

audiolab



8000 series

Winter 2005



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## Introduction

Audiolab has always had a reputation for high-quality, no-nonsense engineering, excellent build-quality and reliability, and a component level approach which provides a sensible upgrade path.

Under the leadership of Nick Clarke, Head of Electronics Engineering - and for many years a key designer within the original Audiolab company - our R&D team has fully embraced the original design philosophy, again seeking to create products which offer high performance and a long life.

We have extended the famous 8000 series of electronics with Home Cinema products - an advanced AV pre-amplifier and 7 channel power amplifier.

As the range develops, we will be adding source components and adopting new technologies within our products. The core 8000 series products will remain, however, the cornerstone of the range and will allow you to develop a system that can grow and adapt to your needs for many years to come.

The new 8000 series offers a definitive and genuine hi-fidelity performance from a no-nonsense approach to engineering

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## 8000CD - Player

Whilst good amplifier design fundamentals have not moved much in the last ten years – the same topological principles apply today as they did then – the same does not apply to digital system sources such as CD players.

The 8000CD is a completely new design. Using a bespoke designed transport, optimised for accurate transfer of data to the very latest Crystal DAC, it is a worthy partner to the amplifiers and stands alone as one of the best CD players at anything close to its price.

The topology is dedicated to high-quality audio reproduction, with twin power supplies being employed to separate the digital and analogue stages of the player – aimed at giving the performance of a two box player from an integrated machine.

Backwards compatibility with older Audiolab systems is preserved through the new remote control (supplied), whilst the new silver livery, VFD display and cutting-edge performance ensures the 8000CD is far more than a trifling update.



8000CD	Analog	Connectors	Two pairs RCA phono
		Output level	2.4V rms
		Frequency response	20Hz - 20kHz +/- 0.5dB
		Output impedance	100 Ohms
		S/N ratio	Better than 100dBA
		Channel balance	Better than +/- 0.5dB @ 1kHz
		Channel separation	Better than 100dB @ 1kHz
		THD+N (at 1kHz)	Less than 0.003% @ 1kHz (>-90dB / 2.4V)
		DAC	24bit 192kHz, 5th order delta sigma
		Output format	SPDIF
Digital	Connectors	75 Ohm BNC, RCA phono, Optical	
	Output level	550mV p-p (nom.) +/- 10%	
	Output impedance	75 Ohms +/-5%	
General	Operating temperature range	10°C - 40°C (ambient)	
	Power requirements	(depending on region)50-60Hz 100V, 110-120V and 220-240V	
	Dimensions (WxHxD - mm)	445 x 74 x 335	



Separate analogue and digital power supplies are employed to lift the performance to that of a two box player.

## 8000S - Integrated Amplifier

The original 8000 series from Audiolab left a legacy of revolutionary products, one of which being the legendary 8000A; a product which lead the way in simple but technically advanced stereo systems.

The 8000S has been designed as a powerful upgrade from the legendary 8000A. With this fine heritage behind it, the virtues of the system are many; not least of which is flexibility.

Able to operate in any one of five modes the 8000S is a more than

worthy replacement for - and an essential addition to - any home with a passion for high quality audio.

The power of the 8000S is self-evident, with 60 Watts per channel output and a maximum peak output current of over 25 Amps, the system is able to drive most loudspeaker loads with ease and comfort.

The 8000S also features 6-line level inputs and has 3 tape loops, all selectable from the supplied system remote control.



8000S	Rated output power	60 W per channel into rated load impedance (8Ω),95 W into 4Ω
	Typical output power	72 W per channel into rated load impedance (8Ω), 115 W into 4Ω
	Preamplifier input impedance	20 kΩ nominal
	Preamplifier maximum output	Greater than 7.76 V rms
	Power amplifier input impedance	47 kΩ nominal
	Frequency response (-3 dB)	1 Hz - 65 kHz
	Frequency response (±0.5dB)	20 Hz - 20 kHz
	Channel separation	Greater than 60 dB at 1 kHz
	Crosstalk rejection	Greater than 80 dB at 1 kHz
	Operating temperature range	10 - 35°C
	Power consumption	Less than 300 W Idle/Power
	Dimensions (WxHxD - mm)	445 x 74 x 335



