PRECISION STEREO PREAMPLIFIER

C-3900

- Dual Balanced AAVA volume control
- High-gain discrete current feedback type input amplifier
- ANCC technology minimizes noise and distortion
- Newly developed volume sensor construction
- Separate toroidal power transformers for left and right
- Newly developed filtering capacitors
- Separate unit amplifiers for left and right
- Printed circuit boards using glass cloth fluorocarbon resin
- Wood cabinet with natural grain finish
- High-performance headphone amplifier

Specifications:

- Minimum load impedance:
  - BALANCED / LINE OUTPUT: 600 ohms
  - RECORDER REC: 10 kilohms

- Crosstalk:
  - -90 dB / 10 kHz

- Gain (GAIN selector at 18 dB):
  - Except for REC output, ±6 dB switching is possible

- Frequency response:
  - BALANCED / LINE INPUT

- Total Harmonic Distortion:
  - All input connectors: 0.005%

- Input sensitivity, Input impedance:
  - BALANCED: 252 mV, 63 mV, 40 kilohms (20 / 20 kilohms)
  - LINE: 252 mV, 63 mV, 20 kilohms

- Rated output voltage, Output impedance:
  - BALANCED / LINE OUTPUT: 2 V, 50 ohms

- S/N ratio, Input-converted noise:
  - BALANCED: 118 dB, -130 dBV, 112 dB
  - LINE: 118 dB, -130 dBV, 112 dB

- Max. output level (20 – 20,000 Hz):
  - BALANCED / LINE OUTPUT: 7.0 V
  - RECORDER REC: 6.0 V

- Max. input voltage:
  - BALANCED INPUT: 6.0 V
  - LINE INPUT: 6.0 V
The culminating half a century of Accuphase preamplifiers

The Dual Balanced AAVA design with two balanced AAVA circuits delivers sonic excellence that is transparence itself. Volume adjustment is realized while retaining all the vibrant energy and richness of detail that is the life breath of an artistic performance. The supple elegance of music as reproduced by the top-of-the-line C-3900 is a moving experience that reflects the impressive depth of Accuphase know-how.

Innovation - The leading edge of technology

- Developing a new preamplifier
  To celebrate the 50th anniversary of Accuphase’s founding, the development of a new flagship model to incorporate the entire wealth of the company’s experience was begun. Now, after five years, the work is complete. The C-3900 represents an uncompromising harmony of technology and sensibility, boasting ultimate performance and sound quality that ushers in a new era of the preamplifier.

- Revolutionary AAVA volume control
  Conventional preamplifiers attenuate the input signal by means of resistors and then amplify the result, which invariably leads to an increase in noise. AAVA on the other hand eliminates the entire step of resistor-based input signal attenuation. With this breakthrough principle, direct volume adjustment is performed through a combination of V-I (voltage-current) conversion circuits of different gain. As a consequence, there are no changes in impedance or frequency response and sound quality remains impeccable. Any changes in noise level depending on the selected volume position are kept to an absolute minimum, thereby realizing outstanding S/N ratio also at commonly used listening levels.

- Dual Balanced AAVA takes AAVA to new heights
  In the C-3900, the Balanced AAVA principle which involves two balanced-connection AAVA circuits is further elevated by driving two such units in parallel, resulting in the Dual Balanced AAVA topology with significantly improved electrical characteristics. Compared to previous models, the already excellent noise level is reduced by a further 30 percent.

- High-accuracy, high-rigidity volume sensor construction
  The volume sensor mechanism performs the task of detecting the angular position of the volume knob. Accuphase has developed the volume sensor in-house, using a massive aluminum block extruded and finished with utmost precision. The knob provides an utterly solid and smooth operation feel and achieves extremely accurate position detection. When using the Remote Commander, a motor drives the volume knob via a set of gears. Generally, gears produce a meshing sound when rotating, but this position sensor is designed so that the gears mesh with each other while always maintaining a constant pressure, which enables super quiet and comfortable volume adjustment.
Going to the Limit
— and Beyond

Precision Stereo Preamplifier with Dual Balanced AAVA

Featuring Dual Balanced AAVA topology with two Balanced AAVA circuits driven in parallel, the C-3900 boldly challenges the limits of performance and leaves conventional notions far behind. Step up to a new sound stage such as never experienced before.
**Advanced features**

- Newly developed Dual Balanced AAVA volume control
- High-gain discrete-configuration current feedback type input amplifier
- ANCC (Accuphase Noise and Distortion Cancelling Circuit) technology minimizes noise and distortion
- Dedicated headphone amplifier uses power transistors in the parallel push-pull output stage to ensure optimal sound quality for private listening
- Logic-controlled relays for signal switching assure high sound quality and long-term reliability
- Printed circuit boards for signal transmission are made from glass cloth fluorocarbon resin with low dielectric constant and minimum loss
- Separate left and right power supply units with toroidal power transformers and a total of twelve 10,000 µF filtering capacitors
- Newly developed volume sensor construction for utterly smooth and quiet operation feel
- Versatile arrangement of inputs and outputs (seven line level inputs, four balanced inputs, and two sets of line level and balanced outputs)
- Line input and output connectors for a recorder
- Line level and balanced EXT PRE inputs for connection of an external preamplifier
- Individual phase setting for each input
- Switchable overall gain (12 dB / 18 dB / 24 dB)
- Left / right balance control also realized with Dual Balanced AAVA
- Stereo signal can be switched to monophonic operation
- -20 dB volume attenuator
- Loudness compensator for correcting the perceived spectral balance
- Informative and easy to read input and volume level indication with on / off switching
- Elegant champagne gold front panel and massive wood cabinet with natural grain finish
- “High Carbon” cast iron insulator feet with superior damping characteristics

Supplied Remote Commander RC-250

Allows volume adjustment, input source switching etc.
By connecting the Stereo Phono Amplifier C-47, high-quality reproduction of analog records becomes possible.

**Stereo Phono Amplifier C-47**
- Low-noise fully balanced configuration
- One dedicated balanced MC phono input and three sets of regular phono inputs
- Balanced and line level output connectors
- Separate settings memory for each input position

### Recommended product

**Stereo Phono Amplifier C-47**

- Low-noise fully balanced configuration
- One dedicated balanced MC phono input and three sets of regular phono inputs
- Balanced and line level output connectors
- Separate settings memory for each input position

### Phono cartridge

<table>
<thead>
<tr>
<th>Cartridge Type</th>
<th>Input Impedance (ohms)</th>
<th>Gain (dB)</th>
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</thead>
<tbody>
<tr>
<td>MC</td>
<td>10/30/100/200/300/1k</td>
<td>64/70</td>
</tr>
<tr>
<td>MM</td>
<td>16/47/100k</td>
<td>34/40</td>
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### Guaranteed Specifications

<table>
<thead>
<tr>
<th>Frequency response</th>
<th>BALANCED / LINE INPUT</th>
<th>3 – 200,000 Hz</th>
<th>+0.00 dB</th>
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<td>Total Harmonic Distortion</td>
<td>All input connectors</td>
<td>0.005%</td>
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<td>Input sensitivity, Input impedance</td>
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<td>For rated output</td>
<td>252 mV</td>
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<td></td>
<td>Input impedance</td>
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<td>Rated output voltage, Output impedance</td>
<td>BALANCED / LINE OUTPUT</td>
<td>2 V</td>
<td>50 ohms</td>
</tr>
<tr>
<td>S/N ratio, Input-converted noise</td>
<td>Input connector</td>
<td>Input shorted (A weighting)</td>
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**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.
- 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
- Audio cable with plugs ASL-10B
- Remote Commander RC-250
- Cleaning cloth

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