

Accuphase

PRECISION INTEGRATED STEREO AMPLIFIER

E-6000

- High power output of 260 watts into 8 ohms, or 350 watts into 4 ohms
- Integrated amplifier with fully balanced configuration from input to output
- Balanced AAVA type volume control with ANCC
- High-accuracy, high-rigidity volume sensor construction
- Power amplification stage configured as an instrumentation amplifier
- Six-fold parallel push-pull configuration using power transistors driven in Class AB
- High damping factor of 1,000
- Strong power supply with massive high-efficiency toroidal transformer and large, high-voltage filtering capacitors
- Protection circuitry using MOS-FET switches





An integrated amplifier boasting overwhelmingly high power

The E-6000 has the highest output power in the Accuphase integrated amplifier line-up. The impressive power produced by the six-fold parallel push-pull configuration with power transistors driven in Class AB easily drives even very large speakers. The preamplifier section features a Balanced AAVA type volume control that implements ANCC to create ideal volume adjustment. Let your entire body experience the overwhelming sense of scale achieved by this high-output Class AB integrated amplifier.

Innovation – At the leading edge of technology

■ Balanced AAVA type volume control circuit

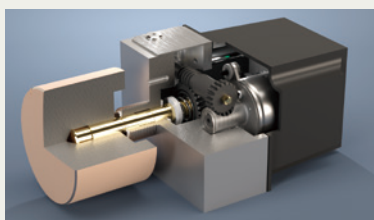
Conventional preamplifiers use variable resistors to adjust volume, which can cause contacts to deteriorate and create grit as well as increase noise at normal volume levels. AAVA, however, produces multiple, widely varying signals from the input signal and controls volume by changing the combination of those signals. This achieves minimum noise at all volume levels without any rasping. The E-6000 relies on Balanced AAVA comprised of balanced AAVA circuits, reducing the overall noise level by about 10% compared to conventional models at typical volume positions.



Balanced AAVA type volume control circuit

■ High-accuracy, high-rigidity volume sensor construction

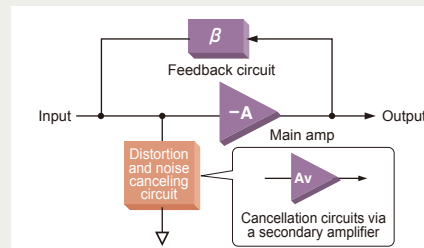
The volume sensor mechanism carved from a single aluminum block ensures silky-smooth operation, a weighty operational feel, and accurate position detection. Operations with the remote commander are so quiet that mechanical noise is hardly noticeable.



Volume sensor construction

■ ANCC significantly reduces distortion and noise (Accuphase Noise and distortion Canceling Circuit)

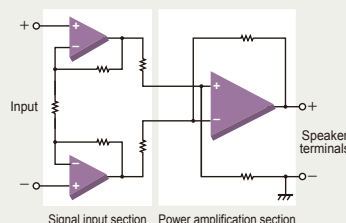
The E-6000's I-V conversion amplifier uses the ANCC principle. ANCC relies on a secondary amplifier to cancel out noise and distortion from the main amplifier. The secondary amplifier utilizes a low-noise amplifier (noise density: 1.5 nV/√Hz) to increase the effect of the ANCC. Incorporating this ANCC in the AAVA I-V conversion amplifier drastically improves noise performance, particularly when transitioning from low volume settings to typical volume positions.



Block diagram of ANCC

■ Power amplification stage configured as an instrumentation amplifier

The instrumentation amplifier circuitry's equal impedance on the + and - sides and exceptional external noise suppression provide optimal performance for an audio amplifier.



Sound quality – Simply aiming for the best

■ Power amplification stage that achieves powerful output

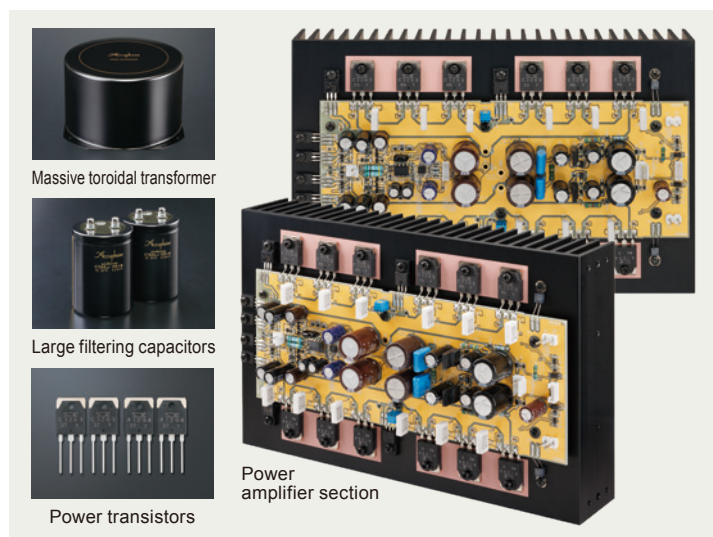
The power amplification stage on both the left and right sides features a large heat sink and employs six-fold parallel push-pull power transistors driven in Class AB to provide ferocious output of 260 watts into 8 ohms, or 350 watts into 4 ohms.