“The 8000S has been designed as a powerful upgrade from the legendary 8000A”

### The 8000S modes

- Pre - Pre Amplifier, activates the pre-outs / de-activates the internal power amp
- Mute - Mutes the output
- Integrated - Integrated Amplifier
- Pre-Power - Activates the pre-outs allowing an additional power amp to be used for Bi-amping
- Pre-Power AV - Allows an AV processor direct access to the pre-out / power in sockets



“the 8000Q must provide all of the functionality and control required without imparting any character of its own.”



## 8000Q - Pre-Amplifier

Separating the delicate signals that pass through pre-amplifier circuits from the high current, field inducing signals that pass through power amplifiers has obvious electrical benefits.

Reliable and robust, the 'Q' has been a stalwart of the 8000 series. Good pre-amplifiers are few and far between in the audiophile world. To be considered such an audiophile pre-amplifier, the 8000Q must provide all of the functionality and control required without imparting any character of its own to the delicate audio signals. It's this neutrality that is

so hard to achieve, and it is this neutrality that is the secret of the 8000Qs enduring appeal.

The 8000Q is a simple, but high quality, remote control pre-amplifier with a wide range of inputs and outputs. All signals are switched with audiophile signal relays and the volume control is a motorised potentiometer

The low impedance line-amplifier is a miniature class A power amplifier with current mirror bias - ideal for use with long interconnects to multiple power amplifiers.



8000Q	Input impedance	20 k $\Omega$ nominal
	Input level vs. gain setting	500 mV at 0 dB - 350 mV at 3 dB - 250 mV at 6 dB 175 mV at 9 dB - 125 mV at 12 dB - 90 mV at 15 dB
	Frequency response (-3 dB)	0.1 Hz - 75 kHz
	Frequency response ( $\pm$ 0.2 dB)	20 Hz - 20 kHz
	Channel separation	greater than 100dB at 1 kHz
	Crosstalk rejection	greater than 100dB at 1 kHz
	Preamplifier output impedance	100 $\Omega$ nominal
	Preamplifier maximum output	greater than 7.7 V rms (20 dBm)
	Record output impedance	1 k $\Omega$ nominal
	Operating temperature range	greater than 10 - 35°C
	AC supply frequency	50 - 60 Hz
	AC supply voltage	110 - 120 V or 220 - 240 V
	Power consumption	less than 25 W
	Dimensions (WxHxD - mm)	445 x 74 x 335

## 8000M - Power Amplifier

Using two monobloc amplifiers, rather than a two-channel stereo power amplifier can significantly improve the performance of any hi-fi system.

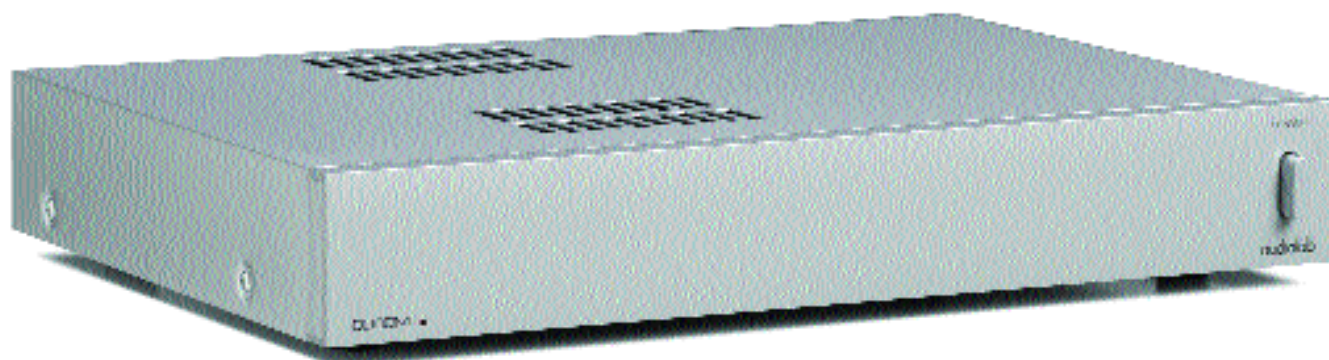
Although the 8000M offers greater power output than an 8000P, it is gain matched, so should you upgrade your system in the future, you can happily use the two in combination.

