



audiolab

Audiolab 8000AP – Pre-Amplifier High End Digital Audio Processor with HDMI

IAG are proud to announce the launch of the new generation Pre amplifier – **8000AP** from Audiolab. The new HDMI enabled 8000 series 'Audio Processor' is a reference quality 7-channel audio processor and preamplifier.

HDMI[™]
HIGH DEFINITION MULTIMEDIA INTERFACE



"An Audiophile approach to home cinema"

The **Audiolab 8000AP** offers superb quality audio processing and switching with capacity for stereo and multi-channel analogue sources, co-axial and optical digital inputs and twin HDMI inputs. Multi-channel HD audio can be passed via the HDMI connections from appropriately equipped source components.

The emphasis is on high-quality audio offering an unequalled sound quality whatever source is used. The Audiolab **8000AP** Audio processor features the latest in Digital signal processing; A dual core Cirrus Logic[™] DSP with a 24bit front end and 32bit post processor. 'High End' Digital to Analogue conversion is handled by 24bit/192KHz bit-stream D/A converters with differential outputs, followed by phase linear active filters and ultra low distortion analogue volume controls.

For details, please contact your **audiolab** sales representative.

IAG HiFi Division
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IAG
International Audio Group

Audiolab 8000AP – Pre-Amplifier



Key Features:

Dual DSP , Cirrus Logic CS494003, 24Bit front end / 32Bit Post processing

- Audio Processing Modes:

- Dolby Digital / Dolby Digital EX
- Dolby Pro Logic II / Dolby Pro Logic IIx
- DTS / DTS ES Matrix / DTS ES Discrete
- DTS 96/24 / DTS NEO:6
- PCM Stereo (24bit / 192KHz)
- HDCD
- 2 - 8 Ch. PCM 24Bit / 96KHz via HDMI
- 5.1 Analogue Bypass

- Video:

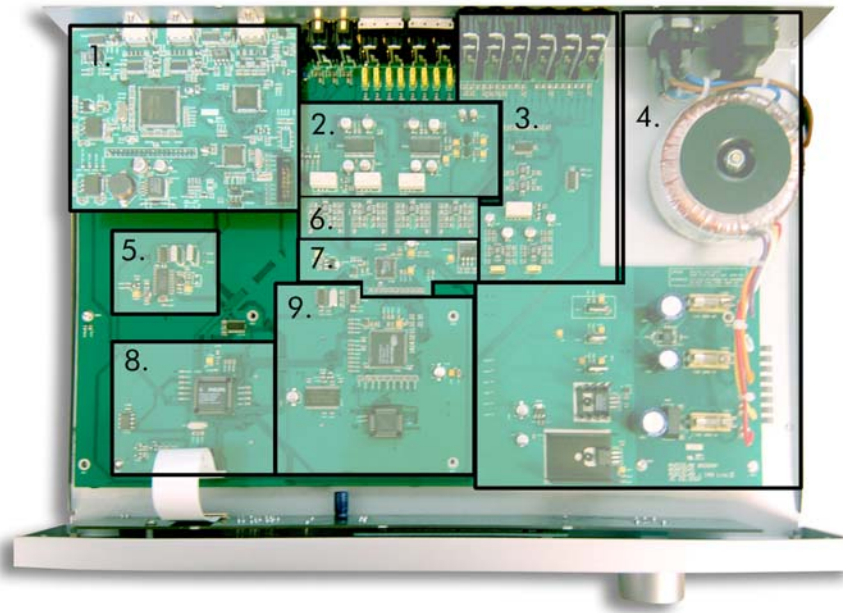
- HDMI max resolution 1080p
- OSD (On Screen Display) Composite Video (PAL/NTSC)

- Connectivity:

- 2 HDMI inputs and 1 HDMI output
- 3 Coaxial Digital SPDIF inputs
- 4 Optical Digital SPDIF inputs
- 1 Optical Digital SPDIF output
- 5 Analogue Inputs via RCA phono Connectors
- 8 Analogue Outputs (7.1) via RCA phono connectors
- 1 Analogue Tape Output via RCA phono Connector
- 6 Analogue Inputs (5.1 Bypass) via RCA phono connectors
- 1 OSD (On Screen Display) output (Composite Video)
- 1 RS232 Communications port

- D/A converters: 24Bit / 192KHz bit-stream
- A/D converters: 24Bit / 48KHz A/D bit-stream
- Adjustable D/A filter response
- 2x Up-sampling (on Digital PCM, HDCD & Analogue sources)
- Separate Analogue and Digital Power Supply with 10 Regulated Supplies.
- Q-SET , Easy system set-up via front panel display.

