



DAC DIGEST

Volume IX, No. 1

March 2002

DIGITAL AUDIO CORPORATION

A DRI COMPANY

"Technology to Make Listening Easier"

NEWS

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PicoDAC Compact Digital Audio Filter

DAC Audio Filter Chosen by U.S. Federal Counterdrug Program

DAC PRODUCTS ARE AVAILABLE THROUGH GSA ADVANTAGE!

**#GS-03F-4062B
GSA Advantage!**

DAC DIGEST

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A publication of Digital Audio Corporation, a DRI company
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PicoDAC, a compact digital audio filter designed and manufactured by Digital Audio Corporation (DAC), recently was selected by the U. S. Army Electronic Proving Ground (EPG) for inclusion in the Technology Transfer Program (TTP) of the Office of National Drug Control Policy's (ONDCP) Counterdrug Technology Assessment Center (CTAC). As a result, the PicoDAC product and training sessions will be available through the 2002 TTP schedule.

"We are very pleased PicoDAC has been selected for the CTAC Technology Transfer Program," DAC Vice President and General Manager Craig Scates said. "DAC products have played an essential role in the law enforcement surveillance mission for more than two decades. PicoDAC is a very capable and appropriate complement to the valuable counterdrug technology available to U.S. law-enforcement agencies through the TTP."

CTAC is the central counterdrug enforcement research and development organi-

zation of the U. S. Government. CTAC's mission is to advance technologies that support national goals by improving the effectiveness of law enforcement, drug interdiction, and substance abuse treatment research. The TTP was established to transfer counterdrug systems and devices

directly to state and local law enforcement agencies that may otherwise be unable to profit from new equipment due to limited budgets. Primary efforts are directed toward state and local law enforcement agencies in High Intensity Drug Trafficking Areas (HIDTAs). The goals of the technology transfer process are

to identify law enforcement requirements, match them with the appropriate counterdrug technologies, and transfer those technologies to the selected law enforcement activities.

EPG serves as a technical agent for CTAC. In this role, EPG provides a variety of program management and technical services.

For more information on how to apply for the CTAC program, please contact the DAC offices. **DAC**

CTAC is the central counterdrug enforcement research and development organization of the United States Government.

SOUND BYTES

2002 Trade-In Program

DAC is pleased to announce its 2002 trade-in program for current PCAP I and MicroDAC II/III customers. DAC is now offering \$2500 (U. S.) on the trade-in of a PCAP I toward the purchase of a PCAP II or MCAP system. MicroDAC II and III customers can receive a trade-in value of \$1000 (U. S.) toward the purchase of a MicroDAC IV system. Limit one trade-in per new purchase item. This program will expire December 31, 2002. Contact the DAC office for a trade-in quote today. **DAC**

Website Updated

The new and improved DAC website is now online at <http://www.dacaudio.com/>. Government customers are now required to input a DAC-assigned user name and password to access the entire DAC catalog online. Please call the DAC office or submit a request via e-mail from the DAC website to get your user name and password. **DAC**

Dealer in South Africa



DAC is proud to announce that it is now represented in South Africa by:

Leonard Friedland
Night Vision Optics SA
1st Floor, Sanlam Park North
9 Fredman Drive
Sandton, South Africa
Phone: 011 27 11 884 9191
E-mail: nvo@iafrica.com. **DAC**

DAC Hosts Tech Seminar

Digital Audio Corporation hosted an executive technical seminar at Ft. Myer, MD on February 6, 2002. This event was the first of several planned education initiatives to be held throughout the United States in 2002. Watch the *DAC Digest* for future dates and locations. **DAC**

PRODUCT UPDATES

They say you can't take it with you, but that was before the PCAP-2500. Now you can take the power of a DAC forensic audio enhancement lab system wherever you go.

