

# Uniden®



## ***BC125AT*** Owners Manual

## **PRECAUTIONS**

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

### ***EARPHONE WARNING!***

Be sure to use only a monaural earphone with this scanner. You can also use an optional stereo headset. Use of an incorrect earphone or mono 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 headset. 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.

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# THE FCC WANTS YOU TO KNOW

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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 wire-line (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.

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.

## **INTRODUCTION**

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Thank you for purchasing a Uniden BC125AT Handheld Scanner. The scanner is versatile, compact, and easy to use. In addition to its standard scanning features, your scanner also includes Close Call™ RF capture technology designed to help you detect and identify strong local radio signals in your area. You can program up to 500 frequencies into the scanner's memory either manually or using optional computer software. The scanner lets you scan transmissions and is preprogrammed with service banks for your convenience. You can quickly search those frequencies most commonly used by police and other agencies, without tedious and complicated programming. The scanner gives you direct access to over 40,000 exciting frequencies. Use your scanner to monitor:

- Police
- Fire/Emergency
- HAM Radio
- Marine



- Railroad
- Civil Air
- Military Air
- CB Radio
- FRS/GMRS/MURS
- Racing

## FEATURE HIGHLIGHTS

**10 Channel Storage Banks** - You can store up to 50 frequencies into each bank for a total of 500 frequencies so you can more easily identify calls.

**Close Call™ RF Capture Technology** - you can set the scanner so it detects and provides information about nearby radio transmissions

**Close Call Do-Not-Disturb** - checks for Close Call activity in between channel reception so active channels are not interrupted.

**Close Call Temporary Store** - temporarily stores and scans the last 10 Close Call hits in the Close Call Hits bank.

**PC Programming** - you can download information into the scanner and upload to the scanner via your personal computer.

**CTCSS and DCS Squelch Modes** - rapid search for CTCSS/DCS tones/codes used during a transmission. You can identify up to 50 CTCSS tones and 104 DCS codes.

**Direct Access** - lets you directly access any channel.

**Lock-Out Function** - lets you set your scanner to skip over specified channels or frequencies when scanning or searching.

**Temporary Lockout** - makes it easy to temporarily lock out any channel or frequency. The lockout is cleared when you turn power off, then back on so you don't have to remember to unlock the channels or frequencies later.

**Triple-Conversion Circuitry** - virtually eliminates any interference from IF (intermediate frequency) images, so you hear only the selected frequency.

**Text Tagging** - you can name each channel, using up to 16 characters per name.

**Service Banks** - frequencies are preset in 10 separate Police, Fire/Emergency, Ham, Marine, Railroad, Civil Air, Military Air, CB Radio, FRS/GMRS/MURS, and Racing banks to make it easy to locate specific types of calls and search any or all of these banks.

**Priority Scan with Do Not Disturb** - lets you program one channel in each bank (10 in all) and then have the scanner check each channel every 2 seconds while it scans the banks so you don't miss transmissions on those channels. Do-Not Disturb keeps the scanner from interrupting transmissions during receiving.

**Priority Plus Scan** - you can set the scanner so it scans only the priority channels.

**Scan/Search Delay/Resume** - controls whether the scanner pauses at the end of the transmission to wait for a reply. You can set the Delay time for each Channel, Close Call Search, Custom Search, and Service search. You can also set a negative delay where the scanner stops on transmissions for a set time then automatically resumes.

**Custom Search** - lets you program up to 10 Custom Search Ranges and search any or all of these ranges.

**Quick Search** - allows you to enter a frequency and start searching up or down from that frequency.

**Turbo Search** - increases the search speed from 100 to 300 steps per second automatically for bands with 5 kHz steps.

**Search Lockouts** - you can lock up to 200 search frequencies: 100 temporary frequencies and 100 permanent frequencies in Custom Search, Service Search, Close Call Search, or Quick Search Modes.

**Weather Alert Priority** - the scanner scans active WX channels every 5 seconds to check for the presence of a 1050 Hz Weather Alert Tone.

**Weather Alert Standby** - the scanner allows you to monitor for weather alerts broadcast on NOAA channels.

**Display Backlight** - You can turn on/off the LCD backlight, set it operate on squelch only, keypress only, or both.

**Signal Strength Meter** - shows the signal strength for more powerful transmissions.

**Flexible Antenna with BNC Connector** - provides adequate reception in strong signal areas and is designed to help prevent antenna breakage. You can also connect an external antenna for better reception.

**Memory Backup** - keeps the frequencies stored in memory for an extended time if the scanner loses power.


**Three Power Options** - let you power the scanner using the included two AA rechargeable or alkaline batteries or the supplied USB cable.

**Built-In Charger** - allows you to charge Ni-MH batteries in the scanner using a USB port on any computer and the supplied USB cable.

**Key Confirmation Tones** - You can turn on/off a tone that sounds when you perform an operation correctly or if you make an error.

**Key Lock** - lets you lock the scanner's keys to help prevent accidental changes to the scanner's programming.

**Battery Save** - works when there is no transmission for 1 minute in *Scan Hold* mode and any *Search Hold* mode (without Priority Scan). This feature turns off RF power for 1 second and turns on it for 300ms to extend the battery life.

**Battery Low Alert** - the  icon will blink in the display and a tone warns you every 15 seconds when the battery power gets low.

## FREQUENCY RANGE

This table lists the frequency ranges, frequency steps, default modulation, and type of transmissions you can hear for each range.

## USA Band Plan

FREQUENCY (MHz)		STEP (kHz)	MODE	BAND
LOWER	UPPER			
25.0000	27.9950	5.0	AM	Petroleum Products & Broadcast Pickup CB Class D Channel Business & Forest Products
28.0000	54.0000	5.0	NFM	10 Meter Amateur Band VHF Low Band 6 Meter Amateur Band
108.0000	136.9916	8.33	AM	Aircraft Band
137.0000	150.7700	5.0	NFM	Military Land Mobile 2 Meter Amateur Band Military Land Mobile VHF High Band Federal Government
150.7750	150.8125	7.5		
150.8150	154.4525	7.5		
154.4562	154.4787	7.5		
154.4825	154.5125	7.5		
154.5150	154.5250	5.0		
154.5275	154.5350	7.5		
154.5400	154.6075	7.5		
154.6100	154.6475	7.5		
154.6500	157.4475	7.5		
157.4500	157.4650	5.0		
157.4700	163.2450	7.5		
163.2500	173.2000	12.5		
173.2037	173.2100	6.25		
173.2150	173.2200	5.0		
173.2250	173.3875	12.5		
173.3900	173.3962	6.25		
173.4000	174.0000	5.0		
225.0000	380.0000	12.5	AM	Military Air Band

FREQUENCY (MHz)		STEP (kHz)	MODE	BAND
LOWER	UPPER			
400.0000	512.0000	6.25	NFM	Miscellaneous Federal Government Land Mobile 70 cm Amateur Band UHF Standard Band

### ***Canada Band Plan***

FREQUENCY (MHz)		STEP (kHz)	MODE	BAND
LOWER	UPPER			
25.0000	27.9950	5.0	AM	Petroleum Products & Broadcast Pickup CB Class D Channel Business & Forest Products
28.0000	54.0000	5.0	NFM	10 Meter Amateur Band VHF Low Band 6 Meter Amateur Band
108.0000	136.9916	8.33	AM	Aircraft Band
137.0000	174.0000	5.0	NFM	Military Land Mobile 2 Meter Amateur Band Military Land Mobile VHF High Band Federal Government
225.0000	380.0000	12.5	AM	Military Air Band
400.0000	512.0000	6.25	NFM	Miscellaneous Federal Government Land Mobile 70 cm Amateur Band UHF Standard Band

## **INCLUDED WITH YOUR SCANNER**

- BC125AT scanner with attached belt clip
- Antenna
- Rechargeable Ni-MH Batteries
- USB cable

- Wrist strap

## OPTIONAL ACCESSORIES

**Note:** *USB cables are also available from the Uniden On-Line store.*

## SCANNING BASICS

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This section provides you with 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 BC125AT.

### WHAT IS SCANNING?

Unlike standard AM or FM radio stations, most two-way communications do not transmit continuously. Your BC125AT 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 BC125AT can search for 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 store it into one of the banks. If not, you can continue to search.

## UNDERSTANDING SCANNING

### *What is CTCSS/DCS?*

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

CTCSS and DCS are sub-audible tone signaling systems sometimes referred to as PL or DPL (Motorola's trademarked terms for Private Line and Digital Private Line respectively). CTCSS and DCS are used only for FM signals and are usually associated with both amateur and commercial two-way frequencies. These systems make use of a special sub-audible tone that accompanies a transmitted signal.

