

# Accuphase

Class-A  
STEREO POWER AMPLIFIER

## A-80

- Class A driven output stage with 10-parallel push-pull power MOS-FETs
- Large linear output of 65 W / 8 ohms, 130 W / 4 ohms, 260 W / 2 ohms, 520 W / 1 ohm
- Instrumentation amplifier principle
- Current feedback amplification circuits
- Balanced remote sensing
- MCS+ circuitry
- High damping factor of 1,000
- Speaker output protection
- Highly responsive large-scale bar graph power meters
- Supports bi-amping and bridged mode connection





# The ideal stereo power amplifier building on 50-year search for perfection

The A-80 is a Class A power amplifier developed as a stereo amplifier version of our 50th anniversary A-300 model. Optimizing the 10-parallel push-pull power MOS-FETs in the output stage produces an output power of 65 W into 8 ohms, 130 W into 4 ohms, 260 W into 2 ohms, and 520 W into 1 ohm. Rigorous investment into new, cutting-edge noise reduction technologies has achieved a sense of presence and minute expression that rival live performances. The A-80 power amplifier perfectly fuses modern technology with the wealth of knowledge Accuphase has amassed in its pursuit of perfect sonic expression.

## Groundbreaking technology

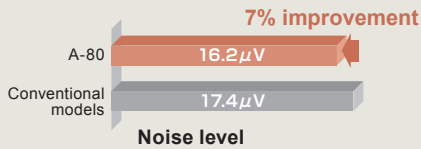
The A-80 employs sophisticated circuitry and hand-selected materials to create a power amplifier with perfectly honed expressiveness.

### Ample output power

The Class A driven 10-parallel push-pull power MOS-FETs in the output stage produce linear output power of 65 W into 8 ohms, 130 W into 4 ohms, 260 W into 2 ohms, and 520 W into 1 ohm.

### High noise performance

Ideal gain distribution and other sophisticated techniques improve noise level suppression by 7% over conventional models.

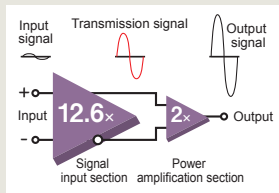


### High damping factor

With a damping factor of 1,000, the speakers can be driven with full control over the counter-electromotive forces to get the most out of your speakers.

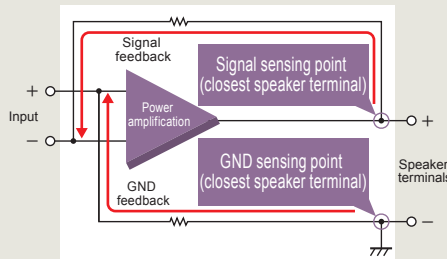
### Ideal gain distribution

Allocating a high gain (12.6 $\times$ ) in the signal input section with its superb noise suppression rating drastically reduces output noise.



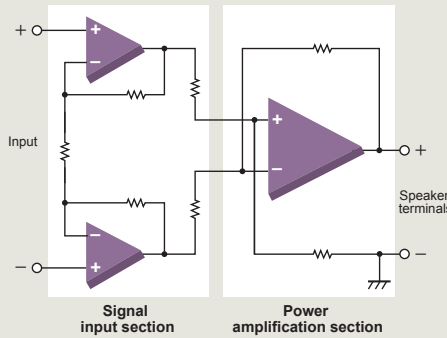
### Balanced remote sensing

Balanced remote sensing improves damping factor by feeding back the GND at the same time as the signal output from speaker terminals.



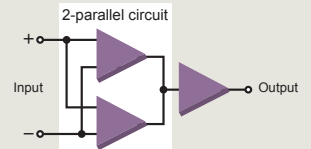
### Instrumentation amplifier

With balanced circuits in the signal input section, the amplification stage is comprised entirely of an instrumentation amplifier principle that equalizes input impedance on the + and - sides for excellent external noise suppression, while providing optimal circuitry for a high-end audio amplifier.

