

CLEAN POWER SUPPLY PS-550



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Accuphase Clean Power Supply series is an epoch-making audio product that enables all users to improve their power supply quality by forming an ideal power supply waveform with precise analog signal processing. It shows a terrific performance to obtain great sound and image quality.

After launching PS-500 in 1996, Accuphase has been making improvements one after another, as known as PS-500V, PS-510, PS-520, and PS-530.

Accuphase makes PS-550 known to the public, the 6th generation Clean Power Supply succeeding PS-530.

The main features of PS-550 are...

- Multiple functions liquid crystal display
- Precise reference signal generator
- Low Total Harmonic Distortion
- Low power consumption

Differences in front view



PS-530

Multiple functions
liquid crystal display



PS-550

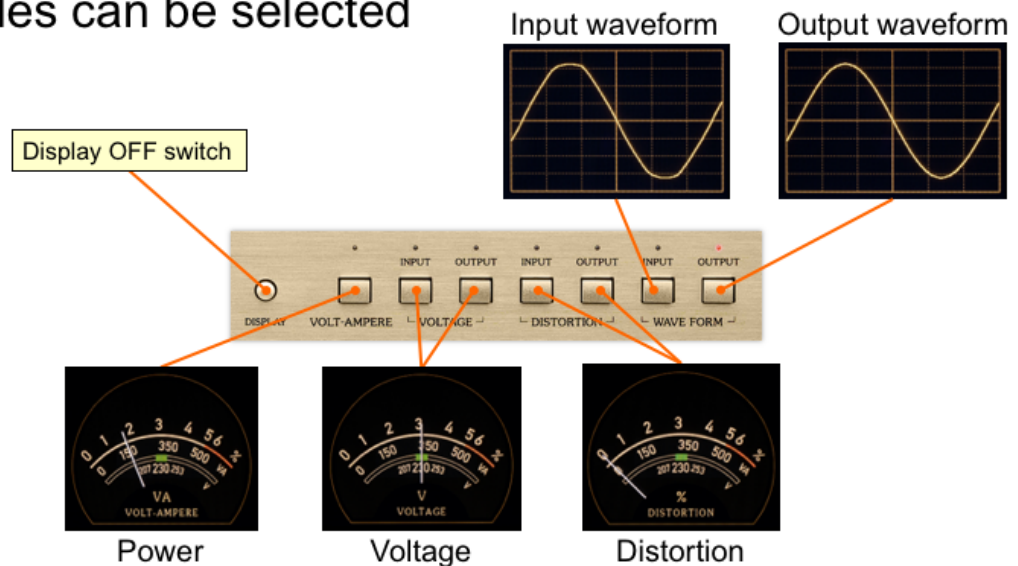
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PS-550 newly adopts the multiple functions liquid crystal display.

Display mode

- Seven modes can be selected



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The PS-550 has seven display modes.

- Output power
- Input(AC line) voltage
- Output voltage
- Input Total Harmonic Distortion
- Output Total Harmonic Distortion
- Input waveform
- Output waveform

The multiple functions display can be turned off.

Internal View



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The massive power supply section sits at the unit's center, and power amplifier blocks are on the right side.

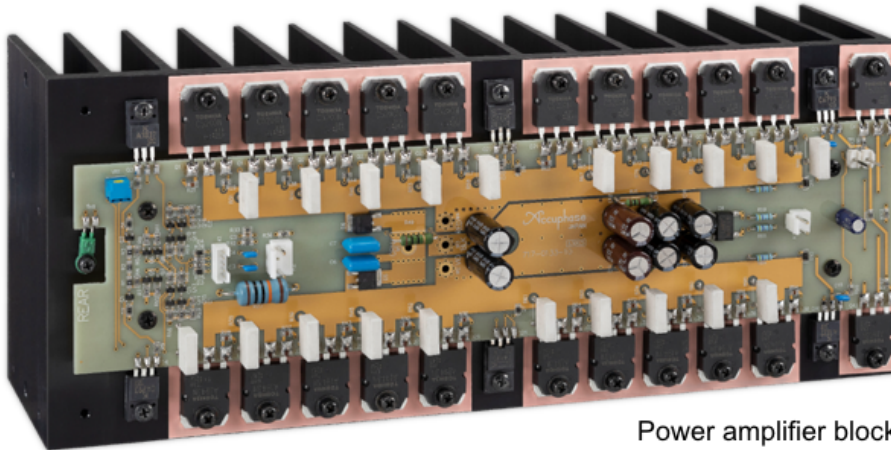
The power transformer has an electrostatic shield between the primary and secondary windings to prevent coupling.

