5-Series STEREO Amplifier. Clean industrial design.



Micro-Precision by Thomas Hoffmann

Technical features.

1. Internal „Dual Board Design“. Splitting the power supply from the analog amplifier board to prevent radiation from power supply on signalpath. Very short and topology symmetrical signal path to prevent loss of detail.

2. Power supply input voltage from 9V to 15.5V DC. The unregulated powersupply gives more power by higher input voltage.

3. 12 V stepup converter to rail voltage from : +/-30V up to +/-40V (depending on input voltage / battery).

4. High grade, long lasting 105°C caps in all supply circuits. „Mundorf M-Lythic®“ Low ESR Power Capacitors 125°C on rail / main power storage.

5. 12.000 Ohm impedance input, low capacitance. DIP switch selector for input level with 1% tolerance metal resistor divider. No potentiometer in signalpath.

7. Dedicated „Sanken ®“ (JAPAN) Darlington transistors. Solid state technology with audiograde parts. Handassembling. No SMD.

9. Protections for reverse input voltage, output short circuit and DC voltage on speakeroutput, thermal shut off @ 90°C (analog sensor).

10. 4 mm. laboratory grade banana terminals for perfect speaker connection.

11. PCB wide copper tracks thickness 100 micron, gold plated to lower internal resistance.

12. Full balanced current circuit for low distortion, extended response and stable bias during temperature change.

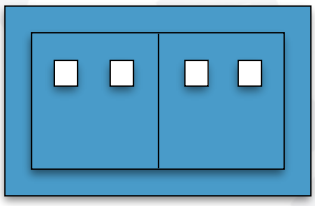


Technical features.

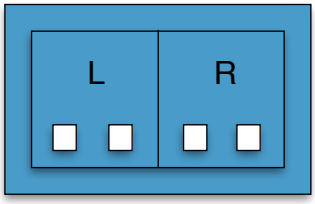


Setting the input sensitvity switch L&R.

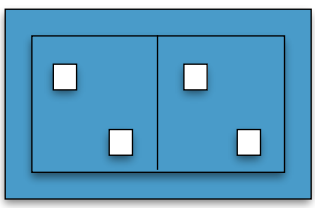
0,7 Volt / Gain 28



1,4 Volt / Gain 14



2,1 Volt / Gain 9,1



4,2 Volt / Gain 4,6

The input switch is used to have exact sensitvy on all channels. Potentiometers are not precise and not long time stable.

The sensitivity in VOLT declare the input voltage you need to get the full output (90 Watt / 19 Volt RMS).

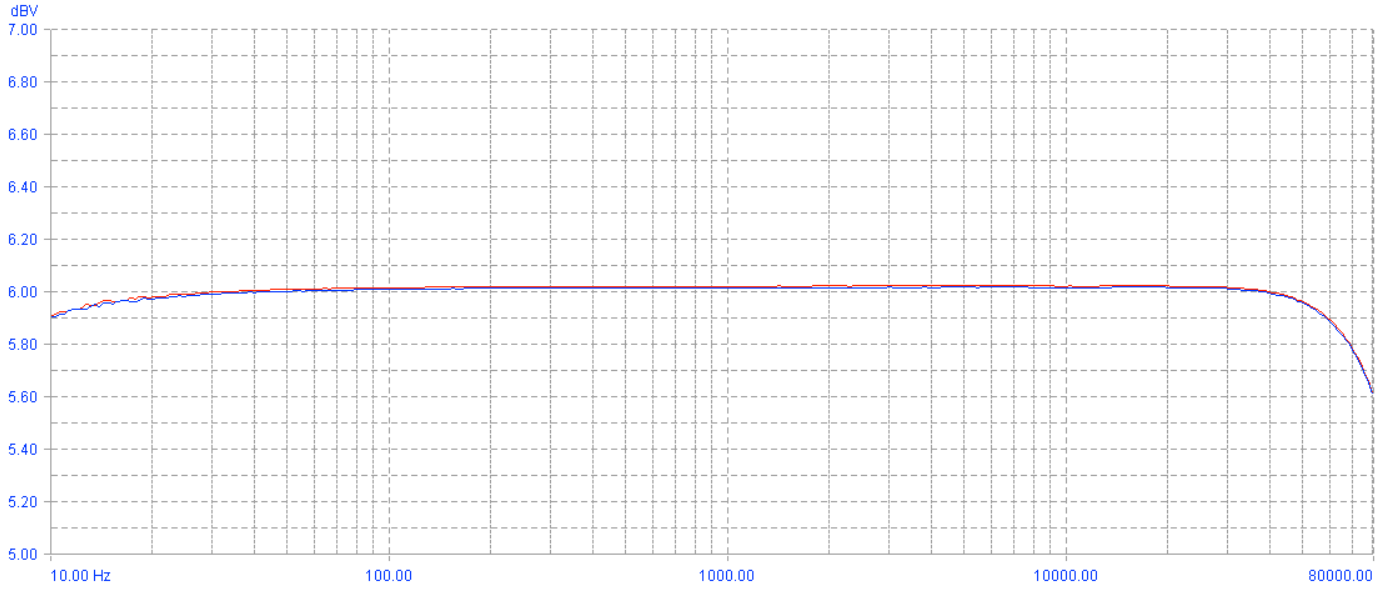
The gain parameter is the voltage amplification factor. For example :

