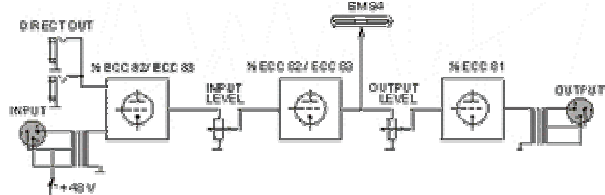


HDB audio

TMA 2 professional tube preamplifier



The TMA 2 is a classically designed pure tube preamplifier. This means that there is no semiconductor in its signal flow.



An audio signal reaches the preamp either through a balanced XLR- or an unbalanced 1/4" jack. In step one and two it passes through an ECC 82 and/or 83- tube. In step three, the signal passes through an ECC 81 and leaves the TMA 2 through the balanced XLR - output.

The symmetry has been made by isolating transformers after XLR - input and before output (on output it's been separately galvanized, too), so the TMA 2 can also be used as a high Ohm - DI-Box.

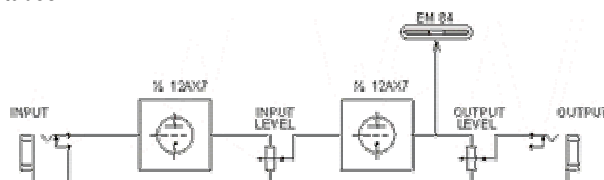
The control of the device is just as uncompromising and easy as its concept. There is one input and one output controller per channel as well as an indicator tube ("magic eye") in the output section. The two separated channels can be switched together, so it is also possible to use the TMA 2 as a mixpreamplifier.

TPA 2 professional tube preamplifier



Our TPA 2 is a classically designed, 2 step pure tube preamplifier designed for working with microphones and musical instruments.

The signal reaches the TPA 2 through an unbalanced 1/4" jack, passes through an ECC 83 in step one and two and leaves the device through an likewise unbalanced 1/4" jack. Therefore the signal is processed and refined completely by tubes.



The control of the TPA 2 is just as uncompromising and easy as its concept.

You can find an input and an output - controller, which allows you enter the distorted area of the tube characteristic. Thus giving you that slightly overdriven tube sound which can't been made by any transistor or DSP simulation.

Beside its excellent sound quality, the TPA 2 also has its optical fascination: The HDB audio output indicator tubes ("magic eye").

TA 200 professional tube amplifier

Our TA 200 is equipped with all features of a class pure tube amplifier and of course handcrafted in Germany. A pure, strong and warm sound which no transistoramp can produce.



With its various connecting possibilities, it is useable in every imaginable situation.

At the input section you find balanced XLR, unbalanced 1/4" - and RCA - jacks. The speakers are connected with 1/4" jacks.

The signal passes through a half ECC 83 in the preamp, four EL 34 and one ECC 83 in the powerstage. How it sounds? It sounds like 2x 100 Watts pure tubes!

And once again - of course - the TA 200 is equipped with the famous HDB audio indicator tubes used as level indication for the output section.

HDB audio

HA 48 / HA 600 professional headphone amplifiers



The headphone amplifiers HA 48 and HA 600 have four separate amplification modules with the possibility to connect up to 2 headphones. So you can connect up to a maximum of eight headphones.

Channel 1 has a 2-band EQ (bass, treble) and a Volume controller for adjusting the output level of both jacks.

The channel has RCA and TSR inputs (LEFT/MONO; RIGHT/STEREO). The active inputs can be selected with a switch. Channels 2, 3 and 4 have a Volume controller and two output jacks (stereo TSR)

The difference between the HA 48 and HA 600 is that the HA 48 has one stereo TSR-jack for channels 2, 3 and four, whereas the HA 600 has two separate mono TSR-jacks per channel. Additionally, the HA 600 has a POWER switch on the frontplate and a higher output-level for 600 ohms headphones.

RackMix 82e professional linemixer



The HDB audio RackMix82e is a compact line mixer with four stereo channels and one effect loop. Each channel features a Volume-, Panorama- and Effect controller. The Master section is equipped with the Master Volume controller, the Effect Return control, as well as a headphone jack.

The effect loop has an SEND MONO switch, which can set the effect send jack to mono or stereo.

The RackMix82e also has a LINK jack which allows you to cascade more rackmixers.

We equipped the RackMix82e with an internal power supply, which makes the device optimal for stage works.

Each channel has two Input jacks (MONO/R and STEREO/L) an Effect Send and Return jack (each stereo or mono), LINK jack and stereo outputs.

