

Uniden BC248CLT Scanner

We reviewed a Uniden BC278CLT clock radio scanner in the November column. Able to fit on the smallest of night tables, the '278 was the first Bearcat scanner to provide an alarm clock feature and cover the AM and FM broadcast bands and the conventional scanner bands. Concurrent with the BC278CLT, Uniden is marketing the lower cost BC248CLT (Fig. 1). The similarity in their cases belies significant differences inside.

The Uniden Bearcat BC248CLT is a 50-channel, double conversion scanner manufactured in the Philippines. That's half as many memories as the BC278CLT. Both models are designed for base use only, and are powered by the same 10 VAC wall transformer (supplied).

The frequency coverage is 520 - 1720 kHz, 88 - 108 MHz, VHF-low, VHF-high, and UHF land mobile bands. The upscale BC278CLT tunes the civilian air and 800 MHz bands, but the BC248CLT omits them. A 7-inch loop antenna (Fig. 3) is provided with both models for AM/BCB reception and its feedline attaches to a 2-pin connector on the rear panel.

■ Memory Features

There are 50 programmable memory channels, organized in five banks. Each channel can be locked out from the scan list, and a 2-second rescan delay is selectable on a per-channel basis. Empty channels are skipped automatically, and channels containing duplicate frequencies are detected. Uniden claims the memory information is backed up indefinitely, but the clock must be reset after a substantial power failure. As with the BC278CLT, the time "stood still" when we unplugged the scanner for 2 minutes or so.

AM and FM broadcast band frequencies are allocated in separate 10 channel banks and they cannot be programmed using the numeric keypad. AM/FM frequencies must be programmed like a car radio instead. You are constrained to tuning up or down the band and pressing E to save the displayed frequency into memory. It would be much simpler if you could program your favorite country music station by pressing 104.3 E, for instance, but you cannot.



FIGURE 1. *Uniden BC248CLT combination scanner and clock radio*

■ Scan Yes, Search No

The BC248CLT may be used as a scanner or AM/FM radio, but not both at the same time. You can scan any combination of the five VHF/UHF memory banks. The scan rate is half the speed of the BC278CLT and our BC248CLT scans at only 11 channels/sec. The scan rate is not unreasonable for a radio with few channels. One channel per bank may be designated as a priority channel, which is sampled every 2 seconds when priority scanning is enabled.

Most of us expect a scanner to provide a limit search facility, but the BC248CLT does not. The higher price BC278XLT includes both limit and service search features.

Pressing the WX key causes both models to search seven preprogrammed NOAA weather frequencies.

If the weather alert feature is active, both models sit silently until the NWS (National Weather Service) transmits the proper signal, which causes the scanner to beep and open the squelch. The NWS can broadcast messages to specific geographic regions by transmitting the appropriate SAME (Specific Area Message Encoding) codes. You can arm the BC278CLT by programming SAME codes, but the lower cost BC248CLT does not support SAME.

■ The Exterior

The BC248CLT and BC278CLT look like twins. Each is housed in a dark gray plastic cabinet. The speaker and all controls are mounted on the top, at a slight angle. The large knobs are finger friendly.

The large LCD display requires no squinting. The display is brightly lit in soft green in scan, manual, and weather modes. In other

modes, the backlight remains bright for 10 seconds, then reverts to dim illumination. Pressing any key will temporarily force the backlight back to bright.

Large, soft rubber feet prevent the BC248CLT from sliding around. While the BC248CLT and BC278CLT look similar from the front and top, they use different antenna connectors. The BC278CLT sports a BNC jack. The BC248CLT incorporates a low cost "Motorola-type" jack—an anachronism found in scanners sold when disco music was popular. A plastic lip below the jack prevents using an SO-239 adapter. You must either file down the plastic lip or use a bench grinder to alter a metal adapter as we did (Fig. 2).

