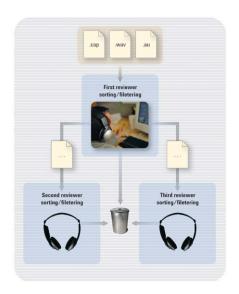# Agilent N6829B Audio Player

Product Overview

The N6829B audio player (formerly 35682A snapshot radio) is a stand-alone application that allows you to play-back, sort, delete, and save, narrowband files created by applications such as the E3238S/35688E signal intercept and collection system, the E3238S/N6820E signal survey system, and the 89601A vector signal analysis software.

The N6829B audio player executes entirely on a PC and does not require E3238S system hardware or software.
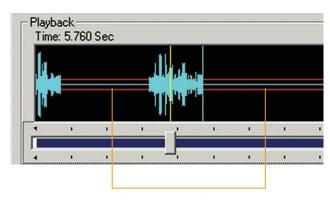
Snapshot Radio Key Features
- Plays a variety of file types (.cap, .wav, .au, .sdf)
- Provides a variety of demodulation types (AM, FM, USB, LSB, CW)
- Allows the captured file to be saved as a wave (.wav) file
- Displays signal as time or frequency data
- Efficient one click file sorting
- Easy to set up hierarchical sorting
- Plays files while the E3238S continues to record new narrowband files

Agilent Technologies

Multiple reviewers using the N6829B file player can be organized in a hierarchy for maximum efficiency.

Skipped portions of recording

Squelch function skips over the noise in playback to significantly compress listening time and reduce fatigue.

Maximize operator efficiency

Using the automation tools in the E3238S system and the N6829B software, monitoring the signals of interest from the E3238S system becomes fast and easy. Because of the vast amounts of data from signal monitoring systems, operators have limited realtime analysis they can perform. The E3238S system captures signal data in time records or snapshots from the ADC, then stores the file on a hard disk drive. With narrowband processing features, the captured data from the narrowband recording is directly streamed into files on the hard disk drive.

Once the signal data is in a file, offline processing of recordings allows reviewers to work at their own pace without risk of losing valuable data. Recordings can be reviewed using N6829B software to listen for voice or non-voice activity. Then, files are quickly sorted or deleted. A backlog of recordings can be processed by adding additional people at any time. New files continue to be stored on the directory while waiting for review by an operator.

Dramatically compress playback review

The N6829B software has a squelch function that skips over portions of the recorded data that does not contain voice. By removing the noise and "dead time" in a recording, reviewers can quickly listen to two-sided voice transmissions, thereby dramatically compressing the playback time. Reviewers might only need to hear a few seconds of this compressed two-sided voice transmission to determine if the recording should be saved or deleted.

Full-featured playback

The N6829B software shows the signal file playback in the time domain, a tuner function showing the full bandwidth of the file, and a processing function for enhancing the conversion to voice. Besides the typical playback functions, the N6829B software lets the user select regions of time and repeat or loop on those regions. You can tune the frequency of SSB signals with the mouse in real-time while listening. The bandwidth of the processing function is user-selectable.

The N6829B processing functions can display either the modulated or demodulated signal, in the frequency or time domain. Modulation of AM, FM, USB, LSB, and CW detections is automatically chosen but it is also user-selectable. You can choose a low-pass filter function to remove CTCSS tones or choose the voice enhance filter to remove noise.

To simplify sharing the file with others who do not have N6829B software, the selected portion of the returned signal can be saved as a .wav or .16t file, with all demodulation and filtering already applied.
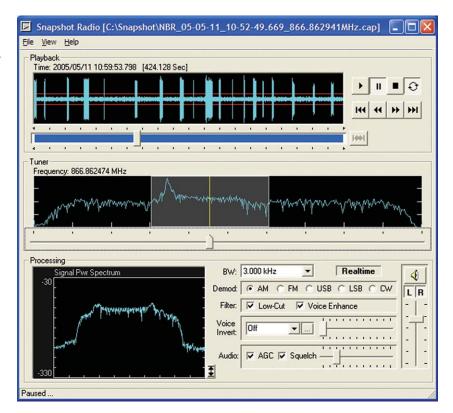
Efficient File Management

