

Accuphase

Class-A
PRECISION INTEGRATED STEREO AMPLIFIER

E-800

- Integrated amplifier with fully balanced configuration extending from input to output
- Balanced AAVA type volume control
- Power amplification stage configured as instrumentation amplifier
- Six-fold parallel push-pull configuration of power MOS-FETs driven in Class A
- Linear power progression of 50 watts into 8 ohms, 100 watts into 4 ohms, and 200 watts into 2 ohms
- 300 W output into 1-ohm load (music signals)
- High damping factor of 1000
- Strong power supply with massive high-efficiency toroidal transformer and large filtering capacitors
- Protection circuitry using MOS-FET switches





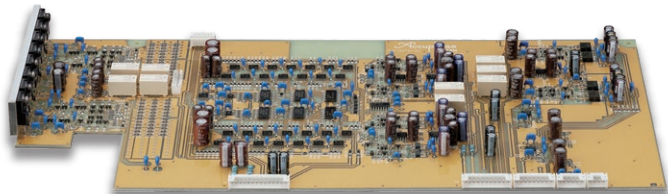
Integrated Amplifier Is First Entry in New Flagship Model Series

The E-800 is positioned above the E-650 as the new flagship model in the integrated amplifier lineup of Accuphase. The preamplifier section features the impeccable Balanced AAVA type volume control, while the power amplifier section is configured as an instrumentation amplifier using a six-fold parallel push-pull configuration of power MOS-FETs driven in pure Class A. The resulting quality is on a par with high-class separate type amplifiers. Operating as a simple and smart system, the E-800 realizes acoustic excellence that reaches to the very heart of the music.

Innovation - The leading edge of technology

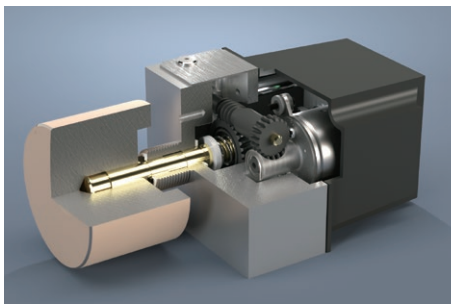
Balanced AAVA type volume control

AAVA performs volume adjustment by making use of a combination of 16 current signals with different magnitude, thereby eliminating signal degradation and impedance fluctuations and maintaining high S/N ratio and low THD over the entire volume range. In the Balanced AAVA implementation of the E-800, two AAVA circuits are driven in a fully balanced configuration with a superior capability to eliminate external noise.

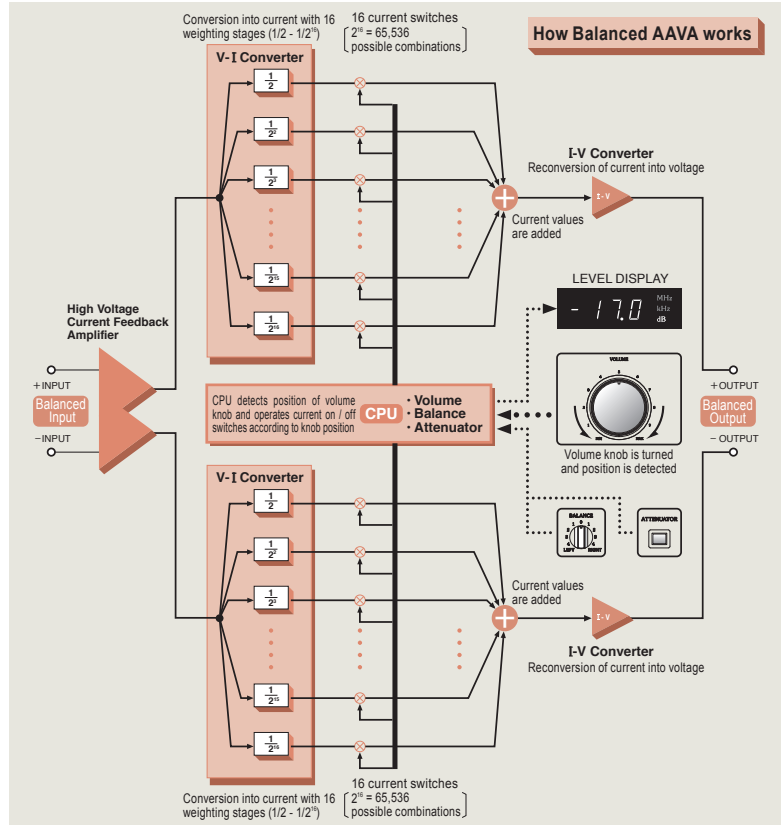


Balanced AAVA type volume control assembly

High-accuracy, high-rigidity volume sensor construction



The volume sensor mechanism developed by Accuphase in-house is built from a single massive aluminum block extruded and finished with utmost precision and complemented by other substantial materials, to ensure a silky smooth operation feel.



