

Product Information Power Amplifier 956 MK2



The Burmester stereo power amplifier 956 MK 2 is a proud descendent of our internationally highly acclaimed family of power amps 911 and 909. Our reference amp 909 has marked the pinnacle of audio amplification since 1990. Many of the insights gained in designing the 909 have influenced the concept of the 956 MK 2. Like our legendary pre-amplifier 808 the 956 MK 2 is of modular design with the advantage that older models can easily be upgraded to the latest version.

Like all amplifiers from Burmester the 956 MK 2 is, of course, completely balanced and DC-coupled without any distorting capacitors in the signal path. Also, the 956 MK 2 sports the same cool-looking heat sinks which Dieter Burmester designed for his bigger amps.

The 956 MK 2 like all our amplifiers is a stereo amp. However, all Burmester stereo amps can easily be bridged into mono operation using external mono adapters. If two amps are ordered as a mono pair we will bridge the amps internally at the factory free of charge. The rise time (the quickness of the amp) is the same whether it operates in stereo or mono mode.

Furthermore, we offer bi-amping adapters for using a pair of 956 MK 2 with speakers that require bi-amping.

All our amplifiers are run through a long battery of tests to make sure each one conforms to our reference prototype. After the first computer-aided set of about 300 test measurements the units are burnt-in at nominal load for a week. After that we run a second set of the same computer-aided tests. Only when the two results are identical will a unit be released for a listening test. If this final test meets our standards the unit will be packed and shipped. By this arduous process of testing and re-testing we want to make sure that each 956 MK 2 fulfills our guarantee of reliability and musicality to our customers.

THE CONCEPT

The 956 MK 2 offers balanced circuitry and it is entirely DC-coupled. There are no distorting capacitors in the signal path. An intelligent protection circuit outside the signal path monitors during operation for overheating, DC offset and overloading.

A special feature of the 956 MK 2 is its extremely high damping factor. This high damping factor coupled with the ability to quickly deliver large amounts of current (rise time at 4Ω is only $1.5 \mu\text{s}$) enable the amp to effortlessly drive virtually any loudspeaker over its wide frequency response. With its mighty power supply the 956 MK 2 is able to deliver high currents continuously and thus easily control speakers with low impedance values and complex loads. The frequency response is practically load-independent. Very good spatial resolution, natural musical warmth and negligible distortion characterize the sound of the 956 MK 2.

The transistors of the output stages are placed on the oversized heat sinks that form the sides of the housing. The driver stages, however, are located on a separate internal heat sink. This keeps the wide temperature fluctuations of the heat sinks from shifting the working points of the amplification section.

Internal wiring of the 956 MK2's inputs is done with 10 mm^2 high-purity copper cable. This ensures that the high currents of the power amplifier reach the massive binding posts without loss. With respect to signal-carrying conductors we consciously omitted copper rails - which have become all the rage these days - to avoid unwanted microphonic effects. For the internal connections that carry music signals we use our electrically and magnetically shielded "Burmester SILVER" cable.

THE SOUND

The 956 MK 2 is widely acclaimed for its naturally warm musicality and detailed imaging. In its capability to unlock the smallest sonic detail in the world's best speakers even at very high volumes the 956 MK 2 is second to none.

UPGRADES

The new MK 2-version differs from its predecessor mainly by an expanded Class-A operation. Consequently, it gets noticeably warmer. For this upgrade the driver stages on the interior heat sink are changed and the whole amp is completely re-tuned. The new driver stages exhibit a considerably more linear power supply than their predecessors. This clearly improves the sound and lowers harmonic distortion. Additional holes have to be drilled into the bottom of the housing for sufficient airflow to cool these drivers located on the internal heat sinks. In comparison with the MK 1-version the power supply has been re-designed and the resistance lowered further. This is made apparent by the 3mm thick copper rails fixed to the power supply board. These rails connect the large electrolytic capacitors and serve as mass. The result of this extra material expense is a considerably lower internal impedance of the power supply than the 75 µm thick copper on the circuit board. For internal signal leads we changed the cables to "Burmester SILVER".

The most obvious discriminating feature of the MK 2-version are its silver anodized housing walls and heat sinks like those of the latest incarnations of the 911 MK 3 and the 909. All 956 MK 1 can be upgraded to a MK 2-version including a new two year warranty. However, the upgrade does not change the housing finish.

TECHNICAL DATA

Dimensions (WxHxD):	482 mm x 191 mm x 482 mm
Weight:	app. 30 kg (66lbs.)
Rated power output:	Stereo: 2x240 W at 4Ω
Mono:	1x500 W at 4Ω
Continuous peak current:	34 A
Damping factor:	>2000
Signal-to-noise ratio:	>81 dB
Input sensitivity:	730 mV for full volume 320 mV for 100W at 4 Ω load
Frequency response:	0-200kHz (-3dB)
4 selected power transistors per channel	
Rise time (stereo/mono):	1,4 µs at 4/8 Ω load 1,9 µs at 1 Ω load

Oversized power supply with 188.000 µF filter capacity and 600 VA toroidal transformer. Additional local filtering close to the output stages of 12.000 µF per channel.

SPECIAL FEATURES

Bridgeable into mono operation by external mono adapters or internally at the factory when ordering a pair of 956 mono amps
Bi-amping with the use of external bi-amping adapters
Balanced circuitry throughout like all Burmester components
Input stages in proprietary X-Amp technology (Class A)
Low overall negative feedback
Signal path completely DC-coupled, no distorting capacitors
High current delivery capabilities due to an oversized power supply
High damping factor enables effortless control of any speaker over the entire frequency range, even at high frequencies
Stable at any load over the entire frequency range
Massive binding posts for connection of speaker cables (use only spade plugs!)
Remote on/off switching in connection with Burmester pre-amps and D/A converters with variable output (remote control current: 10V DC)
A protection circuit outside of the signal path monitors the 956 during operation for overheating, DC offset and overdrive.

AVAILABLE INPUTS/OUTPUTS

Balanced inputs (stereo/mono)
Unbalanced inputs by using the supplied adapters (only in stereo mode)
10V DC input for remote on/off switching by Burmester pre-amps and Burmester D/A converters with variable output
Binding posts for loudspeaker hook-up (stereo/mono)

AVAILABLE FINISHES AND ACCESSORIES

Standard model with engraved chrome triangle name plate, housing in silver anodized.
Custom finishes upon request.