

---

---

# CONTENTS

---

---

Introduction . . . . .	3
Important Notice . . . . .	4
Terminology . . . . .	5
What is Scanning? . . . . .	5
What is Searching? . . . . .	5
What is Trunk Tracking? . . . . .	5
Feature Highlights . . . . .	7
Where to Obtain More Information . . . . .	8
Information on the Internet . . . . .	8
Included with Your Scanner . . . . .	9
Setup . . . . .	10
Installing the Batteries . . . . .	10
Charging the Battery Pack . . . . .	11
CRX120 Battery Charger . . . . .	12
Adapter Safety Feature . . . . .	13
Flexible Antenna . . . . .	14
Belt Clip . . . . .	14
Basic Operation . . . . .	15
Setting the Squelch . . . . .	15
Keylock . . . . .	16
Programming . . . . .	17
Duplicate Frequency Alert . . . . .	19
Programming Tips . . . . .	19
Deleting a Stored Frequency . . . . .	20
Scanning . . . . .	21
Channel Lockout . . . . .	22
Lockout in Manual Mode . . . . .	22
Lockout in Scanning Mode . . . . .	23
Lockout Tips . . . . .	23
Restore a Locked Out Channel . . . . .	24
Restore All Locked-Out Channels . . . . .	24
Priority Scan . . . . .	25
Changing the Priority Channel . . . . .	26
Searching . . . . .	27
Setting a Search Range . . . . .	27
Search Hold Feature . . . . .	28
Data Skip . . . . .	28
Channel Skip . . . . .	29
Storing Search Frequencies . . . . .	29
SVC Scanning . . . . .	31
SVC Scan Lockout . . . . .	33
Programming with SVC Scan . . . . .	33
Trunk Tracking . . . . .	35
Types of Trunking Systems . . . . .	35
Setting the Squelch . . . . .	37
Programming Trunking Frequencies . . . . .	37

Searching a Trunked Bank . . . . .	39
ID Hold Mode . . . . .	41
ID Lockout . . . . .	42
Restore a Single ID . . . . .	42
Restore all IDs . . . . .	43
Searching Tips . . . . .	43
Channel Activity Indicators . . . . .	44
Scan Lists . . . . .	46
Deleting a Stored ID . . . . .	49
Fleet Map Programming . . . . .	50
Selecting Trunking Programming Mode . . . . .	50
Selecting a Preset Fleet Map . . . . .	51
Programming a Fleet Map . . . . .	52
Programming a Hybrid System . . . . .	53
Care and Maintenance . . . . .	54
General Use . . . . .	54
Location . . . . .	54
Cleaning . . . . .	54
Repairs . . . . .	55
Birdies . . . . .	55
Troubleshooting . . . . .	56
Specifications . . . . .	58
Appendix . . . . .	59
Preset Fleet Maps . . . . .	59
User Defined Fleet Maps . . . . .	61
One Year Limited Warranty . . . . .	64

---

---

# Introduction

---

---

The *BC 235XLT* is a brand new state-of-the-art radio with **TrunkTracking™** and automatic scanning capabilities. It can store frequencies such as police, fire/emergency, marine, air, amateur, and other communications into 10 banks of 30 channels each.

Use your new scanner to monitor:

- 800 MHz Trunked Public Safety Systems
- Police and Fire Departments (including rescue and paramedics)
- NOAA Weather Broadcasts
- Business/Industrial Radio
- Utilities
- Marine and amateur (ham radio) bands
- Air band

Frequency Range	Steps	Transmission
29.0-29.7 MHz	5 kHz	10 Meter Amateur Band
29.7-50.0 MHz	5 kHz	VHF Low Band
50.0-54.0 MHz	5 kHz	6 Meter Amateur Band
108-137 MHz	12.5 kHz	Aircraft Band
137-144 MHz	5 kHz	Military Land Mobile
144-148 MHz	5 kHz	2 Meter Amateur Band
148-174 MHz	5 kHz	VHF High Band
406-420 MHz	12.5 kHz	Federal Govt.
420-450 MHz	12.5 kHz	70cm Amateur Band
450-470 MHz	12.5 kHz	UHF Standard Band
470-512 MHz	12.5 kHz	UHF "T" Band
806-956 MHz	12.5 kHz	Public Service "800" Band

---

---

## 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.
- The screen displays used in this manual are representations of what might appear when you use your scanner.

---

---

# Terminology

---

---

## What is Scanning?

Unlike standard AM or FM radio stations, most two-way communications do not transmit continuously. The *BC 235XLT* scans programmed channels until it finds an active frequency.

Scanning stops on an active frequency and remains on that channel as long as the transmission continues. When the transmission ends, the scanning cycle resumes until another transmission is received.

## What is Searching?

The *BC 235XLT* can search each of its 12 bands to find active frequencies. This is different from scanning because you are searching for frequencies that have not been programmed into your scanner. You can choose between two speeds while searching. *Turbo Search*, a new feature for Uniden scanners, can search the **VHF FM** bands at up to 300 channels per second.

## What is Trunk Tracking?

Conventional scanning is a simple concept. You enter a radio frequency in your scanner's memory which is used by someone you want to monitor. For example, the police in your area may broadcast 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.

As the demand for public communications has increased, many public radio users don't have enough frequencies to meet their needs, and this has created a serious problem. Trunking radio systems solve this problem.

In a trunked radio system, which contains up to 29 different frequencies, radio users are divided into groups, often called talk groups, and these talk groups are assigned specific IDs. When someone in a talk group uses their radio, a brief burst of data is broadcast before each transmission. The trunking system computer uses this data to temporarily assign each radio in a talk group to an available frequency. If the group using a frequency stops broadcasting or pauses between replies for a few seconds, they are removed from the frequency so another talk group can use it.

Sharing of the available public service frequencies, or trunking, allows cities, counties, or other agencies to accommodate hundreds of users with relatively few frequencies. On the other hand, following a conversation on a trunked system is difficult, if not impossible, because when there's a short break during the conversation you're monitoring, it's possible that the talk group will be assigned to a completely different frequency in the trunked system. This type of scanning is difficult and frustrating.

***TrunkTracker™*** changes this! Not only does your new ***BC 235XLT*** 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're a new scanner enthusiast, you may 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 its terminology will make trunk tracking much easier. But if you're already a sophisticated scanner operator, you may want to go to *Trunk Tracking* on page 35 now.


---

---

## Feature Highlights

---

---

- **Trunk Tracking** – Follow 800 MHz trunked public safety and public service systems just as if conventional two-way communications were used.
- **300 Channels** – Program one frequency into each channel. You must have at least one channel programmed to use the Scan mode.
- **12 Bands, 10 Banks** – Includes 12 bands, with Aircraft and 800 MHz. 10 banks with 30 channels each are useful for storing similar frequencies to maintain faster scanning cycles or storing all the frequencies of a trunked system.
- **29 MHz-956 MHz** – Indicates the range of frequencies that can be searched within the bands of your scanner.  
*Note: The frequency coverage is not continuous and excludes the cellular band.*
- **10 Priority Channels** – You can assign one priority channel in each bank. Assigning a priority channel allows you to keep track of activity on your most important channel(s) while monitoring other channels for transmissions.
- **Preprogrammed Service (SVC) Search** – Allows you to toggle through preprogrammed police, fire/emergency, aircraft, marine, and weather frequencies.
- **Unique Data Skip** – Allows your scanner to skip unwanted data transmissions and reduces birdies.
- **Memory Backup** – If the battery completely discharges or if power is disconnected, the frequencies programmed in your scanner are retained in memory.
- **Manual Channel Access** – Go directly to any channel.
- **LCD Back Light** – An LCD light remains on for 15 seconds when  is pressed.
- **Battery Save** – In manual mode, your scanner automatically reduces its power requirements to extend the battery's charge.

---

---

## Where to Obtain More Information

---

---

Before using your scanner, you must program frequencies into available channels. The *Betty Bearcat Frequency Guide* lists typical frequencies used around the U.S.A. and Canada that you may program into your new scanner.

To order a copy of the frequency guide, call the enclosed Mr. Scanner (800) Number. A Uniden representative should be able to order you a copy of Betty Bearcat for your area and provide you with sample frequencies. You can also use the enclosed order form to purchase a local frequency list.

The Bearcat Radio Club, and other similar hobby clubs, have publications, information on computer bulletin boards, and even contests for the radio enthusiast. Also, your local library has more information.