TSR 3 professional tube spring reverb



This device combines full and pure tube sound with the famous ACCUTRONICS - spring reverb module.

Input and output are unbalanced 1/4" jacks. The signal is being processed and refined before and after passing through the spring reverb module by ECC 83 - tubes.

The operating controls are limited to the essentials: An input and a mix controller, an effect STOP - switch, which can also be controlled with a footswitch and an indicator tube ("magic eye") to decorate the front panel and give you your output level.

The TSR 3 can be used in an effectloop of a mixer or amplifier as well as directly in combination with a musical instrument, i.e. guitar or microphone.

The best way to describe the style of our TSR 3 is; an excellent, warm, vintage effect with the very popular spring sound.

XL4 professional crossover

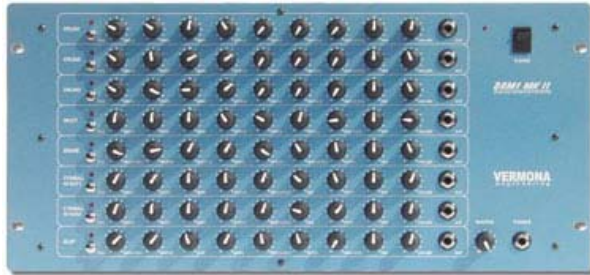


Our XL 4 is a modular active crossover with the features of a professional system controller. The concept of this unit is, to be a combinable quadruple 2-way x-over which can be easily switched into the following modes: 4x2 way, 2x3 way, 1x4 way or qx5 way.

The XL 4 belongs to the top of it's class X-overs due to the 24dB/octave filters and the various configuration possibilities. With it's 8 selectable limiters, free selectable cut-off frequencies, clip-, signal-, and limiter indicators and, of course, balanced in- and outputs you can surely label the XL 4 as a professional PA unit

Vermona

DRM1 MKII analog drum synthesizer



Structure

Would you like to create your own unique analog drum sounds instead of using boring, static samples? If so, you should take a serious look at our DRM1 MKII. It's the perfect drum and percussion module for the job.

The DRM1 MKII is an eight-channel, completely analog drum synthesizer that gives you total control over every parameter through its 72 (!) controls.

There are eight channels, each featuring specific parameters for generating a certain kind of drum and/or percussive sound. They are divided into:

- 3 DRUM channels
- 1 MULTI channel
- 1 SNARE channel
- 2 HI HAT / CYMBAL channels
- 1 CLAP channel

In addition to the main stereo output, every channel is equipped with an individual output/insert jack, which allows you to insert external effects such as the VERMONA DAF-1 filter or PH-16 phaser.

The DRM1 MKII can be triggered via MIDI whereby MIDI channel and note number can be easily assigned.

Control Features

Each channel has its own output/insert jack on the front panel. The rear panel features the master output (L/R), as well as the MIDI IN and THRU jacks. As an option, a group of 10 standard trigger inputs is available that allows use of the DRM1 MKII with analog step sequencers or trigger pads. The DRM1 MKII has an integrated power supply.

The design and construction of the chassis makes it possible to use the DRM1 MKII either in a 19" rack (5U) or as a tabletop unit with the front panel tilted on a convenient angle.

M.A.R.S. monophonic analog rack synthesizer



Structure

The M.A.R.S. is a complete analog monophonic synthesizer in a single rack space. It builds upon the classic VCO-VCF-VCA subtractive synthesis structure and offers many special, useful features.

- 2 discrete voltage controlled oscillators with sawtooth-, square-, and pulse wave
- two suboscillators per oscillator (square wave, one and/or two octaves below the main oscillator)
- separate GLIDE per oscillator
- GLISSANDO
- 24dB lowpass filter with resonance
- 2 quick ADSR Envelopes
- 2 LFOs with square-, triangle-, 2x sine waveforms, as well as sample&hold
- possibility to change the waveforms symmetry
- LFO1 has an preceding ATTACK-DECAY envelope
- numerous parameters for wheels, aftertouch and footswitch
- memory for 127 patches

M.A.R.S. Control

The M.A.R.S. Control is a special programmer for the M.A.R.S. With 56 controls you have optimal access to each sound parameter for fast and enjoyable hands-on programming.

Vermona

PERFOURMER Quad Analog Synthesizer



Structure

The PERFOURMER is a true analog synthesizer, providing nearly unlimited diversity of basses, leads, pads and effect sounds through its incredibly flexible sound generation circuitry and easy user interface.

