SCANNER EQUIPMENT

Uniden BCT8 Scanner

The Uniden BCT8 is a trunk tracking scanner with features primarily useful to drivers. It is the successor to the BCT7, enhanced with trunk tracking capabilities, a full numeric keypad, BCT8-to-BCT8 cloning, and the ability to be controlled or configured by a computer.

The BCT8 provides 250 user programmable channels. Like some of the other Uniden models, there is a service search capability.

What sets the BCT8 apart from other models is that the BCT8 comes preprogrammed with frequencies specific to each state (Hawaii excepted) and an alert feature which emits a beep and flashes a red lamp when activity is detected on a police mobile extender frequency. The latter is a clue that a police vehicle is nearby.

❖ What You Get

Though the BCT8 is chiefly a mobile scanner, it comes equipped for tabletop usage, too. A 117 VAC wall wart power supply comes standard and two mobile DC cords.

One mobile cord plugs in the cigarette lighter and the other has bare wire leads which can be connected to a 12 VDC power source. Oddly, a mobile mounting bracket is not included. As the owner's manual indicates, an MB-007 mobile bracket is available and must be ordered separately.

The BCT8 employs a BNC antenna connector on the rear panel and the radio is furnished with a telescoping antenna as well as a suction cup wire antenna for use inside a window or windshield.

❖ Frequency Coverage

BCT8 frequency coverage includes Citizens Band, the 10 and 6 meter ham bands, commercial aircraft, and the more common land mobile bands. UHF military air, television, FM broadcast, and the 72 MHz bands are not included.

The radio coerces VHF-high frequencies to the nearest 5 kHz step, which doesn't account for federal government assignments. For instance, the BCT8 rounds off the 165.2375 MHz US Customs frequency to 165.2400 MHz.

❖ Memory and Modes

For scanning conventional systems, the BCT8 provides 250 user programmable channels in 5 banks of 50 channels each. The numeric keypad makes frequency entry much easier than on Uniden's other highway scanners. A per-channel rescan delay is available. One channel per bank may be designated as a priority channel.

The BCT8 supports a variety of trunked systems:

Motorola Type II 800 MHz, VHF-high band, and UHF
Motorola Type I and hybrid
EDACS wide band 9600 baud
EDACS SCAT
LTR

Only one trunked system may be programmed per bank, so the radio accommodates up to five trunked systems at a time. Each bank supports five talk group ID lists of 10 IDs each, for a total of 50 talk groups per system.

❖ Scanning and Searching

Memory scanning works in the BCT8 like it does in most other models. You can scan through five private banks of memories and lock out both banks and individual channels so they are skipped.

In addition, you can enable the preprogrammed highway frequency bank during the scan operation, permitting you to scan a mixture of both highway and personally programmed frequencies.

More general purpose scanners provide a limit search which permits the user to program a lower and upper frequency limit and search between them. While the BCT8 does not support a general purpose limit search, it does provide a restricted band search. The band search employs a fixed step size and mode and fixed frequency limits to search any one of these bands: 25 - 28, 28 - 30, 30 - 50, 50 - 54, 108 - 137, 144 - 148, 148 - 174, 400 - 420, 450 - 470, 470 - 512, and 806 - 956 MHz (excluding the cellular phone bands).

Service Search hunts through banks of preprogrammed frequencies. You may choose from these service banks: local police and county sheriff, fire and emergency medical service, news media, weather, citizens band, civilian air band (excluding the 108 - 117.9875 MHz navigation frequencies), railroad, marine band, and government transportation.

Perhaps future models might include FRS and MURS service search banks, but the BCT8 does not.

The BCT8 displays both channel designations and frequencies when receiving a signal during citizens band, railroad, and marine band service search.

A Hold/Resume button permits pausing on a frequency or talk group during searches and while memory scanning. The Data Skip feature tries to recognize nonvoice signals and ignore them after a brief delay while scanning or searching.

