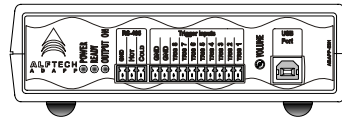




ALFTECH
YOUR PARTNER IN INDUSTRIAL INNOVATION



ADAPP-EN1

Amplified Digital Audio Programmable Player

ADAPP-EN1

HARDWARE FEATURES

- **50 Watt build-in Amplifier**
- **4 Assignable Speaker Outputs**
- **16 minutes of near CD quality mono playback, or 34 minutes "high quality" mono voice playback**
- **8 Hardware Triggers**
- **62 Scheduled Timer triggered events**
- **62 RS-485 triggered events**
- **Each Hardware trigger can be individually programmed to be active high or low**
- **PULSE or LOOP playback can be programmed for each Hardware trigger**
- **Each trigger can be assigned a priority level**
- **Universal AC supply input**

HARDWARE CONNECTIONS

- **90 – 260 V AC (50 or 60 Hz) supply input**
- **4 Assignable Speaker Outputs**
- **8 Hardware Trigger Inputs**
- **USB Connector**
- **RS-485 terminals**

HARDWARE INDICATORS

- **Power LED**
- **System operational LED**
- **System busy playing LED**

HARDWARE ORDERING OPTIONS

Part Number	Description
<div style="border-bottom: 1px solid black; width: 100%;"></div> <div style="text-align: center;">↓</div>	<div style="border-bottom: 1px solid black; width: 100%;"></div> <div style="text-align: center;">↓</div>
ADAPP-EN1 +C	Desktop Enclosure form factor, including all features as described above Add: 1 x 1.8m USB-A to USB-B Cable

DAPP-Console

SOFTWARE DESCRIPTION

The ADAPP-EN1 is supplied with DAPP-CONSOLE, a Microsoft® Windows based graphical user interface software, which allows easy setup, configuration and programming. DAPP-CONSOLE uses any MP3 (MPEG 1 or 2, Layer 3 Audio), compatible files for playback. Your audio files can be prepared in any program that can generate a MP3 compatible file.

For each "event" a trigger is configured that has an audio file assigned to play when the "event" triggers its playback. Programmable Audio file playback triggers can be Externally Hardwired Triggers, Programmed Timed Events or RS-485 triggered events.

The Programmed Timed Events can be programmed to trigger at a certain time of day, and on specific day(s) of the week.

The RS-485 triggered events can also be implemented to activate audio playback via a RS-485 connected device.

Triggered events can be configured to playback sequentially on any of the 4 Assignable Speaker Outputs, and playback priority can be configured per trigger event.

Once your setup and configuration is complete, the DAPP-CONSOLE will download the Program Setup File and MP3 audio files to the ADAPP-EN1. Every audio file's compression level can be set individually, to optimize compression and/or audio output quality.

Each of the 62 audio files can be tested by playback from within the DAPP-CONSOLE software application.

After downloading and testing, the ADAPP-EN1 can be disconnected from the PC, and installed on site. Data retention exceeds 10 years with no battery backup.

ADAPP-EN1 DATASHEET SEPTEMBER 2005

Specifications and Information contained in this manual are furnished for informational use only, and are subject to change at any time without notice, and should not be construed as a commitment by ALFTECH. ALFTECH assumes no responsibility or liability for any errors or inaccuracies that may appear in this manual, including the products and the software described in it.
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DAPP-CONSOLE

Software Requirements

- **Requires an IBM PC/AT Compatible Computer**
 - Available USB Port
- **Recommended Platforms:** IBM-compatible PC running Windows XP, Windows 2000, NT4 SP3+, ME* or 98SE* at a minimum screen resolution of 800×600 (Small Fonts).

* NOTE: DAPP-CONSOLE has been tested successfully on alternative Microsoft Windows platforms, but ALFTECH makes no recommendation of the use of such alternatives. Only LIMITED support is provided if the ADAPP Products are installed or connected to such alternatives.

ADAPP-EN1 Electrical Specifications

Electrical Characteristics

(Over the Operating Range)

PARAMETER	CONDITION	MIN	TYP	MAX	UNITS	NOTES
Supply Voltage		90		250	VAC	
Power Consumption	Standby		4		W	
Trigger input Current	Trigger pulled to GND		2		mA	
Trigger pull up resistance			10		kΩ	
LOW level Trigger Voltage				1	V	1
Minimum Trigger pulse width		20			mS	
Real Time Clock Accuracy	0°C to +40°C		±1		Min/Yr	2
Battery Backup time	Power removed from board		100		days	
Minimum Speaker Impedance		4			Ω	
Audio Output Power	4 Ω		50		W	
Frequency Response	30 Hz to 16 kHz		± 1.5		dB	3
Signal-to-Noise Ratio	-3 dBFS digital			84	dB	3
Total Harmonic Distortion	-3 dBFS digital			0.05	%	3
Memory data retention time		10			Yr	

Notes

1. The trigger inputs should be left floating when not triggered, and must be pulled to GND when triggered, with a relay contact or an open collector transistor.
2. The Real Time Clock may vary to ±4 Min/Yr over 0°C to +85°C.
3. Tested with 44100 Hz sample rate, 16 bits and 192 kbps data rate.

Electrostatic Discharge

The inputs and outputs can be damaged by electrostatic discharge, thus care must be taken when handling and connecting the products. Failure to observe proper handling and installation procedures can cause damage. ESD damage can range from performance degradation to complete product failure.

Physical Connection

PHOENIX Contact Connectors (Supplied with the ADAPP-EN1)

The hardwired connections to the ADAPP-EN1 are via a set of PHOENIX Contact 3.81 mm pitch connectors as illustrated below.

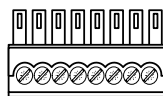
Plug-in screw

Connectors

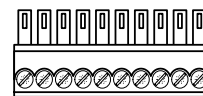
(included as standard)



PHOENIX CONTACT
MC 1,5/3-ST-3,81



PHOENIX CONTACT
MC 1,5/8-ST-3,81



PHOENIX CONTACT
MC 1,5/10-ST-3,81

Physical Layout and Dimensions

ADAPP-EN1

(All Dimensions in mm)

