VAmpI fully configurable 6-channel preamp

Problem Solver

The analog preamplifier VAmpI was developed by driven of several weaknesses in the high-end signal processing chain. It gives solutions for problems, which not have been touched before.

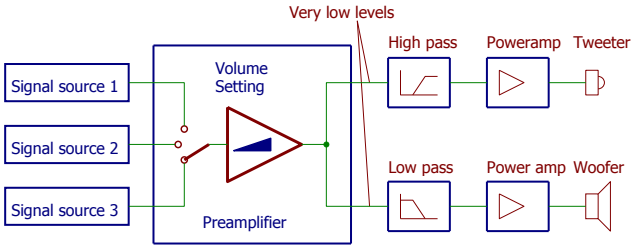
For example, here are three typical cases of problems there was no perfect solution in the past.

Testing and comparing

By testing and comparing of different high-end speakers it is not possible to make a direct comparison with a similar level, since the speakers always have a different efficiency. Only after a rewiring and adjusting the volume-level their can compared. This normally takes too long and is not always perfect and repeatable succeed. For a direct comparison you need a preamp with more than 2 output channels, which can be adjust the volume for each channel and it can be hold.

Active Speakers

In active multi way loudspeakers, the crossover network is right in front of the power amplifiers. The stereo volume setting is then normally before the crossover.

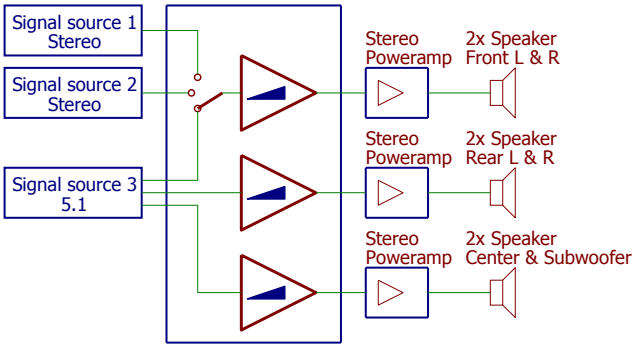


At listening music with a low volume level the crossover must work with very low levels. Even at a typical low volume, the signal has only 1/1000 of the usual value.
The only way to solve this problem is the relocation of the volume setting behind the active crossover. This has never been realized in commercial amplifier construction, it requires for each speaker frequency range a complete stereo preamplifier with coupled synchronous logarithmic volume setting.

Optimal Integration of 5.1

For a good high-end playback you need very high quality components for two playback channels. If you still want to achieve a good 5.1 playback, it is desirable to use the high-quality components of the stereo high-end-part as the front channels of the 5.1 system.

The alternating operation of high-end-stereo and 5.1-components has only been through an extensive rewiring, because the 5.1 components very often do not correspond to the quality of high-end-stereo.
The only way to combine 5.1 and stereo high-end perfectly, results in a high-end preamplifier with now 6 complete high-end channels includes and handles all signal-routing in an analogous way without compromise.

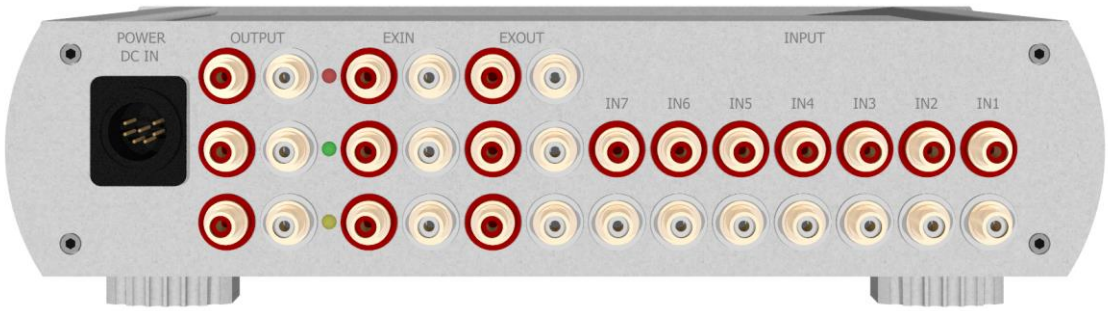


Without Compromise

The audio signal processing of VAmpI works completely analogous. The signal is distorted at no point, this also ensures a completely DC-coupled design without distorting capacitors in the signal structure.
The entire audio signal routing inside is passive and occurs uncompromising with 48 gold-contact relays (no CMOS-switches). The well thought out distribution of signals enables connection from any stereo input to any stereo output. The crossover-network is fully floating and able to be transmitted video signals.
The volume control is handled by a very high-quality circuit, which is usually found in professional recording studio mixing consoles. The volume of the three stereo channels may at any time separately or coupled.