❖ Owner's Manual

The BCT8 owner's manual provides enough information to operate the scanner. Two separate frequency booklets are included with the scanner, but there is no accounting of exactly which frequencies are preprogrammed into the BCT8.
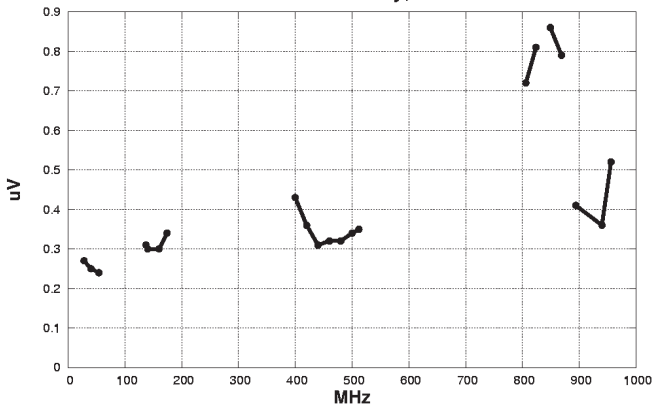
The specifications section is minimal and fails to provide the intermediate frequencies, sensitivity, and other performance figures.
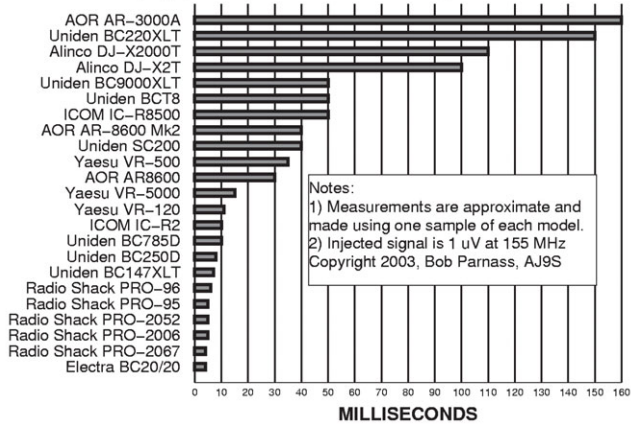
❖ Performance

The audio from our borrowed BCT8 (serial number 318Z34000015) is crisp and clear. We measure about 1.6 watts

Uniden BCT8
NFM 12 dB SINAD Sensitivity, s/n 318Z34000015

SQUELCH TAIL LENGTH

Notes:
1) Measurements are approximate and made using one sample of each model.
2) Injected signal is 1 uV at 155 MHz
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MILLISECONDS

MEASUREMENTS

Uniden BCT8 Scanner
S/N 318Z34000015
List price $319.95
Uniden America Corp.
4700 Amon Carter Blvd.
Fort Worth, TX 76155
tel. (800) 554-3988
http://www.uniden.com

Frequency coverage (MHz):
25 - 54
108 - 174
400 - 512
806 - 823.9875
849.0125 - 868.9875
894.0125 - 956

Step sizes (kHz):
fixed, not user selectable

Modes:
AM, NFM, not user selectable
NFM modulation acceptance: 13 kHz

Audio output: 1.6 watts into
8 ohms @ 10% distortion

Attenuator: none

Image Rejection Due to 1st IF (380.7 MHz):
46 dB @ 40 MHz
41 dB @ 155 MHz
45 dB @ 460 MHz
45 dB @ 860 MHz

Squelch tail near threshhold
(1 uV @ 155 MHz): 50 ms.

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at 10% distortion into an 8 ohm resistive load connected to the external speaker jack.

There is a 50 millisecond squelch tail (noise burst) the squelch control is set at its threshold. We prefer a shorter tail. The burst becomes shorter as the squelch control is tightened, though our BCT8 requires a correspondingly stronger signal to open the tighter squelch.

The BCT8 uses triple up conversion circuitry and has over 40 dB of image rejection – adequate for mobile use.

Interference from a 162.4 MHz NWR transmission can be heard on various VHF-high band frequencies, which is true for most of the other Uniden scanners we review.

❖ Software

The BCT8 is furnished with limited version programming software on a single CDROM. The software requires Microsoft Windows and we didn't try it. Uniden says the supplied software will run only in "Demo mode," restricting access to only the first memory bank unless you register the software with Uniden.

You can enable more features in the software by ordering a software key from the Uniden web site. Uniden will provide you the information required to activate the additional functionality.

❖ Other Observations

Unlike the Radio Shack PRO-2067 mobile scanner (Sept. 2000 *MT*), the BCT8's keypad is well lit. This is vital for use in a dark car.