All the internal output wires are isometric and set at the same length. It helps the electric performance and sound quality of each AC outlet keep the same level.

The power switch has a circuit breaker function that operates on overcurrent.

Power amplifier block

- 10-paralleled push-pull bipolar transistors output stage



Power amplifier block

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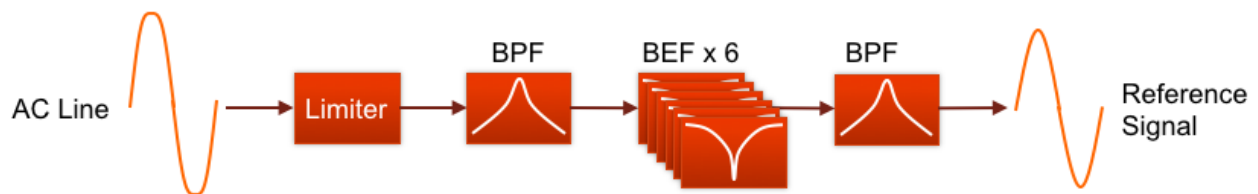
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The power amplifier block that performs addition/subtraction for waveform compensation uses the pure complementary 10-paralleled push-pull bipolar transistors output stage.

It leads to the success of high peak output current and low output impedance.

Reference signal generator

- Guaranteed Total Harmonic Distortion: $\leq 0.08\%$



Block diagram of reference signal generator

BPF: Band Pass Filter
BEF: Band Eliminate Filter

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The Reference Signal Generator is the circuit that eliminates the noise and distortion components in AC line signals with filters and generates the reference signals for waveform shaping.

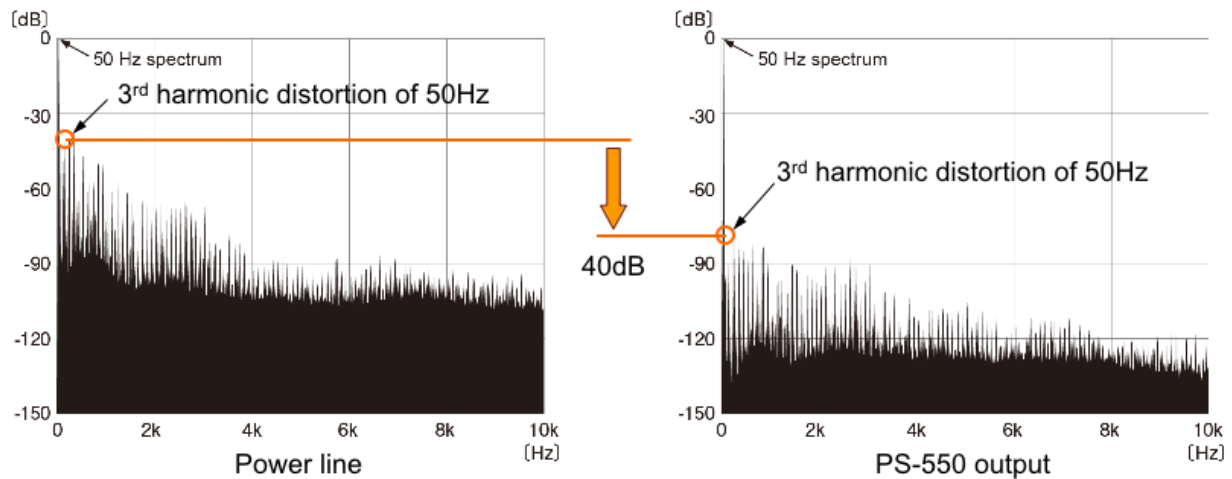
PS-550 has evolved this Reference Signal Generator much more precisely.

PS-550's configuration is that two stages of the Bandpass Filters remove undesired out-of-band signals. Then, the six stages of the Band Eliminate Filters also remove the harmonic component.

These two features contribute to the low distortion and low noise characteristics of the reference signals.

Clean out the power supply waveforms

- Significantly reduces harmonic distortion and noise



Example of the frequency spectrum at 50Hz power line

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Accuphase's original waveform correction technology provides outputs with significantly reduced harmonic distortion and noise. Third-order harmonics are suppressed by more than 40 dB.