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Uniden BC278CLT Scanner

ight tables are too small. That's the conclusion I came to long ago, after trying to fit an FM monitor receiver, AM/FM broadcast radio, and an alarm clock on the night table next to my bed. It's now 30 years later, and Uniden has a new combination scanner radio and alarm clock that will fit on the smallest of night tables.

The BC278CLT (Fig. 1) is the first Bearcat scanner to provide an alarm clock function and cover both the AM and FM commercial broadcast bands. Regency flirted with the scanner clock radio paradigm in the past. The old Regency K500 contained an alarm clock but no AM or FM broadcast band. The later Regency Z60 (Fig. 2), which was housed in a sloping, clock radio type cabinet, covered FM and had an alarm clock function, but didn't tune the AM broadcast band.

The Uniden Bearcat BC278CLT is a 100-channel, double conversion scanner manufactured in the Philippines. It is designed for base use only and is powered by the supplied 10 VAC wall transformer.

The frequency coverage is 520 - 1720 kHz, 88 - 108 MHz, and the conventional scanner bands including the 800 MHz and civilian air bands. Cell phone coverage is, of course, excluded in the US version. A 7-inch loop antenna (Fig. 3) is provided for AM BCB reception and its feedline attaches to a 2-pin connector on the rear panel.

■ Memory Features

There are 100 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 perchannel 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. The time remained intact when I unplugged the scanner for 2 minutes or so.

AM and FM broadcast band frequencies are allocated in separate 10 channel banks. Too bad they cannot be programmed using the numeric keypad. They 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 press-



FIGURE 1. Uniden BC278CLT combination scanner and clock radio

ing 99.5 E, for instance, but you cannot.

■ Scanning and Searching

The BC278CLT 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 slower than Turbo Scan models and my radio scanned at about 19 channels/sec. One channel per bank may be designated as a priority channel, which is sampled every 2 seconds when priority scanning is enabled.

You can program one pair of search limits and the BC278CLT will search frequencies between them. My scanner searched at about 23 steps/second. You can pause a search operation and step up or down in frequency manually by pressing the appropriate keys. Up to 10 frequencies may be locked out from a limit search.

The BC278CLT does not support a direct search facility, which would permit searching up or down from the currently displayed frequency. A Service Search menu is provided for scanning preprogrammed frequencies in categories named Police, Fire/Emergency, Air, and Marine. Pressing the WX key can search seven preprogrammed NOAA weather frequencies.

If the weather alert feature is active, the BC278CLT sits 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, and you can program up to 15 SAME codes in the BC278XLT. The scanner displays different indicators for warnings, watches, weather statements, and tests.

■ Big Knobs, Nice Display

The BC278CLT 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 very easy to use, much better than "dust magnet" slider controls or the tiny bar-like knobs on the BC9000XLT which elude my grasp.

The LCD display is different from previous models. Most impressive is the huge size of the frequency digits. You can actually read them without squinting! The display is backlit 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 dimillumination. Pressing any key will temporarily force the backlight back to bright – a thoughtful arrangement.

Large, soft rubber feet prevent the BC278CLT from sliding around.

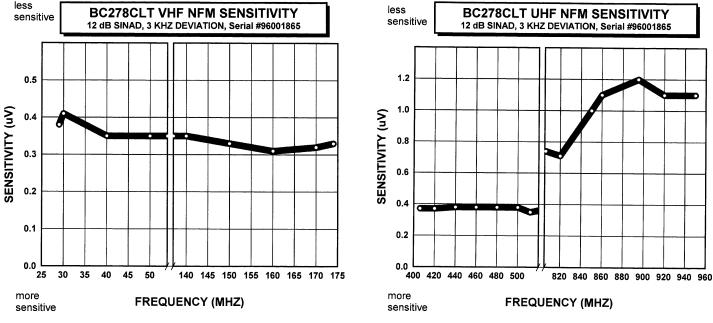
■ Improved Performance

The telephone industry, through the FCC, is pressuring manufacturers to rid scanners of cellular telephone images, and hobbyists are the beneficiaries. The newer double conversion Uniden scanners, including the BC278CLT and BC245XLT (see September 1999 *MT*), exhibit outstanding image rejection compared with their ancestors of 5 years ago.

The loaner BC278CLT (s/n 96001865) worked well. I measured several performance parameters and the quantitative results appear elsewhere in this review. The sensitivity, modulation acceptance and audio output of this BC278CLT are quite reasonable. Audio from the top mounted speaker is pleasant, though with accentuated treble. A rear mounted 1/8" jack permits connection of an external speaker.



FIGURE 2. Regency Z60, an early combination scanner and clock radio, lacked AM broadcast coverage (RELM photo).



MEASUREMENTS UNIDEN BC-278CLT SCANNER S/N 96001865

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)

108 - 137 (AM, 12.5 kHz steps)

137 - 174 (5 kHz steps)

406 - 512 (12.5 kHz steps)

806 -823.9875, 849.0125 -

868.9875,

894.0125 - 956 (12.5 kHz steps)

Sensitivity:

see graphs

FM modulation acceptance:

12 kHz

Intermediate Frequencies:

10.85, 0.45 MHz

Image rejection:

50 dB at 155 MHz, 50 dB at 860 MHz

Audio output power at speaker jack: 550 mW @ 10% distortion into 8 ohms

Practical memory scan speed:

19 ch/sec.

Search speed:

23 steps/sec.

Birdies can be heard on 41.6, 52.0, 165.3, 407.7625, 407.8125, 413.175, 413.225, 813.4, 814.95, 815.8, 815.85, 823.8, 849.35, 899.2375, 906.4125, 906.5875, and 926.7 MHz. That may seem like a long list, but it's a lot better than the older BC890XLT I tested, and most of the BC278CLT birdies fall on frequencies I don't monitor.

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

■ Overall

I was impressed with the BC278CLT. It's certainly not in the "Lincoln Town Car" category, but it performs much better than some of radios sold us 10 years ago. Its weather capabilities, large knobs and display are appealing. I wouldn't hesitate to keep it on my nightstand or recommend it unless you require a trunk tracking capability.



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

and selectivity also suffers at this frequency – take any strong trunking control channel at 930 MHz and it is audible 25 kHz either side of the true center frequency. Performance at 800 MHz is better, but not by much. I guess your sensitivity plot tells the story there..."

■ Note on the BC245XLT

Reader Mike Chace commented on the portable Uniden BC245XLT Trunktracker II we reviewed in the September 1999 issue:

"Just read through your review of the BC245XLT and had a comment. It may be just due to my downtown Philadelphia location, but my '245 is way too sensitive and intermod prone around 930 MHz. I have to listen with just the helical antenna (and attenuator switched in) to anything on the 935-940 MHz trunked portion, since connecting the outside antenna totally shuts down the front-end."

Mike continues, "The radio generates plenty of intermod even with no antenna connected,

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