### Information on the Internet

If you have access to the Internet, you may want to visit [www.trunktracker.com](http://www.trunktracker.com), which is under development, and may contain manufacturer information, frequency data, and ID information as it becomes available.

For more information about Uniden and our other products, visit [www.uniden.com](http://www.uniden.com).



---

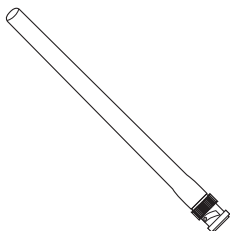
---

# Included with Your Scanner

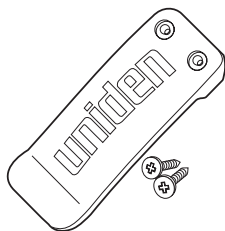
---

---

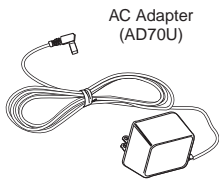
If any of these items are missing or damaged, immediately contact your place of purchase or Uniden Customer Service at: (800) 297-1023, 8:00 a.m. to 5:00 p.m., Central, Monday through Friday.



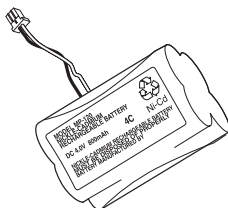
Antenna



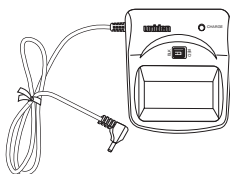
Belt Clip



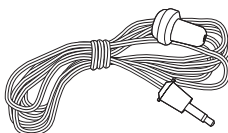
AC Adapter



2 Battery Packs



Charging Cradle



Earphone



Operating Guide



Frequency Guide  
and Other Printed  
Material

---

---

# Setup

---

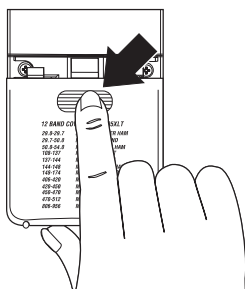
---

These are helpful guidelines when using your new scanner:

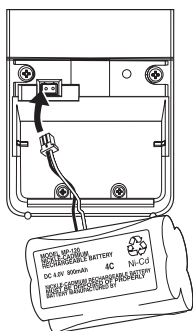
- If your scanner receives interference or electrical noise, move the scanner or its antenna away from the source.
- If you need to improve reception, use an optional antenna designed for multi-band coverage. (You can purchase this type of antenna at a local electronics store.)
- Use the included earphone or an optional stereo headset with proper impedance for private listening. Read the precautions on the inside front cover of this Guide.

## Installing the Batteries

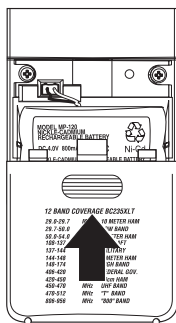
1. Open the cover.



2. Insert the battery pack.

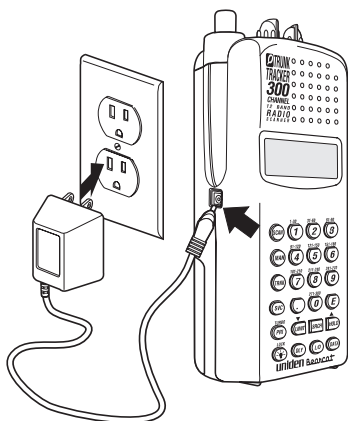


3. Replace cover and press down until it clicks into place.



## Charging the Battery Pack

Use the AC Adapter/Charger to power the **BC 235XLT** from an AC outlet.



Use only the supplied AC Adapter (**AD70U**) or one of the optional power cords (**WZ1015** or **WZ1017**).

You can use your scanner while the battery charges. To fully charge the battery, leave the AC Adapter/Charger connected for 14 – 16 hours.

**Note:** *Disconnect the AC Adapter/Charger from the unit when charging is complete.*

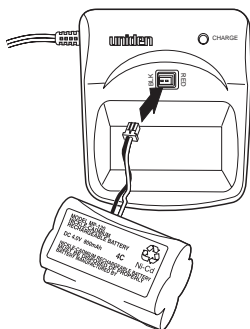
## CRX120 Battery Charger

The CRX120 charger allows you to charge the extra battery included with your scanner. You can also charge the battery inside your scanner at the same time. This way you can always have a charged battery ready to go.

### Charging the Spare Battery

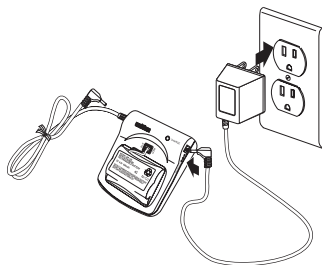
To fully charge the extra battery in the CRX120, you should leave the battery in the charger for 14 – 16 hours.

1. Plug the cable from the BP180 into the connector in the CRX120. Make sure the red wire matches **RED** and the black wire matches **BLK** on the charger.



2. Place the battery in the charger, and plug the AC Adapter into a wall outlet.

Then connect the adapter to the charger.

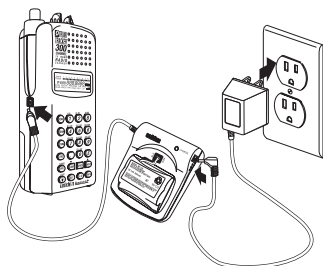


*The red LED on the charger will light, indicating that the battery is charging.*

## Connecting the Charger to Your Scanner

You can charge both batteries at the same time. To fully charge both batteries, you should leave the AC Adapter/Charger connected for 14 – 16 hours.

1. Follow steps 1 and 2 under *Charging the Spare Battery* on page 12, then connect the charging lead on the CRX120 to the charging jack on your scanner.

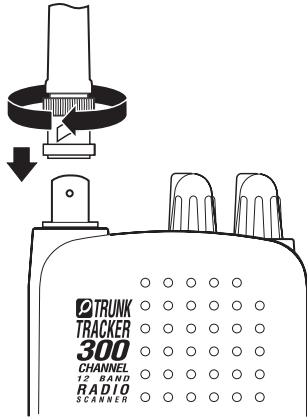


2. When charging is complete, disconnect the CRX120 from your scanner, then unplug the AC Adapter/Charger from the CRX120.

## Adapter Safety Feature

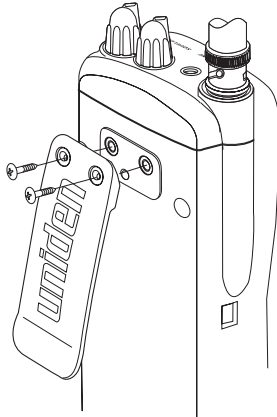
The AC Adapter included with this scanner may be equipped with a polarized line plug — a plug with one blade wider than the other. This plug will fit into a power outlet only one way. If you are unable to insert the adapter's plug into an outlet, try reversing the plug.

## Flexible Antenna



Attach the flexible antenna to the BNC connector.

## Belt Clip



Do not tighten the screws too tight.  
You can damage the case or clip.

---

---

# Basic Operation

---

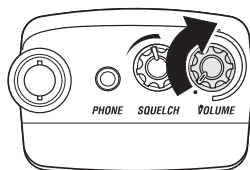
---

**Note:** You can fold out the Front Cover to see the Controls and Indicators while reading this Guide.

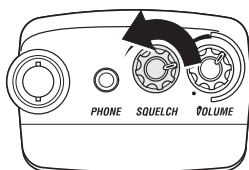
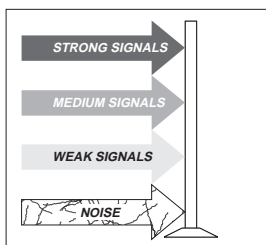
## Setting the Squelch

To set the squelch, you must be in the Manual mode, and you should not be receiving a signal on your scanner.

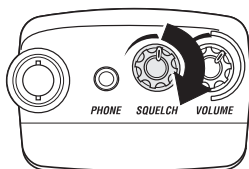
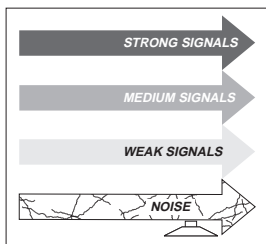
1. Press **MAN** until you do not hear a signal.
2. Adjust **VOLUME** to a comfortable listening level.



