT** appears.

Your scanner's volume is muted until the warning tone sounds.

Your scanner now functions as a weather alert radio, waiting to receive a severe weather emergency tone. When your scanner receives the emergency tone and a SAME event code from your local NOAA weather station, it responds with a loud siren at maximum volume (regardless of the volume control setting) and displays information about the alert.

You might see any of the following information during a weather alert:

L1 – Warning
L2 – Watch
L3 – Statement
TsT - Test

The siren will continue until the emergency tone stops transmitting. To cancel the siren, press **WX** or turn the rotary tuner.

[Searching for a Weather Broadcast](#)

You can use the BC898T to search for your local NOAA weather channel.

To use weather alert, press **WX** to find an active weather channel in your area. **WX** appears.

You might receive more than one weather station in your area. When you press **WX**, your scanner finds the first active transmission. If a transmission seems weak or distant, press **WX** again to find a clearer station.

Notes:

- Weather scan does not resume automatically. You must press **WX** again to start the weather scan again. In some parts of the country, you might not be able to monitor weather transmissions, such as in low-lying areas. Normally a higher location will improve the reception.

- NOAA broadcasts are continuous broadcasts. You will only lose reception if you move out of a coverage area. If the signal is lost, the scanner resumes searching for a weather transmission.

Programming a FIPS Code

1. Hold down **WX** to turn on weather alert.
2. Hold down **E**.

If the scanner has not been set to alert for any FIPS code, _____ appears. If the scanner is set to alert for all FIPS codes, **ALLFIPS** appears. If the scanner is set to alert only for the area you programmed, **F1** appears.

3. Turn the rotary tuner or repeatedly press **HOLD** \triangle or **LIMIT** ∇ to enter a FIPS code (1 through 15). Then press **E** to enter the FIPS code or . to clear it.
4. To set the scanner so it sounds an alert tone when it receives any FIPS code, turn the rotary tuner or repeatedly press **HOLD** \triangle or **LIMIT** ∇ to move **ALLFIPS** to **F1**. To set the scanner so it sounds an alert tone when it receives only the FIPS code you programmed, turn the rotary tuner or repeatedly press **HOLD** \triangle or **LIMIT** ∇ to move **F1** to **F15**. Then press **E**.
5. Press **ALERT** to exit this mode.

Search Hold

1. Press **HOLD** \triangle at any time to stop the search.
2. Press **HOLD** \triangle to move to the next higher frequency
— or —
3. Press **LIMIT** ∇ to move down to the previous frequency.

Note: You can also use the rotary tuner to move to other frequencies. Simply make sure the **FREQ** LED is lit before turning the dial.

4. Press **SRC** to resume searching.

Searching for CTCSS/DCS Tones

You can use the CTCSS/DCS tone search mode to determine if the frequencies in your area are transmitted with associated tones. If

the scanner finds a CTCSS or DCS tone, the type of tone and the frequency flash on the display. Then, if you store that frequency into a channel, the tone is also stored in the channel.

Notes:

- You can search for CTCSS/DCS tones in scan mode, manual mode, or chain search mode. You cannot search for CTCSS/DCS tones while the scanner is scanning a priority channel.
 - You might find frequencies that do not have a tone associated with them. This might be because CTCSS or DCS tones are not being transmitted.
1. If necessary, press **PRI** to turn off priority scan.
 2. Hold down **CTCSS/DCS** until you hear two short beeps. **CTCSS** and **DCS** appear and begin to flash, and the scanner starts searching for an associated CTCSS or DCS tone. All tones are checked if the transmission is long enough. If there is a break before a tone is identified, then your scanner starts searching where it left off when the transmission begins again. If a CTCSS or DCS tone is found, the type of tone (**CTCSS** or **DCS**) and the frequency flash.
 3. If you programmed the tone in scan mode or manual mode, press **E**. To exit tone search, press **CTCSS/DCS**.

Programming

The BC898T has 500 memory channels, each of which can be programmed to store one frequency. The channels are divided into ten 50-channel banks, useful for storing similar frequencies in order to maintain faster scanning cycles.

Each time you store a frequency, the scanner automatically sorts the list of scanning frequencies in the bank by frequency number. This unique Auto Sort feature enables faster scanning. When you manually step through a bank, frequencies are sorted according to channel number.

Select one of the following ways to program your scanner:

- Use the keypad to manually select a channel and frequency
- Use the rotary tuner to select a channel and frequency
- Use the AutoStore feature to automatically program the channels
- Transfer a programmed frequency from another channel

Programming Using Manual Entry

1. Select frequencies from your starter guide or from the Internet.
2. Press **MANUAL** to stop scanning.
3. Select a channel.
 - a. Enter the channel number.
 - b. Then press **MANUAL**.
4. Enter the frequency.
 - a. Enter the frequency number.
 - b. Then press **E**.

Note: To clear a mistake while entering the frequency, press . (decimal) twice then repeat Steps 1-4.

If you enter a frequency outside the scanner's frequency bands, the scanner sounds a distinctive beep.

The display flashes for a moment then resets itself, or you can press . and go back to the previous step.

Programming Using the Rotary Tuner

1. Press **MANUAL** to stop scanning.
2. If the green LOCK LED is on, press **LOCK** to unlock the rotary tuner.
3. Hold down **FREQ/CHAN** until the CHAN LED lights.
4. Use the rotary tuner to select the channel you want to program.
5. Press **FREQ/CHAN** until the FREQ LED lights.
6. Use the rotary tuner to select the frequency you want to program

Note: You can also enter the frequency on the keypad.

7. Press **E** to program the frequency into the channel you selected.

Programming Using AutoStore

To use this feature, you must set up a search range. Once the search begins, AutoStore will automatically program active frequencies into the available channels of the bank(s) you select. For more information about your scanner's search feature, see [Searching](#).

1. Press **MANUAL** to stop scanning.
2. Use the keypad to enter the lower frequency of the search range. For example, enter 155.000 MHz.
3. Press **LIMIT** ▽.
4. Use the keypad to enter the higher frequency of the search range. For example, enter 157.000 MHz.
5. Press **LIMIT** ▽.
6. Press **AUTO**. All the banks begin flashing and **AUTO** appears.
7. Select the bank(s) you want to program during AutoStore.

The selected bank indicators stop flashing.

If you select a bank with no available channels, **FULL** appears for about two seconds before your scanner resets. You must either delete frequencies in the bank or select a different bank.

8. Press **SRC** to start AutoStore.

You can press **STEP** to change the step increment during AutoStore.

Press **STEP** until you select the increment you want. If you select the default step increment for the frequency band you are searching, the indicator stops flashing.

AutoStore stops automatically when all available channels in the selected bank(s) have been programmed.

9. Press **MANUAL** to exit AutoStore and return to the manual mode.

Note: To exit AutoStore before all the available channels are programmed, press **MANUAL** twice.

Transferring a Programmed Frequency

Except for frequencies stored in priority channels, you can send any frequency to another channel by following these steps.

You cannot transfer a frequency that is stored in a priority channel. **Error** flashes for two seconds then your scanner automatically resets. If you want to transfer the frequency stored in a priority channel, you must designate another channel in the bank as the priority channel.

To transfer a programmed frequency, select the channel with a frequency you want to assign to a different channel. Then press **SEND**.

All the bank indicators start flashing. If you have programmed CTCSS tones, they also appear when you press **SEND**.

Transferring a Frequency to the First Available Channel In Another Bank

1. Select the bank where you want to send the frequency. For example, press **D**.

The bank's lowest available channel begins flashing, waiting to be programmed.

