

## Manual for **BRINKMANN** Mono Power Amplifiers

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### Legal Regulation of the European Community :

This amplifiers had been designed and tested according to the guidelines IEC55013 and IEC55020, and meet the safety requirements IEC60065.

### Informations for Safety :

The Mono power amplifiers are only to be used in dry rooms with an average temperature and are only allowed for 220-240V, 50Hz alternating current unless otherwise stated on the amplifiers.

Please connect or disconnect only when the amplifiers are not connected to the mains.

Always disconnect the amplifiers from the mains when they are not in use for a longer period of time ( during holidays etc.) !

**ATTENTION ! The loudspeaker-outputs are not short circuit proof when the amplifiers are switched on !**

Never lift or remove the glass plates while the amplifiers are connected to the mains !

Attention, dangerous voltages !

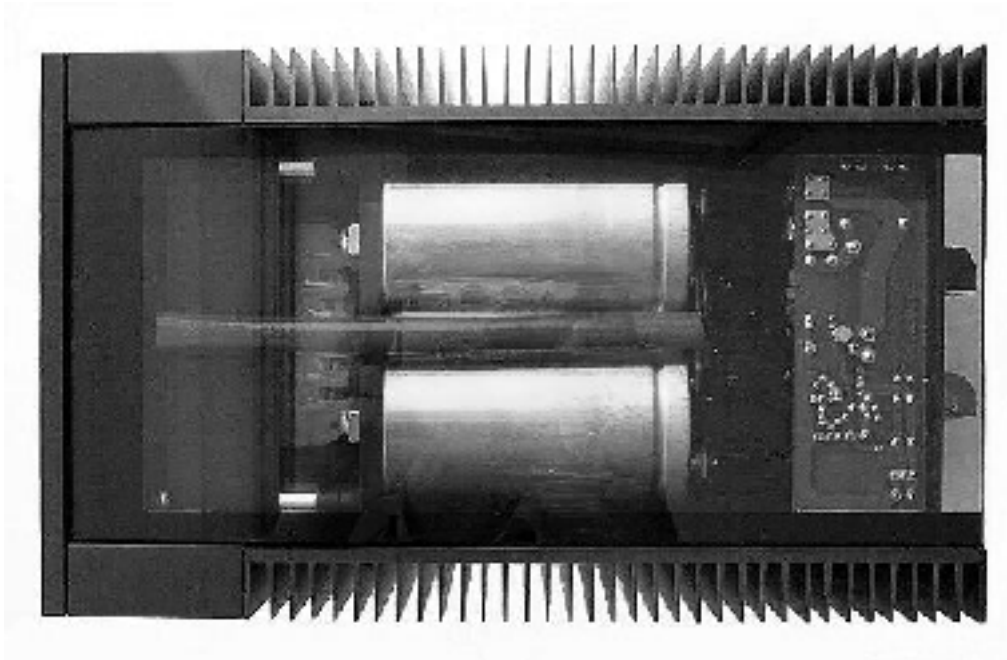
Repairs, modifications etc. are only to be carried out by the company **BRINKMANN** itself or by specially authorized workshops !

Always keep the amplifiers away from wet, heat and open fire. Don't expose them to the blazing sun ! Never place receptacles with fluids on the amplifiers !

The amplifiers are not equipped with temperature limiters ; to guarantee a flawless function please make sure to have a free space for air circulation measuring 30cm above each power amplifier and 10cm on each side. The heatsinks are never to be covered !

The amplifiers can be cleaned with a dry cloth or a brush, wet cleaning can cause damages, always disconnect from the mains during cleaning !

The power amplifiers must be set up on the granite bases and for thermal reasons must have direct contact to the stone surface ! Beware of overheating !



### **Technical Information :**

In the output-stages the two symmetrical signals from the preamp are added together to form one signal again. This cancels out any possible component-coloration and all other interferences and allows for an uncontaminated flow of music.

The symmetrical inputs of our Mono power amplifiers feature XLR as well as (RCA)-Cynch sockets. The Cynch sockets are for use of asymmetrical connections to the preamplifier, it is possible to drive the power amplifiers in an inverting or non-inverting way, depending on the chosen input sockets.

The extremely impulse-proof powersupplies, built around 500 Watts transformers, which allow for shorttime power in excess of 1500 Watts, each amp containing four large Roederstein condensers, the very compact construction with the shortest possible feeds, plus four high power output-transistors made by Sanken, which are directly connected to the output-terminals through "Diamond" topology output-stages without negative feedback, allow for 2 MHz fast outputs of power for an uncompromised musical impact and sonically balanced flow of music.

Although there is no feedback used, the output stages have feature low output-resistance at all phase degrees and frequencies.

The output stages are driven via gain-amplifiers, that match our preamplifiers in circuitry of the line stage and in technical aspects.

## Inputs and Outputs :

symmetrical XLR-inputs and each Mono-amp two (RCA)-Cynch sockets for the inverting and non-inverting inputs, as well as loudspeaker outputs.

## Setup :

The power amplifiers must be set up on the granite bases to prevent overheating !

First all needed inputs should be plugged in and the power amplifiers connected to the loudspeakers before being connected to the mains. Essentially be careful not to create a short circuit, because a short circuit can lead to damages in the power amplifier.

For symmetrical use no short circuit plugs are needed on the (RCA)-Cynch sockets, only for asymmetrical use via the "+ inputs" , a short circuit plugs are needed on the "-inputs". Be shure to remove these plugs when the preamp is connected symmetrically.

The knobs of the loudspeaker terminals can be removed completely and the connection of 4mm-"banana"-plugs is possible.

About two minutes after power on, the loudspeakers are switched through, now the amps are no longer short circuit proof !

The mains-plug has a red mark on one side, the terminal at this side should be connected to the hot pole of the mains to get the best sound quality.

→ Please avoid the power amplifiers being plugged into the same multiple plug as the preamplifier, a wall socket with a separate lead to the fuse box is the best option, if this is not possible, the power amplifiers should have a separate multiple plug for their own. To prevent extreme inrush currents, please do not switch on both amps at the same moment.

## some technical details :

power output both channels driven :	load 4 / 8 Ohms	250 / 150 W
minimum load :		3 Ohms
damping factor	load 8 Ohms	80
distortion :	half power	0.1 %
input sensitivity and resistance :	unbalanced input	775mV / 1kOhm
input sensitivity and resistance :	balanced input	+/- 390mV / +/- 1kOhm
power consumption full power :	load 8 Ohms	380 Watts

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