CALVIN

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A new BRINKMANN preamplifier for the new millenium.
When the Audiolabor era ended 15 years ago, a new, absolutely puristic preamplifier was conceived out of the experiences we had made with -VV2020-, -Klar- and –Rein-.
Even now, after one and a half decade, this preamplifier still has a reputation of being first class between musiclovers and High-End purists. At the same time the our know how gained in amplifier construction throughout a quarter of a century has led towards an improved construction technique which we now present with our new preamplifier –CALVIN-.

The Brinkmann Audio Calvin Preamplifier is designed to give the experienced music lover control over selection of whatever digital or analog music sources with extremely short signal paths and shielded from vibration.
Symmetrical ciruit topology. Available as a line stage or as a full functioning preamplifier with use adjustable built in MM and MC phono stage. Five line inputs (two are used with the phono stage), a tape monitor circuit, and two outputs are all single ended operation with RCA type plugs with a seperate free standing power supply, left and right balance control, infra-red remote control that adjusts for volume and mute.
Where the older preamplifier sometimes had thermical problems with the power supply, all heat emitting parts are now build into the preamplifier. With its large enclosure and the heat sinks on both sides, this preamplifier is much more capable to dissipate the heat. Now 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 via the help of two relays.

The amplifier stages have been thoroughly revised, for example the input circuits are build into compact modules. The output stage has been reinforced and especially the power supply has been upgraded. All bias points in the preamplifier are related to only

one single temperature-compensated reference voltage, deviations between the bias points are therefore practically out of question.
As with the previous preamplifier, all amplifier stages operate in pure class A and the stabilization of the power supply is made by serial- and parallel- voltage regulators, that allow a good amount of power dissipation. Although very high capacity values are used in the power supply (10.000μF), the operation of parallel voltage regulators that

produce a calculated infinitely high capacity is a must in order to allow a low down reaching bass to be reproduced.
An other aspect of this new design is the use of ultra fast rectifier diodes and inductionfree resistors in the AC-leads, so the power transformer doesn't operate in magnetic saturation. This helps to keep interferences from the mains and associated rectifiers to an absolute minimum.
A very important approach for the construction was to use lowest possible amounts of ceramics in the preamplifier. A lot of components contain technical ceramics, i.e. nearly all resistors, but also switches, potentiometers and even some condensors.
These ceramics normally consist of sintered metaloxides. The sintering process makes components become prone to certain resonances that can alter the sound, especially in the high frequency region.
Therefore the amount of ceramics has been reduced as much as possible, i.e. the resistors are mainly in SMD-technology, allowing for extremely small units. Bigger power resistors are build from manganin-foil, which contains no ceramic.

The optional phono stage has user adjustable sensitivity and resistance in three levels:
1 --- MM --- 47 kOhm/1mV
2 --- MC --- 600 Ohm/0,5mV
3 --- MC --- 600 Ohm/0,2mV
The resistors which are relevant for these adjustments are placed around the rotary switch. They are easily changed to other valued resistors on customer demand.

The glass cover has to be lifted off to reach the rotary switch, therefore it is fixed with removable adhesive tape.
In addition to the phono-input there are four line-inputs. If there is no phono board in the preamplifier, the phono input can be used as a fifth line-input. A record output and the asymmetrical amplifier output complete the rear panel layout.

The remote control is a feature nobody would like to miss these days. The possibility to adjust the volume without leaving the seat is a really usefull feature, especially with the considerable different levels of the various records. We have equipped the remote control for our preamplifier with the functions volume –up- / -down- and –mute-. A classical motorpot shifts

the volume and the rotary knob at the front panel provides the visualization of the volume setting via a small mark.

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

Aditional technical data:

linear input sensitiviy :	150	mV
phono input sensitivity :	see above	
Distortion factor / intermodulation :	0,01 / 0,05	%
SNR linear :	91	dbA
SNR MM / MC :	80 / 78	dbA
linear frequency response :	DC....250	kHz
phono frequency response :	20....50	kHz
maximum output voltage :	12	V
output resistance :	< 0,1	Ohm
linear input resistance :	20	kOhm
MC input resistance :	600	Ohm
MM input capacity :	50	pF

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"The more clearly we can focus our attention on the wonders and realities of the universe about us, the less taste we shall have for destruction." -- Rachel Carson