2. Press **E** to transfer the frequency to the new channel.

The old channel is now empty.

3. To cancel the transfer before it is complete, press either **SEND** or **MANUAL**.

Transferring a Frequency to a Specific Channel

1. Use the keypad to enter the channel where you want to send

the frequency. For example, press **9** and **4** on the keypad.

2. Press **HOLD** \triangle .

The display alternates between the frequency you are transferring and the frequency in the new channel. If the channel you select is not programmed, only the new channel number will flash.

3. Press **E** to complete the transfer.

The frequency is now stored in the new channel, and the old channel is empty.

4. To cancel the transfer before it is complete, press either **SEND** or **MANUAL**.

Duplicate Frequency Alert

If you enter a frequency already stored in another channel, the scanner beeps and the other channel appears.

Press **.** to start again

- or -

Press **E** again to store the frequency in both channels.

Deleting a Stored Frequency

To delete a stored frequency, press **0** then press **E**.

Channels with no frequencies are automatically locked out.

Programming a Channel With a CTCSS/DCS Tone

1. Press **MANUAL**.
2. Press **CTCSS/DCS**.
3. Select the channel you want to program then press **E**. If you have already programmed a CTCSS or DCS tone, the frequency for the tone blinks. Otherwise, **000.0 Hz** blinks.
4. Enter a CTCSS tone.
 - a. Use the keypad, rotary tuner, or **HOLD** \triangle or **LIMIT** ∇ to select the tone.
 - b. Then press **E**.

Notes:

- If you make a mistake while entering a tone with the keypad, press . twice and enter the tone again. If you are using the rotary tuner, make sure the **FREQ** LED is lit.
 - Make sure **FREQ** is lit before turning the rotary tuner to select a frequency.
5. Press **CTCSS/DCS** or **MANUAL** to cancel CTCSS mode. The CTCSS indicator and displayed tones are turned off but not deleted.

Fleet Map Programming

If you have programmed a trunk tracking bank and press **SRC**, user IDs appear. Since your scanner defaults to monitor Type II systems, most if not all IDs appear as even numbers. However, if you notice an even mix of odd and even user IDs, for example 6477, 2560, 6481, 6144, 1167, etc., then you are probably monitoring either a Type I or Hybrid system.

You might also notice that you are missing responses when you hold on an active ID. Unlike Type II systems, Type I/III systems require a fleet map that sets specific fleet-subfleet parameters. It's easy to select a fleet map for your scanner; what isn't always easy is selecting or programming a map that matches your particular area.

There are 16 preset fleet maps listed in the appendix that you can choose, and these are usually a good place to start when setting up a Type I/III trunk tracking bank. If you choose a preset map and still have difficulty following complete conversations, then you'll have to program your own fleet map.

Selecting a Trunking Programming Mode

To change the system type that your scanner monitors, you must be in the trunking programming mode. Follow these steps to select this mode:

If you are in conventional scan mode:

1. Hold down **TRUNK**. The scanner beeps twice and **BANK** and **TRUNK** flash.
2. Select the trunking bank you want to program.

If you are in trunking scan mode:

1. Press **TRUNK** to return to conventional mode if you have been monitoring a trunking bank.

2. Hold down **TRUNK**. The scanner beeps twice and **BANK** and **TRUNK** flash.
3. Select the trunking bank you want to program.

Selecting a Preset Fleet Map

1. Select the trunking programming mode and bank you want to change.
2. Press **DATA**.
3. Repeatedly press **HOLD** \triangle or **LIMIT** ∇ to select E1.
4. Press **DATA**.
5. Repeatedly press **HOLD** \triangle or **LIMIT** ∇ to select the fleet map you want. For example, E1P2.
6. Press **E**.

The scanner exits the trunking programming mode, acquires the data channel, and begins searching using the preset fleet map you chose.

Note: You will now begin to see Type I Fleet-Subfleet IDs. For example, 100-12,100-9, 000-12,400-8, etc. See [User Defined Fleet Maps](#) in the Appendix for more information about Type I IDs.

How do you know if the preset map is correct? You'll have to listen to see if you are following complete conversations. If not, try another preset fleet map.

Programming a Fleet Map

You might want to read [User Defined Fleet Maps](#) in the Appendix before programming a fleet map. It contains a detailed explanation of scanner fleet map programming, as well as a table listing the fleet map size codes.

1. Select the trunking programming mode and the bank you want to change.
2. Press **DATA**.
3. Repeatedly press **HOLD** \triangle or **LIMIT** ∇ to select E1.
4. Press **DATA**.
5. Repeatedly press **HOLD** \triangle or **LIMIT** ∇ to select USr.
6. Press **DATA**.
7. Repeatedly press **HOLD** \triangle or **LIMIT** ∇ to select the size code for the first block.
8. Press **E**. The next available block appears.

9. Repeat Steps 7 and 8 until you have selected a size code for each block.

For specifics about each size code, see [Size Code Restrictions](#) in the Appendix.

10. Press **SRC**.

The scanner exits the trunking programming mode, acquires the data channel, and begins searching using the map you've programmed.

[Restoring Default Tracking](#)

Your scanner is set to monitor Type II systems as its default. However, if you select a preset fleet map or program your own fleet map, then you'll change the default setting.

Follow these steps to reset the Type II default for a trunking bank:

1. Select the trunking programming mode and the bank you want to change.
2. Press **DATA**.
3. Repeatedly press **HOLD** Δ or **LIMIT** ∇ to select E2.
4. Press **E**.

The scanner exits the trunking programming mode, acquires the data channel, and begins searching.

Note: Your scanner saves the setting for the preset map you selected or the Type I fleet map you programmed. If you decide to select E1 for the bank again, the last settings used appear.

[Programming a Hybrid System](#)

A hybrid system is simply a Type I system with some blocks designated as Type II blocks. To program a Hybrid system, follow the steps listed in Programming a Fleet Map in the previous section. However, if you want a block to be Type II, select Size Code S-0.

When you begin searching a trunking bank with a hybrid fleet map, you will see both types of system IDs. That is, Type II IDs usually appear as an even number without a dash; Type I IDs appear as a three or four digit number, followed by a hyphen, followed by a one or two digit number.

[Programming Tips](#)

- Since weather transmissions are continuous, do not program

a weather frequency into any of the scanner's channels. To listen to a weather transmission, press **WX** to select the weather information band instead.

- Group similar frequencies into adjacent channels. For example, program police frequencies in channels 1 through 10 and fire/emergency into channels 11 through 20, and so on.
- Put the frequency you listen to the most or the most important frequency into a Priority channel.
- To quickly program a series of channels, start with the lowest number channel. For example, when you are programming five new frequencies into Channels 4 through 8, start with Channel 4. After you finish programming a channel, press **m** or **h** to go to the next higher channel.
- Record channels and frequencies in some convenient place in case the scanner's memory is lost.

Setting the Delay Mode

A delay can be set for each programmed channel so that when Scan or Search stops on a channel there is a brief pause before the scanning cycle resumes. Delay must be set for each programmed channel, and it can be set when your scanner pauses during a scan or when manual mode is selected.

Setting Delay in Scan or Search Mode

1. Press **SCAN** or set a search range then press **SRC**.
2. When your scanner stops on a channel, press **DELAY**.

DELAY appears. Scanning resumes two seconds after the transmission ends.

Setting Delay in Manual Mode

1. Press **MANUAL**.
2. Use the keypad or rotary tuner to select a channel.
3. Press **DELAY**.

DELAY appears. The scanner pauses on the channel when a transmission is received.

