In the Valve Reactor power amplifier, a 12AX7 dual-triode tube (12AX7s are typically used as preamp tubes) is connected directly to an output transformer. Because of the relatively low Wbble of the 12AX7 tub amp power stage, our amp designers had to develop a way to take the output level to one which could actually drive speakers at stage volume levels while maintaining the integrity of the tube amp sound and feel. We accomplished this by creating a circuit of proprietary design called the VOX Valvetronix Power Circuit. The output transformer is connected to this new Valvetronix Power Circuit which uses C-rate Current design and Reactive Feedback technology. The Valvetronix Power Circuit cannot be overdriven, is totally transparent and can be configured to be 1, 15, 30 or 60 Watts.

The Valvetronix Power Circuit does not color or change the signal in any way and the resulting output tone is pure. It also ensures that this output signal maintains the high dynamic range associated with traditional tube amps — something most solid-state amplifiers simply cannot deliver, and one of the primary reasons why tube guitar amps normally sound and feel so much louder and more alive than solid-state amps boosting the same output power rating.

The Reactive Feedback technology used in the Valvetronix Circuit “reads” the impedence curve of the speaker and then reports this reactive information back to the secondary side of the output transformer. This information is fed back to the primary side of the output transformer and therefore changes the load on the tube, another important part of the tube amp and all-tube power amp plays in the creation of traditional tube tone.

**AMP MODELS:**
- 16 types

**EFFECTS:**
- 21 types (Drive: 10 types, Modulation: 5 types, Delay: 3 types, Reverb: 3 types)

**FOOTSWITCH:**
- 52 [2 Banks x 4 Channel]

**INPUTS:**
- 2 x Guitar Input (High, Low), 2 x Loop Return (AD60VT, Mono AD120VT: L & R), 1 x Headphone Line Out (AD60VT, Mono AD120VT: L & R), External Speaker Out (AD60VT, Mono AD120VT: L & R), 1 x Foot Controller

**SPECIFICATION:**
- 1217 Custom-voiced Celestion (AD60VT), 2 x 12" Custom-voiced Celestion (AD120VT)
- TUBE: 1 x 12AX7 (AD60VT), 2 x 60W RMS (AD120VT)
- DIMENSIONS: 530(W) x 267(D) x 559(H) mm / 20.87" (W) x 10.51" (D) x 22" (H) (AD60VT)
- WEIGHT: 19.6kg / 43.21lbs (AD60VT), 26.2kg / 57.76 lbs (AD120VT)

**AD60VT/AD120VT OPTIONS:**
- VC-4 VOX FOOT CONTROLLER

**CONNECTORS:**
- Vox bus jack, Volume jack

**DIMENSIONS:**
- 417.0(W) x 158.4(D) x 63.3(H) mm / 16.42(W)" x 6.24(D)" x 2.49(H)" (VC-4)

**WEIGHT:**
- 1.8 KG / 4.82 LBS.

**ACCESSORIES:**
- 10 Base-T cable (straight type)

**OPTIONS:**
- V850 Volume Pedal
INTRODUCING VOX VALVETRONIX: WHAT A DIGITAL MODELING AMPLIFIER SHOULD BE.

DIGITAL MODELING AMPS THAT DELIVER

When we set out to create Valvetronix, the goal was clear—design a digital modeling amp that sounded and felt great. A versatile amp that could superbly re-create every detail, every nuance of a collection of the world’s most sought after guitar amplifiers. An amp that actually lives up to the promise that digital modeling amplifiers appear to offer, but have never advanced—until now.

THE BEST OF ALL WORLDS

We realized that reaching this goal wouldn’t be easy. That it would require top-notch digital technology plus a tube-power amp capable of modeling the power amp sections of a ton of classic and modern tube amplifiers. We knew four tone-filled decades. Vox amplifiers have defined classic, even cult status. They’re the amps of choice for countless pros. But we knew it would take more than our own guitar amplifier technology. We also needed the skill and experience of a high-tech music equipment innovator. From this need, the collaboration between Vox and Korg’s ToneWorks division was born.