Signal files are automatically displayed in the N6829B file manager display. These files can easily be selected and played. With the up/down arrow buttons users quickly move through a list of files while they automatically play. The N6829B can instantly jump to next recording for faster playback of multiple files.
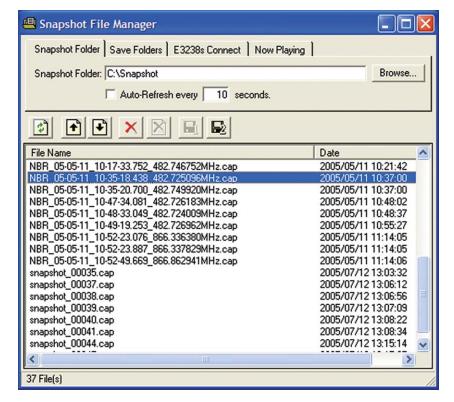
Reviewers will listen to the voice content and delete unwanted recordings or save files to one of two directories. Directory1 could be used for highly relevant signals and directory2 used for less relevant signal files. The file list can be refreshed manually or automatically refreshed periodically. New files created from an operational E3238S system can be saved in the same directory. To save critical review time, all retuning, looping, filtering, and noise reduction settings are saved in the file when changing to a new file so they do not have to be redone later or for a second reviewer.

Users can create a socket link between the E3238S system and the N6829B software that will automatically add frequencies to the E3238S ignore list and thereby eliminating unwanted signal collections automatically. Now deleting a file with the alternate delete button in the file manager display adds that file's center frequency to the E3238S ignore list.

The N6829B software allows reviewers to listen to files, demodulate the signal files with radio functions, and manage these files efficiently.

Integrated, full-featured playback in N6829B software.

Efficient recorded file management automatically jumps to next recording after save/delete decision.

Operating Characteristics:

Supports playback of capture files up to 2 MHz in bandwidth.

Input file formats supported:
.cap from E3238S or 89600S

.sdf from 89600S

.au

.wav from other types of programs

Ouptut file formats:
.wav, .16t, or .cap

The N6829B software can be installed on a PC with these recommended features:

Processor:	1.8 GHz P4 or better
Memory:	512 MB
Operating System:	Win-2K with SP4 or Win-XP with SP2
Sound Card:	required
LAN:	Ethernet adaptor required

Ordering Information

N6829B	Audio player
N6829B-103	Standard software on Windows®

Choose one of three license key options:

N6829B-LKI Independent USB-keyed Software License

N6829B-LKS Shared USB-keyed Software License

N6829B-LKC Computer-keyed Software License

The N6829B software can be tied to a USB key or the hostID of the PC. Your license file can be encoded specifically for a removable USB hostID device (USB Key) by selecting LKI or LKS options. This is the best choice if you prefer to work on multiple computers, or want to easily move the software to another PC. Option LKS lets you share the USB key device with the 35688E or N6820E software licensing schemes.

Alternatively, your license file can be keyed to a specific computer as option LKC. A unique hostID is derived from your computer's components. This is the best choice if you need operational simplicity; the N6829B software will work on a specific PC.

Windows is a U.S. registered trademark of Microsoft

Agilent Email Updates

www.agilent.com/find/emailupdates
Get the latest information on the products and applications you select.

www.agilent.com

For more information on Agilent Technologies' products, applications or services, please contact your local Agilent office. The complete list is available at:

www.agilent.com/find/contactus

Americas
Canada	(877) 894-4414
Latin America	305 269 7500
United States	(800) 829-4444

Asia Pacific
Australia	1 800 629 485
China	800 810 0189
Hong Kong	800 938 693
India	1 800 112 929
Japan	0120 (421) 345
Korea	080 769 0800
Malaysia	1 800 888 848
Singapore	1 800 375 8100
Taiwan	0800 047 866
Thailand	1 800 226 008

Europe & Middle East
Austria	01 36027 71571
Belgium	32 (0) 2 404 93 40
Denmark	45 70 13 15 15
Finland	358 (0) 10 855 2100
France	0825 010 700*
	*0.125 €/minute
Germany	07031 464 6333**
	**0.14 €/minute
Ireland	1890 924 204
Israel	972-3-9288-504/544
Italy	39 02 92 60 8484
Netherlands	31 (0) 20 547 2111
Spain	34 (91) 631 3300
Sweden	0200-88 22 55
Switzerland	0800 80 53 53
United Kingdom	44 (0) 118 9276201

Other European Countries:
www.agilent.com/find/contactus

Revised: July 17, 2008

Product specifications and descriptions in this document subject to change without notice.

© Agilent Technologies, Inc. 2007-2008
Printed in USA, February 8, 2010
5989-2839EN

Agilent Technologies