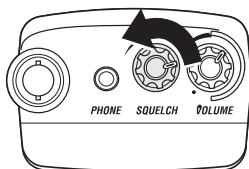
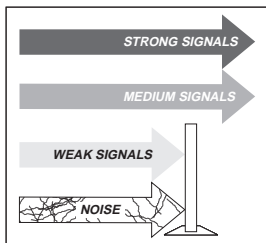
3. Think of the Squelch Control as a gate. Turn **SQUELCH** fully counter-clockwise. This raises the “Squelch Gate” so high that only very strong signals can get through.



- Turn **SQUELCH** fully clockwise until you hear a hiss. This lowers the “Squelch Gate” so that everything gets through—noise, weak signals, and strong signals.




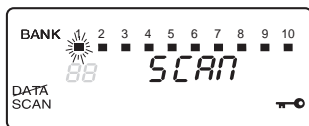
- Turn **SQUELCH** back counter-clockwise just until the hiss stops. Now the “Squelch Gate” allows only clearer signals through.




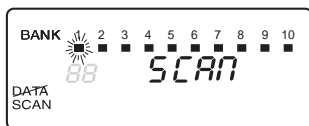
## Keylock

Key Lock prevents accidental key entries during conventional scanning or while in trunk tracking mode.

- To lock the keypad, press and hold **LOCK** until the  symbol appears in the lower right of the display.



- To unlock the keypad, press and hold **LOCK** until the  symbol in the lower right of the display turns off.



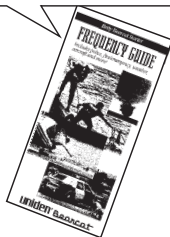


# Programming

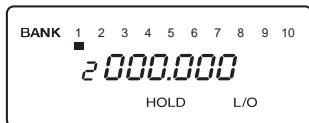
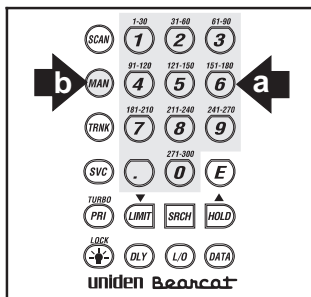
Before the *BC 235XLT* can begin conventional scanning, you must program a frequency into at least one channel. Repeat this procedure for each channel you want to program.

1. Select frequencies from your starter guide.

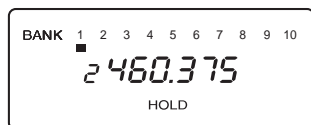
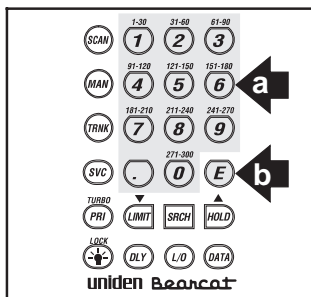
LOCATION	BASE	MOBILE
-----	----	-----
PAYETTE	460.150	465.150
PINEHURST	155.490	***.***
POCATELLO	154.725	***.***



2. Press **MAN**.
3. Select a channel.
  - a. Enter the channel number.
  - b. Then press **MAN**.

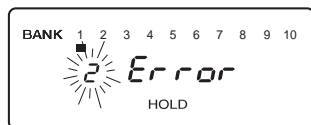


4. Enter the frequency.
- Enter the frequency number.
  - Then press **E**.



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

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

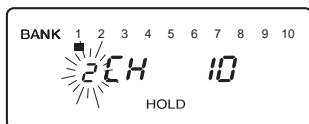



Press **E** and go back to Step 4.

*(See the Table on page 3 or the Band List on the back of the scanner).*


## Duplicate Frequency Alert

If you enter a frequency which is stored in another channel, you hear a beep and the other channel displays.






Press  to start again

—OR—

Press  again to store the frequency in both channels.

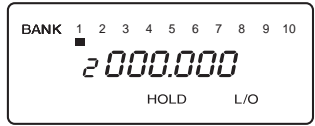
## Programming Tips

- Do not program a weather frequency into one of the channels, since weather channels transmit continuously.  
Use  to select the weather information band.
- 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 that 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  or  to go to the next higher channel.
- Record channels and frequencies in some convenient place in case the scanner memory is lost.

## Deleting a Stored Frequency

To delete a stored frequency:

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



*Channels with no frequencies are automatically locked out.*

# Scanning

1. After programming frequencies, simply press **SCAN** to begin scanning.

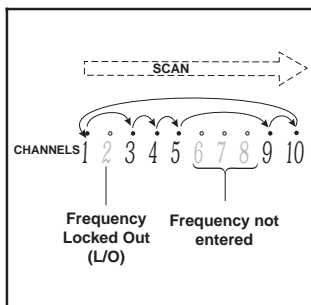


2. The indicator for each bank which will be scanned appears in the display, while the bank being currently monitored flashes. You can deselect banks from active scanning by pressing their number on your keypad. The indicator for each deselected bank turns off, and the bank's channels are not scanned.

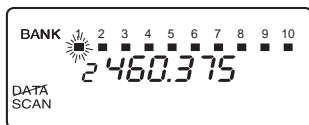
**Note:** One Bank must always be active. You cannot deactivate all ten banks at the same time. If you try to turn all the banks off, the first bank is automatically selected.

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

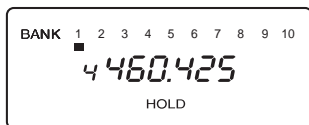
3. During normal scanning the scanner skips unprogrammed or locked out channels.



4. When a transmission is received, the Scanner stops on that channel. When the transmission ends, scanning resumes automatically.



- Press **MAN** to stop on a channel during scanning.



- Press **SCAN** to resume scanning.

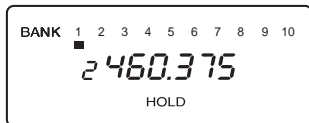
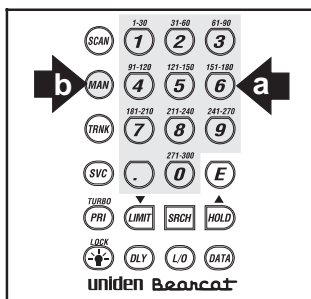


## Channel Lockout

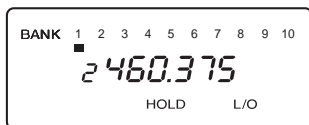
You can lockout any channel so it is not reviewed during normal scanning. You can restore the channel to scanning whenever you wish.

### Lockout in Manual Mode

- Press **MAN**.
- Select a channel.
  - Enter the channel number.
  - Then press **MAN** again.



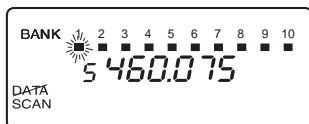
- Press **L/O** to lockout the channel.



## Lockout in Scanning Mode

If the scanner keeps stopping on a particular channel due to noise or too frequent transmissions, you may want to keep that channel from scanning.

1. Wait until the scanner stops at the channel.



2. Then press **L/O**.
3. The scanner immediately resumes scanning because the locked out channel is no longer in the scanning sequence.



## Lockout Tips

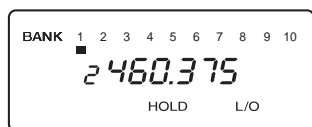
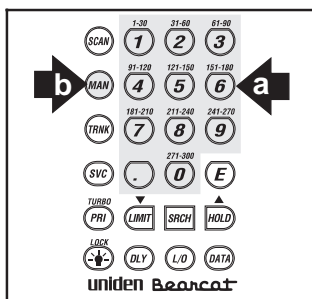
- To quickly lockout a series of channels, start with the lowest number channel.

For example, if you are locking out channels 4, 7, 8, 12, and 15, start with Channel 4. After selecting channel 4, press **L/O**. Then press **MAN** one or more times to step up to the next channel to be locked out.

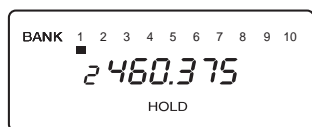
- Record the locked-out channels in some convenient place so you can restore them.

## Restore a Locked Out Channel

1. Press **(MAN)**.
2. Select a locked out channel.
  - a. Enter the channel number.
  - b. Then press **(MAN)** again.



3. Press **(L/O)** to unlock the channel.



## Restore All Locked-Out Channels

You can restore all locked-out channels in a bank only when a bank is selected for scan. If you have deselected a bank and you want to restore all of its locked-out channels using the steps below, you must press **(SCAN)** and then press the number of the bank on your keypad.