0.7 Volt in = 19,1 Volt out.
1,4 Volt in = 19,1 Volt out.
2.1 Volt in = 19,1 Volt out.
4.2 Volt in = 19,1 Volt out.

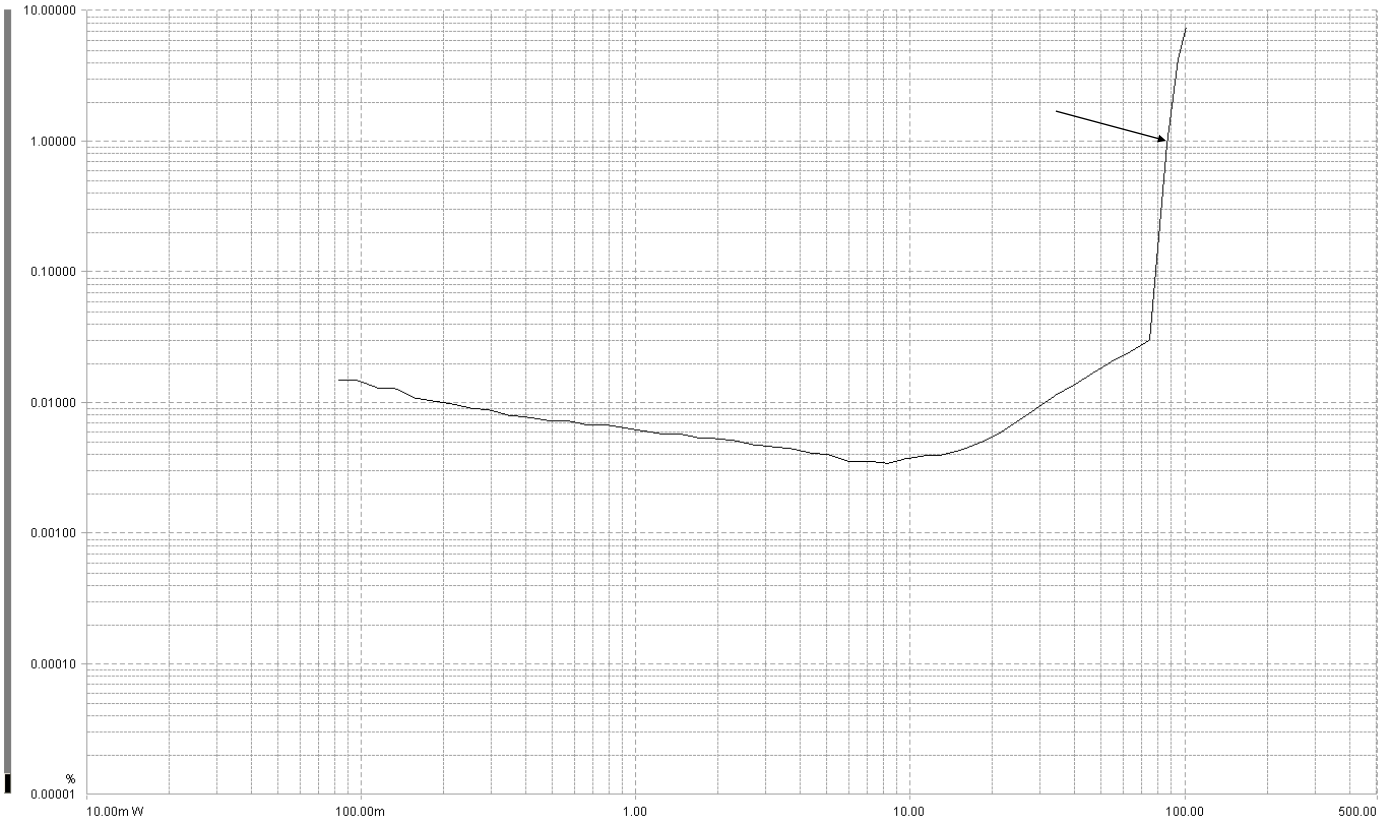
Technical specification 5-Series Stereo Amplifier.

Power : 2 Channel @ 13.8 Volt	
Power Typical @ 4 Ohm 1% THD	90 Watt
Power Typical @ 2 Ohm 1% THD	170 Watt
Power : 1 x in bridged mode	
Power Typical @ 8 Ohm 1% THD	-
Power Typical @ 4 Ohm 1% THD	-
Distortion K2 @ 1 Watt	0,003 %
Distortion K3 @ 1 Watt	0,004 %
Powersupply Frequency	48 kHz
Powersupply F.Resident	-67 dB
Frequency Response -1 dB	185.000 Hz
Frequency Response -3 dB	300.000 Hz
Tolerance R/L Channel	<> 0,06 dB
Signal / Noise Ratio	<> 112 dB
DC Offset on speaker output.	<> 0,1mV
Remote current.	2,50 mA
Idle current.	0,8 A
Stand by - No remote.	4 uA
Remote delay switch on	0,5 sec.
Remote delay shut off	0,3 sec.
Input impedance	12 kOhm
Input capacity	10 nF.
Damping Factor 10 Watt 100 Hz.	82
Damping Factor 10 Watt 1.000 Hz.	90
Damping Factor 10 Watt 10.000 Hz.	90
Turn on voltage min.	8 Volt
Shut off voltage.	8 Volt
Shut off thermal	+90 Cels.
Dimension	
Lenght	305/340mm
Wide	100mm
Hight	65mm
Weight	2.5 kg / net / pc.

Technical features.



Channel left & right @ 0.1 dB resolution. Both channel are 100% the same freq.response.



Outputpower @ 13.8 Volt = 2 x 90 Watt.