uniden®
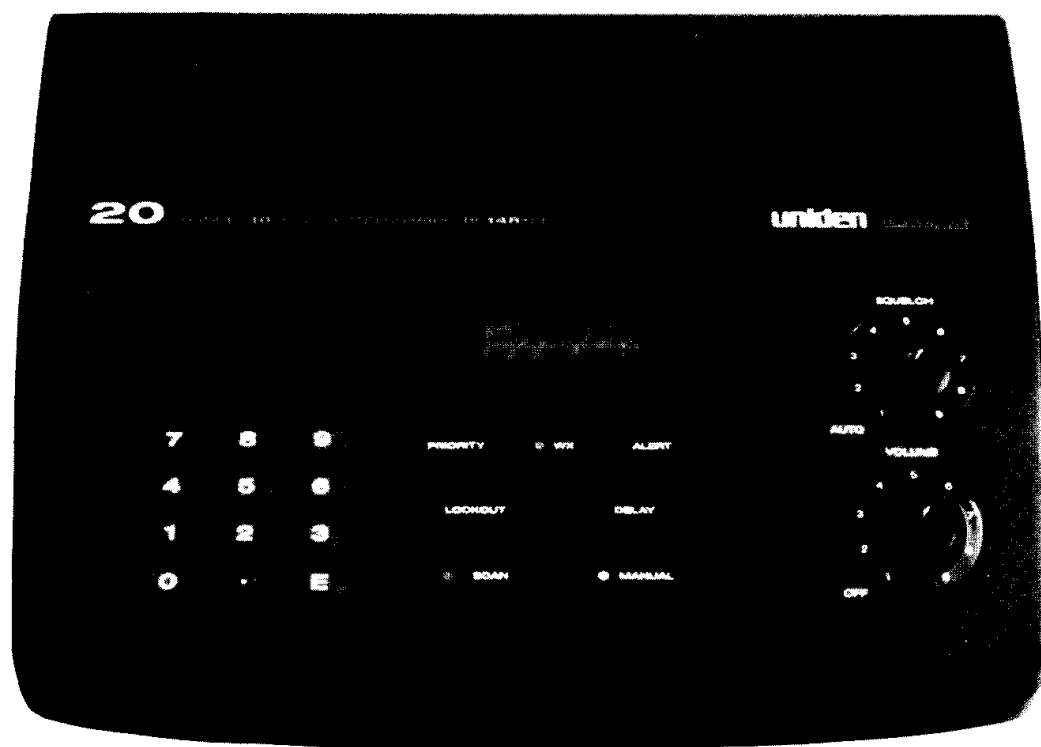
Bearcat®

BC148XLT-1
20-Channel Base Scanner

PRECAUTIONS

Before you read anything else, please observe the following:

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.

NOTE:

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 jurisdiction. Your local law enforcement officials should be able to provide you with information regarding the laws in your community.

Table of Contents

Introduction

About Scanning

Scanning Options

Scanning is easy and fun with the **BC148XLT-1** 20-Channel Base Scanner. You can scan in 2 ways:

- Scan channels you have programmed
- Scan pre-programmed weather channels.

Unlike standard AM or FM radio stations, most 2-way communications (see "Types of Communication" below) do not transmit continuously. The **BC148XLT-1** scans programmed channels at the rate of about 15 channels per second until it locates an active frequency. When the scanning stops on an active frequency, it remains on that channel as long as the transmission continues. When the transmission ends, the scanning cycle resumes until another transmission is received. You can set a 2 second delay (refer to "2 Second Delay", page 11.)

Types of Communication

You can monitor communications such as:

- Police and fire department (including rescue and paramedics)
- NOAA weather broadcasts (7 pre-programmed channels)
- Business/industrial radio
- Motion picture and press relay
- Utility
- Land transportation frequencies such as trucking firms, buses, taxis, tow trucks, and railroads
- Marine and amateur (ham radio) bands
- And many more in the 29-54 MHz, 137-174 MHz, and 406-512 MHz ranges

You must program a frequency into each channel you want to use. If you do not have any known local frequencies to program, call the 800 number on the yellow sheet enclosed in this package. A Uniden representative should be able to provide you with a few sample frequencies. Or, use the enclosed order form to purchase a local frequency list.

Where to Obtain More Information

The Bearcat Radio Club and other similar hobby clubs have publications, information on computer bulletin boards, and contests for the radio enthusiast. See the enclosed printed material for more information. Additional information is also available through your local library.

Taking Proper Care of Your Scanner

■ 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.

■ Do not plug the scanner into an outlet controlled by a wall switch as prolonged periods without power causes scanner memory loss.