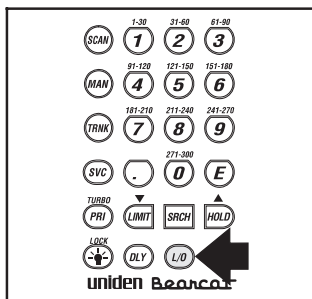
1. Press **(MAN)**.

**Note:** You must be in Manual mode before restoring all locked-out channels.



- Press and hold **(L/O)** for about two seconds.

*You will hear two beeps when all the channels have been restored.*

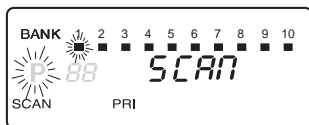


## Priority Scan

When Priority Scan is turned on, your scanner checks the priority channel every two seconds for activity. If a signal is present on the priority channel, your scanner monitors the channel until the transmission ends, then resumes normal scanning. You can designate one channel in each bank as a Priority Channel.

To activate Priority Scan (in either the Manual or Scan Mode):

- Press **(PRI)**.



**Note:** *If you have locked out the priority channel, this message appears when you select Priority mode.*

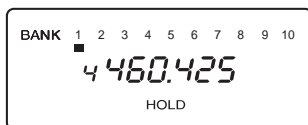
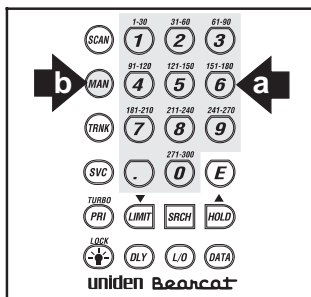
- Press **(PRI)** again at anytime to deactivate Priority Scan.



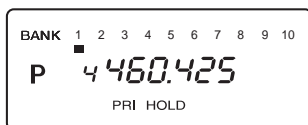
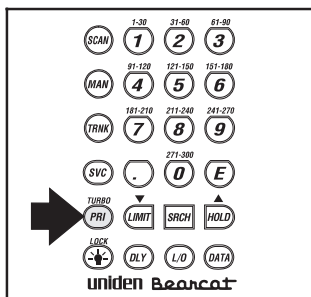
## Changing the Priority Channel

You cannot eliminate the Priority Channel, but you can change it to any of the 30 available channels in each bank.

1. Press **MAN**.
2. Select a new Priority Channel.
  - a. Enter the channel number.
  - b. Then press **MAN** again.



3. Press and hold **PRI** for two seconds to designate this channel as your new Priority Channel.



*Two beeps indicate that the Priority Channel is changed.*

---

---

# Searching

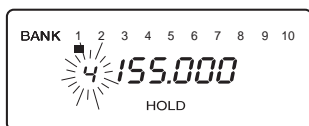
---

---

## Setting a Search Range

The *BC 235XLT* 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 **MAN** to stop scanning.
2. Using your keypad, enter the lowest frequency of your search range. For example, enter 155.000 MHz.



3. Press **LIMIT**.
4. Using your keypad, enter the highest frequency of your search range. For example, enter 157.000 MHz.

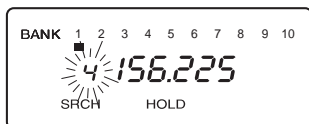


5. Press **LIMIT**.
6. Press **SRCH**.

**Note:** When Search mode is active, press **PRI** to activate **TURBO** search to increase the search speed to 300 steps per second in those bands which have 5 KHz steps. **SRCH** flashes when **TURBO** search is active. Press **PRI** again to cancel **TURBO** search.

## Search Hold Feature

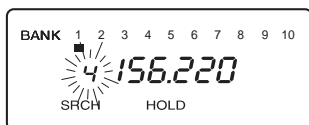
1. Press **HOLD** at anytime to stop the search.



2. Press **▲** to move to the next higher frequency

—OR—

3. Press **▼** to move down to the previous frequency.



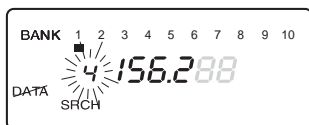
4. Press **SRCH** to resume searching.

## Data Skip

A scanner will normally stop on any transmission it receives. This means the **BC 235XLT** will stop on data signals and unmodulated transmissions. You can automatically skip many of these types of transmissions during searches.

1. Press **DATA** to activate the data skip feature.

*The **DATA** indicator appears on the display.*



2. Press **DATA** again to cancel the data skip feature.

*The **DATA** indicator disappears from the display.*



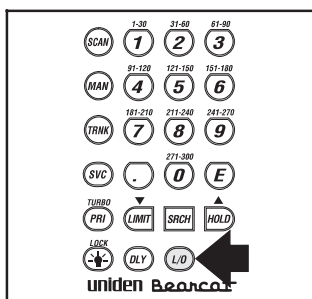
When data skip is active, your scanner may pause momentarily on an unwanted signal but will resume searching in 2 or 3 seconds. Data Skip does not function when the **AIR** Band is selected.

## 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. The 21st skip frequency entered causes the first skipped frequency to unlock.

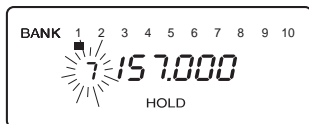
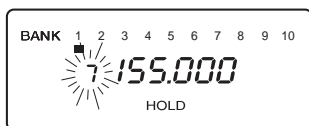


## Storing Search Frequencies

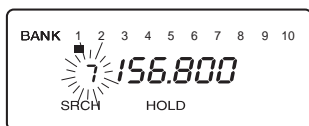
You can quickly store any frequency you find during Search.

**Caution:** You must select the channel in which you will store the frequency before entering the search mode. Otherwise, you may erase a stored frequency that you want to keep.

1. Press **MAN**.
2. Using your keypad, enter the lowest frequency of your search range. For example, enter 155.000 MHz.
3. Press **LIMIT**.
4. Using your keypad, enter the highest frequency of your search range. For example, enter 157.000 MHz.

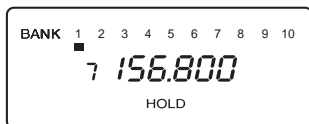


5. Press **LIMIT**.
6. Press **SRCH**.
7. Press **HOLD** when the scanner stops at the frequency you want.



8. Press **E** to store the frequency in the channel you selected.

**Note:** After this step you are in manual mode.



9. To store another frequency, select another channel for the new frequency.
10. Repeat steps 6 through 8 for all the Search frequencies you want to store.

---

---

## SVC Scanning

---

---

The Service (SVC) Scan feature allows you to toggle through five bands preprogrammed for police, fire/emergency, aircraft, marine, and weather. The frequencies selected for these bands are the most commonly used around the U.S.

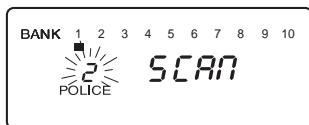
1. Press (SVC).

*POLICE* appears beneath the blinking channel number, and a frequency displays.

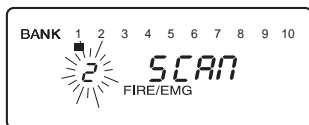


2. After a two second delay, scanning begins.

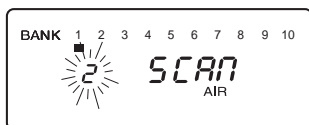
*Press (SCAN) to start scanning immediately or to continue scanning if you want to skip a frequency.*



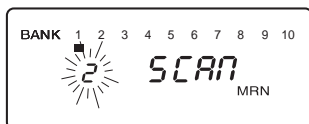
3. Press (SVC) to scan the FIRE/EMG bank.



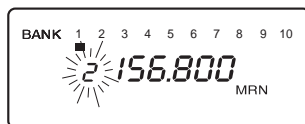
4. Press (SVC) to scan the AIR bank.



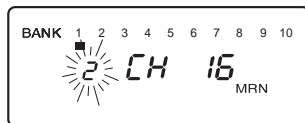
5. Press (SVC) to scan the MRN bank.



When an active channel is displayed, the scanner will alternate between the frequency and the Marine channel number. For example, 156.800 alternates with CH 16.