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.



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 on the same frequency. The stations might even interfere with each other to the point where it is impossible to clearly receive any of the stations. Your scanner can code each received frequency with a specific sub-audible CTCSS or DCS frequency or code. 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.

Refer to the Reference section of this manual for tables showing the available CTCSS frequencies and DCS codes.

### ***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). 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
- Many business radio users

When you want to store a conventional system, all you need to know is the frequencies 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 1-8 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.

# UNDERSTANDING BANKS

## ***Channel Storage Banks***

To make it easier to identify and select the channels you want to listen to, the 500 channels are divided into 10 channel storage banks containing 50 channels each. You could use each channel storage bank to group frequencies by department, location, area of interest, or any other way you prefer. You can listen to any or all of the banks by using the number keys to turn them on or off.

## ***Service Search Banks***

The scanner is preprogrammed with many of the frequencies allocated to Police, Fire/Emergency, Ham, Marine, Railroad, Civil Air, Military Air, CB radio, FRS/GMRS/MURS, and Racing services. There are 10 banks allocated for these searches that can be used just like the channel storage banks to search these frequencies in *Service Search* mode.

## ***Custom Search Banks***

Custom Search Banks let you program and search 10 custom search ranges. During custom search, the scanner starts searching with the lowest frequency in the search range you select to the highest frequency in the range. You can search any or all of these ranges by turning each search bank on or off just like channel storage banks in *Search* mode.

## **SETTING UP YOUR SCANNER**

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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 rubber antenna.

To improve the scanner's reception, use an optional external antenna designed for multiband coverage. (You can purchase this type of antenna at a local electronics store). If the optional antenna has no cable, use 50 ohm coaxial cable for lead-in. An adapter plug might be necessary for the optional antennas.

Use an optional mono earphone or stereo headset with proper impedance for private listening. Read the precautions on the inside front cover of this Owners Manual.

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.

## **CONNECTING THE ANTENNA**

1. Align the slots around the antenna's connector with the tabs on the scanner's BNC connector.

2. Slide the antenna's connector down over the scanner's connector.
3. Rotate the antenna connector's outer ring clockwise until it locks into place.

### **Connecting an Optional Antenna**

The scanner's BNC connector makes it easy to connect a variety of optional antennas, including an external mobile antenna or outdoor base station antenna.

**Note:** Always use 50-ohm, RG-58, or RG-8, coaxial cable to connect an outdoor antenna. If the antenna is over 50 feet from the scanner, use RG-8 low-loss dielectric coaxial cable. If it is less than 50 feet, use RG-58. You can get a BNC adapter at local electronics stores.

## **CONNECTING AN EARPHONE/HEADPHONE**

For private listening, you can plug a 1/8-inch (3.5 mm) mini-plug earphone or stereo headphones (not supplied) into the headphone jack on top of your scanner. This automatically disconnects the internal speaker.

## **CONNECTING AN EXTENSION SPEAKER**

In a noisy area, an optional extension speaker, positioned in the right place, might provide more comfortable listening. Plug the speaker cable's 1/8-inch (3.5-mm) mini-plug into your scanner's jack.

**WARNING! If you connect an external speaker to the scanner's headphone jack, never connect the audio output line to a power supply and ground. This might damage the scanner.**

## ADJUSTING THE BELT CLIP

The factory-attached belt clip makes it easier to carry the scanner. Use a Phillips screwdriver to adjust (loosen) the mounting screws or remove the belt clip completely.


## POWERING THE SCANNER

You can power the scanner using alkaline (ALK) non-rechargeable batteries (not supplied) or the included Nickel Metal-Hydride (Ni-MH) rechargeable batteries. [Uniden provides a USB cable to charge the Ni-MH batteries on initial installation and to recharge them through your computer (or through a power adapter that provides USB charge power (not included, but available at many retailers).]

Inside the battery compartment is a switch to set the unit to either ALK or Ni-MH.

**WARNING! Non-rechargeable batteries can get hot or burst if you try to recharge them.**

### CAUTIONS:

- When  flashes in the display and the scanner beeps every 15 seconds, recharge or replace the batteries.
- Use only fresh batteries of the required size and recommended type.
- Always remove old or weak batteries. Batteries can leak chemicals that destroy electronic circuits.
- Do not mix old and new batteries, different types of batteries (standard, alkaline, or rechargeable), or rechargeable batteries of different capacities.

## ***Installing Non-Rechargeable Batteries***

1. Make sure the power is turned off.
2. Slide the battery compartment cover off.
3. Use a pointed object such as a ballpoint pen to set the battery selection switch inside the compartment to **ALK**.
4. Insert the batteries as indicated by the polarity symbols (+ and -) marked inside the battery compartment.
5. Replace the battery compartment cover.

## ***Installing Rechargeable Ni-MH Batteries***

You can also use two Ni-MH rechargeable batteries to power your scanner. The Ni-MH batteries included with your unit are not fully charged; you must charge them completely after you install them into your scanner. See *Charging the NiMH Batteries*, page 24, for details.

1. Make sure the power is turned off.
2. Slide the battery compartment cover off.
3. Use a pointed object such as a ballpoint pen to set the battery selection switch inside the compartment to **Ni-MH** for Nickel Metal-Hydride batteries.
4. Install two batteries in the compartment as indicated by the polarity symbols (+ and -) marked inside and replace the cover.

### ***Notes:***

- To prevent damage to Ni-MH batteries, never charge them in an area where the temperature is above 113°F (45°C) or below 40°F (4°C).

- For longer operation, you can get higher capacity Ni-MH batteries at your local electronics store. This type of battery takes longer to recharge.

### ***Charging the Ni-MH Batteries***

The scanner has a built-in circuit that charges the included Ni-MH batteries when a USB cable connects it to a computer (NOT to a USB hub) or to an AC or DC adapter that provides USB charging power. Verify that the battery selection switch is set to **Ni-MH** and that only Ni-MH rechargeable batteries are inserted in the scanner before connecting it to your computer.

***CAUTION: Never attempt to charge non-rechargeable batteries or install non-rechargeable batteries when the battery selection switch is set to Ni-MH. The USB cable will only charge the batteries if the scanner is turned off.***

1. Be sure the scanner is turned off. It will recharge only if it is turned off, even with the USB cable connecting it to a computer.
2. Connect the included USB cable to the scanner's USB port.
3. Connect the other end of the USB cable to the computer's USB port or to an AC or DC adapter that provides USB charging power.

***NOTE: If you connect to a computer's USB port, the PC will prompt you for the drivers for your scanner.***

4. The scanner displays *Charging* while it charges the batteries and *Charge Complete* when the Ni-MH batteries are completely charged.



Different status messages may display depending on the battery type and scanner status:

<b>USB Message</b>	<b>Batt. Type</b>	<b>Meaning</b>	<b>Scanner Cond.</b>
<i>Charging</i>	Ni-MH	Scanner is charging.	Off
<i>No Battery</i>	None	NO batteries in scanner.	Off
<i>Charge Complete</i>	Ni-MH	Unit is charged.	Off
<i>Charge Off</i>	Alk./Ni-MH	Scanner is not charging (Battery selection switch is set to Alk.)	Off
<i>Battery Error</i>	Ni-MH	Batteries cannot be charged (dead battery).	Off
<i>Illegal Voltage</i>	Ni-MH	USB external power is out of range.	Off

See also Setting the Charging Timer, page 35.

If the batteries are good, the scanner charges the batteries and it operates normally. If the scanner cannot immediately determine if the batteries are good and can be charged, it checks them and displays the battery icon. If the scanner judges the batteries are good, the scanner starts charging and the battery icon disappears. If it cannot regard the batteries as good in 60 seconds, the scanner stops checking and the battery icon blinks.

## ABOUT YOUR SCANNER

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We use a few simple terms in this manual to explain the features of the scanner. Familiarize yourself with these terms and the scanner's features, and you can put the scanner to work for you right away. Simply determine the type of communications you want to receive, then set the scanner to search those communications.

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

Besides searching within a selected frequency range, you can also search your scanner's service banks. Service banks are preset groups of frequencies categorized by the type of services that use those frequencies. For example, many amateur radio frequencies are located in the HAM service bank.

