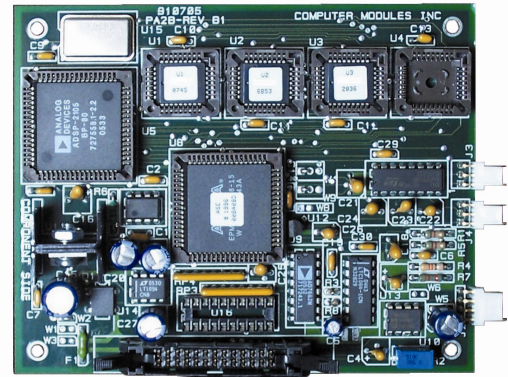




## High Quality, Multi Phrase, Audio and Sound Effects, Information, or Warnings Playback Card with Parallel or Serial Port Triggering for Stand Alone Playback of Recorded Sound Effects From On Board Memory



### Features

- Audio is recorded, not synthesized, and sounds great...
- Interface is via serial or parallel port
- Stores over 4 minutes of speech and/or sound effects in nonvolatile memory at telephone voice quality
- Audio may be divided into a maximum of 512 phrases selected via on-board dip switches or computer control
- Parallel interface is switch closure or TTL/CMOS compatible – the board has pull ups on all parallel input signals
- Serial interface is RS-232 compatible with active driver pass through – no processor delay to reduce performance
- On board processor control for computer interface or stand alone applications
- Sound sources include equations, Sound Blaster VOC files, WAV files, your audio on tape or CD, or word list
- Digital signal processor based design for performance and flexibility

### Applications

- Safety and security
  - Direct people to safety during a fire
  - Automatically communicate a 911 emergency
  - Announce safety warnings in a subway
  - Warn of possible hazards in industrial areas
- Repetitive Communications
  - Announce the floor in an elevator
  - Communicate instructions in airports
  - Announce arrivals and departures of trains
  - Communicate messages to telephone callers, i.e., to inform that they are on hold and their call will soon be answered
- Communicate Instructions
  - Robotic grocery store checking systems
  - Theme park announcements or ride enhancements
  - Communicate choices from a vending machine
  - Announce weight from a scale
  - Transportation ticketing machines
  - Add realism to training simulators, such as military sound effects

### Overview

Cyber Sounder™ is designed to provide a highly reliable method of storing and reproducing high quality sound using nonvolatile memory to store the phrases. This audio playback unit needs no computers and easily mounts on machinery or in instruments, and works with an AC or DC adaptor and speaker. The quality of the output is far superior to “synthesized” speech. The tone and inflection of the person speaking or any sound effects used are accurately reproduced by the module.

In the development of this product, we paid particular attention to the audio output quality. Our goal is to deliver the finest quality audio.

There are many applications where Cyber Sounder provides superior performance. These include military simulators, danger announcements for high-speed machinery and vehicles, voice feedback for remote control and audio echoes for computer input applications over local telephone lines or via radio.

**DVEO**

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# Specifications

## Digital

### Parallel Interface:

- 9 address lines to select 512 phrases, also has start and done pulse lines

### Serial Interface:

- All functions and parameters are printable ASCII characters. Commands include board selection and phrase selection. Serial command set is compatible with DVEO's video and audio products.
- RS232 pass through with up to 16 units selectable (daisy chain); provisions are included for audio mixing and line output
- ASCII "@" followed by ASCII "0-9" or "A-F" selects the board to receive further commands
- Valid command characters are echoed
- Unrecognized command characters are followed by a question mark
- Upon completion of phrase, sends return and line feed characters (0D hex, 0A hex)

### Capacity:

Playing time is dependent on resolution and sampling rate selected.

\*Number of 4 MB EPROMs, ksps is sampling rate

| * | 8 bits @ 8 ksps | 16 bits @ 1ksps |
|---|-----------------|-----------------|
| 1 | 64 seconds      | 23 seconds      |
| 2 | 128 seconds     | 45 seconds      |
| 3 | 192 seconds     | 68 seconds      |
| 4 | 256 seconds     | 91 seconds      |

Cyber Sounder may be divided into as many as 512 segments, with the smallest segments at 31 milliseconds.

**Cyber Sounders are delivered preprogrammed with your desired audio files.**

## Ordering Info

Cyber Sounder Module with your audio programmed

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## Audio

- Sampling rate: 8 kHz - 44 kHz
- Resolution: 8 bit - 16 bit
- Bandwidth: 3 kHz - 16 kHz
- Speaker: 8 ohm
- Output power: 1 W

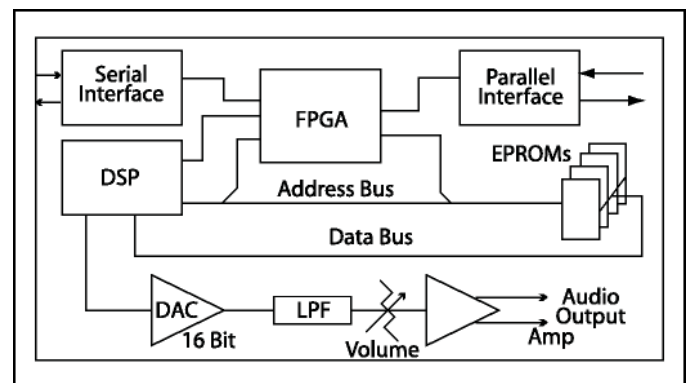
## Power Requirements

- AC: 9 to 12V rms 50/60 Hz
- DC: 9 to 12.9V
- ICC: 300 mA typical

## Mechanical

- Dimensions: 4 x 5 inches

## Block Diagram



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