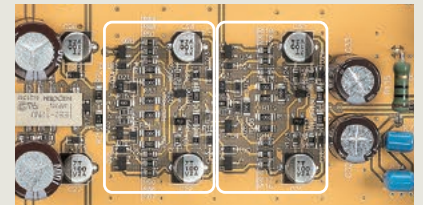


### MCS+ circuit

By placing the voltage amplification stage in a two-parallel circuit layout, the MCS+ (Multiple Circuit Summing-up) circuit theoretically reduces the noise floor by about 30%.



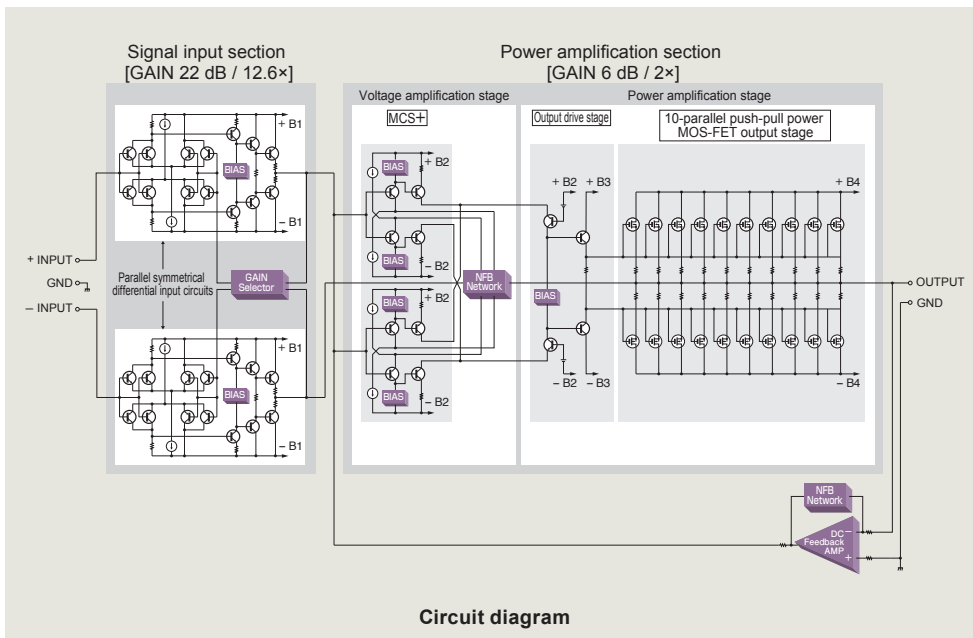
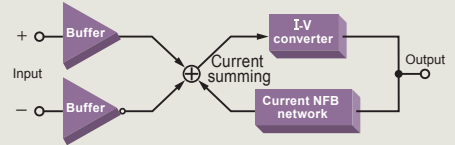
MCS+ circuitry



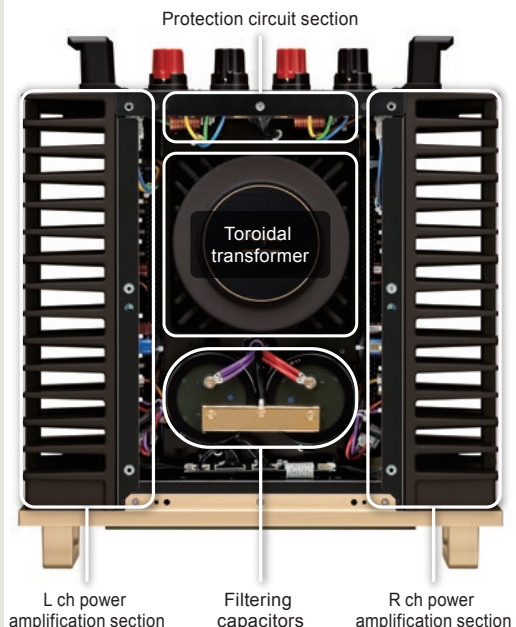
2-parallel circuit layout of MCS+ principle

### Current feedback amplification topology

The current feedback amplification circuit offers exceptional performance in the high range with almost no impact on the frequency characteristics even when gain is switched, resulting in natural and dynamic driving of the speakers.