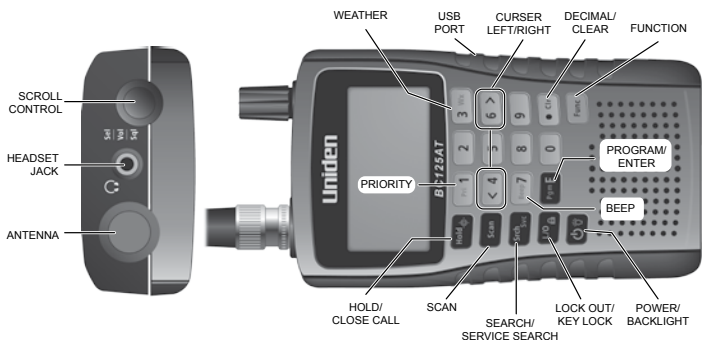
When you search and find a desired frequency, you can store it into a programmable memory location called a channel. Channels are grouped into channel storage banks. The scanner has 10 channel storage banks and each bank has 50 channels. You can scan the channel storage banks to see if there is activity on the frequencies stored there.

## GETTING TO KNOW THE SCANNER



If your scanner's keys seem confusing at first, the following information should help you understand each key's function.



Your scanner's keys have various functions labeled on the key tops and below the keys. The keys operate in *Normal* mode and *Function* mode. Pressing **Func** puts the scanner into *Function*

mode for 3 seconds and then returns to *Normal* mode. The scanner displays **F**. During that 3 seconds you can press other keys and operate that function. Pressing **Func** again before 3 seconds returns to *Normal* mode and the **F** icon disappears. In *Normal* mode the **F** icon is not displayed.



Key/ Icon	Press to...	Press <i>Func</i> and this key to...
<b>1/PRI</b>	Enter 1.	Enter the <i>Priority</i> menu.
<b>3/WX</b>	Enter 3.	Enter the <i>Weather</i> menu.
<b>6/&gt;</b>	<ul style="list-style-type: none"> <li>Enter 6.</li> <li>Scroll right in <i>Edit Tag</i> mode.</li> </ul>	NA
<b>.Clr</b>	<ul style="list-style-type: none"> <li>Enter a decimal point.</li> <li>Input a space in a text string.</li> </ul>	NA


Key/ Icon	Press to...	Press <i>Func</i> and this key to...
<i>func</i>	<ul style="list-style-type: none"> <li>• Enter <i>Function</i> mode for 3 seconds.</li> <li>• Return to <i>Normal</i> mode from <i>Function</i> mode.</li> </ul>	NA
<b>Hold/</b> 	<ul style="list-style-type: none"> <li>• Hold on a current channel.</li> <li>• Release hold and resume scanning/searching.</li> <li>• Monitor an unprogrammed frequency after you have entered it.</li> <li>• Access a channel directly after you have entered it.</li> </ul>	Enter the <i>Close Call</i> menu.
<b>Scan</b>	Enter or resume <i>Scan</i> mode.	NA
<b>Srch/ Svc</b>	Start Custom Search.	Start Service Search.
<b>L/O/</b> 	<ul style="list-style-type: none"> <li>• Temporarily lock out a channel or search frequency (press once).</li> <li>• Permanently lock out a channel or search frequency (press twice).</li> <li>• Unlock a locked out channel or search frequency.</li> <li>• Unlock all locked out settings of the current channel bank (press and hold).</li> </ul>	Lock or unlock the keypad.

Key/ Icon	Press to...	Press <i>Func</i> and this key to...
 / 	<ul style="list-style-type: none"> <li>• Turn scanner on and off (press and hold).</li> <li>• Turn backlight on and off.</li> </ul>	Enter the <i>Display/Charge</i> menu.
<b>Pgm/E</b>	<ul style="list-style-type: none"> <li>• Select input data or a menu item.</li> <li>• Access a channel through its channel number.</li> </ul>	<ul style="list-style-type: none"> <li>• Enter <i>Channel Programming</i> menu.</li> <li>• Quickly save frequencies in various modes.</li> </ul>
<b>4/&lt;</b>	<ul style="list-style-type: none"> <li>• Enter 4.</li> <li>• Scroll left in <i>Edit Tag</i> mode.</li> </ul>	NA
<b>7/Beep</b>	Enter 7.	Toggle the <i>Key-beep</i> setting.

**Note:** Turn **SCROLL CONTROL** to scroll up and down through menu selections.

## TURNING ON THE SCANNER

**Note:** Make sure the scanner's antenna is connected before you turn it on.

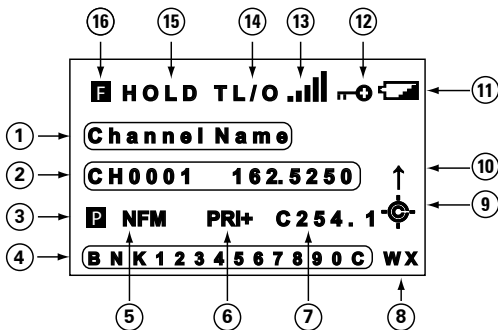
1. You can select the band plan (USA or Canada) when you turn on the scanner. When you press and hold  for 1 second to turn on the scanner, also press and hold **1** for USA or **2** for Canada. The opening screen displays, followed by the copyright notice.

- If the scanner is new or has been reset, the default mode is *Scan Hold* with all banks enabled and *Close Call Do-Not-Disturb* active. Otherwise, the scanner displays the last mode the scanner was in before it was powered down.






## A LOOK AT THE DISPLAY

The display has indicators that show the scanner's current operating status. The display information helps you understand how your scanner operates.

**Note:** *Not all of these icons may appear at the same time.*



Item	Meaning
1	<ul style="list-style-type: none"> <li>Channel Name in <i>Scan/Scan Hold</i> mode.</li> <li>Custom/Service Search Bank Name.</li> <li>Quick Search in <i>Quick Search</i> mode.</li> <li>Close Call Hits in <i>Scan/Scan Hold</i> mode.</li> <li>Close Call in <i>Close Call Only</i> mode.</li> <li>WX Scan in <i>Weather Scan</i> mode.</li> <li>WX Alert Standby in <i>WX Alert Standby</i> mode.</li> </ul>

Item	Meaning
2	<ul style="list-style-type: none"> <li>• Scan in <i>Scan</i> mode.</li> <li>• CC Search in <i>Close Call Only</i> mode.</li> <li>• Channel Number and Frequency.</li> <li>• Searching Frequency.</li> </ul>
3	<p><b>P</b> identifies a Priority channel.</p>
4	<ul style="list-style-type: none"> <li>• BNK/SVC/SRC/BND shows banks/bands enabled for <i>Scan/Service Search/Custom Search/Close Call Only</i> mode.</li> <li>• <b>C</b> is for the Close Call Hits bank.</li> </ul>
5	<p>AM/FM/NFM shows channel/frequency modulation.</p>
6	<ul style="list-style-type: none"> <li>• <b>PRI</b> indicates Priority Scan.</li> <li>• <b>PRI</b> indicates Priority Do-Not-Disturb.</li> <li>• <b>PRI+</b> indicates Priority Plus Scan.</li> </ul>
7	<p>Shows any CTCSS/DCS tone/code received.</p>
8	<p><b>WX</b> indicates Weather Priority is on.</p>
9	<ul style="list-style-type: none"> <li>•  indicates Close Call Priority.</li> <li>•  indicates Close Call Do-Not-Disturb.</li> </ul>
10	<p>↑ or ↓ indicates the scan/search direction.</p>
11	<p> indicates the batteries are low.</p>
12	<p> indicates the key lock is enabled.</p>
13	<p> indicates the signal strength.</p>
14	<ul style="list-style-type: none"> <li>• <b>TL/O</b> indicates temporary lock out.</li> <li>• <b>L/O</b> indicates permanent lock out.</li> </ul>

Item	Meaning
15	<ul style="list-style-type: none"> <li>• Hold on a channel.</li> <li>• Release hold and resume scanning.</li> </ul>
16	Indicates <i>Function</i> mode.

## SETTING UP YOUR SCANNER

When you turn on your scanner for the first time, you can set your screen display preferences as well as other elements such as squelch levels, volumes, brightness, etc.

### **Using the *SCROLL CONTROL* Knob**

Turn the ***SCROLL CONTROL*** knob on top of the BC125AT to:

- Select channels
- Adjust volume
- Adjust squelch
- Set display settings
- Selects characters for text tagging
- Scroll up or down through menu options
- Change channels/frequencies in *Hold* mode
- Resume scanning

Press the ***SCROLL CONTROL*** knob to select a setting.