In addition, the PERFOURMER can be used as a complex filterbank with its 6 filter inputs!

Even though the PERFOURMER is not a modular system, you can configure its structure as a semi-modular. The basic concept is reminiscent of classic synthesizers like the Oberheim 4-Voice or the Korg MONO/POLY.

The PERFOURMER consists of four voices. Each of them is a completely separate synthesizer which can be played and tweaked individually. You can link the synthesizer channels in any combination with each other and play them in three modes.

Synthesizer Channels

The PERFOURMER's four synthesizer channels are identical and have the following structure:

One VCO with six waveforms, which are divided into two separate octaves with a noise generator that produces white noise. The pitch can be adjusted smoothly in a range of +/- 13 halftones.

A 4-pole lowpass filter with resonance and variable keytrack.

A fast ADSR envelope that can modulate the VCA and VCF.

An LFO with four waveforms which modulates the VCO frequency and the CUTOFF frequency, as well as the VCA.

One VCA that can be modulated by the ADSR envelope, a fixed GATE envelope or the LFO.

FM

The synthesizer channels 1 to 3 can function as modulator for their neighbouring synthesizer channel. For example, synthesizer 1 can modulate the VCO frequency and the CUTOFF frequency of synthesizer 2. Or synthesizer 2 can modulate synthesizer 3, etc.

The modulation intensity can be adjusted separately for VCO and VCF.

MODES

All four synthesizer channels can be linked in arbitrary fashion and can be used in one of the following three modes:

- UNISON: All combined channels work as one monophonic synthesizer.

- DUOPHONIC: This mode separates the PERFOURMER into a two-voice synthesizer. Synthesizer 1 and 2 form the first and synthesizer 3 and 4 the second voice

- POLYPHONIC: All combined channels work as a polyphonic synth.

Channels that are not part of a combination, work simply monophonic synthesizers.

Depending on which way the synthesizer channels are combined, the PERFOURMER can be used as a fat monophonic synthesizer with 4 oscillators, 4 filters, 4 VCAs, etc., but also as a two, three, or four voice polyphonic synthesizer.

PERFOURMER as filterbank

The PERFOURMER has six filter inputs. There is one filter input per channel. The input signal will be added to the oscillator's signal of the respective channel. On the rear panel of the PERFOURMER are two more inputs that are routed in parallel to all four synthesizer channels and which can be used alternatively to the oscillators' signal. The CUTOFF of the single synthesizer channels can be controlled by MIDI.

Connecting Features

As well as the filter inputs, there are individual outputs per channel that can also be used as a channel insert. It's easy to connect the PERFOURMER to other equipment! It's also possible to tap the unprocessed VCO signal from each synth channel.

You can increase the sonic possibilities of the PERFOURMER by "internal patching" between the channels. For example, you can create a synthesizer that consists of two PERFOURMER channels with two envelope generators and LFOs. It's also possible to double the slope of the filters by connecting two of them in a row.

The PERFOURMER can be controlled by MIDI, and optionally can be equipped with four CV/GATE inputs (1V/octave).

Vermona

DAF-1 dual analog filter



Structure

The DAF-1 is an analog stereo filter with a flexible structure and professional sound quality.

Each channel of the DAF-1 has two individual high/lowpass filters, each with separate controls for the cutoff frequency and resonance. Both filters have a slope of 24dB per octave and can be combined in four modes:

- **Band:** Both filters work together as one bandpass filter. In this case filter 1 is highpass and filter 2 is lowpass. Because of the separate cutoff and resonance controls, you can set the width of the bandpass range and adjust different resonance values for each cutoff frequency.
- **Notch:** Both filters work together as one notch filter. In this mode, filter1 is lowpass and filter 2 is highpass. In notch mode you can adjust the width of the band-stop range.
- **Parallel:** Both filters work as individual lowpass filters, (24dB per octave) parallel to each other.
- **Serial:** Audio passes through one filter and then the other, serially. Bothwork as lowpass. That results in a doubled slope giving you a lowpass filter with 48dB per octave - completely analog and stereo!

The cutoff frequencies can be modulated by the internal LFO in four different ways. For example, you can modulate the width of the bandpass range in bandpass mode, or the manually adjusted bandpass range through the frequency range.

The second modulation source is the CV / EF section. It works either as envelope follower, or with an external control voltage or volume pedal. There are also four different modulation modes.