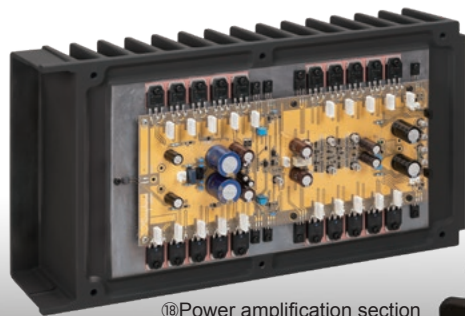
Circuit diagram



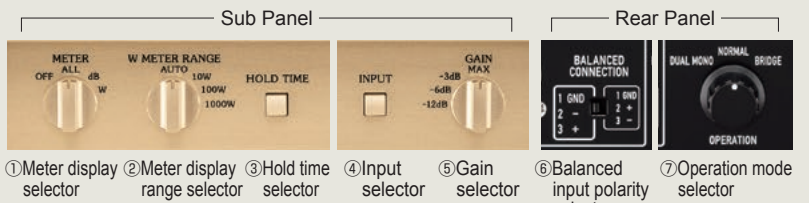
L ch power amplification section      Filtering capacitors      R ch power amplification section

## Advanced features

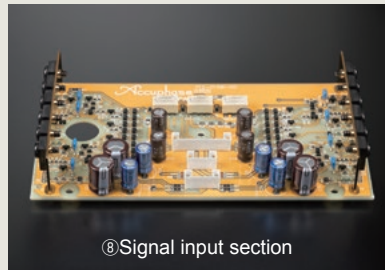
- Class A driven 10-parallel push-pull MOS-FET output stage
- 65 W into 8 ohms, 130 W into 4 ohms, 260 W into 2 ohms, and 520 W into 1 ohm large linear output power
- Instrumentation amplifier
- Current feedback amplification topology
- Balanced remote sensing
- MCS+ circuitry
- High damping factor of 1,000
- Meter display switching .....①
- Digital power meter display switching .....②
- Hold time switching function that changes the meter peak display time .....③
- LINE / BALANCED input switching .....④
- 4-step gain control .....⑤
- Polarity switching of balanced input connectors .....⑥
- Bi-amping connection and bridged connection switching...⑦
- Signal input section with a fully discrete configuration for low noise .....⑧
- Speaker output protection circuit guards against short-circuiting .....⑨
- Large speaker terminals connected directly to protection circuitry .....⑩
- Edgewise coils improve damping factor .....⑪
- Highly reliable MOS-FET switches with no mechanical connections .....⑫
- Large, high-efficiency toroidal transformer .....⑬
- High capacity 120,000  $\mu$ F filtering capacitors .....⑭
- Aluminum hairline finish top plate .....⑮
- Highly responsive large-scale bar graph meters and digital power meters .....⑯
- High-carbon cast iron insulator feet with superior damping characteristics .....⑰
- Power amplification section on circuit boards using glass cloth fluorocarbon resin .....⑱



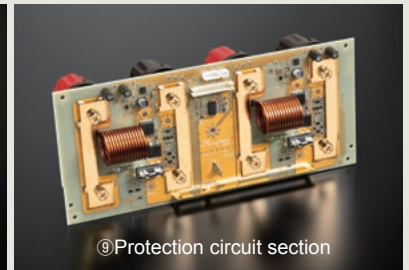
⑱ Power amplification section



- ① Meter display selector    ② Meter display range selector    ③ Hold time selector    ④ Input selector    ⑤ Gain selector    ⑥ Balanced input polarity selector    ⑦ Operation mode selector



