PCM8

8-CHANNEL PCM DIGITAL AUDIO WORKSTATION





The PCM8 represents a powerful addition to the new SADiE Series 5 range, featuring 8 channels in/out processing with a greatly enhanced feature set offering a significant increase in processing power for the widest range of professional audio applications.

The PCM8 utilises the new SADiE Series 5 hardware platform to meet the demand for more powerful high-speed processing of today's high-resolution audio formats up to 192kHz/24bit. In addition to the increase in

processing muscle, the PCM8 features full support for real-time Direct-X plug-ins and standard Windows™ networking.

In combination with the new SADIE Version 5 software system, which offers a powerful new feature set whilst retaining the familiar SADIE user interface, the cost-effective PCM8 is set to continue the strong presence of SADIE products for high-end mastering, post and all advanced editing applications.

- 8 inputs & 8 outputs
- real-time architecture
- up to 192kHz/24bit audio
- one button PQ editing
- · AIFF, WAV, BWF file support
- professional plug-ins and DirectX support
- full CD Pre-Mastering to DDP/CDR
- · segment based automation
- optional hardware control interface with moving fader mixing
- multitrack editing
- · project management
- background recording/backup
- backup to AIT, DDS, DLT, DVD-RAM
- 50 undo levels
- sample accurate waveform editing
- standard windows networking
- 19" rack mount hardware
- simple upgrade path from 24.96 and Artemis workstations
- fully supports AES-31 interchange

www.sadie.com







KEY FEATURES

The SADIE Series 5 PCM8
Digital Audio Workstation
is a fully featured PCM
editing, mastering and
authoring system,
designed to record, edit
and process PCM audio at
up to 192kHz. It is

available as a turnkey system and utilises the same Version 5 editing paradigm as other SADIE Series 5 systems.

HARDWARE

The system comprises a Pentium-based host, and a SADiE Series 5 DSP processor. The system relies on proprietary hardware for processing and audio I/O. The number of channels cannot currently be increased though future hardware upgrades will be made available to customers at favourable prices.

STORAGE

Storage interfaces: Any Windows compliant storage medium: IDE, SCSI 1/2/3, Firewire, Fibre channel.

Continuous recording limit: up to drive size.

SOFTWARE

The SADiE Version 5 software system runs on Windows™ 2000 or XP.

SYSTEM OPERATION

There are three main windows, comprising the Playlist Window with multiple track displays and EDL editing, the Mixer Window with full automation of faders, pans and EQ's, and the Transport Window. The transport control functions and tool bars are all customisable, most functions are hotkey assignable, and custom settings can be saved per log-in account. A User Manager provides a secure multi-user environment by allowing an unlimited number of users to have designated privileges based on a password management system.

Audio representation: tape-style tracks, waveforms, events lists, source/master, numbers, labels, level meters.

Timings displayed: HMSF(Timecode), Absolute time, Sample numbers, Bars & Beats.

DIGITAL INPUTS

Each SADIE Series 5 PCM8 supports four stereo digital AES inputs.

XLR 3-pin female connectors: These signals appear on type 800 breakout box transformer balanced and isolated.

- Accepts levels between 500mV and 10V peak-to-peak.
- Accepts digital protocols to S/PDIF (consumer, IEC 958) or AES (professional AES3) format, 32-96kHz (single wire), 192kHz (dual wire) +/- 10%.

Separate Digital reference input

ANALOGUE INPUTS

SADIE Series 5 PCM8 supports 8 channels of analogue input. These signals appear on type 800 breakout box terminated in 1/4" jack connectors.

- Nominal Level for peak digital audio (sine wave): +12dBu (as standard)
 19dPu or higher available with entired electronically.
- +18dBu or higher available with optional electronically balanced 800B breakout box
- Conversion: 24-bit oversampling delta sigma converters supporting sampling rates up 96kHz

LTC AND VITC TIMECODE

Optional Input/Output

DIGITAL OUTPUTS

SADIE Series 5 PCM8 provides four stereo AES Outputs XLR 3-pin male connectors : These signals appear on type 80

XLR 3-pin male connectors: These signals appear on type 800 breakout box transformer balanced and isolated.

 Generates digital protocols to S/PDIF (consumer, IEC 958) or AES (professional AES3) format, 32-96kHz (single wire), 192kHz (dual wire) +/- 10%, depending on software selection.