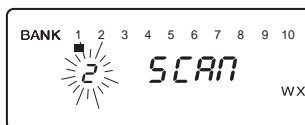


AND



6. Press **(SVC)** to scan the WX band.

**Note:** It's possible to receive more than one weather broadcast in your area. If the broadcast sounds weak or distant, press **(SCAN)** again to look for a closer station.



7. To exit SVC Scan mode, press **(MAN)**.

During search of one of the preprogrammed service bands, press **(HOLD)** to stop the scan on a frequency. **HOLD** appears in the display. Press **▼** or **▲** to move up or down one programmed frequency, or press **(SCAN)** to resume scanning.

**Note:** If you want to remain on a channel until a responding transmission is received, press **(DLY)** to activate the two second delay feature.

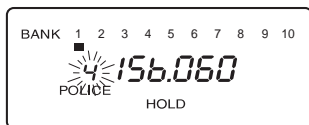


## SVC Scan Lockout

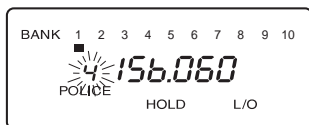
Follow these steps to lockout frequencies during Service scanning:

**Note:** *You cannot lockout weather frequencies.*

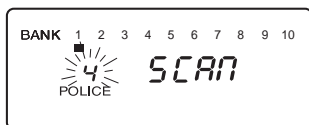
1. Press **HOLD** to stop the Service Scan.



2. Press **L/O**.



3. Press **SCAN** to resume scanning.



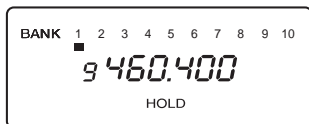
**Note:** *You can lockout up to 20 frequencies in SVC Scan mode. The 21st locked out frequency entered causes the first locked out frequency to unlock.*

## Programming with SVC Scan

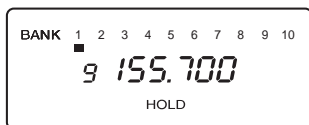
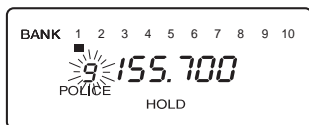
Follow these steps to program frequencies into a channel during Service scanning:

1. Select a channel you want to program.

**Note:** *If a frequency is already stored in the channel you select it will be erased when you save the new frequency.*



2. Press **(SVC)** to select Service Scan mode. Repeat until you select the service mode you want.
3. Press **(SCAN)** to begin scanning.
4. When SVC Scan stops on a frequency you want, press **(HOLD)**.
5. Press **(E)** to store the frequency in the channel you selected.



---

---

# Trunk Tracking

---

---

Your *BC 235XLT* is designed to track Motorola Type I, Type II, Type III, Hybrid, SMARTNET™, and PRIVACY PLUS™ analog trunking systems\*, which are extensively used in 800 MHz communication systems. When tracking these types of systems, you may 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 cannot track an 800 MHz trunked system and scan frequencies in conventional mode 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 *BC 235XLT* scanner.
- If you have internet access, you can visit **[www.trunktracker.com](http://www.trunktracker.com)** for current news and information about Trunk Tracking Scanning.

\* *Motorola, SMARTNET, and PRIVACY PLUS are trademarks of Motorola Inc.*

## 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 which 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 which is 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's 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 may 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.

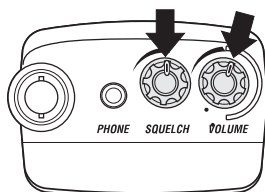
Even though there are many Type II systems, Type I systems are still in use. There are also Hybrid systems which are a combination of both Type I and Type II. Your scanner defaults to monitor Type II systems, but it's possible to select a Preprogrammed Fleet Map or create a Custom Fleet Map for your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

## Setting the Squelch

Since Squelch is automatically adjusted in trunking mode, it isn't necessary to manually adjust the squelch control while trunk tracking. 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.

Set **SQUELCH** in this position before selecting a trunking bank.

**Note:** You can change this recommended setting, if necessary, to provide better performance in your area.



## Programming Trunking Frequencies

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

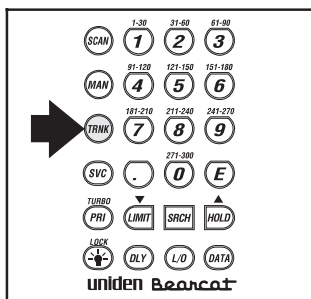
- You can only program one trunking system in each bank of your scanner.
- Trunking frequencies must be entered while in the Trunking Programming mode.
- If you're in the Trunking Programming mode, you cannot select channels in other banks.

For example, if you are programming Bank 4, you can only select channels 91-120 with the ▼ or ▲ keys.

The first step in tracking a trunked system is storing the frequencies in one of the 10 available banks in your scanner.

1. Press and hold **TRUNK**.

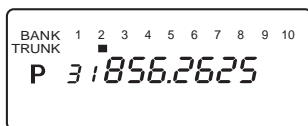
*You will hear two beeps, and **BANK** and **TRUNK** will begin to flash in the display.*



2. Choose the bank you want to trunk track. For example, press **2**.

3. Use the keypad to enter a frequency for the trunked system.

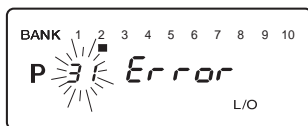
For example, enter *856.2625*, or enter a frequency of the system you're going to track.



Then press **E**.

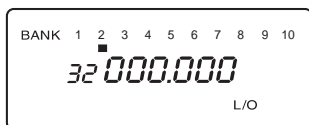
**Note:** To clear a mistake while entering a frequency, press **.** twice, and start over.

*If you enter a non-800 MHz trunked repeater output frequency, an error message displays.*



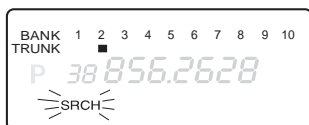
Press **.** and go back to Step 3.

4. Press either **MAN** or **▲** to select the next channel in the bank.



5. Repeat steps 3 and 4 until all frequencies have been entered.

6. Press **SRCH** to begin searching the bank you've programmed.



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

## Searching a Trunked Bank


Before you Search a Trunked Bank with your scanner, consider the following:

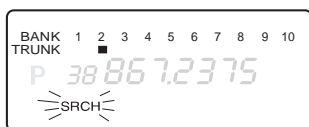
- You can only trunk track one bank at a time.
- Use **TRNK** to toggle between the conventional and the trunk tracking modes.
- Press **DATA** while in the Trunk Tracking mode to review which bank is currently in use. The appropriate bank icon will flash at the top of the display for 5 seconds.

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 .

*The bank indicators begin to flash.*


2. Use the keypad to select the trunked bank you want. For example press .



**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 ID's, which represent different service groups, begin to display.*



3. Press  again to return to conventional scanning mode.

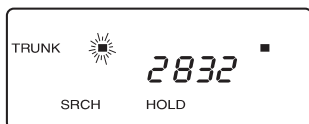
While searching, you won't know exactly who the ID's are assigned to until you listen awhile or until ID lists are available in frequency guides or on internet sites. However, it usually only takes a few minutes to figure out police, fire, and emergency medical personnel. Other IDs may take some time,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



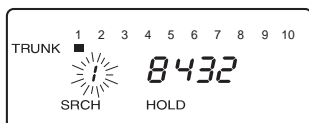
## ID Hold Mode

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

1. Press **HOLD** while in Search mode.

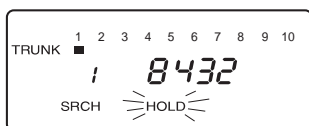


2. Use the keypad to enter the ID you want.



3. Press **HOLD** again.

***HOLD** flashes in the display.*



4. Press **SRCH** to return to Search mode.

**Note:** *The ID Hold mode works in Scan List mode, and the steps are the same; however, **SRCH** doesn't appear in the display.*

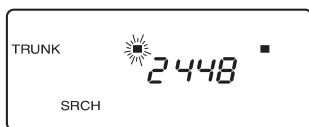
## ID Lockout

Like conventional scanning, it's possible to lockout 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 may want to lock out these unintelligible broadcasts.

To lockout an ID, press **(L/O)** when the ID displays.