Unpacking

Carefully check the contents against this list:

■ **BC148XLT-1** Base Scanner

■ Telescoping Antenna

■ AC Adapter (Model AD-144U)

■ This Operating Guide

■ Registration Form (in this Operating Guide)

■ Frequency Directories Order Form and other printed information

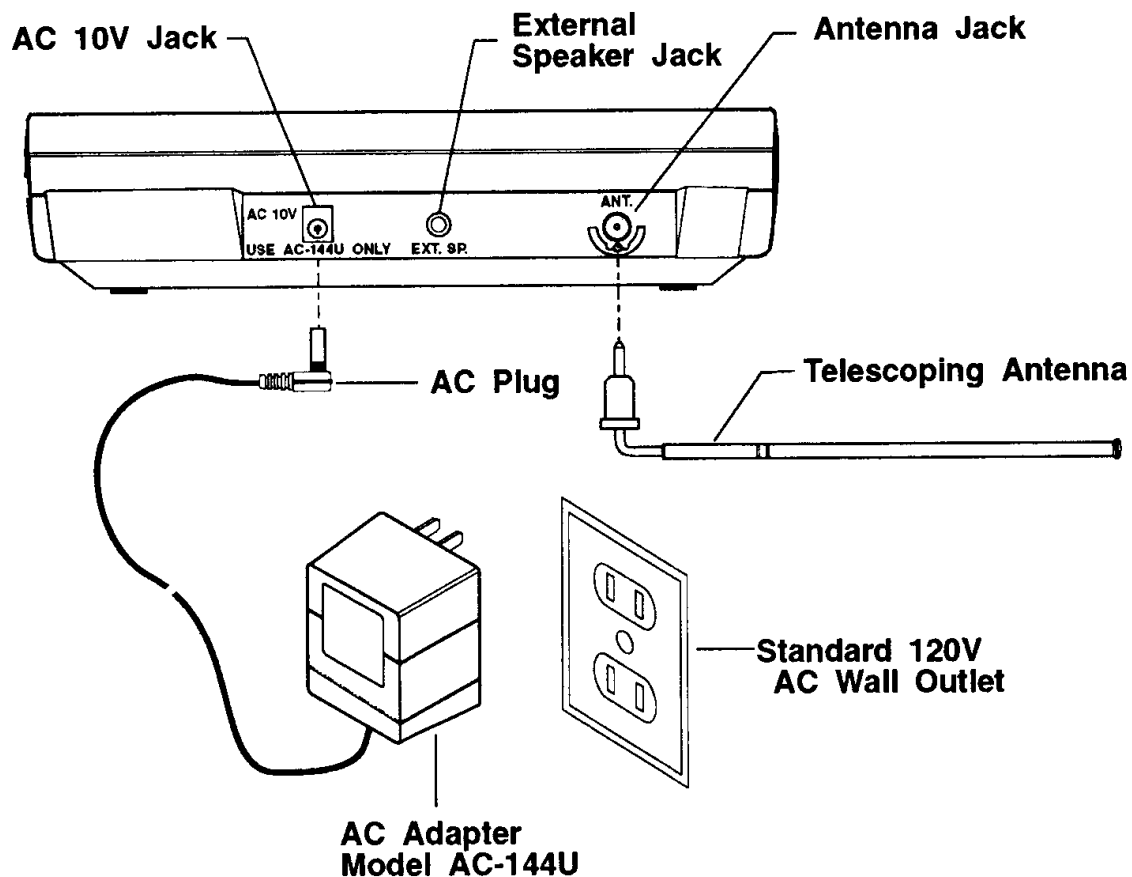☞ If any items are missing or damaged, contact your place of purchase immediately.

☞ Complete and mail your Registration Form immediately.

☞ Read this Operating Guide thoroughly before operating the scanner.

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Installation

AC 10V Jack

External Speaker Jack

Antenna Jack

AC 10V
USE AC-144U ONLY   EXT. SP.
ANT.

AC Plug

Telescoping Antenna

Standard 120V
AC Wall Outlet

AC Adapter
Model AC-144U

1. Insert small plug at the end of the AC Adapter cord into the **AC 10V** jack on the scanner.

2. Plug the AC Adapter into any standard 120V AC wall outlet. **Do not** plug into an outlet controlled by a wall switch; it could cause scanner memory loss.

3. Plug the Telescoping Antenna into the **ANT.** jack. Extend the antenna to its full height. For UHF frequencies, shortening the antenna may improve the reception.