Recording Transmissions

You can set any channel for recording while scanning. Then, if your scanner stops on a channel you have designated for recording, the

transmission and its time, as well as the channel number and frequency, are all recorded.

However, before you can use this feature, you must connect a tape recorder to your scanner. For information about attaching a recorder to your scanner, see [Using an Optional Tape Recorder](#).

To program a channel for tape recording:

1. Use the keypad or rotary tuner to select the channel you want to record.
2. Press **AUX**. **LINE** appears indicating that the channel will be recorded if you connected a tape recorder to your scanner.

Repeat these steps to select other channels for recording.

To record a channel, press **SCAN**. When your scanner stops on a channel and **LINE** appears, the channel is recorded.

To turn the record feature off for a channel:

1. Use the keypad or rotary tuner to select the channel you do not want to record anymore.
2. Press **AUX**. **LINE** turns off and the channel is not recorded.

[Data Skip](#)

A scanner will normally stop on any transmission it receives. This means the BC898T will stop on data signals and unmodulated transmissions. You can automatically skip many of these types of transmissions during searches. Repeatedly press **DATA** until **DATA** appears (to activate the data skip feature) or until **DATA** disappears (to deactivate the data skip feature).

When data skip is active, your scanner might pause momentarily on an unwanted signal but will resume searching in 2 or 3 seconds.

[Channel Skip](#)

If a particular channel continues to interrupt search scanning, it is possible to set your scanner to skip the frequency. To skip a frequency, press **L/O**.

Note: You can program up to 20 skip frequencies. If you try to program more than 20 skip frequencies, additional frequencies you program cause the first skipped frequency to unlock.

[Storing Search Frequencies](#)

You can quickly store any frequencies you find during a search.

1. Press **MANUAL**.
2. Use the keypad to enter the lowest frequency within your search range. For example, if you want to search 155.000 MHz through 157.000 MHz, enter 155.000 MHz.
3. Press **LIMIT** ▽.
4. Use the keypad to enter the highest frequency within your search range. For example, if you want to search 155.000 MHz through 157.000 MHz, enter 157.000 MHz.
5. Press **LIMIT** ▽.
6. Press **SRC**.
7. Press **HOLD** △ when the scanner stops at the frequency you want.

Notes:

- You can press **HOLD** △ to step up a frequency or press **LIMIT** ▽ to step down a frequency. Hold down either key to rapidly step through the frequencies.
 - You can also use the rotary tuner to skip through frequencies. Make sure **FREQ** is lit before turning the dial.
8. Press **E** to store the frequency in the channel flashing on the display.

— or —

Send the frequency to another channel.

For information about sending a frequency to another channel, see [Transferring a Programmed Frequency](#).

9. Press **MANUAL** or **SCAN** to cancel a search.
10. Repeat Steps 6 through 8 for each search frequency you want to store.

[Programming Conventional Channels](#)

Each bank can hold a mix of conventional channels plus one trunking system. This section describes how to store known frequencies into conventional channels.

The first few sections are intended to be performed in the order indicated if you are entering information the first time. If you are editing existing information, manually select the channel then follow the steps in the appropriate section to access the information you want to change.

Note: To quickly store only a frequency in a channel, manually select the channel, enter the frequency, then press **E**. Do not use this method for trunking systems, however, as these systems require additional information to scan correctly.

[1. Select a Channel to Program](#)

To select a channel, repeatedly press **FREQ/CHAN** until CHAN lights to select channel mode, then turn the rotary tuner to select the channel. Or, simply use the keypad to enter the channel number.

[2. Enter the Frequency](#)

Use the keypad to enter a frequency.

Notes:

- If the channel already had a frequency programmed, it appears above the prompt.
- If you select a frequency that is not valid, **ERROR** appears. Press **.** then enter a correct frequency to continue.
- If you enter a frequency that has already been stored in the scanner, the scanner sounds an error tone and the channel where the frequency has already been stored flashes.

To save the frequency in both channels, press **E**. Otherwise, press **.** to cancel and enter a different frequency.

[Changing the Frequency Step](#)

The channel frequency step option controls the frequency step size used when you manually tune up or down from the frequency stored in the channel. Your BC898T is preprogrammed with the most common step sizes for each band, so you seldom need to change this setting.

To change the frequency step, press **MANUAL** then repeatedly press **STEP** until the frequency step you want flashes.

Setting the Modulation Mode

Radio transmissions are modulated in several different ways.

The BC898T is able to demodulate the most common transmission types. Your scanner has the most common modulation mode preset for each band, so you seldom have to change this option. However there are occasional services that use a modulation mode that is not standard for that band.

To change the modulation mode, press **MANUAL** then repeatedly press **MODE** until the modulation mode you want flashes.

Setting Priority Channels

You can set one conventional channel in each bank as a priority channel. When you turn on the priority scan option (see [Priority Scanning](#)), the scanner automatically checks these channels every 2 seconds to see if there is activity. If there is, the scanner immediately switches to the priority channel.

Notes:

- The scanner does not check priority channels in locked-out banks.
- The scanner does not check priority channels if the channel is locked out.

By default, the first channel of each bank is set as priority. To change the priority channel:

1. Manually select the channel you want to set as the priority channel.
2. Hold down **PRI** for about 2 seconds. The scanner beeps and the new priority assignment is made.

Programming Trunked Systems

Before you start programming your scanner to track a trunked system, consider the following:

- You can only program one trunking system in each bank of your scanner.
- Trunking frequencies must be entered while in the Trunking Programming mode.
- If you are in the Trunking Programming mode, you cannot select channels in other banks.

For example, if you are programming Bank D, you can only select channels 91-120 with the rotary tuner or using the **HOLD** Δ or **LIMIT** ∇ keys.

Note: To clear a mistake while entering a frequency, press . twice, and start over.

Channel Activity Indicators

The BC898T has 30 channel activity indicators to visually display a trunked system's activity when you select delay, hold, scan, etc. You'll always know which frequencies are in use and how much communication traffic is occurring.

Each frequency you program in a trunking bank corresponds to an activity indicator on your scanner's display. The way the activity indicators appear provide you with information about the system you are tracking.

- The indicator which remains on, even when there is no traffic, represents the frequency being used as the data channel.
- If an indicator turns on and you don't hear a conversation, then the channel is probably being used for a telephone interconnect call or a private call. These calls are not monitored by your scanner.
- The indicator which flashes when an ID appears represents the frequency being used by the talk group.
- If you are holding on an ID that is not active, the activity indicators will turn on and off as other groups use the system.

Programming Motorola Systems

1. Hold down **TRUNK** for about 2 seconds. The scanner beeps and **TRUNK**, **BANK**, and the bank letters A-J blink.
2. Press a bank key to select the bank where you want to store the frequencies.

3. Select Motorola scanning by turning the rotary tuner or repeatedly pressing **HOLD** Δ or **LIMIT** ∇ to select one of the following Motorola scanning choices:

- E2-800 (Motorola Type 2 800 MHz)
- E2-900 (Motorola Type 2 900 MHz)
- E2-Hi (Motorola Type 2 VHF)
- E2-UHF (Motorola Type 2 UHF)
- E1 (Motorola Type 1)

Then press **E**.

4. Use the keypad to enter the first frequency, then press **E**.

Note: To clear a mistake while entering a frequency, press . (decimal) on the keypad twice, then repeat Step 4.

