Accuphase

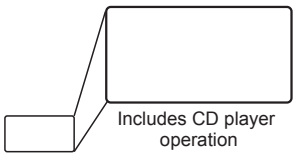
Class-A
PRECISION INTEGRATED STEREO AMPLIFIER

E-700

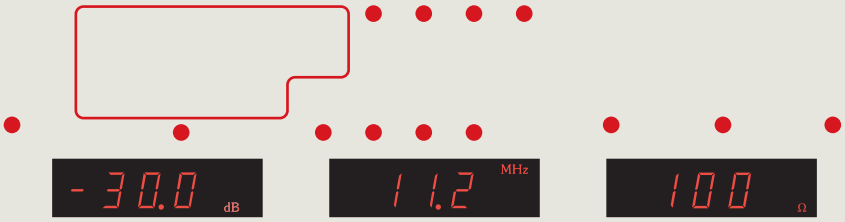
● Integrated amplifier with fully balanced configuration from input to output ● Balanced AAVA type volume control ● High-accuracy, high-rigidity volume sensor construction ● Power amplification stage configured as an instrumentation amplifier ● Four-fold parallel push-pull configuration using power MOS-FETs driven in Class A ● Linear power output of 35 watts into 8 ohms, 70 watts into 4 ohms, or 140 watts into 2 ohms ● 160 W output into 1-ohm load (music signals) ● High damping factor of 1,000 ● Strong power supply with massive high-efficiency toroidal transformer and large filtering capacitors ● Protection circuitry using MOS-FET switches

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**
- **–20 dB volume attenuator to instantly reduce the sound level**
- **Speaker output selector**
- **Tone controls using summing active filters**
- **Individual phase setting for each input**
- **Stereo signal can be switched to monophonic operation**
- **Loudness compensator to adjust audible sonic balance**
- **Display mode selector**
- **DAC input selector (when DAC-60 / DAC-50 / DAC-40 is installed)**
- **MC/MM selector (when AD-60 / AD-50 / AD-30 / AD-20 is installed)**
- **Subsonic filter ON/OFF selector (when AD-60 is installed)**
- **MC input impedance selector**
  30 ohms / 100 ohms / 200 ohms / 300 ohms (when AD-60 is installed)
- **Left/right balance control using AAVA**
- **Power amplification input selector (LINE / BALANCED)**
- **Recorder selector**
- **Volume display**
- **Sampling frequency display**
  (when DAC-60 / DAC-50 / DAC-40 is installed)
- **Five sets of line inputs**
- **Speaker output protection circuit guards against short-circuiting**
- **Two sets of balanced inputs**
- **Two sets of large speaker terminals**
- **Highly sensitive LED power meters capable of displaying output levels to –50 dB**
- **Highly reliable MOS-FET switches**
- **High-carbon cast iron insulators for superior vibration damping**



Supplied Remote Commander RC-250



Volume display

Sampling frequency display

MC input impedance display

Line input/output connectors

Protection circuit assembly

Speaker terminals connected directly to protection circuitry

Power meter

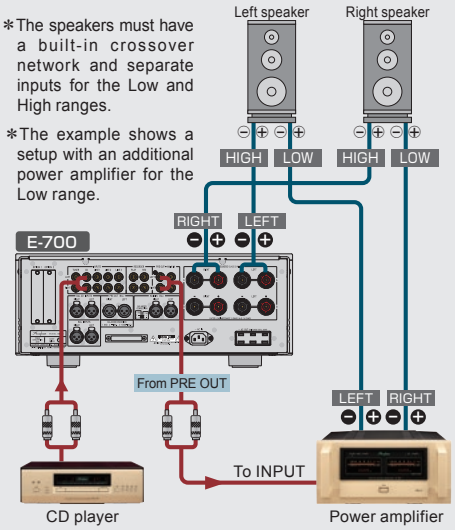
switches

iron insulators

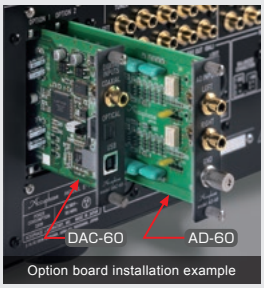
Bi-amping for Further Enhanced Sound

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



Option board installation example

The rear panel expansion slots allow use of three types of option boards: DAC-60, AD-60, and LINE-10. The E-700 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

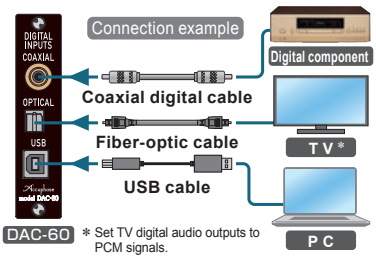
Analog Record Input Board AD-60

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 DAC-60



* Set TV digital audio outputs to PCM signals.