**Note:** Pressing ***SCROLL CONTROL*** is the same as pressing ***Pgm/E*** on the keypad in *Menu* mode.

### **Adjusting the Volume**

1. Press ***SCROLL CONTROL***; The volume level indicator and battery voltage display.




2. Turn **SCROLL CONTROL** to adjust the volume level from 0 to 15.
3. Press **SCROLL CONTROL** to set the volume.
4. To exit *Volume Level* mode, press **SCROLL CONTROL** again or wait 10 seconds to return to the previous mode.


### **Adjusting the Squelch**

To adjust the squelch level, press **FUNC**, then press **SCROLL CONTROL**. When the squelch level indicator and battery voltage appear, turn **SCROLL CONTROL** to change the squelch level from 0 to 15.


1. Press **Func**, then press **SCROLL CONTROL**. The squelch level indicator and battery voltage appears.
2. Turn **SCROLL CONTROL** until the audio mutes. If the scanner picks up unwanted partial signals or very weak transmissions, increase the Squelch setting to increase the signal level required to open squelch. To listen to a weak or distant station, decrease the Squelch setting.
3. Press **SCROLL CONTROL** to set the desired level and return to the previous mode.


### **Setting the Backlight**

Press  to turn on the backlight on and off.

1. Press **Func** and  to view the *Display/Charge* menu.
2. From this menu, scroll to *Set Backlight* from the submenus. Press **SCROLL CONTROL**.
3. Scroll to select one of the following settings:
  - Always Off - Backlight is always off.


- Always On – Backlight is always on.
  - On with Squelch - Backlight is on while squelch is open and until delay expires.
  - On with Keypress - Backlight is on for 10 seconds after any key is pressed.
  - Keypress+Squelch – Both above-mentioned "Squelch" and "Keypress."
  - < Back - Return to previous menu.
4. Press **Pgm/E** (or press **SCROLL CONTROL**) to save and return to the previous menu. (Default = Always Off)
  5. Press **.Clr** to exit.

**Notes:** If the backlight is set to Always On when  is pressed, the backlight is turned off and the backlight setting is then set to Always Off.

If the backlight is set to Always Off when  is pressed, the backlight is turned on and the backlight setting is then set to Always On.

### **Adjusting the Contrast**

This submenu of the *Display/Charge* menu controls the display's contrast (how light or dark it appears) for different viewing conditions. There are 15 contrast settings. You see the contrast change as you scroll through the settings.


1. To adjust the contrast, press **Func** then  ; the *Display/Charge* menu displays
2. Scroll to *Set Contrast* and press **Pgm/E**.
3. Scroll to see the contrast settings.

4. When you have selected a setting, press **Pgm/E** to set it and return to the previous menu.
5. Press **.Clr** to exit.

### **Setting the Charging Timer**

The *Charging Timer* menu is also a submenu of the *Display/Charge* menu. It sets how long the scanner will charge the batteries when you plug the supplied USB cable into a USB port and connect it to your scanner.

**WARNING: The Charging Timer will reset to the set charging time every time you plug the USB cable into the scanner or charge the batteries while the USB cable is connected.**

1. To set the Charging Timer press **Func** then  to view the *Display/Charge* menu.
2. Scroll to *Set ChargeTime* and press **Pgm/E**.
3. Scroll to 1-16 (hours) (default = 14 hours) and press **Pgm/E** to save and return to the previous menu.

Suggested maximum charging time for Ni-MH batteries:




1500mAh	9 hours
1800mAh	11 hours
2000mAh	12 hours
2100mAh	13 hours
2200mAh	13 hours
2300mAh	14 hours
2500mAh	15 hours

2700mAh	16 hours
---------	----------

**Note:** The batteries will take longer to charge when the scanner is in use.

4. Press **.Clr** to exit.

### **Using the Keypad Lock**

Use the scanner's keypad lock to protect it from accidental program changes. When the keypad is locked, only **Func, Hold, , , ** and **SCROLL CONTROL** (volume only) operate.

Press **Func** then **L/O** to toggle the keypad lock on and off. The scanner displays *Keypad Lock On* or *Keypad Lock Off*.

### **Setting the Beep Tone**

Press **Func** then **Beep/7** (Default = ON) to toggle the keypress confirmation tone on or off.

### **Resetting the Scanner**

**WARNING: Resetting the scanner clears all data and settings you have entered. You cannot restore user programmed data that has been deleted. You can, at a last step, restore only the original factory data.**

1. Press and hold the **2, 9,** and **Hold** keys and turn on the scanner.
2. The scanner clears all data and returns to the initial setting. *All Memory Clear* displays.

### **PC Programming**

Connect your scanner to your PC through the USB cable to:

- Program channels into the scanner

- Set any setting

When you connect your scanner to your PC, a series of screens will appear to assist you.

USB drivers and programming software are available for download.

## PROGRAMMING CHANNELS

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Now that you have configured your scanner, you are ready to start using your scanner's preprogrammed service banks, the custom search banks, the Close Call feature, or the Weather Scan/Alert feature. You can also program your channel memories or re-program your 10 custom search bank memories.

Before the scanner can begin scanning, you must program a frequency into at least one channel.

1. To select a channel, press **Hold** then enter the channel number (1-500).
2. Press **Pgm/E** to enter the *Channel* menu. (You can also press **Hold** and scroll to the channel; press **Func** then **Pgm/E**.)

**Note 1:** Turning **SCROLL CONTROL** in *Function mode* will allow you to select the first channel in each bank.

**Note 2:** You can quickly store frequencies in *Scan Hold mode* by entering the frequency and pressing **Pgm/E**.

3. Scroll to highlight *Enter Frequency* and press **Pgm/E**. You will see the channel number and currently programmed frequency. (To return to the previous screen, press **.Clr.**)

4. Use number keys and **.Clr** for a decimal to enter the frequency. If you make a mistake, press **.Clr** to clear the display. Press **Pgm/E** to store the frequency and return to the *Channel* menu.
5. Press **.Clr** to return to the last screen.

The scanner automatically rounds the entered number to the nearest valid frequency. For example, if you enter 151.473 (MHz), your scanner accepts it as 151.475.

If you entered an invalid frequency, *Out of Band* appears and the scanner beeps three times. Press **.Clr** and enter a valid frequency. If you enter a frequency that has already been entered elsewhere, the scanner displays the channel number and *Frequency Exists – Confirm?* appears.

If you entered the frequency by mistake, press **.Clr** then enter the correct frequency. To enter the frequency anyway, press **Pgm/E** to accept.

The smallest channel is displayed when two or more duplication channels exist.

## PROGRAMMING CHANNEL TEXT TAGS

You can customize your channels by programming text tags (up to 16 characters in length) for easier channel frequency identification. The default tag is the bank number followed by the channel number in the bank.

1. To select a channel, press **Hold** and then enter the channel number.

2. Press **Pgm/E** to enter the *Channel* menu. (You can also press **Hold** and scroll to the channel; press **Func** then **Pgm/E**.)
3. Scroll to select *Edit Tag* and press **Pgm/E**.
4. Turn **SCROLL CONTROL** to choose the characters, pressing > or < to move the cursor to the right or left. If you make a mistake, press **. CLR** to clear the last character. Press **. CLR** twice to clear all characters. To cancel and exit, press **L/O**.
5. Press **Pgm/E** to save the tag and return to the *Channel* menu.

## SETTING CTCSS/DCS FOR A CHANNEL

You can store a CTCSS tone or DCS code, set the scanner to search for tones/codes, have the scanner open squelch on any tone/code, or have the squelch only open if no CTCSS/DCS is detected for any channel. (Default = Off)

1. To select a channel, press **Hold** and then enter the channel number.
2. Press **Pgm/E** to enter the *Channel* menu. (You can also press **HOLD** and scroll to the channel; press **Func** then **Pgm/E**.)
3. Scroll to select *Set CTCSS/DCS* and press **Pgm/E**.
4. Scroll to select one of the following options:
  - **Off** - the scanner ignores all tones and opens squelch on any signal

- **CTCSS** - the scanner prompts the user for the appropriate tone. Squelch will open for this channel only if the tone matches.
- **DCS** - the scanner prompts the user for the appropriate code. Squelch will open for this channel only if the code matches.
- **CTCSS/DCS Search** - the scanner displays any tone/code being used, but opens squelch on any signal.
- **No Tone** - indicates that the channel squelch will only open if no CTCSS/DCS is detected.
- **<Back** - returns to *Channel* Menu.