Introducing the **PCAP-2500 Portable Audio Enhancement Kit**, DAC's latest entry in a growing line of portable, rugged, all-in-one audio solutions for field deployment. The PCAP-2500 combines the power of DAC's PCAP II Personal Computer Audio Processor, an integrated laptop control unit, five audio input sources (including DAT recorder, microcassette recorder, stereo cassette recorder, analog line-in, and digital line-in), as well as an output DAT recorder for storing processed audio tracks. All of these components are mounted in a rugged Pelican® case and include headphones and universal AC power with US line cord. Call for your quote today! **DAC**



2002 DAC School Schedule

Sign up now for DAC School 2002! The Raleigh session is scheduled for April 22-26. Don't miss out on an opportunity to improve **your** audio enhancement skills in the new year.

We are offering a European DAC School September 16-20 in Neustadt, Germany. Contact:

SIM Electronics
Phone: 49 63 21 91270
E-mail: heimgaertner@sim-electronic.com

If you have specialized needs, call DAC to design an on-site custom session at your facility. **DAC**

New DAC Products on GSA ADVANTAGE!

Digital Audio Corporation marked the start of 2002 with the placement of several new products on our GSA Contract. All federal government customers can now benefit from GSA pricing on the following products:

- ◆ CM-200 Kit
- ◆ SSABR-12
- ◆ SpotMIC-16 Kit
- ◆ PCAP-2500 Kit
- ◆ ProbeAmp
- ◆ SpotMIC-08 Kit
- ◆ UltraScope

SSABR-12 is DAC's Solid-State Audio Body Recorder with twelve hours of record time. ProbeAmp is a multi-function, audio countermeasures device. UltraScope is a high performance, ultrasonic, acoustic detection device for TSCM. The kits contain core DAC equipment with accessories for unique technical environments and surveillance requirements.

Call the DAC office, (877) 532-2283, for complete product descriptions and prices, or find them on the GSA Advantage website, www.gsaadvantage.gov. **DAC**

What You Really Need to Know About CD-R Media

By Don Tunstall

Over the past few years, CD-R discs have become quite common for copying audio CDs and also for storing many types of digital data. Most modern PCs include a fast CD-ROM drive as standard equipment, which makes the CD-R media almost universal. Total capacity of a CD-R disc is approximately 700 megabytes; due to this large storage capacity, as well as the ability for virtually all PCs to read them, CD-Rs are the recommended medium for storing original audio evidence data downloaded from DAC's Solid-State Audio Body Recorders (SSABRs).

CD-Rs often have a gold, green, or blue tint on the read surface rather than the familiar silver color of pressed CDs. Blank media quality varies by brand, and some CD-ROM drives have more difficulty reading some brands than they do others. The theoretical quality of any given CD-R is a function of two basic properties:

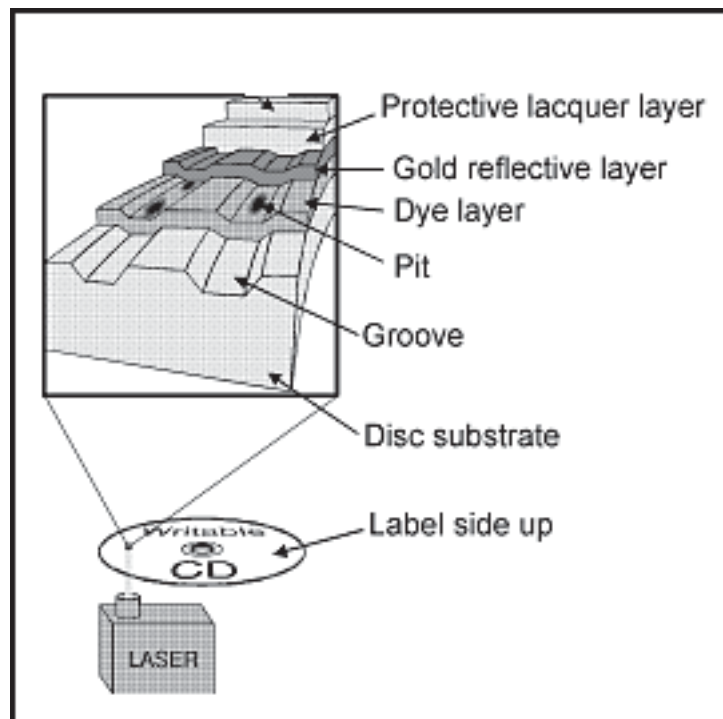
(1) the ability of the reflective layer to reflect light, and
 (2) the ability of darkened portions of the dye layer to absorb or scatter light (see picture, courtesy of Eastman Kodak, Inc.).

