Stereo Power Amplifier

P-4200

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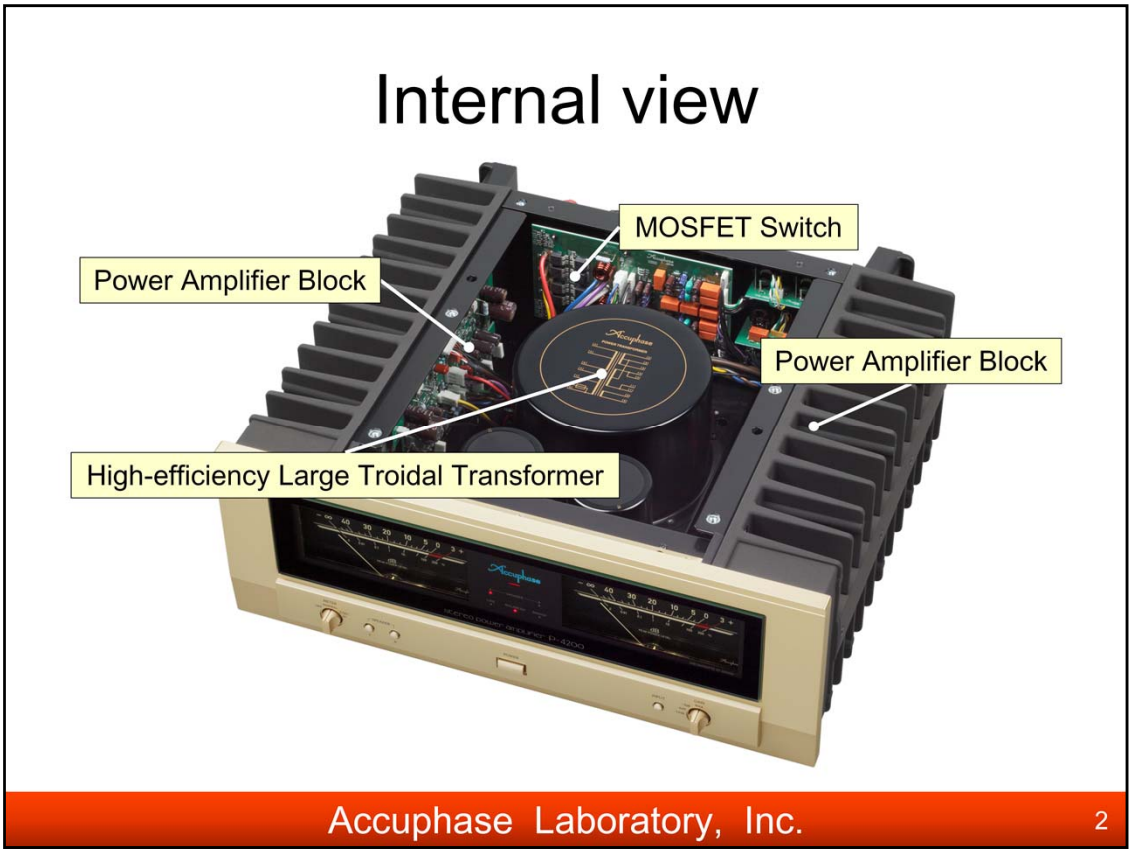
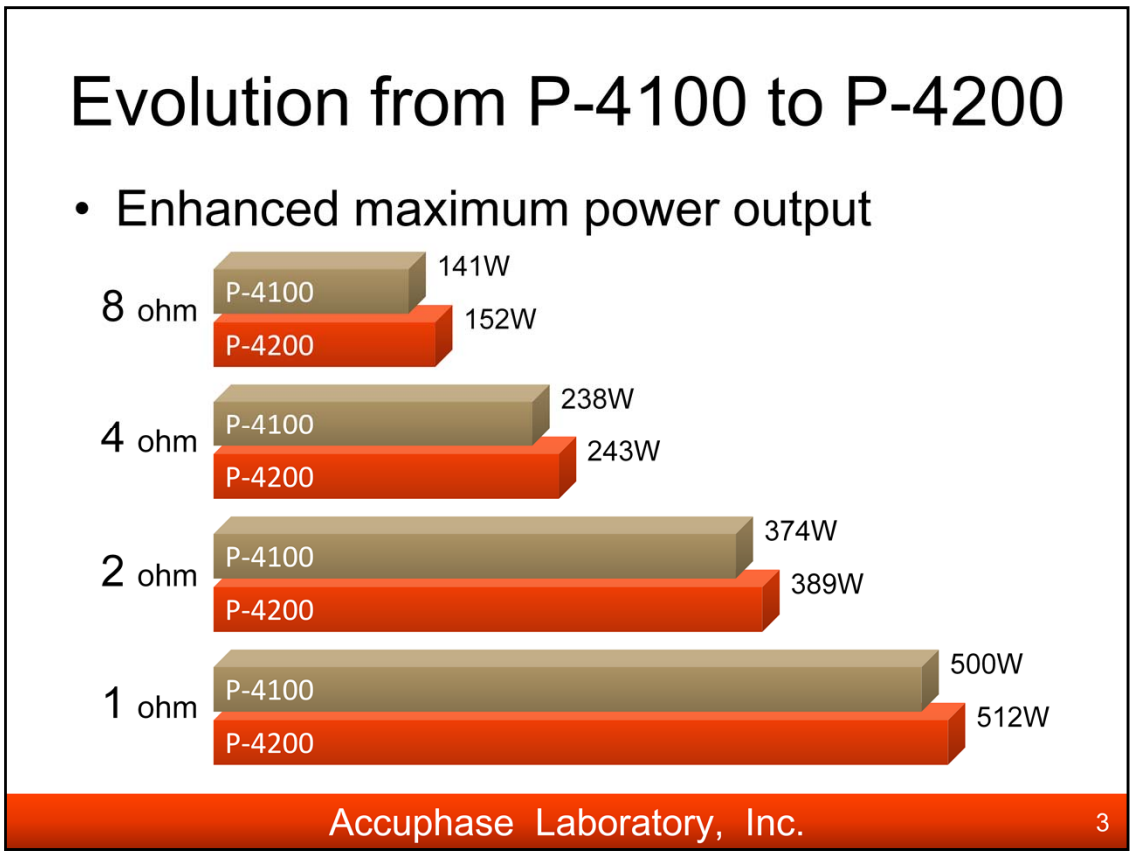
P-4200 is a class A-B powerful amplifier which is refined and redesigned from P-4100.