**Note:** *If you select Off, CTCSS/DCS Search, or No Tone, the scanner returns to the channel menu. If you selected CTCSS or DCS, you can then select the CTCSS tone or DCS code.*

5. Scroll to select, then press **Pgm/E** to save and return to the *Channel* menu.

## SETTING CHANNEL MODULATION

1. To select a channel, press **Hold** and then enter the channel number.
2. Press **Pgm/E** to enter the *Channel* menu. (You can also press **Hold** and scroll to the channel; press **Func** then **Pgm/E**.)
3. Scroll to select *Set Modulation* and press **Pgm/E**.
4. Scroll to select modulation from the following options (Default = Auto):



- *Auto* - the scanner selects the modulation automatically based on the frequency's band.
  - *AM* - the scanner uses AM modulation.
  - *NFM* - the scanner uses Narrowband FM modulation.
  - *FM* - the scanner uses FM modulation.
5. Press **Pgm/E** to save and return to the *Channel* menu.

## SETTING THE PRIORITY CHANNEL

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

**P** displays to identify a Priority channel.

1. To select a channel, press **Hold** then enter the channel number.
2. Press **Pgm/E** to enter the *Channel* menu. (You can also press **Hold** and scroll to the channel; press **Func** then **Pgm/E**.)
3. Scroll to *Set Priority* and press **Pgm/E**.
4. Scroll to *Priority On* and press **Pgm/E** to save and return to the *Channel* Menu.

## SETTING CHANNEL DELAY

This setting controls how many seconds the scanner waits after a transmission ends before resuming scanning. If you select a minus delay time, the scanner stops on the transmission for the setting time, then automatically resumes scanning. (Default = 2 seconds)

1. To select a channel, press **Hold** then enter the channel number.
2. Press **Pgm/E** to enter the *Channel* menu. (You can also press **Hold** and scroll to the channel; press **Func** then **Pgm/E**.)
3. Scroll to *Set Delay* and press **Pgm/E**.
4. Turn **SCROLL CONTROL** to select the delay time from the following options:
  - -10 sec - resumes after 10 seconds.
  - -5 sec - resumes after 5 seconds.
  - 0 sec - resumes immediately.
  - 1 sec - waits 1 second for a reply then resumes.
  - 2 sec - waits 2 seconds for a reply then resumes.
  - 3 sec - waits 3 seconds for a reply then resumes.
  - 4 sec - waits 4 seconds for a reply then resumes.
  - 5 sec - waits 5 seconds for a reply then resumes.
5. Press **Pgm/E** to save and return to the *Channel* menu.

## DELETING CHANNELS

You can delete all programming for a channel.

1. Press **Hold** then enter the channel number to delete.
2. Press **Pgm/E** to enter the *Channel* menu. (You can also press **Hold** and scroll to the channel; press **Func** then **Pgm/E**.)
3. Scroll to select *Delete Channel* and press **Pgm/E**.
4. At *Confirm Delete?*, press **Pgm/E** to delete the channel or **.Clr** to cancel and return to the *Channel* menu.

### **Clearing a Bank**

You can delete all channels in a bank.

1. Press **Hold** to select any channel in the bank, then enter that channel number.
2. Press **Pgm/E** to enter the *Channel* menu. (You can also press **Hold** and scroll to the channel; press **Func** then **Pgm/E**.)
3. Scroll to select *Clear Bank* and press **Pgm/E**.
4. To clear the Close Call Hits bank, turn off the scanner and turn it back on.
5. At *Confirm Clear?*, press **Pgm/E** to clear the bank or **.Clr** to cancel and return to the *Channel* menu.

## **SCANNING STORED CHANNELS**

Press **Scan** to begin scanning channels.

The scanner scans through all unlocked channels in the enabled banks in channel order. When the scanner finds a transmission, it stops on it.

When the scanning of all normal banks ends, the scanner scans a channel storage bank that is named Close Call Hits (if enabled). This is a storage bank that automatically stores found frequencies with any *Close Call* mode. You will see *Close Call Hits* on the display. If the Close Call Hits bank is empty, the scanner does not scan this bank.

In *Scan* mode, the upper line displays the current channel bank number and the lower line displays and scrolls *SCAN* from right to left with the direction indicator (↑ or ↓).

Enabled scan banks appear on the lowest line. Disabled scan bank numbers are not displayed. The currently scanned bank number flashes.

- You can turn scan banks on/off by pressing 1-9 or 0, but one scan bank must always be enabled. If you turn off all scan banks, the scanner will display *Nothing to Scan*.
- If you want to change the search direction or if it is a long transmission and you want to continue scanning, turn the **SCROLL CONTROL** or press **Scan**.

When the scanner finds a transmission, it stops on it. When the transmission ends, the scanner resumes scanning according to the delay setting for each channel.

- To hold on a channel, press **Hold**.
- To step through the channels, turn the **SCROLL CONTROL** in *Hold* mode. Press **Hold** to resume.

While monitoring a transmission, the upper line displays the current bank and bank channel number (or name if tagged) and the lower line displays the channel number in the scanner and frequency with the direction indicator (↑ or ↓).

**P** appears in the display if it is a priority channel. The modulation, *Priority* mode icon (if Priority is enabled), and the Close Call icon (if CC Pri or CC-DND is enabled) also displays.

Any CTCSS/DCS received blinks in CTCSS/DCS search and appears solid if programmed.

Numbers at the bottom of the display show the selected scan banks. The currently scanned bank number flashes in *Receive* mode.

- To temporarily lock out a channel, press **L/O**.
- To permanently lock out a channel, press **L/O** twice quickly.

See Locking Out Channels on page 46.

### ***Priority Scan Modes***

This scanner allows four different Priority modes. These modes also function in *Search* and *Hold* modes (except *Close Call Only* mode and *Weather* modes). (Default = Off)

In *Scan* or *Search* mode, press **Func** then **Pri/1** to view the *Priority* menu.

Scroll to highlight one of the following option and then press **Pgm/E** to select it:

- *Priority Off* - does not check for priority channels.
- *Priority DND* - checks Priority channels every 2 seconds only when not receiving. If you set *Priority* mode to Priority DND, the scanner turns on the PRI icon during scanning or searching.

- *Priority Scan* - checks Priority channels every 2 seconds. If you set mode to *Priority Scan*, the scanner turns on the PRI icon during scanning or searching.
- *Priority Plus* - scans only Priority channels in enabled banks. If you set *Priority* mode to *Priority Plus*, the scanner turns on the PRI+ icon during scanning or searching.
- *Exit* - Return to previous mode.

**Note:** If no Priority channels are enabled for scan, *Priority Scan No Channel* displays and *Priority* mode is set to *Off*.

## MANUALLY SELECTING A CHANNEL

You can continuously monitor a single channel without scanning. This is useful if you hear an emergency broadcast on a channel or if you want to monitor a specific channel.

1. To manually select a channel, press **Hold** and enter the channel number.
2. Press **Hold** again.

### **Locking Out Channels**

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

While receiving a channel or while in *Scan Hold* mode, press **L/O** once to temporarily lock out the channel. *Temporary L/O* and *TL/O* briefly appear in the display. Turning the scanner off clears the temporary lockout.

Press **L/O** twice quickly to permanently lock out the channel. *Locked Out* and *L/O* briefly appear in the display. Turning the scanner off will NOT clear the lockout.

If you lock out a channel in *Scan* mode, the scanner will resume scanning from the next channel.

### *To Lock Out a Specific Channel*

1. Press **Hold**.
2. Enter the channel number you want to lock out and press **Hold** again. (You can also press **Hold** and scroll to the channel.)
3. Press **L/O** once to temporarily lockout or press **L/O** twice quickly to permanently lock out the channel.

**Note:** *You can still manually select locked-out channels. If you lock out all channels in the selected bank, the scanner displays All Locked! on the second line.*

### **Unlocking Channels**

1. Press **Hold**.
2. Enter the channel number you want to unlock and press **Hold** again. (You can also press **Hold** and scroll to the channel.)
3. Press **L/O**. *L/O* (or *TL/O*) disappears.

### **Unlock all Channels in Banks Currently Enabled for Scan**

1. Press **Hold** to stop scanning.
2. Press and hold **L/O** until *Confirm Unlock All Channels?* appears in the display.
3. Press **Pgm/E** to unlock all or **.Clr** to cancel.

## SERVICE SEARCH MODE

If you do not have a reference to frequencies in your area, use a search to find a transmission. You can search for Police, Fire/Emergency, Ham, Marine, Railroad, Civil Air, Military Air, CB Radio, FRS/GMRS/MURS, and Racing frequencies without knowing the specific frequencies used in your area. The scanner is preprogrammed with all the frequencies allocated to these services.

