

AVANTGARDE ACOUSTIC MODEL THREE AMPLIFIER

For more than 5 years the in-house amplifiers of Avantgarde Acoustic have succeeded in bringing the virtues of horn speakers to a still growing customer base. Now the amplifier concept was facing the next step of evolution by applying latest research results and technologies. But instead of just renovating, Matthias Ruff, designer of Avantgarde Acoustic, introduced so many new ideas, that finally a new model was born: The MODEL THREE integrated amplifier.

The features include:

- 2 balanced inputs (+3 unbalanced)
- advanced balanced output stage (pre out)
- cascode power stage circuit design
- Black Gate capacitors throughout the signal path
- Near-Zero-Feedback circuitry
- 20 mm aluminium front panel

The balanced inputs provide for connecting highest quality sources in the best possible way. MODEL THREE also features true pre and power amp sections. Thus the fully balanced pre amp output adds extra functionality, as the MODEL THREE may as well serve as a high quality balanced pre amplifier, driving active speakers or power amplifiers.

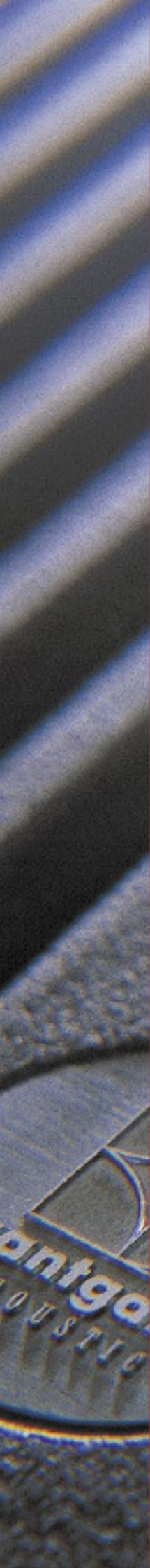
Near-Zero-Feedback design and top quality parts have been a "must" to optimise resolution and dynamic ease, thus providing untarnished detail, liquid midrange and sweet treble. But a true speciality is the cascode power stage. Usually applied in pre amps and measuring equipment, the cascode circuit widens the bandwidth and increases resolution by clearing out the Miller capacity of the power transistors. Admittedly this limits output power to 38 watts per channel (@ 8 ohms), but at the high efficiency speakers of Avantgarde Acoustic this will be no issue at all, allowing you to fully benefit from this innovative circuit.

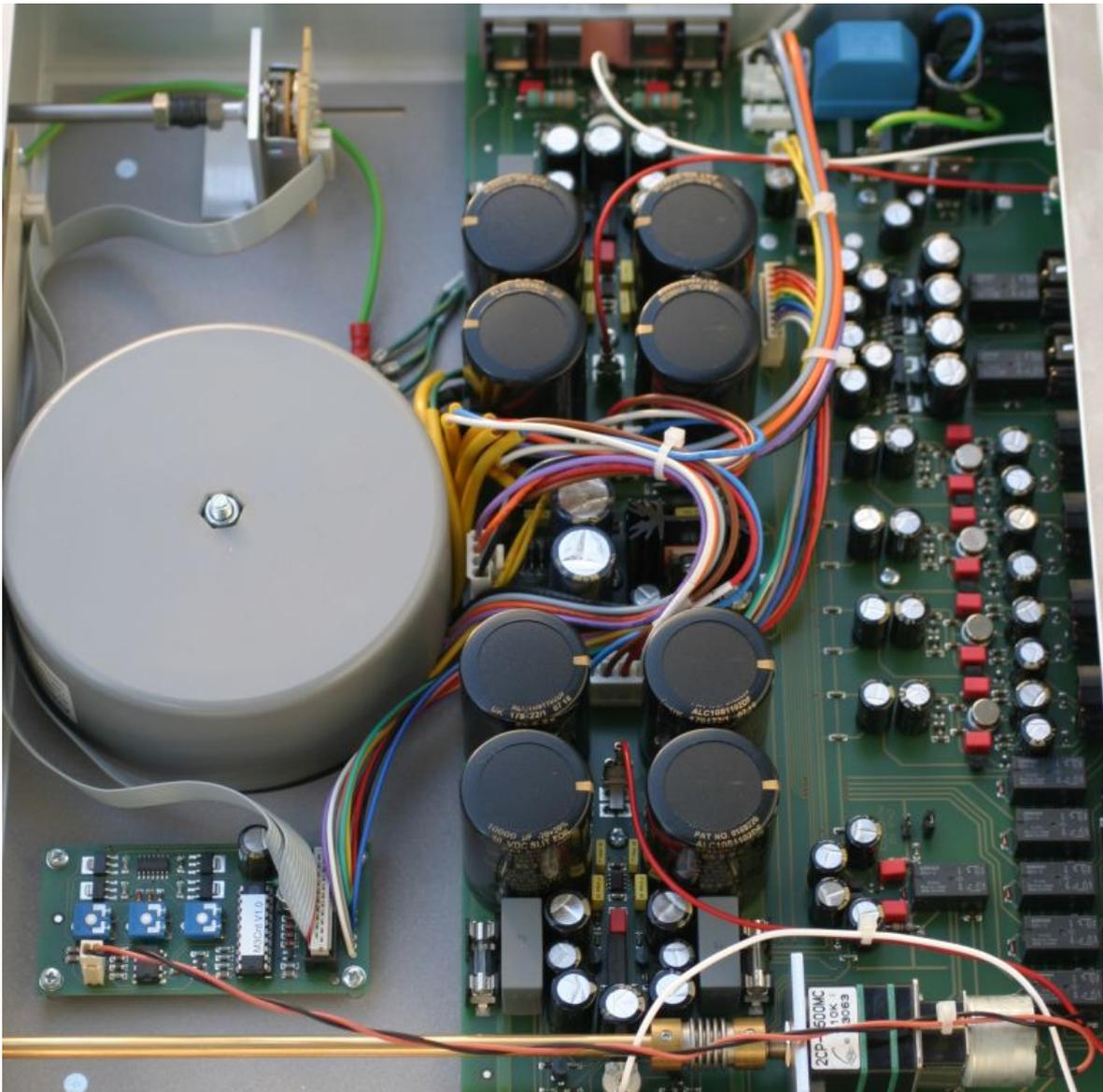
As a little deviation from the purist approach, the added cascode circuit also brings a bit more complexity to the circuitry. But apart from the reduction of the Miller effect, it also results in a more natural even-harmonic THD (harmonic distortion) characteristics. Even-harmonic distortions (also known as K2, K4, K6 etc. distortions) are noted for causing the extra "sweetness" of some tube amp designs.