5. Repeat Step 4 for each additional frequency. When you enter a frequency, select the next channel by turning the rotary tuner or repeatedly pressing **HOLD** Δ or **LIMIT** ∇ to select the next channel in the bank. Then press **E**

6. If the system type is a Motorola Type 1 or hybrid Type I/Type II, select a fleet map. Otherwise, skip to Step 7.

- a. Turn the rotary tuner or repeatedly press **HOLD** Δ or **LIMIT** ∇ until E1 appears. Then press **E**.

- b. Select the fleet map list by turning the rotary tuner or repeatedly pressing **HOLD** Δ or **LIMIT** ∇ until FLEET appears. Then press **E**.

- c. Select a preset fleet map from the list by turning the rotary tuner or repeatedly pressing **HOLD** Δ or **LIMIT** ∇ until the fleet map you want appears (P1 to P12). Then press **E**.

7. If the system type is a Motorola Type II VHF or Motorola Type II UHF, enter the band plan (base frequency, spacing frequency, and offset channel) for the system you want to scan. Otherwise, stop here.

- a. Turn the rotary tuner or repeatedly press **HOLD** Δ or **LIMIT** ∇ until bASE appears. Then press **E**.

- b. Select the band plan by pressing **A**, **B**, or **C**.

- c. Use the keypad to enter the base frequency, step frequency, and channel offset. Then press **E**.

- d. If the system uses more than one band plan, repeat Steps a-c.

8. Enter the talk group ID for each group you entered:

- a. Repeatedly press **HOLD** Δ or **LIMIT** ∇ until `Prog id` appears. Then press **E**.
- b. To enter a Type 2 ID, use the keypad to enter it. Then press **E**. Otherwise, to enter a Type 1 ID, use the keypad to enter the fleet map information you entered or selected in Step 6. Then press **E**.

Programming EDACS Systems

1. Hold down **TRUNK** for about 2 seconds. The scanner beeps and **TRUNK**, **BANK**, and the bank letters A-J blink.
2. Select the bank by entering the letter for the bank. This bank is where the frequencies you enter will be stored.
3. Select EDACS scanning by turning the rotary tuner or repeatedly pressing **HOLD** Δ or **LIMIT** ∇ to select one of the following EDACS scanning options:
 - Ed-Hi (Wideband, 9600 bps)
 - Ed-Lo (Narrowband, 4800 bps)
 - Ed-SCt (SCAT)

Then press **E**.

4. Enter the talk group ID (agency, fleet, and subfleet) for the system you want to scan, then press **E**.

If the system uses multiple talk group IDs, repeat Step 4.

5. Use the keypad to enter the frequency for LCN1, then press **E**.

Note: To clear a mistake while entering a frequency, press . (decimal) on the keypad twice, then repeat Step 5.

6. Repeat Step 5 for each frequency. When you enter a frequency, select the next channel by turning the rotary tuner or repeatedly pressing **HOLD** Δ or **LIMIT** ∇ to select the next channel in the bank. Then press **E**.

Programming LTR Systems

1. Hold down **TRUNK** for about 2 seconds. The scanner beeps and **TRUNK**, **BANK**, and the bank letters A-J blink.
2. Select the bank by entering the letter for the bank.
3. Select LTR scanning by turning the rotary tuner or repeatedly pressing **HOLD** Δ or **LIMIT** ∇ to select `Lt`. Then press **E**.

4. Enter the talk group ID (area code, home repeater, and user ID) for the system you want to scan, then press **E**.
5. If the system uses multiple talk group IDs, repeat Step 4.
6. Use the keypad to enter the first frequency, then press **E**.

Note: To clear a mistake while entering a frequency, press . (decimal) on the keypad twice, then repeat Step 4.

Repeat Step 4 for each frequency you entered on the worksheet next to **Frequency**. When you enter a frequency, select the next channel by turning the rotary tuner or repeatedly pressing **HOLD** \triangle or **LIMIT** ∇ to select the next channel in the bank. Then press **E**

ID Lockout

Like conventional scanning, it's possible to lock out unwanted traffic. This is particularly important in trunked systems because in many areas water meters, door alarms, traffic signals, and other mechanical devices are assigned IDs just like other users. Also some departments scramble or encrypt their communications, and you might want to lock out these unintelligible transmissions.

To lock out an ID, press **LOCK** when the ID appears. The ID is locked out, and the next active ID appears. You can lock out up to 200 IDs.

Note: If you lock out an ID in search mode, it is also locked out in scan list mode. Conversely, if you lock out an ID while in scan list mode, it is locked out in search mode.

Restoring a Single ID

Follow these steps to unlock a single ID.

1. Hold down **LOCK** until you hear two short beeps.
2. Use either the rotary tuner or **HOLD** \triangle or **LIMIT** ∇ to select the ID you want to unlock.
3. Press **LOCK**. The ID is unlocked and the next locked ID appears.
4. Press **SRC** to return to the Search mode.

Restoring All IDs

Follow these steps to unlock all locked out IDs at once:

1. Hold down **LOCK** until you hear two short beeps.
2. Press **E** to unlock all the IDs at once.

Note: If you unlock all the IDs, the scan list memory mode

appears. Press **SCAN** to scan the IDs stored in your scan Lists or press **SRC** to return to the search mode.

3. Press **SRC** to return to the search mode.

Searching Tips

ID Hold Mode

Use the **DELAY** key to select the delay mode if it's not active. This mode holds an ID for 2 seconds while you wait for a reply. In a trunked system, you can set a delay for each bank. Other groups might use the system, but your scanner will only look for the ID in the display.

Note: If you consistently miss responses while in ID Delay mode, you might need to change the default system type or change the fleet map you are using.

Hold Mode

Press **HOLD** Δ to hold on a particular ID in the display. This is where the trunk tracking effect is really noticeable. You can hold a specific talk group, such as fire department on-scene operations, no matter which frequency the group uses.

ID Monitor Mode

If you hold down **SRC** until you hear two short beeps, you will select the ID monitor mode. **SEARCH** flashes and all active talk group IDs appear in succession. You won't hear conversations in this mode, but this is an excellent way to determine which talk groups are the most active.

Note: Locked out IDs appear during ID monitor mode with the **L/O** icon turned on.

Scan Lists

Each of your scanner's banks can be a trunk tracking or conventional scanning bank. When you designate a bank as a trunk tracking bank, your scanner sets up 5 scan lists (A –E), which are simply lists used to store your favorite IDs. Each list can contain up to 10 IDs, so you can store a total of 50 IDs for each trunk tracking bank (500 if you use all banks as trunking banks!).

Scan lists help you organize the trunking system users into categories. For example, you might use List A for police IDs, List B for fire department IDs, List C for emergency medical service IDs, etc. Once IDs are stored in lists, you can scan them like you scan conventional frequencies. You can program your scan lists either manually or during trunking search mode.

You can use the rotary tuner to scroll through the IDs in your scan

lists.

Programming Scan Lists Manually

1. Select the trunking bank you want.
2. After the scanner begins trunk tracking, press **MANUAL**.
3. Use either the rotary tuner or repeatedly press **HOLD** Δ or **LIMIT** ∇ to select the scan list location you want to program. For example, select the second memory location in the first scan list.
4. Enter the Type II ID you want to store, and press **E**.

—or—

To enter a Type I ID:

- a. Enter the fleet number.
- b. Press **.**
- c. Enter the subfleet number, and press **E**.

Note: If the trunking bank is set to monitor Type II systems, you cannot enter Type I IDs. To clear a mistake while entering an ID, press **.** twice, and start over.