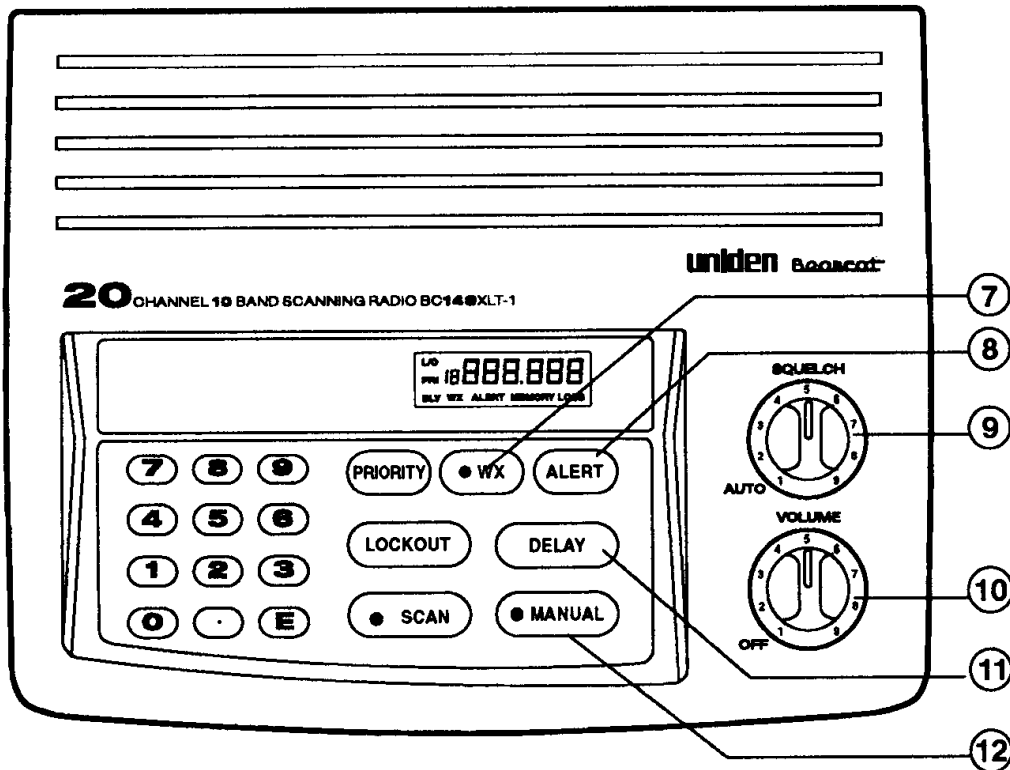4. Plug an optional external speaker (8-ohm) into the **EXT. SP.** jack.

Note

■ If your scanner receives strong interference or electrical noise, relocate the scanner or its antenna away from the source.

■ If you are operating the scanner in the fringe area or 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.) If the optional antenna has no cable, use 50-70 ohm coaxial cable for lead-in. A mating plug may be necessary for the optional antennas.

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Operation

Controls and Functions
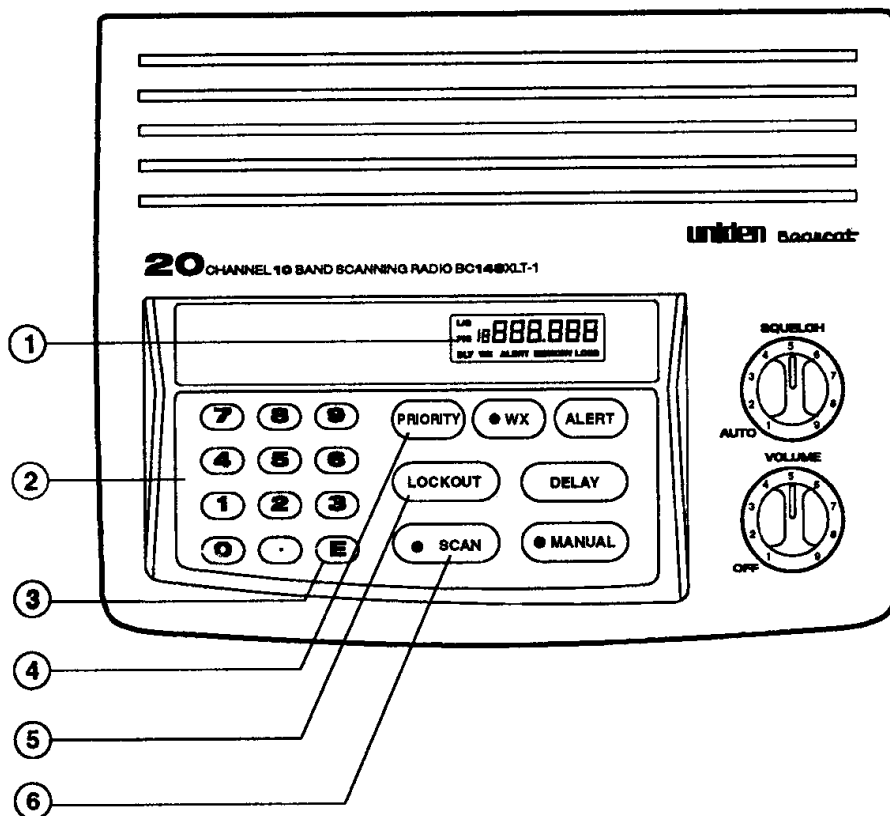
1. **LCD Display**   Displays channel frequency and functions.

