



**ALFTECH**  
YOUR PARTNER IN INDUSTRIAL INNOVATION



**iDAP-EN1**

## Industrial Digital Audio Player

### iDAP-EN1

#### Hardware Features

- **AC powered, with 4 hours of battery operation when external power fails.**
- **Supports most MP3 file formats.**
- **Stereo Audio Line-Out.**
- **2 Volume settings.**
- **microSD Card Storage. Support most off-the-shelf microSD Cards.**
- **microSD card file access for 100 folders and 60 MP3 files/folder.**
- **Random or Sequential file playback option.**
- **Support setup file configuration, stored on microSD card.**

#### Hardware Connections

- **5 v. DC supply input, 100 – 240 v. AC (50 or 60 Hz). External Power Supply included.**
- **Stereo Audio Line-Out.**
- **microSD (secure digital) card slot.**

#### Hardware Indicator LED's

- **POWER: DC vs. Battery**
- **PLAYBACK: Random vs. Sequential**
- **SD Card: Read OK vs. File Error**

### DESCRIPTION

The ALFTECH iDAP-EN1 is an Industrial Digital Audio Player, providing continuous playback of compressed MP3 Audio files such as music, advertisements or announcements. The MP3 Audio Files are stored on a standard microSD Card, inserted into the microSD Card slot on the iDAP-EN1.

When the microSD Card is inserted and valid MP3 files are detected, playback will start automatically. There is no playback or stop buttons as the iDAP-EN1 plays continuously whenever valid MP3 files are available.

A configuration file, copied to the microSD Card offers the option of selecting random or sequential playback. There are 2 preset volume option settings in the configuration file; -10dBu for consumer audio equipment, and 0dBu for professional audio equipment. If no configuration file is detected the iDAP-EN1 will create one, with the default settings (Sequential Playback, -10dBu).

The iDAP-EN1 is AC powered, but will run on the internal batteries for approx 4 hours when the AC is removed.

Example of MP3 Audio Compression Ratios:

microSD Card	Low Quality, i.e. Telephones (40kbts/s)	High Quality, i.e. Background Music (128kbts/s)
1 GByte	58 hours	18 hours
2 GByte	116 hours	36 hours
4 GByte	233 hours	72 hours
8 GByte	466 hours	144 hours

### HARDWARE ORDERING OPTIONS

Part Number	Description
<div style="display: flex; align-items: center;"> <div style="margin-right: 10px;"> </div> <div style="border-bottom: 1px solid black; padding-bottom: 2px;">iDAP-EN1</div> <div style="margin-left: 20px; border-bottom: 1px solid black; padding-bottom: 2px;">-SD</div> </div>	Enclosure form factor, <b>including External Power Supply Unit, USB microSD Card Reader &amp; 2 GB microSD Card, and all features as described above.</b> Optional: <b>NO microSD Card and Reader</b>

iDAP-EN1 DATASHEET June 2008

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## iDAP-EN1 Electrical Specifications

PARAMETER	TEST CONDITIONS	MIN	TYP	MAX	UNIT	NOTES
Supply Current	5 v. DC, normal operation		120		mA	
Power Consumption	5 v. DC, normal operation		0.6		W	
Battery Backup time			4		hours	
Audio Output Level - low	0 dBFS digital		-10		dBu	1
Audio Output Level - high	0 dBFS digital		0		dBu	1
Audio Output Impedance			22		$\Omega$	
Frequency Response	20 Hz to 18 kHz		$\pm 1$		dB	2
Signal-to-Noise Ratio	-3 dBFS digital			84	dB	2
Total Harmonic Distortion	-3 dBFS digital			0.01	%	2

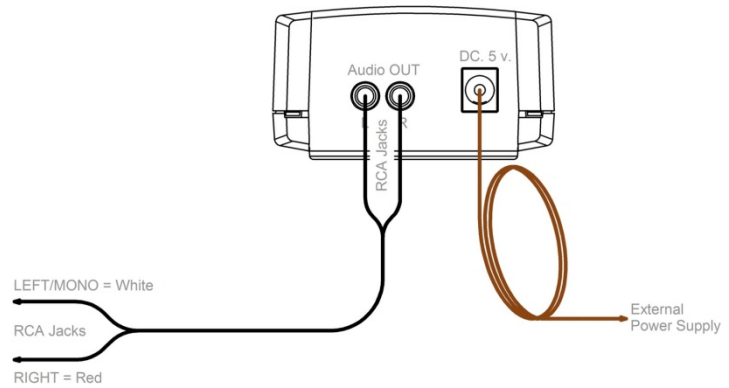
### Notes

1. The output level is between the hot and ground terminals, unbalanced.
2. Tested with 44100 Hz sample rate, 16 bits and 192 kbps data rate.

### DC Input Warning:

Use the supplied AC to DC adapter, or an appropriate alternative. The voltage must be 5 v. DC regulated, and must be able to supply at least 300 mA continuously. Any other voltage can damage the device, and or the battery might overcharge and explode.

### iDAP-EN1 Connections



### Physical Layout and Dimensions

(All Dimensions in mm)

