Uniden BR-330T A Wideband Scanner with Trunk Tracking – Finally!

By Larry Van Horn, N5FPW

nyone who has followed this column closely over the last year knows that Uniden has been constantly raising the bar with a line of new handheld scanners offering the scanner hobbyist more listening capability. Now, for the first time ever in the scanner marketplace, we have a wideband handheld scanner with trunk trucking capability – the new Uniden BR-330T handheld.

The BR-330T offers continuous frequency coverage from 100 kHz to 1300 MHz (except for the mobile and base cellular bands). Reception modes include AM, narrowband FM and wideband FM. In addition to conventional scanning, the BR-330T has Trunk Tracker III™ technology. This will let the monitor follow unencrypted conversations on analog Motorola, EDACS, EDACS SCAT, and LTR trunk radio systems, including systems in VHF, UHF, 700 MHz, 800 MHz and 900 MHz bands. The scanner can scan both conventional and trunk systems at the same time.

If the scanner is used to scan Motorola trunk frequencies, you can set it so it scans using only the system control channel frequency data. You do not have to program all the trunk system voice channel frequencies into memory in this mode as long as all possible control channels are programmed.

Like its 246/396 Uniden cousins, this scanner uses dynamically assigned memory channels to store frequencies more efficiently than conventional scanners. The 330T has 2,500 of these memory channels used to store frequency, talkgroup, and alphanumeric tag information. This lets you organize the scanner's memory so that it more closely matches how radio systems actually work, making it easier to program and use your scanner, and allowing you to determine how much memory you have used and how much you have left.

Using 99 quick keys, you can set the scanner so you can quickly select systems and groups by using the keypad. This makes it easy to listen to or quickly lock out those systems or groups you don't want to scan.

Preprogrammed Frequencies

The BR-330T is preprogrammed with over 1,000 channels covering police, fire, and ambulance operations in the 25 most populated counties in the U.S. and frequencies for many major automobile races. For race track operations, you can set it to scan races using a frequency list or the frequencies preprogrammed into the scanner.

You can scan by car number and driver name, assign the car to a quick key, and set the scanner so it sounds an alert when the car you are scanning transmits.

There are 13 service searches ranges preset in separate public safety, TV/Radio services, amateur radio, maritime, railroad, civilian air, CB radio, FRS/GMRS frequencies, automobile racing, special services, AM broadcasts, FM broadcasts, and TV broadcasts.

The BR-330T also has a feature that lets you include selected service searches or custom search ranges during normal scan operation.

Other Enhanced Features

Many of the features found in the more expensive BCD396T have been incorporated into the BR-330T. Here are a few of the most notable ones

Close CallTM RF Capture Technology – This one feature that monitors have really enjoyed. Recently at an airshow, a milair monitor was able





to find some new frequencies thanks to Close Call. This model has a broadcast screen to set the scanner to ignore Close CallTM or to search hits on known broadcast frequencies, including pager frequencies. It also has a custom screen capability that lets you input up to 10 frequency ranges that the scanner will ignore during Close CallTM or search operation.

You can lock out any system, group, frequency, or channel while scanning or searching. If you lock out a system or group, any channels belonging to that system or group are also locked out. You can lock out up to 200 frequencies and review all locked-out frequencies. The scanner skips locked-out frequencies while using the Close Call feature or while searching.

The 330T incorporates the fast CTCSS and DCS squelch modes search and store. You can see the CTCSS/DCS tone on a programmed memory channel or during searches if this function is selected.

First introduced in the 396, this scanner also has fire tone-out standby. This feature lets you set the scanner to alert you if a two-tone sequential page is transmitted. You can set up to 10 settings (transmit frequency, tone frequencies) then select one of those presets for standby monitoring.

Repeater reverse lets you set the scanner so it switches to the input frequency on a conventional repeater system. Channel alert allows you to set the scanner so it alerts you when there is activity on any channel you specify. For each alert in the scanner (such as channel alert, Close Call alert, emergency alert), you can select from nine different tone patterns and also set the alert volume level independently from the main volume level.

