

## Manual for **BRINKMANN** Preamplifier **MARCONI**

### Design :

Brinkmann Audio  
Im Himmelreich 13  
88147 Achberg DE  
Germany  
Tel.: 08380 / 981195  
Fax: 08380 / 981233

[www.brinkmann-audio.com](http://www.brinkmann-audio.com)  
[info@brinkmann-audio.com](mailto:info@brinkmann-audio.com)

### Service :

Ing.-Büro R. Klatt-Milsmann  
Deppendorfer Str. 151  
33793 Bielefeld DE  
Germany  
Tel.: 05203 / 883033  
Fax: 05203 / 883034

[R.Klatt-Milsmann@gmx.de](mailto:R.Klatt-Milsmann@gmx.de)

### Legal Regulation of the European Community :

This amplifier had been designed and tested according to the guidelines IEC55013 and IEC55020, it meets the safety requirements IEC60065.

### Informations for Safety :

The preamplifier MARCONI is only to be used in dry rooms with an average temperature and is only allowed for 220-240V, 50Hz alternating current.

The power supply is only to be connected to grounded wall sockets.

Please connect or disconnect only when the amplifier is not connected to the mains.

The amplifier is not switched off in the stand-by modus.

Always disconnect the amplifier from the mains when it is not used for a longer period of time ( during holidays etc. ) !

Never lift or remove the glass plate while the amplifier is connected to the mains !

Attention, dangerous voltage !

Repairs, modifications etc. are only to be carried out by the company **BRINKMANN** itself or by specially authorized workshops ! Please allow some time before lifting the glass plate, so high voltages can reduce.

Always keep the amplifier away from wet, heat and open fire. Never expose it to the blazing sun ! Never place receptacles with fluids on the amplifier.

The amplifier is equipped with a temperature limiter that switches off at about 65°C ; to guarantee a flawless function please make sure to have a free space for air circulation measuring 30cm above the preamplifier and 10cm on each side. The heatsinks are never to be covered !

The amplifier can be cleaned with a dry cloth or a brush, do not use wet cleaning, wet cleaning can cause damages !

PLEASE NOTE : only use the original tube type, no tubes from different manufacturers even if they carry the same type indication !



### **Technical Information :**

The **BRINKMANN** preamplifier MARCONI impresses with its puristic design, featuring only the minimum of controls. The control panel includes left hand the level switches for the right and left channel, the input selector, in the middle a display that indicates some operating information, right hand the volume control and a "mute" and "on-off" push button. The operation settings may be done directly at the amplifier; input selection, volume and "mute" can also be driven via remote control.

The buffer stage for the tape recording output "rec" always carries the signal of the chosen input, regardless of the volume setting.

All inputs and outputs are switched off while in the stand by mode; the amplifier should be in mute mode when it is not in use for a certain time.

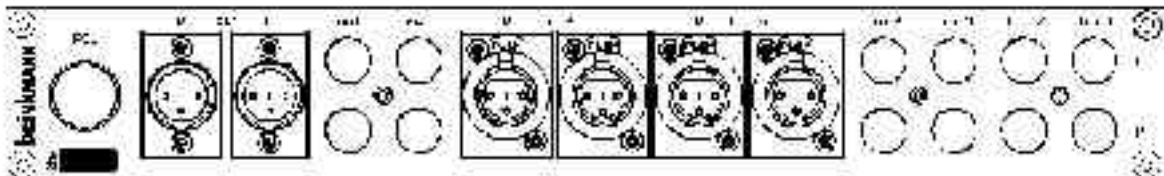
### **Display :**

The display shows the gain of the output stages, independently adjustable for each input and each channel, from 0dB to 12,5dB in steps of 0,5dB.

When the corresponding input is selected, the display shows i.e. "lin1-0dB". The top line shows the left channel and the bottom line the right channel.

Now the gain can be programmed by the level control switches from 0dB to 12,5dB. The level can be changed as long as the input is selected, the level will be stored automatically when another input is selected. By selecting the former input again, the last programmed gain is still stored. The programmed levels of the several inputs also stay stored when the preamplifier is disconnected from the mains and are available again when the preamplifier is connected for the next time.