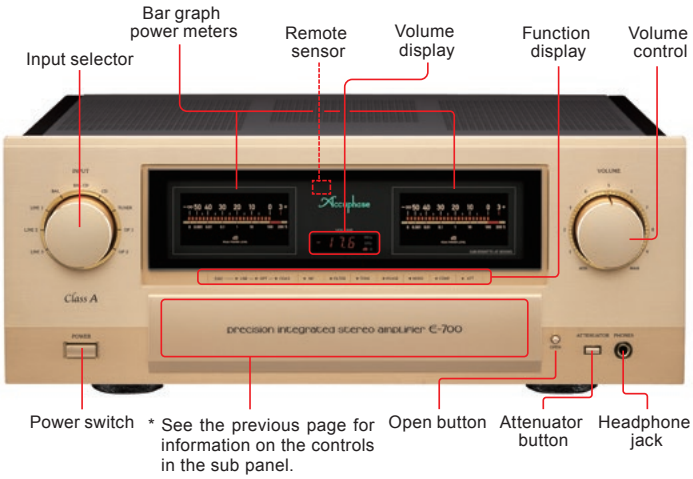
High-performance DAC with two ES9016K2M chips from ESS Technology driven in parallel.

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

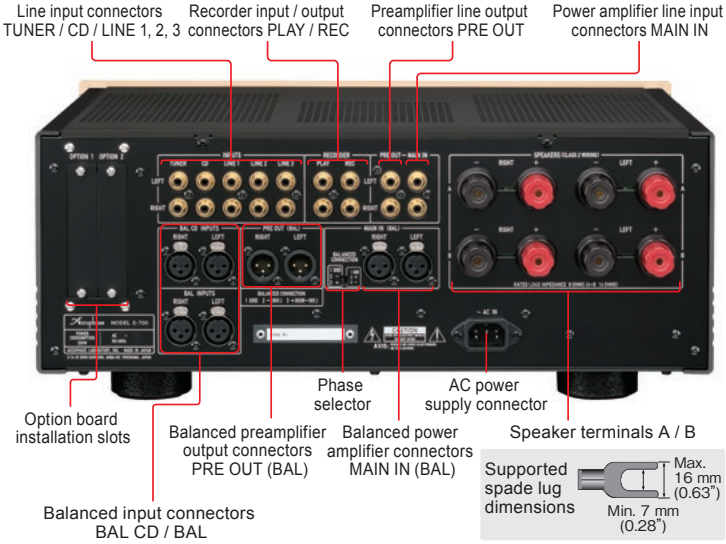
Line Input Board LINE-10

Provides an additional set of unbalanced line level inputs.

Front Panel



Rear Panel



Supported spade lug dimensions

E-700 Guaranteed Specifications

Rated Output (20 to 20,000 Hz)	1-ohm load *		160 W/ch
	2-ohm load *		140 W/ch
	4-ohm load *		70 W/ch
	8-ohm load		35 W/ch
Total Harmonic Distortion (20 to 20,000 kHz, rated output)	2 to 4-ohm load		0.05 %
	8 to 16-ohm load		0.03 %
Intermodulation Distortion	0.01 %		
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)	83.9 mV
		MAIN IN (BALANCED / LINE)	666 mV
	EIA (at 1 W output)	INPUT (BALANCED / LINE)	14.2 mV
		MAIN IN (BALANCED / LINE)	113 mV
Input Impedance	INPUT (BALANCED)		40 kilohms
	INPUT (LINE)		20 kilohms
	MAIN IN (BALANCED)		40 kilohms
	MAIN IN (LINE)		20 kilohms
Max. Input Voltage	INPUT (BALANCED / LINE)		5.0 V
Output Voltage	At rated output	PRE OUTPUT (BALANCED / LINE)	0.666 V
Output Impedance	PRE OUTPUT (BALANCED / LINE)		50 ohms
Gain	INPUT (BALANCED / LINE) → PRE OUTPUT (BALANCED / LINE)		18 dB
	MAIN IN (BALANCED / LINE) → SPEAKER OUTPUT		28 dB

Tone Controls	Turnover frequency and adjustment range	Bass: 300 Hz	±10 dB
		Treble: 3 kHz	±10 dB
Loudness Compensator	+6 dB (100 Hz)		
Attenuator	–20 dB		
S/N Ratio (At rated output (Input shorted, A weighting))	INPUT (BALANCED)		103 dB
	INPUT (LINE)		103 dB
	MAIN IN (BALANCED / LINE)		117 dB
S/N Ratio (EIA)	INPUT (BALANCED / LINE)		97 dB
	MAIN IN (BALANCED / LINE)		101 dB
Power Meters	Bar graph meters, Output voltage (dB) using 26 points, with ON/OFF switch		
Headphones Jack	Compatible 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		178 W
	In accordance with IEC 62368-1		220 W
	Stand-by		0.3 W
Maximum Dimensions	Width 465 mm (18.3") × Height 191 mm (7.5") × Depth 428 mm (16.9")		
Mass	Net	24.9 kg (54.9 lbs)	
	In shipping carton	32 kg (71 lbs)	

* Music signals only

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

Supplied accessories

● **AC power cord** ● **Remote Commander RC-250**

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.*

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