Sound quality - Simply aiming for the best

Formidable power amplification stage

The power amplification circuitry mounted directly on a large heat sink employs a six-fold parallel push-pull configuration of power MOS-FETs driven in Class A. Two identical units arranged on the left and right sides of the chassis deliver impeccable power in a linear progression for the two channels: 50 watts into 8 ohms, 100 watts into 4 ohms, and 200 watts into 2 ohms. The amplifier can even supply 300 watts into 1 ohm (music signals).

High damping factor brings out the full musical potential of loudspeakers

Features such as Balanced Remote Sensing and MOS-FET switches help to realize a damping factor of 1000. Superb motion control lets every loudspeaker perform at its very best.

Power supply circuitry designed for optimum stability

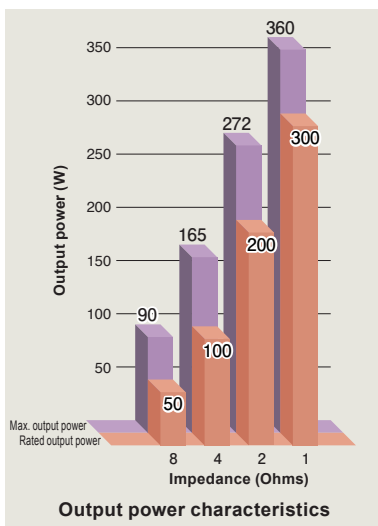
The strong power supply with massive high-efficiency toroidal transformer and two large 60,000 µF filtering capacitors ensures a stable current supply at all times.



Massive toroidal power transformer



Large filtering capacitors



Power amplifier assembly

Epoch-Making Fusion



of Skill and Technology



Ultra-Massive Pure Class-A Precision Integrated Amplifier

Combining cutting-edge technology with carefully selected materials of superb quality, the E-800 exudes an aura of solid luxury, with a lavish champagne gold front panel that changes its look depending on the viewing angle, and bar graph meters that delicately reflect the rhythm of the music.

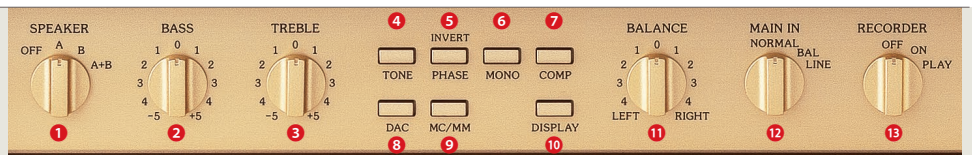


Advanced features

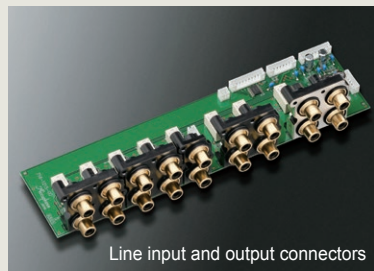
- Logic-control signal switching relays for shortest signal paths
- Five line level and three balanced inputs
- Line input and output connectors for a recorder
- Individual phase setting for each input
- Stereo signal can be switched to monophonic operation
- Left/right balance control also realized with Balanced AAVA
- Convenient attenuator is useful for example when operating an analog record player or taking a telephone call
- Loudness compensator enhances low end presence at low volume levels
- Tone controls using summing active filters
- Power amplification stage employs instrumentation amplifier principle
- Current feedback amplification circuit topology assures excellent phase characteristics in high range
- Speaker output protection circuit guards against short-circuiting
- Protection circuitry using MOS-FET switches
- Two sets of large speaker terminals
- Preamp and power amplifier sections can be used separately
- Line level and balanced outputs of preamp section also support bi-amping connection
- Line level and balanced inputs of power section enable use as a power amplifier
- Dedicated headphone amplifier constructed with discrete components
- Two rear panel expansion slots allow use of option boards
- DAC input selector button for use with digital input board (when DAC-40 / DAC-50 is installed)
- Sampling frequency display for digital input signal (when DAC-40 / DAC-50 is installed)
- High-sensitivity LED bar graph power meters with 30-point indication to -50 dB



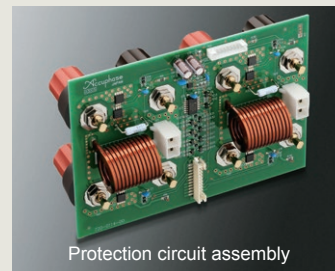
- Supplied Remote Commander RC-240
Allows volume adjustment, input source switching etc.