2. **Numeric Keys**   Use to program a frequency into each channel for scanning. Also, use for direct channel access with (• MANUAL).

3. **Enter Key**
   (E)   Press (E) to complete the programming of a frequency to the selected channel.

4. **PRIORITY Key**
   (PRIORITY)   Press (PRIORITY) to turn Priority mode on or off. In Priority mode, the scanner samples Channel 1 every 2 seconds, regardless of any other mode the scanner is in, except Weather Alert. If a transmission on Channel 1 is detected, the scanner monitors Channel 1 until no signal is present. Priority mode cancel when you turn off your scanner.

5. **LOCKOUT Key**
   (LOCKOUT)   Use the **LOCKOUT** mode to prevent scanning of a selected channel. The L/O indicator appears when the current channel is locked out. Lockout is retained in memory. Press (LOCKOUT) again to unlock the channel. The **LOCKOUT** indicator disappears.

6. **SCAN Key**
   (• SCAN)   Press (• SCAN) to start scanning.

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uniden Bearcat

20 CHANNEL 10 BAND SCANNING RADIO BC140XLT-1

7. Weather Key
(• WX)

Press (• WX) to find the local weather channel.
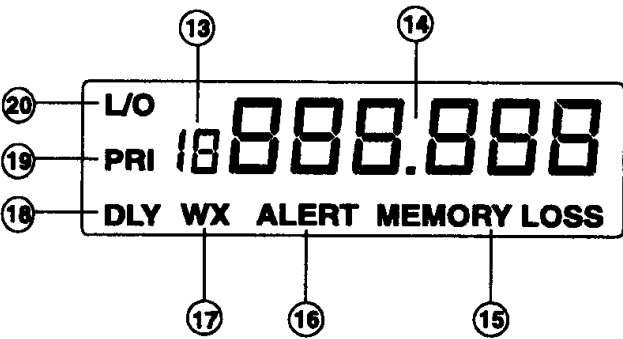
8. ALERT Key
(ALERT)

You can activate the Weather Alert only while you are listening to a local weather channel in the Weather mode. Weather Alert mutes the normal weather broadcast audio. A siren sounds when a severe weather emergency tone signal is received.

9. SQUELCH Control

Adjust **SQUELCH** to set the scan threshold or use **AUTO** for the factory setting.

10. Volume Control / Power Switch

Turn **VOLUME** *clockwise* to turn the scanner on and increase the volume. Turn *counterclockwise* to decrease the volume or turn the scanner off.

11. DELAY Key
(DELAY)

Press (DELAY) for a switchable 2 second delay at the end of transmissions.

12. MANUAL Key
(• MANUAL)

Press (• MANUAL) to stop scanning. Press (• MANUAL) again to step to the next channel. Also, use for direct channel access by first entering the channel number and then pressing (• MANUAL) to go directly to that channel.

13. Channel Display   2-digit display that shows 0 through 19. Channel 20 displays as "0".

14. Frequency Display   Six-digit display that shows the current frequency.

15. Memory Loss Indicator   **MEMORY LOSS** shows on the LCD display when a power failure causes a loss in memory.

16. Alert Indicator   **ALERT** appears on the LCD display when the scanner is in the Weather Alert mode. The broadcast audio is mute.

17. Weather Indicator   **WX** shows when in Weather Search mode.

18. Delay Indicator   **DLY** appears when Delay function is active

19. Priority Indicator   **PRI** displays when Priority function is active

20. Lockout Indicator   **L/O** shows when the current channel is locked out.

Scanning Overview

The **BC148XLT-1** has 20 memory channels; each can be programmed to store 1 frequency within the band of frequency coverage. (For a listing of frequency ranges and bands, see "Technical Specifications" on page 18.)

When you press (· SCAN), the **BC148XLT-1** scans each programmed frequency for activity (skipping channels that are locked out) at the rate of about 15 channels per second. As the unit scans, the word "SCAN" moves across the LCD display.