*The ID is locked out, and the next active ID displays. You can lockout up to 100 IDs.*



**Note:** *If you lockout an ID in Search mode, it is also locked out in Scan List mode. Conversely, if you lockout an ID while in Scan List mode, it is locked out in Search mode. For information about Scan Lists see page 46.*

## Restore a Single ID

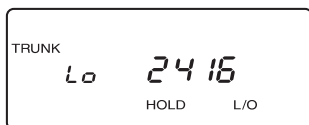
To unlock a single ID, follow these steps:

1. Press and hold **(L/O)** until you hear two short beeps.
2. Use **▼** or **▲** to select the ID you want to unlock.



3. Press **(L/O)**.

*The ID is unlocked and the next locked ID displays.*

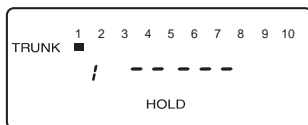


4. Press **[SRCH]** to return to the Search mode.

## Restore all IDs

To unlock all locked out IDs at once, follow these steps:

1. Press and hold **(L/O)** until you hear two short beeps.
2. Press **(E)** to unlock all the IDs at once.



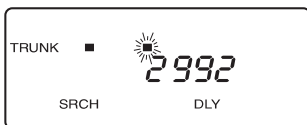
**Note:** If you unlock all the IDs, then the Scan List Memory mode displays. Press **(SCAN)** to scan the IDs stored in your Scan Lists or press **(SRCH)** to return to the Search mode. For information about Scan Lists see page 46.

3. Press **(SRCH)** to return to the Search mode.

## Searching Tips

### ID Delay Mode

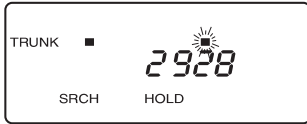
- Use the **(DLY)** key to select the Delay mode if it's not active. This mode holds an ID for 5 seconds while you wait for a reply. Other groups may use the system, but your scanner will only look for the ID in the display.



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

## Hold Mode

- Press **HOLD** 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 press and hold **SRCH** until you hear two short beeps, you will select the ID Monitor mode. **SRCH** begins flashing in the display, and all active talk group IDs begin to display 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.



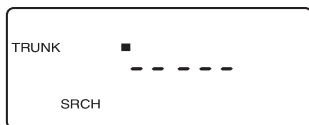
**Note:** Locked out IDs display during ID Monitor mode with the L/O icon turned on.

## Channel Activity Indicators

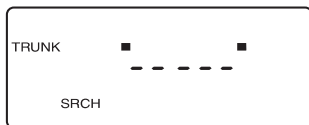
The *BC 235XLT* has 20 Channel Activity Indicators to visually display a trunked system's activity when you select delay, hold, scan etc. You'll always know which frequencies are in use and how much communication traffic is occurring.

Each frequency you program in a trunking bank corresponds to an activity indicator at the top of your scanner's display. The way in which the Activity Indicators display provide you with information about the system you're tracking.

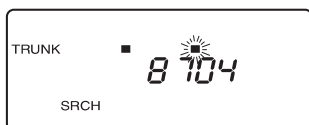
- The indicator which remains on, even if when there is no traffic, represents the frequency being used as the data channel.



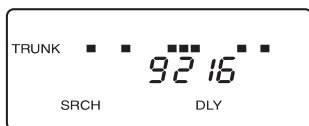
- If an indicator turns on and you don't hear a conversation, then the channel is probably being used for a telephone interconnect call or a private call. These calls are not monitored by your scanner.



- The indicator which flashes when an ID displays represents the frequency being used by the talk group.



- If you're holding on an ID which isn't active, the activity indicators will turn on and off as other groups use the system.




**Note:** If more than 20 channels are stored in a bank, then the indicators represent multiple channels. For example, if 29 channels are programmed, the first 9 activity indicators each represent two channels.

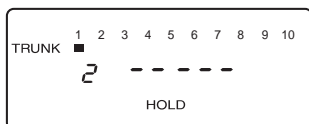
## Scan Lists

Each bank of your *BC 235XLT* can be a trunk tracking bank or it can be a conventional scanning bank. When you designate a bank as a trunking bank, your scanner sets up 5 Scan Lists, 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!).

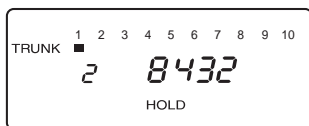
Scan Lists help you organize the trunking system users into categories. For example, you might use List 1 for police IDs, List 2 for fire department IDs, List 3 for emergency medical service IDs, etc. Once IDs are stored in lists, you can scan them like you scan conventional frequencies. You can program your scan lists either manually or during trunking search mode.

### Programming Scan Lists Manually

1. Select the Trunking bank you want.
2. After the scanner begins trunk tracking, press .
3. Use ▲ and ▼ to select the Scan List location you want to program. For example, select the second memory location in the first scan list.

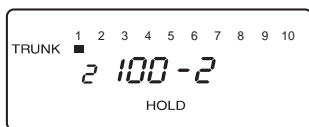


4. Enter the Type II ID you want to store, and press **(E)**.



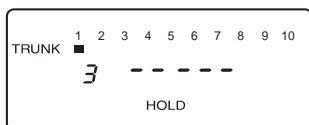
—or—

- To enter a Type I ID:
- Enter the fleet number.
  - Press **(.)**.
  - Enter the subfleet number, and press **(E)**.

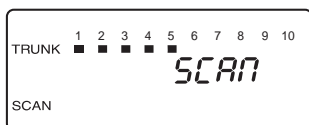


**Note:** To clear a mistake while entering an ID, press **(.)** twice, and start over.

5. Press **(MAN)** or **(▲)** to select the next Scan List location.

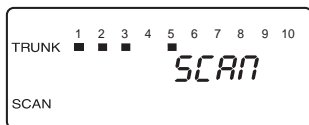


6. Press **(SCAN)** to begin scanning the lists you have programmed.



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

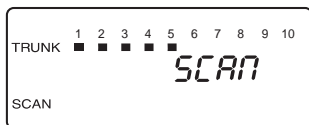
7. To remove a Scan List from active scanning, press the number of the Scan List on your keypad.



*The Scan List indicator turns off, and the IDs in that list are not be scanned.*

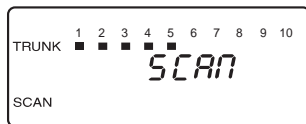
**Note:** One Scan List must always be active. If you try and deactivate all the Scan Lists, Scan List 1 will automatically be active.

- To restore a Scan List to active scanning, press its number again.

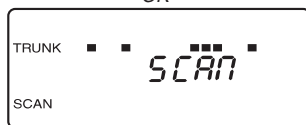


- Press **SRCH** to return to Trunk Tracking Search mode.

*To alternate your display between the trunking repeater indicators and the Scan List indicators, press **PRI**.*



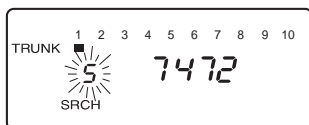
OR



## Programming Scan Lists During Search

To select a Scan List location and store an ID during Search mode, follow these steps:

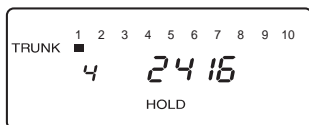
- When your scanner stops on an ID you want to store, press **PRI**.
- Use **▲** or **▼** to select the Scan List memory location you want, then press **E**.
- Press **SRCH** to return to Trunk Tracking Search mode.





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.

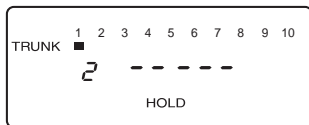


2. Press **[SRCH]** to return to Trunk Tracking Search mode.

## Deleting a Stored ID

To delete a stored ID:

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



---

---

# Fleet Map Programming

---

---

If you have programmed a trunk tracking bank and select **SACH**, you will see user IDs display on your screen. Since the *BC 235XLT* defaults to Type II systems, all the IDs will appear as numbers. However, if you notice a 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. See *Types of Trunking Systems* on page 35.

You may also notice that you're missing responses when you hold on an active ID. Unlike Type II systems, Type I/II 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/II 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.

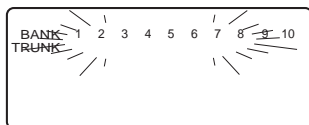
## Selecting Trunking Programming Mode

To change the system type which your scanner monitors, you must be in the Trunking Programming mode. To select this mode, follow these steps:

### If you are in Conventional Scan mode:

1. Press and hold **TRUNK**.

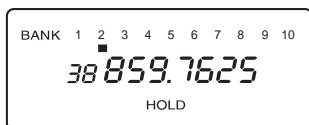
*You'll hear two short beeps and **BANK** and **TRUNK** will begin to flash in the display.*



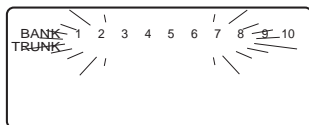
2. Select the trunking bank you want to program.