5. Press **MANUAL** or **HOLD** Δ to select the next scan list location.
6. Press **SCAN** to begin scanning the lists you have programmed.

If you haven't programmed any IDs, **SCAN** appears but your scanner cannot stop on an active conversation.

7. To remove a scan list from active scanning, press the number of the scan list on the keypad. The scan list indicator turns off, and the IDs in that list are not scanned.

Note: One scan list must always be active. If you try and deactivate all the scan lists, scan list A will automatically be active.

8. To restore a scan list to active scanning, press its number again.
9. Press **SRC** to return to trunk tracking search mode.

Programming Scan Lists During Search

To select a scan list location and store an ID during search mode, follow these steps:

1. When your scanner stops on an ID you want to store, press **PRI**.
2. Use either the rotary tuner or repeatedly press **HOLD** Δ or **LIMIT** ∇ to select the scan list memory location you want, then press **E**.
3. Press **SRC** to return to trunk tracking search mode.

To let your scanner automatically store an ID in an available scan list location, follow these steps:

1. Press **E** when your scanner stops on an ID you want to store.
2. Press **SRC** to return to trunk tracking search mode.

Deleting a Stored ID

To delete a stored ID:

- a. Press **0**.
- b. Then press **E**.

Care and Maintenance

General Use

- Turn the scanner off before disconnecting the power.
- Always write down the programmed frequencies in the event of memory loss.
- If memory is lost, simply reprogram each channel. The display shows 000.000 in all channels when there has been a memory loss.
- Always press each button firmly until you hear the entry tone for that key entry.

Location

- Do not use the scanner in high-moisture environments such as the kitchen or bathroom.
- Avoid placing the unit in direct sunlight or near heating elements or vents.
- If the scanner receives strong interference or electrical noise, move it or its antenna away from the source of the noise. If possible, a higher elevation might provide better reception.
- Also try changing the height or angle of the antenna.

Cleaning

- Disconnect the power to the unit before cleaning.
- Clean the outside of the scanner with a mild detergent.
- To prevent scratches, do not use abrasive cleaners or solvents. Be careful not to rub the LCD window.
- Do not use excessive amounts of water.

Repairs

Do not attempt any repair. The scanner contains no user serviceable parts. Contact the Uniden Customer Service Center or take it to a qualified repair technician.

Birdies

All radios can receive “birdies” (undesired signals). If your scanner stops during Scan mode and no sound is heard, it might be receiving a birdie. Birdies are internally generated signals inherent in the electronics of the receiver.

Press **LOCK** to lock out the channel, then press **SCAN** to resume scanning.

Troubleshooting

If your BC898T is not performing properly, try the following steps.

Problem	Possible Cause	Suggestion
The scanner doesn't work.	The scanner might not be receiving any power.	Make sure the AC adapter is connected to an AC outlet and the scanner.
		If there is a wall switch that controls power to the AC outlet where you connected the AC adapter, make sure it is on.
Improper reception.	The scanner's antenna might need to be adjusted.	Check the antenna connection or move or reposition the antenna.
		Move the scanner.
		You might be in a remote area that could require an optional multi-band antenna. Check with your dealer or local electronics store.
Scan won't stop.	The squelch might need to be adjusted.	Adjust the squelch threshold. See Setting the Squelch .
	The antenna might need to be adjusted.	Check the antenna connection.
	One or more channels might be locked out.	Make sure the channels you want to scan are not locked out.
	The channel's frequency might not be stored in memory.	Make sure the channel's frequency is stored in the scanner's memory.
	The channel might not be active.	Wait for a transmission on the channel.
Scan won't start.	You must press SCAN to scan.	Press SCAN .
	The squelch might need to be adjusted.	Adjust the squelch threshold. See Setting the Squelch .
	One or more channels might be locked out.	Make sure the channels you want to scan are not locked out.
Weather scan doesn't work.	The squelch might need to be adjusted.	Adjust the squelch threshold. See Setting the Squelch .
	The antenna might need to be adjusted.	Check the antenna connection.

If you experience difficulty while in TrunkTracker™ mode, try the following steps. .

Problem	Possible Cause	Suggestion
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Scanner won't track a trunked system.	The system might not be one your scanner can scan.	Scan another system.
	The data frequency might be missing.	Enter the data frequency.
	The scanner might need to be changed to a Type 1 scanner setup.	Change to a Type 1 scanner setup. Review Programming Motorola Systems..
Scanner won't stop scanning during Scan List mode.	No IDs have been programmed.	Program one more more IDs.
	The IDs you have stored are not active.	Wait for the IDs to become active or scan another system.
Scanner won't acquire the data channel.	The squelch might need to be adjusted.	Adjust the squelch threshold. See Setting the Squelch.
	The frequency used for the data channel might be missing.	Check your frequency list for the data channel.
Missing replies to conversations.	The scanner might need to be changed to a Type 1 scanner setup.	Change to a Type 1 scanner setup. Review Programming Motorola Systems..
.	The fleet map might be incorrect.	Try another preset fleet map or program your own fleet map.
	One or more of the system's frequencies might not be entered.	Make sure all the system's frequencies have been entered.
Channel activity indicators are flashing but no sound is heard.	The transmission you are trying to scan might be a private or telephone interconnect call.	Your scanner blocks private or telephone interconnect calls.
	The displayed ID might not be active.	Wait for the ID to become active or scan another system.

If you still cannot get satisfactory results while using your scanner or if you want additional information, please call or write the Uniden Parts and Service Division. The address and phone number are listed in the Warranty at the end of this manual. If you would like immediate assistance, please call Customer Service at (800) 297-1023.

If you have internet access, you can visit <http://www.uniden.com/> for additional information.

Specifications

Certified in accordance with FCC Rules and Regulations Part 15, Subpart C, as of date of manufacture.

Channels: 500

Banks: 10 (50 channels each)

Service Bands: 17 – preprogrammed search bands (including the NOAA Weather Service band)

Frequency Range:

25.0-27.995 MHz Citizens Band/Business Band

28.0–29.995 MHz 10 Meter Amateur Band

30–49.995 MHz VHF Low Band

50.0–54.0 MHz 6 Meter Amateur Band

137–143.995 MHz Military Land Mobile

144–147.995 MHz 2 Meter Amateur Band

148–174 MHz VHF High Band

Above bands in 5 kHz steps

108–136.9875 MHz Aircraft Band

216-224.9875 MHz VHF High Band

225–399.9875 MHz UHF Air Band

400–419.9875 MHz Federal Land Mobile

420–449.9875 MHz 70 cm Amateur Band

450–469.9875 MHz UHF Standard Band

470–512 MHz UHF “T” Band

806–823.9875 MHz “800” Band

850-868.9875 MHz “800” Band

895-956 MHz “800” Band

Above bands in 12.5 kHz steps

Operating Temperature: –20°C to +60°C

Scan Rate: 100 channels per second (conventional mode)

Search Rate: 300 steps per second

Scan Delay: 2 seconds

Audio Output: 1.8W nominal into 8W internal speaker

Power Requirements: 12 VDC 500mAh (internal battery or AD140U AC adapter)

Antenna: 50 ohms (Impedance)

External Jacks: Antenna Jack BNC Type

Ext. Speaker Jack 3.5mm

Line Out Jack 3.5mm

AUX Jack RCA Type

DC Power Jack 5.5mm

Remote Jack 5 Pins

Size: 10 1/2 in. (W) x 7 3/8 in. (D) x 3 1/2 in. (H)

Weight: 3.8 lbs

Features, Specifications, and Availability of optional accessories are all subject to change without notice.