⑧ Signal input section



⑨ Protection circuit section



⑩ Speaker terminals



⑪ Edgewise coil



⑫ MOS-FET switches



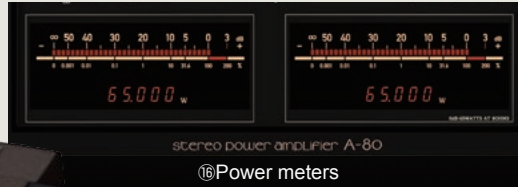
⑬ Toroidal transformer



⑭ Filtering capacitors



⑮ Top plate

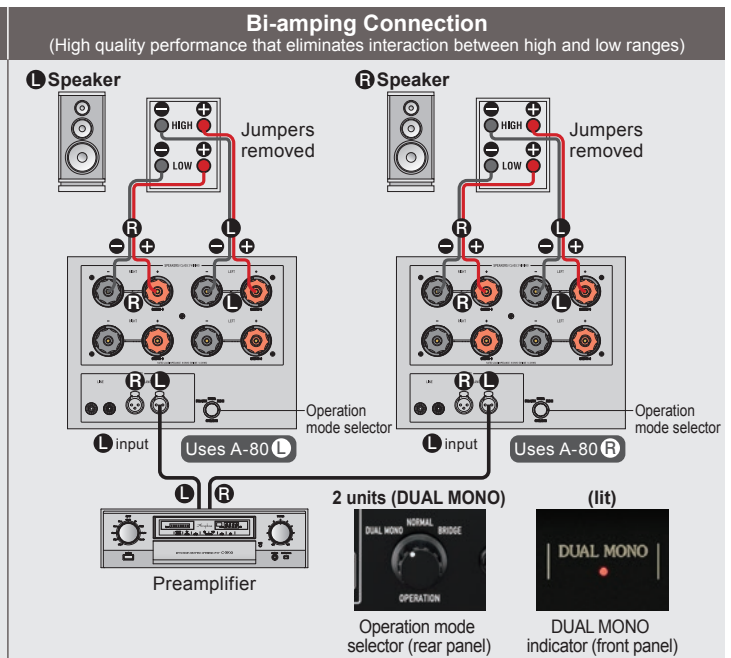
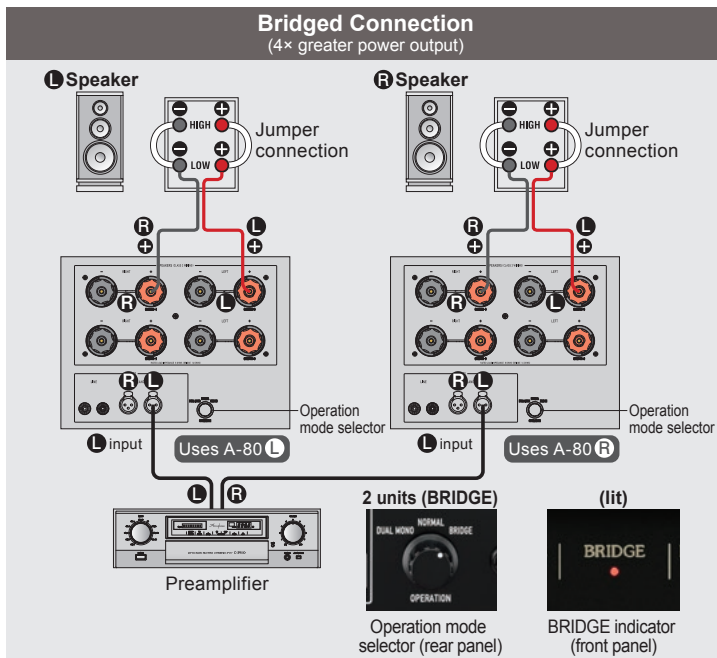