The 8000M provides a genuine 125W power into an 80hm

loudspeaker load, and features twin output terminals for bi-wiring.

It has parallel phono connectors making it easy to connect several pairs of 8000Ms to any pre-amplifier. This allows you to daisy-chain units to further improve headroom in bi-amped and even tri-amped systems.

Simple styling belies the power and speed of response available from this compact amplifier.



8000M	Rated output power	125 W per channel into rated load impedance (8Ω), 200 W into 4Ω
	Typical output power	145 W per channel into rated load impedance (8Ω), 240 W into 4Ω
	Input for full rated power	1.13 V rms
	Input impedance	47 kΩ nominal
	Gain	29.0 dB at 1 kHz
	Signal to noise	Greater than 96 dB (relative to 0 dBW)
	Frequency response (-3 dB)	0.1 Hz - 75 kHz
	Frequency response (±0.3dB)	20 Hz - 20 kHz
	Total harmonic distortion + noise	Less than 0.05%
	Dimensions (WxHxD - mm)	445 x 74 x 337

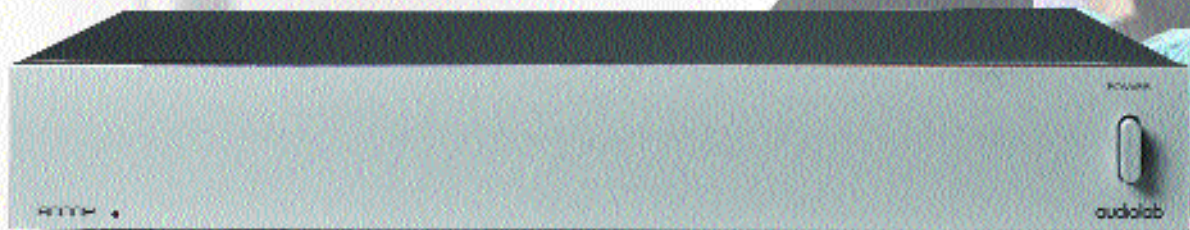
## 8000P - Power Amplifier

The 8000P is a classic two-channel power amplifier, delivering over 100W per channel and a peak output of over 40 Amps.

Comfortably able to drive most loudspeaker loads, the 8000P is equally useful in Home Cinema configurations as it is in high performance stereo applications.

A simple aesthetic and wide compatibility with other components ensures the 8000P amplifier is an ideal building block for your current and future systems.

All Audiolab 8000 series power amplifiers are gain-matched for easy integration into a growing system.



8000P

Rated output power	100 W per channel into rated load impedance (8 $\Omega$ ), 150 W into 4 $\Omega$
Typical output power	120 W per channel into rated load impedance (8 $\Omega$ ), 180 W into 4 $\Omega$
Input for full rated power	1.0 V rms
Input impedance	47 k $\Omega$ nominal
Gain	29.0 dB at 1 kHz
Signal to noise	Greater than 95 dB (relative to 0 dBW)
Frequency response (-3 dB)	0.1 Hz - 75 kHz
Frequency response ( $\pm$ 0.3dB)	20 Hz - 20 kHz
Total harmonic distortion + noise	Less than 0.05%
Dimensions (WxHxD - mm)	445 x 74 x 337

## 8000AV - Pre-Amplifier

The new 8000 Series from Audiolab also caters well for Home Theatre applications. The 8000AV Pre-Amplifier and the 8000X7 Power Amplifier continue the theories of no-nonsense engineering and great production quality.