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1. HDMI circuit.

The HDMI is a discrete section included as standard, which features 2 x HDMI inputs – fully HDMI1.2 compliant and certified to HDMI 1.3 - and a single output. The audio streams are read from the HDMI data and passed to the DSP section of the processor for subsequent decoding and D/A conversion. Both inputs and the outputs are fully HDCP compliant and are capable of all video resolutions up to and including 1080P. The HDMI signal sent to the display is an exact replica of the signal fed into the machine.

2. 8 Channel analogue volume control

A high quality digitally addressed, analogue volume control is applied at the end of the output stage. This volume section is either fed from the post DAC active filters, or directly from the 5.1 bypass inputs if these are used. In the event that the 5.1 bypass inputs are used, the signal purity is fully retained with a direct path, bypassing all processing circuitry.

3. Analogue input circuits

The 8000AP has provision for up to six line level analogue inputs and a 5.1 bypass input - which connects directly to the analogue volume control (2). All standard analogue inputs can be fed into the DSP and encoded by a variety of processing modes including Dolby Pro Logic II, Dolby Pro Logic IIx and all versions of DTS NEO:6.

4. Power supply

A high quality 'toroidal' transformer, linear power supply is used for the 8000AP. The PCB design ensures that there is minimum electromagnetic interaction with any sensitive components. A series of quick-blow fuses protect the circuit from high in-rush currents or power spikes.

5. The OSD (On Screen Display)

The OSD section allows full control of all menu functions of the 8000AP. A separate composite output carries this menu, allowing configuration of inputs, speaker sizes and distances, HDMI decoding options, and bass management. In addition to the OSD menu, the remote control accesses a 'Quickset' menu which allows the user quick and easy calibration of all essential functions.

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6. Post DAC Phase Linear active filters.

Phase linear active filters are utilised after the D-A conversion, using components chosen for their excellent sonic characteristics. This moves DAC noise outside the audible spectrum, lowering the noise floor significantly and optimises the analogue output prior to amplification.

7. CODEC (SPDIF receiver, Stereo A/D, 8 Channel DAC)

The 8000AP uses a high quality 8 channel CODEC which includes the following features and performance.

- A/D converters: 24Bit / 48kHz
- D/A converters: 24Bit / 192kHz
- S/PDIF receiver
- 8 Channel SPDIF input multiplexer
- Differential analogue architecture
- -100 dB THD+N

8. Microprocessor

A powerful microprocessor ensures all the component parts of the 8000AP work together seamlessly.

9. DSP

The 8000AP uses a "Dual" DSP which integrates a multi-channel audio decoder and a 32-bit audio processor with an audio optimised software framework. This allows the 8000AP to decode all of the popular processing modes listed below.

SPECIFICATIONS

Digital Inputs	Frequency Response	10Hz - 20KHz (+0.2dB), 5Hz - 75KHz (+3dB)
	Distortion (THD+N)	less than 0.002%
	Dynamic Range	greater than 103dB
Analogue Input	Input sensitivity	0dBu (775mV), Max 3.5V (2)
	Frequency Response	10Hz - 20KHz (+0.2dB), 5Hz - 24KHz (+3dB)
	Distortion (THD+N)	greater than 0.003%
5.1 Analogue Bypass input	Dynamic Range	less than 100dB @ 1kHz
	Input sensitivity	0dBu (775mV), Max 3.5V (2)
	Frequency Response	10Hz - 20KHz (+0.2dB), 5Hz - 100KHz (+3dB)
Analogue Outputs	Distortion (THD+N)	less than 0.001%
	Dynamic Range	greater than 110dB
	Output level	0dBu (775mV), MAX 3.5V
Video Outputs	Volume control	-90dB to +15dB in 1dB steps, Channel C19imbalance <+0.1dB
	HDMI	Max resolution 1080p, HDCP compatible, 'Type A' Connectors
Power Supply	OSD	1.5Vp-p, 75ohm, PAL or NTSC
	Mains voltage :	230VAC +/- 10%
Finish	Power consumption :	15W , (< 7W in Standby)
	Dimensions (WxHxD - mm)	445 x 74 x 338
	Colour	Black / Silver