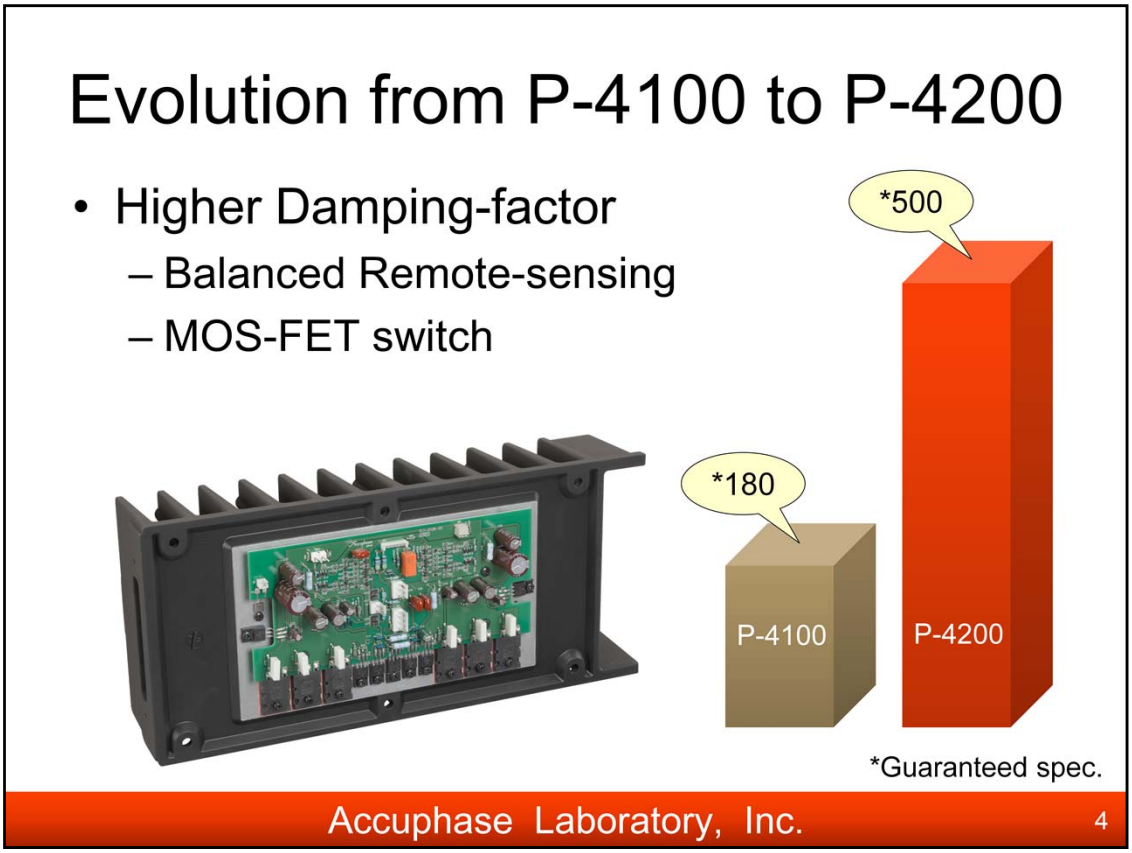
The cross section of second side winding wire in power transformer is increased 30% more than P-4100's.
(P-4100:2.6mm^2, P-4200:3.3mm^2)

Due to this, the current supplying capability is remarkably progressed.