Korg is the undisputed leader in the technology-driven world of digital music products and the force behind ToneWorks, the first company to master and patent “digital distortion with overcutting.” This breakthrough actually made high-quality digital recreations of guitar effects and amplifiers (that sounded and felt like the real thing) a reality. Together, Vox and ToneWorks have created Valvetronix—the ultimate, hybrid digital modeling amplifier that sounds, feels, and operates like a guitar amp, with no compromises or compromise.

THE FRONT END, WHERE IT ALL STARTS

The preamp sections of the Valvetronix combos rely on Korg’s proprietary REMS™ technology. REMS (Resonant structure and Electronic circuit Modeling System) accurately replicates the complex circuitry in each of the modeled amplifier’s signal paths and re-creates the tonal identity originally found in those amps. To even replace their unique tone-stack networks on the Valvetronix tone control interfaces exactly as they do in the amplifiers being modeled? Play a new AD60VT or AD120VT and you’ll hear and feel the difference immediately.

VALUE REACTOR™ TECHNOLOGY, THE BIG DIFFERENCE

The power amp section—is well as the relationship and interaction between the output tubes, output transformer and speakers—is a critical part of any high tube amp. Every classic amplifier’s power amp has its own unique set of characteristics, and to accurately model a great sounding guitar amp, we had to precisely model its power stage, too. Because we were insist on modeling one amp, but 16 different, amazing amplifiers, we had to have a power amp that could actually change itself to model each and every one of those amplifiers.

So how did we accomplish this? By inventing a new type of modeling, tube, power amplifier. Our patented Valve Reactor power amp consists of a tube power amp with an output transformer electronically coupled to a solid-state power circuit in such a way that the relationship between the output tubes, output transformer and speaker is unaltered. (See the sidebar on the last page for more detailed information.)

This ingenious design delivers a number of benefits. All of the great sounding amps we’ve modeled are tube amplifiers. Vox’s Valve Reactor technology enables the new AD60VT and AD120VT to produce the high dynamic range associated with these traditional tube amps—something a solid-state amp simply couldn’t do. That dynamic range is one of the reasons why tube amps sound and feel so much louder than solid-state amps rated for the same output power. Also, the AD60VT and AD120VT are better able to capture the sound and feel of the amps they’re modeling because their output power can be configured to be exactly the same as those amps. For instance, a 50 Watt AC15 may be an interesting curiosity, but the original was 15 Watts!

We didn’t stop there. This new technology actually has the ability to switch automatically between Class “A” and Class “AB” depending on the amplifier it’s modeling! In addition, it can select whether or not a model will have a negative feedback loop, as well as how much and what kind of feedback there will be. This adds immensely to the overall accuracy of the modeled sound and feel because you just can’t accurately model a Class “A” amp that doesn’t have a feedback loop—like an AC15, for example—with class “AB” circuitry and all kinds of feedback. This is something the competition just doesn’t want to grasp.

VOICE COIL EFFECTS BUILT-IN

The effects in the AD60VT and AD120VT aren’t an afterthought. Each one is a carefully crafted model of one of a variety of sought after classic and popular effects. These 15 essential pedals include: Compressor, Acoustic Simulator, Vox Wah, Auto-Wah, U-Verb, Octave Distiller, Tumble, Echo, Tube Overdrive, Fuzz Overdrive and Fuzz. As pedals, they appear before the preamp models so they can drive the preamp in the same way they would in a traditional amp.

The new Valvetronix combos also feature Modulation, Delay and Reverb effects sections, all of which can be used simultaneously. Just like in the pro guitar amp/rack, these effects are between the preamp and power amp sections. The Modulation Section includes models of popular chorus, flanger, phaser, tremolo and rotary effects. The Delay Section delivers Delay, Tape Echo and Multi-Hand Delay. A Tap button is provided for setting the delay time. The Reverb Section has three types: Spring, Plate and Room. Each section can be controlled independently from the top panel, or, in the case of Modulation, from the optional VC-4 Foot Controller.

FOLLOWING THE SIGNAL PATH

When laying out the Top and Rear panels of the Valvetronix combo, we laid out the signal path in the same way a guitarist typically pairs his or her equipment together.

AD120VT

AD60VT

OPTIONAL VC-4 FOOT CONTROLLER

INTRODUCING VOX VALVETRONIX: WHAT A DIGITAL MODELING AMPLIFIER SHOULD BE.