■ Power supply circuitry delivers steady power

A strong power supply featuring a massive toroidal transformer and two high-voltage, large filtering capacitors (47,000 μ F/100 V) offer a stable power supply at all times.

■ High damping factor brings out the full potential of speakers

The damping factor represents the amplifier's ability to drive the speakers. A damping factor of 1,000 (guaranteed) extracts maximum potential from the loudspeakers.



Uncompromising Quality

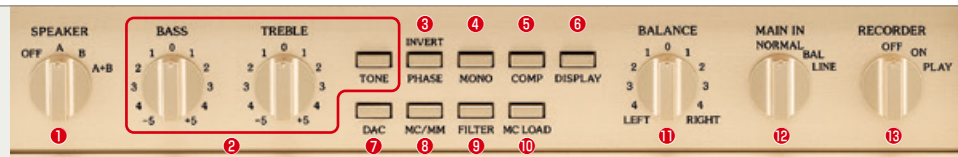


for Life's Precious Moments



Advanced features

- Balanced AAVA volume control circuit
- High-accuracy, high-rigidity volume sensor construction
- Highly reliable logic-control signal switching relays
- Power amplification stage configured as an instrumentation amplifier
- Balanced remote sensing to improve the damping factor
- Current feedback amplification circuit topology assures excellent phase characteristics in the high range
- Preamplifier I/O terminals (LINE / BALANCED)
- Dedicated, high-quality headphone amplifier with discrete circuitry
- -20 dB volume attenuator to instantly reduce the sound level
- Speaker output selector ①
- Tone controls using summing active filters ②
- Individual phase setting for each input ③
- Stereo signal can be switched to monophonic ④
- Loudness compensator to adjust audible energy balance ⑤
- Display mode selector ⑥
- DAC input selector ⑦
(when DAC-60 / DAC-50 / DAC-40 is installed)
- MC/MM selector ⑧
(when AD-60 / AD-50 / AD-30 / AD-20 is installed)
- Subsonic filter ON/OFF selector ⑨
(when AD-60 is installed)
- MC input impedance selector ⑩⑬
30 / 100 / 200 / 300 ohms (when AD-60 is installed)
- Left/right balance adjustment with more steps for fine-tuning ⑪
- Power amp section input selector (LINE / BALANCED) ⑫
- Recorder selector ⑬
- Volume display ⑭
- Sampling frequency display ⑮
(when DAC-60 / DAC-50 / DAC-40 is installed)
- Five sets of line inputs ⑰
- Speaker output protection circuit guards against short-circuiting ⑱
- Two sets of balanced inputs ⑲
- Two sets of large speaker terminals ⑳
- High-sensitivity analog power meters ㉑
- Highly reliable MOS-FET switches ㉒
- High-carbon cast iron insulators for superior vibration damping ㉓