The maximum power output is enhanced.
The output power of P-4100 is 90W at 8 ohm.
P-4200 is also 90W but 90W means the rated power output.
The actual maximum power output reaches much higher.

The maximum power output of P-4200 is reinforced more than P-4100.

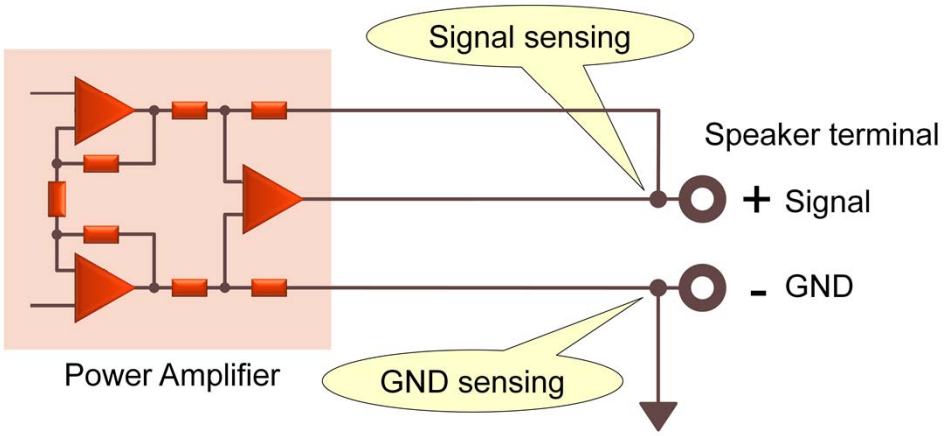


The Damping-factor is an index of speaker driving ability.
By using Triple Darlington configuration power stage and Balanced Remote-sensing, P-4200 achieves higher Damping-factor than P-4100.
P-4100 is 180 and P-4200 is 500.
It is 2.8 times higher.

*Damping-factor = 8 ohm / Zo
Zo : Output impedance of amplifier
By CEA-490-A R-2008 standard

Balanced Remote-sensing

- Feedback from speaker terminal proximity
- Signal-line and GND-line sensing



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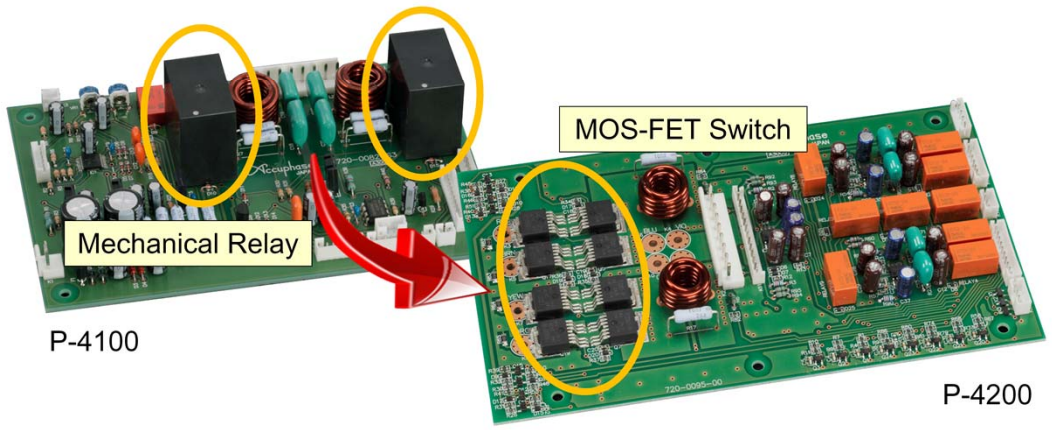
Remote-sensing is the technique to lower the output impedance of amplifier by the negative feedback with signal sensing from close up the speaker terminals.

Balanced Remote-sensing is the technique to make impedance even lower by GND sensing and the negative feedback of GND level with adding the signal sensing.

Not only Damping-factor is improved but also Total Harmonic Distortion and Intermodulation Distortion get better by Balanced Remote-sensing.

MOS-FET switch

- Speaker protection employs MOS-FET switch
  - Assures long-term reliability, Higher Damping-factor and Improved sound quality



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MOS-FET switch is mounted on the speaker protection. Generally, a mechanical relay is used for the power-amp output for speaker protection.
P-4200 replaces a mechanical relay with MOS-FET switch. As a result, the reliability, Damping-factor and sound quality is improved.

*On-resistance of MOS-FET used for P-4200: 2.1mOHM