- 1 Speaker output selector
- 2 Bass control
- 3 Treble control
- 4 Tone control on / off button
- 5 Phase selector button
- 6 Mono / stereo selector button
- 7 Loudness compensator on / off button
- 8 DAC input selector button
- 9 MC / MM selector button
- 10 Display mode selector button
- 11 Balance control
- 12 Preamplifier / power amplifier separator switch
- 13 Recorder selector



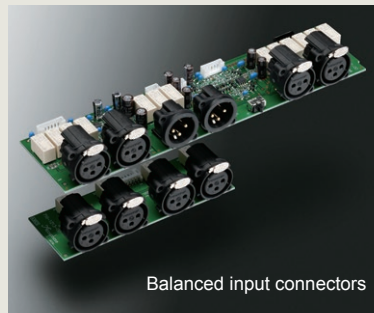
Line input and output connectors



Protection circuit assembly



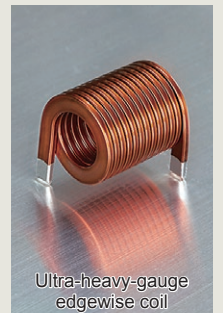
MOS-FET switches



Balanced input connectors



Speaker terminals connected directly to protection circuitry



Ultra-heavy-gauge edgewise coil

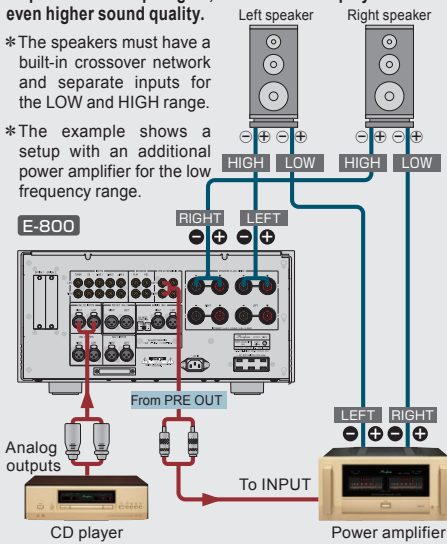


Bi-amping for further enhanced sound

In a bi-amped setup, the speaker units for the LOW frequency range and the HIGH frequency range are driven by separate amplifiers with equal gain, which enables playback with even higher sound quality.

* The speakers must have a built-in crossover network and separate inputs for the LOW and HIGH range.

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



Option Boards



Photo shows an option board installation example.

Rear panel expansion slots allow use of three types of option boards (DAC-50, AD-50, LINE-10). Up to two boards can be inserted, according to requirements.

■ The following option boards can also be used:

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

Analog Disc Input Board AD-50

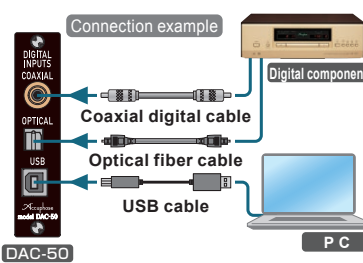


Features a high-performance phono equalizer for playback of analog records.

- Supports MC and MM cartridges
- Load impedance selector button (for MC only)
- Subsonic filter

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

Digital Input Board DAC-50



High-performance DAC with two AK4490EQ chips from Asahi Kasei Microdevices driven in parallel.

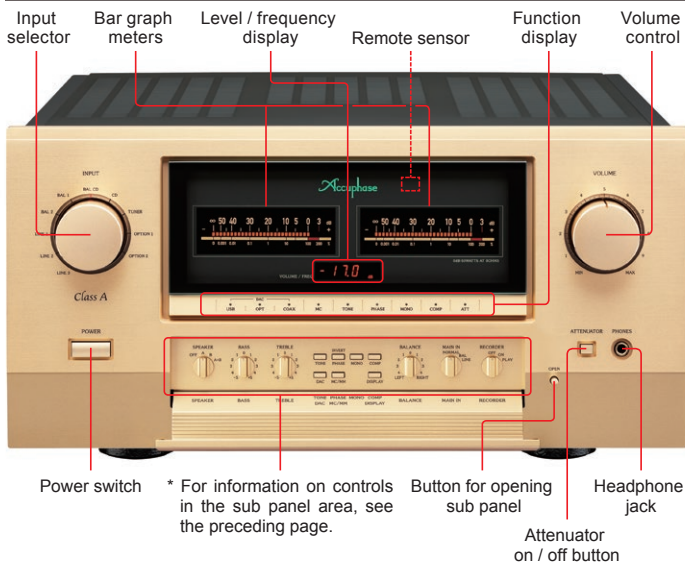
Input	Signal	Sampling frequencies	Number of bits
USB	DSD	2.8 MHz	1-bit
		5.6 MHz	
		11.2 MHz	
OPTICAL	PCM	32 to 384 kHz	32-bit
		32 to 96 kHz	24-bit
COAXIAL	PCM	32 to 192 kHz	24-bit