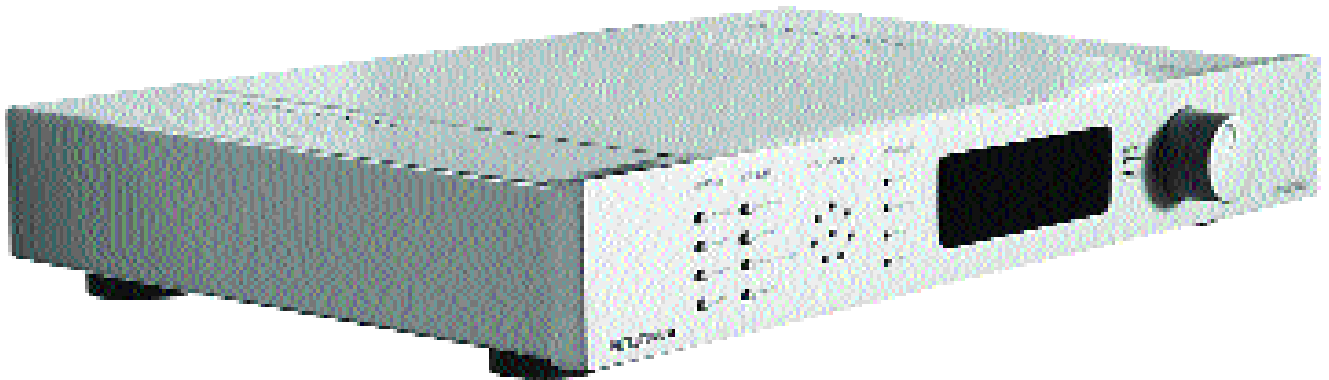
Designed for the real AV enthusiast these two components have stacks of power and are capable of handling any of the most complicated of Home Theatre applications you should wish to throw at them.

The 8000AV home theatre pre-amplifier is a fully featured 7.1 channel AV processor which can

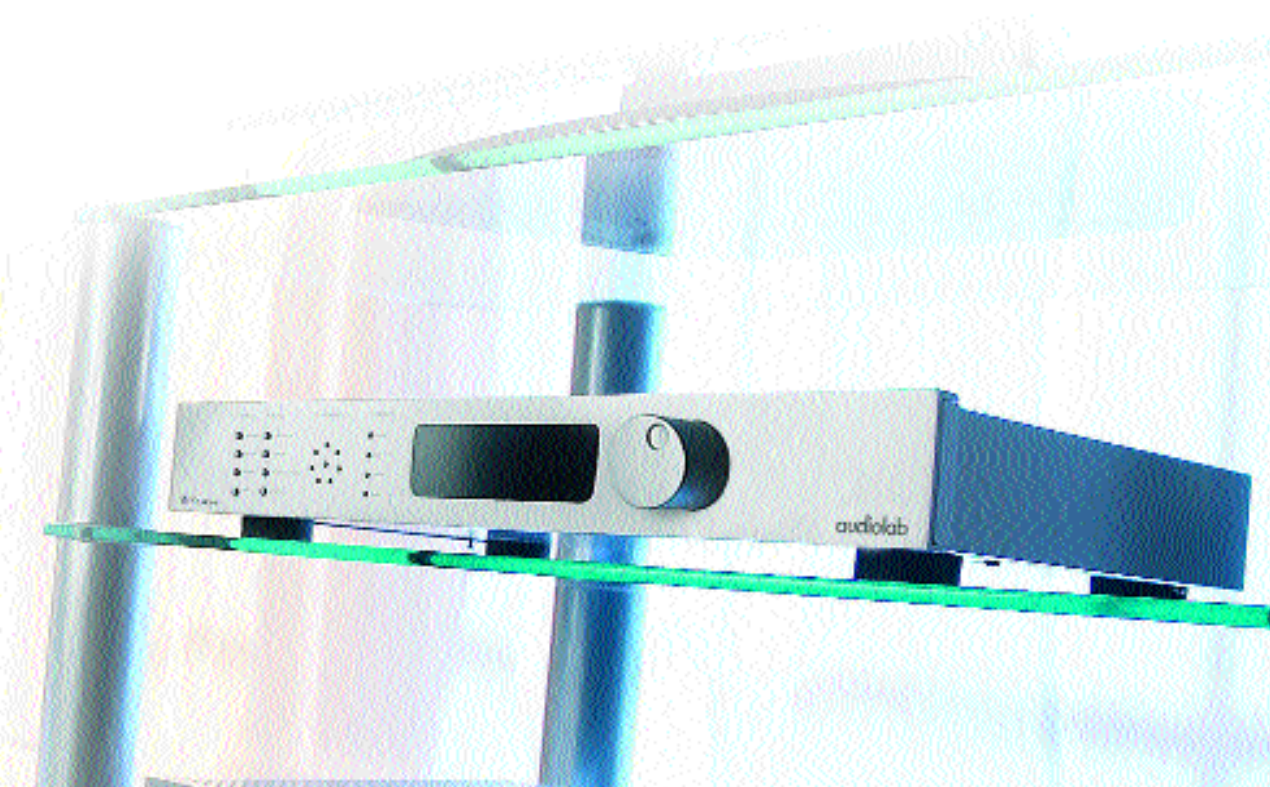
be used in conjunction with our dedicated 7 channel power amplifier or any combination of our stereo and mono power amplifiers.