When the scanning stops on an active frequency, it remains on that channel as long as the transmission continues. What happens at the end of the transmission depends on whether or not the Delay function is active. If the Delay function is active, the scanner pauses on the same channel for 2 seconds, waiting for a responding transmission. If there is no responding transmission within 2 seconds, the scanning cycle resumes. If the Delay function is inactive, the scanner immediately resumes scanning.
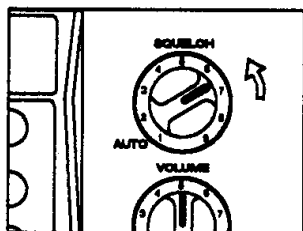
Getting Started
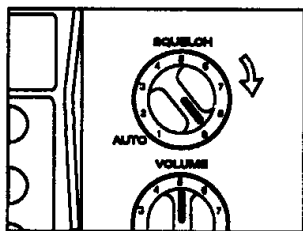
Turn **SQUELCH** fully *clockwise* to the highest number setting (9).
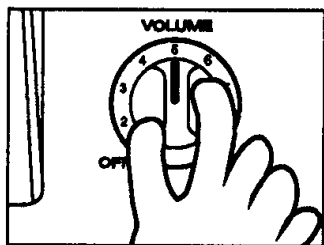
Turn on the power by turning **VOLUME** *clockwise*.
Adjust the volume to where you can hear a steady noise.

Set the squelch at the scanning threshold by turning **SQUELCH** *counterclockwise* just until the noise disappears or set on **AUTO** for the factory setting.
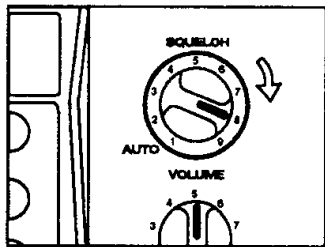
The scanner automatically starts scanning.

If you have not programmed any channels yet, press (· WX) to hear your local weather broadcast.

Adjust **VOLUME** to a comfortable listening level.

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Adjusting the Squelch

Set the **SQUELCH** control to **AUTO** for the factory setting or manually set squelch.

To manually set squelch, open the squelch by turning **SQUELCH** control *clockwise* to position **8** or **9**. You should hear a steady sound (scanning stops).

Now turn **SQUELCH** control *counterclockwise* slowly until the sound disappears. This is the threshold point at which scanning starts. At the squelch threshold, an incoming signal just slightly stronger than the noise will open the squelch.

When squelch is open, you can hear the broadcast (scanning is stopped). If squelch is set too tight (that is, too far *counterclockwise* from the threshold point), a stronger signal is required to open the squelch.

If squelch is set on a point *clockwise* from the threshold, you hear a constant sound (noise, if no signal is present); the scanner does not scan.

Programming Tips

- Program 1 frequency per channel.

- The fixed priority channel is Channel 1. Program the most important frequency, or the one of major interest, into Channel 1.

- 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 complete the programming in 1 channel (by pressing (E)), press (•MANUAL) to step up to the next channel.

- If you make an error during programming, or the frequency is out of range, "**Error**" appears on the channel display.

- During numeric entry, if you know that you pressed the wrong number, press (•) twice. This cancels the entire numeric entry, and displays the current channel number.

- Above 406 MHz, the frequency steps are in 12.5 kHz increments. To enter a frequency such as 450.4875, press each of the seven digits in sequence.

- Once you have programmed a channel, you cannot *erase* the frequency in that channel. However, you *can* change the frequency in a specific channel by programming a new frequency over the existing one.

- If you want to manually erase *all* the memory, first turn off the scanner. Then, press and hold (•) , (2), and (9) simultaneously while you turn the scanner back on. "**MEMORY LOSS**" appears in the LCD Display, indicating that all memory is erased.
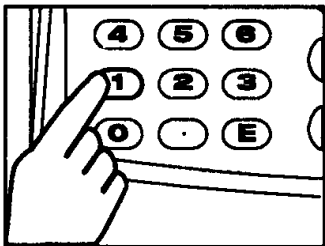
9

Programming Frequencies

Before you can use your **BC148XLT-1**, you must program the channels – except weather frequencies. Follow these steps:
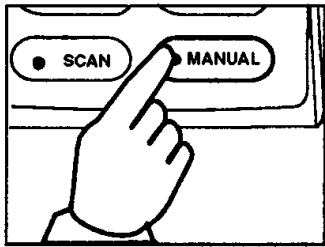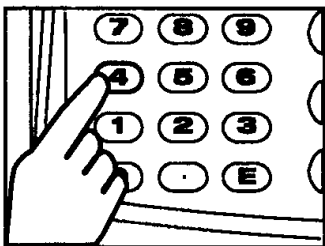
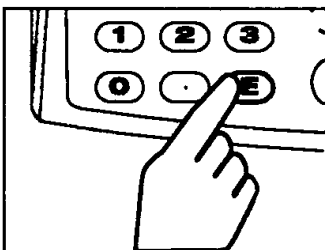**Example:** Program 420.150 MHz into Channel 12.

Press (•MANUAL) to stop scanning.