⑯ Power meters

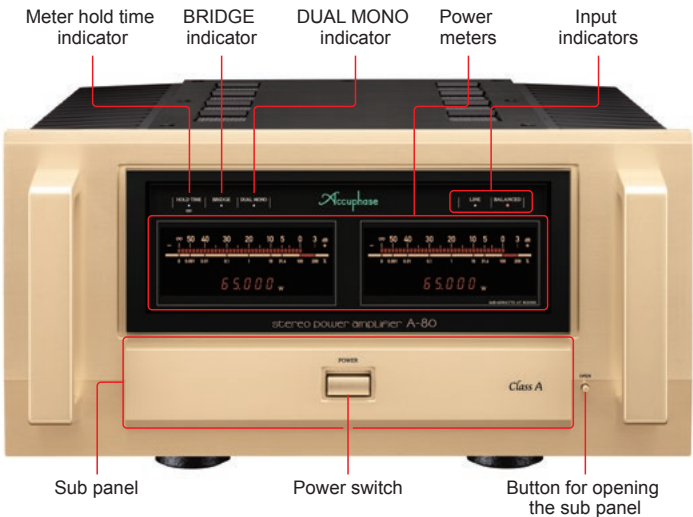


⑰ Insulator feet



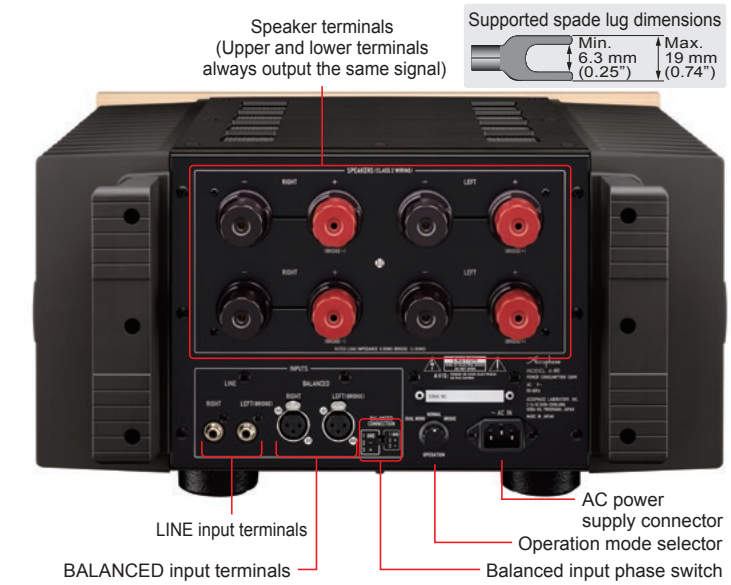


### Front Panel



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

### Rear Panel



### A-80 Guaranteed Specifications

Rated Output (20 – 20,000 Hz)	Load	8 ohms	4 ohms	2 ohms	1 ohm
	Normal / Bi-amping connection		65 W	130 W* <sup>1</sup>	260 W* <sup>1</sup>
	Bridged connection	260 W* <sup>1</sup>	520 W* <sup>1</sup>	1,040 W* <sup>1</sup>	—
Total Harmonic Distortion (20 – 20,000 Hz, At rated output)	Normal / Bi-amping connection	2 ohms		0.07 %	
	Bridged connection	4 to 16 ohms		0.03 %	
Intermodulation Distortion	Normal / Bi-amping connection	4 to 16 ohms		0.05 %	
	Bridged connection	0.01 %			
Frequency Response	At rated output	20 – 20,000 Hz (+0, –0.2 dB)			
	At 1 W output	0.5 – 160,000 Hz (+0, –3.0 dB)			
Damping Factor		1,000 or greater			
Input Impedance	BALANCED / LINE input	40 kilohms / 20 kilohms			
Input Sensitivity	Output	At rated output		At 1 W output	
	Normal / Bi-amping connection	0.91 V		0.11 V	
	Bridged connection	1.82 V		0.11 V	
Signal-to-Noise Ratio (A-weighted, input shorted)	Gain switch at MAX / –12 dB	123 dB / 129 dB			

\*1: Limited to music signals

Gain	Gain switch	MAX	–3 dB	–6 dB	–12 dB
	Normal / Bi-amping connection		28 dB	25 dB	22 dB
Power Meters	Format	Logarithmic scale, with illumination off switch			
	Display range	–∞ ~ +3 dB			
	Hold time	1 sec. / ∞ switchable			
Power Requirements	120/220/230 V AC, 50/60 Hz (Voltage as indicated on rear panel)				
Power Consumption	Idle	210 W			
	In accordance with IEC 62368-1	260 W			
	Stand-by	0.3 W			
Maximum Dimensions	Width 465 mm (18.3") × Height 240 mm (9.4") × Depth 515 mm (20.3")				
Mass	Net	44.6 kg (98.4 lbs)			
	In shipping Carton	54 kg (119 lbs)			

- The measurement methods for the Guaranteed Specifications comply with JEITA CP-1301A and IEC 60268-3.
- "Normal connection" indicates standard operation.

**Supplied accessories**

- AC power cord

**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.



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

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 12305Y 850-2236-00 (B1) PRINTED IN JAPAN