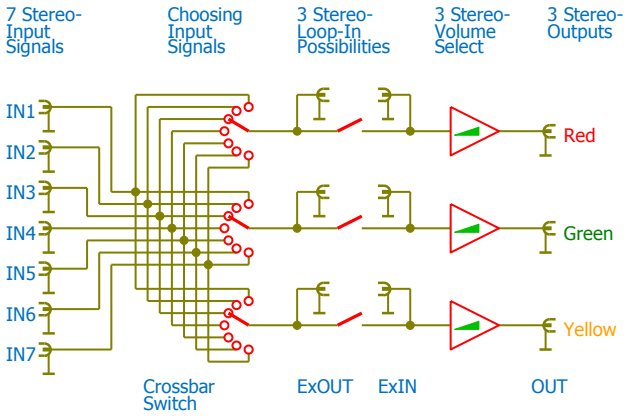
Perfect Routing

The PCB layout of the VAmpI was handmade, with greatest care, resulting in a perfect signal routing optimised so that each signal passes through its individual current track, in both directions.



Exceptional Concept

The basic concept of the VAmpI - base on 3 complete stereo preamplifiers with random access on 7 stereo input signal sources.



To prevent interference at any time, the control part and the audio part has been completely constructed separated within the preamplifier. Both sections are also powered by its own galvanically isolated power supply.

Display Configurable

The integrated LCD in the device is showing the volume adjustment of all 6 channels in the form of individual bars. The actual volume position can be seen even from a wider distance. An additional numerical display in dB or % is located directly behind each bar. The text that appears on the screen for the selected input is selectable.
The backlight of the display can be set by color and by brightness.

Flicker-Free Display

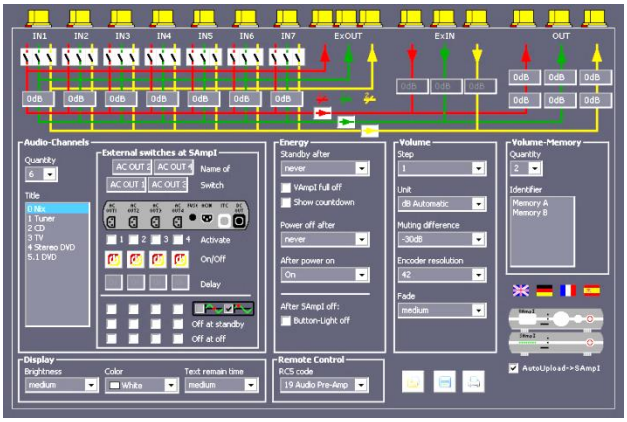
The control of the backlight in not done by dimming. It is performed entirely in analog circuit technology. This results in a flicker free display at every brightness.

Power-Supply-Unit outside

The power section of the VAmpI is completely outsourced to a second device (SAmpI), this minimize the influence of interference from the power grid.
The power-supply-unit SAmpI can also be operated as a standalone unit, with some special features, which are described in detail in a separate SAmpI datasheet.

Easy Handling

The handling of the VAmpI has been very carefully thought out and all functions can be operated remotely.
All configuration tasks can be performed easily on a PC, the handover to VAmpI can done with a memory card.



Technical Data

Power consumption	5 W
Power supply	230 VAC ±10 % / 50 Hz
Input sensitivity	1 Veff
Input impedance	3x10 kΩ
Slew rate	15 V/µs
Amplification	-80...+10 dB
Frequency response	0 Hz-300 kHz
Crosstalk attenuation	130 dB
THD+N	0.0002 % 1kHz
S/N ratio	114 dB
Output resistance	100 Ω
Display	LCD 128x64Pixel
Standby power consumption	<0.5 W
Standby waiting time	5 min-6 h or never
Power off waiting time	5 min-6 h or never
Dimensions W H D	332x75x272 mm
Weight	2.8 kg