Line Input Board LINE-10

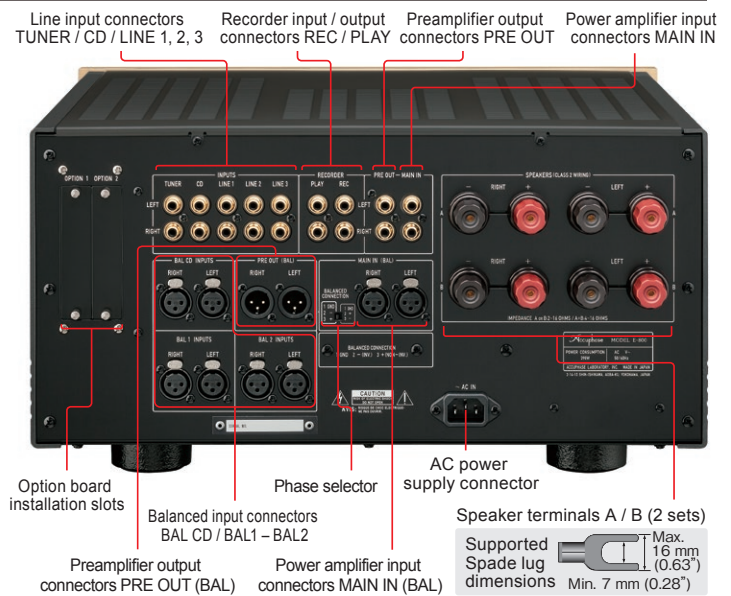


Provides an additional set of unbalanced line level inputs.

Front Panel



Rear Panel



E-800 Guaranteed Specifications [Guaranteed specifications are measured according to EIA standard RS-490.]

Continuous Average Output Power (20 – 20,000 Hz)	(both channels driven)	1-ohm load (music signals)	300 W	
		2-ohm load	200 W	
		4-ohm load	100 W	
		8-ohm load	50 W	
THD (20 – 20,000 Hz)	(both channels driven)	2-ohm load	0.05%	
		4 to 16 ohm load	0.03%	
Intermodulation Distortion			0.01%	
Frequency Response	HIGH LEVEL INPUT	*	20 – 20,000 Hz (+0, -0.5 dB)	
	MAIN IN	*	20 – 20,000 Hz (+0, -0.2 dB)	
		At 1 watt output:	3 – 150,000 Hz (+0, -3.0 dB)	
Damping Factor			1000 (with 8-ohm load, 50 Hz)	
Input Sensitivity, Input Impedance	Input	Input sensitivity		Input Impedance
		For rated output	For 1 W output (EIA)	
	HIGH LEVEL INPUT	100 mV	14.2 mV	20 kilohms
	BALANCED INPUT	100 mV	14.2 mV	40 kilohms
	MAIN IN, LINE	796 mV	113 mV	20 kilohms
MAIN IN, BAL	796 mV	113 mV	40 kilohms	
Output Voltage and Impedance	PRE OUTPUT	LINE	796 mV*	50 ohms
		BAL	796 mV*	50 ohms

*: At rated continuous average output

Gain	HIGH LEVEL INPUT → PRE OUTPUT		18 dB
	MAIN IN → OUTPUT		28 dB
Tone Controls	Turnover frequency and adjustment range	Bass: 300 Hz	±10 dB (50 Hz)
		Treble: 3 kHz	±10 dB (20 kHz)
Loudness Compensator	+6 dB (100 Hz)		
Attenuator	-20 dB		
S/N Ratio	Input	Input shorted (A weighting)	S/N ratio (EIA)
		S/N ratio at rated output	
	HIGH LEVEL INPUT	104 dB	97 dB
	BALANCED INPUT	104 dB	97 dB
	MAIN IN	119 dB	101 dB
Bar graph meters	Represents output voltage value (dB) using 30 points (with on / off switch)		
Output Load Impedance	(terminals A or B driven) 2 – 16 ohms (1-ohm load permissible with music signals only)		
	(terminals A and B driven simultaneously) 4 – 16 ohms (2-ohm load permissible with music signals only)		
Stereo Headphones	Suitable impedance: 8 ohms or higher		
Power Requirements	120 V, 220 V, 230 V AC (voltage as indicated on rear panel), 50/60 Hz		
Power Consumption	Idle		180 W
	In accordance with IEC 60065		390 W
Maximum Dimensions	Width 465 mm (18.31") x Height 239 mm (9.41") x Depth 502 mm (19.76")		
	Mass	Net	
In shipping carton		45.0 kg (99.2 lbs)	

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.

Supplied accessories

- AC power cord
- Remote Commander RC-240



ACCUPHASE LABORATORY, INC.

• The specifications and appearance of this product are subject to change without notice.
http://www.accuphase.com

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