Automatic channel step accepts frequencies on any valid channel step, even if it does not fall within the band plan's default step. Frequency step lets you select a frequency step (5, 6.25, 7.5, 8.33, 9, 10, 12.5,15, 20, 25, 50 or 100 kHz) for manual mode and chain search mode. The scanner's auto

MT First Look Rating (0-10 scale) Audio Quality8	
Audio Levels9	
Back light/Display8	
Battery Life8	
Ease of use8	
Feature Set8	
Keyboard/Button/Control Layout 8	
Overall Construction8	
Overall Reception8	
Overall Manual7	
Sensitivity8	
Selectivity7	

step feature also lets you set the scanner so it automatically chooses the correct step.

Some of the other features that 396T users will be familiar with include: Quick recall, scan/search delay, text tagging (name each system, group, channel, talk group ID, custom search range, and SAME group, using up to 16 characters per name), unique data skip, duplicate frequency alert, and memory backup.

NOAA Weather Features

Like earlier Uniden models, the BR-330T has a suite of NOAA weather reception features

Weather search lets your scanner receive your local NOAA weather transmission. The SAME weather alert alerts you when a SAME weather alert is transmitted on a NOAA weather channel. The scanner also displays the transmitted alert type. Weather priority alerts you when a SAME weather priority alert is transmitted on a NOAA weather channel.

Auto Store

Frequency autostore automatically stores all active frequencies in the selected conventional system, and talk group ID autostore stores all new talk group IDs it finds into a channel group you select.

Backlight and Power

The BC330T display and keypad are backlit making the display and keypad easy to see in dim light. You can adjust the back light so it turns on (1) when you press a key, (2) when squelch breaks during a transmission, or (3) manually. There are also low battery alert and battery save functions.

PC Control and Cloning

You can transfer programming data to and from your scanner and your personal computer, and control the scanner using a computer using Uniden's PC Control software. This helps you find frequencies listed on the Internet and load them into the scanner. PC control and programming software can be purchased at http://www.uniden.com for \$29.95.

You also have a couple of scanner cloning options using two units wired together and overthe-air cloning. You can clone all programmed data, including the contents of the scanner's memory, menu settings, and other parameters from one BR-330T scanner to another BR-330T scanner.

Antennas

The BR-330T has several antenna options. There is a built-in bar antenna for AM radio broadcasts. This antenna can be turned on or off. An external antenna can be used for reception of any of the frequency ranges the scanner can be tuned to via the SMA connector on top of the unit. The unit comes with a rubber duck antenna and an SMA to F female adapter.

Bottom Line

The backlit color has been changed from the

blue used on the 396T which made the display harder to read. The 330 uses amber backlight which is easier on the eyes, especially in bright light environments. Also, do not try to view the screen or photograph it using polarized eye wear or lenses. There is a special screen bezel over the display that will not present the display properly with polarizing filter/lenses in use.

Out of the box, the AM/Shortwave reception using the stock rubber duck or AM bar antenna is poor. Add a good external antenna and AM/Shortwave reception improves considerably. Unfortunately, there is no SSB/CW mode capability. This limits the utility of shortwave reception to shortwave broadcast stations (only about 15-20% of the shortwave frequencies covered by this unit).

This scanner is loaded with features for the money. It is a lot of fun to use the BCD396T and BR-330T together to monitor a wide swath of radio spectrum. I now have two scanners programmed with 8,500 frequencies, monitoring a wide variety of services/frequencies. There is a lot of monitoring capability in the BR-330T. If you don't need digital decoding capability in your area or you are looking for a good second scanner, the BR-330T is the model you should consider

The Uniden BR-330T (SCN 30) is available from Grove Enterprises (1-800-438-8155 or http://www.grove-enterprises.com) for \$289.95 plus shipping.

Table One: BR-330T Specifications

Dynamic Allocation Capacity:

Systems-200 max, Groups-20 per system, Channels-2500, and channels per trunk system up to 200.