PH-16 sixteen stage analog phaser



Structure

The PH-16 is an extremely versatile, true analog mono/stereo phaser with a variable number of stages and excellent sound quality.

By virtue of its flexible structure, the PH-16 stands out audibly from many other analog phasers.

Inside the PH-16 there are two individual phasers that can work together in serial or parallel modes. Therefore, you can use the PH-16 as a true stereo phaser, using four, six or eight stages, or as a mono phaser with eight, twelve or sixteen (!) stages. By varying the number of stages, the phaser's sound character changes making this a very dynamic effect unit with many possibilities.

The phaser circuits are constructed with handmade and hand-selected VERMONA optocouplers. Thus, it is virtually noiseless and allows refinement of high-level signals without undesirable distortion.

The integrated LFO brings fluid motion into play. It can modulate the phase shifts of both phaser units in four different ways. For a secondary modulation source, we have integrated the CV / EF section. This allows you to modulate the PH-16 with either external control voltages, such as those from modular systems and synthesizers, or you can use the internal envelope follower, which converts the volume contour of the input signal into a control voltage. Alongside being able to modulate the phase shifts, the CV / EF section can also influence the LFO speed and intensity.

As with all our products, the PH-16 sets the standard with its quality and accessible user interface.

Vermona

RM-1 analog ringmodulator



Structure

The VERMONA RM-1 is an analog ring modulator with many controls and connecting features, built as a standalone device in a single rack space enclosure (1U).

A ring modulator outputs the sum and difference of the frequencies from two input signals. If you feed a ring modulator with a 500Hz sine wave and a second sine wave with a frequency of 100Hz, at the output you will get is a 400Hz sine wave (500Hz - 100Hz) and a 600Hz sinewave (500Hz + 100Hz). A ring modulator always needs two signals to work.

The RM-1 is equipped with an internal oscillator that generates a "carrier" signal. The waveshape of this oscillator can be smoothly faded from sine to triangle. The oscillator's frequency can be adjusted in a range from 0,5Hz up to 5kHz and can be modulated by three modulation sources simultaneously:

- envelope follower
- external control voltage or volume pedal
- internal LFO

When connecting a control voltage with a 1V/octave characteristic, you can play it tuned in a three octave range. Alternatively, you can insert an external carrier signal to the RM-1.

The RM-1's LFO has a range of 0,05 Hz - 50 Hz. Its speed and intensity can be adjusted by two controls as well as by an external control voltage. It has four waveforms: triangle, square, positive and negative saw. The LFO signal can also be used to modulate other devices (i.e. DAF-1 or PH-16).

Control Features

The RM-1 has an input on the front panel and one on the rear panel.

On the rear panel you also find the CARRIER IN/OUT jack and numerous CV inputs and outputs. All CV inputs can also be used with volume pedals, because the RM-1 can produce the necessary control voltage on its own.

The RM-1 has an internal power supply.

ACTION-FILTER professional DJ filter



Structure

The VERMONA ACTION-FILTER is a special tool for DJ's, musicians and remix producers. It is especially suitable for live situations with its easy and intuitive user interface. The basic structure of the ACTION-FILTER is similar to that of the DAF-1 Dual Analog Filter.

There are two analog high/lowpass filters with a slope of 24dB/octave per channel. Each filter (FILTER LOW and FILTER HIGH) have individual controls for the cutoff frequency and resonance.

The ACTION-FILTER can be used in two modes:

BAND and NOTCH

In BAND mode, the two filters work together as a bandpass filter (FILTER LOW is highpass and FILTER HIGH is lowpass). NOTCH mode is the exact opposite of BAND mode. FILTER LOW is lowpass and FILTER HIGH is highpass, resulting in a notch filter.

Unlike other bandpass or notch filters, you can set the width of the bandpass, the band-stop range, and also adjust different resonance levels for each cutoff frequency. A great number of effects can be created just by tweaking four controllers.

If you like to create rhythmical effects you can use the TRIGGER button which triggers the bypass function. It gives you the possibility to change between unfiltered original signal and filtered effect signal quickly.

The ACTION-FILTER is the definitive hands-on effect unit which begs to be played. We have designed the user interface to be as simple and logical as possible for quick access to all parameters.

Control Features

The ACTION-FILTER is equipped with a LINE and a PHONO input with ground screw. You can connect a CD player or cassette deck simultaneously with a turntable and switch between the inputs. Of course, you also can use the ACTION-FILTER in the effects loop of your mixer.