To start a Service Search, press **Func** then **Srch/Svc**. When the scanner finds a transmission, it stops on it. When the transmission ends, the scanner resumes searching according to the delay setting (see page 42).

During a Service Search, the upper line displays the current service name. The lower line displays the search frequency and the direction indicator (↑ or ↓) with the modulation.

Enabled service banks appear on the lowest line. Disabled service bank numbers are not displayed. The currently searched bank number flashes. You can turn service banks on/off by using 1-9 or 0; however, one service bank must always be enabled. If you turn off all service banks, the scanner will display *Nothing to Srch*.

If you want to change the search direction or if it is a long transmission and you want to continue searching, turn the **SCROLL CONTROL** or press **Func** then **Srch/Svc**.

### **Service Search Receive/Hold Modes**

To hold on a frequency, press **Hold**. To step through the frequencies, turn **SCROLL CONTROL** while in *Hold* mode. Press **Hold** to resume.



While monitoring a transmission, the upper line displays the current service bank name and the lower line displays the channel name (if defined) and current frequency with the direction indicator (↑ or ↓).

The modulation, *Priority* mode icon (if Priority is enabled), any CTCSS/DCS received (if enabled), and the Close Call icon (if CC Pri or CC-DND is enabled) will also appear in the display.

Numbers at the bottom of the display show the enabled service search banks. The currently searched bank number flashes in *Receive* mode.

To store a frequency, press **Pgm/E**. (see Storing Found Search Frequencies on page 55.)

To temporarily lock out a frequency, press **L/O**.

To permanently lock out a frequency, press **L/O** twice quickly.

See also Search Options on page 53 for Delay, CTCSS/DCS settings, and locking out/reviewing/unlocking frequencies.

### ***Custom Search Mode***

*Custom Search* mode lets you program and search 10 custom search ranges. You can search any of these ranges simultaneously and reprogram each custom search range. During custom search, the scanner searches starting with the lowest frequency in the search range you select to the highest frequency in the range.

This feature lets you search through the preset frequency ranges. (See also Programming Custom Search Ranges, page 54). The preset frequency ranges are:

Bank No.	Frequency (MHz)	Step (kHz)
1	25.0000-27.9950	5.00
2	28.0000-29.6950	5.00
3	29.7000-49.9950	5.00
4	50.0000-54.0000	5.00
5	108.0000-136.9916	8.33
6	137.0000-143.9950	5.00
7	144.0000-147.9950	5.00
8	225.0000-380.000	12.50
9	406.0000-449.99375	6.25
10	450.0000-469.99375	6.25

To start a Custom Search, press **Srch/Svc**. When the scanner finds a transmission, it stops on it. When the transmission ends, the scanner resumes searching according to the delay setting.

While searching, the upper line displays the current search bank name. The lower line displays the search frequency and the direction indicator (↑ or ↓) with the modulation.

Enabled search banks appear on the lowest line. Disabled search bank numbers are not displayed. The currently searched bank number flashes.

- You can turn search banks on/off by using 1-9 or 0. One search bank must always be enabled. If you turn off all search banks, the scanner will display *Nothing to Srch*.
- If you want to change the search direction or if it is a long transmission and you want to continue searching, turn **SCROLL CONTROL** or press **Srch/Svc**.

## **Custom Search Receive/Hold Modes**

To hold on a frequency, press **Hold**. To step through the frequencies, turn **SCROLL CONTROL** in *Hold* mode. Press **Hold** to resume searching.

While monitoring a transmission, the upper line displays the current search bank name and the lower line displays the current frequency with the direction indicator (↑ or ↓)

The modulation, *Priority* mode icon (if priority is enabled), any CTCSS/DCS received (if enabled), and the Close Call icon (if CC Pri or CC-DND is enabled) will also appear in the display.

Numbers at the bottom of the display show the enabled service search banks. The currently searched bank number flashes in *Receive* mode.

- To store a frequency, press **Pgm/E**; see Storing Found Search Frequencies on page 55.
- To temporarily lock out a frequency, press **L/O**.
- To permanently lock out a frequency, press **L/O** twice quickly.

See also Search Options on page 53 for Delay, CTCSS/DCS settings, and locking out/reviewing/unlocking frequencies.

## **Quick Search Mode**

*Quick Search* mode allows you to enter a frequency and start searching up or down from that frequency from any *Hold* mode (except *Close Call Only/Weather Hold*).

To start a Quick Search in *Scan* or *Search* mode, press **Hold** to hold on any channel or frequency. Enter the new frequency (include a decimal point so you don't go to a channel) and press **Hold** again to set the frequency.

At Quick Search, press **Hold** to start searching.

To start a Quick Search at the current frequency during Close Call Search, turn **SCROLL CONTROL** in *Hold* mode and press **Hold** to start searching.

When the scanner finds a transmission, it stops on it. When the transmission ends, the scanner resumes searching according to the delay setting.

While searching in *Quick Search* mode, the upper line displays *Quick Search* and the lower line displays the searching frequency and the direction indicator (↑ or ↓) with the modulation.

If you want to change the search direction or if it is a long transmission and you want to continue searching, turn **SCROLL CONTROL** or press **Srch/Svc**.

### **Quick Search Receive/Hold Modes**

To hold on a frequency press **Hold**. To step through the frequencies, turn **SCROLL CONTROL** in *Hold* mode. Press **Hold** to resume.

While monitoring a transmission, the upper line displays *Quick Search* and the lower line displays the current frequency and the direction indicator (↑ or ↓).

The modulation, *Priority* mode icon (if Priority is enabled), any CTCSS/DCS received (if enabled), and the Close Call icon (if CC Pri or CC-DND is enabled) will also appear in the display.

- To store a frequency, press **Pgm/E**. See Storing Found Search Frequencies, page 55.
- To temporarily lock out a frequency, press **L/O**.

- To permanently lock out a frequency, press **L/O** twice quickly.
- To exit Quick Search, press **Scan**.

See also Search Options on page 53 for Delay, CTCSS/DCS settings, and locking out/reviewing/unlocking frequencies.

## **Search Options**

### *Search Delay*

This setting controls how many seconds the scanner waits after a transmission ends before resuming searching. If you select a minus delay time, the scanner stops on the transmission for the setting time and then automatically resumes scanning. (Default = 2 seconds)

1. Press **Func** then **Pgm/E** in *Service, Custom, or Quick Search/Search Hold* mode to view the *Search* menu.
2. Scroll to *Set Delay* and press **Pgm/E**.
3. Turn **SCROLL CONTROL** to select the delay time from the following options:
  - -10 sec - resumes after 10 seconds.
  - -5 sec - resumes after 5 seconds.
  - 0 sec - resumes immediately.
  - 1 sec - waits 1 second for a reply then resumes.
  - 2 sec - waits 2 seconds for a reply then resumes.
  - 3 sec - waits 3 seconds for a reply then resumes.
  - 4 sec - waits 4 seconds for a reply then resumes.
  - 5 sec - waits 5 seconds for a reply then resumes.
4. Press **Pgm/E** to save and return to previous menu.

## CTCSS/DCS Search

This setting controls whether the scanner will search for a subaudible tone when it stops on a transmission during a Service Search. (Default = On)

1. Press **Func** then **Pgm/E** in any *Service*, *Custom*, or *Quick Search/Search Hold* mode to view the *Search* menu.
2. Turn **SCROLL CONTROL** to *CTCSS/DCS Search* and press **Pgm/E**.
3. Turn **SCROLL CONTROL** to select one of the following settings:
  - Search Off
  - Search On
4. Press **Pgm/E** to save and return to previous menu.

## Programming Custom Search Ranges

You can define each search range used during a Custom Search.

1. Press **Func** then **Pgm/E** in *Custom Search* mode to view the *Search* menu.
2. Turn **SCROLL CONTROL** to *Program Limits* and press **Pgm/E**.
3. Turn **SCROLL CONTROL** to *Search Bank 1-10* and press **Pgm/E**. You will see the previously programmed lower frequency. At *Lower*, press **Pgm/E** and use the keypad to enter the lower limit frequency then press **Pgm/E**.
4. Scroll to *Upper* and press **Pgm/E**. You will see the previously programmed upper frequency. Use the keypad to enter the upper limit frequency then press **Pgm/E**.

5. Press **.Clr** to return to the *Select Bank* menu. Repeat for each custom search bank you want to reprogram then press **Srch/Svc** to start searching.