When the CD-R is "burned" with data, intense laser light is applied to literally billions of individual spots on the disc surface, causing the dye layer to become dark and non-reflective in those areas, while billions of other areas are left unexposed to the laser light and remain shiny and reflective. This allows digital "1s" and "0s" to be discerned by the laser pickup during reading. So, the combination of the metal used to make the reflective layer of the disc and the material used for the dye layer determines the overall quality of the media.

Generally speaking, discs that have a gold reflective layer are considered to be better quality than those with

a silver reflector, since gold is inherently a better reflector and does not tarnish with age. But the dye layer is just as critical, because different dyes have different lifetimes, and some are more susceptible to being darkened by sunlight over time than others, causing an eventual loss of data. To compensate for inferior-quality dyes, many

blank discs actually have a black tint added to the disc substrate material, which is intended to protect the dye layer from excessive light exposure. Whether or not this actually helps is debatable.



The layers of a CD.

Bottom Line: After evaluating all the available data that is available from CD-R manufacturers and other knowledgeable sources, DAC has concluded that **Mitsui Gold** blank CD-R discs are the very best media for archiving original digital audio evidence data. The

materials and manufacturing process used to make these discs provide an expected lifetime of over 100 years, as long as they are properly stored in a cool, dry place and handled only by the edges to prevent scratches. Alternatively, **Mitsui Silver** discs can be used, which are still better than most other companies' discs and have a lifetime of at least 10 years. Mitsui Gold or Silver CD-Rs are now available for purchase through DAC for use with your SSABR units.

For more information on the topics discussed in this article, we recommend the following websites:

- <http://www.cdafaq.org/>
- <http://www.mitsugold.com/>
- <http://www.howstuffworks.com/cd.htm>
- <http://www.howstuffworks.com/cd-burner1.htm>
- <http://www.howstuffworks.com/question287.htm>

DAC

Look for DAC at These Shows in 2002

National Conference Services, Inc., Department of Defense
March 5 ♦ Fort Bragg, North Carolina

Intermountain NATIA 2002
March 6-8 ♦ Denver, Colorado

FRENZY ♦ June 3-6 ♦ Washington, D. C.

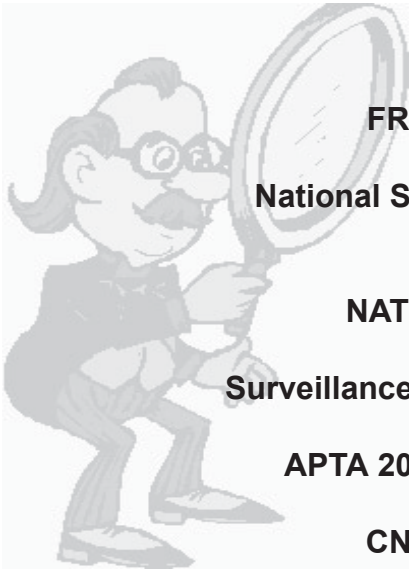
National Sheriff's Association Conference and Exhibition
June 23 -26 ♦ Tulsa, Oklahoma

NATIA 2002 ♦ July 15-19 ♦ Phoenix, Arizona

Surveillance Expo 2002 ♦ August 26-28 ♦ Washington, D. C.

APTA 2002 ♦ September 23-25 ♦ Las Vegas, Nevada

CNOA ♦ Nov. 17-18 ♦ Monterey, California



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