Optional Accessories

Contact your local Uniden Dealer or call the Uniden Parts Center at:
(800)554-3988, 8:00AM to 5:00PM EST, Monday through Friday,
for information about ordering these optional accessories.

DC Power Cord

Cigarette Lighter Power Cord ®

External Speaker Earphone Mobile Mounting Bracket with Hardware (MB001)

Betty Bearcat Frequency Directory/Local Directories

User Defined Fleet Maps

Type I Programming Information

When a Type I system is designed, the address information for all the IDs is divided into 8 equal sized blocks, numbered 0–7. When you program your scanner to track a Type I system, you must select a size code for each of these blocks. When you have assigned a size code to all 8 blocks, you'll have defined the fleet map for the system you are tracking. Each size code determines the number of fleets, subfleets, and IDs each block will have. For example, a size code of S-4 has one fleet, which is divided into 16 separate subfleets, and it has a total of 512 individual IDs.

When a block is assigned a size code, the fleet or fleets created within the block are assigned a Type I ID. The way these IDs display on your scanner depend on the block number and the block's size code. When a Type I ID appears, the leftmost digit represents the block which contains the ID.

The next two digits identify which fleet is active, and the last digit(s) identifies the subfleet.

The details concerning how the size codes are selected by a Type I System designer are highly dependent on the specific needs of the system's users. Some organizations might want many subfleets with only a few radios each, while another organization might want only a few subfleets with many radios each. Your task is to program your fleet map with the same size code assignments as the trunked system. If you do this accurately, you'll track all the Fleet-Subfleet combinations used by the system. In other words, you'll hear complete communications while monitoring a trunked system.

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If you don't already know the size codes used, you'll have to guess at them. But since you don't have to figure out all the blocks at once, this isn't as hard as it seems. Select a size code for a block, and then press S. Now listen to the communications. If you decide you are receiving most of the replies to the conversations with IDs assigned to the block you just programmed, then you've probably selected the right size code and can work on the next block of the map.

Finally, for most public safety systems there are some size codes which are more common. S-3 and S-4 are probably the most common, followed by S-10, S-11, and S-12.

Size Code Restrictions

If you select size code S-12, S-13, or S-14, there are some restrictions as to which blocks can be used for these codes.

S-12 can only be assigned to Blocks 0, 2, 4, or 6.

S-13 can only be assigned to Blocks 0 and 4.

S-14 can only be assigned to Block 0.

Since these size codes require multiple blocks, you will be prompted for the next available block when programming a fleet map. For example, if you assign Block 0 as an S-12, you will be prompted for b2, the next block available, instead of b1. And if you assign Block 0 as an S-14, you would not see another prompt because it uses all available blocks.

One Year Limited Warranty

Important: Evidence of original purchase is required for warranty service.

WARRANTOR: UNIDEN AMERICA CORPORATION ("Uniden")

ELEMENTS OF WARRANTY: Uniden warrants, for one year, to the original retail owner, this Uniden Product to be free from defects in materials and craftsmanship with only the limitations or exclusions set out below.

WARRANTY DURATION: This warranty to the original user shall terminate and be of no further effect 12 months after the date of original retail sale. The warranty is invalid if the Product is (A) damaged or not maintained as reasonable or necessary, (B) modified, altered, or used as part of any conversion kits, subassemblies, or any configurations not sold by Uniden, (C) improperly installed, (D) serviced or repaired by someone other than an authorized Uniden service center for a defect or malfunction covered by this warranty, (E) used in any conjunction with equipment or parts or as part of any system not manufactured by Uniden, or (F) installed or programmed by anyone other than as detailed by the Operating Guide for this product. STATEMENT OF REMEDY: In the event that the product does not conform to this warranty at any time while this warranty is in effect, warrantor will repair the defect and return it to you without charge for parts, service, or any other cost (except shipping and handling) incurred by warrantor or its representatives in connection with the performance of this warranty. THE LIMITED WARRANTY SET FORTH ABOVE IS THE SOLE AND ENTIRE WARRANTY PERTAINING TO THE PRODUCT AND IS IN LIEU OF AND EXCLUDES ALL OTHER WARRANTIES OF ANY NATURE WHATSOEVER, WHETHER EXPRESS, IMPLIED OR ARISING BY OPERATION OF LAW, INCLUDING, BUT NOT LIMITED TO ANY IMPLIED WARRANTIES OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE. THIS WARRANTY DOES NOT COVER OR PROVIDE FOR THE REIMBURSEMENT OR PAYMENT OF INCIDENTAL OR CONSEQUENTIAL DAMAGES. Some states do not allow this exclusion or limitation of incidental or consequential damages so the above limitation or exclusion might not apply to you.

LEGAL REMEDIES: This warranty gives you specific legal rights, and you might also have other rights which vary from state to state. This warranty is void outside the United States of America.

PROCEDURE FOR OBTAINING PERFORMANCE OF WARRANTY: If, after following the instructions in this Operating Guide you are certain that the Product is defective, pack the

Product carefully (preferably in its original packaging). Include evidence of original purchase and a note describing the defect that has caused you to return it. The Product should be shipped freight prepaid, by traceable means, or delivered, to warrantor at:

Uniden America Corporation
Parts and Service Division
4700 Amon Carter Boulevard
Fort Worth, TX 76155
(800) 297-1023, 8:00 a.m. to 5:00 p.m., Central, Monday through Friday

Covered under one or more of the following U.S. patents:
and other patents pending.

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[Quick Start to Programming Your Scanner](#)

This help contains information you'll need to quickly program conventional and trunking frequencies into your scanner. You can use it to help you find information about conventional and trunking frequencies in your area, compile the information into an easy-to-use format, then use the information to program your scanner.

Note: This help does not include all of the programming information for your scanner. Consult your [Owners Manual](#) for complete information about how to program your scanner.

[Getting Started](#)

You can use the scanner to scan agencies such as:

- 800 MHz trunked public safety systems
- Police and fire departments (including rescue and paramedics)
- NOAA weather transmissions
- Business and industrial radio
- Utilities
- Marine bands
- Amateur (ham) radio bands
- Aircraft

Your scanner can monitor any of the following types of systems.

- Conventional (not trunked) systems
- Motorola trunking systems
- LTR trunking systems
- EDACS trunking systems

Getting your scanner programmed and scanning takes a few steps. This help guides you through these steps that will make it easier for you to start scanning.

1. Collect information about the system(s) you want to monitor.

Do you want to listen to your local police and fire departments? How about the highway patrol, ambulance service, and aircraft? You might even want to listen to your local utility company as they track down a break in electrical service in your area.

Make a list of the agencies you want to listen to, then look up the frequencies and systems used by those agencies. The Internet is a great source for current frequencies and information about scanning. Here are a few useful sites:

- <http://www.radioreference.com> - the Internet's premier source for user-supported radio system information.