### **Storing Found Search Frequencies**

You can store found frequencies into the channel storage banks in any *Search* mode, any *Close Call* mode, or *Weather Scan* mode.

- To store a frequency, press **Pgm/E**.
- To store a frequency in the Close Call Hits bank to a Channel Storage Bank in *Scan* mode, press **Func** then **Pgm/E**.

*Save Frequency* displays and the scanner shows the first empty channel location. To select another location, turn **SCROLL CONTROL** to select another channel then press **Pgm/E** to store the frequency or **.Clr** to exit and return.

The scanner saves the frequency to the channel location and brings you to the channel menu for the channel so you can customize the channel options.

Scroll to to any channel options desired to edit. See *Programming Channels*, page 37.

### **Locking Out Search Frequencies**

You can lock up to 200 search frequencies: 100 temporary frequencies and 100 permanent frequencies.

While receiving a frequency in any *Search* or *Search Hold* mode, press **L/O** once to temporarily lock out the frequency. *Temporary L/O* and *TL/O* briefly appears in the display. When the scanner is turned off, the temporary lockout is cleared.

Press **L/O** twice quickly to permanently lock out the frequency. *Locked Out* and *L/O* briefly appear in the display. When the scanner is turned off, the lockout is not cleared.

If you lock out a frequency in *Search* mode, the scanner will resume searching from the next frequency.

**Notes:** Any frequency locked out in one *Search* mode will also be locked out in all *Service, Custom, Quick, and Close Call Search* modes. You can still manually select locked-out frequencies. However, if you lock out all frequencies in the selected search bank, the scanner displays *All Locked!* on the second line.

### **Unlocking Search Frequencies**

1. Press **Func** then **Pgm/E** in any *Search* or *Search Hold* mode to view the *Search* menu.
2. Scroll to *Review Lockouts* and press **Pgm/E**.
3. Scroll to view the locked out frequencies. *L/O* will indicate a permanent lockout and *TL/O* will indicate a temporary lockout. Press the **L/O** button to unlock any selected frequency.

To unlock all *Search/Close Call* frequencies, press and hold **L/O** in any *Search Hold* mode until the scanner prompts *Clear All L/O*.

To unlock all *search/Close Call* frequencies, press and hold **L/O** until the scanner prompts *Clear All L/O?* Press **Pgm/E** to confirm or **.Clr** to cancel.

Press **.Clr** to resume Searching.



# CLOSE CALL

## *Using the Close Call Feature*

Unlike searching, which requires the scanner to tune to a frequency to check for a transmission, Close Call RF capture directly detects the presence of a strong, nearby signal and tunes to that frequency.

Close Call RF capture works great for finding frequencies at venues such as malls and sporting events. You can set the scanner so Close Call detection works "in the background" while you are scanning other frequencies, turn off normal scanning while Close Call is working, or turn off the Close Call feature and use the scanner normally. You can set the scanner so it alerts you when the Close Call feature detects a frequency. and you can also set the frequency bands where you want the scanner to look for transmissions.

The scanner also automatically stores the last 10 hits received into a temporary bank called "Close Call Hits" in any *Close Call* mode. The hits go away when you cycle power. You can also store these temporary frequencies into channel storage banks.

Close Call capture works well for locating the source of strong local transmissions such as mobile and handheld two-way radios in areas with no other strong transmission sources. However, if you are in an area with many transmission sources (such as pager radio transmitters, multi-use radio towers, traffic control devices, etc.), Close Call RF capture might not find the transmission you are searching for, or it might find a transmission other than the one you are searching for.

Close Call works better with some types of transmissions than others. It might not correctly display frequency information for transmitters using a highly directive antenna (such as an amateur radio beam antenna), if there are many transmitters operating at the same time in the same area, or if the transmitter is a broadcast television station.

### **Selecting Close Call Modes**

1. In *Scan* or *Search* mode press **Func** then **Hold** to enter the *Close Call* Menu.
2. Scroll to *Close Call Mode* and press **Pgm/E**.
3. Turn **SCROLL CONTROL** and select from the following modes:
  - Close Call Off - turns off Close Call.
  - Close Call DND - only checks for Close Call hits between transmissions avoiding breaks in current transmiss
  - Close Call Pri (Priority) - checks for Close Call hits every 2 seconds, even during transmissions.
  - Close Call Only - performs continuous Close Call checks until you exit by pressing **Scan** or **Srch/Svc**.
  - < Back - returns to previous menu.
4. Press **Pgm/E** to select and return to the *Close Call* menu.

If Close Call DND or Close Call Pri is selected, the Close Call icon will display in *Scan* and *Search* modes.

### **Close Call Only Mode**

In *Close Call Only* mode, the first line displays *Close Call*, *CC Search* scrolls from the right to the left on the second line, and the Close Call icon blinks in the display.

Enabled search bands appear on the lowest line. Disabled search bands are not displayed. The currently searched bank number flashes.

- To turn Close Call bands on or off, use the number keys (1-5) on the keypad.

One search band must always be enabled. If you turn off all search bands, the scanner will display *All Band Off!*

- To hold on a specific band, press **Hold**. Turn **SCROLL CONTROL** and select the band to monitor.

When the scanner finds a frequency, *CCFOUND!* appears in the display. The scanner will also beep or flash the display (if enabled) in the *Close Call Alert* option in the *Close Call* menu.

- Press any key (other than **Hold**) to view the displayed frequency.

While monitoring a Close Call transmission, the scanner displays *Close Call* on first line and the monitoring frequency on the second line.

The modulation and any CTCSS/DCS received (if enabled) will also appear on the display.

Numbers at the bottom of the display show the enabled Close Call bands. The currently searched band number flashes.

When the transmission ends, the scanner resumes searching according to the delay setting.

To hold on a frequency, press **Hold**.

To start a Quick Search at the current frequency, turn the **SCROLL CONTROL** in *Hold* mode and press **Hold** to start searching.

To cancel the hit, turn the Scroll Control.

To temporarily lock out a frequency, press any key then **L/O**.

To permanently lock out a frequency, press any key then **L/O** twice quickly.

To store a frequency, press **Pgm/E**. See Storing Found Search Frequencies on page 55.

To exit *Close Call Only* mode, press **Scan**.

The following paragraphs describe Delay, CTCSS/DCS, Alert Settings, Setting Close Call Bands, and reviewing/unlocking frequencies.

### **Set Close Call Bands**

This setting allows you to select the bands searched for all *Close Call* modes.

1. Press **Func** then **Hold** to view the *Close Call* menu.
2. Scroll to *Close Call Bands* and press **Pgm/E**.
3. Scroll to each band you want to enable/disable and press **Pgm/E**.
4. Scroll to select *C-Call Band On or Off* and press **Pgm/E**.
  - 25-54 VHF-Low-VHF Low Band (25 - 54 MHz)
  - 108-137 CIV-Air - Civil Air Band (108 - 137 MHz)
  - 137-174 VHF-High - VHF High Band (137 - 174 MHz)
  - 225-320 MIL-Air - Military Air Band (225 - 320 MHz)
  - 320-512 UHF - UHF Band (320 - 512 MHz)
  - Back - returns to previous menu.

5. Press **.Clr** (or scroll to *Back* and press **Pgm/E**) to save and return to the *Close Call* menu.

### **Close Call Alert**

This setting controls the Alert Beep and Alert Light settings used during Close Call operation. (Default = On for both)

1. Press **Func** then **Hold** to view the *Close Call* menu.
2. Scroll to *Close Call Alert* and press **Pgm/E**. Select from the following options:
  - Alert Beep - Controls whether the scanner sounds an alert beep when Close Call detects a signal.
  - Alert Light - Controls whether the scanner flashes the display backlight when Close Call detects a signal.
  - Back - returns to previous menu.
3. Scroll to any option you want to enable/disable and press **Pgm/E**.
4. Scroll to *On* or *Off* and press **Pgm/E**
5. Press **.Clr** (or scroll to *Back* and press **Pgm/E**) to save and return to the *Close Call* menu.

### **Close Call Hits Bank**

The scanner saves the last 10 Close Call hits into the Close Call temporary store bank named "Close Call Hits."

This setting turns the bank on or off during *Scan* mode. (Default = Off)

1. Press **Func** then **Hold** to view the *Close Call* menu.
2. Scroll to *Scan Hits* and press **Pgm/E**.

3. Scroll to *Scan Hits On or Off* and press **Pgm/E** to save and return to the *Close Call* menu. (Default = Off)

You can also store these temporary frequencies into channel storage banks when you receive them in *Scan* mode and scroll to them in *Scan Hold* mode.