Attenuation: 18 dB (nominal), 10 dB (limit) Operating Temperature:

Normal -20° C to $+60^{\circ}$ C, Close Call -10° C to $+60^{\circ}$ C

Scan Rate: 90 channels per second (conventional mode)

Search Rate: 140 steps per second (5 kHz step only)

Scan Delay: 0-5 seconds

Audio Output:

400mW nominal into 24 ohms internal speaker, 30 mW nominal into 32 ohms headphone

Power Requirements:

3 AA Alkaline Batteries (4.5V DC), 3 AA Rechargeable Ni-MH Batteries (3.6V DC), or AC Adapter (6 VDC 800mA) (AD-1001)

Search/

Antenna Impedance: 50 ohms External Jacks:

Antenna Jack SMA Type, Headphone Jack 3.5mm, DC Power Jack (EIAJ TYPE-2 Center Positive) 4.0mm, and Remote Jack 4 Pin Mini

Size:

2.40-inches (W) by 1.22-inches (D) by 5.35-inches (H)

Weight:

0.60 lbs (with batteries installed), 0.40 lbs (without batteries installed)

Specifications certified in accordance with FCC Rules and Regulations Part 15, Subpart C, as of date of manufacture. Features, specifications, and availability of optional accessories are all subject to change without notice.

Frequency coverage: Continuous 100 kHz-1300 MHz (except for cellular bands):

Frequency (MHz)	Prog. Step:	s Service(s)
0.100-0.525	5 kHz	Longwave (100-525 kHz)
0.530-1.700	10 kHz	AM Broadcast (530-1700 kHz)
1.705-24.995	5 kHz	Shortwave (1705-24995 kHz)
25.000-26.960		5 kHz Petroleum products/Broadcast pick up band
26.965-27.405	5 kHz	Citizens Band Class D
27.410-27.995	5 kHz	Business/Forest products land mobile
28.000-29.680	20 kHz	10-Meter Amateur band
29.700-49.990	10 kHz	VHF Low band land mobile
50.000-53.980	20 kHz	6-Meter Amateur band
54.000-71.950	50 kHz	VHF TV Broadcast channels 2-4
72.000-75.995	5 kHz	Miscellaneous land mobile and Astronomy
76.000-87.950	50 kHz	VHF TV Broadcast channels 5-6
88.0000-107.9000	100 kHz	FM Broadcast
108.0000-136.9750	25 kHz	Civilian aircraft
137.0000-143.9875	12.5 kHz	Military land mobile
144.0000-147.9950	5 kHz	2-Meter Amateur band
148.0000-150.7875	12.5 kHz	Military land mobile
150.8000-161.9950	5 kHz	VHF High band land mobile
162.0000-173.9875	12.5 kHz	Federal government land mobile
174.0000-215.9500	50 kHz	VHF TV Broadcast channels 7-13
216.0000-224.9800	20 kHz	Miscellaneous services/1.25-Meter Amateur band
225.0000-399.9500	25 kHz	UHF Military aircraft
400.0000-405.9875	12.5 kHz	Miscellaneous services
406.0000-419.9875	12.5 kHz	Federal government land mobile
420.0000-449.9875	12.5 kHz	70-cm Amateur band
450.0000-469.9875	12.5 kHz	UHF Public service
470.0000-511.9875	12.5 kHz	UHF-T Public service/UHF TV Broadcast channels 14-20
512.0000-763.9500	50 kHz	UHF TV Broadcast channels 21-62 (except channel 37: 608-614
		MHz)/Astronomy
764.0000-775.9875	12.5 kHz	700 MHz Public service/UHF TV broadcast channels 63-64
776.0000-793.9500	50 kHz	UHF TV Broadcast channels 65-67
794.0000-805.9875	12.5 kHz	700 MHz Public service/UHF TV broadcast channels 68-69
806.0000-823.9875	12.5 kHz	800 MHz Public service (mobile-to-base)
849.0125-868.9875	12.5 kHz	800 MHz Public service (base-to-mobile)
894.0125-956.0000	12.5 kHz	
956.0250-1300.000	25 kHz	Miscellaneous services/25-cm Amateur band
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