## If you are in Trunking Scan mode:

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



2. Press and hold **TRNK** until you hear two short beeps.

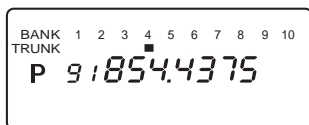


*You'll hear two short beeps and **BANK** and **TRUNK** will begin to flash in the display.*

3. Select the trunking bank you want to program.

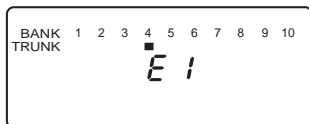
## Selecting a Preset Fleet Map

1. Select the Trunking Programming mode and the bank you want to change.



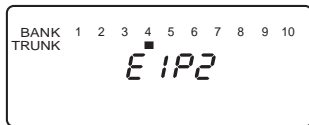
2. Press **DATA**.

3. Use **▲** or **▼** to choose **E1**.



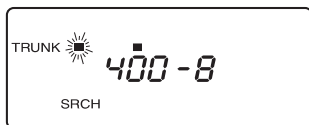
4. Press **DATA**.

5. Use **▲** or **▼** to choose the 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 map you chose.*



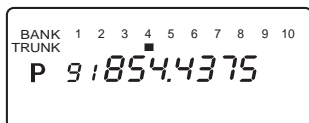
**Note:** You will now begin to see Type I Fleet-Subfleet IDs. For example, 100-12, 100-9, 000-12, 400-8, etc. See User Defined Fleet Maps in the Appendix for more information about Type I IDs.

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

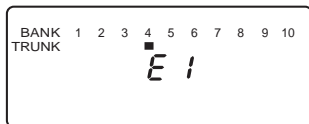
## Programming a Fleet Map

You may 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.

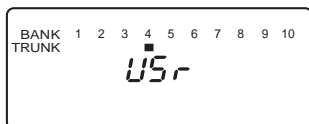
1. Select the Trunking Programming mode and the bank you want to change.



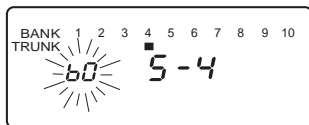
2. Press **(DATA)**.
3. Use **▲** or **▼** to choose **E1**.



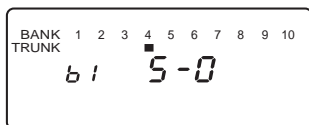
4. Press **(DATA)**.
5. Use **▲** or **▼** to choose **USr**.



- Press **DATA**.
- Use **▲** or **▼** to select the size code for the first block.



- Press **E**.  
*The next available block displays.*



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

*For specifics about each size code, see Fleet Map Size Codes in the Appendix.*

- Press **SRCH**.  
*The scanner exits the Trunking Programming mode, acquires the data channel, and begins searching using the map you've programmed.*



## 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. See page 61 for more information.

---

---

# Care and Maintenance

---

---

## General Use

- Turn the scanner off before disconnecting the power or replacing the batteries.
- 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, may 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 may be receiving a birdie. Birdies are internally generated signals inherent in the electronics of the receiver.

Press  to lockout the channel, and then press  to resume scanning.

---


---

# Troubleshooting

---

---

If your *BC 235XLT* is not performing properly, try the following steps.

Problem	Suggestion
Scanner won't work.	<ol style="list-style-type: none"><li>1. Check the connections at both ends of the AC Adapter.</li><li>2. Turn on the wall switch of your room. You could be using an outlet controlled by the wall switch.</li><li>3. Move the AC Adapter to another wall outlet or replace the battery pack.</li></ol>
Improper reception.	<ol style="list-style-type: none"><li>1. Check the antenna connection or move and reposition the antenna.</li><li>2. Move the scanner.</li><li>3. You may be in a remote area which could require an optional multi-band antenna. Check with your dealer or local electronics store.</li></ol>
Scan won't stop.	<ol style="list-style-type: none"><li>1. Adjust squelch threshold - refer to page 15, Setting the Squelch.</li><li>2. Check the antenna connection.</li><li>3. Check to see if many of the channels are locked out. If so, the scanner has less chance of finding an active channel.</li><li>4. Review each channel's frequency to see if it is still stored in memory and is correct.</li><li>5. It's possible that none of the programmed frequencies are currently active.</li></ol>
Scan won't start.	<ol style="list-style-type: none"><li>1. Press the  key again.</li><li>2. Adjust the <b>SQUELCH</b> control.</li><li>3. Check to see if all channels are locked out.</li></ol>
Weather Scan won't work.	<ol style="list-style-type: none"><li>1. Adjust squelch threshold - refer to page 15, Setting the Squelch.</li><li>2. Check the antenna.</li></ol>



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

Problem	Suggestion
Scanner won't track the trunked system.	<ol style="list-style-type: none"><li>1. May not be a system which can be tracked by your scanner.</li><li>2. Missing the data frequency.</li><li>3. Change to a Type 1 Scanner setup. Review Fleet Map Programming on page 50.</li></ol>
Scanner won't stop during Scan List mode.	<ol style="list-style-type: none"><li>1. No IDs have been programmed.</li><li>2. The IDs you have stored are not active.</li></ol>
Scanner will not acquire data channel.	<ol style="list-style-type: none"><li>1. Adjust the squelch for trunking mode. See page 37.</li><li>2. Missing the frequency used for the data channel. Check your frequency list.</li></ol>
Missing replies to conversations.	<ol style="list-style-type: none"><li>1. Change to a Type 1 Scanner setup. Review Fleet Map Programming on page 50.</li><li>2. Try another Preset Fleet Map or Program your own Fleet Map.</li><li>3. Check to see that all of the systems frequencies have been entered.</li></ol>
Channel Activity Indicators are flashing but no sound is heard.	<ol style="list-style-type: none"><li>1. May be a private or telephone interconnect call, which are intentionally blocked by your scanner.</li><li>2. The ID in your display is not active.</li></ol>

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 **[www.uniden.com](http://www.uniden.com)** or **[www.trunktracker.com](http://www.trunktracker.com)** for additional information.

---

---

# Specifications

---

---

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

Channels:	300
Banks	10 (30 channels each)
Service Bands:	5—preprogrammed search bands (including the NOAA Weather Service band)
Frequency Range:	29.0–29.7 MHz 10 Meter Amateur Band 29.7–50.0 MHz VHF Low Band 50.0–54.0 MHz 6 Meter Amateur Band 137–144 MHz Military Land Mobile 144–148 MHz 2 Meter Amateur Band 148–174 MHz VHF High Band Above bands in 5 kHz steps  108–137 MHz Aircraft Band 406–420 MHz Federal Government 420–450 MHz 70 cm Amateur Band 450–470 MHz UHF Standard Band 470–512 MHz UHF “T” Band 806–956 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:	100 steps per second (Normal Search) 300 steps per second (Turbo Search)
Scan Delay:	2 seconds
Audio Output:	180 mW nominal into 8Ω internal speaker 30 mW nominal into 32Ω stereo headphone 8 mW nominal into 64Ω earphone
Power Requirements:	4.8 VDC 800mAh (internal battery or AD70U AC Adapter)
Antenna:	Rubber antenna (included)
External Jacks:	External earphone, DC 12V power jack
Size:	2 1/2 in. (W) x 1 3/4 in. (D) x 6 1/2 in. (H)
Weight:	12.6 oz.