See also Storing Found Search Frequencies on page 55.

### ***Close Call Delay***

This setting controls how long the scanner stays on the frequency after a transmission ends before resuming Close Call operation. If you select a minus delay time, the scanner stops on the transmission for the preset time and then automatically resumes scanning. (Default = 2 seconds)

1. Press **Func** then **Hold** to view the *Close Call* menu.
2. Scroll to *Set Delay* and press **Pgm/E**.
3. Scroll to select the delay time from following options:
  - -10 sec - resumes after 10 seconds.
  - -5 sec - resumes after 5 seconds.
  - 0 sec - resumes immediately.
  - 1 sec - waits 1 second for a reply then resumes.
  - 2 sec - waits 2 seconds for a reply then resumes.
  - 3 sec - waits 3 seconds for a reply then resumes.
  - 4 sec - waits 4 seconds for a reply then resumes.
  - 5 sec - waits 5 seconds for a reply then resumes.
4. Press **Pgm/E** to save and return to the *Close Call* menu.

## **Close Call CTCSS/DCS Search**

This setting controls whether the scanner will search for a subaudible tone when it stops on a transmission during Close Call operation. (Default = On)

1. Press **Func** then **Hold** to view the *Close Call* menu.
2. Scroll to *CTCSS/DCS Search* and press **Pgm/E**.
3. Scroll to select one of the following options:
  - Search Off
  - Search On
4. Press **Pgm/E** to save and return to the *Close Call* menu.

## **WEATHER OPERATION**

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Your scanner has been primarily designed as a multi-band, general services scanner. While it incorporates a weather alert ability as one of its features, we recommend that you not use the scanner as your sole means for receiving emergency alerts. Your local electronics retailer can supply a selection of weather radios that are dedicated to weather service monitoring. Such radios can be more dependable for this application.

### **SEARCHING FOR A WEATHER BROADCAST**

To monitor a weather channel, press **Func** then **3(WX)** to view the *Weather* menu.

Scroll to *Weather Scan* and press **Pgm/E**.

The upper line displays *WX Scan* and the lower line displays the scanning frequency with the channel number and the modulation.

The scanner starts scanning the preprogrammed weather frequencies, and stops on the first good signal. Generally, there will be one channel of the seven that you will receive best. If this station is weak, turn the Scroll Control to check for other weather broadcasts in your area.

**Note 1:** *NOAA broadcasts are continuous broadcasts. You only lose reception if you move out of a coverage area. If the signal is lost, the scanner resumes searching for a weather transmission.*

**Note 2:** *You cannot lock out weather frequencies.*

## **WEATHER ALERT STANDBY**

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 scans the weather channels, but does not play the channel's audio.

To turn *Weather Alert Standby* on or off, press **Func** then **3(WX)** to view the *Weather* menu.

Scroll to *Weather Standby* and press **Pgm/E**.

The upper line displays *WX Alert Standby* and the lower lines display the channel number with the frequency and modulation.

When the scanner detects the Weather Alert Tone (1050Hz), the scanner goes into *Hold* mode, immediately sounds a Weather



Alert siren and displays *WX Alert Warning*. This siren sounds as long as the Weather Alert Tone (1050Hz) is broadcasted.

Pressing any key stops the siren, opens the squelch, then monitors the Weather channel.

To exit *Weather Alert Standby* mode, press **Scan**.

## WEATHER ALERT PRIORITY

Enabling this setting assigns priority to weather alert scanning no matter what else the radio might be doing. Checking the weather channel every 5 seconds for a 1050Hz tone assures you of the latest occurrence of a NOAA warning. (Default = Off)

1. To turn Weather Alert Priority on or off, press **Func** then **3(WX)** to view the *Weather* menu.
2. Scroll to *Alert Priority* and press **Pgm/E**.
3. Scroll to select *WX Priority On or Off* and press **Pgm/E** to save and return to the *Weather* menu.
4. Press *Scan* or *Srch/Svc* to exit.

While Weather Alert Priority is active, *WX* appears in the display.

If no carrier is on any Weather channel, the scanner displays *No WX Reception WX Priority Off* and turns Weather Alert Priority off.

## TECHNICAL SPECIFICATIONS

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Size: 2.6 in (W) x 1.3 in (D) x 4.5 in (H)

Weight: 6.2 oz. (without antenna and battery)

Operating Temperature: – 20° C (– 4°F) to + 60°C (+ 140° F)  
Close Call – 10° C (+ 14°F) to + 50°C (+ 122° F)  
Power Requirements: 2 AA Rechargeable Ni-MH Batteries (2.4V DC)  
2 AA Alkaline Batteries (3.0V DC)  
Connect to PC with USB cable (5.0V DC 500mA)

LCD Display: 64 X 128 Full Dot Matrix LCD with orange-color backlight.

Internal Speaker: 24ohm, 32mm diameter, Dynamic Type, 0.8W Max.

Certified in accordance with FCC Rules and Regulations Part 15 Sub-part C as of date of manufacture.

Scan Banks: 10 banks

Scan Channels: 500 Channels (50 Channels/Bank)

Service Searches: 10 Bands

Police

Fire/Emergency

HAM Radio

Marine

Railroad

Civil Air

Military Air

CB Radio

## FRS/GMRS/MURS

### Racing

Custom Searches: 10 Bands

Waather Channels: 7 Channels

Search Band: 16 searchable bands

Scan Rate: 80 channels/second

Search Rate: 90 steps/second  
270 steps/second  
(5kHz step)

Scan Delay: 2 seconds

Audio Output Power: Internal Speaker - 360mW nominal  
(24ohm)

Headphone (L-ch) 4mW nominal  
(32ohm)

Antenna: 50 ohms (Impedance)

### Sensitivity (12dB SINAD) Nominal

#### VHF Low Band

(AM)	25.005 MHz	0.3 uV
(NFM)	40.840 MHz	0.3 uV
(NFM)	132.980 MHz	0.3 uV

#### Aircraft Band

(AM)	118.800 MHz	0.4 uV
(NFM)	127.175 MHz	0.3 uV
(NFM)	135.500 MHz	0.3 uV

### VHF High 1 Band

(NFM)	138.150 MHz	0.3 $\mu$ V
(FM)	157.100 MHz	0.2 $\mu$ V
(NFM)	161.985 MHz	0.2 $\mu$ V
(NFM)	173.225 MHz	0.2 $\mu$ V

### VHF High 2 Band

(AM)	225.050 MHz	0.4 $\mu$ V
(AM)	272.950 MHz	0.4 $\mu$ V
(AM)	315.050 MHz	0.4 $\mu$ V

### UHF Band

(AM)	325.050 MHz	0.4 $\mu$ V
(NFM)	406.875 MHz	0.3 $\mu$ V
(NFM)	511.9125 MHz	0.3 $\mu$ V

### Close Call Sensitivity (No Modulation)

#### VHF Low Band

(NFM)	40.8400 MHz	282 $\mu$ V
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#### Aircraft Band

(AM)	127.1750 MHz	112 $\mu$ V
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#### VHF High 1 Band

(NFM)	173.2250 MHz	0.89 $\mu$ V
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#### VHF High 2 Band

(AM)	315.0500 MHz	200 $\mu$ V
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#### UHF Band

(NFM)	406.875 MHz	0.3 uV
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#### Signal Noise Ratio (nominal)

##### VHF Low Band

(AM)	25.0050 MHz	48dB
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(NFM)	40.8400 MHz	37dB
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##### Aircraft Band

(AM)	127.1750 MHz	48dB
------	--------------	------

##### VHF High 1 Band

(FM)	157.100 MHz	42dB
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(NFM)	173.2250 MHz	37dB
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##### VHF High 2 Band

(AM)	225.0500 MHz	48dB
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##### UHF Band

(AM)	325.0500 MHz	49dB
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(NFM)	511.9125 MHz	34dB
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Features, specifications, and availability of optional accessories are all subject to change without notice.

## RBRC INFORMATION

As part of our commitment to protect the environment and conserve natural resources, Uniden voluntarily participates in an RBRC industry program to collect and recycle Ni-MH batteries within the US.



Please call for information on Ni-MH battery recycling in your area. (RBRC is a registered trademark of the Rechargeable Battery Recycling Corporation.)

# REFERENCES

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## CTCSS FREQUENCIES

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			

## DSC CODES

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

## 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. Birdies are especially present at the 16MHz level (Internal CPU clock).

Press **L/O** to lock out the channel, then press **SCAN** to resume scanning.

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.

Discover other CB radios and components on our website.