PCM8 PRELIMINARY SPECIFICATIONS

ANALOGUE OUTPUTS

SADIE Series 5 PCM8 supports 8 channels of analogue output. These signals appear on type 800 breakout box and are terminated in 1/4" jack connectors.

- Level for peak digital audio (sine wave): +12dBu (as standard)
- +18dBu or higher available with optional electronically balanced 800B breakout box
- Conversion: 24-bit oversampling delta sigma converters supporting sampling rates up 96kHz

SERIAL MACHINE CONTROL INTERFACE

Up to 4 channels of RS-422 machine control (optional)

RECORDING METHOD

No data compression is used. Recorded data is replayed unchanged if no processing is selected in software.

Recording Resolution: we can record 32-bit floating point words as well as 16 and 24 bit.

EDITING

The system has numerous editing paradigms designed to suit various professional audio editing and mastering disciplines, specifically CD pre-mastering, music editing and radio and speech editing. Both the Playlist and the Mixer each support 50 levels of undo/redo, and there is also a user definable automatic save function.

Fully supports 3-point and 4 point editing model.

No. of editing tracks: up to 32 PCM

Nowline locates to: markers, in/out point, next/previous segment, session start, current video position, any point in session.

In/out trimming: auditioning up to/away from, loop between markers, mark on-the-fly, zoom-in waveform, nudge, slide/reveal, audio scrub.

Segment placing: mark on-the-fly, type-in value, nudge, drag & drop, grab & slide, snap to nowline, snap to grid, sync to offset. Sequence editing: cut, copy, delete, insert, overlay, move, lock events pre/post marker, region edit within a track, region edit across selected tracks, selective group edit

Crossfades: one-step symmetric on same track, user definable by up to 120 crossfade shapes of any length, plus crossfade fully definable using automation.

Maximum fade duration: up to length of source audio.





MIXING/DSP

Real time mixing functions can include level, surround pan, nband parametric EQ and dynamics. Mixes can be controlled by mouse or hardware control surface.

Internal level control: static track, track envelope, dynamic track, static segment, segment envelope, dynamic segment. Plug In support: numerous custom plug ins plus full DirectX

support.
Internal submixing: PCM in real-time.

Audio processing: PCM real-time or faster.

NETWORKING

Standard Windows™ 2000 / XP based networking.
Via network: data transfer, non real-time audio file transfer faster than real-time audio transfer.

COMPATABILITY

EDL/project files: [read directly] SADiE3, SADiE4
Ability to save projects, EDL's, clipstores and mixers to SADiE4.2 format

AES-31 interchange included as standard in Series 5.

(NORMALLY SUPPLIED AS TURNKEY UNIT)

230Vac or 110Vac 50-60 Hz, switch selected.
IEC line connector.
Steady-state power requirement < 300 W

Fuse: 5 Amp (T) COMPLIANCE

SADIE Series 5 PCM8 case is CE marked.
Conforms to the following standards:
EN50081-1 (EN55022); 1995
EN50082-1 (EC 801-2,3,4); 1992
Following the provisions of the Low Voltage and EMC Council

Directives: 73/23/EEC 89/336/FFC

MECHANICAL

SADIE Series 5 PCM8 turnkey: 19" rack mounting chassis 4U Max dimensions: 485mm wide x 550mm deep x 178mm high. Combined mass: < 20kg

E & O E

United Kingdom SADIE UK The Old School, Stretham Ely, Cambs. CB6 3LD. UK

Tel: +44 (0)1353 648 888 Fax: +44 (0)1353 648 867

Europe SADiE GmbH Villa Leinen, Kollwitz Strasse 16, 73728 Esslingen. Germany Tel: +49 (0)711 3969 380

Tel: +49 (0)711 3969 380 Fax: +49 (0)711 3969 385

USA SADiE Inc. 475 Craighead Street, Nashville. TN 37204 USA

Tel: +1 615 327 1140 Fax: +1 615 327 1699

Copyright Studio Audio & Video Ltd 2002. Studio Audio & Video Ltd acknowledges all trademarks used in this document. Studio Audio & Video Ltd reserves the right to make changes to specifications at any time and without prior notice. The information contained herein is believed to be accurate and reliable, however, no responsibility is assumed by Studio Audio & Video Ltd for its use, nor for any infringement of patents or other rights of third parties resulting from