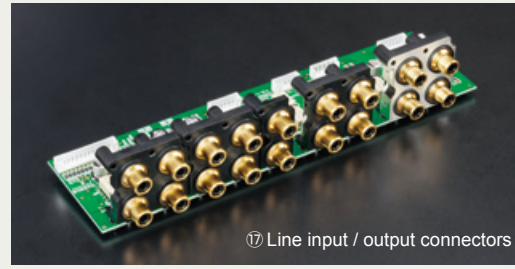
⑭ Volume display



⑮ Sampling frequency display



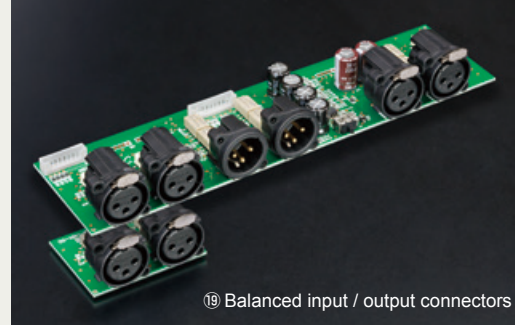
⑯ MC input impedance display



⑰ Line input/output connectors



⑱ Protection circuit assembly



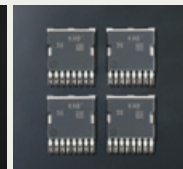
⑲ Balanced input/output connectors



⑳ Speaker terminals connected directly to protection circuitry



㉑ Power meter



㉒ MOS-FET switches



㉓ High-carbon cast iron insulators

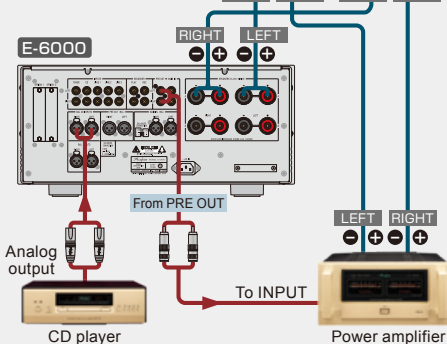


Bi-amping for Further Enhanced Sound

In a bi-amped setup, the speaker units for the Low range and the High range are driven by separate amplifiers with equal gain, enabling playback with higher sound quality.

* The speakers must have a built-in crossover network and separate inputs for the Low and High ranges.

* The example shows a setup with an additional power amplifier for the Low range.



Option Boards



The rear panel expansion slots allow use of three types of option boards: DAC-60, AD-60, and LINE-10. The E-6000 can accommodate two boards according to the requirements.

■ The following option boards can also be used:

Digital Input Board	DAC-50 / DAC-40 / DAC-30 / DAC-20 / DAC-10
Analog Record Input Board	AD-50 / AD-30 / AD-20 / AD-10 / AD-9
Line Input Board	LINE-9

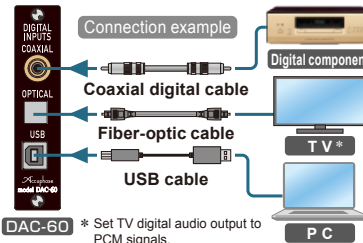
Analog Record Input Board AD-60

Features a high-performance phono equalizer for playback of analog records.

- Supports MC and MM cartridges
- Load impedance selection (MC only)
- Subsonic filter

Cartridge	MC	MM
Gain	66 dB	40 dB
Input Impedance	30 ohms 100 ohms 200 ohms 300 ohms	47 kilohms

Digital Input Board



High-performance DAC with two ES9016K2M chips from ESS Technology driven in parallel.

Input	Signal	Sampling Frequencies	Number of Bits
USB	DSD	2.8 MHz	1-bit
		5.6 MHz	
		11.2 MHz	
		[11.2 MHz: ASIO only]	
OPTICAL	PCM	32 to 384 kHz	32-bit
		32 to 96 kHz	24-bit
COAXIAL	PCM	32 to 192 kHz	24-bit

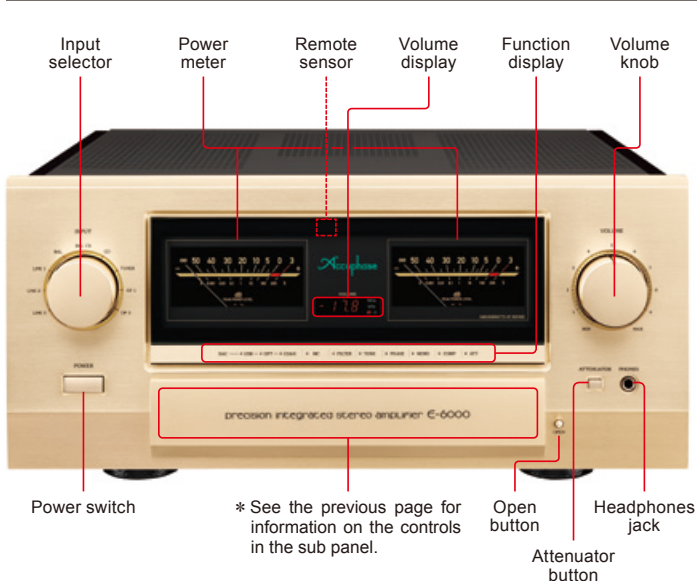
* Set TV digital audio output to PCM signals.