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

---

---

# Appendix

---

---

## Preset Fleet Maps

Preset Map E1P1

Block	Size Code
0	S11
1	S11
2	S11
3	S11
4	S11
5	S11
6	S11
7	S11

Preset Map E1P2

Block	Size Code
0	S4
1	S4
2	S4
3	S4
4	S4
5	S4
6	S4
7	S4

Preset Map E1P3

Block	Size Code
0	S4
1	S4
2	S4
3	S4
4	S4
5	S4
6	S12
7	--

Preset Map E1P4

Block	Size Code
0	S12
1	--
2	S4
3	S4
4	S4
5	S4
6	S4
7	S4

Preset Map E1P5

Block	Size Code
0	S4
1	S4
2	S12
3	--
4	S4
5	S4
6	S4
7	S4

Preset Map E1P6

Block	Size Code
0	S3
1	S10
2	S4
3	S4
4	S12
5	--
6	S12
7	--

Preset Map E1P7

Block	Size Code
0	S10
1	S10
2	S11
3	S4
4	S4
5	S4
6	S4
7	S4

Preset Map E1P8

Block	Size Code
0	S1
1	S1
2	S2
3	S2
4	S3
5	S3
6	S4
7	S4

**Preset Map E1P9**

Block	Size Code
0	S4
1	S4
2	S0
3	S0
4	S0
5	S0
6	S0
7	S0

**Preset Map E1P10**

Block	Size Code
0	S0
1	S0
2	S0
3	S0
4	S0
5	S0
6	S4
7	S4

**Preset Map E1P11**

Block	Size Code
0	S4
1	S0
2	S0
3	S0
4	S0
5	S0
6	S0
7	S0

**Preset Map E1P12**

Block	Size Code
0	S0
1	S0
2	S0
3	S0
4	S0
5	S0
6	S0
7	S4

**Preset Map E1P13**

Block	Size Code
0	S3
1	S3
2	S11
3	S4
4	S4
5	S0
6	S0
7	S0

**Preset Map E1P14**

Block	Size Code
0	S4
1	S3
2	S10
3	S4
4	S4
5	S4
6	S12
7	--

**Preset Map E1P15**

Block	Size Code
0	S4
1	S4
2	S4
3	S11
4	S11
5	S0
6	S12
7	--

**Preset Map E1P16**

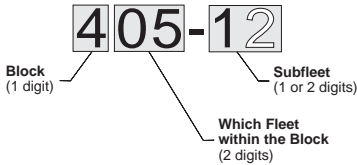
Block	Size Code
0	S3
1	S10
2	S10
3	S11
4	S0
5	S0
6	S12
7	--

# 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're 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 displays, 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 may want many subfleets with only a few radios each, while another organization may 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.

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 **SACH**. 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.

## Fleet Map Size Codes

Size	Fleets	Subfleets	IDs	Blocks Used
S-0	<i>Reserves block for Type II IDs</i>			
S-1	128	4	16	1
S-2	16	8	64	1
S-3	8	8	128	1
S-4	1	16	512	1
S-5	64	4	32	1
S-6	32	8	32	1
S-7	32	4	64	1
S-8	16	4	128	1
S-9	8	4	256	1
S-10	4	8	256	1
S-11	2	16	256	1
S-12	1	16	1024	2
S-13	1	16	2048	4
S-14	1	16	4096	8

## 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.





---

---

## Precautions

---

---

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

---

### **EARPHONE WARNING!**

Be sure to use only the recommended optional monaural earphone (EP009). You may also use a 32 $\Omega$  stereo headset. Use of an incorrect earphone or stereo headset may 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 (32 $\Omega$ ). 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 may 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.

---

### **GENERAL BATTERY WARNING!**

**Do not** short-circuit any Battery.

**Do not** discard Batteries in a fire; they may explode.

---

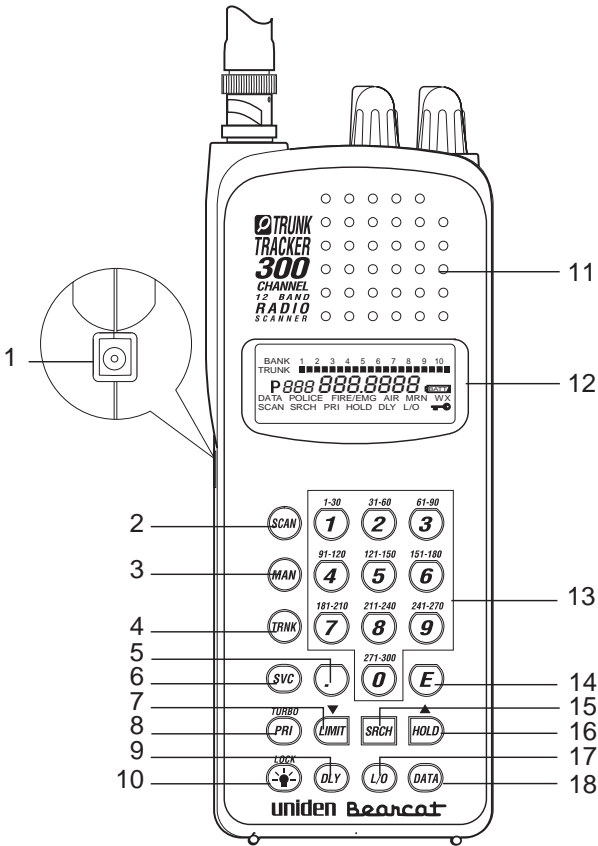
### **NICKEL-CADMIUM BATTERY WARNING!**

When using Nickel-Cadmium Batteries with this product, take note of the following warnings: Cadmium is a chemical known to the State of California to cause cancer.

**Do not** charge Nickel-Cadmium Batteries with any charger other than the one supplied with this product. Using another charger may damage the Batteries, or cause them to explode.

**Nickel-Cadmium Batteries must be disposed of properly.** Residents of Minnesota should contact 1-800-225-PRBA for information concerning reclamation and disposal of Nickel-Cadmium Batteries. Residents outside of Minnesota should contact their local authorities for information concerning reclamation and disposal of Nickel-Cadmium Batteries.

# Front View



- |                                 |                           |
|---------------------------------|---------------------------|
| 1. DC Power Jack                | 10. Light  / Lock Key     |
| 2. Scan Key                     | 11. Speaker               |
| 3. Manual Key                   | 12. Display               |
| 4. Trunking Key                 | 13. Keypad                |
| 5. Decimal Key                  | 14. Enter Key             |
| 6. Service Key                  | 15. Search Key            |
| 7. Limit Key  /<br>Down Key     | 16. Hold Key  /<br>Up Key |
| 8. Priority Key  /<br>Turbo Key | 17. Lockout Key           |
| 9. Delay Key                    | 18. Data Key              |

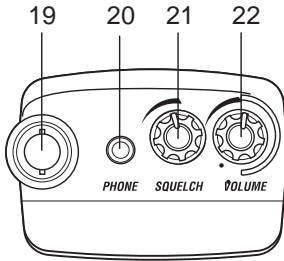
---

---

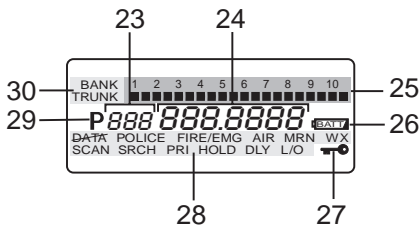
# Top View and Display

---

---



- 19. Antenna Connector
- 20. Earphone Jack
- 21. Squelch Control
- 22. On/Off Volume Control



- 23. Channel Display
- 24. Frequency Display
- 25. Bank/Activity Indicators
- 26. Battery Low Indicator
- 27. Keypad Lockout Indicator
- 28. Mode Indicators
- 29. Priority Channel Indicator
- 30. Bank/Trunk Indicators

---

---

# 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 may not apply to you.

**LEGAL REMEDIES:** This warranty gives you specific legal rights, and you may 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:

RE31,523 4,057,760 4,092,594 4,100,497 4,114,103

4,156,193 4,157,505 4,179,662 4,219,821 4,270,217

4,398,304 4,409,688 4,455,679 4,461,036 4,521,915

4,597,104 4,627,100 4,841,302 4,888,815 4,932,074

4,947,456 5,014,348 5,199,109 5,408,692 5,428,826

5,438,688 5,448,256 5,465,402 5,471,660 5,483,684

5,548,832 5,551,071

and other patents pending.

**uniden**®  

---

**Beancat**®

©1997 Uniden America Corporation. All rights reserved.  
Printed in the Philippines

## Free Manuals Download Website

<http://myh66.com>

<http://usermanuals.us>

<http://www.somanuals.com>

<http://www.4manuals.cc>

<http://www.manual-lib.com>

<http://www.404manual.com>

<http://www.luxmanual.com>

<http://aubethermostatmanual.com>

Golf course search by state

<http://golfingnear.com>

Email search by domain

<http://emailbydomain.com>

Auto manuals search

<http://auto.somanuals.com>

TV manuals search

<http://tv.somanuals.com>