To select the channel (12), press (1), then (2) on the numeric keypad.

Then press (•MANUAL) again.

Type in the frequency numbers, including the decimal point, using the numeric keypad:
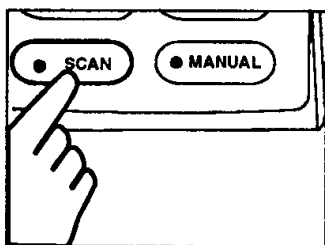
(4)(2)(0)(•)(1)(5)(0)

Press (E) to complete the entry.

About Memory Back-up

Your **BC148XLT-1** has a convenient type of memory back-up system. In the event of a power failure, the scanner provides approximately 7 days of memory retention so you don't immediately lose the frequencies stored in any of the channels. If the memory is lost, **MEMORY LOSS** shows in the LCD Display.

Scanning

Turn on the power, or press (• SCAN) to start scanning. (When the scanner is turned on, it is automatically in Scan mode.)

Scanning automatically stops on any active channel, except those channels programmed with (LOCKOUT). If the Delay function is active, scanning automatically resumes 2 seconds after the channel becomes inactive. If the Delay function is inactive, scanning resumes immediately at the end of a transmission.
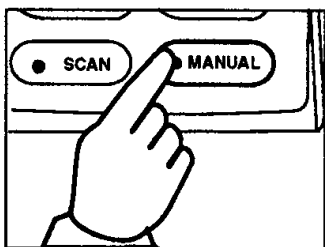
Press (• MANUAL) anytime to stop scanning. When you press (• MANUAL), you are out of Scan mode, and the scanner remains on the displayed channel.

Press (• SCAN) to start scanning again, or press (• MANUAL) to step up to the next channel.

If desired, you can press (• MANUAL) repeatedly to manually scan all 20 channels, 1 press per channel, including the channels that are locked out.

2-Second Delay

You can program your **BC148XLT-1** to pause for 2 seconds after a transmission ends. This allows time for a slight pause between transmissions. Without the 2 second delay, the scanner immediately resumes scanning, missing the rest of the transmission.
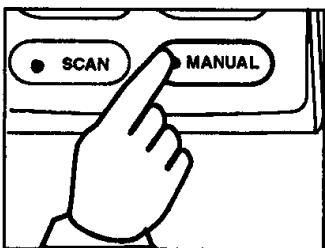
To activate the Delay function, press (• MANUAL). You cannot enable the Delay function while scanning.
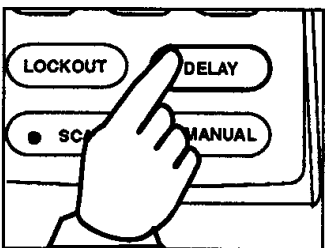
Press (DELAY). "**DLY**" appears in the LCD Display. To disable, press the **DELAY** key again.

Direct Channel Access

This feature allows you to instantly access a specific channel you want to monitor.

Example: Select Channel 4.

Press (**4**).

Press (**• MANUAL**).

When you press (**4**), the display changes to "**4**", but the scanner still monitors the previous channel displayed. You must press (**• MANUAL**) to successfully complete the direct access to Channel 4.
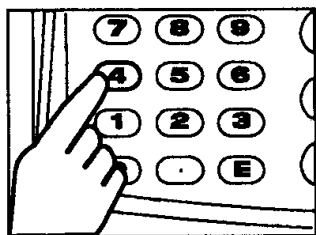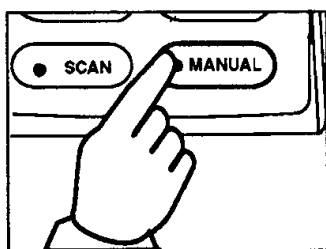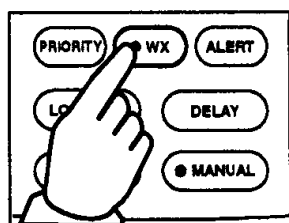
Weather Channel Scan

The **BC148XLT-1** allows you to search for your local NOAA weather channel.

Press (**• WX**) to find the active weather channel in your area from 7 pre-programmed NOAA channels.

It is possible that your area is covered by more than 1 weather station.

When you press (**• WX**), the **BC148XLT-1** immediately finds an active broadcast. If the broadcast sounds weak and distant, press (**• WX**) again to look for a closer station.

Note

■ All weather channels transmit continuous broadcasts. Once the Weather Scan stops on a transmission, it remains on that channel. Weather Scan does not resume automatically. You must press (**• WX**) again to resume weather scanning.

■ In some parts of the country, you may not be able to monitor weather broadcasts, such as in low-lying areas. Normally a higher location improves the reception.