Line Input Board LINE-10

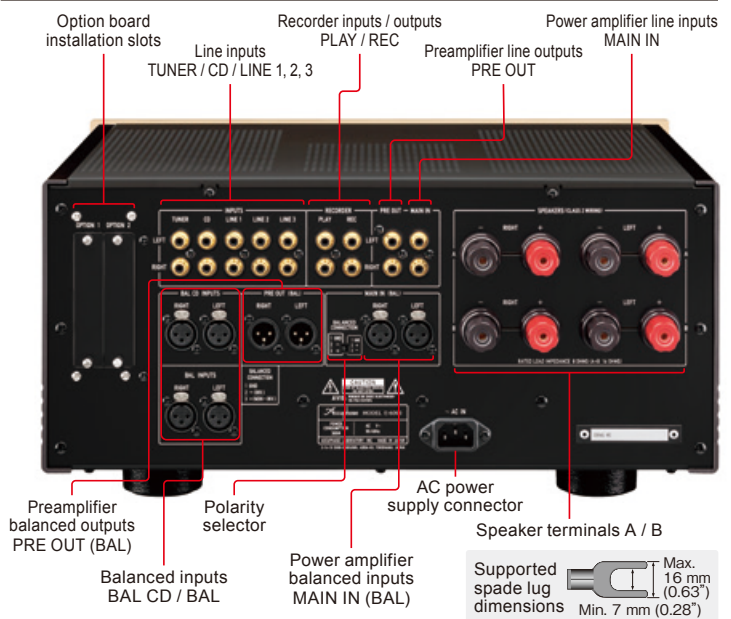


Provides an additional set of unbalanced line level inputs.

Front Panel



Rear Panel



E-6000 Guaranteed Specifications

Rated Output (20 to 20,000 Hz)	Both channels driven simultaneously	4-ohm load*	350 W / ch
Total Harmonic Distortion (20 to 20,000 Hz, rated output)	Both channels driven simultaneously	8-ohm load	260 W / ch
Intermodulation Distortion		4 to 16-ohm load	0.05 %
Frequency Response	At rated output	INPUT (BALANCED / LINE)	20 to 20,000 Hz (+0, -0.5 dB)
		MAIN IN (BALANCED / LINE)	20 to 20,000 Hz (0, -0.2 dB)
	At 1 W output	MAIN IN (BALANCED / LINE)	3 to 150,000 Hz (+0, -3.0 dB)
Damping Factor			1,000
Input Sensitivity	At rated output	INPUT (BALANCED / LINE)	229 mV
		MAIN IN (BALANCED / LINE)	1.82 mV
	EIA (at 1 W output)	INPUT (BALANCED / LINE)	14.2 mV
Input Impedance		MAIN IN (BALANCED / LINE)	113 mV
		INPUT (BALANCED)	40 kilohms
		INPUT (LINE)	20 kilohms
		MAIN IN (BALANCED)	40 kilohms
Max. Input Voltage		MAIN IN (LINE)	20 kilohms
Output Voltage	At rated output		5.0 V
Output Impedance	PRE OUTPUT (BALANCED / LINE)		1.82 V
Gain	INPUT (BALANCED / LINE) → PRE OUTPUT (BALANCED / LINE)		50 ohms
	MAIN IN (BALANCED / LINE) → SPEAKER OUTPUT		18 dB
			28 dB

Supplied accessories

- AC power cord (2 m (6.5'))
- Remote Commander RC-260

Remarks

- ★ This product is available in versions for 120/220/230 V AC. Make sure that the voltage shown on the rear panel matches the AC line voltage in your area.
- ★ The 230 V version has an Eco Mode that switches power off after 120 minutes of inactivity.
- ★ The shape of the plug of the supplied AC power cord depends on the voltage rating and destination country.

Tone Controls	Turnover frequency	Bass: 300 Hz	±10 dB
	and adjustment range	Treble: 3 kHz	±10 dB
Loudness Compensator			+6 dB (100 Hz)
Attenuator			-20 dB
S/N Ratio	At rated output	INPUT (BALANCED)	112 dB
	(Input shorted, A weighting)	INPUT (LINE)	112 dB
		MAIN IN (BALANCED / LINE)	126 dB
		INPUT (BALANCED / LINE)	97 dB
Input Equivalent Noise (Input shorted, A weighting)		MAIN IN (BALANCED / LINE)	101 dB
		INPUT (BALANCED)	-124 dBV
Power Meter		INPUT (LINE)	-124 dBV
		MAIN IN (BALANCED / LINE)	-121 dBV
Headphones Jack	Logarithmic compression peak level display, output dB and % display		
Power Requirements	Compatible impedance		8 ohms or higher
Power Consumption	120 V, 220 V, 230 V AC (voltage as indicated on rear panel)		
			50 / 60 Hz
	Idle		90 W
	In accordance with IEC 62368-1		380 W
Maximum Dimensions	At 8-ohm load rated output		887 W
	Standby		0.4 W
Mass	Width 465 mm (18.3") × Height 221 mm (8.7") × Depth 502 mm (19.8")		
	Net		38.6 kg (85.1 lbs)
	In shipping carton		48 kg (106 lbs)

* Music signals only

● Measurement methods for Guaranteed Specifications adhere to JEITA CP-1301A and IEC 60268-3.



ACCUPHASE LABORATORY, INC.

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