■ Performance

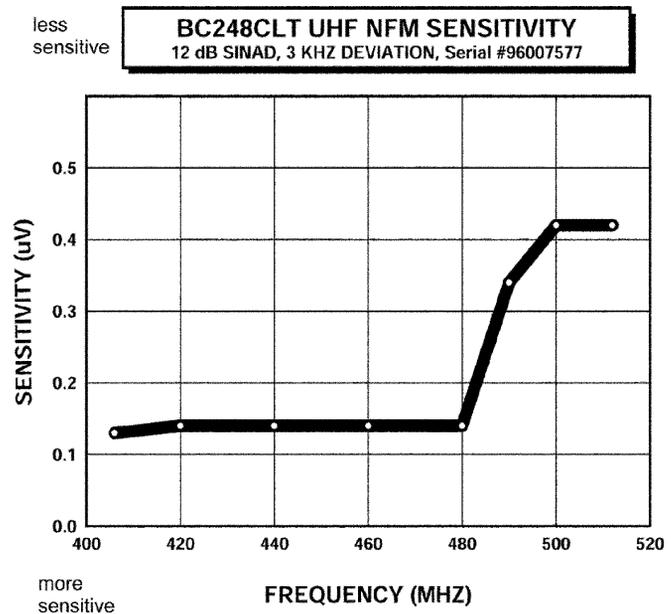
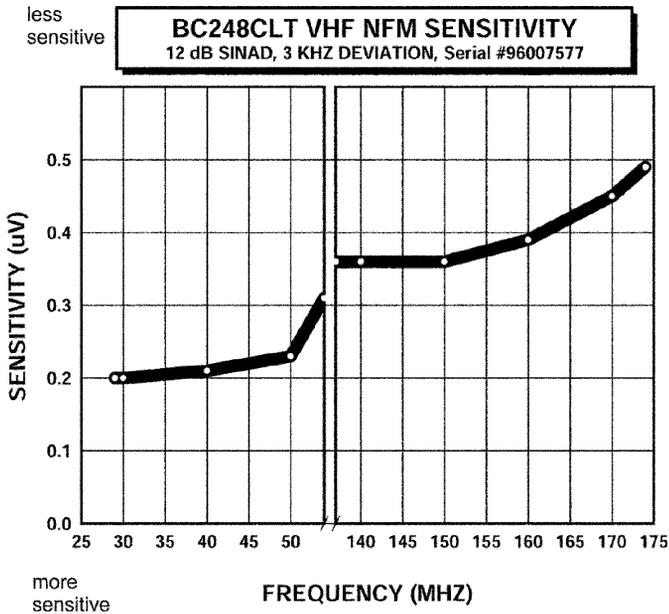
The loaner BC248CLT (s/n 96007577) works well. We measured several performance parameters and the quantitative results appear elsewhere in this review.

The double conversion BC248CLT and BC278CLT share a 0.45 MHz 2nd IF, but they have different 1st IFs—21.4 MHz and 10.85 MHz, respectively. Though the BC248CLT uses a higher 1st IF, our BC278CLT rejects images better at our 155 MHz test frequency. The sensitivity, modulation acceptance and audio output of this BC248CLT are quite reasonable. The BC248CLT has no limit search, so we didn't hunt for birdies.

A rear mounted 1/8" jack permits connection of an external speaker, but you won't



FIGURE 2. *Female UHF to Motorola plug adaptor modified to fit BC248CLT (top). Unmodified adaptor (bottom)*



need one. Audio from the top mounted, 2 watt speaker is pleasant, with sufficient treble.

The weather alert feature worked as advertised during the weekly NWS test transmission.

■ **Overall**

Low cost (\$119.95 from Grove Enterprises) doesn't have to mean poor performance. In this case, it simply means fewer features. Our BC248CLT sounds good and performs well, but its frequency coverage and feature set is quite limited. It would serve someone with simple needs, e.g., a businessman who needs to monitor his VHF tow truck fleet or a resident who enjoys listening to the fire department and doesn't want to search for new frequencies.



FIGURE 3. Supplied 7-inch AM loop antenna (base stand not shown)

MEASUREMENTS
UNIDEN BC-248CLT
SCANNER
S/N 96007577

List price \$179.95
Uniden America Corp.
4700 Amon Carter Blvd.
Fort Worth, TX 76155

Frequency coverage (MHz):
0.520 - 1.720 (10 kHz steps)
88 - 108 (100 kHz steps)
29 - 54 (5 kHz steps)
137 - 174 (5 kHz steps)
406 - 512 (12.5 kHz steps)

Sensitivity:
see graphs

FM modulation acceptance:
12 kHz

Intermediate Frequencies:
21.4, 0.45 MHz

Image rejection:
35 dB at 155 MHz

Audio output power at speaker jack:
780 mW @ 10% distortion into
8 ohms

Practical memory scan speed:
11 ch/sec.

Search speed:
No search capability

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