The display also shows the phase degree of the output signal, **0°** says : the phase of the output signal is the same as the phase of the input signal, **180°** says : the phase of the output signal is 180° shifted according to the phase of the input signal; the phase is inverted.



### Inputs and Outputs :

four asymmetrical line-inputs, two symmetrical line-inputs,  
a record-output,  
an output for the power amplifier asymmetrical,  
an output for the power amplifier symmetrical,  
the connection for the extern power supply.

The asymmetrical inputs, the rec-output and the asymmetrical output are cynch-(RCA)-sockets.

The pin-outs of the XLR-sockets are : **1**= ground, **2**= non inverting input, **3**= inverting input

### Remote Control :

The purchase of the integrated amplifier includes the remote control. It features three push buttons for the functions (left to right) **volume down**, **mute** and **volume up**, for the volume and stand by (mute), as well as two push buttons for the input selection **e +**, **e -**, and a sixth push button **phase** fo inverting the output signal.

The sensor for the remote control is positioned under the glass plate in the front of the amplifier, just behind the frontplate ; for an impeccable function of the sensor it is essential to keep the glass plate clear from objects or immediately adjacent shelves etc. on top of the amplifier.

To change the battery cells, please unscrew the remote control at its back side, pull out the battery holder and replace the empty battery cells by two new ones of the type AA according to the illustration in holder. Please push the battery holder completely back into the remote control until the cover can be closed again easily.



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*>Used batteries are not to be thrown into household waste but be disposed at special waste utilisation plants or collecting points according to the possibilities of your country.<*

## **Adjustments :**

The input selector switch chooses the asymmetrical inputs as well as the symmetrical inputs. The selected input is indicated on the display at the front panel.

By pushing the button "on-off", the preamplifier is connected to the power supply via relays, the red LED turns off and the display is illuminated.

The button "mute" clears the inputs and outputs, the button is cleared as soon as the writing "MARCONI" on the display fades and the input and level settings are shown.

To protect the power amplifiers and loudspeakers, the DC-offset at the outputs is measured and switches the outputs off, when a certain level is exceeded. In that case the display shows –DC-Offset-.

→ Please allow some minutes of burn in after switching on, to prevent the DC-sensors to switch off because of some slowly reducing DC from the tube stages. Avoid to raise the volume control to high volumes during that time.

## **Setup :**

First all needed inputs and outputs should be plugged in and the preamplifier be connected to the power supply before this is connected to the mains. It is essential of being careful not to create a short circuit, because a (lasting) short circuit can lead to damages in the preamplifier (i.e. take off short circuit bridges at symmetrical power amplifier inputs when connected symmetrically).

In order to connect the preamplifier to the mains, the power supply has to be plugged into a socket or a multiple plug with double poled power switch.

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.

The LED at the front panel of the power supply starts to glow when the power supply of the preamplifier is connected to the mains. The power supply needs a minimum of current when the preamplifier is switched off, only the micro-controller of the preamplifier is still under current.

The preamplifier should be placed on its granite base as far away as possible from power supplies, (magnetic fields, humming).

The granite base can be equipped with felt gliders or spikes to improve the setup.

The tubes have a normal life span of approximately 10 years. If they have to be changed, they should be replaced only by a complete set of the original tubes. The tubes used in this preamplifier are specially selected and matched for their purpose. They can be ordered as a whole set from the manufacturer by giving the preamplifier serial number. A special tool is needed to replace the tubes.

### some Technical Data :

Distortion / Intermodulation :	0,01 / 0,05	%
Signal to noise, linear :	90	dbA
Bandwith, linear :	DC... 250	kHz
max. output :	± 12	V
output resistance :	< 0,1	Ohm
output resistance symm.:	± 0,1	Ohm
input resistance linear :	20	kOhm
input resistance symm.:	± 20	kOhm
input sesitivity linear :	150	mV
output phase :	0° / 180°	
span of level controls :	0... 12,5	dB
each step of level controls :	0,5	dB
Casing : W x H x D	420 x 65 x 310	mm
Casing power supply :	120 x 80 x 160	mm
Weight with psu :	aprox. 12	kg
Granit plate :	420 x 30 x 310	mm
Weight granit plate :	aprox. 12	kg

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tel: xx49 8380 981195

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