- <http://www.scannermaster.com> - frequency resources and home of Police Call.
- <http://www.bearcat1.com> - frequency information from National Communications.
- svartifoss2.fcc.gov/reports/index.cfm – conventional frequency information on file with the US Government

Tips:

- Scanners are designed to monitor complex radio systems. That means that programming your scanner might seem like a daunting task at first. Be patient if you don't get it right the first time. You can also seek out help locally for the systems you want to scan by visiting the forums section of <http://www.radioreference.com/>.
 - Before you start to program your scanner, decide how you want to organize the frequencies you want to scan. For example, some areas are best organized by geographic location (east, north, south, west, central, etc), while others are best organized by agency (police, sheriff, ambulance, fire, etc.). You might even find it easier to organize a mixture of frequencies (north, southeast, and west for police but fire all in one group for example).
2. Organize the system information using these system worksheets included in this help.
 - Use the [conventional scanning worksheet](#) to organize information about conventional frequencies.
 - Use the [Motorola trunking worksheet](#) to organize information about Motorola frequencies.
 - Use the [LTR trunking worksheet](#) to organize information about LTR frequencies.
 - Use the [EDACS trunking worksheet](#) to organize information about EDACS frequencies.
 3. Follow the instructions in [Filling Out the Conventional Scanning Worksheet](#), [Filling Out the Motorola Worksheet](#), [Filling Out the LTR Worksheet](#), and [Filling Out the EDACS Worksheet](#) to program your scanner.

4. Press **SCAN!**

Tips:

- Before you start, print as many copies of the worksheets as

you think you'll need. You can also go to the download section of www.uniden.com/productsupport.cfm and download the worksheets there.

- All worksheet instructions assume that you have completed the critical Step 1 (collecting the system information). Don't skip this step.
- Use a pencil to fill out the worksheets. This lets you change information if necessary.

Conventional Scanning Worksheet **Instructions**

Important: The conventional scanning worksheet is for conventional frequencies only. To program LTR trunking frequencies, use the [LTR trunking worksheet](#). To program Motorola trunking frequencies, use the [Motorola trunking worksheet](#). To program EDACS trunking frequencies, use the [EDACS trunking worksheet](#).

Filling Out The Conventional Scanning Worksheet

- **Bank**

Your scanner has 10 banks. Fill in the letter of the bank (A-J) you want to use to store all the frequencies on this page. You can use more than one page for the same bank.

- **Category**

Fill in the general type of frequencies to be stored in this bank. For example, if you want to store all police frequencies in this bank, enter "Police." If you want to store more than one type of frequency in the bank, you can enter "Mixed."

- **Channel**

Your scanner has 500 channels. Fill in the channel number (1-500) where you want to store each frequency.

Tips:

- Try to enter frequencies you write on the worksheet into consecutively numbered channels. This makes it easier to keep track of how many channels you have used.
- Leave this field blank until you gather all information about the frequencies you want to store. Then go back and fill in a channel number for each frequency you entered, beginning with the first open channel in the bank if possible.

- **Frequency**

Fill in the frequency you want to store in this channel.

- **Location/Radio Service**

Fill in information that identifies the frequency. For example, if the motorcycle police on your city's north side use the frequency, you can enter "City Motorcycle Police North Side."

- **Priority**

The scanner lets you designate one channel in each bank as a priority channel. Check this field if you want to designate the frequency as a priority channel.

- **CTCSS/DCS**

If the agency transmits a CTCSS or DCS tone on the frequency, fill in the frequency. For example, if the agency transmits a CTCSS tone on 173.8 Hz, enter "173.8."

Note: See [What is CTCSS/DCS?](#) in your Owners Manual for more information about CTCSS and DCS.

- **Comments**

Fill in any general comments about the agency. For example, if the agency is active only during auto races, enter that information in this field.

[Using The Conventional Scanning Worksheet to Program Your Scanner](#)

1. If necessary, press **MANUAL** to stop scanning.
2. Select the bank by entering the letter for the bank you entered on the worksheet next to **Bank**. This bank is where the frequencies you enter will be stored.
3. Use the keypad to enter the first channel number on the worksheet (next to **Channel**), then press **MANUAL**.
4. Use the keypad to enter the first frequency on the worksheet (next to **Frequency**), then press **E**.

Note: To clear a mistake while entering the frequency, press . (decimal) on the keypad twice, then repeat Step 4.

5. If you checked **Priority** for the frequency you are entering, press **PRI** to set that channel as the priority channel. You can designate one channel per bank as the priority channel.
6. If you entered a CTCSS/DCS frequency next to **CTCSS/DCS** for the frequency you are entering, see [Programming a Channel With a CTCSS/DCS Tone](#) in your Owners Manual for more information about entering a CTCSS/DCS frequency.
7. Repeat Steps 3 through 6 for each subsequent channel/frequency listed on the worksheet.

[Motorola Trunking Worksheet Instructions](#)

Important: The Motorola trunking worksheet is for Motorola frequencies only. To program conventional scanning frequencies, use the [conventional scanning worksheet](#). To program LTR trunking frequencies, use the [LTR trunking worksheet](#). To program EDACS trunking frequencies, use the [EDACS trunking worksheet](#).

Filling Out The Motorola Worksheet

- **System Name**

Fill in the general type of frequencies to be stored in this bank. For example, if you want to store all police frequencies in this bank, enter "Police." If you want to store more than one type of frequency in the bank, you can enter "Mixed."

- **System Type**

Fill in the type of Motorola system you are scanning.

- Type 1. A fleet map is supplied for this type of system.
- Type 2 800 MHz. The supplied frequencies are between 800 MHz and 899 MHz. No fleet map is supplied for this type of system.
- Type 2 900 MHz. The supplied frequencies are between 900 MHz and 999 MHz. No fleet map is supplied for this type of system.
- Type 2 UHF. The supplied frequencies are between 400 MHz and 500 MHz. No fleet map is supplied for this type of system.
- Type 2 VHF. The supplied frequencies are between 100 MHz and 200 MHz. No fleet map is supplied for this type of system.

- **Bank**

Your scanner has 10 banks. Fill in the letter of the bank (A-J) you want to use to store all the frequencies on this page. You can use more than one page for the same bank.

- **Frequency/Name**

For each channel, fill in each frequency and name used by the agency.

- **Talk Group ID/Name**

Identifies the agency. The talk group ID is sent by the agency on the radio system's control channel, and appears on your scanner's display when the talk group is active. You can group the talk group IDs you want to hear into their own groups, then write that ID and a name identifying its agency here.

Fill in the talk group ID and a name for each agency.

Tip: Leave this field blank until you gather all remaining information about the agency. Then go back and fill in the talk group ID and name when you see them on the scanner's display.

- **Fleet Map (Type I or Type I/Type II Hybrid Only)**

Fill in the fleet map used by this agency.

- **Band Plan (VHF or UHF Only)**

A band plan is required so the scanner can correctly determine the voice channel frequency. Fill in the band plan used by this agency, consisting of:

- Base frequency
- Step frequency
- Channel offset

You can enter up to three band plans.

[Using The Motorola Worksheet to Program Your Scanner](#)

1. Hold down **TRUNK** for about 2 seconds. The scanner beeps and **TRUNK**, **BANK**, and the bank letters A-J blink.
2. Select the bank by entering the letter for the bank you entered on the worksheet next to **Bank**. This bank is where the frequencies you enter will be stored.
3. Select Motorola scanning by turning the rotary tuner or repeatedly pressing **HOLD** \triangle or **LIMIT** ∇ to select the Motorola scanning choice you entered next to **System Type**:
 - E2-800 (Motorola Type 2 800 MHz)
 - E2-900 (Motorola Type 2 900 MHz)
 - E2-Hi (Motorola Type 2 VHF)
 - E2-UHF (Motorola Type 2 UHF)
 - E1 (Motorola Type 1)

Then press **E**.

4. Use the keypad to enter the first frequency you entered on the worksheet next to **Frequency**, then press **E**.

Note: To clear a mistake while entering a frequency, press . (decimal) on the keypad twice, then repeat Step 4.

