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EQUIPMENT AND ACCESSORIES FOR YOUR MONITORING POST

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### **Uniden BC80XLT Portable Scanner**

've reviewed some pretty sophisticated scanners in this column. Each model is packed with more features than its predecessor. The prices are stiff, too. The digital trunktracking portables are now in the \$500 price range.

So it was with some trepidation that I asked the folks at C. Crane Company to lend me a Uniden BC80XLT portable scanner for review. Of what interest could a simple, 50 channel, conventional scanner be? I spent the next few weeks with the BC80XLT and can tell you it is fun to use due to its simple programming and decent performance.

### Battery Options

The BC80XLT is powered by four AA batteries – a simple, yet flexible power arrangement.

An AD70U AC wall wart power supply is included and plugs into side of the radio. You can charge NiCd cells while they are installed inside the BC80XLT's battery compartment. A two position switch inside the battery compartment selects either alkaline or NiCd batteries. The switch permits the wall wart to recharge NiCd batteries and prevents it from interacting with nonrechargeable alkaline batteries.

### Mode and Frequency Coverage

The BC80XLT's frequency coverage is ba-

sic. It tunes the VHF-low, VHFhigh, UHF, and 800 MHz land mobile bands, as well as the upper portion of the 10 meter amateur band. There is no AM detector nor coverage of the VHF civilian air frequencies.

Step sizes are fixed and cannot be overridden. The step size is 5 kHz below 174 MHz and 12.5 kHz above.

### Memory

The BC80XLT has 50 memory channels divided across five banks. The memory capacity is dwarfed by more upscale 1000 channel models, but is adequate for a basic model.

Programming memory is as easy as it gets. The BC80XLT uses the same keypad sequence as the old Electra/Bearcat models, like the BC250 and BC210. Press the Manual key, the channel number, then E(nter). That gets you to the channel you want to program. Then, type the frequency digits and E(nter).

The BC80XLT is smart enough to recognize duplicate memory channels and flashes the channel number if you try to program a frequency which is already programmed in another memory channel, regardless of bank. You can override the warning by a second press of the E(nter) key.

### Scanning and Searching

Channels may be bypassed during a memory scan by using the L/O (lockout) key.

The BC80XLT does not support a limit search feature. A less powerful, but easier to use band search is provided instead. Repeated presses of the band key lets you select one of these bands to search: 29 - 29.7, 29.7 - 50, 50 -54, 137 - 144, 144 - 148, 406 - 420, 420 - 450, 450 - 470, 470 - 512, and 806 - 956 MHz.

A few seconds after the band is selected, the BC80XLT starts to hunt up or down the band, looking for an active frequency. The search direction can be controlled using one of the arrow keys. You can pause the search and hold a single frequency by pressing the Hold key. Pressing E(nter) writes the displayed frequency to the current memory channel.

A built-in rescan delay keeps the BC80XLT on the same frequency for 2 sec-

onds after the last transmission before resuming a scan or search. More sophisticated models permit you to defeat the rescan delay, but the BC80XLT does not.

Pressing the WX key searches through the set of preprogrammed NWR weather frequencies.

When priority is enabled, the BC80XLT samples a priority channel every 2 seconds. Priority is available in Manual or memory scan mode, but not during band searches.

The first channel of each bank is marked as a priority channel, but you can designate a different channel within each bank if you wish. The priority channels



appear to be nested, with the lower priority channels having higher priorities.

### Other Features

The frequency digits displayed on the LCD screen are large enough to view, though the display "washes out" when viewed at an angle from above. Pressing the LIGHT key illuminates the LCD display for 15 seconds. There is control to turn the lamp on continuously.

### Performance

My sample BC80XLT has adequate sensitivity, though the 137 - 140 MHz range could use a boost.

The BC80XLT's audio quality is ample in volume and pleasing in tone.

I measured a 60 millisecond squelch tail (noise burst) at the end of each transmission of a 1  $\mu$ V signal when the squelch control is set just past the threshold. That's a little longer than I like, but close to the BCT8, BC9000XLT, and ICOM IC-R8500. As with most Uniden scanners, the squelch tail is shortened with tighter settings of the squelch

### **CURRENT CONSUMPTION**



# TORING TIMES September 2004

6855.4875

scan 1 2 3

HOLD BAND 7 8 9

AL 4 5 6

LIGHT WX L/O PRI

### Measurements

#### Uniden BC80XLT Scanner S/N 34028626

Uniden America Corp. 4700 Amon Carter Blvd. Fort Worth, TX 76155 tel. (800) 554-3988 http://www.uniden.com

Frequency coverage (MHz): 29 - 54 137 - 174 406 - 512 806 - 823.9875 849.0125 - 868.9875 894.0125 - 956 Step sizes: fixed, not user selectable 5 kHz below 174 MHz 12.5 kHz above 174 MHz Modes: NFM NFM modulation acceptance: 12 kHz Audio output: 0.165 watts into 8 ohms @ 10% distortion Attenuator: none Intermediate Frequencies: 380.7 (approx.), 10.85, 0.45 MHz Squelch tail near threshhold (1 UV @ 155 MHz): 60 ms. **Current Consumption (mA):** 0.25, off 62, scanning 153, open squelch, max volume **Practical memory scan** speed: 19 channels/sec.

control. A stronger signal is required to "break" the tighter squelch.

Alkaline batteries might last longer and rechargeable batteries could require less frequent charging when used in the BC80XLT than in most other models. Without a lot of fancy circuitry to rob power, the BC80XLT is economical in current consumption. It draws only about 62 mA while scanning, which is lower than most scanners I measured (see chart). It is bested only



by my Yaesu VR-120 and the older BC100 and BC200XLT.

### Summary

One of the toughest problems facing the scanner radio industry is making radios which are too complicated for customers to use. Nothing can discourage a hobbyist faster than a radio too complex to understand. This is especially true for newcomers to the hobby who may be forever turned off by purchasing "too much" radio the first time.

The first few generations of keyboard programmable scanners were much easier to use than their high end, modern descendants. The BC80XLT is as simple as the earlier model scanners, but is a better performer due to its triple up conversion circuitry. The early model scanners used a 10.7 or 10.8 MHz first IF and had poor image rejection.

If you keep in mind the lack of air band coverage, the BC80XLT is a good first scanner for people new to the hobby or as a second "knock around" scanner for those who already own a high end model.

The BC80XLT is available for \$174.95 from C. Crane Company, 1001 Main St., Fortuna, CA 95540-2008, tel. (800)522-8863, Web site http://ccrane.com

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