The power supply is built from a high quality toroidal transformer, both magnetically and statically shielded. It features a total of 7 individual secondary windings, thus providing excellent and clean power to dedicated parts of the circuit. Power capacitors are "slit foil" types, known for short recovery time and high instantaneous current output.

The MODEL THREE amplifier features a conventionally sized 17 inch cabinet, being compatible with most normally sized equipment on the market. Its stylish front plate is made from a 20 mm solid aluminium block, featuring a large central analog display, indicating VOLUME and INPUT. The rotary controls are also machined from solid aluminium and feature a handy knurled surface – for great looks and great feel.

The MODEL THREE is a pure stereo line amplifier, which can also be integrated into home theatres by an internal AV-Direct configuration of input 5. It comes with a simple and robust remote control handset for volume attenuation and MUTE function, made from powder coated aluminium.





TECHNICAL SPECIFICATIONS MODEL THREE

INPUTS:

3 x audio (unbalanced)	RCA/cinch sockets input impedance	3 x stereo pairs 10 kOhm
2 x audio (balanced)	3-pin XLR sockets, female input impedance	2 x stereo pairs 10 kOhm

optional (internally configurable):

1 x audio AV-Direct (unbalanced) (bridging volume potentiometer)	RCA/cinch sockets input impedance	1 x stereo pair 10 kOhm
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OUTPUTS:

1 x record line out (unbalanced)	RCA/cinch sockets	1 x stereo pair
1 x preamp line out (balanced)	3-pin XLR sockets, male output impedance max. output level	1 x stereo pair 200 Ohm 2 V
1 x speaker output	WBT terminals rec. load impedance	1 x stereo pair 8-16 Ohm

SPECIFICATIONS:

output power CLASS A mode	8 Ohm 20 Ohm	2 x 0.4 Watt 2 x 1.1 Watt
output power CLASS AB mode	8 Ohm 16 Ohm	2 x 38 Watt 2 x 27 Watt
bandwidth	-3 dB, 10 Watt @ 8 Ohm	10-75,000 Hz
damping factor (@ 8 Ohm, dynamically measured)	20 Hz 200 Hz 2.000 Hz 20.000 Hz	44 21 19 5
signal-to-noise ratio		86 dB
harmonic dist. (0,5 Watt, 8 Ohm)	100 Hz 1,000 Hz	0.5 % 0.5 %
harmonic dist. (20 Watt, 16 Ohm)	100 Hz 1,000 Hz	1 % 1 %
harmonic dist. (38 Watt, 8 Ohm)	100 Hz 1,000 Hz	2 % 2 %
max. power consumption power consumption STANDBY mode		160 VA 6 VA
power supply	(internally switchable)	230 Volt (50/60 Hz) 115 Volt (50/60 Hz)
7-fold precision power supply	primary voltage secondary voltage secondary voltage secondary voltage	toroidal transformer feat. 7 secondary windings 2 x 115 Volt (50/60 Hz) 4 x 25 Volt (1.2 Ampere) 2 x 15 Volt (0.5 Ampere) 1 x 12 Volt (0.5 Ampere)
	static shieldings magnetic shieldings safety standards	3 1 UL/CSA + ENEC EN 61558
power connection		3-pin socket ICE standard
fuses (internally, on main board)	fuses for power amp mains fuse	4 x 2.5 Ampere (slow) 1 x 1.6 Ampere (slow)
remote control handset batteries		2 x AA type @ 1,5V

FEATURES:

trigger output (1/8" jack sockets)	12 volt, 100 mA	2
rigid casing (suppressing vibration)	heat dissipation panels	10 mm
	front plate	20 mm
	back plate	2 mm
	cover	3 mm
frontal analog display		volume + input/source
display illumination (*brightness adjustable)	STANDBY mode	LED red*
	ON/operation (input 1-4)	LED white*
	ON/operation (AV Direct)	LED white*
	MUTE mode	50% LED white
remote control handset	(included)	volume + mute
dimensions (WxDxH)		437 x 425 x 77 mm
weight		9.6 kg

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