

Accuphase

Class-A
PRECISION INTEGRATED STEREO AMPLIFIER

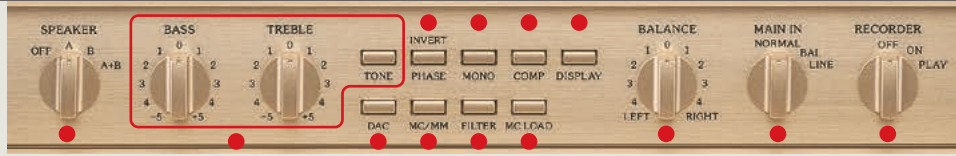
E-700

- 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
- ✓ Preamp 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 □



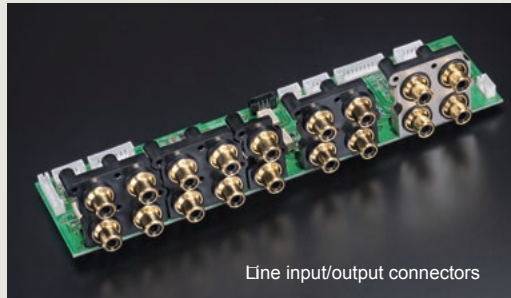
Volume display



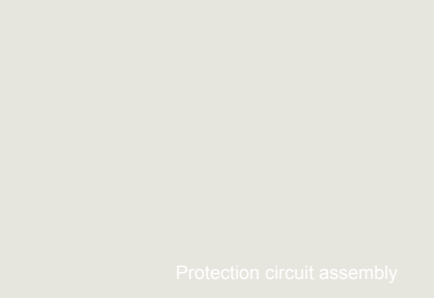
Sampling frequency display



MC input impedance display



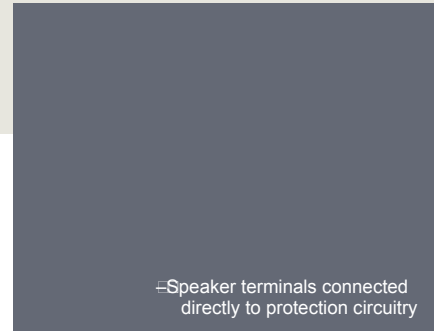
Line input/output connectors



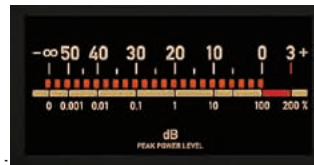
Protection circuit assembly



□ BMBODE0VBVVDPOOBST

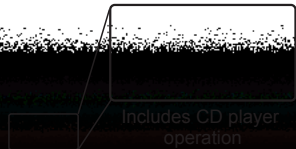


-Speaker terminals connected directly to protection circuitry



switches

iron insulators



Includes CD player operation
Supplied Remote Commander RC-250

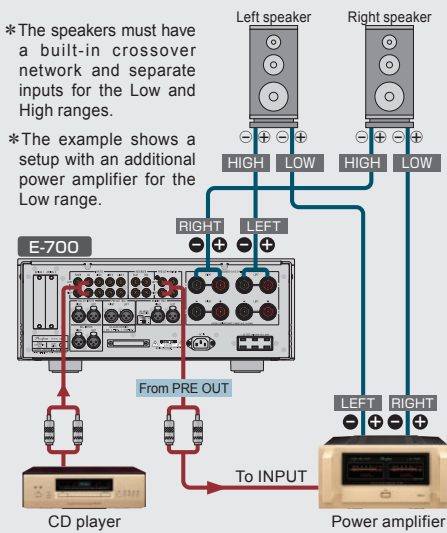


Bi-amping for Further Enhanced Sound

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-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.

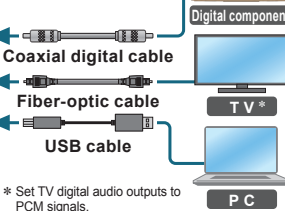
- Supports MC and MM cartridges
- Load impedance selection (MC only)
- Subsonic filter

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

Digital Input Board DAC-60



Connection example



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 |

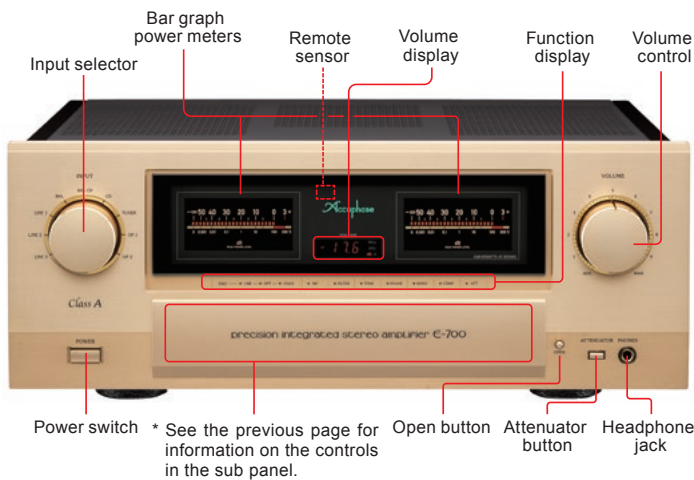
* Set TV digital audio outputs to PCM signals.

Line Input Board LINE-10



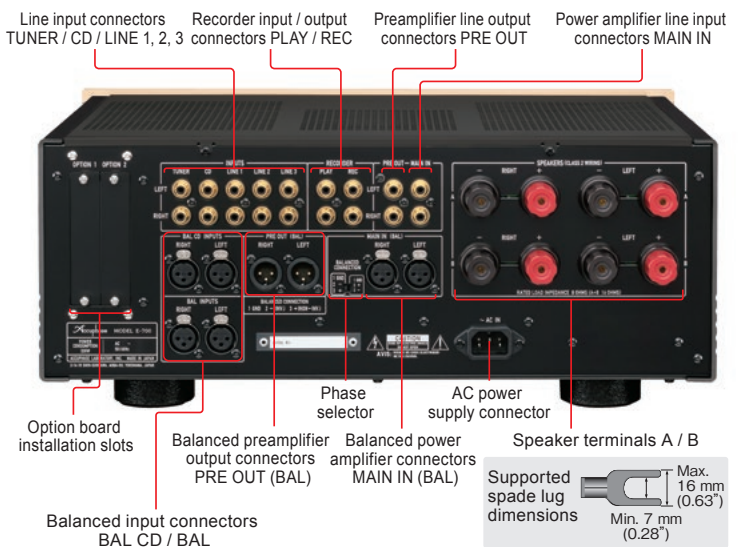
Provides an additional set of unbalanced line level inputs.

Front Panel



* See the previous page for information on the controls in the sub panel.

Rear Panel



Supported spade lug dimensions
Max. 16 mm (0.63")
Min. 7 mm (0.28")

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 |
| | EIA | MAIN IN (BALANCED / LINE) | 117 dB |
| | | MAIN IN (BALANCED / LINE) | 97 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 |
| Maximum Dimensions | Stand-by | | |
| | 0.3 W | | |
| Mass | Width 465 mm (18.3") × Height 191 mm (7.5") × Depth 428 mm (16.9") | | |
| | 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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● The specifications and appearance of this product are subject to change without notice.

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