

MARCONI

Those who contemplate the beauty of the earth find reserves of strength that will endure as long as life lasts." (Rahel Carson in *Sense of Wonder*)

MARCONI is our new top of the line preamplifier. We have chosen this name as an homage and a reflection towards the great inventor.

To prevent electrical interference a symmetrical circuit- topology has been utilized. All amplifier-stages are doubled : they carry the signal in either the original wave-form as well as in an inverted one, which is phase-shifted by 180 degrees. In the output-stages the two signals are fed back together to form one signal again. This cancels out any possible component-coloration and all other interferences and allows for an untainted flow of music.

We use this technique in our MARCONI preamplifier to further reduce all existing influences in an endeavour to keep the tonal influence of the components as small as possible. The phase inverters that are responsible for the symmetrical signals work with tubes. Tubes respond to the input signal without a noticeable time delay. Allowing a free synchronical and symmetrical signal. The outputs are provided by four identical, low output resistance transistor amplifiers.

Our asymmetrical preamplifier CALVIN uses the same output stages and the technical details described there are also valid for the MARCONI preamp.

big photo

The preamplifier is equipped with six linear-inputs, 5 of them correspond to asymmetrical and one to symmetrical signals. As a special feature, the input levels of all the six inputs are individually adjustable, so the user can set the same level of loudness for every connected source. The outputs are both, symmetrical and asymmetrical, the phase can be switched between 0° and 180° via remote control.

A record output completes the rear panel layout.

photo from back

The power supply for the preamplifier is build into a separate casing. All components that emit heat have been placed in the preamplifier. It's large enclosure with heat sinks on both sides is much more capable to dissipate heat. The tubes are placed inside the heat sinks, enabling the heat to dissipate. So only the power transformer is left in the power supply casing. The power switch on the front panel of the preamplifier activates the secondary low voltage and the high voltage rails for the tubes via three relays.

photo power supply

A special feature of the preamplifier is its fully electronical control for level as well as for volume. An AD-converter interrogates the motorpot at the front panel and this information formed as a digital word is fed into the digital potentiometer-ICs to control the volume passively via a few hundred integrated resistors. This technique allows to drive the four outputs with the same volume, there are no differences between the channels.

The volume can be adjusted with a rotary knob on the front panel of the preamplifier or via remote control. A mark at the rotary knob allows the visualization of the volume setting level.

photo potchips

The remote control of the MARCONI preamplifier also provides the functions muting, the switching of the inputs and the switching of the output phase. A display at the front informs the user about the chosen input, input level for each channel and output phase.

photo display

The supply includes the preamplifier, the power supply and a power cord, the remote control and a granite base as preamplifier support.

Additional technical data :

Distortion factor / intermodulation :	0,01 / 0,05	%
SNR linear :	90	dbA
Frequency response :	DC... 250	kHz
maximal output voltage:	± 12	V
output resistance :	< 0,1	Ohm
symm. output resistance :	± 0,1	Ohm
linear input resistance :	20	kOhm
symm. input resistance :	± 20	kOhm
linear input sensitivity :	150	mV
output phase:	0° / 180°	
extension of level controls:	0... 20	dB
stepping of level control:	0,5	dB

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