To exit Weather mode, press (**• SCAN**), (**• MANUAL**), or turn off the scanner.

Note

■ Do not program a weather frequency into 1 of the 20 channels. Because weather channels transmit continuously, the scanner remains on that channel, disrupting the scanning cycle. The Weather Scan feature is provided specifically to avoid this occurrence.
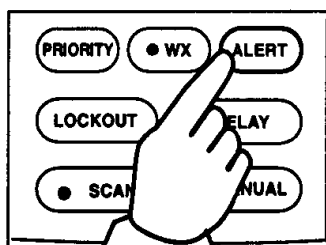
Weather Alert

With this unique feature, the **BC148XLT-1** can function as a severe weather warning radio. This is especially useful when your area is expecting severe weather conditions late at night. Just set the scanner to Weather Alert mode and sleep peacefully! The **BC148XLT-1** will awaken you with a loud siren whenever your local NOAA weather station broadcasts a severe weather emergency tone.

To use Weather Alert:
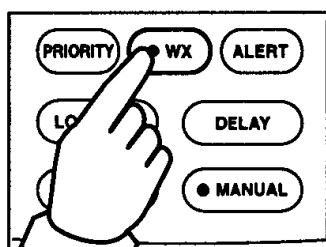
First, press (• WX) a few times to find your best local weather broadcast.

The Weather mode must be selected to activate the Weather Alert mode.

Press (ALERT).

The LCD displays "**ALERT**", and the **BC148XLT-1** is silent.

The **BC148XLT-1** now functions as a Weather Alert radio, waiting to receive a severe weather emergency tone.

When the scanner receives an emergency tone from your local NOAA weather station, it responds with a loud siren at maximum volume (regardless of the volume control setting). The siren continues until the emergency tone stops transmitting. When the siren stops, you can hear the emergency message being broadcast. The "**ALERT**" blinks to indicate that the scanner has received an emergency tone at least once. The **BC148XLT-1** remains in Weather Alert mode and responds with a siren if another emergency tone is broadcast.

To stop the siren manually and exit Weather Alert mode, press any of these keys: (• WX), (• MANUAL), or (• SCAN).

Testing the Weather Siren   You can test the siren in any mode to hear how it sounds and to ensure that the circuitry is working.

Press and hold (• WX), then press (ALERT) to start the siren.

To stop the siren, press any key.

Priority Scanning

Your **BC148XLT-1** has a fixed Priority Channel, Channel 1. Priority Scan works like a "dual watch" function. When you activate Priority Scan mode, the scanner starts "sampling," or keeping track of the activity on Channel 1 while listening to other channels. A constant **"PRI"** appears on the LCD display.

Note

■ Priority Scan mode does not work when the scanner is in Weather Alert mode.

Every 2 seconds, the scanner checks Channel 1 for activity. If a signal is present, Channel 1 is monitored until the transmission ends. When the signal stops for more than 2 seconds, normal operation resumes.
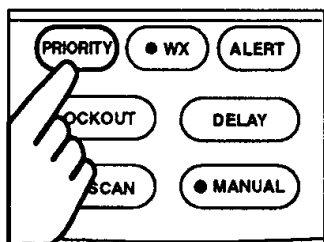
First, program the frequency most important to you into Channel 1.

Press (PRIORITY) to set the scanner in Priority Scan mode. **"PRI"** appears on the display.

To exit Priority Scan, press (PRIORITY) again. The **"PRI"** disappears from the LCD display.

Channel Lockout

You can lock out a channel so it is not scanned. Locked out *does not* erase the frequency from the channel. You can lock out up to 19 channels, including the Priority channel, but *not all* 20 channels. Lockout information is retained in memory when the scanner is turned off.

Example: Suppose you want to lock out Channel 2 because it stops on transmissions you don't want to hear.
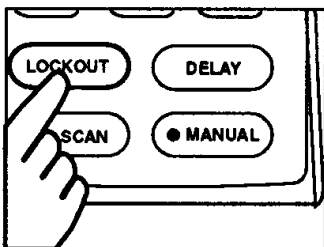
Press (LOCKOUT) when the scaner stops on Channel 2. The scanner locks out Channel 2, immediately advances to the next channel that is not locked out, and resumes scanning.

In the Manual mode, press (LOCKOUT) to lock out the displayed channel. Pressing (LOCKOUT) does not advance to the next channel in Manual mode.

"L/O" appears in the LCD display to indicate the displayed channel is locked out.

Whenever you want to search for channels that are locked out, press (•MANUAL) repeatedly to go through all 20 channels. If a channel is locked out, the **L/O** indicator shows.