Optical and co-axial digital inputs, as well as analogue audio inputs, allow seamless transitions between audio sources. Video switching is offered between up to eight inputs - both S-video and composite.

All popular formats are supported and the unit is supplied as standard with trigger switches to allow integration with a full cinema installation.



“Optical and co-axial digital inputs, as well as analogue audio inputs allow seamless transitions between audio sources.”



<b>8000AV</b>	Digital input frequencies	44.1 kHz, 48 kHz, 96 kHz
	Digital input impedance	Coaxial: 75 Ohm
	Digital output impedance	75 Ohm
	Analog input impedance	10 kOhm
	Analog input frequency response	DC-50 kHz (-3 dB) Direct, 2 Hz - 20 kHz ( $\pm 0.5$ dB) processed
	Analog input total harmonic distortion	0.0065% processed, 0.0015% unprocessed (Direct)
	Tape output impedance	100 Ohm
	Tape output gain	-3 dB
	Analog output impedance	100 Ohm
	Maximum analog output level	5 V rms on all channels
	Analog output frequency response	2 Hz - 20 kHz (processed)
	Analog output signal to noise ratio	Left/right: 102 dB (A-weighted), other channels: 90dB @ 0dB volume
	Analog output total harmonic distortion	Left/right: 0.004%, all other channels: 0.004 % @ 0 dB volume setting
	Video bandwidth	5 Hz - 4.2 MHz ( $\pm 0.25$ dB), 1 Hz - 20 MHz (-3 dB)
	Video input impedance	75 Ohm
	Video output impedance	75 Ohm
	Dimensions (W x H x D - mm)	445 x 75 x 338

## 8000X7 - Power Amplifier

The 8000X7 is a genuine one-box, seven channel power amplifier, capable of handling even difficult loudspeaker loads.

The 8000X7 home theatre power amplifier delivers 7 x 100Wrms power. However, you can also run it in five or six channel mode too. By bridging two channels it is possible to create a more powerful single channel - especially useful if your front left and front right speakers are more performance critical than the other speakers in your 5.1 system.

This can be achieved simply by changing switch settings on the rear of the unit.

The 8000X7 is gain matched with the other 8000 series power amplifiers, and indeed the Power section of the 8000S integrated amplifier. It will work happily in combination with any of these should the demands of your system change in time.

Unobtrusive, with an elegant simplicity, the 8000X7 is a compact yet powerful performer.



8000X7	Power output	7 x 100W into rated load impedance (8 Ohm) 5 x 100W and 1 x 150W (8 Ohm) 3 x 100W and 2 x 150W (8 Ohm)
	IHF toneburst power	7 x 120W (8 Ohm)
	Input for rated power	1.05 Vrms
	Input impedance	47 kOhm
	Gain	+29 dB at 1 kHz
	Signal to noise	better than 90 dB (relative to 0 dBW) unweighted
	Frequency Response	1.5 Hz - 150 kHz (-3 dB)
	Input connector	RCA



“The 8000X7 home theatre power amplifier delivers 7 x 100Wrms power. However, you can also run it in five or six channel mode.”

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