5. Repeat Step 4 for each frequency you entered on the worksheet next to **Frequency**. When you enter a frequency, select the next channel by turning the rotary tuner or repeatedly pressing **HOLD** \triangle or **LIMIT** ∇ to select the next

channel in the bank. Then press **E**

6. If you entered Motorola Type 1 or a hybrid Type I/Type II next to **System Type**, you must select a fleet map. If you entered anything else next to **System Type**, skip to Step 7.
 - d. Turn the rotary tuner or repeatedly press **HOLD** Δ or **LIMIT** ∇ until **E1** appears. Then press **E**.
 - e. Select the fleet map list by turning the rotary tuner or repeatedly pressing **HOLD** Δ or **LIMIT** ∇ until **FLEET** appears. Then press **E**.
 - f. Select a preset fleet map from the list by turning the rotary tuner or repeatedly pressing **HOLD** Δ or **LIMIT** ∇ until the fleet map you want appears (**P1** to **P12**). Then press **E**.

Note: You can also program and use your own fleet map in this step. Consult your [Owners Manual](#) for more information.

7. If you entered Motorola Type II VHF or Motorola Type II UHF next to **System Type**, you must enter the band plan (base frequency, spacing frequency, and offset channel) for the system you want to scan. If you entered anything else next to **System Type**, stop here.
 - e. Turn the rotary tuner or repeatedly press **HOLD** Δ or **LIMIT** ∇ until **bASE** appears. Then press **E**.
 - f. Select the band plan by pressing **A**, **B**, or **C**.
 - g. Use the keypad to enter the base frequency, step frequency (within a range of 5-100 kHz), and channel offset (within a range of 380-759) you entered in **Band Plan**. Then press **E**.
 - h. If the system uses more than one band plan, repeat Steps a-c.
8. Enter the talk group ID for each group you entered on the worksheet next to **Talk Group ID**:
 - c. Repeatedly press **HOLD** Δ or **LIMIT** ∇ until **Prog id** appears. Then press **E**.
 - d. To enter a Type 2 ID, use the keypad to enter it. Then press **E**. Otherwise, to enter a Type 1 ID, use the keypad to enter the fleet map information you entered next to **Fleet Map** or selected in Step 6. Then press **E**.

[LTR Trunking Worksheet Instructions](#)

Important: The LTR trunking worksheet is for LTR frequencies only. To program conventional scanning frequencies, use the [conventional scanning worksheet](#). To program Motorola trunking frequencies, use the [Motorola trunking worksheet](#). To program EDACS trunking frequencies, use the [EDACS trunking worksheet](#).

Filling Out The LTR Worksheet

- **System Name**

Fill in the general type of frequencies to be stored in this bank. For example, if you want to store all police frequencies in this bank, enter "Police." If you want to store more than one type of frequency in the bank, you can enter "Mixed."

- **Bank**

Your scanner has 10 banks. Fill in the letter of the bank (A-J) you want to use to store all the frequencies on this page. You can use more than one page for the same bank.

- **System Frequencies**

For each channel, fill in the frequency and alpha tag used by the agency.

- **Talk Group ID/Name**

Identifies the agency. The talk group ID is sent by the agency on the radio system's control channel, and appears on your scanner's display when the talk group is active. You can group the talk group IDs you want to hear into their own groups, then write that ID and a name identifying its agency here.

Fill in the talk group ID and a name for each agency.

Tip: Leave this field blank until you gather all remaining information about the agency. Then go back and fill in the talk group ID and name when you see them on the scanner's display.

Using The LTR Worksheet to Program Your Scanner

1. Hold down **TRUNK** for about 2 seconds. The scanner beeps and **TRUNK**, **BANK**, and the bank letters A-J blink.
2. Select the bank by entering the letter for the bank you entered on the worksheet next to **Bank**. This bank is where the frequencies you enter will be stored.
3. Select LTR scanning by turning the rotary tuner or repeatedly pressing **HOLD** \triangle or **LIMIT** ∇ to select Lt. Then press **E**.
4. Enter the talk group ID (area code, home repeater, and user

ID) for the system you want to scan, then press **E**.

5. If the system uses multiple talk group IDs, repeat Step 4.
6. Use the keypad to enter the first frequency you entered on the worksheet next to **Frequency**, then press **E**.

Note: To clear a mistake while entering a frequency, press . (decimal) on the keypad twice, then repeat Step 4.

7. Repeat Step 6 for each frequency you entered on the worksheet next to **Frequency**. When you enter a frequency, select the next channel by turning the rotary tuner or repeatedly pressing **HOLD** \triangle or **LIMIT** ∇ to select the next channel in the bank. Then press **E**

EDACS Trunking Worksheet Instructions

Important: The EDACS trunking worksheet is for EDACS frequencies only. To program conventional scanning frequencies, use the [conventional scanning worksheet](#). To program Motorola trunking frequencies, use the [Motorola trunking worksheet](#). To program LTR trunking frequencies, use the [LTR trunking worksheet](#).

Filling Out The EDACS Worksheet

- **System Name**

Fill in the general type of frequencies to be stored in this bank. For example, if you want to store all police frequencies in this bank, enter "Police." If you want to store more than one type of frequency in the bank, you can enter "Mixed."

- **Bank**

Your scanner has 10 banks. Fill in the letter of the bank (A-J) you want to use to store all the frequencies on this page. You can use more than one page for the same bank.

- **System Frequencies**

For each channel, fill in the frequency and name.

- **Talk Group ID/Name**

Identifies the agency. The talk group ID is sent by the agency on the radio system's control channel, and appears on your scanner's display when the talk group is active. You can group the talk group IDs you want to hear into their own groups, then write that ID and a name identifying its agency here.

EDACS talk group IDs are in the form *AFS*, where:

- A is the agency (00 through 15)
- F is the fleet (00 through 15)
- S is the subfleet (0 through 7)

Note: You can also set the scanner so it displays EDACS talk group IDs in decimal form. Consult your [Owners Manual](#) for more information.

You can enter a full or partial talk group ID. For example, if you enter the agency and the fleet but do not enter a subfleet, the scanner scans all subfleets within the fleet you entered.

Fill in the talk group ID and a name for each agency.

Using The EDACS Worksheet to Program Your Scanner

1. Hold down **TRUNK** for about 2 seconds. The scanner beeps and **TRUNK**, **BANK**, and the bank letters A-J blink.

2. Select the bank by entering the letter for the bank you entered on the worksheet next to **Bank**. This bank is where the frequencies you enter will be stored.
3. Select EDACS scanning by turning the rotary tuner or repeatedly pressing **HOLD** \triangle or **LIMIT** ∇ to select the EDACS scanning choice you entered next to **Scan Type**:
 - Ed-Hi (Wideband, 9600 bps)
 - Ed-Lo (Narrowband, 4800 bps)
 - Ed-SCt (SCAT)

Then press **E**.

4. Enter the talk group ID (agency, fleet, and subfleet) for the system you want to scan, then press **E**.

If the system uses multiple talk group IDs, repeat Step 4.

5. Use the keypad to enter the frequency you entered on the worksheet under **Frequency** for LCN1, then press **E**.

Note: To clear a mistake while entering a frequency, press . (decimal) on the keypad twice, then repeat Step 5.

6. Repeat Step 5 for each frequency you entered on the worksheet under **Frequency**. When you enter a frequency, select the next channel by turning the rotary tuner or repeatedly pressing **HOLD** \triangle or **LIMIT** ∇ to select the next channel in the bank. Then press **E**.