Bench Tests One-Tube Vonder

By Art Thompson

ubes have distinct sonic personalities, and one of the privileges of being a tube-amp player is exploring the myriad tonal colors that tube swapping can provide. Of course, to really experience the tonal changes that occur with different tubes, you have to swap them in the same amplifier. This typically requires rebiasing the amp, and may also involve

Snapshot

The UniValve (\$995) is a single-ended, class A amplifier that can accommo-

date a variety of different output tubes without having to be rebiased. The 15-watt amp features high/low voltage operation, a built-in Hot Plate power attenuator, and bypassable noise reduction. The UniValve receives an **Editors' Pick Award**.



The Ratings Game	Tone	Workmanship	Features	Vibe	Value
THD UniValve	••••	••••	••••	****	****
The Rate-O-Meter: Dismal = • • • • • • • • • • • • • • • • • •					

rewiring the tube sockets. But not if you own the THD UniValve—a single-ended, class A amp that can digest a variety of output tubes without rebiasing.

The UniValve (\$995) accepts such popular octal-based tubes

as the 6L6, 5881, KT66, EL34, 6CA7, 6550, and KT88. The amp can also operate with a single EL84 when fitted with the optional THD Univalve Yellow Jacket base adapter (\$50). The UniValve's engraved front panel features volume, treble, bass, and Attitude controls, a noise reduction switch, an Attenuator control and bypass switch, a Hi/Lo voltage switch, and power and standby switches. The UniValve's single speaker out is switchable for $2\Omega/4\Omega$ and $8\Omega/16\Omega$ loads, and the amp also sports a transformer-isolated lineout that features a level control *and* a switch for selecting line- or instrument-level signals. A builtin dummy load allows you to operate the amp without a speaker



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connected for direct recording.

Accessing the tubes is merely a matter of undoing the captive thumbscrews that secure the perforated steel cover. The cover protects the tubes, and its side cutouts allow easy carrying. The interior of the steel chassis is exposed by removing the six screws that attach the bottom plate. The beautifully made circuit uses a trio of PC boards for the smaller components, while the pots, jacks, switches, and tube sockets are chassis mounted for ruggedness. The parts quality is grade A throughout, and THD's attention to detail is obvious in the neat soldering and clean wire routing.

Sounds

With a pair of 12AX7 preamp tubes in place and a guitar plugged into the upper Rock input, the UniValve has a lot of gain and is surprisingly loud-especially when connected to a 4x12 Marshall cabinet loaded with Celestion Vintage 30s. The UniValve is a very dynamic amp-it responds beautifully to guitar-volume changes-and its tone controls provide plenty of bottom and just enough treble bite without entering the shrill zone. Turning up the Attitude knob adds edge and agressiveness, but it's not a presence control in the classic sense because the UniValve's output stage does not incorporate negative feedback.

Tube Talk

I tried a number of different output tubes with the UniValve, and, sure enough, the amp sounded different with every one. Fitted with a vintage Mullard EL34, the UniValve delivered excellent, British-style crunch and lead tones. The mids were rich and focused, and the highs were clear and musical. It was easy to hear the outstanding qualities of this classic tube compared to the current EL34s. Switching to an N.O.S. (new old stock) GE 6L6 didn't exactly morph the UniValve into a Fender Twin, but the full bottom, spunky mids, and bright top-end elicited by this tube proved excellent for crisp rhythm playing and moderately distorted blues solos. With a 12AX7 installed-and a guitar plugged in the Rock input-the UniValve is actually a little too gained-out for roots styles. I obtained better American-style tones by swapping in an N.O.S. Sylvania 5751WA, which is a slightly lowergain version of the 12AX7. (If you want really clean tones, the Roll input provides a dramatic reduction in gain.) The combination of the 5751WA and an old Tung-Sol 5881 was particularly devastating. With the amp's volume set around two o'clock, the overall gain structure was perfect for going between lead and rhythm via the guitar's volume control. The tone was a hearty blend of Fender clang and Marshall grind, and the Tung-Sol 5881 added cool twanginess to the rich distortion brew.

Installing an old GE 6550 produced a tighter and more muscular tone with punchy mids and explosive highs—AC/DC spoken here—while a GE JAN (joint army navy) 6V6 yielded a crisp, Fender-flavored sound with lots of complex grind. A surplus

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French Visseaux 6V6 upped the complexity and shimmer to near sinful degrees. Fitting a new Tesla EL84 nudged the UniValve back in a more English direction with Vox-like chime and harmonically rich saturation—awesome for ringing chords and smooth, singing solos.

Groovy Details

The UniValve's built-in Hot Plate power attenuator allows you to enjoy full output stage distortion at almost any volume. The circuit works by simulating the *reactive* impedance load of a speaker, and it enables your tones to remain ballsy and dynamic at whisper levels. Considering that a stand-alone Hot Plate goes for around \$350, this is very welcome standard equipment!

The UniValve also has a 2-position power switch that allows for operation at either 450-470 volts or 300-320 volts (depending on the output tube). Low-power operation chops the wattage in half, reducing the volume and mellowing the amp's aggressiveness. The Univalve is exceptionally low-noise, but activating the noise-reduction feature reduces the buzz from single-coil guitars and other sources by placing a small incandescent light in parallel with the speaker load. Here's how it works: When you're not playing, the bulb's cool filament is at a lower impedance than the speaker, which allows it to absorb the noise signal. As you start playing and the filament heats up, its impedance suddenly jumps into the 150Ω range, and the majority of the signal is shunted to the lower impedance speaker. It's a brilliantly archaic noise gate (THD's Andy Marshall says the idea was conceived over 40 years ago), and you also get a a nifty visual effect as the jeweled light brightens and dims in response to your playing. However, there is some loss of volume and punch when this function is active. I preferred the dynamic immediacy of the UniValve with its noise reduction bypassed.

Uni for U?

The UniValve is an obvious choice for anyone who loves to "tone taste" with tubes, and this multiple-personality amp is also ideally suited for recording and rehearsals. Though 15 watts is undergunned for most live gigs, the UniValve is surprisingly loud, gushing, and three-dimensional. These qualites are partly due to its no-negative-feedback design (which is one of the reasons why Vox, Matchless, and other class A amps tend to sound so big for their wattage), as well as its hefty power supply, which can handle studly tubes such as the 6550 and KT88. Just when you think there are no new tricks in the boutique world, THD has pulled a rabbit out of a hat with this baby. With its tonal range, smart features, and superb craftmanship, the UniValve is a bang-for-buck winner.