The ribbed volume and squelch knobs are easy to grip, though they feel a little loose.

We prefer the BCT8's metal clamshell cabinet to the plastic cabinet on some earlier mobile scanners, like the Relm MS200.

❖ Overall

The BCT8 is targeted for mobile scanning. Therefore, a mobile mounting bracket should be included with the radio instead of an extra cost option.

We were impressed with the BCT8. It doesn't have text labels, CTCSS and DCS squelch like the upscale models. But, the BCT8 is a good radio for mobile use and its preprogrammed frequencies make it a good choice for a newcomer.

The Uniden BCT8 is available from Grove Enterprises for $189.95. Call 800-438-8155 or visit http://www.grove-ent.com

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reminding us that Christmas, New Years, and other holidays are good times to check for pirates. (Uses *oldturkeyradio@yahoo.com* e-mail)

Radio Free Speech- Bill O. Rights has been back on the air with his advocacy for individual freedoms, of course including the right to operate pirate transmitters. (Blue Ridge Summit)

Ragnar Radio- Last month we mentioned that this one sometimes features country music. But, no sooner was the ink dry on last month's *MT*, that they switched to rock music formats for the rest of 2003. (Uses *rangarradio@yahoo.com* e-mail)

Undercover Radio- Dr. Benway, "broadcasting from the middle of nowhere," has been adding more of a rock music emphasis to his shows lately. (Merlin and *undercoverradio@mail.com* e-mail)

Voodoo Radio- Although this one is not a new pirate, its rock music is back on the pirate bands despite its very sporadic schedule. (Elkhorn)

Voice of Captain Ron Shortwave- Captain Ron normally features rock music, with comedy sketches from time to time. (Uses *Captainron6955@hotmail.com* e-mail)

WHYP- This memorial station for James Brownyard's licensed North East, PA, operation memorial station continues its programming mix of rock music, comedy sketches, and pirate radio commentary. (Providence)

WMPR- This now veteran pirate remains active with a "dance party" format of techno rock music. (None)

❖ QSLing Pirates

Reception reports to pirate stations require three first class stamps for USA maildrops or $2 US to foreign locations. The cash defrays postage for mail forwarding and a souvenir QSL to your mailbox. Letters go to these addresses, identified above in parentheses: PO Box 1, Belfast, NY 14895; PO Box 28413, Providence, RI 02908; PO Box 69, Elkhorn, NE 68022; PO Box 109, Blue Ridge Summit, PA 17214; and Box 159, Santiago 14, Chile. Some pirates prefer e-mail, bulletin logs or internet web site reports instead of snail mail correspondence. The best bulletins for sending pirate loggings remain *The ACE* ($2 US for sample copies via the Belfast address above) and the e-mailed Free Radio Weekly newsletter, still free to contributors via *niel@ican.net*. The Free Radio Network web site, another outstanding source of content about pirate radio, is found at **http://www.frn.net**.

❖ Thanks

Your loggings and news about unlicensed broadcasting stations are always welcome via 7540 Highway 64 W, Brasstown, NC 28902, or via the e-mail address atop the column. We thank this month's valuable contributors: Dave Balint, Wooster, OH; Kirk Baxter, North Canton, OH; Artie Bigley, Columbus, OH; Cachito, Santiago, Chile; Ross Comeau, Andover, MA; Rich D'Angelo, Wyomissing, PA; Brian Duddy, Nyack, NY; Virginia Enzor, Cary, NC; Harold Frodge, Midland, MI; William Hassig, Mount Prospect, IL; Harry Helms, Las Vegas, NV; Chris Lobdell, Stoneham, MA; Greg Majewski, Oakdale, CT; Larry Magne, Penn's Park, PA; Bill McClintock, Wellington, OH; Mark Morgan, Cincinnati, OH; Adrian Peterson, Indianapolis, IN; Mike Prindle, New Suffolk, NY; Lee Reynolds, Lempster, NH; Fred Roberts, Hamburg, Germany; Robert Ross, London, Ontario; Martin Schoech, Merseburg, Germany; John Sedlacek, Omaha, NE; Ronnie Stroup, Wooster, OH; Niel Wolfish, Toronto, Ontario; and Joe Wood, Gray, TN.