Restoring a Locked Out Channel

To unlock a channel so that it can be monitored during scanning:
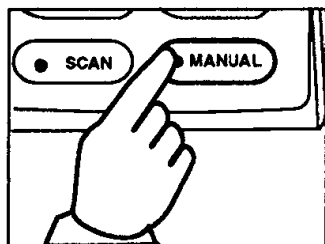
Use (•MANUAL) to find the locked out channel.
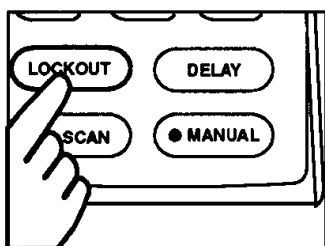
Press (LOCKOUT) again to unlock the displayed channel.

The L/O indicator disappears.

About the Unit

Helpful Hints

General Use

■ Turn the scanner off before disconnecting the power.

■ Always write down the programmed frequencies in the event of memory loss.

■ If memory is lost, simply reprogram each channel. The display shows **MEMORY LOSS** indicator when there has been a memory loss.

■ Always press each keypad button firmly until you hear the entry tone for that key entry.

Location

■ If strong interference or electrical noise is received, relocate the scanner 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.

■ 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.

■ Do not plug the scanner into an outlet controlled by a wall switch as prolonged periods without power will cause scanner memory loss.

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 Display window.

■ Do not use excessive amounts of water.

Repairs

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

Birdies

■ All radios are subject to receiving undesired signals or "birdies". 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 (• SCAN) to resume scanning.

Troubleshooting

If your **BC148XLT-1** is not performing properly, try the following steps.

Problem	Solution
Scanner won't work.	• Check the connections at both ends of the AC Adapter. • Turn on the wall switch of your room. You could be using an outlet controlled by the wall switch. • Move the AC Adapter to another wall outlet.
Improper reception.	• Check antenna connection • Move or angle the antenna. • If programmed frequency is higher than 406 MHz, a shorter antenna length may improve the reception. • Relocate the scanner. • You may be in a fringe area. This could require an optional multi-band antenna. Check with your dealer or local electronics store.
Scan won't stop.	• Adjust squelch threshold (see page 9, "Adjusting the Squelch.") • Check the antenna connection. • Check to see if many of the channels are locked out. If so, the scanner has less chance of finding an active channel. • Review each channel's frequency to see if it is correct and no memory has been lost. • It is possible that none of the programmed frequencies are active at this time.
Scan won't start.	• Press the Scan key again. • Adjust the Squelch control. • Check to see if 19 channels are locked out. If so, unlock the channels as needed.
Weather Scan won't work.	• Adjust squelch to the threshold (see page 9, "Adjusting the Squelch.") • Check antenna. • No active station within range.
Cannot set Weather Alert.	• Press the Weather key again to find the active channel. Then press the Alert key again.

If you still cannot get satisfactory results and want additional information, or to return the unit for service, 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.

Technical Specifications

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

Band Coverage: 10 bands

Frequency Coverage:
29.0-29.7 MHz 10 Meter Amateur Band
29.7-50.0 MHz 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

406-420 MHz   Federal Government
420-450 MHz   70 cm Amateur Band
450-470 MHz   UHF Standard Band
470-512 MHz   UHF-"T" Band
Above bands in 12.5 kHz steps

Sensitivity (nominal)
12 dB SINAD:
$0.3\,\mu V$ 29-54 MHz
$0.4\,\mu V$ 137-174 MHz
$0.6\,\mu V$ 406-512 MHz

Selectivity (nominal):
-6 dB at ±10 kHz (162.4 MHz 20 dB QS)
-50 dB at ±15 kHz (162.4 MHz 20 dB QS)

Channels: 20

Scan Rate: Up to 15 channels per second

Scan Delay: 2 seconds

Audio Output (nominal):   0.9 W to 1.2 W (max.) 10% TDH

Power Requirements: 10 VAC using AD-144U AC Adapter

Antenna: Telescoping (included)

External Jacks:
Antenna jack
External speaker
AC 10 V power jack

Size: $9\,\frac{9}{16}$" (W) x $7\,\frac{7}{8}$" (D) x $2\,\frac{5}{16}$" (H)

Weight: 1 lb. 5 oz.

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

One Year Limited Warranty

WARRANTOR: UNIDEN MANUFACTURING, INC ("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
> 8707 North By Northeast Blvd.
> P.O. Box 501368
> Indianapolis, IN 46250
> (317) 842-2483, 8 a.m. to 5 p.m. EST, Monday through Friday

COVERED UNDER ONE OR MORE OF THE FOLLOWING U.S. PATENTS:				
RE 31,523	4,027,251	4,057,760	4,092,594	4,100,497
4,114,103	4,123,715	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	4,627,100	4,888,815	4,932,074
4,947,456	5,014,348	5,199,109		

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